





TRANSACTIONS
OF THE
NATURAL HISTORY SOCIETY
OF
NORTHUMBRIA

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**ANNUAL REPORT
OF THE
COUNCIL AND TRUSTEES
FOR THE
YEAR ENDED 31 JULY 2002**

decrease of nine members over last year; however, as previously noted, it does include an increase in new members.

The Council reports with much regret the death during the year of four members: Mr J S Armstrong (elected in 1960), Mrs L M Hardy (2000) Miss M Nelson (1972), Dr D H Prothero (1996) and Miss P D Smith (1964). As this report was being prepared we were very sorry to hear that Mr Anthony Dickinson (1927) had died at the age of one hundred years. Although his death did not come within the year covered by this report we felt that due to his enormous contribution to the Society in the past it should be noted in this report. In next year's report we will hope to have a suitable obituary of, probably, our oldest and longest-standing member.

ANNUAL MEETING

The Annual Meeting of the Society was held in the museum on 23 November 2001; Viscount Ridley presided. The Annual Report and Financial Statement were adopted unanimously and the President and Vice Presidents were re-elected. The following four members were elected as additional Vice-Presidents: Mr H Chambers, Mrs S Chambers, Dr D Gardner-Medwin and Dr B Selman. Mrs P Ranner and Dr M McKay were elected as members of Council and Mr S Lowe retired by rotation. However, during the year he also became the section leader for mammals so remains on Council in this capacity. A proposal was carried to change the rules of the Society to reverse the previous year's decision to permit the election of either an Honorary or a paid Treasurer, and, instead, to permit the election of an Honorary Treasurer whenever possible, Council having the power to employ a financial manager if necessary. Such a financial manager would have no voting rights at meetings of Council or committees, nor form part of a quorum at such meetings.

No candidate for the position of Honorary Treasurer being available, it was agreed that during the current financial year Council should have the power to appoint an Honorary Treasurer, who could be proposed for election at the subsequent Annual Meeting. Messrs Tait Walker were elected Independent Examiners. The important role of the informal botanical recording group, which met fortnightly during the summer, was emphasised and the omission of a proper account of it in the Annual Report was regretted. This would be done next year. It was agreed to send a greetings card to Mr A H Dickinson, one of the Society's Vice-Presidents, who was shortly to celebrate his centenary. The Secretary proposed a vote of thanks to Lord Ridley and the meeting was closed.

Mr Moorhouse then presented the results of the questionnaire on the future of the Society which had been circulated to all members. This had produced some very valuable ideas and the presentation stimulated a lively discussion.

COUNCIL

The Society's officers and members of Council are listed on page 4. Council met, as usual, four times during the year, in October, January, April and July. In addition to our Council members, Newcastle University is entitled to have four representatives on Council, but for some years now has appointed only three. This situation changed with the appointment of Dr Geoff Smith. During the year the following were in attendance at Council meetings: Mrs June Holmes who continues to represent the interests of the Archives; Mr Steve McLean representing the Principal Keeper of the Museum; Mr Neville Furness, as Finance Manager, and the Secretary.

PUBLICATIONS

Autumn saw the publication of the supplement to Professor George Swan's 'Flora of Northumberland' (1993) together with a similar follow-up to the Flora and Vegetation of Co Durham (1988), namely 'The Durham Flora – Corrigenda et Addenda' (2001) by Reverend G G Graham. These together formed the final part of volume 61 of the *Transactions*. The first part of volume 62, the 'Annual Report 2001' was published in the November and was followed in the spring with 'Birds of the Farne Islands in 2001' compiled by Robin Harvey and edited by Margaret Patterson. We expect to publish a volume in the autumn containing a collection of scientific papers covering a range of subjects. The editor once again urges members to submit

papers long or short giving accounts of their field activities and observations. Please don't be shy, have a go! Finally, thanks are due to Brian Selman, David Noble-Rollin and Margaret Patterson for all their hard work and expertise in the production of the Society's publications.

OFFICE MANAGEMENT

Staff

Mr Martin Hughes Martin joined the Society office staff in June 2001. In his first year he has made a number of improvements in both the appearance and efficiency of the organisation. His biological knowledge has enabled him to take on many of the hundreds of enquiries that are received from both members and the general public. He has also become a busy member in a voluntary capacity, working regularly with the ringing group, leading some of the ornithological field trips and appearing on the next series of a TV programme showing the Society installing an artificial nest box for kingfishers in Gosforth Park Nature Reserve.

Ms Siu Carter Siu's main duties are the day-to-day finances and helping Martin maintain the membership database. Throughout the year she has worked to ensure the accuracy of members' details and has dealt with much of the correspondence generated by the Secretary. She is also cooperating with Joan Holding on the production of new display boards to promote membership of the Society.

Dr Anne Westerberg Early in the year Anne got a part time job with the RSPB and this meant that she could no longer come into the office two days a week. However she continued to work for the Society for most of the year dealing with field meetings, volunteer work and arranging the holiday in the Outer Hebrides mentioned later in this report. In May she was asked to increase her role at the RSPB and to take on the job of arranging volunteer work for them. Consequently with great regret she had to give up her work in the Society office. We would like to wish her every success in her new role and thank her for her hard work in the last few years.

Volunteers

The Society is very grateful for the enormous amount of work that is undertaken by members in a voluntary capacity. We are particularly grateful to the members who are listed below, who work on a regular basis for the Society, usually contributing from half a day to two days a week of their time. There are also a large number of other volunteers whose contribution may not be as frequent but is nevertheless of great importance to the smooth running of the Society. We would like to take this opportunity to thank particularly the thirty-five deliverers who every time there is a bulletin or *Transaction* to send out, walk the streets of our towns delivering our mail and consequently saving about £2,250 for the Society. There are also a number of members who sit on internal Society committees, preparing winter programmes and summer field meetings for the sections and also adding their expertise to the management of Gosforth Park. The Council of the Society would like to thank them all for their efforts in making both our programmes and nature reserve of such high quality. The following volunteers deserve particular mention.

Mr Graham Ashley Graham filled in the questionnaire sent out with the autumn Bulletin and offered to do some book keeping for the Society. He now assists the Financial Officer, Neville Furness, in maintaining the Society's accounting ledgers.

Mrs Veronica Carnell Veronica is working as a volunteer for the Northumberland Wildlife Trust and is organizing the winter programme for the Northumbria Mammal Group and the Society. She is also working on supplementary feeding for red squirrels in Gosforth Park Nature Reserve and trying to determine if it will be possible to exclude grey squirrels from feeders by size. These experiments are being carried out at the feeding station with the main visible signs being rather strange boxes on some of the trees!

Mrs Janet Angel Janet has continued her analyses of the members' log sheets from Gosforth Park, and although she only makes infrequent visits to the office her work in keeping this task up-to-date is greatly appreciated. Janet also now runs the informal botany group and is the first contact for members wishing to join in these activities.

Mr and Mrs Hugh Chambers Hugh and Stella have continued to run the Society's library and to look after the many students and members who visit and use its resources. Hugh is chairman of the Library Committee and produces the reports from the committee for both Council and the Bulletin. Stella has been deeply involved this year in the assessment and organization of the Society's back numbers of the *Transactions*. This work has resulted in the offer of many of the old issues to members in recent Bulletins, and a strategy to deal with the lack of space in which to house them.

Miss Barbara Harbottle Barbara has now completed the compilation of a database of Society officers from 1829 onwards. The initial entries into the database were completed by the end of last year and during the current year the database was checked for accuracy. She has also continued to help June Holmes in preparing a catalogue of Margaret Dickinson's watercolour botanical drawings.

Mrs Joan Holding Joan has continued to work as our graphic artist illustrating the Bulletin and preparing drawings for the *Transactions*. The drawings that she produced for the Newcastle City Biodiversity Action Plan were extensively used to illustrate the document and showed attractive habitats in the Newcastle area. This work greatly helped the Society to be considered one of the leading partners in the production of the Plan. In the spring Joan started working on the new display boards that will help to promote membership of the Society.

Mrs June Holmes June continues to produce the catalogue of manuscripts and other archival papers held in the Hancock Museum. Because of her knowledge she has been co-opted on to Council so that the archives of the Society can be properly represented at Council meetings. Apart from her work on the collections she is now the museum's expert on Thomas Bewick, and deals with all the enquiries and visiting scholars relevant to the subject. Working in conjunction with David Gardner-Medwin, she has secured grants to undertake conservation work on items in the collections. This is dealt with more fully under 'Archives' later in this report.

Mr Ian Johnston Ian has continued to help with the ringing group administration; he organizes the meetings of the group at the beginning of the season and organized the North East of England Ringer's Conference which was hosted by the Society this year. The success of this event was mainly due to his careful organization and eye for detail. He has continued to manage the periodical 'exchanges', which involve recording parts of journals as they arrive, checking for missing copies and getting volumes bound, and with Martin Hughes he has updated the exchanges which form a major part of the library.

Mrs Margaret Patterson Margaret continues to be assistant editor of the *Transactions* and comes into the office one day a week. She has worked with the Secretary on preparing the papers for the next issue due this autumn and has proof read many of the papers, Bulletins, minutes and reports that are part of the office work. She edits 'Birds on the Farne Islands' each winter and meets the tight deadlines that are necessary to get the report ready to go out with the spring Bulletin and to the National Trust in time for the start of the summer season.

Ms Ann Stephenson Ann assists June Holmes in the cataloguing of the archive letters in the Museum. She has typed over 1300 letters, mostly from the Hancock correspondence collection. Eventually this will form the basis of a searchable reference collection attached to the main archive catalogue.

Dr Anne Wilson Anne devotes a morning each week to helping in the office and has been of great assistance to Martin Hughes in preparing membership leaflets to go to the libraries in the north-east of England. She continually checks that leaflets are available and is now keeping our publications stocked on our stand in the foyer of the museum. She carries the supplying of leaflets to suitable outlets to the extreme by personally restocking the Inner Farne information centre (although we suspect that this is one of her more enjoyable deliveries).

Mrs Rita Wolland Rita has continued throughout the year to put the thousands of sightings and recovery data for ringed birds from the Farne Islands onto a database. She also helps with office duties when we are busy or short staffed.

MUSEUM MANAGEMENT COMMITTEE

This committee reports to the Council and the University's Museums and Galleries Board. Little progress has been made during much of the year as a result of the University reorganisation. Our thanks go to Professor Roger Dye, outgoing Chairman of the Museum Management Committee who retired in July this year, for all his support and we are delighted to welcome Dr Eric Cross, Dean of Cultural Affairs, as new Chairman of the Management Committee. Now that the new structure has been announced and posts filled we can look to a more active time next year. Already there is a sense of greater cooperation and commitment than was at times evident in the past and it is hoped that this will continue.

Whilst no long term solution to the Hancock's roof has been found, it is to be hoped that remedial work and extensions will come out of the Newcastle/Gateshead bid for Capital of Culture in 2008. It is also hoped that the Hancock will form a central component of the bid's 'cultural quarter'. Much effort over the year has been placed on securing the status of the Museum with respect to the bid and the Hancock is seen as a 'gateway', encouraging visitors to explore all aspects of the landscape and wildlife of the region. This is a tremendous opportunity for the Museum in its efforts to secure funding for a large capital redevelopment. Following on from the successful inclusion of the Hancock Museum in the bid for Capital of Culture 2008, the University has commissioned consultants to carry out a feasibility study into the development of a University Cultural Quarter.

We have enjoyed the energetic and enterprising partnership of Iain Watson and Steve McLean whose work in curation, the choice and implementation of exhibitions and all the other details entailed in making the Museum and its finances run smoothly have been admirable.

HANCOCK MUSEUM

The Museum and all its collections are owned by the Society and the financing of the Museum is undertaken by Newcastle University under an agreement with the Society. In turn they have sublet the running of the Museum to Tyne and Wear Museum Services who have a service level agreement with the University. The following covers the activities undertaken by Tyne and Wear Museum services during the current year.

The Museum attracted 102,282 visitors, almost 15,000 more than the previous year. This was achieved through an extensive programme of major and supporting exhibitions and educational initiatives. At the same time significant progress was made on the management and research of the collections and, most importantly, the future development of the Museum as a whole.

Major Exhibitions

Three major blockbuster exhibitions fell into 2001/2002. **Star Trek : Federation Science**, supported by Paramount Pictures, Oregon Museum of Science and Industry, used the theme of Star Trek to investigate the science of space in over thirty interactive exhibits. **Walking with Dinosaurs** used material from the popular BBC programme. This was extremely popular, some days over the October half-term reaching more than 3000 visitors. Both exhibitions were augmented by a series of educational activities including real fossil hunting using rock supplied by Lafarge Aggregates from Thrislington Quarry in Co Durham. **Shark!** opened on 13 July and explores the natural history of sharks. It was designed and created in-house with collaboration from the Yorkshire Museum and the Blue Reef Aquarium in Tynemouth. Specimens were borrowed from museums around the country including large fossil sharks from the Natural History Museum in London and a variety of extinct and modern shark specimens from The Royal Museum of Scotland in Edinburgh. There are also live sharks including smoothhounds from Blue Reef Aquarium. The exhibition was also supported by grants from the Museum of Zoology University College London; National Museums and Galleries of Wales; National Museums and Galleries on Merseyside; Birmingham Museum; Yorkshire Museum; The Shark Trust; BBC Worldwide; LWT; Universal Music Ltd; Hunterian Museum (Zoology) University of Glasgow; Royal Albert Memorial Museum

Exeter; Dundee City Council; Mr. Jo Sage; Anglesey Sea Zoo and Scottish Sealife Sanctuary Oban.

Art Programme

This programme was again supported by Northern Arts. Selling exhibitions by local artists included **Life in the Landscape** by Paul Henery, and **Natural North** by Allan Potts. **Footprints** represented the first embroidery/textile exhibition the Museum has undertaken. The exhibition was based upon Egyptian imagery, much of it inspired by the collections on display in the Museum.

Discovering the Beauty of Taiwan's Ecology was a prestigious exhibition of Taiwanese wildlife paintings and sculpture in association with the UK Taipei Representative Office in London. The Hancock was the first UK venue to host this exhibition.

Finally, Marion Coutts, in association with the Newcastle-based artists' agency Locus+, completed her residency work at the Museum and exhibited a large video-projection installation in the bird gallery entitled **No Evil Star**. The installation was very popular with visitors and received excellent reviews in the national press.

Touring exhibitions and new displays

The Museum's popular touring exhibitions **Claws!** and **Wild Christmas** were shown at Discovery Museum and South Shields Museum and Art Gallery respectively. **Claws!** then toured to Truro Museum for a summer show. All indications are that it has been very successful. In addition, the new permanent ethnography gallery, **A World of Difference**, was formally opened by Professor Richard Bailey on 8 February. The gallery was financially supported by NEMLAC, HLF and The Sir James Knott Trust. This gallery exhibits material from the Museum's internationally important ethnographic collection – the first re-display in over forty years.

Applications have been made to the Wolfson Foundation and to the heritage Lottery Fund for funds to re-display parts of the geology balcony. This will allow the re-location of the geology storage and the redevelopment of one side of the balcony to provide an accessible, family friendly geology 'discovery centre'.

The Museum has received core-funding through a Strategic Development Grant from NEMLAC to develop an under 4s educational activity centre.

Education Activities – Schools

The Living History events ran for thirteen weeks during the autumn and spring term and attracted just under 7,000 children. In February, six workshops called 'Looking for Clues' were based on the theme of Egyptian archaeology. Approximately 450 children took part in fossil hunting activities which supported the 'Walking with Dinosaurs' exhibition. They were given the opportunity to look for fossil fish, with geology staff. 'Bookworms', a project funded by COPUS and Tyne and Wear Museums Business Partners, ran for four weeks in June and July and attracted over 750 children. The project focused on minibeasts through storytelling and songs, observation and investigation of live bugs and creepy-crawly craft activities.

Two schools science workshops were held in mid-June where 'Dr Bunhead' unravelled the science of solids, liquids and gases using a barrage of amazing experiments including an exploding hot water bottle!

Education Activities – Informal Activities

Thirty-nine Family Fun events took place during the year. These included events to support the 'Star Trek Federation Science' and 'Walking with Dinosaurs' exhibitions. Science Week was supported by a 'Bugs and Snakes Alive' weekend. At Easter two days of Egyptian inspired craft workshops were held as well as six shows of the very popular 'Horrible Histories Roadshow – Awesome Egyptians' which attracted approx 1,200 visitors. The temporary exhibition 'Footprints' provided the inspiration for two Saturday events based on Egyptian

textiles and needlework and there were Birds of Prey activities on 4 May and 'Rent-a-Peasant' on 25 May. Finally, in June, the Horrible Histories provided six more shows on the theme of 1,000 years of British History.

Thanks are expressed to all the volunteers who have assisted the Education Officer in the delivery of activities over the year (listed at the end of this report). Particular thanks are expressed to June Waites for her invaluable support.

Adult Education and Training

Staff at the Museum have taught museology to third year Zoology students at the University of Newcastle and bird conservation to first year Zoology students as well as palaeobotany to Plant and Nutritional Sciences students. Most staff were involved with the teaching of various aspects of the university post graduate Museums Studies course.

The Education Officer ran teaching sessions for PGCE students from Newcastle University and BEd students from Northumbria University. Museum Studies students at Newcastle University were given an overview of the Hancock's education programme and then carried out a number of follow-up visits to observe school groups in the Land of the Pharaohs gallery and to watch the Living History event. Staff have also delivered numerous lectures to outside bodies.

Collections Management

Notable projects have included the cataloguing of the remaining birds' egg collections by Linda Morris (over 10,000 specimens), and the completion of a regional ethnography project, which has resulted in significant improvements to the storage and documentation of the ethnographic collections. A large collection of fossil fish from the Old Red Sandstone of Achanarras in Scotland, which were collected by Major Murray Threipland, were curated by Dr Sue Turner (very familiar to many of you as a previous member of staff who worked at the Museum during the 70s and early 80s). Some very important specimens have come to light and this is generating considerable interest in the palaeontological research community. It is also interesting to note that specimens of at least two fossil fish genera from this collection are now considered to be the best individual specimens in the world. Another wonderful treasure uncovered at the Hancock Museum! The above three projects were each part-funded by NEMLAC, the latter receiving additional funding from the University Conservation Fund.

As part of a large Tyne and Wear Museums project funded through the New Opportunities Fund (NOF), the Hancock is currently digitising approx 1,000 specimens from all corners of the Museum's collections. These images, and selected data, will be published on a World Wide Web-based application for public access.

Roger Stobbart has been working on identifying a suitable technique for removing the DDT powder applied to the Stevens butterfly collection. Consideration is being given to forming this into a larger scale collections project which may be suitable for a future grant application.

Key volunteers, including Paddy Cottam, Roger Stobbart, Ron Cook and Jess Fermie, continue to work on the bird collections, osteology and palaeontology collections. Updating of MODES databases with new collections information has also been undertaken.

Russell Society volunteers and staff have completed the upgrading of the mineral cabinets in the rear corridor in order to secure them from dust contamination.

Research

There has been a considerable amount of research taking place on the collections over the year. The research interest in the Museum's collections clearly demonstrates their continued importance in the study of the natural sciences and ethnography. Some of these research projects are highlighted below:

Volunteers

Once again the Museum has benefited from the tremendous work undertaken by a considerable number of volunteers who have given up their own time to contribute in a variety of important ways. Our sincere thanks for their continued and invaluable support. They are:

Paul Bewley	<i>Star Trek</i>	Joan and Jim Malligan	<i>Reptile educational events/animal care</i>
Elin Bornemann	<i>Palaeontology curation / exhibitions</i>	Michael Mann	<i>Insect events/animal care</i>
Trevor Bridges	<i>Mineralogy curation</i>	Kyoko Metz	<i>Ethnography Curation</i>
Ron Cook	<i>Botany/oology curation</i>	Kimberley Penn	<i>Star Trek</i>
Paddy Cottam	<i>Osteology curation</i>	Alan Pringle	<i>Mineralogy curation</i>
Byron Cresswell	<i>Star Trek</i>	Anthony Rose	<i>Star Trek</i>
Jess Fermie	<i>Palaeontology curation</i>	Barry Smith	<i>Mineralogy curation</i>
Alan Fowler	<i>Star Trek</i>	Kristian Spencer	<i>Star Trek</i>
Michael Frankis	<i>Northumberland bird records</i>	Roger Stobbat	<i>Entomology and bird curation</i>
John Harrison	<i>Star Trek</i>	Lucy Storey	<i>Education support</i>
Connie Hawkins	<i>Star Trek</i>	Robert Tyer	<i>Education support</i>
Lawrence Heslop	<i>Geology curation</i>	Arron Waddle	<i>Star Trek</i>
Ann Hobson	<i>Star Trek and Education support</i>	June Waite	<i>Education support</i>
June Holmes	<i>Archive collections</i>	Helen Wilkinson	<i>Mineralogy curation</i>
Mathew Littledyke	<i>Star Trek</i>	Malcolm Woodward	<i>Mineralogy curation</i>
Clare Loughney	<i>Education support</i>	Mathew Young	<i>Star Trek</i>
Susan McLean	<i>Education support</i>		
Tim McVey	<i>Star Trek</i>		

Selected Acquisitions

Capercaillie – gift (Mr Gilliat, Northumberland), Bones of a Chillingham heifer (Mr Ingham, Barnard Castle), Twenty boxes of insects (Dr Davies, Durham), Three grey wolves – gift (Camperdown Park, Dundee), Limestone with limpet markings – gift (Mr Meers, Wallsend).

Tyne and Wear Museums News

Dr David Fleming, formerly Director of Tyne and Wear Museums (TWM), was appointed Director of the National Museums and Galleries on Merseyside and took up his post in October this year. Dr Fleming was a strong supporter of the Hancock during his tenure as Director and indeed was directly involved with the management of the Museum through his work on the Management Committee and through the general operational involvement of TWM. Staff at the Museum would like to wish him the very best of success in his new role. We are delighted to welcome back Alec Coles, who returned to Tyne and Wear Museums as Director in May after two years as Chief Executive of the Northumberland Wildlife Trust.

LIBRARY

During the year members, researchers and students have used the library and for this purpose it has been open and staffed by volunteers every Wednesday.

This year eighty-nine books were added. Forty-four were donated for which we must thank, amongst others, Elin Bornemann, Alec Coles, Peter Davis, David Gardner-Medwin, Barbara

Harbottle, June Holmes, Les Jessop, Ian Kerr, Rosetta Lovett, Steve Lowe, A McDonald, Tricia Ranner, Helen Roscoe, George Swan and Tony Tynan.

The books purchased included: for ornithology *Handbook of the Birds of the World* Vol.7, *Handbook of Australian, New Zealand and Antarctic Birds* Vol 5, *Nightjars and related nightbirds, Pheasants, Partridges and Grouse*; for botany *Aquatic Plants in Britain and Ireland*, *Ainsworth and Bisby's Dictionary of the Fungi*, *Plantfinders guide to Garden Ferns*, *Herbal* by D Brown: for geology and ecology *The Map that changed the world. The tale of William Smith*; New Naturalist's *The Broads*: for mammals *The New Encyclopaedia of Mammals*, *The European Rabbit*: for entomology *Moths and Butterflies of Great Britain & Ireland* Vol.4, *The Millennium Atlas of Butterflies in Britain*: for the history section *John Bewick Engraver on Wood*, *Sir William Jardine A life in Natural History*, *David Douglas Explorer and Botanist*, *John Lindley*, *John Dobson Architect of the North East*.

More than 375 items of serial publications (Journals, Transactions etc.) were received from more than eighty sources by exchange, subscription and donation. A 'stock take' of our own *Transactions* was carried out during the year and the housing of them reorganised with additional shelving being installed.

The contents of the library are entered on a reasonably comprehensive database and data was extracted from this to produce a list of books, serial publications, geological maps and the papers in our own *Transactions*. This data was then made available to members on disk or CD.

The subject for the Library Evening held on 25 January was the naturalist and author Sir William Jardine and he was brought to life by Professor Peter Davis in a most informative talk. There was a display in the library of many of his books and those of his friends and correspondents in Northumberland. Despite failures in lecture theatre equipment it was a most successful evening and the Council must thank all concerned.

The direction of library affairs is controlled by the Library committee which meets four times a year. The members are Hugh Chambers (chairman), Paddy Cottam (mammals), Peter Davis (marine biology), David Gardner-Medwin (history of natural history), Trevor Hardy (geology), June Holmes (archives), David Noble-Rollin (ornithology) and Trevor Walker (botany). Unfortunately Joyce Parvin resigned during the year: she is a qualified librarian and her advice will be missed. The library continued to be serviced by the office staff; the binding of journals and periodicals was arranged by Ian Johnston and this year twenty-seven volumes were bound to become a permanent part of our collection. Incoming periodicals and exchange arrangements were dealt with.

Volunteers gave reliable assistance during the year: Stella Chambers kept the filing system in order and was helped by Norman Moore providing a copy of the relevant parts of the latest Dewey system index. Dave Brownlee also assisted her in moving and reshelving our *Transactions*. Trevor Hardy worked steadily on his winter task of reviewing the ten thousand geological offprints from the University that have been entrusted to our care. Council thanks them all for their efforts.

ARCHIVES

Work in the archives has been severely restricted due to the lack of funds over many years, especially in the conservation and storage of our unique collections. Recognising this difficulty Council decided to allocate the archives a small annual budget with the idea of obtaining further grant funding.

A generous donation of £1,000 made to the Society last year by Lord Ridley was used for this purpose with his enthusiastic agreement and 'The Ridley Fund for the Conservation of Archives' was initiated. Further funding of £3,000 has been acquired from the Sir James Knott Trust and more grant applications are in preparation with research and conservation in mind as well as the funding of the archival management itself.

With the finances in place, a five-year plan has been initiated with Jane Colbourne, Senior Conservator at the Department of Fine Art Conservation, University of Northumbria, for

conservation of items from the archives by second year students working under close supervision. One or two items funded by the new grants will be conserved every year. This year they have successfully completed conservation work on an 1821 watercolour by James Ramsay of the Cartonnage of Bakt-hor-nekt.

Other items relating to the Bewick collection have been restored (most notably the portrait of John Bewick by George Gray and the oil painting of Robert Bewick by John Bell) in preparation for an exhibition next year in the Hancock Museum on the portraiture of Thomas Bewick and his family as part of the 250th anniversary celebrations of his birth.

June Holmes is making a considerable effort to raise the profile of the Natural History Society's archive collections. A number of requests for exhibition loans have been supported and currently the portrait of Robert Bewick can be viewed at Cherryburn, Northumberland and our famous copy on vellum of the Chillingham Bull by Thomas Bewick is on tour in an exhibition called 'Love, Labour and Loss: 300 years of British Livestock Farming in Art'.

The archives are also being publicised as an important resource for the study of local history, the history of natural history and the history of art. Amongst many other activities this involved work for 'Tomorrow's History' project, to which the Society's contribution was the scanning of the Bewick original drawings and the preparation of the Bewick part of the project's website. Also digital images and information were supplied for the 'Meet the Middletons' exhibition to be displayed in the Middleton Heritage Centre, County Durham. The images include some fine watercolours of Teesdale flora by Margaret Dickinson and items from the Guy L Drury archives.

Currently two volunteers, Ann Stephenson and Barbara Harbottle, are working on archive material with June Holmes; however, due to the increase in enquiries and research, it is hoped that more volunteers will be recruited, from the volunteers list, in the near future to assist with the backlog of cataloguing.

There have been further interesting additions to the archives. A manuscript letter from Dr W A Sledge to Professor J W Heslop-Harrison was discovered in an old copy of *Transactions* by Dr J Hedley and duly deposited with the Society.

Ron Cook, a museum volunteer for many years, has kindly presented notes and correspondence regarding his important report of a wood sandpiper breeding site in West Inverness-shire in 1960. This includes a letter from David Bannerman, who published the report in his *Birds of the British Isles* Vol. 10.

Ian Moorhouse has given an ornithological field trip notebook belonging to E G (Ted) Bevans, the Society's ornithological field trip secretary from 1955-1973.

Finally, Professor Michael Collie who is researching Roderick Impey Murchison (1792-1871) and his connection to the Society and the north-east, has generously presented a map of Western Siberia, ca 1860s.

GOSFORTH PARK NATURE RESERVE

Autumn 2001 saw the start of the last phase of the desilting work on the lake. Getting the machinery into the reserve to do the work proved to be a major undertaking, and, once the excavation had finished, the paths and boardwalks were in a very poor state. These scars have gradually healed during the year, and boardwalks have been constructed, re-installed and repaired so that it is now possible to walk to the feeding station without fear of being sucked into the mire. The desilting has greatly expanded the area of open water and attracted good numbers of duck to the reserve; we hope this will also allow greater expansion of the reedbeds with time. As part of the desilting work, an island was carved out and covered with gravel to provide a new habitat for birds and other animals. The Society is grateful to English Nature for the grant of £29,665 to the nature reserve to enable this desilting to be undertaken.

Since the noise and mud of the desilting operation, the reserve has been quiet overall, although the spring was marred by extensive vandalism of two hides and the ringing hut. These were repaired with the benefit of insurance money, and alarms installed, but despite these there have

been recurring episodes of vandalism and the ringing hut has been damaged twice more. This further damage has not yet been repaired as we need to come up with solutions to the problem that do not involve spending large amounts of time and money on security. Winter storms inflicted some damage to the roof of Lake Lodge; although this has now been repaired, it is clear that the Society has to come up with a long-term solution to the repair and maintenance of the Lodge. This will require a substantial amount of money and it is important that we identify ways to raise the resources required.

Wildlife on the reserve continues to thrive; grebes seem to have done well this year and at least one pair of great-crested grebes produced young. Common terns again nested on the wooden platform, producing one chick. Although there were up to six common terns around the reserve early in the season, the newly prepared gravel island proved insufficient to attract more pairs to breed. There are still signs of otter activity within the reserve and the Society has gratefully received a donation of £500 from a member to enable the lake to be further stocked with fish. We hope to do this during the coming winter, and it will no doubt be a benefit to the otters, terns and grebes. The kingfisher nestbox installed earlier in the year remained without a tenant, but perhaps this will change next year with an increase in available fish.

FINANCE

During the year expenditure exceeded income by £8,587, reversing the 2001 surplus of £9,736. However, the 2001 surplus was in part created by a grant of £5,000 for sand eel research which was spent during the current year. The detailed breakdown of the accounts is shown in the financial statements at the end of this report.

In summary, however, income decreased mainly because of a reduction in grants (see previous paragraph), investment interest (the tax refund in respect of tax on investment income has been reduced by a further 20% this year) and subscriptions and gift aid. The latter had been inflated in 2001 by gift aid on a most generous donation for work on the archives. There were, however, welcome increases in miscellaneous income and sales of *Transactions*.

Expenditure increased over that of the previous year largely because of the sand eel research mentioned above, additional salary costs, archive work (partly covered by grants) and repairs and renewals. In addition, the increase in accounting costs reflects the changeover to the accounts being prepared by Tait Walker for which a provision has been made. As is usual practice, a provision of £3,000 has also been made for the *Transactions* to cover the cost of producing Volume 62, part 3 which will be published later in 2002.

Valuable savings were however made on the cost of postage and telephone, the library, Gosforth Park Nature Reserve and the cost of *Transactions* published in the current year.

The investments of the Society continue to be managed by Brewin Dolphin Securities Ltd and *Transactions* during the year produced a net realised gain of £32,534. There were also unrealised losses on the portfolio of £129,095 (2001 £36,871), reflecting the poor performance of the stock market in recent months. The investment portfolio was valued at 31 July 2002 at £514,279 (2001 £607,452).

Financial Reserves Policy

It is the policy of the charity to maintain unrestricted funds, which are the free reserve of the charity, at a level which equates to approximately one year of unrestricted expenditure. This provides sufficient funds to cover management, administration and support cost and to respond to emergency applications for funds which arise from time to time. Unrestricted funds were maintained at a higher level than this through the year.

Risk Management

The Council as Trustees are assessing the major risks to which the charity is exposed, in particular those relating to its operations and finances, in order to be satisfied that systems are in place to mitigate the exposure to the major risks.

CONSERVATION

The autumn saw the launch of the Newcastle City Biodiversity Action Plan. The Society was one of the partners in the Plan and has over the last few years put a great deal of effort into the successful completion and publication of the results which shows Gosforth Park Nature Reserve as a major asset and reservoir for wildlife within the city. The finished product was greatly enhanced by Joan Holding's drawings of habitats within the city. Our congratulations should go to one of our members, Judith Baker of Newcastle City Planning Department, who oversaw the whole project.

David Gardner-Medwin has throughout the year continued to look at development plans throughout the area, to prepare objections where appropriate, and to report to Council. Proposed developments, particularly in the Weetslade area, have threatened the integrity of the wildlife corridors from Gosforth Park and the evident size of the Great North Park urbanization is disturbing.

ACTIVITIES

General Field meetings

From the responses to the members' questionnaire it was clear that a number of members thought that general field meetings covering a range of disciplines would be of interest. As a result two new events were added to the summer programme.

On 26 May a number of new members and some old ones met the Secretary and went around the reserve visiting the hides and other points of interest. Apart from getting to know the reserve they were introduced to the ringing group activities and the reasons for the constant effort site.

On 6 June Ian Moorhouse and the mid-week botany group led a joint ornithological and botanical meeting in Upper Teesdale, visiting Cronkley Scar and Fell. The day began very misty and rather wet and looked most unpromising for a field trip of any description. Despite the weather, birds were everywhere. Chicks of redshank, lapwing and oystercatcher were seen in the fields and along the river as well as a good variety of upland birds such as dipper and wheatear. The very local shrubby cinquefoil, a Teesdale speciality, was admired by botanists and non-botanists alike. After lunch and a stiff climb through the mist up to the moors further delights awaited the group including a brood of ring ouzels, a first for some of the party, and two very anxious golden plovers. A range of the famous Teesdale floral rarities including mountain avens and bird's-eye primrose provided beauty in this rather inhospitable area.

On the walk back down to the river, past the spectacular White Force and the house foundation at the bronze age Bracken Rigg site, the weather really began to clear and by the time the party reached the cars the sun was shining and Upper Teesdale lay bathed in a beautifully soft light. A fitting end to an excellent day.

Ornithology section

The winter lectures began on 28 September with a talk by John Almond on 'A Naturalist in Indonesia' which covered two trips to the area in 1996 and 1998. John described his adventures and the many fascinating things that he saw culminating in the 'dragon hunt' to catch a glimpse of one of the famous ten foot, 150 kilo lizards.

On 18 October 2001 the Durham Bird Club held an open lecture to commemorate the fiftieth anniversary of the publication in the Society's *Transactions* of George Temperley's major work 'A History of the Birds of Durham'. Several members of the Society were amongst the audience of about a hundred people who were treated to an excellent talk by Terry Pickford on the peregrine falcon and other predators. Amongst publications on sale were copies of Temperley's work – rescued from half a century of languishing in cupboards – the sale of which raised approximately £200 for the Society's funds.

In October Martin Hughes gave an excellent account of his adventures on Brabant Island on the Joint Services expedition to this inhospitable area. His role was to study the birds and seals

and he was the expedition surveyor and in charge of the inflatable boats. He graphically described the contrast of beautiful scenery and the smell and noise of the colonies of penguins and seals that they had lived with for six months.

On 18 January John Barratt, Deputy Team Manager with English Nature's Northumbria Team, gave a talk on 'Wind farms and nature conservation'. John covered both the positive aspects of wind-generated power and the effects of wind farm developments on wildlife. He gave a very fair and balanced view of both sides and left his audience with a much clearer picture of the problems involved with this type of initiative.

On 22 February the Society's Secretary, David Noble-Rollin, gave a talk on 'Identification of birds of prey' concentrating on the birds likely to be seen locally. He illustrated the talk with both slides and video to help the audience to follow the identification features.

This year, the Pybus Lecture was delivered by Dr Chris Wernham, a Senior Population Biologist at the British Trust for Ornithology. Dr Wernham is the lead author and editor for the BTO's Migration Atlas, which will be published later this year. The Migration Atlas has been a massive undertaking in which recovery data from approximately ninety years of bird ringing have been analysed and summarised to provide a comprehensive picture of the migration and movements of the majority of bird species in Britain and Ireland. She gave a very entertaining and informative lecture on the production of the Atlas, highlighting some of the important and surprising conclusions that have resulted from this flagship project. The book will be a fascinating source of information on bird movements, and an invaluable resource for conservation and for directing the future of migration research across Europe.

The first field visit on 8 September to Wheldrake Ings and Blacktoft Sands had to be cancelled due to a combination of foot and mouth restrictions and maintenance work on the reserve. However, the next meeting at Holy Island led by David Noble-Rollin took place and a small party of members enjoyed a pleasant day on the island looking for migrants and the arrival of the wintering birds to the slake. There were excellent views of dark-bellied brent geese as well as the normal light-bellied form, the usual waders, and brambling, great spotted woodpecker and stonechat. However the most unusual sight was a stoat that brought a fish as large as itself from the pools on the foreshore and proceeded to eat it in front of the party until it suddenly became aware of their presence.

On 20 January Steve Westerberg led the annual outing to Aberlady Bay and Musselburgh. Unusually, this trip ran on a Sunday because of his other commitments, and as in recent years members travelled by minibus. The day was very windy and cold, with poor visibility for sea-watching. A few red-breasted mergansers, two red-throated divers, some long-tailed ducks and velvet and common scoters were just visible in the swell at Aberlady Bay. However, no grebes were seen. A few geese came in to roost and a large flock of pink-footed geese with barnacles was seen as the group left Aberlady.

This was followed by a visit on 9 March to Loch Ken, Laurieston Forest and Mersehead. Thankfully the weather was fine, to the relief of Steve Westerberg, the trip leader, following his very windy Aberlady/Musselburgh trip in January. The group was treated to superb views of white-fronted geese at Loch Ken. The bus stopped for lunch and a short walk at a viewpoint in Laurieston Forest, where participants were delighted to have a brief glimpse of a displaying golden eagle. The return eastwards via Laurieston village produced good, close and prolonged views of three red kites flying over. This was a considerable bonus, although not totally unexpected since there had been a recent report from the area. Finally, at Mersehead a good selection of wildfowl was seen including gadwall, pintail and shoveler. At Southernness a flock of thousands of barnacles wheeled and swooped against the arc of a rainbow, a very fitting end to an enjoyable birding trip.

The summer programme of field meetings started on 28 April with a visit to Cresswell ponds and Druridge Bay. Exciting migrants were not in evidence but there was an excellent mixture of waders and ducks to look at from the hides.

In early June Steve and Anne Westerberg led the annual Society birding holiday, this year venturing to the islands of South and North Uist and Benbecula. The weather was amazingly fine and sunny. During the ferry crossing from Oban to South Uist the group saw hundreds of Manx shearwaters and gannets, razorbills, black guillemots, arctic and great skuas, minke whales, a basking shark close inshore and at least five white-beaked dolphins.

On South Uist short-eared owls, cuckoo, corncrake and several corn buntings were seen. At Ardvule Point the famous machair (coastal grassland) produced waders, with lapwing, redshank and ringed plover all very common. Some bar-tailed godwits and sanderling with a few common seals were on the beach. Birds of prey were in evidence, two golden eagles displayed, dwarfing a mobbing buzzard, a peregrine falcon also circled overhead and a sea eagle was seen being mobbed by herring gulls.

At Balranald RSPB Reserve on North Uist the reserve produced excellent views of an otter swimming and eating a fish, a great northern diver, more waders and corn buntings, and one calling corncrake. On the last day, the group visited the small hamlet of Howemore (South Uist) with its old Black Houses, now converted into a hostel. Corncrakes were calling everywhere, and in this perfect setting. Everyone had very close views of birds walking and flying in the open. Some short walks around the western side of Benbecula and South Ford (South Uist) allowed participants a further opportunity to soak up the atmosphere of the islands, before departing on the ferry.

On 15 June David Noble-Rollin led a group up the College Valley. The morning was spent around Hethpool where a number of warblers included whitethroat. Dippers feeding newly fledged young were watched from the bridge. Quite a large number of Cheviot wild goats were also seen. In the afternoon the party moved to the Bizzle and had marvellous views of peregrine. There was a noticeable lack of ring ouzel although they were heard. Sightings were rather dubious with a lot of 'rock birds' in evidence as members desperately tried to make rocks into ring ouzels.

The summer field meeting programme ended with two boat trips around Coquet Island to see the roseate terns. Although the advertised trip on 28 June had to be cancelled due to bad weather, alternative dates of 25 and 27 July both proved successful with excellent views of the terns and their fledged young.

Mammal section

On 5 October, Dr Roger Trout presented a description of the spread of a new disease amongst rabbits. Viral Haemorrhagic Disease (VHD) is a virulent disease that has badly affected rabbit populations on mainland Europe. Originally restricted to the far east, incidence in the UK appears to be growing, with the first recorded case in Northumberland at Lindisfarne in recent months. This is a worrying matter that could have severe impacts upon rabbit populations and then upon a range of species for which the rabbit is a staple source of food.

On 4 January, Ailsa Hall from the Sea Mammal Research Unit at Aberdeen University updated the group on the research programme relating to grey seals, particularly around the Farn Islands. She discussed the effect that varying fat levels in seal pups have on their survival in their first year and the other possible environmental variables that could also affect their survival.

On 8 March, the Mammal Group was honoured to welcome Derek Yalden, president of The Mammal Society with a talk entitled 'A History of British Mammals'. Those who missed the lecture did, as they say, 'miss a treat', as Derek condensed into an hour a great deal of the fascinating detail contained within his Poyser book of the same name. His talk covered the last 20,000 years of mammals in Britain. In particular, he discussed how Britain and Ireland got their current, restricted mammal faunas when they were separated from continental Europe some 9,000 years ago. It appears that the climate warmed up even more rapidly than under the current period of global warming, leaving comparatively little time for temperate species to spread north and make it to Britain before the land bridge flooded. Consequently we have to make do without such species as beech marten and garden dormouse. The future of Britain's

mammals was also discussed, relating to the effect of introduced species on native flora. This could result in a small number of ubiquitous species across the globe, colourfully described as 'slum fauna'.

The mammal field meetings began in May with a number of badger watches run by Bob Wilkin and Paul Drummond. In a change from previous years, foxes chose to have their den at an unused badger sett well away from the viewing platform so this year the badgers took centre stage in the entertainment together with a supporting cast of owls, bats, roe deer and a red squirrel. Twelve people attended the watches which were spread over four evenings. They were all rewarded with very close up views of boars, sows and cubs feeding, playing and scent marking. Eight individual animals were seen, with up to six on the surface at any one time. Three of these were this year's cubs and as they gained confidence they spent longer and longer periods above ground, which was a very rewarding experience for the watchers. Badgers continue to expand their range both within the confines of Gosforth Park and in the surrounding areas, several residents in both the Whitebridge Park and Gosforth areas reporting sightings in their gardens during the year.

On 22 May Bob Wilkin took five members on a mammal walk looking for tracks and signs, which included a visit to a badger sett, viewing badger prints, pathways, dung pits and feeding areas. Next was a stop at a fox earth where prey remains and fox scats could be seen. A rabbit warren was visited and roe deer were represented by their slots or footprints, resting up places and territory marking activity. Otter spraint was found at several sites on the walkways, soil mounds and elsewhere; however, mink scats on this occasion were very scarce. There was also an opportunity to examine cones and hazelnuts that had been eaten by red squirrels and members watched a red squirrel that had built its drey in a bird's nest box.

Northumbria Mammal Group activities

The evening meetings of the mammal section are a joint venture with the Northumbria Mammal Group. This group is made up of members of the Northumberland and Durham Wildlife Trusts and the Society. Each year apart from the evening lectures a wide range of activities has been undertaken. It is especially pleasing to note the increase in recording as well as the surge of interest in Teesside, into which area the group recently expanded its remit. Doubtless this enthusiasm centres on the excellent group newsletter produced by Ian Bond. This publication now even boasts its own Big Cat Diary, recording a number of mysterious sightings of large cats across the north-east. Ian has also been coordinating the captive breeding of harvest mice for a release programme around Castle Eden Walkway. Further work on this topic is planned for the future. In addition, the group is planning to undertake a regional survey for water shrews in the next year. The Mammal Group AGM was followed by a visit to the Northumberland Wildlife Trust's Big Waters reserve, where members enjoyed views of roe deer, a number of bats and, for the alert, an eight second glimpse of an otter. To celebrate Mammal Week a very successful event was held on 14 July at Carlisle Park, Morpeth, organized by Ian Robson of Castle Morpeth Borough Council. Visitors enjoyed small mammal trapping and badger and otter walks, as well as a host of information stands. This event will undoubtedly become a regular one in the calendar.

Geology section

The last field meeting of the summer was a trip to the Throckley Brickworks where Colin Richardson described and demonstrated the science and art of commercial brick making. He explained the role of geological activities in determining the characteristics of the raw materials used in the process. The company very kindly provided some extremely welcome hospitality after the visit.

The programme of winter talks started with a talk by Maurice Tucker on 'Coral Reefs' and the way in which modern reefs are affected by human activities. The geological record shows not only similarities but also important differences between ancient and modern reefs. Fred Worral explained how environmental and geological factors have to be taken into account in the safe use of pesticides. The next talk by David Knight covered a timescale long even by geological

standards. He dealt with the origin of life on earth and the geological conditions necessary for such an event. He gave a fascinating insight into the fact that there may have been many cycles of origin and extinction of living organisms until the final explosion of life in the Pre-Cambrian, leading ultimately to ourselves. Moyra Wilson extended our knowledge of tropical reefs with an account of the latest research which indicated that the history of reefs may be more complex than was once thought. One of the hot topics of the moment is global warming and Angus Lunn put this into the context of climatic fluctuations over recent geological time and the implications for predicting future change. The winter season finished with an account by Colin MacPherson of recent research on subduction in the western Pacific which indicates that hotspot activity may play a crucial role in this process. All the talks were of the usual high standard and demonstrated that good speakers can make even the most complex topics understandable.

The summer season of field trips started off with a visit led by Trevor Hardy to the Harthope Valley to look at igneous rocks. Last year's visit had to be postponed because of foot and mouth restrictions but this year's was a highly enjoyable visit where it only rained when members were in their cars. In June, Mike Leddra, Andy Lane and Bill Scott led a very enjoyable hands-on visit to Hartley Bay where the object was to show a mapping technique used in the construction of simple geological maps. The party divided into four groups each with a plane table and equipment to map the outline of a dyke. At the end, the four draft maps were put together and, somewhat to our surprise, they all lined up. The July trip was led by Gordon Liddle who took us to a quarry at Wards Hill where the shales and limestones are very rich in brachiopod fossils. The visit ended with a series of worksheets from which groups were asked to interpret some of the geological features exposed in the quarry. The practical element of these two visits was greatly enjoyed by members and may be a feature of future visits. Thanks go to all speakers and field leaders who gave their time most generously.

Botany section

The winter lecture programme began in October when Dr Brian Whitton of the Department of Plant Biology in the University of Durham spoke on 'Plant life in rivers of the North East'. He described the more conspicuous plants in our local river systems, relating the various communities to the geology and other physical characteristics of the catchment areas, to levels and types of pollution and to the fluvial regimes. The River Wear had been more intensively surveyed and monitored than any other British river. Then in November Michael Braithwaite, BSBI county recorder for Berwickshire, greatly entertained us 'In search of the flora of Berwickshire'. He has an intimate knowledge of the county and illustrated some of its highlights, making comparisons with the flora of his native Northumberland and other areas. He demonstrated both decreases and increases in members of the flora, and related changes to the changing structure of the countryside.

In February John Steele, the Northumberland National Park Species and Habitats Officer, spoke on 'Conserving endangered flora in the Northumberland National Park'. Following the recent publication of Northumberland National Park's *Biodiversity Action Plan*, a range of habitats and species had been identified as being very special to our area. Many were threatened at a local, national or international level, so the planning and practical work had already started to reverse declines and to improve the condition of heather moorland, blanket and raised bog and hay meadows. In parallel, there was work on individual species such as bog orchid *Hammarbya paludosa*, serrated wintergreen *Orthilia secunda* and juniper *Juniperus communis*. Finally, in March, Dr Martin George lectured on 'Problems and challenges in the Norfolk Broads'. Dr George, formerly of the Nature Conservancy Council, is now Chairman of the Broads Society and author of a definitive account of the region – *The land use, ecology and conservation of Broadland*. He explained how Broadland forms one of Britain's most important wetland systems, and was afforded National Park status in 1989. In addition to the approximately fifty shallow lakes or broads (which are flooded peat workings of mediaeval origin) there are substantial areas of undrained fen and wet grazing marshland. Although the region's ecology, and particularly its wetland flora, is of exceptional interest, this has been significantly affected by water quality problems, and by the impact of intensive water-based

tourism and recreation. Dr George described the ecology, plant life, and management problems of the Broads.

On 13 October Janet Simkin led the lichen sub-section to Echo Crag, close to the Scottish border. This site had not been visited by lichenologists since the 1970s, so they were delighted to find the colony of *Alectoria sarmentosa* still present and in good condition. The lichen flora includes many species typical of the Northumberland uplands, and provided much of interest to both experienced lichenologists and those new to the subject. Other finds included *Cladonia bellidiflora*, *Arthonia arthonioides*, *Sphaerophorus melanocarpus*, and a new record for the crags and for north-east England, *Platismatia norvegica*. In the spring, members, relieved to be back in the field after last year's foot and mouth disaster, supported in good numbers even the long-distance summer field trips. The first was to Roudsea Wood in June and was led by Dr Bill Pickering. It is a National Nature Reserve in southern Cumbria, near to Greenodd, and is an exceptionally rich ancient woodland lying on two ridges of contrasting rock, limestone and slate, each with its own flora. Trees and shrubs seen included small-leaved lime *Tilia cordata*, spindle *Euonymus europaeus* and buckthorn *Rhamnus cathartica*. The highlight was large yellow sedge *Carex flava* at its only known British site. Other plants were herb Paris *Paris quadrifolia*, lily-of-the-valley *Convallaria majalis*, gromwell *Lithospermum officinale*, black bryony *Tamus communis*, mountain melick *Melica nutans*, cyperus sedge *Carex pseudocyperus*, royal fern *Osmunda regalis* and much else. A bonus was an adult slow worm with young.

Later in June, Dr John Richards led us to Crag Lough, under the crags of the Whin Sill and with a rich wetland and aquatic flora (examined under drenching conditions). Many sedges were seen, including a very healthy stand of lesser tussock sedge *Carex diandra*. There were also slender sedge *C. lasiocarpa*, much bogbean *Menyanthes trifoliata* in flower and, below the Whin crags, parsley fern *Cryptogramma crispa*.

Finally, in mid-July, Michael Braithwaite guided us round Hareheugh Craigs and Lurgie Loch, in Berwickshire, following his winter lecture. Hareheugh Craigs is an outcrop of the igneous 'Kelso Traps', and supported an interesting grassland flora. Unfortunately management under the Countryside Premium Scheme requires no grazing until August, which has led to the loss or reduction of a number of species. However the steep slopes are still good, with spectacular displays of maiden pink *Dianthus deltoides* and common rockrose *Helianthemum nummularium*. Also present were small cudweed *Filago minima* and annual knawel *Scleranthus annuus*. At a small spring, water whorl-grass *Catabrosa aquatica* was in full flower – a plant new to most members. Nearby Lurgie Loch is actually now a fen (with small areas of acid bog), which has largely wooded over. Species of interest which were seen included slender sedge *Carex lasiocarpa*, marsh stitchwort *Stellaria palustris*, greater marsh bedstraw *Galium palustre* subsp. *elongatum*, common wintergreen *Pyrola minor* and cranberry *Vaccinium oxycoccos*. Along an arable edge, while returning to the cars, we found the local speciality, large-flowered hempnettle *Galeopsis speciosa*.

Midweek Botany Group

The group has continued to meet on a fortnightly basis throughout the spring and summer months, and has shown an increase in the numbers of members attending. The group have visited places of botanical interest chosen by members, ranging from local sites at Prudhoe and Tynemouth to more distant places such as Teesdale and St Abbs Head, each time submitting complete records of plants found to the County Recorder.

In addition, this year the group have carried out surveys requested by other members of the Natural History Society, one of a wood in Weardale, and another of a quarry at Corbridge.

The botanists also joined Ian Moorhouse on the June outing to Cronkley Fell, providing a successful mixture of birds and flowers, although it had to admit that the calls and displays of the moorland birds were more spectacular than the tiny (but interesting) plants found on the sugar limestone of Teesdale!

The midweek botany group looks forward to continuing its activities next season and anyone wishing to join can find out more details from the spring bulletin.

Entomology

On 2 November Dr Brian Selman gave us a masterly display of his many years of experiences as an entomologist in Australia. Part travelogue, part seminar, this was no mere slide show. Each spectacular slide told a story or illustrated some fascinating detail of insect biology.

Our second annual entomological field day was held at Close House, Heddon-on-the-Wall on Saturday 6 July. Our prayers were answered and the morning dawned bright and dry after a very wet week, though this was not to last. Seven members attended including our past chairman, and were led by Brian Selman and Gordon Port representing the Natural History Society and the Royal Entomological Society respectively. Soon all were busy sorting out the moths from the light trap. Then out collecting along the local path sides, sweeping with nets, beating trees into folding trays and pooting (using pocket suction devices to suck insects off the flowers and foliage). The latter is great fun, involving a high degree of stalking skills! Then back into the laboratory for a busy afternoon learning to identify what we had caught and something of their habits. Everyone had a good time and learnt a lot, including of course the leaders. Thus ended a very enjoyable day which we aim to repeat next year when we hope to welcome many more members and their families of all ages 'to get to know more about the insects'.

Thanks are due to the Department of Agricultural and Environmental Science of the University of Newcastle upon Tyne for the use of their laboratory and equipment.

Teas before indoor meetings

During the winter Stella Chambers and Margaret Stobbart prepared coffee or tea and biscuits in the Council room before every Friday evening lecture. This gives an opportunity to members to talk and relax before the lecture. We are very grateful to them both.

RINGING GROUP

The Ringing Group followed its usual pattern of activity during the year, starting off with the autumn migration project at Low Newton-by-the-Sea in September-October 2001 and, after a short winter break, continuing with the constant-effort (CES) ringing project in Gosforth Park Nature Reserve in spring-summer 2002, finally branching out into the seabird projects on the Farne Islands and Coquet Island as the season progressed. In common with the CES totals for 2001, the catch at Low Newton was relatively low, 215 birds were ringed. Eighteen of these were house sparrows, a declining species for which ringing data are worthwhile. It is somewhat paradoxical that the Ringing Group should target a very sedentary species at Low Newton but, given the recent declines in house sparrow numbers that have been linked to a combination of changing agricultural practice and their sedentary habits, detailed study of this species at coastal sites would be worthwhile. The number of migrant warblers caught at Low Newton in autumn 2001 was very low – only five in total. However, this was compensated for by an increase in the numbers of finches caught.

The ringing in Gosforth Park in spring 2002 got off to a relatively slow start, with low numbers being caught. However, as the end of the constant-effort period approached, numbers picked up, including good numbers of young tits (which have fared badly in previous years) and willow warblers. These changes amply illustrate the utility of the constant-effort approach to ringing: year-by-year comparisons allow bird numbers and productivity (the number of young birds produced each year) to be measured, providing indicators of long- and short-term trends essential for conservation planning. As in the previous year, the number of sedge warblers caught was relatively low, but reed warblers seem to be holding their own.

Despite a great deal of bad weather during the season, seabird work has also gone well; 1137 Sandwich terns were ringed on the Farnes and Coquet Island, and also good numbers of shags (189), arctic terns (574), eiders (72), kittiwakes (200) and fulmars. Although most of the seabirds were ringed as chicks, substantial numbers of adult arctic terns, eiders (chicks of this

species are not ringed) and shags were ringed and retrapped as part of a 'Retrapping Adults for Survival' (RAS) project run by the British Trust for Ornithology Ringing Scheme. In addition, the ringing of arctic tern chicks on Coquet Island, with detailed recording by the RSPB Warden Dave Fletcher of hatching dates, has been invaluable in providing estimates of chick mortality and growth quality for arctic terns; this is part of a long term monitoring project which has acted as one of the catalysts for a wider collaborative effort with Newcastle University and the National Trust, aimed at developing a deeper understanding of the dependence of north-east seabird colonies on sand-eel stocks. This project took a further step forward this year and we were able (as a participant in the Farne Islands Marine Research Group) to employ two research assistants to work full time on the Farnes, gathering data on seabird foraging locations and patterns of chick feeding activity. These data are now being analysed. The Sir James Knott Trust has again been very supportive of this coastal research and has agreed a grant of £4000 conditional on matching funds being obtained.

A departure from the Group's normal spectrum of activities occurred at the beginning of March when it hosted the fifth North-East Ringers' conference. This conference is held every two years at Durham University and was an opportunity to raise the Society's profile in the region. The one-day event, sponsored by Northumbrian Water, had a varied programme of talks on raptors (Martin Davison), Coquet and Farne Island terns (Kathy Fletcher and Chris Redfern), hen harriers (Dave Sowter), Lindisfarne brent geese (Steve Percival), the BTO Migration Atlas (Mike Toms) and Ringing and Conservation (Jacquie Clark). In addition, a short session on North-east CES projects allowed participants to compare activities at different CES sites in the region, including Gosforth Park (presented on the Group's behalf by Philip Hanmer). Ringing Group members David Leat, David Noble-Rollin and Ian Johnston (Conference Organiser) chaired the conference sessions.

The Ringing Group demands a high level of commitment from its members each year and we are very grateful for their continuing involvement in the Society's ringing activities, and for their hard work and support of the North-East Ringers' Conference. The Sir James Knott Trust supports the Group with a grant which last year funded the purchase of a four-wheel drive vehicle for towing and launching the boat, and with its support of the Society's coastal research. Northumbrian Water continues to support the Group through the provision of the boat without which the team would be unable to reach the islands. We are grateful to the Farnes wardens for their continued enthusiasm and support, and for welcoming our two field assistants who spent a few weeks on the islands collecting foraging and range-finding data. We greatly appreciate John Walton's involvement in this project and for allowing the field assistants to stay and work on the islands. On Coquet Island, Dave Fletcher made an immense contribution by ringing the arctic tern chicks in our study area as they hatched. Ian Johnston of the Ringing Group deserves special mention for allowing himself to be 'marooned' on Coquet Island for several days, yet again, to ring and retrap adult arctic terns for the RAS project. Finally, as in previous years, the Group is very grateful to Major Carr Ellison for allowing them to use his beach hut at Low Newton.

Many people contribute to the upkeep and maintenance of the reserve. The Society is particularly grateful to the many volunteers who give their time and energy to work parties – building boardwalks and bridges, and keeping the willow carr and rhododendrons in check. The Ringing Group puts in a substantial effort to keeping the willow carr and birch around the lake in check, helped out this year by a team of volunteers from the University of Newcastle Conservation Society led by David Morris. The reserve benefits tremendously from the energy and enthusiasm of our Warden, Paul Drummond, and the Society is very grateful to him and his wife Mary for their work on the Society's behalf.

COQUET ISLAND ADVISORY COMMITTEE

The Committee, which is in place to advise the RSPB on the management of the island, has amongst its members two representatives from both the Society and the Northumberland Wildlife Trust. It has met on two occasions during the year.

The rules governing the remit of the Committee, which were mentioned in last year's report, have still not been finalised. However, one of its proposals, that chairmanship should rotate between the RSPB, the Society and the Wildlife Trust, has been implemented with the result that the Society currently has the chair.

Roseate terns have had an extremely successful year, with fifty-seven pairs breeding compared with forty-one and thirty-one in 2001 and 2000 respectively. This makes the island the largest colony of roseates in Great Britain. The other terns – Sandwich, common and arctic – were also present in increased numbers, possibly aided by a considerable decrease this year in the number of large gulls breeding on the island.

Eiders, unfortunately, have continued their downward trend with 230 pairs and a clutch size of about 3.25. The predation of eggs and chicks by the gull populations continues to be closely monitored.

LINDISFARNE NATIONAL NATURE RESERVE

Lindisfarne Advisory Committee

The advisory committee to English Nature met twice during the year, on 28 November and 22 May. The committee has representatives from a large number of local organizations that have an interest in the Holy Island area. Their main remit is to look at issues that could affect the wildlife in the Lindisfarne National Nature Reserve and any changes that are planned or occur through new or increased use of the area. During the year the main issues discussed included the increasing use of the Budle Bay area for recreational sports such as windsurfing and the new building development there. The committee will monitor the effects of these changes. Also the preparation of new interpretive signs for Holy Island, the construction of a new hide at Fenham-le-Moor and the north end of the Sustrans bicycle route are now in place. A feasibility study to improve the use of the harbour area for tourism was looked at and will be a major focus for the committee in the coming years. The refuge area is discussed under the Wildfowl Panel report

Lindisfarne Wildfowl Panel

The on-going monitoring of the refuge area in the nature reserve has shown that the numbers of birds and the time they spend at Holy Island have increased since the introduction of the non-shooting area at the south end of Holy Island Slake. The number of shooting permits has declined which could be attributed to the presence of the refuge or possibly to a further effect of the foot and mouth outbreak which could have deterred wildfowlers from renewing their permits, as there were movement restrictions on the area until the autumn.

Another issue that was discussed at the two meetings of the Panel was the constant battle to control the spread of *Spartina*. This invasive species reduces the area of mud available for both waterfowl feeding on *Zostera* and waders feeding on animal life in the mudflats. Use of a special rotivator has shown excellent results over the last few years and Wildlife Habitat Stamp funds have once again donated £1000 towards further work. The Environment Agency is undertaking a water quality study to understand better the effects of agricultural and sewage effluent on the nutrient levels of the reserve. Work to date suggested that a large proportion of the nutrients at Lindisfarne originate from agricultural sources with significant input from the river Tweed. English Nature will attempt to reduce this effect by the possible use of agri-environment grants.

Ian D Moorhouse

Chairman of Council

FINANCIAL STATEMENTS

31 JULY 2002

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA TRUSTEES' REPORT FOR THE YEAR ENDED 31 JULY 2002

CHARITY NUMBER 526770

Review of Developments and Activities

The detailed report of the Society's activities during the year appears on pages 5 to 26 of the Annual Report.

Accounts Presentation

The format of the accounts complies with the requirements of Statement of Recommended Practice No. 2 (Revised) – Accounting and Reporting by Charities (SORP 2). SORP 2 requires investments to be valued at market value rather than cost (Note 1).

Statement of Trustees' Responsibilities

Law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial period which give a true and fair view of the charity's financial activities during the period and of its financial position at the end of the period and adequately distinguish any material trust or other restricted fund of the charity. In preparing financial statements giving a true and fair view, the trustees should follow best practice and:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether the policies are in accordance with applicable accounting standards and statements of recommended practice on accounting by charities subject to any departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation.

The trustees are responsible for keeping accounting records which disclose, with reasonable accuracy at any time, the financial position of the charity, and which enable them to ensure that the financial statements comply with the Accounting Standards and Statements of Recommended Practice and the regulations made under s44 of the Charities Act 1993. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Investments

All investment transactions during the year under review have been carried out in accordance with the trustees' powers.

Financial Review

	2002	2001
Net (outgoing)/Incoming Resources	£(8587)	£9736

During the year Tait Walker were appointed as Independent Examiners in place of PricewaterhouseCoopers. Tait Walker have expressed their willingness to continue in office, and a resolution to reappoint them will be proposed at the Annual Meeting.

Signed on behalf of the Trustees

IAN D MOORHOUSE
Chairman and Trustee

11 October 2002

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 JULY 2002

	2002			2001
	Restricted	Unrestricted	Total	Total
	£	£	£	£
Income and expenditure				
Incoming resources				
Members' subscriptions		19537	19537	21070
Grants and donations	3000	1583	4583	11777
Activities for generating funds:				
Investment income		25020	25020	24862
Interest receivable		4312	4312	6306
University of Newcastle upon Tyne		8350	8350	8350
Proceeds from the sale of <i>Transactions</i>		1968	1968	1329
Miscellaneous income		1410	1410	-
Total incoming resources	<u>3000</u>	<u>62180</u>	<u>65180</u>	<u>73694</u>
Resources expended				
Charitable expenditure (note 2)	5440	55785	61225	54911
Management and administration (note 3)		12542	12542	9047
Total resources expended	<u>5440</u>	<u>68327</u>	<u>73767</u>	<u>63958</u>
Net (outgoing)/incoming resources for the year	(2440)	(6147)	(8587)	9736
Other recognised gains and losses				
Realised	0	32534	32534	6596
Unrealised	0	(129095)	(129095)	(36871)
Total investment gains/(losses)	<u>0</u>	<u>(96561)</u>	<u>(96561)</u>	<u>(30275)</u>
Net movement in funds	(2440)	(102708)	(105148)	(20539)
Balance brought forward	5649	680998	686647	707186
Total funds carried forward 31 July 2002	<u>3209</u>	<u>578290</u>	<u>581499</u>	<u>686647</u>

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
BALANCE SHEET AS AT 31 JULY 2002

	2002	2001
	£	£
Fixed assets		
Tangible assets for use by the charity (note 6)	9957	11411
Investments (note 7)	514279	607452
	<u>524236</u>	<u>618863</u>
Current assets		
Debtors (note 8)	4858	2461
Cash at bank and in hand	60552	73832
	<u>65410</u>	<u>76293</u>
Creditors: Amounts falling due within one year (note 9)	8147	8509
Net Current Assets	<u>57263</u>	<u>67784</u>
Total Assets Less Current Liabilities	<u>581499</u>	<u>686647</u>
Funds		
General Fund	184398	213093
Expendable Endowments:		
TB Short Memorial Fund	203700	235708
Grace Hickling Memorial Fund	172394	206949
	<u>560492</u>	<u>655750</u>
Life Members Fund	2124	2322
Designated Capital Funds (note 10)		
Gosforth Park Nature Reserve Restoration Fund	15674	18926
Deferred Repairs Fund		4000
Restricted Funds:		
Archive/Coquet/ Farnes Research Fund (note 11)	3209	5649
	<u>581499</u>	<u>686647</u>

Approved by Council on 11 October 2002

IAN D MOORHOUSE - Chairman and Trustee

DAVID GARDNER-MEDWIN - Trustee

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 JULY 2002

1 Accounting Policies

1.1 Basis of Accounting

The accounts are prepared under the Historical Cost Convention as modified for the revaluation of Fixed Asset Investments and comply with the Statement of Recommended Practice 'Accounting and Reporting by Charities'.

1.2 Realised and Unrealised Gains and Losses on Investments are recognised in the Statement of Financial Activities in the period in which they arose.

1.3 Listed Investments are stated at market value at 31 July 2002.

1.4 Tangible Fixed Assets

Tangible fixed assets are stated at cost less depreciation which is provided in equal annual instalments over the estimated useful lives of the assets.

No value was attributed to the Hancock Museum at the date of its completion in 1884. The building is leased to the University of Newcastle upon Tyne which is normally responsible for all repairs and improvements.

The cost of Lake Lodge, less donations and grants received, of £3899 is depreciated at 2% per annum. The cost of installing mains electricity at Lake Lodge, less donations received, of £5300 has been fully depreciated

The cost of the hides, equipment and office furniture is depreciated at 10% per annum and computers and office equipment at 20% per annum.

1.5 Statement of Financial Activities

Donations are recognised when received unless the receipt is certain, when they are recognised as accrued income. Expenditure is accounted for on an accrued basis. Any excess of income over expenditure for the year is arrived at after making appropriations to special funds for the purpose of setting aside temporary surpluses of income to meet future expenditure.

1.6 Fund Accounting

The General Fund is unrestricted, and is expendable at the discretion of the trustees in the furtherance of the objects of the charity. The T B Short and Grace Hickling Memorial Funds were created from legacies and are invested in accordance with the Trustee Investment Acts and are subject only to expenditure for special projects. The Life Members Fund consists of amounts received in payment of life subscriptions and they are released to income over a period of 20 years in equal annual instalments.

Gosforth Park Nature Reserve Restoration Fund	2002	2001
General restoration	7174	10426
Sir James and Lady Steel donation for lake rejuvenation	<u>8500</u>	<u>8500</u>
	<u>15674</u>	<u>18926</u>

2 Charitable Expenditure (unrestricted)

	2002	2001
Salaries, pension contributions and national insurance (note 4)	28112	26084
Printing and stationery	2402	2327
Postage and telephone	2430	2684
Insurance	2250	1996
General expenses	1103	283
Subscriptions to societies	487	583
Lecture and field meeting expenses	2122	1529
Transactions	5558	6319
Library	1994	2440
Gosforth Park Nature Reserve		
Net of: transfer from Restoration Fund	950	1709
Coastal research	2413	2320
Depreciation	2406	2286
Archives	1678	-
Repairs and renewals	1727	-
Repairs to Lake Lodge	153	-
	<u>55785</u>	<u>50560</u>

3 Administration Expenses

	2002	2001
Salaries, pension contributions and national insurance (note 4)	8171	6247
Printing and stationery	126	122
Postage and telephones	128	142
Insurance	250	222
General expenses	400	229
Accountancy fees	2768	1565
Independent review	699	520
	<u>12542</u>	<u>9047</u>

4 Information regarding Employees and Trustees

	2002	2001
Average number of employees during the year	<u>4</u>	<u>3</u>
Total emoluments	<u>36283</u>	<u>32331</u>

No trustee, or person related or connected by business to them, has received any remuneration from the charity during the year.

During the year, payments were made to two (2001 - four) trustees in respect of reimbursement of expenses incurred on the Charity's behalf totalling £222 (2001 - £131).

A payment was received during the year from one trustee of £50 (2001 - £100) in respect of photocopying carried out at a commercial rate.

5 Coastal Research

Coastal Research comprises boat and vehicle costs together with ringing expenses for Farne Islands and Coquet Island research.

6 Tangible Fixed Assets for use by the Society

	2002	2001
Hancock Museum	Not valued	
Lake Lodge: Cost	3899	3899
Electrical installation	5300	5300
	9199	9199
Less: Depreciation to date	<u>7250</u>	<u>7172</u>
Net book value	1949	2027
Hides, equipment, office furniture and computers		
Cost	37363	37363
Additions	952	-
Depreciation to date:	<u>30307</u>	<u>27979</u>
Net book value	<u>8008</u>	<u>9384</u>
Total net book value	<u>9957</u>	<u>11411</u>

There were no capital commitments at 31 July 2002

7 Investments held as Fixed Assets

Investments in trustee securities, at market value, were held as follows:

	2002	2001
Listed		
On a recognised stock exchange	<u>461222</u>	<u>510673</u>
Unlisted		
Charities Official Investment Fund	<u>53057</u>	<u>96779</u>

The portfolio investments include the following material investments:

Short Fund - Schroder UT's Ltd

82,000 Retail Corporation Bonds which represent 7.17% of the market value of the portfolio.

General Fund - Charity Funds Investment Income

7,000 units which represent 10.32% of the market value of the portfolio.

General Fund - Schroder UTs Ltd

61,500 Retail Corporation Bonds which represent 5.35% of the market value of the portfolio.

8 Debtors	2002	2001
Trade debtors	228	114
Prepayments and accrued income	<u>4630</u>	<u>2347</u>
	<u>4858</u>	<u>2461</u>

9 Creditors	2002	2001
Other taxation and social security	0	732
Accruals	<u>8147</u>	<u>7777</u>
	<u>8147</u>	<u>8509</u>

10 Designated funds

	2001	New designations	Utilised	2002
Gosforth Park Nature Reserve	18926	-	(3,252)	15674
Deferred repairs	4000	-	(4000)	-
	<u>£22926</u>	<u>-</u>	<u>(7252)</u>	<u>15674</u>

11 Restricted funds

	2001	New designations	Utilised	2002
Archives/Coquet/Farnes research	<u>5649</u>	<u>3000</u>	<u>(5440)</u>	<u>3209</u>

This fund was set up to accumulate funds for the purchase of a support vehicle, and to undertake research into sand eels. A restricted grant for this purpose of £5000 was received in 2001 from the Sir James Knott Trust and the research was undertaken during the current year. The grant of £3000 was also received from the same trust to undertake archive repair and restoration work.

INDEPENDENT EXAMINERS REPORT TO THE TRUSTEES
OF THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

I report on the financial statements of the charity for the year ended 31st July 2002, which are set out on pages 28 to 34.

RESPECTIVE RESPONSIBILITIES OF TRUSTEES AND EXAMINER

As the charity's trustees, you are responsible for the preparation of the accounts; you consider that the audit requirement of Section 43(2) of the Charities Act 1993 (the Act) does not apply. It is my responsibility to state, on the basis of procedures specified in the General Directions given by the Charity Commissioners under Section 43 (7)(b) of the Act, whether particular matters have come to my attention.

BASIS OF INDEPENDENT EXAMINER'S REPORT

My examination was carried out in accordance with the General Directions given by the Charity Commissioners. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from you as trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

INDEPENDENT EXAMINER'S STATEMENT

In connection with my examination, no matter has come to my attention:

- (1) which gives me reasonable cause to believe that in any material respect the requirements:
 - to keep accounting records in accordance with Section 41 of the Act; and
 - to prepare accounts which accord with the accounting records and to comply with the accounting requirements of the Act
 - have not been met; or
- (2) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

G J Moore
Independent Examiner
Chartered Accountant
Tait Walker
Bulman House
Regent Centre
Gosforth
Newcastle upon Tyne
NE3 3LS

15 October 2002

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BIRDS ON THE FARNE ISLANDS in 2002

compiled by

ROBIN HARVEY

National Trust Warden

ringing report by

CHRIS REDFERN

edited by

MARGARET PATTERSON

¹Foresters Cottage, Doxford, Chathill, Northumberland NE67 5DS, ²Medical Molecular Biology Group, Department of Medicine, University of Newcastle NE2 4HH and ³The Natural History Society of Northumbria, Hancock Museum, Newcastle upon Tyne NE2 4PT

INTRODUCTION

The wardens sailed out to the islands on 26 March and both the inner and outer groups were manned until 13 December (the planned departure date being delayed by one of the worst autumns weather wise on record). Twenty-two species bred with an estimated population of 72,000 pairs. Increases were noted for fulmar (+13%), mallard (+100%), eider (+24%), oystercatcher (+54%), ringed plover (+54%), black-headed gull (+49%), arctic tern (+20%) guillemot (+7%), razorbill (+21%), rock pipit (+60%) and pied wagtail (+33%), while cormorant (-3%), shag (-7%), kittiwake (-13%), Sandwich tern (-20%) and common tern (-20%) all decreased. Some breeding species fared better than others in the now expected poor June weather with many puffin burrows flooded on the outer group and some tern chick mortality. On the plus side the single pair of roseate terns raised two young, Sandwich terns had a very successful season and preventative measures reduced gull predation on Brownsman allowing many more arctic tern chicks to survive than in 2001.

Passage birds were represented by 156 species with the overall total of 178 being rather lower than in most recent years. Whooper swan, pochard, water rail and little bunting to name but a few were conspicuous by their absence. Despite this, it was another remarkable season. Three species were added to the island list: white-rumped sandpiper, red-rumped swallow and thrush nightingale. The second to fourth spoonbills were recorded, honey buzzard appeared for the third time, and the fourth Fea's petrel and hobby were noted. Great shearwater made a sixth appearance, the sixth to eighth little grebes were seen and osprey was noted for the eighth time. Three Cory's shearwaters were the eighth to tenth for the islands, two hen harriers were the eighth and ninth records, and the ninth yellow-breasted bunting and grey-headed wagtail were discovered. Other species of note included Balearic shearwater (seven, including the latest ever in Northumberland), storm petrel, Leach's petrel, quail, corncrake (2), coot, wood sandpiper (3), grey phalarope (4), long-tailed skua (4), Mediterranean, Iceland and glaucous gulls, black tern, wryneck (5), shore lark, red-spotted bluethroat (3), barred warbler (5), yellow-browed warbler, wood warbler, Scandinavian chiffchaff, red-backed shrike, mealy redpoll (2), common rosefinch and ortolan bunting. Again some impressive day counts were recorded including 1,389 barnacle geese, 500 woodcock, 1,747 little gull (a Northumberland record), 2,112 little auk, 479 brambling, 58 greenfinch and 420 crossbill.

Thanks go to the 2002 wardening team of Mark Brown, Graeme Garner, James Gorman, Robin Harvey, Chris Hill, Mark Patterson, Alein Shreeve, David Steel, Bas Teunis, Stuart Thomas and John Thompson, to research assistants Rachel Coombes and Phil Day, and to various boatmen, for supplying the records which make up this report.

The following is a day-by-day summary of the highlights of 2002. *First record* means the first record for the year and species in bold are of particular interest; for more details refer to the species accounts.

February

- 10 Greylag goose, teal (40), sparrowhawk, peregrine (2)

March

- 18 Grey wagtail, greenfinch
26 Bar-tailed godwit (14, peak spring count)
27 Wigeon (first record), long-tailed duck (3, first record), Sandwich tern (first record), woodpigeon (first record), goldcrest (first record), jackdaw (first record)
28 Merlin, chiffchaff (first record), rook (2, first record), chaffinch (first record)
29 Wheatear (first record), greenfinch
30 Sparrowhawk
31 Sparrowhawk

April

- 2 Merlin, swallow (first record)
3 Merlin, woodcock, sand martin (first record), meadow pipit (102, peak count), brambling (2, first record), greenfinch, goldfinch (first record), siskin (first record)
4 Mute swan (dead), merlin, peregrine, lapwing (first record), knot (2, first record), **glaucous gull**, fieldfare (32, peak spring count), redwing (18, peak spring count), greenfinch
6 White wagtail
7 Merlin, first kittiwake nest building, linnet (19, peak spring count)
8 Red-breasted merganser (first record), snipe (first record), whinchat (first record), **Lapland bunting** (2)
9 Red-throated diver (5, spring peak), Manx shearwater (first spring record), gannet (1,520 per hour, peak passage), wigeon (13, peak spring count), first prospecting eiders
10 First Sandwich tern display, first rock pipit nest building
11 Mute swan (2), curlew (300, peak spring count)
12 Manx shearwater
13 Black-throated diver, goldeneye (last spring record), golden plover (61, first record, peak spring count), first guillemot eggs
14 Common scoter (40, peak spring count), goosander (2), oystercatcher (94, peak spring count), purple sandpiper (247, peak spring count), redshank (12, peak spring count), turnstone (111, peak spring count), great skua (first record), song thrush (first record)
15 First ringed plover eggs
17 Common tern (first record), dunnoek, willow warbler (first record)

- 18 First cormorant eggs, pintail (2), woodcock, first displaying black-headed gulls, arctic tern (first record), dunnoek, blackcap (first record), chiffchaff (6, peak spring count)
- 19 Red-throated diver (4), long-tailed duck (3, last spring record), greenshank, song thrush (8, peak spring count)
- 20 **Spoonbill** (2)
- 21 Red-breasted merganser (4, peak and last spring record), yellow wagtail (first record), fieldfare (last spring record), lesser redpoll (first record)
- 22 Common gull (130, peak count), **Iceland gull**, white wagtail, wren (last spring record), wheatear (11, peak spring count)
- 23 Greylag goose, red-necked grebe, first shag eggs, peregrine, carrion crow (18, peak count), goldfinch (9, peak spring count), **mealy redpoll**
- 24 Collared dove, first rock pipit eggs
- 25 First eider eggs, **Mediterranean gull**, first common tern display, collared dove
- 26 Tufted duck (2, only spring record), peregrine, first puffin eggs, white wagtail
- 27 Goosander (2)
- 28 Teal (2, last spring record), sparrowhawk, first nest-building black-headed gull, first arctic tern display, first razorbill egg, yellow wagtail (2)
- 30 **Spoonbill**, redwing (last spring record)

May

- 1 Common tern (100, peak spring count), little tern (2, first record), whitethroat (3, first record), garden warbler (first record), rook (2, last spring record)
- 2 First black-headed gull eggs, redstart (first record)
- 3 Chaffinch (last spring record)
- 4 Scaup, Sandwich tern (3,500, peak count), roseate tern (first record)
- 5 First oystercatcher eggs, reed bunting (first record)
- 6 Arctic skua (first record), arctic tern (3,500, peak count), lesser whitethroat (first record), willow warbler (8, peak spring count), **red-backed shrike**, brambling (last spring record)
- 7 First mallard young, arctic skua, great skua, short-eared owl, tree pipit (first record), ring ouzel, sedge warbler (first record), goldcrest (last spring record), **red-backed shrike**
- 8 Lapwing (last spring record), great skua, **thrush nightingale**
- 9 First rock pipit young, first pied wagtail eggs, **red-spotted bluethroat**, song thrush (last spring record), pied flycatcher (2, first record)
- 10 **Red-spotted bluethroat** (2), lesser whitethroat (5, peak spring count)
- 11 Barnacle goose (only spring record), **grey phalarope**, first kittiwake eggs, **red-spotted bluethroat**, lesser whitethroat (3, last spring record), carrion crow (18, peak count), goldfinch (last spring record)
- 12 Eider (671, peak spring count)
- 13 First Sandwich tern eggs
- 14 Little tern (62, peak count)
- 16 First fulmar eggs, first arctic tern eggs

- 17 Manx shearwater (107, peak spring count), blackbird (last spring record)
- 18 **Hobby**, meadow pipit (last spring record), **red-spotted bluethroat**, redstart (last spring record)
- 19 Garden warbler (2, last spring record), jackdaw (3, last spring record)
- 20 House martin (2, first record), chiffchaff (last spring record)
- 21 Mute swan (3), whimbrel, first common tern eggs, whitethroat (last spring record), spotted flycatcher (first record)
- 22 **Osprey**, sedge warbler (last spring record)
- 23 Canada goose (3), grey plover (last spring record), bar-tailed godwit (last spring record), whimbrel, collared dove, skylark (last spring record)
- 24 Dunlin (13, peak spring count), whimbrel, collared dove, first rock pipit fledglings, **grey-headed wagtail**
- 26 First cormorant young, little gull
- 27 Little gull, first guillemot young, first razorbill young, first puffin young, first pied wagtail young, robin (last spring record)
- 28 First shag young
- 29 First black-headed gull young
- 30 Canada goose (46), snipe (last spring record)

June

- 2 Common sandpiper (first record)
- 3 First ringed plover young, first kittiwake young, first Sandwich tern young, first razorbill 'jumpling', swift (2, first record)
- 4 House martin (last spring record)
- 6 Dunlin (last spring record)
- 7 Black redstart (first record), linnet (last spring record)
- 8 First arctic tern young, woodpigeon (last spring record), first pied wagtail fledglings, black redstart (2)
- 9 First fulmar young, tree pipit (last spring record), black redstart, whinchat, reed warbler, blackcap (last spring record), spotted flycatcher (last spring record), pied flycatcher (last spring record), siskin (2, last spring record)
- 10 Canada goose (36), black redstart
- 12 First common tern young, first guillemot 'jumplings'
- 13 First oystercatcher young, knot (24, peak spring count)
- 16 **Quail**, swift (last spring record), willow warbler (last spring record)
- 20 Red-throated diver (2), mute swan, pomarine skua
- 21 Golden plover (140)
- 22 Great skua (first autumn record)
- 26 Black-tailed godwit
- 27 Manx shearwater (84), arctic skua (first autumn record)
- 28 Whimbrel (first autumn record)
- 29 First cormorant fledglings

July

- 1 First arctic tern fledglings
- 2 First black-headed gull fledglings, first Sandwich tern fledglings
- 3 Dunlin (first autumn record)
- 4 First puffin fledglings
- 5 Woodpigeon (first autumn record)
- 6 First shag fledgling, knot (19, first autumn record), bar-tailed godwit (3, first autumn record)
- 7 Teal (3, first autumn record)
- 8 Common sandpiper (2, first autumn record)
- 10 First common tern fledglings, reed warbler (first autumn record)
- 11 First kittiwake fledglings, swift (first autumn record), wren, reed warbler
- 14 Purple sandpiper (280, peak autumn count)
- 15 Greenshank (first autumn record)
- 16 Little gull
- 20 Golden plover (7, first autumn record)
- 21 Manx shearwater (116)
- 24 Storm petrel (2)
- 25 Curlew (240, peak autumn count), roseate tern (8, peak count)
- 29 Snipe (first autumn record)
- 30 Lapwing (2, first autumn record), dunlin (first juveniles)
- 31 Sanderling, whimbrel (9), **wood sandpiper** (2, first record), willow warbler (2, first autumn record)

August

- 1 Manx shearwater (27), green sandpiper (first record), **wood sandpiper** (3), common gull (10, first autumn record)
- 2 Sooty shearwater (3, first autumn records), **wood sandpiper** (2), sedge warbler (first autumn record)
- 3 Sooty shearwater, ruff, green sandpiper, **wood sandpiper** (2), major departure of puffins, swift (last record), robin (first autumn record), garden warbler (first autumn record)
- 4 Dunlin (35, peak count), green sandpiper, **wood sandpiper** (2), black redstart
- 5 Ruff, **wood sandpiper** (2)
- 6 **Wood sandpiper** (2)
- 7 Green sandpiper, **wood sandpiper** (2), black redstart, **wood warbler**, pied flycatcher (3, first autumn record)
- 8 Green sandpiper, **wood sandpiper** (2)
- 9 **Wood sandpiper**
- 10 Green sandpiper, **wood sandpiper**, fieldfare (first autumn record), **barred warbler**, chiffchaff (first autumn record)
- 11 Oystercatcher (200, peak autumn count), **wood sandpiper**, **barred warbler**

- 12 **Wood sandpiper, barred warbler**
- 13 **Wood sandpiper**
- 14 **Wood sandpiper**, willow warbler (23, peak count)
- 15 Red-breasted merganser (4, first autumn record), **wood sandpiper**
- 16 **Wood sandpiper**
- 17 **Wood sandpiper**
- 18 Greenshank (2), **wood sandpiper**, common sandpiper (10, peak count), whinchat (6, first autumn record), whitethroat (first autumn record)
- 19 **Wood sandpiper**
- 20 Shoveler, **wood sandpiper, black tern**, reed warbler (3), **barred warbler**, starling (150, peak count)
- 21 **Black tern**
- 22 Red-throated diver (first autumn record), wigeon (3, first autumn record), teal (86, peak August count), shoveler, **black tern**
- 23 Tufted duck (2, first autumn record), whimbrel (7), greenshank (2), **black tern**, goldfinch (22, first autumn record and peak count), **crossbill** (4, first record)
- 24 Redstart (first autumn record), **barred warbler, crossbill**
- 25 First fulmar fledgling, **crossbill** (2)
- 26 Sooty shearwater (3), sanderling
- 27 Peregrine (first autumn record), goldcrest (first autumn record), linnet (2, first autumn record)
- 28 Kittiwake (2,323, peak count)
- 29 **Crossbill** (2)
- 30 Whimbrel (10, peak count), tree pipit (first autumn record), spotted flycatcher (first autumn record), **crossbill**
- 31 Meadow pipit (4, first autumn record)

September

- 1 Teal (45, peak September count), merlin (first autumn record), dunnoek (first autumn record)
- 2 **Coot**
- 3 Brent goose (10, first record), grasshopper warbler (first record), **crossbill** (107), **yellow-breasted bunting**
- 4 Sparrowhawk (first autumn record), kestrel (first record), **white-rumped sandpiper**, wren (first autumn record), grasshopper warbler, **crossbill, common rosefinch**
- 5 **White-rumped sandpiper**, swallow (110), meadow pipit (43), lesser redpoll (first autumn record), **crossbill**
- 6 Golden plover (1,500, peak autumn count), **white-rumped sandpiper**
- 7 Knot (38, peak count), **white-rumped sandpiper**, grasshopper warbler
- 8 Red-throated diver (12), grey plover (2, first autumn record), **white-rumped sandpiper**, redshank (47, peak autumn count), turnstone (496, peak autumn count), arctic skua (23, peak count), great black-backed gull (450, peak count),

- wryneck, grasshopper warbler, lesser whitethroat (first autumn record), blackcap (first autumn record), **crossbill** (45)
- 9 Pintail (first autumn record), **white-rumped sandpiper**, ruff, arctic skua (12), **wryneck** (4), **red-rumped swallow**, swallow (100), house martin (7), yellow wagtail, whinchat (12), song thrush (2, first autumn record), lesser whitethroat (13, peak count), garden warbler (45), spotted flycatcher (6, peak count), pied flycatcher (21), chaffinch (17), **crossbill** (420, peak and record count)
 - 10 Great northern diver (first autumn record), wigeon (178, peak September count), pintail (19, peak count), red-breasted merganser, **honey buzzard**, moorhen, **little stint**, **white-rumped sandpiper**, jack snipe (2, first records), green sandpiper (last record), common sandpiper (7), **wryneck** (3-4), swallow (133, peak count), house martin (12, peak count and last record), tree pipit (3, peak count), meadow pipit (57, peak count), yellow wagtail (last record), redstart (24, peak count), whinchat (56, peak count), wheatear (60, peak count), reed warbler (5, peak count), **barred warbler**, garden warbler (50, peak count), chiffchaff (20, peak count), willow warbler (20), pied flycatcher (34, peak count), **crossbill** (42)
 - 11 Red-necked grebe (first autumn record), common tern (140, peak count), **wryneck**, meadow pipit (50), whinchat (17), pied flycatcher (10), **crossbill** (3)
 - 12 Snipe (11, peak count), tree pipit (3), whinchat (10), **crossbill** (2)
 - 13 Common scoter (200, peak count), ringed plover (54, peak count), brambling (first autumn record), **crossbill**
 - 14 Sooty shearwater (401), **little stint**, **white-rumped sandpiper**, great skua (16), skylark (first autumn record), sedge warbler (last record), **crossbill** (last record)
 - 15 Black-throated diver, **blue fulmar**, **Cory's shearwater**, **great shearwater**, sooty shearwater (229), **Balearic shearwater** (2), grey heron (19, peak count), **corncrake**, **white-rumped sandpiper**, great skua (15), little gull (21), grey wagtail (first autumn record)
 - 16 **White-rumped sandpiper**, little auk (first record)
 - 17 Greylag goose (22), **little stint**, **white-rumped sandpiper**, pomarine skua (2), little tern (last record), short-eared owl (first autumn record)
 - 18 **White-rumped sandpiper**, grasshopper warbler (last record)
 - 19 Red-throated diver (17), barnacle goose (203, first autumn record), roseate tern (last record)
 - 20 Pomarine skua (3), arctic skua (12)
 - 21 Pomarine skua (3), jackdaw (11, first autumn record and peak count)
 - 22 Blue fulmar, **Cory's shearwater**, sooty shearwater (559), Balearic shearwater (2), velvet scoter (2, first record), **grey phalarope**, pomarine skua (2), **long-tailed skua**, great skua (13), little auk, blackbird (first autumn record), fieldfare (4,980, peak count), goldcrest (22, peak count)
 - 23 Red-necked grebe (3, peak count), **Fea's petrel**, **Cory's shearwater**, sooty shearwater (696, peak count), Manx shearwater (249, peak count), **Balearic shearwater**, pomarine skua (17, peak count), **long-tailed skua** (3), great skua (30, peak count), little gull, little auk (2), twite (first record)
 - 24 **Corncrake**
 - 26 Sooty shearwater (458), pink-footed goose (119, first record), barnacle goose (1,389, peak and record count), brent goose (48, peak count), pintail (4), rook (first autumn record)
 - 27 Red-breasted merganser (last record), sparrowhawk (last record)

- 28 Knot (last record), **yellow-browed warbler**
- 29 Common sandpiper (last record), rook (7, peak count), carrion crow (7, peak autumn count)

October

- 1 Great northern diver (3), spotted flycatcher (last record)
- 2 Whimbrel (last record), tree pipit (last record), whinchat (last record), ring ouzel (first autumn record), song thrush (75), redwing (8, first autumn record), siskin (7, first autumn record and peak count), reed bunting (9, first autumn record)
- 3 Pied flycatcher
- 4 **Hen harrier**, pied flycatcher
- 6 Sooty shearwater (323), Manx shearwater (133), woodcock (first autumn record), pomarine skua (14), arctic skua (13), great skua (13)
- 7 Sooty shearwater (77), wigeon (89, peak October count), long-tailed duck (first autumn record)
- 8 Arctic tern (2, last record), ring ouzel (2-4, peak count), blackbird (136), song thrush (1,811, peak count), redwing (3,405, peak count), brambling (479, peak count), greenfinch (35), **ortolan bunting**, reed bunting (25)
- 9 **Shore lark**, brambling (71), greenfinch (36), reed bunting (15)
- 10 Slavonian grebe, black guillemot (first record), **shore lark**, wheatear (last record), greenfinch (45), reed bunting (23)
- 11 Short-eared owl (2), **shore lark**, song thrush (120), greenfinch (58, peak count), reed bunting (26, peak count)
- 12 **Shore lark**, greenfinch (28), **Lapland bunting**, reed bunting (21)
- 13 Little gull (20), Sandwich tern (last record), **shore lark**, dunnoek (6, peak count), robin (25, peak count), mistle thrush, greenfinch (14), **Lapland bunting**, yellowhammer (first record), reed bunting (17)
- 14 **Balearic shearwater**, little gull (1,747, record count), **shore lark**, robin (25), redstart (last record), willow warbler (last record), chaffinch (23, peak count), brambling (40), greenfinch (14), **Lapland bunting**, yellowhammer, reed bunting (17)
- 15 **Shore lark**, **Lapland bunting**, yellowhammer, reed bunting (10)
- 16 Manx shearwater, little gull (217), long-eared owl, **shore lark**, garden warbler (last record), **Lapland bunting**, yellowhammer, reed bunting (5)
- 17 Goldeneye (first autumn record), **shore lark**, yellowhammer
- 18 Velvet scoter (14, peak count), goosander (2, first autumn record), **shore lark**, yellowhammer
- 19 Slavonian grebe, little auk, **shore lark**
- 20 Little gull (15), **shore lark**, greenfinch (37)
- 21 **Hen harrier**, pomarine skua, arctic skua (11), little auk, **shore lark**, black redstart, yellowhammer
- 22 Jack snipe (3, peak count), common tern (last record), woodpigeon (last record), **shore lark**, wren (13, peak count), black redstart (2), ring ouzel (last record), redwing (2,875), reed warbler (3, last record), **barred warbler**, blackcap (18, peak count), pied flycatcher (2, last record), brambling (23), yellowhammer (6, peak count), reed bunting (8)

- 23 Little gull (17), little auk (3), **shore lark**, black redstart, yellowhammer
- 24 Teal (110, peak October count), **shore lark**, siskin (last record), linnet (40, peak count), yellowhammer
- 25 Little gull (27), **shore lark**, yellowhammer
- 26 Little auk (2), yellowhammer
- 27 Little gull (24) yellowhammer
- 28 Pink-footed goose (530, peak count), barnacle goose (75, last record), **grey phalarope**, yellowhammer
- 29 Yellowhammer
- 30 Snow bunting (first record)
- 31 Red-throated diver (13), **little grebe** (3), skylark (24, peak count), twite (23, peak count)

November

- 2 Sooty shearwater, woodcock (500, peak count), little auk (25), black redstart (last record), blackbird (450, peak count), fieldfare (300), lesser whitethroat, blackcap (2, last record), jackdaw (last record), yellowhammer (2)
- 3 Red-throated diver (13), wigeon (465, peak count), scaup, velvet scoter (8), goldeneye (45, peak count), goosander (9, peak count), woodcock (26), little gull (36), short-eared owl (last record), blackbird (250), lesser whitethroat (last record), chiffchaff (last record), chaffinch (last record), lesser redpoll (5, peak count), yellowhammer
- 4 Black-throated diver, greenshank, great skua, little gull (50), black-headed gull (115, peak count), rook (last record), yellowhammer (last record)
- 5 Carrion crow (7, peak autumn count), goldfinch (3, last record), twite (13)
- 6 Sooty shearwater, grey plover (6, peak count), jack snipe (last record)
- 8 Greylag goose, meadow pipit (last record)
- 9 Sooty shearwater, **Leach's petrel**, little auk (20), **mealy redpoll**
- 10 Arctic skua, little auk (218), fieldfare (100)
- 11 Swallow (2, last record)
- 12 Little auk (20)
- 13 Kestrel (last record)
- 14 **Balearic shearwater**, long-tailed duck (8, peak count), pomarine skua, arctic skua (5), great skua (22), reed bunting (2, last record)
- 15 Red-throated diver (27, autumn peak), black-throated diver, great northern diver (4, peak count), **storm petrel**, shelduck (6, peak count), golden plover (850), lapwing (300, peak count), little gull (16), grey wagtail (last record)
- 16 Great crested grebe (3), black guillemot (3, peak count), **Scandinavian chiffchaff**
- 17 Red-throated diver (16), Manx shearwater (last record), scaup, black guillemot (3), little auk (20), snow bunting (11)
- 18 Eider (723, peak autumn count), goldcrest (last record)
- 19 Great crested grebe
- 20 Little auk (12)

- 21 Tufted duck (4, peak count), long-tailed duck (last record), great skua (3), little auk (57)
- 22 Little auk (2,112, peak count)
- 23 Teal (180, peak count), bar-tailed godwit (20, peak count), great skua (3), little auk (22), greenfinch (13), twite (11, last record), snow bunting (8)
- 24 Mallard (60, peak count), snow bunting (7)
- 26 Tufted duck (2, last record), greenfinch (13), lesser redpoll (last record)
- 27 Little auk (16)
- 28 Arctic skua (last record), greenfinch (last record)
- 29 Linnet (3, last record), snow bunting (12, peak count)
- 30 Common gull (50, peak autumn count)

December

- 2 Woodcock
- 3 Golden plover (30), **grey phalarope**, little gull (14)
- 4 Velvet scoter (4), dunlin (2)
- 6 Brent goose (3), scaup (6, peak count), woodcock, little gull (10), long-eared owl, brambling (2), snow bunting (last record)
- 7 Song thrush
- 8 Brent goose (3), goosander (2), little gull (15)
- 9 Woodcock, little gull (10), little auk (23)
- 10 Woodcock, great skua, black guillemot (3), little auk (53)
- 11 Great skua, little auk (73)
- 12 Red-necked grebe, pintail, woodcock, little gull (5), little auk (51)
- 13 Black guillemot (2), little auk (5)

Details of all the birds are given in the following list: this follows the order and scientific nomenclature of Professor Dr K H Voous' list of recent Holarctic species (1977), except for the shearwaters and gannet which adopt the new changes recommended by *Ibis* 133, p438. Where appropriate, the figures for 2001 breeding birds are included for comparison, in brackets.

The status of each species/sub species is classified using the following categories:

abundant	>1,000 occurrences per annum
common	101-1,000 occurrences per annum
well represented	11-100 occurrences per annum
uncommon	no more then 10 occurrences per annum but more than 10 in total
rare	6-10 occurrences
extremely rare	no more than 5 occurrences in total

SYSTEMATIC LIST

Red-throated Diver *Gavia stellata*

A common winter and passage visitor.

Spring sightings of 1-3 on fifteen dates from 26 March-26 May with four in Inner Sound and one through Staple Sound on 9 April, and four in Inner Sound on 19 April. Two late birds were

in Inner Sound on 20 June. The first of the autumn was one flying north through Inner Sound on 22 August. More regular passage in the last quarter produced 1-10 on sixteen days in September, eighteen days in October, fifteen days in November and eight days in December (Table 1). More significant counts were of twelve south through Inner Sound on 8 September, two north and fifteen south on 19 September, ten in Staple Sound and three north through Inner Sound on 31 October, seven north and six south on 3 November, twenty-one north, five south and one in The Kettle on 15 November and fifteen north and one south on 17 November.

Table 1 Red-throated Diver passage off the Farne Islands, autumn 2002.

	Sept	Oct	Nov	Dec	Total
Inner Sound N	7	19	37	0	63
Staple Sound N	3	17	17	3	40
South end of Brownsman N	6	1	0	0	7
Total north	16	37	54	3	110
Inner Sound S	47	9	15	0	71
Staple Sound S	1	12	14	13	40
South end of Brownsman S	2	1	0	0	3
Total south	50	22	29	13	114

N = northerly passage, S = southerly passage. Totals exclude lingering birds.

Black-throated Diver *G. arctica*

A well represented winter and passage visitor.

A quiet year with only four records. One flew north through Staple Sound on 13 April, a partially summer plumaged bird moved north past the south end of Brownsman on 15 September, one flew south through Inner Sound on 4 November and one was off Brownsman on 15 November.

Great Northern Diver *G. immer*

A well represented winter and passage visitor.

There were no spring records and only a light passage in the autumn. 1-2 birds were noted on sixteen days from 10 September-11 December involving a total of ten south and eight north. In addition, lingering birds were in The Kettle on 28 October, 15-16 November (up to two) and 4 December, off Megstone on 31 October, off Brownsman from 16-20 November (two on the last date) and in Inner Sound on 17 November. The only higher counts were of three south through Inner Sound on 1 October and four (one north, one south, two on the sea) on 15 November.

Little Grebe *Tachybaptus ruficollis*

A rare visitor.

Two discovered on the sea off Big Harcar on 31 October remained in the area for most of the day and another was reported off Longstone by the *Glad Tidings* boatmen. Only the sixth to eighth individuals to be recorded at the islands and the first records since one on Inner Farne in 1999 (Harvey and Walton, 2001).

Great Crested Grebe *Podiceps cristatus*

An uncommon visitor.

On 16 November two flew north through Staple Sound and a dead individual found on South Wamses appeared to have been regurgitated by a grey seal *Halichoerus grypus*. Another was in Staple Sound off Brownsman on 19 November.

Red-necked Grebe *P. grisegena*

A well represented winter and passage visitor.

A summer plumaged bird in Inner Sound on 24 April was the only spring record. Autumn passage began with one in Inner Sound on 11 September. Three flew north off the south end of Inner Farne on 23 September, and one was off Brownsman on 25 September. Singles were recorded off Inner Farne on 31 October, and 13, 15 and 21 November and one was in Staple Sound on 17 November. The last was one (still in juvenile plumage) in Brownsman Gut on 12 December.

Slavonian Grebe *P. auritis*

An uncommon winter and passage visitor.

One flew south through Inner Sound on 10 October and one was near Northern Hares on 19 October.

Fulmar *Fulmarus glacialis*

A common breeder, abundant on passage. 'Blue phase' is an uncommon visitor.

Birds were well settled at their breeding sites when the wardens arrived on 26 March and although most departed in early May, all were back by mid May. The first eggs were discovered on 16 May on South Wamses and on 19 May on Inner Farne and the Wideopens. The first young were on Brownsman on 9 June, North Wamses on 10 June and Inner Farne on 13 June. 255 (226) pairs nested as follows: Inner Farne 26 (25), Knoxes Reef 20 (22), West Wideopens 17 (18), East Wideopens 21 (19), Skeney Scar 0 (0), Staple Island 35 (25), Brownsman 75 (57), North Wamses 27 (22), South Wamses 24 (34), Big Harcar 10 (4), Longstone End 0 (0). The first young fledged on Brownsman on 25 August. Productivity was similar to 2001 with 174 monitored nests producing an average of 0.56 young. The inner group again fared better than the outer group with respective average productivities of 0.77 (from seventy nests) and 0.43 (from 104 nests). Most birds had left the islands by early September and the species remained scarce until early November. Twenty-four were off Brownsman on 2 November with thirty around Inner Farne on 6 November and fifty on 12 November. Pairs returned to the breeding sites on Brownsman on 13 November and at least eighty were on Brownsman and Staple Island on 6 December. Single 'blue phase' birds moved north past the south end of Brownsman on 15 and 22 September and an almost pure white leucistic bird was noted at Inner Farne on 4, 5 and 8 September.

Fea's Petrel *Pterodroma feae*

An extremely rare visitor

A bird seen off Flamborough Head at 07:18 on 23 September was tracked up the east coast and eventually observed flying north past the south end of Brownsman at 16:36. Emotions ranged from elation for the three lucky outer group wardens who saw this dream seabird, to utter despair for two on Inner Farne who missed it. Fourth record for the islands and last recorded in 1999 (Walton, 2000). The four so far have all been at three-year intervals and all have passed the outer group. Brownsman in autumn 2005 would seem a good place to be!

Cory's Shearwater *Calonectris diomedea*

A rare visitor.

Three birds in a year are unprecedented. One flew north past the south end of Inner Farne at 15:20 on 15 September and was then located in a sooty shearwater flock on the sea off Brownsman at 1800. Further singles moved north past Inner Farne (06:53) and Brownsman (07:00) on 22 September and past Brownsman at 16:10 on 23 September. Eighth to tenth records for the islands and last recorded in 2001 (Harvey, 2002).

Great Shearwater *Puffinus gravis*

A rare visitor

A bird initially seen off Hartlepool was observed flying north past East Wideopens at 17:30 on 15 September. It was subsequently discovered in a sooty shearwater flock off Brownsman in the company of a Cory's shearwater! Sixth record for the islands and last recorded in 1991 (Walton and Richardson, 1991).

Sooty Shearwater *P. griseus*

A well represented to common passage visitor.

For the second year running huge numbers were recorded. Early records (all birds moving north past Brownsman) involved three on 2 August, one on 3 August and two on 26 August when one also flew north through Staple Sound. The main passage occurred in September when a total of at least 3,762 moved north (Table 2). The most significant counts were 401 (in six hours) past Inner Farne on 14 September, 559 (in nine hours twenty minutes) past Brownsman on 22 September, 696 (in nine and a quarter hours) past Inner Farne on 23 September and 458 (in two hours) past Brownsman on 26 September. Movement continued throughout October with a total of at least 444 north and 118 south (on fourteen dates) including 323 north past Brownsman on 6 October and seventy-seven north there the following day. Large numbers of lingering birds were also recorded including 167 off Brownsman on 15 September and about thirty off Megstone on 1 October. Late singles flew through Staple Sound on 2 and 9 November (north) and 6 November (south).

Table 2 Sooty Shearwater passage off the Farne Islands in September 2002.

Date	9	10	13	14	15	16	17	19	20
B'man	26	31	44	76	229	197	203	24	70
IF	5	43	25	401	138	57	-	3	-
Total	31	43+	44+	477	229+	197+	203	24+	70

Date	21	22	23	24	25	26	27	29	Total
B'man	206	559	554	260	101	458	110	1	3149
IF	279	351	696	-	1	-	1	-	2000
Total	279+	559+	696+	260	101+	458	110+	1	3762+

Counts are for northerly passage. B'man = Brownsman, IF = Inner Farne.

Manx Shearwater *P. puffinus*

A common passage visitor.

Early birds flew north through Staple Sound on 9 and 12 April. The species was recorded regularly from 17 May-10 October (Table 3).

Peak day counts (all northerly passage) included 107 (in three hours) past Brownsman on 17 May, eighty-four (in one and three quarter hours) past Inner Farne on 27 June, 116 past Inner Farne on 21 July, twenty-seven (in two hours) past Brownsman on 1 August, 249 (in nine and a

quarter hours) past both islands on 23 September and 133 past Brownsman on 6 October. Late birds flew through Staple Sound on 16 October (south) and 17 November (north).

Table 3 Manx Shearwater passage off the Farne Islands in 2002.

	May	June	July	August	Sept	October	Total
Brownsman	108 north 1 south	119 north	78 north	60 north	407 north	124 north	896 north 1 south
Inner Farne		162 north	133 north		415 north		710 north
Staple Sound	3 north 8 south	51 north 3 south		28 north 2 south		13 north 2 south	95 north 15 south
Inner Sound		13 north	2 north	8 north	2 north 1 south		25 north 1 south
Total	111 north 9 south	295 north 3 south	201 north	96 north 2 south	569 north 1 south	137 north 2 south	1409 north 17 south
No. days recorded	6	8	10	6	19	6	55

Totals take into account the duplication of some records (birds passing both islands).

Balearic Shearwater *P. mauretanicus*

An uncommon passage visitor.

All records came from Brownsman. Two flew north past the south end on 15 September with two more north on 22 September and one north on 23 September. More unusual were singles through Staple Sound on 14 October (south) and 14 November (north). The last is the latest ever to be recorded in Northumberland and only the second November record in the county (Kerr, 2001).

Storm Petrel *Hydrobates pelagicus*

An uncommon passage visitor. Some evidence of possible breeding in 1998-99 (Walton and Maher, 1999; Walton 2000).

Two were observed from the Newcastle University research boat feeding east of Longstone on 24 July. The only other record was a single flying south through Staple Sound on 15 November.

Leach's Petrel *Oceanodroma leucorhoa*

An uncommon visitor.

One flew north between the inner group and Crumstone on 9 November.

Gannet *Morus bassanus*

An abundant passage and non-breeding summer visitor.

There were almost daily records throughout the season. Peak hourly passage rates (all birds moving north) were 1,520 on 9 April, 230 on 28 June, 718 on 21 July, 514 on 26 August and 720 on 22 September. Smaller numbers were recorded in May and from October-December. Adults (possibly prospecting birds) were on cliffs at the inner group in early June, picked up and released on Longstone on 3 July and on Cairngorm Cliff, Staple Island from 6-14 July.

Cormorant *Phalacrocorax carbo*

A common breeding resident.

The breeding season was in full swing when the wardens arrived on 26 March with well-developed nests at both colonies. The first eggs were located on East Wideopens on 18 April with the first young on both East Wideopens and North Wamses on 26 May. 190 (196) pairs nested as follows: East Wideopens 105 (84), North Wamses 85 (112). The first fledglings

were on North Wamses on 29 June and both colonies had been vacated by early August. Only small numbers remained around the islands thereafter.

Shag *P. aristotelis*

An abundant breeding resident.

The breeding season was well underway when the wardens arrived on 26 March with almost complete nests noted on Inner Farne. The first eggs were found on Inner Farne, Big Harcar and Longstone End on 24 April and the first young on 28 May on Brownsman and on 29 May on East Wideopens. 1,282 (1,373) pairs nested as follows: Megstone 32 (28), Inner Farne 290 (323), West Wideopens 66 (74), East Wideopens 81 (75), Skeney Scar 72 (82), Staple Island 354 (320), Brownsman 121 (172), North Wamses 31 (24), South Wamses 72 (65), Roddam and Green 15 (26), Big Harcar 80 (117), Longstone End 68 (67). The first fledgling was on Inner Farne on 6 July and after the usual protracted season the last was seen on Staple Island on 8 October. Productivity was slightly higher than in 2001 with 325 monitored nests producing an average of 0.97 fledglings each. In contrast to last year the outer group fared better than the inner group (average productivities of 1.38 and 0.89 respectively). Breeding success was lowest on the Wideopens where gull presence may be a limiting factor. A white (leucistic) chick was discovered on Staple Island on 2 July, fledged on 5 August and was on or around the islands until 15 September.

Grey Heron *Ardea cinerea*

A well represented visitor. Bred in 1894 (Paynter, 1894).

Spring sightings involved singles at (or past) the inner group on nine days from 2 April-4 May and over Inner Farne on 9 June. The species became more regular in the autumn with 1-2 noted on twenty-two days from 1 August-29 September then one daily on Knoxes Reef from 1 October-28 November and 1-2 on the outer group on fifteen dates from 1 October-18 November. Higher counts were of four west and one on the Wideopens on 9 September, three at the inner group on 11 September, up to nineteen (twelve north past Inner Farne, two over the Wideopens and five east at the outer group) on 15 September and four west and one on Knoxes Reef on 23 October.

Spoonbill *Platalea leucorodia*

An extremely rare visitor.

Two (an adult and an immature) flying south over The Kettle at 19:35 on 20 April were somewhat of a surprise for the finder. They appeared to head south-west but one was seen over the Wideopens a short while later and then at 20:20 the adult was again seen circling Inner Farne. It landed at the end of St Cuthbert's Gut for around thirty seconds (a very odd sight amongst the guillemots and shags) before flying off to the west. Remarkably, an adult was also observed heading south past Brownsman at 06:15 on 30 April – a nice reward for one early riser! Second and third records for the islands, the first being a bird over the outer group on 3 May 1988 (Hawkey, 1991).

Mute Swan *Cygnus olor*

An uncommon visitor.

An adult was discovered dead on Longstone on 4 April, two flew north through Inner Sound on 11 April, three (an adult and two immatures) flew east past Inner Farne and Brownsman on 21 May and one was reported in Inner Sound on 20 June.

Pink-footed Goose *Anser brachyrhynchus*

A well represented passage and winter visitor.

Autumn passage began on 26 September when a total of 119 (in three skeins) flew north over Inner Farne followed by a total of 211 (five skeins) south on 1 October, 291 south and thirty

north (eight skeins) on 3 October and 140 south on 26 October. The peak day count came on 28 October when 150 moved south over Inner Farne and 380 south-west over Brownsman. Forty-nine flew west on 30-31 October, fifty-five south over Inner Farne on 4 November and finally 180 west over Longstone on 18 November.

Greylag Goose *A. anser*

An uncommon passage and winter visitor.

One was on Brownsman on 10 February. Singles flew south-west over Inner Farne on 23 April and east over Brownsman (before apparently landing on Longstone) on 26 April. Twenty-two moved north through Staple Sound on 17 September and one flew north past Brownsman on 8 November.

Canada Goose *Branta canadensis*

An uncommon passage visitor.

A very quiet year for this species with only three records. Three flew north over Inner Farne on 23 May with forty-six north through Inner Sound on 30 May and thirty south through Inner Sound on 10 June.

Barnacle Goose *B. leucopsis*

A well represented passage and winter visitor.

There was one spring record on 11 May of a bird over Inner Farne and then on West Wideopens for several hours. Return passage began on 19 September when a total of 203 (three skeins) flew north through Inner Sound. A large movement occurred on 26 September with a Farnes day record total of 1,389 (twenty-seven skeins) arriving from the east and passing both Brownsman and Inner Farne before dispersing up and down the mainland coast. A further twenty-one flew west over Inner Farne on 27 September and two moved east over Brownsman on 28 September. Passage continued with a total of 145 (seven skeins) north past Brownsman from 3-5 October, forty-two west (two skeins) and seven east over Inner Farne on 5 October, five west over Inner Farne on 9 October and seventy-five west over Inner Farne on 28 October. Three lingered for fifteen minutes on Brownsman flats on 4 October.

Light-bellied Brent Goose *B. bernicla hrota*

A well represented passage and winter visitor.

Autumn passage produced a total of 110 north (nine skeins) on seven dates from 3-27 September with a peak of forty-eight on 26 September (past Longstone, the only early outer group record). Three were on Inner Farne on 9 September, one off The Bridges on 9 October, and one on Knoxes Reef from 3-24 November with a total of five north and three south past Inner Farne on three other November dates. Six moved north through Inner Sound on 4 December and three (two adults and a juvenile) lingered on Brownsman flats on 6 and 8 December where they fed on algae.

Shelduck *Tadorna tadorna*

A well represented visitor. Former breeder which last bred successfully in 1994 (Walton, 1995).

One to two were at the inner group on 29 March and 1, 8, 13 and 16 April. A pair was present daily on the outer group from 25 April-30 June, the female often prospecting in puffin burrows on Brownsman, but there was no breeding attempt. The birds also visited the inner group periodically throughout the period and were last recorded on Brownsman on 6 July. One flew north over Knoxes Reef on 27 July, then light passage in November produced a total of sixteen north through Inner Sound on five days from 6-22 November, with a peak count of six north on 15 November.

Wigeon *Anas penelope*

A common passage and winter visitor.

A quiet spring began with a male off West Wideopens on 27 March. 1-2 were recorded at the inner group on 6, 19 and 21 April with a total of thirteen south through Inner and Staple Sounds on 9 April and six south through Inner Sound on 12 April. Autumn passage began on 22 August when three were at the inner group. Eighteen flew north the following day (when one was on the Churn pool, Inner Farne), and seven were in The Kettle on 24 August. A total of 487 moved north on nine dates in September including 178 on 10 September. Light passage continued in October with a total of 142 north on eight days, peaking at eighty-nine on 7 October. The heaviest passage of the year occurred on 3 November when 465 flew north and ten south, mostly through Inner Sound. Fifteen moved north on 6 November, two north on 9 November, 1-4 were noted around the outer group on four days from 5-12 December and two were on Knoxes Reef on 12 December.

Teal *A. crecca*

A common passage and winter visitor.

Forty were noted on Brownsman during a pre-season visit on 10 February. Spring passage produced 1-2 on eleven days from 30 March-28 April and three were on Knoxes Reef, then over the outer group on 14 April. Three early autumn birds were at the inner group on 7 July and two were present on 28 July. One on Brownsman on 4 August and two north past Inner Farne on 9 August were followed by regular sightings from 16 August until the end of the season. Passage was generally light with monthly peaks of eighty-six north on 22 August, forty-five north on 1 September, forty-six north and seventeen south on 21 October and fifteen north on 3 November. Lingered birds on Knoxes Reef included 110 on 24 October and 180 on 23 November and there were frequent counts of 40-65 in late October and November. Up to twenty-five were seen regularly on Staple Island and thirty-five were on Brownsman flats on 2 December.

Mallard *A. platyrhynchos*

A common winter and passage visitor. Uncommon breeder (but up to thirteen pairs in past).

There were almost daily records throughout the season. Numbers in spring were low with a maximum of only four on many dates. There were at least ten breeding attempts by eight females (five on the inner group and three on the outer group). Two ducks hatched eighteen young on West Wideopens, with the first brood of seven noted on 7 May, a duck with a single chick was seen on East Wideopens on 14 May and a female flushed off Knoxes Reef on 27 May behaved as if it was nesting. On Inner Farne a duck flushed off eggs on nest count day (6 June) later successfully fledged seven young (first seen on 10 July), the family making a welcome change from the more usual eiders on the pond. They remained on the island until mid September. On the outer group the first eggs were found on North Wamses on 16 May and four young fledged on 16 June. A nest found on Brownsman on 25 May produced ten ducklings on 1 June and eight young fledged on South Wamses on 1 July, the first nest having been predated. An increase in numbers was evident in September as passage birds began to arrive. The peak count was fourteen on Knoxes Reef on 24 September and northerly passage through Staple Sound included nine on 10 September and seven on 27 September. Continued arrival produced monthly peaks of fifty on Knoxes Reef on 6 October, sixty on 24 November and forty-five on 12 December. Smaller numbers were recorded at the outer group with a maximum of twelve north through Staple Sound on 31 October.

Pintail *A. acuta*

An uncommon passage and winter visitor.

A pair flew west from Inner Farne then north through Inner Sound on 18 April. One flew north through Staple Sound on 9 September, a total of nineteen moved north on 10 September (eight

through Inner Sound, eight through Staple Sound, and one through The Kettle), four flew north past Inner Farne on 26 September and a male circled Inner Farne on 12 December.

Shoveler *A. clypeata*

A well represented passage and winter visitor.

An incredibly quiet year with only two records: singles over Knoxes Reef on 20 August and north past Inner Farne on 22 August.

Tufted Duck *Aythya fuligula*

A well represented visitor.

The only spring sighting involved a pair flying north between Brownsman and Nameless Rock on 26 April. The first birds of the autumn were two north through Inner Sound on 23 August. Two more flew north there on 27 October, one north on 2 November and two north on 3 November. Four (a male and three females) were on the sea north-west of Inner Farne on 21 November and a pair were flushed off Brownsman Pond during the hours of darkness on 26 November.

Scaup *A. marila*

An uncommon passage and winter visitor.

Single males flew north through Staple Sound on 4 May, Inner Sound on 3 November and Staple Sound on 17 November. The only other record was of six north through Inner Sound on 6 December.

Eider *Somateria mollissima*

An abundant breeding resident.

Numbers around the islands were fairly low when the wardens arrived, with only 280 noted on the Wetland Bird Survey count on 14 April. Prospecting pairs were first seen on Inner Farne on 9 April and on Brownsman on 23 April with the first sitting females on Inner Farne on 24 April (first eggs on 25 April) and Brownsman on 26 April (first eggs on 27 April). 997 (802) ducks nested as follows: Inner Farne 698 (561), Knoxes Reef 8 (5), West Wideopens 30 (21), East Wideopens 10 (5), Staple Island 21 (15), Brownsman 209 (171), North Wamses 4 (5), South Wamses 12 (12), Big Harcar 2 (3), Northern Hares 1 (0), Longstone main rock 0 (1), Longstone End 2 (3). The first chicks were found on Inner Farne on 24 May and on Brownsman on 27 May (although there was an earlier report of ducklings in Inner Sound on 9 May). 394 monitored nests produced 984 young, an average productivity of 2.5 (little change on the last two years). A slight improvement in breeding success on the outer group was offset by a slight drop on the inner group. Wetland Bird Survey counts (Table 4) produced a peak of 723 in November.

Table 4 Wetland Bird Survey counts of Eider at the Farne Islands in 2002.

	April	May	June	July	Aug	Sept	Oct	Nov
Date(s)	14	12	10/11	14	11	8	6/7	18/21
I Group	198	477	168	132	NC	29	103	580
O Group	82	194	125	128	43	15	136	143
Total	280	671	293	260	NC	44	239	723

O Group = Outer group, I Group = Inner group, NC = No count.

Long-tailed Duck *Clangula hyemalis*

A well represented passage and winter visitor.

A good run of spring records began with three males in Inner Sound on 27 March, followed by 1-3 in Inner Sound or off The Bridges on five dates from 8-19 April. The first autumn bird was a male flying north through Staple Sound on 7 October. Thereafter, 1-4 were noted at the inner group on thirteen dates from 16 October-17 November and singles were at the outer group on 20 October and 21 November. The only higher count was of eight north through Inner Sound on 14 November.

Common Scoter *Melanitta nigra*

A common passage and winter visitor.

Recorded throughout the season. Low numbers were seen from March-May with peaks of forty in Inner Sound on 8 April and thirty-two north and seventeen south there on 14 April. 1-30 were noted on twenty other dates. Sixty flew north past Longstone on 18 June with seventy-five north through Staple Sound on 20 June and smaller numbers on two other June days. Monthly passage totals (in a generally quiet autumn) for July-December are shown in Table 5. The only two counts in three figures were 200 north through Inner Sound on 13 September and 190 north there on 3 November.

Table 5 Common Scoter passage past the Farne Islands, autumn 2002.

	July	August	September	October	November	December
North	318	92	310	237	572	21
South	16	-	6	11	15	-

Velvet Scoter *M. fusca*

A well represented passage and winter visitor.

Two moving south past Inner Farne on 22 September were the first seen. 1-3 were recorded on ten days from 6 October-17 November (a total of fourteen north and four south). Higher counts were of fourteen north through Inner Sound on 18 October, eight south through Inner Sound on 3 November and four north through Staple Sound on 4 December.

Goldeneye *Bucephala clangula*

A common passage and winter visitor.

Three were off the Wideopens on 26 March, a pair off The Bridges on 31 March and a female also off The Bridges on 12-13 April. There were regular sightings at the inner group from 17 October-6 December with a total of seventeen north through Inner Sound in October (including fourteen on 19 October), and forty-seven north in November (with forty-five on 3 November alone). Lingering individuals off The Bridges and in The Kettle peaked at eight on 24 November. The only outer group records were two north through Staple Sound on 3 November, one south on 22 November and one south on 11 December.

Red-breasted Merganser *Mergus serrator*

A well represented passage and winter visitor.

A total of three flew north and six south through Inner Sound on five dates from 8-21 April, the peak count being four south on 21 April. The only autumn records were four north through Inner Sound on 15 August, one north through Staple Sound on 10 September and one north through Inner Sound on 27 September.

Goosander *M. merganser*

An uncommon passage visitor.

There were two spring sightings: pairs north through Staple Sound on 14 April and behind The Bridges off Knocklin Ends on 27 April. Two flew north through Inner Sound on 18 October and a redhead passed Brownsman several times and was also in The Kettle on 2 November. The peak count came on 3 November when eight flew north through Inner Sound and one north through Staple Sound. The last record was a pair south through Staple Sound on 8 December.

Honey Buzzard *Pernis apivorus*

An extremely rare visitor.

A dark morph juvenile flew west past the north end of Inner Farne at 08:50 on 10 September. It was also seen a short while later over the mainland at Bamburgh. Third record for the islands and last recorded in 2000 when a nationwide influx produced two dark morph juveniles on 25 September (Harvey and Walton, 2001).

Hen Harrier *Circus cyaneus*

A rare visitor.

A juvenile female over Brownsman on 4 October was relocated on Staple Island where it fed on a feral pigeon carcass. It appeared to roost overnight on Brownsman and remained until 11:15 the following morning. Another 'ringtail' (probably an adult female) arrived over Brownsman flats at 12:15 on 21 October. It lingered on the island until 15:05 when it was flushed and flew directly west to the mainland. Eighth and ninth records for the islands and last recorded in 2001 (Harvey, 2002).

Sparrowhawk *Accipiter nisus*

An uncommon visitor.

Females were on Inner Farne on 10 February and 30-31 March and over Brownsman on 28 April. A female seen on Brownsman and Staple Islands on eight days from 4-27 September also visited Inner Farne on 9-10 September and, more unusually, Crumstone on 17 September. Kills included a male crossbill.

Osprey *Pandion haliaetus*

A rare passage visitor.

One discovered by a Brownsman warden out monitoring puffins on 22 May circled over the outer group then drifted slowly north. Sadly, only one other person saw the bird despite the best efforts of the finder. Eighth record for the islands and last recorded in 1995 (Walton, 1996).

Kestrel *Falco tinnunculus*

A well represented passage visitor. May have bred in 1916 and 1943 (March, 1916; Thorp, 1943).

Single females or juveniles were noted on five dates from 4-24 September at the outer group (and also on Inner Farne on the first date) with two on Inner Farne on 9 September and two on Brownsman the following day. A juvenile was on Inner Farne on 2 and 6 October, a male on Brownsman on 4 October and a juvenile male at the outer group on 7, 10, 11 and 13 November.

Merlin *F. columbarius*

A well represented passage and winter visitor.

Single females were on Inner Farne on 28 March, over Inner Sound on 2 April and on Brownsman on 3, 4 and 7 April. The first bird of the autumn was a female or immature on Brownsman on 1 September. The species was recorded almost daily on Brownsman from 2

October-12 December and on Inner Farne on 2-3 October, then on thirteen dates in November and on 1, 6 and 12 December. Most sightings were of singles (and all were of females or immatures) but two were on Brownsman on 31 October (grappling talons on the vegetable garden wall!) and 7 December. Kills included snipe, purple sandpiper, feral pigeon, turnstone, meadow pipit, rock pipit, skylark, blackbird, song thrush, redwing, starling and snow bunting.

Hobby *F. subbuteo*

An extremely rare visitor.

An adult showed well in foggy conditions on Longstone main rock on 18 May where it attempted unsuccessfully to catch a redstart. Fifth record for the islands and now recorded annually for the last three years. (A newly discovered old record involved an adult on Longstone in 1859 (Tristram, 1860)).

Peregrine *F. peregrinus*

A well represented passage and winter visitor. May have bred in 1925 (Watt, 1951a).

A pre-season visit to the islands on 10 February produced an adult male on Staple Island and an immature male on Inner Farne. An adult male was on Inner Farne on 4 April and an immature male over the island on 23 and 26 April. The first autumn bird was again an immature male on Inner Farne on 27 August and 5 September. There were regular sightings from 16 September-28 November including twos at Inner Farne on 16 September and 28 November (an adult male and an immature female) and over Longstone on 20 October. At least three different birds (adult male, immature male, immature female) were involved. Kills included bar-tailed godwit, arctic tern and feral pigeon.

Quail *Coturnix coturnix*

An uncommon passage visitor.

A female was flushed from Brownsman on 16 June.

Corncrake *Crex crex*

An uncommon passage visitor.

One was seen well at close range on Brownsman on 15 September before moving to Staple Island and another was flushed near the pond on Brownsman on 24 September.

Moorhen *Gallinula chloropus*

An uncommon passage visitor. Bred in 1901 (Miller, 1959) and in 1947-48 (Hawkey, 1991).

A juvenile was flushed from the 'Dock Bank' on Inner Farne on 10 September.

Coot *Fulica atra*

An uncommon passage visitor.

An adult was on the sea off South Wamses on 2 September. Last recorded in 1999 (Walton, 2000).

Oystercatcher *Haematopus ostralegus*

A common winter and passage visitor and well represented breeder.

Reasonable numbers were around the islands in the spring including seventy at the inner group on 28 March. The usual post breeding build up produced peak counts in August and September (Table 6).

The first eggs were located on 5 May on East Wideopens and 15 May on Brownsman with the first young on Brownsman on 13 June and on Inner Farne on 15 June. 37 (24) pairs nested as

follows: Inner Farne 6 (4), Knoxes Reef 3 (2), West Wideopens 6 (7), East Wideopens 2 (2), Staple Island 5 (3), Brownsman 9 (5), North Wamses 2 (0), South Wamses 1 (1), Northern Hares 1 (0), Longstone main rock 1 (0), Longstone End 1 (0). It was a reasonable breeding season with fifteen monitored nests, the inner group producing eleven fledglings (average productivity of 0.73) and fourteen nests on the outer group producing fifteen fledglings (average productivity of 1.07).

Table 6 Oystercatcher Wetland Bird Survey count totals at the Farne Islands, April-November 2002.

	April	May	June	July	August	Sept	Oct	Nov
Date(s)	14	12	10/11	14	11	8	6/7	18/21
I Group	42	38	32	38	152	194	97	NC
O Group	52	50	31	81	48	93	73	73
Total	94	88	63	129	200	187	170	73+

I Group = Inner group, O Group = Outer group, NC = No count.

Ringed Plover *Charadrius. hiaticula*

A common passage visitor, uncommon and declining as a breeding species.

Birds were displaying on 27 March on Inner Farne, and the first eggs were discovered there on 15 April with the first chicks on 3 June. 6 (4) pairs nested as follows: Inner Farne 3 (2), Staple Island 1 (0), Brownsman 2 (1). Six nesting attempts on Inner Farne produced three fledglings, all from the same scrape, while nine attempts on the outer group also resulted in three fledged young. A scrape with one egg on West Wideopens (predated) was assumed to be one of the Inner Farne pairs. The main cause of breeding failure was again gull predation although one nest was washed out and another abandoned. Post breeding arrival produced the largest counts of the year, all on Inner Farne, with ten on 2 August increasing to forty-five on 22 August and fifty-four on 13 September before a decline to the last three on 22 October. On the outer group the highest counts were seven on Longstone on 18 July, twelve on Brownsman flats on 9 September and eight on Longstone on 18 November. Small numbers were on Brownsman and Longstone intermittently into December.

Golden Plover *Pluvialis apricaria*

A well represented passage visitor.

A good run of spring records began with sixty-one in Brownsman Gut on 13 April, one on Staple Island on 21 April, forty-one south through Staple Sound on 22 April, and a pair displaying over Staple Island on 27 April. One was on Brownsman on 8 May, one flew over Staple Island on 1 June, one was on Inner Farne on 7 June and 140 flew west over Inner Farne on 21 June. Autumn passage began on 20 July when up to seven were on Longstone and Knoxes Reef. The usual build up followed. On the outer group 200 on Staple Island on 16 August increased to 900 by 28 August and 1500 from 6-23 September before a decline to 600 on 3 October and 150 on 6 October. Numbers at the inner group were lower with twenty-five on Knoxes Reef on 15 August rising to 400 on 26 August and 500 on 11 September before a drop to 210 on 6 October. Only small numbers were recorded thereafter with peaks of fifty-five on Staple Island on 31 October and seventy-five on Knoxes Reef on 18 October (although 850 flew north through Inner Sound on 15 November). Three to five were over Brownsman on 19, 22 and 23 November and the last record was thirty south over Inner Farne on 3 December.

Grey Plover *P. squatarola*

A well represented passage visitor.

One on Knoxes Reef on 18 and 29 March was followed by 2-3 on Longstone on five days from 14 April-12 May with another on Knoxes Reef on 22-23 May. The species was regularly recorded in autumn with the first two on Longstone on 8 September and two still on West Wideopens on 12 December. Peak counts were six on Knoxes Reef on 6 November and five on Longstone main rock on 18 November.

Lapwing *Vanellus vanellus*

A well represented passage visitor. Sporadic breeder in past; last attempt in 1962 (Hawkey, 1991).

Scarce in spring with singles on Inner Farne on 4 and 18 April and on Staple Island on 17 April and 8 May. The first autumn birds were two juveniles on Brownsman on 30 July with one still present the following day. 1-5 were recorded on four dates from 19 August-19 September. An influx produced thirty-seven west over Inner Farne and eight south over Brownsman on 2 November with twenty-two west the following day, six west on 11 November and thirty west on 23 November. Three hundred flew north through Inner Sound on 15 November and a flock on the inner group rose from eighteen on 19 November to seventy on 20 November with forty still present on 6 December. Fifty-seven were over Brownsman and the Wamses on 29 November.

Knot *Calidris canutus*

A well represented passage visitor.

Two were on Longstone on 4 April with four present on 11 June, twenty-four on Brownsman on 13 June and five on Knoxes Reef on 21 June. There were regular records from 6 July-22 September but numbers were much lower than in 2001. Peak counts were nineteen at the inner group and fifteen on Longstone on 6 and 17, and 14 July, respectively, six on Knoxes Reef on 30 August and thirty-eight on Brownsman on 7 September (with 1-9 on thirty-seven other dates). Seventeen flew west from Brownsman on 3 October, one was at the inner group on 25 and 30 October, three on Inner Farne on 6 November and one on Knoxes Reef on 28 November.

Sanderling *C. alba*

An uncommon passage visitor.

There were two records from Inner Farne: an adult was in St Cuthbert's Cove on 31 July and another flew north on 26 August.

Little Stint *C. minuta*

An uncommon passage visitor.

Single juveniles (possibly the same bird) were on Brownsman on 10, 14 and 17 September.

White-rumped Sandpiper *C. fuscicollis*

An extremely rare visitor.

A moulting adult was present on Brownsman from 4-10 and 14-18 September. Initially found on the north rocks it provided excellent views both there and on the pond to an admiring stream of present and past wardens. First record for the islands and the ninth for Northumberland (Northumberland and Tyneside Bird Club, 2002). Another unexpected addition to the island list.

Purple Sandpiper *C. maritima*

A common passage and winter visitor.

Recorded throughout the season with large numbers in spring and autumn and a small number summering. Peak monthly counts are shown in Table 7.

Table 7 Peak monthly Purple Sandpiper counts at the Farne Islands in 2002.

	April	May	June	July	August	Sept	Oct	Nov
Date	14	19	12	14	22	8	10	-
I Group	101	12	31	25	62	50	10	-
Date	14	1	-	14	11	14	7	18
O Group	146	160	-	255	277	109	269	153

I Group = Inner group, O Group = Outer group.

Dunlin *C. alpina*

A common passage and winter visitor.

One to two were recorded on 29 March, 14 and 23 April, on six dates from 8-27 May and on four dates from 1-6 June. Higher counts were of four on Brownsman on 13 May, four north past Solan Rock on 15 May and thirteen on Inner Farne on 24 May. Autumn passage produced regular records from 3 July-11 October followed by more sporadic sightings from 21 October-19 November. The maximum was thirty-five on Longstone on 4 August. Peak monthly autumn counts are shown in Table 8. The first juveniles were on Inner Farne and Brownsman on 30 July and the last record of the year was two on Knoxes Reef on 4 December.

Table 8 Peak monthly Dunlin counts on the Farne Islands, autumn 2002.

	July	August	Sept	October	November
Date	14	23	18	25	19
I Group	6	13	7	6	14
Date	14	4	9, 14	7	18
O Group	12	35	10	8	3

I Group = Inner group, O Group = Outer group.

Ruff *Philomachus pugnax*

A well represented passage visitor.

A very quiet year. A juvenile male was on Inner Farne on 3 August, a female or juvenile was on Brownsman on 5 August and two were on Brownsman on 9 September.

Jack Snipe *Lymnocyrtes minimus*

A well represented passage visitor.

There were no spring records. The first autumn birds were singles on Inner Farne and Brownsman on 10 September, the latter remaining until 12 September when it was found dead. Further singles were on Brownsman on 18 September, 8, 10, 14 and 27 October and on 2 and 6 November with a total of three on Brownsman and Staple Island on 22 October. The only other records from Inner Farne were singles on 23 October and 1 November.

Snipe *Gallinago gallinago*

A well represented passage visitor.

Singles were on Inner Farne on 8, 12 and 14 April when two were also on Brownsman. One was on Inner Farne on 8 May and one over Staple Island on 30 May. Autumn passage began with one west over Staple Island on 29 July, followed by two on Inner Farne on 1 August and one there on 3 August. The species became more regular from 10 September with records of 1-4 on forty-seven dates until 2 December. Higher counts were of eleven west over Inner Farne on 12 September, five on 15 September and six on 2 November. The last were on Brownsman from 11-12 December (when it was killed by a merlin) and on Inner Farne on 12 December.

Woodcock *Scolopax rusticola*

A well represented passage visitor.

A quiet spring with one on Brownsman on 3 April and one on Inner Farne on 18 April. One to two were recorded on Brownsman on twenty-two days from 6 October-10 December and on Inner Farne on seventeen dates from 9 October-12 December. Three were on the outer group on 21 October, with four there on 22 October and four on 12 November. A major influx on 2 November brought at least 400 to Brownsman and a hundred to Inner Farne. With the wardens unable to visit any other islands (due to heavy seas), one can only speculate on how many birds arrived in total. Twenty-six were still present the following day.

Black-tailed Godwit *Limosa limosa*

An uncommon passage visitor.

There was only one record of a bird flying west over Brownsman on 26 June.

Bar-tailed Godwit *L. lapponica*

A well represented passage visitor.

Birds were seen throughout the season but numbers recorded were lower than in 2001. 1-8 were noted on many days at the inner group (Table 9). The only counts to exceed these were fourteen on Knoxes Reef on 26 March and twenty on West Wideopens on 23 November.

The species was much scarcer at the outer group with six north through Staple Sound on 11 May and 1-2 on nine dates from 1 September-21 November. These included a sick juvenile lingering on Brownsman from 9-13 September when it was killed by a peregrine.

Table 9 Bar-tailed Godwit numbers at the inner group in 2002.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Dates	26-31	4-23	5-23	-	6-28	5-27	10-23	6 & 25	3-19	2, 3, 12
No. of days recorded	4	3	3	-	10	6	4	2	4	3
Peak	14	2	7	-	8	5	2	2	20	4
Date	26	4	21	-	25	21	14 & 23	25	23	2

Whimbrel *Numenius phaeopus*

A well represented passage visitor.

The only spring record involved one feeding on Inner Farne from 21-24 May. The first of the autumn was one over Inner Farne on 28 June. 1-3 were noted on twenty-nine days from 5 July-19 September (eleven days in July, thirteen days in August, and five days in September).

Higher counts were of nine west over Brownsman on 31 July, seven (four over the outer group, three on Knoxes Reef) on 23 August and ten on Knoxes Reef on 30 August. The last sighting of the year was of one west over Inner Farne on 2 October.

Curlew *N. arquata*

A common passage and winter visitor.

Present almost daily throughout the season. Knoxes Reef, as always produced the peak counts. Monthly maxima are shown in Table 10.

Table 10 Peak Curlew counts on Knoxes Reef in 2002.

	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Peak count	200	300	1	50	240	150	200	150	180	130
Date	28	11	27	26-27	25	5	daily	31	4	4

Redshank *Tringa totanus*

An common passage and winter visitor. Bred in eight years 1924-46 (Goddard, ms; Hawkey 1991; Wilson ms).

There were regular records throughout the period. Monthly peaks are shown in Table 11.

Table 11 Peak Redshank counts on the Farne Islands in 2002.

Month	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Inner Group	1	8	-	-	25	26	4	11	-	11
Date	26	20	-	-	23	26	23	15	-	12
Outer Group	-	12	2	3	19	33	47	30	6	1
Date	-	14	Sev.	17	23	11	8	3	18	Sev.

Greenshank *T. nebularia*

A well represented passage visitor.

One calling over Knoxes Reef on 19 April was the only spring record. It was a quiet autumn with one seen over Brownsman on 15 July, 1-2 on six dates (four at the outer group, two at the inner group) from 8-24 August, singles on 4, 9, 11 and 12 September and a very late individual on Brownsman flats on 4 November.

Green Sandpiper *T. ochropus*

An uncommon passage visitor.

After last year's major influx there was a return to normal. Singles were on Inner Farne on 1, 3 and 4 August and on Brownsman/Staple Island on 7, 8 and 10 August. One was on Brownsman and Inner Farne on 10 September.

Wood Sandpiper *T. glareola*

An uncommon passage visitor.

A juvenile discovered on Brownsman Pond on 31 July was later joined by an adult and three (one adult and two juveniles) were present on 1 August. The adult had departed by the following day but two juveniles remained until 8 August and one until 20 August.

Common Sandpiper *Actitis hypoleucos*

A well represented passage visitor.

The only 'spring' record was one on Staple Island on 2 June. Two on Brownsman on 8 July were followed by singles on 11, 28 and 31 July when one was also on Inner Farne. Sightings increased in August-September with 1-2 at the outer group on twenty-two dates and at the inner group on seven dates, the last being one on Brownsman Pond on 29 September. There were higher counts of six on Inner Farne and four on Brownsman on 18 August, five at the outer group on 8 September and seven on Brownsman on 10 September.

Turnstone *Arenaria interpres*

A common passage and winter visitor, uncommon in summer.

Present throughout. Monthly peaks are shown in Table 12.

Table 12 Peak Turnstone counts on the Farne Islands in 2002.

	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Inner Group	58	36	NC	7	110	255	151	63	NC	NC
Date	30	14	-	24	28	12	8	6	-	-
Outer Group	NC	75	33	33	150	300	345	323	93	NC
Date	-	14	12	11	20	4	8	7	18	-

Grey Phalarope *Phalaropus fulicarius*

An uncommon autumn passage and winter visitor, extremely rare in spring.

There were four records. A summer plumaged bird was seen off the Wideopens from *Glad Tidings IV* on 11 May. A winter plumaged adult was off the south end of Brownsman on 22 September and a phalarope, almost certainly this species, landed briefly off the south end of Knocklin Ends on 28 October. One showed well in Staple Sound on 3 December, allowing a close approach in the Zodiac inflatable.

Pomarine Skua *Stercorarius pomarinus*

A well represented passage visitor, common in some years.

An adult was off Inner Farne on 20 June. Peak numbers were recorded in September (Table 13) with a total of twenty-seven flying north.

Thirteen flew north and one south past Brownsman on 6 October (including two dark phase adults and two juveniles), an adult flew north through Staple Sound on 21 October and a juvenile moved south then north there on 14 November.

Table 13 Pomarine Skua passage off the Farne Islands, September 2002. Totals include birds recorded more than once.

Date	17	20	21	22	23
Inner Farne			3 North	2 ads. North	13 North
Brownsman	2 ads. North	3 ads. North		1 ad. North	10 ads. North
Total	2	3	3	2	17

Arctic Skua *S. parasiticus*

A common passage visitor.

Spring sightings involved singles north through Staple Sound on 6 and 7 May. Autumn passage began with one north past Inner Farne on 27 June, followed by two off Brownsman on 28 June and two through Staple Sound on 29 June. Records increased from July-October (Table 14) with 1-10 recorded on many days. The only counts to exceed these were twenty-two

south and one north through Inner Sound on 8 September, a total of twelve on 9 September (seven north, four south, one lingering), twelve north past Brownsman on 20 September, eleven north and two south on 6 October and eleven north (ten of which were through Staple Sound) on 21 October. Singles flew north through Staple Sound on 10 and 14 November when four also moved north through Inner Sound, and one flew north over Inner Farne on 28 November.

Table 14 Arctic Skua passage at the Farne Islands, autumn 2002.

	July	August	September	October	Totals
Brownsman N	10	9	39	30	88
Inner Farne N	5	13	45	4	67
Brownsman S	1	1	0	2	4
Inner Farne S	0	4	47	4	55
Days recorded	13	25	21	14	73

N = northerly passage, S = southerly passage.

Long-tailed Skua *S. longicaudus*

An uncommon passage visitor, well represented to common in 'invasion' years.

A juvenile flew north past the south end of Brownsman on 22 September and a total of three juveniles flew north on 23 September.

Great Skua *S. skua*

A common passage visitor.

Singles flew north on 14 April, 7 and 8 May and 22 June. 1-10 were recorded on many days from 4 July-22 November (Table 15). There were higher counts (all northerly passage) of sixteen on 14 September, fifteen on 15 September, thirteen on 22 September and thirty on 23 September. Eleven flew north and two south on 6 October and twenty-two north (sixteen through Inner Sound and six through Staple Sound) on 14 November. The last bird of the year was one lingering in gull feeding frenzies in Staple Sound on 10-11 December.

Table 15 Great Skua passage at the Farne Islands, autumn 2002.

	July	August	September	October	November	Totals
Brownsman N	8	2	74	21	13	118
Inner Farne N	2	12	79	0	16	109
Brownsman S	0	0	0	5	0	5
Inner Farne S	0	0	3	5	2	10
Days recorded	5	6	18	10	4	43

N = northerly passage, S = southerly passage.

Mediterranean Gull *Larus melanocephalus*

An uncommon passage and winter visitor.

A first summer bird roosted with terns on Inner Farne on the evening of 25 April.

Little Gull *L. minutus*

Normally a well represented passage and winter visitor.

A first summer bird was on Inner Farne on 26-27 May and an adult fed off Crumstone on 16 July. Twenty-one flew north past Inner Farne on 15 September with one north on 23 September. Persistent south-easterly winds in October and November produced a major influx

and birds were still present when the wardens left the islands on 13 December. A breakdown of sightings is given in Table 16.

By far the largest count was made on 14 October when a total of 1,747 flew south through Staple Sound in nine and a half hours (including 606 in one hour between 10:00 and 11:00 am). This is by far the heaviest passage ever recorded in Northumberland (Kerr, 2001). Other notable counts included 217 south on 16 October (seventy-three through Staple Sound and 144, in two hours, through Inner Sound), and fifty north through Inner Sound on 4 November. Many birds lingered: the largest flock recorded was twenty-seven in Staple Sound on 25 October.

Table 16 Little Gull passage at the Farne Islands, autumn 2002.

	October	November	December	Total
Staple Sound N	51	14	4	69
Inner Sound N	20	59	0	79
Total North	71	73	4	148
Staple Sound S	1842	39	7	1888
Inner Sound S	150	27	0	177
Total South	1992	66	7	2065
Days recorded	15	13	9	37

N = northerly passage, S = southerly passage.

Black-headed Gull *L. ridibundus*

A well represented breeding species and common visitor.

Displaying birds were noted from 18 April with the first nest building on Inner Farne on 28 April and the first eggs discovered there on 2 May. 85 (57) pairs nested as follows: Inner Farne 81 (56), Brownsman 4 (1). The first young were found on Inner Farne on 29 May and the first fledglings on 2 July. Twenty monitored pairs on Inner Farne laid fifty-nine eggs, thirty-two hatched and fourteen young went on to fledge – an average productivity of 0.70. The main cause of breeding failure was again predation by the larger gull species. On Brownsman four pairs laid four eggs but all were predated. Only small numbers were seen after the breeding season but sightings increased in the final three months. Fifty per hour flew north through Staple Sound on 7 October and at least a hundred were present from 30 November-3 December. Counts from Knoxes Reef included eighty-seven on 20 October and 115 on 4 November.

Common Gull *L. canus*

A common visitor. Bred in four years 1910-14 (Booth, 1911, 1913; Miller, ms), probably in 1916 (March, 1916) and attempted breeding in 1974 (Hawkey, 1974).

Counts of spring passage birds on Knoxes Reef rose from five on 28 March to 130 on 22 April before a rapid decline in early May. Returning birds began to arrive on 1 August when ten were on Brownsman. Small numbers were recorded until an influx brought at least fifty to Staple Sound from 30 November-3 December.

Lesser black-backed Gull *L. fuscus* and Herring Gull *L. argentatus*

A common breeding species and passage visitor. Herring gull abundant in winter.

1,057 (1,058) pairs nested as follows: Inner Farne 23 (7), Knoxes Reef 40 (26), West Wideopens 186 (185), East Wideopens 93 (109), Skeney Scar 8 (40), Staple Island 53 (57), Brownsman 21 (28), North Wamses 211 (208), South Wamses 193 (156), Roddam and Green 14 (21), Big and Little Harcar 158 (145), Northern Hares 32 (49), Longstone main rock 10 (0), Longstone End 15 (27). The first eggs were found on the Wideopens on 5 May.

Iceland Gull *L. glaucoides*

An uncommon winter and passage visitor.

A first summer bird roosted on Knoxes Reef on the evening of 22 April.

Glaucous Gull *L. hyperboreus*

An uncommon winter and passage visitor.

A first winter bird roosted on Knoxes Reef on the evening of 4 April.

Great Black-backed Gull *L. marinus*

An uncommon breeder, common winter and passage visitor.

Eight (1) pairs nested as follows: East Wideopens 4 (1), Brownsman 1 (0). South Wamses 1 (0), Roddam and Green 1 (0), Northern Hares 1 (0). At least three pairs were successful. Post breeding season counts included ninety-six at the outer group on 14 July, 150 on Longstone on 29 August, 450 at the outer group on 8 September, 260 on Knoxes Reef on 14 November and 180 on Knoxes Reef on 2 December.

Kittiwake *Rissa tridactyla*

An abundant breeder and passage visitor, well represented in winter.

Nest building was noted from 7 April on Brownsman and from 9 April on Inner Farne. The first eggs were found on 11 May on Inner Farne and on 12 May on Brownsman, with the first chicks on Staple Island on 3 June and on Inner Farne on 8 June. 5,055 (5,781) pairs nested as follows: Megstone 16 (19), Inner Farne 1,502 (1,575), West Wideopens 256 (321), East Wideopens 336 (373), Skeney Scar 182 (239), Staple Island 1,334 (1,468), Brownsman 1,181 (1,534), North Wamses 60 (49), South Wamses 62 (80), Roddam and Green 21 (23), Big Harcar 105 (100). The first fledglings were located on Staple Island on 11 July and on Inner Farne on 14 July. It was an unexceptional breeding season with less than one fledgling produced per monitored nest: on the outer group 341 young fledged from 418 nests (average productivity of 0.82) while on the inner group 221 nests produced 169 fledglings (0.76 per nest). Post breeding roost counts included 877 on Staple Island on 23 August and a total of 2,323 at the outer group on 28 August.

Sandwich Tern *Sterna sandvicensis*

An abundant breeding summer and passage visitor.

The first bird of the year roosted on Knoxes Reef on 27 March. Numbers at the inner group quickly rose from five on 30 March to 1,500 by 23 April and 3,500 by 4 May. The peak spring count on the outer group was 120 on Longstone on 12 May. Display was noted from 10 April and the first eggs were found on 13 May. 1,881 (2,364) pairs nested, all on Inner Farne. The colony was split into three with 698 scrapes on the Cemetery Bank, 793 on the top meadow and 390 in St Cuthbert's Cove. The first chicks were found on 3 June and the first fledglings on 2 July. Despite some losses in poor June weather it was a very successful season with large numbers of young fledging. The majority had departed by the third week in August. A late adult was on Knoxes Reef on 13 October.

Roseate Tern *S. dougallii*

A well represented summer and passage visitor, uncommon breeding species.

The first arrival was one over Inner Farne on 4 May, the first pair was seen on 8 May, and three birds were present on 18 May. One pair settled to breed and two eggs were laid: both hatched and both young fledged on 25 July. Up to three additional pairs were present from 18 June-12 July with one pair prospecting in nest boxes on a newly constructed breeding terrace on 23-24 June. 1-2 were also seen at the outer group on seven dates from 17 May-26 June. Post breeding arrival produced peaks of eight (five adults and three juveniles) on Inner Farne on 25 July and

three (two adults and one juvenile) on Brownsman on 24 July and 8-9 August. At least some of these individuals had come from Coquet Island, as evidenced by a juvenile, ringed there on 18 June, present on Inner Farne from 22-25 July. Birds lingered well into September with an adult and a juvenile at the inner group until 18 September and an adult on Brownsman until 19 September.

Common Tern *S. hirundo*

A common breeding summer and passage visitor.

One on Knoxes Reef on 17 April was the first arrival. Numbers built up to a hundred by 1 May with display noted from 25 April. 91 (114) pairs nested, all on Inner Farne. The first eggs were located on 21 May, the first young on 12 June and the first fledglings on 10 July, with twenty-three counted at the pond on 22 July. It was another poor breeding season with thirty monitored nests producing only seven fledglings, an average productivity of 0.23. Poor weather was the main cause of breeding failure. On Brownsman, small numbers were noted from 2 May-19 September and a cold egg was found on 28 May. Post breeding arrival (presumably of birds from elsewhere) saw numbers on Inner Farne rise from five on 5 September to 140 on 11 September with eighty still present on 16 September, before a rapid decline. The last was a first winter bird off Brownsman on 22 October.

Arctic Tern *S. paradisaea*

An abundant breeding summer and passage visitor.

The first bird of the year was in the tern roost on Knoxes Reef on 18 April. The usual rapid arrival followed with six at the inner group on 20 April increasing to 1,500 by 1 May and 3,500 by 6 May. On Brownsman roost counts peaked at 427 on 11 May. Display was noted from 28 April, the first scapes were found on 2 May and the first eggs on 16 May (on both Inner Farne and Brownsman). 1,301 (1,088) pairs nested as follows: Inner Farne 1120 (899), Brownsman 181 (189). The Brownsman total may be an underestimate as birds were apparently still arriving after 'nest count day'. Two pairs attempted to nest on Staple Island but the eggs were predated. The first young were found on 8 June on Inner Farne and on 12 June on Brownsman, with the first fledglings on Inner Farne on 1 July and on Brownsman on 5 July. After last year's poor breeding performance on Brownsman the use of chick shelters and canes to deter large gulls was stepped up. The results were encouraging: 226 eggs were laid in 130 monitored nests, 145 hatched and ninety-five chicks went on to fledge, an average productivity of 0.73. On Inner Farne, 417 eggs were laid in 211 nests, 251 hatched and 123 young fledged, giving an average productivity of 0.58 (a slight improvement on 2001). Poor weather was again a factor and predation continues to frustrate the wardens. First summer birds were present from 2 June-25 July with peaks of eighteen on Inner Farne on 29 June and ten on Brownsman on 25 July. Post breeding roost counts at the outer group included 817 on 28 July. Most had departed by the end of August although up to ninety were on Inner Farne on 6 September. The last bird on the islands was a juvenile on Brownsman on 6 October, two flew north through Staple Sound on 7 October and two were in Inner Sound on 8 October.

Little Tern *S. albigrons*

A well represented passage visitor.

The first birds of the year were two in St Cuthbert's Cove, Inner Farne on 1 May. The usual steady evening roost build up followed with fifteen on 3 May rising to forty-seven by 9 May and a peak of sixty-two by 14 May. Seventeen were present on 19 May, twelve on 26 May and eight on 29 May with three still roosting on 3 and 12 June. One was over Inner Farne on 18 June and there were two outer group records: one over Brownsman jetty on 4 May and one off the flats on 17 September.

Black Tern *Chlidonias niger*

An uncommon passage visitor.

A juvenile roosting on Brownsman north rocks nightly from 20-23 August was the only record of the year.

Guillemot *Uria aalge*

An abundant breeding resident and passage visitor.

Large numbers were on their breeding ledges when the wardens arrived. The first eggs were found on 13 April on Staple Island and 22 April on Inner Farne. 38,056 (35,436) individuals were present on the breeding cliffs as follows: Megstone 207 (136), Inner Farne 4,078 (4,140), West Wideopens 1,926 (1,760), East Wideopens 2,555 (2,183), Skeney Scar 1,568 (2,126), Staple Island 18,573 (17,957), Brownsman 6,880 (5,283), North Wamses 1,410 (1,268), South Wamses 520 (286), Roddam and Green 93 (92), Big Harcar 246 (205). The first young were recorded on Staple Island on 27 May and on Inner Farne on 31 May with the first 'jumplings' off Staple Island on 12 June and the last chick on Inner Farne on 2 August. Heavy predation of eggs by herring gulls was noted at the outer group. Small numbers were around the islands into December and passage movement included 120 south per hour through Staple Sound on 10 December.

Razorbill *Alca torda*

A common breeding resident and passage visitor.

Birds were present at their breeding sites when the wardens arrived. The first egg was located on Staple Island on 28 April with the first chick there on 27 May and the first 'jumping' on 4 July. 209 (173) pairs nested as follows: Inner Farne 72 (65), West Wideopens 47 (28), East Wideopens 16 (18), Skeney Scar 8 (9), Staple Island 30 (23), Brownsman 8 (10), North Wamses 7 (4), South Wamses 10 (4), Big Harcar 11 (12). It was an average breeding season: on the inner group twenty-one monitored nests produced eleven fledglings (0.52 per nest). Small numbers remained around the islands after the breeding season and passage counts included 360 south per hour through Staple Sound on 10 December.

Black Guillemot *Cephus grylle*

A well represented winter and passage visitor. Bred in the 17th and possibly 18th centuries (Kerr, 2001).

One to two were in the favoured locality around Gun Rock/in Staple Sound on twenty-one days from 10 October-13 December and singles were off Knoxes Reef on 10 and 25 October. The only higher counts were three in Staple Sound on 16-17 November and on 10 December.

Little Auk *Alle alle*

A well-represented winter and passage visitor; large numbers can occur after northerly gales.

Early sightings involved singles north past the south end of Inner Farne on 16 and 22 September and two north on 23 September. 1-3 were noted on four days from 19-26 October before sightings became regular from 3 November-13 December when the wardens left the islands. There was one 'big' day on 22 November when 2,112 flew south in four hours (1,570 through Staple Sound and 542 through Inner Sound). This and other double figure counts are shown in Table 17. Lingering birds included fifteen off Northern Hares on 9 November and twelve off Brownsman on 12 December.

Table 17 Little Auk passage at the Farne Islands – November-December 2002.

Date	November									December				Total
	3	10	12	17	20	21	22	23	27	9	10	11	12	
North	5	214	3	20	1	0	0	3	0	2	1	7	7	263
South	20	4	17	0	11	57	2112	19	16	20	52	66	24	2418

Puffin *Fratercula arctica*

An abundant breeding summer and passage visitor.

Large numbers were around the islands when the wardens sailed out with thousands prospecting soon after their arrival. The first eggs were found on Inner Farne on 26 April and on Brownsman on 28 April with the first chicks on Brownsman on 27 May and on Inner Farne on 29 May, and the first fledglings on Brownsman on 4 July. There was no population census due to the fragility of the soil cap and staff shortages – the last estimate was 34,710 pairs in 1993. Heavy rain in early June had a major effect at the outer group and fifty monitored nests produced only eighteen fledglings (0.36 per burrow). Inner Farne fared better with forty-seven fledglings from fifty burrows (0.94 per burrow); however an estimated twenty per cent of the burrows on the Wideopens were flooded. Most birds departed on 3 August although small numbers were at sea around the islands into December. A partially albino bird was on Inner Farne on 29 April.

Feral pigeon *Columba livia*

A common breeding resident.

Present all year in large numbers with up to 200 counted on Inner Farne in autumn.

Woodpigeon *C. palumbus*

An uncommon passage visitor.

Singles were on Inner Farne on 27 and 31 March, 17 and 19 April, 17 May and 8 June. At the outer group singles were noted on 5, 12 and 15 May and 5 July. The only other record was one over Inner Farne on 22 October.

Collared Dove *Streptopelia decaocto*

An uncommon passage visitor.

One was on Inner Farne on 24-25 April and also on Brownsman on the first date. Another was on Inner Farne on 23 May and Brownsman on 24 May.

Long-eared Owl *Asio otus*

An uncommon passage visitor.

One flushed from the central meadow on Inner Farne on 16 October flew west to the mainland. Another showed well by Brownsman cottage on 6 December.

Short-eared Owl *A. flammeus*

An uncommon passage visitor.

One flew west over Brownsman and Inner Farne on 7 May. The first autumn bird was one on Brownsman on 17 September. Singles were at/over the inner group on 5, 15 and 22 October and at the outer group on 6, 8 and 22 October and 3 November. Two were on both Inner Farne and Staple Island on 11 October.

Swift *Apus apus*

A well represented summer and passage visitor.

Two flew west over Inner Farne on 3 June, with one west on 9 June and singles were over Brownsman on 11 and 16 June. 1-3 were over the outer group on five days from 11-28 July, then one was at Inner Farne on 2 August and one flew south over Brownsman on 3 August.

Wryneck *Jynx torquilla*

An uncommon passage visitor.

A bird discovered on Brownsman on 8 September was the forerunner of a mini invasion. One on Brownsman on 9-10 September was thought to be a different bird. Three were on Inner Farne on 9 September with 2-3 still present the following day and one on 11 September. The artificial 'trees' on the islands were a favoured locality, allowing excellent views.

Skylark *Alauda arvensis*

A common passage visitor. May have bred in 1865 and 1883 (Brown, 1866; Harvie-Brown *et al.*, 1884).

One to three were on Inner Farne on nine days from 28 March-19 April and 1-2 on Brownsman/Staple Island on six days from 3 April-23 May. Autumn passage brought singles to Inner Farne on 14, 22 and 24 September with three present on 23 September. There were regular records in the next two months with 1-10 seen on twenty-one days from 3 October-30 November. Higher counts were of sixteen west over Brownsman on 8 October, twelve over Inner Farne on 10 October, at least twenty on Brownsman on 13 October with fifteen still present the following day and twenty-four north over Brownsman on 31 October. 1-3 were present on Inner Farne on 1, 3 and 12 December and on Brownsman on 3, 6 and 11 December.

Shore Lark *Eremophila alpestris*

An uncommon passage and winter visitor.

A confiding bird in almost full summer plumage was on Brownsman from 9-13 October and on Inner Farne from 14-25 October.

Sand Martin *Riparia riparia*

A well represented summer and passage visitor.

Singles flew over Inner Farne on 3, 7 and 21 April and one was at Longstone on 4 April. A total of eleven flew north on 23 April (nine over Inner Farne and two over Brownsman). The only other records were two north over Brownsman on 31 May and one over Brownsman Pond on 6 July.

Red-rumped Swallow *Hirundo daurica*

An extremely rare visitor.

An adult discovered hawking over Brownsman Pond with swallows at 17:25 on 9 September then moved to Inner Farne where it spent twelve minutes (17:30-17:42) flying around the top meadow and the lighthouse compound. It was last seen heading west towards the mainland. Superb close views were enjoyed by all the wardens present. First record for the Farne Islands and one of the highlights of the year.

Swallow *H. rustica*

A common summer and passage visitor. Bred in 1857, 1984 (Hawkey, 1991) and 1990-1997 (Walton, 1991-1998).

One north over Inner Farne on 2 April was the first of the year. 1-4 were seen on 18, 20, 21, 22 and 24 April with eighteen north on 23 April. There were regular records during May with 1-7 noted on twenty dates, including one without a tail on Brownsman from 22-31 May. 1-4 were over the outer group on nine dates from 4 June-29 July and 1-2 over Inner Farne on 28 and 30 July. Heavier autumn passage followed with sightings on twenty-nine days from 11 August-24 September. High counts (southerly passage) included forty-four over Inner Farne on 13 August, seventeen on 18 August, twenty-one on 2 September, 110 on 5 September, at least a hundred on 9 September, 133 on 10 September, twenty-five on 11 September and twenty-two on 12 September. One was on Inner Farne and two flew south over Brownsman on 2 October,

one was on Inner Farne on 3 October and two were over Inner Farne on the late date of 11 November.

House Martin *Delichon urbica*

A well represented summer and passage visitor. Six pairs attempted to breed in 1950 (Watt, 1950).

A quiet spring produced two over the outer group on 20, 28 and 29 May, one over Brownsman on 4 June and two over Inner Farne on 21 May. Seven flew south over Inner Farne on 9 September and twelve south over Brownsman on 10 September.

[Tawny Pipit *Anthus campestris*

An extremely rare visitor.

A large pipit flushed from Brownsman and Staple Islands at 08:45 on 20 October was almost certainly this species. Unfortunately it was not seen on the ground and was identified solely by its very distinctive call. This record has not been submitted to the Northumberland Rarities Committee.]

Tree Pipit *A. trivialis*

A common passage visitor.

Singles were on Brownsman from 7-9 and 18-21 May and on Inner Farne from 8-9 June. One was on Brownsman on 30 August, two on Inner Farne on 10 September (with one still present the following day) and three on Brownsman on 10 and 12 September (with two on 11 September and two remaining until 16 September). The last record was one over Inner Farne on 2 October.

Meadow Pipit *A. pratensis*

A common passage visitor. Bred in fifteen years 1946-1972 (Hawkey, 1991; Wilson, ms).

There were regular sightings of 1-19 from 26 March-18 May and higher counts of twenty-one north-west over Inner Farne on 28 March and 102 north-west there on 3 April. Autumn passage began with four west over Inner Farne on 31 August. There were daily sightings in September with notable counts of forty-three on 5 September, thirty on the inner group and twenty-seven south-west over Brownsman on 10 September, and thirty south-west over Brownsman and twenty on the inner group on 11 September. Smaller numbers were recorded in October with 1-11 on most days. Two were on Brownsman on 2, 3 and 7 November and one on 8 November.

Rock Pipit *A. spinoletta*

A common resident, well represented as a breeding species.

Present throughout. 32 (20) pairs nested as follows: Inner Farne 5 (3), West Wideopens 1 (1), East Wideopens 1 (0) Staple Island 7 (6), Brownsman 15 (7), North Wamses 1 (1), South Wamses 1 (1), Longstone main rock 1 (1). This is the highest numbers of pairs since 1983 when there were fifty-one (Hawkey, 1983). Nest building was noted from 10 April on Inner Farne, the first eggs were located on 24 April on Brownsman, the first chicks on 9 May on Brownsman and the first fledglings on 24 May on both Brownsman and Inner Farne. At the inner group it was a disappointing breeding season with only five young fledging from five monitored nests (poor weather, abandonment and destruction of one nest by puffins were all to blame). On Brownsman, fifty-seven eggs were laid in thirteen nests, forty-five hatched and twenty-nine young fledged (2.42 per nest). Some pairs also successfully raised second broods, the last fledging on Staple Island on 19 July. There were no high counts after the breeding season with a peak of ten on Brownsman in early October.

Yellow Wagtail *Motacilla flava flavissima*

A well represented passage visitor.

A male was on Brownsman and Staple Island on 21 April, two flew south-west over West Wideopens on 28 April and further singles were recorded on 8, 20, 22 and 27 May. One was on Inner Farne on 9 September and one flew west over Brownsman on 10 September.

Grey-headed Wagtail *M. f. thunbergi*

A rare visitor.

A fine male was present all day on Brownsman on 24 May. Ninth record for the islands and last recorded in 1999 (Walton, 2000).

Grey Wagtail *M. cinerea*

An uncommon passage visitor. May have bred in the 1890s (Miller, ms).

One on Inner Farne on 18 March was the only spring record. Singles flew over Brownsman on 15 and 27 September and over Inner Farne on 21 and 27 September, 1 October and 15 November.

Pied Wagtail *M. alba*

A well represented summer and passage visitor and uncommon breeding species.

Recorded regularly from March-August with fewer records in September and October. 4 (3) pairs nested as follows: Inner Farne 2 (1), Staple Island 1 (1), Brownsman 1 (1). The first eggs were noted on Brownsman on 9 May with the first young there on 27 May and the first fledglings on 8 June. Five young fledged on Brownsman, three on Staple Island and eight on Inner Farne – a successful breeding season. The highest counts of the year were eight at Inner Farne on 3 April and at the outer group on 16 April.

White Wagtail *Motacilla alba alba*

An uncommon passage visitor. Pure pairs bred in 1991-92 (Walton and Richardson, 1991; Walton 1993) and mixed pairs (with *M. a. yarrelli*) in 1994 (Walton, 1995) and 2000 (two) (Harvey and Walton, 2001).

Single males were on Inner Farne on 6 and 22 April and on Brownsman on 26 April.

Wren *Troglodytes troglodytes*

A common visitor and passage migrant. May have bred in the 1880s (Bolam, 1912).

One was on Inner Farne on 10 February and up to three from 18 March-5 April, two from 6-10 April and one from 11-21 April. 1-2 were also on Brownsman from 3-22 April with three present on 14 April. One on Staple Island on 11 July was unusual. Autumn passage brought daily sightings from 4 September-13 December. The peak count was a total of thirteen on 22 October (seven on the outer group and six on Inner Farne). 1-7 were recorded on all other dates.

Dunnock *Prunella modularis*

A common passage visitor. May have bred in the 1890s (Pybus, 1903).

The only spring record was one on Inner Farne on 17-18 April. One was on Inner Farne on 1 September, 1-3 daily from 9-15 and 20-29 September and one on Brownsman from 9-15 September. There were sightings of 1-6 on twenty-three dates during October with peaks of six on Brownsman on 13 October and four on Inner Farne on 24 October. One was on Inner Farne daily from 1-22 November and two daily from 23 November-13 December.

Robin *Erithacus rubecula*

A common passage visitor. Bred in 1951 (Watt, 1951a).

Light spring passage involved 1-2 on Inner Farne on 27-28 March, 4 April and seven days from 2-27 May. On Brownsman, 1-2 were present on 3, 4-14 and 20 April and on 6 May. Early autumn birds on Inner Farne on 3 and 7 August were followed by almost daily sightings of 1-10 from 4 September-13 December. Slightly heavier passage from 10-16 October produced a peak of twenty-five (with island peaks of twenty on Inner Farne on 13 October and ten on Brownsman on 14-15 October).

Thrush Nightingale *Luscinia luscinia*

An extremely rare visitor.

A confiding bird was present in Brownsman vegetable garden all day on 8 May. With excellent views the wardens were able confidently to rule out nightingale and confirm this as the first definite record for the Farne Islands. It was also the eighth for Northumberland and the first record since 1987 (Kerr, 2001).

Red-spotted Bluethroat *L. svecica svecica*

An uncommon passage visitor, well represented in some years.

Males were on Inner Farne from 9-11 May (singing in the lighthouse compound on occasion), and on Brownsman from 10-11 May. A female was on Staple Island on 18 May.

Black Redstart *Phoenicurus ochruros*

A well represented passage visitor.

Single males were on Inner Farne from 7-10 June and on Brownsman on 8 June. Females on Inner Farne on 4 and 7 August were followed by one on 21-22 October and a first winter bird on Staple Island and Brownsman on 22-23 October. The last was a female or first winter bird on Inner Farne on 2 November.

Redstart *P. phoenicurus*

A common passage visitor.

Females on Inner Farne on 2, 13 and 14 May and on Staple Island/Brownsman from 9-15 May were followed by a male on Longstone on 18 May (the latter was attacked by a hobby but escaped). A female or juvenile on Brownsman on 24-25 August was the first of the autumn. There were daily sightings from 8-16 September with a peak of twenty-four (fifteen on Inner Farne, six on Brownsman and three on West Wideopens) on 10 September and 2-8 on the other dates. Two were at the outer group on 2 October, a female on Inner Farne on 8 October and singles on Brownsman on 10 and 14 October.

Whinchat *Saxicola rubetra*

A common passage visitor.

A female on Inner Farne on 8-9 May and one on the east rocks of Brownsman on 9 June were the only spring records. Autumn arrival began with four on Brownsman and one on Inner Farne on 18 August. Four were still on Brownsman the following day, one on 20, two from 23-25 and one from 26-31 August. September produced records on thirteen days on Brownsman (all month) and ten days at the inner group (last record on 15 September). Peak arrival saw twelve on 9 September increase to fifty-six on 10 September (thirty-eight on the outer group) with seventeen still present on 11 September and ten on 12 September. 1-8 were present on the other dates. The last was one on Brownsman on 1-2 October.

Stonechat *S. torquata*

An uncommon passage visitor. Bred in 1946 (Goddard, 1946).

A poor year by recent standards with only two records: an immature male was on Brownsman on 17 September and a male on Inner Farne on 19 September.

Wheatear *Oenanthe oenanthe*

A common passage visitor. Bred in six years from 1931-59 (Goddard, ms).

Spring passage birds were recorded regularly from 29 March-20 May with peaks of eleven on 22 April and ten on 1 May. A male was on Inner Farne on 6 June, a female or juvenile on Brownsman on 17 June and a juvenile on Inner Farne from 18-20 June. 1-8 were noted regularly from 11-30 August, 1-7 September and 13-30 September. There were higher counts of seventeen on 31 August, thirteen on 1 September and 15-60 from 8-12 September (peaking on 10 September with forty on Brownsman and twenty on the inner group). 1-2 were recorded on four days in October with the last on Inner Farne on 10 October.

Ring Ouzel *Turdus torquatus*

An uncommon passage visitor.

A female on Brownsman on 7 May was the only spring sighting. Autumn arrival began with a first winter female on Inner Farne from 2-3 October. Two flew west over Brownsman and two were on Inner Farne on 8 October, a female was on Brownsman on 9 October and a first winter bird on Brownsman and Staple Island on 10-11 October. The last sighting of the year was a male on Brownsman, Staple Island and Inner Farne on 22 October.

Blackbird *T. merula*

An abundant passage visitor. Bred in four years from 1893-1914, 1962 then annually from 1964-74 (Miller, ms; Hawkey, 1991).

Three were on Inner Farne on 18 March, 1-5 almost daily from 27 March-23 April and a male was on Brownsman on 17 May. Autumn passage began with one on East Wideopens on 22 September and there were almost daily records from 1 October-12 December. Notable counts included 136 west over Brownsman on 8 October, a hundred there on 9 October (and eighty still present the following day), forty-nine west and fifty on the island on 22 October, 300 on 2 November (when 150 were also on Inner Farne) and 200 on 3 November.

Fieldfare *T. pilaris*

A common passage visitor.

One was on Inner Farne on 18 March, and continued light spring passage brought sightings of 1-20 on seventeen more days from 28 March-21 April. The peak spring count was thirty-two on 4 April, twenty-two of which were on Inner Farne. One on Brownsman on 10 August was unusual and 1-2 were also there on 3, 4 and 10 September. More typical autumn arrival began on 2 October and there were records on thirty-eight days until the wardens left the islands on 13 December. The only major arrival took place on 22 October when 4,980 flew west over Brownsman and at least 4,000 over Inner Farne. Forty-nine flew west on 1 November, 300 west on 2 November, a hundred west on 10 November and forty were on Brownsman on 14 November. 1-11 were recorded on all other dates.

Song Thrush *T. philomelos*

A common passage visitor.

One to eight were seen on seven days from 14-22 April and one was on Inner Farne on 9 May. In autumn there were almost daily sightings from 9 September-23 November. 1-17 were recorded in September before the first major arrival brought seventy-five to the islands on 2 October. 1,811 flew west over Brownsman on 8 October with eighty on the island and

thirty-two west the following day. At least 120 were present on Inner Farne and Brownsman on 11 October, with a hundred on 12 October dropping to twenty-five by 17 October. On 22 October thirty-two flew west over Brownsman and twenty were on the island. 1-21 were recorded on all other dates. The last was a single on Brownsman on 6-7 December.

Redwing *T. iliacus*

An abundant passage visitor.

One was on Inner Farne on 26 March, three were there on 31 March and 1-18 were noted on twenty-one days from 3-30 April. Autumn passage brought almost daily sightings from 2 October-12 December. The first major arrival took place on 8 October when 3,405 flew west over Brownsman. Further westerly movement included 119 on 9 October, eighty-five on 11 October, 2,875 on 22 October and fifty on 10 November. Counts of lingering birds included 200 on 9 October, 130 on 11 October, 160 on 12 October (dropping to a hundred by 14 October) and seventy on 2 November.

Mistle Thrush *T. viscivorus*

An uncommon passage visitor.

One was on Inner Farne on 13 October.

Grasshopper Warbler *Locustella naevia*

A well represented passage visitor.

Another quiet year with no spring sightings and only three in autumn: singles were on Brownsman on 3-4 and 7-8 September and on Inner Farne on 18 September.

Sedge Warbler *Acrocephalus schoenobaenus*

A well represented passage visitor.

One on Inner Farne on 7 May was followed by 1-2 at the outer group on eight days from 8-22 May. Autumn passage was also light. The first was one on Brownsman on 2-3 August. Further singles were on Inner Farne on 3, 14 and 15 August, and on Brownsman on 8 August, 9-10 and 14 September.

Reed Warbler *A. scirpaceus*

A well represented passage visitor.

One on Brownsman on 9 June was the only spring record and one there on 10-11 July was unusual. More typical autumn arrival began with one on Brownsman from 2-4 August and singles on Inner Farne on 3 and 10 August. A total of three were present on 20 August (two on Inner Farne, one on Brownsman), one on 25 August, one on 6 and 8-9 September and five on 10 September (four of which were on Inner Farne). The last records were one on Staple Island and two on Inner Farne on 22 October.

Barred Warbler *Sylvia nisoria*

An uncommon passage visitor.

An excellent year with five records: the only other year with five sightings was 1981 (Hawkey, 1981). First winter birds were on Brownsman on 10-12, 20 and 24 August and on Inner Farne on 10 September and 22 October.

Lesser Whitethroat *S. curruca*

A common passage visitor.

One on Brownsman on 6-7 May was the first of the year. Three on Brownsman and Staple Island on 8 May increased to five by 10 May before dropping to three by 11 May. Autumn

passage produced daily sightings from 8-14 September with a peak of thirteen on 9 September (ten on Inner Farne and three on Brownsman). One was on Brownsman on 22 September with two present the following day, and a late bird was on Inner Farne on 2-3 November.

Whitethroat *S. communis*

A common passage visitor.

Three on Brownsman on 1 May were the first arrivals. 1-2 were present on 2-4, 17-18 and 20-21 May with singles on Inner Farne on 2 and 15 May. Autumn passage began with a first year bird on Brownsman on 18-20 August. 1-2 were on Inner Farne on six days from 4-19 September and 1-3 on Brownsman on six days from 9-16 September.

Garden Warbler *S. borin*

A common passage visitor.

One on Brownsman from 1-3 May and two there on 19 May were the only spring records. Birds were recorded at the outer group on ten days from 3-26 August with a peak of six on 23-24 August. Four on 8 September preceded a major fall the following day when twenty-five were on Brownsman and twenty on Inner Farne. At least fifty were present on 10 September (thirty on the inner group and twenty on Brownsman) and daily sightings continued until 18 September with a gradual decline in numbers. Singles were on Inner Farne on 21 and 30 September and 1 and 9 October and the last was one on Brownsman on 16 October.

Blackcap *S. atricapilla*

A common passage visitor.

Males were on Brownsman on 18 April, 8-9 May and 12 June and a female was present from 8-9 June. Autumn passage brought 1-9 to the islands on nineteen dates from 8 September-21 October. A fall on 22 October produced a total of eighteen (ten on Inner Farne, eight on the outer group). Late singles were on Brownsman on 1 November (male), and 2 November (female) when one was also on Inner Farne.

Yellow-browed Warbler *Phylloscopus inornatus*

An uncommon passage visitor. Fourteen in 1999 was exceptional (Walton, 2000).

One on Brownsman on 28 September arrived during light westerly winds.

Wood Warbler *P. sibilatrix*

An uncommon passage visitor.

One showed well on Brownsman on the evening of 7 August.

Chiffchaff *P. collybita collybita*

A common passage visitor.

One on Inner Farne on 28 March was followed by regular sightings from 2 April-20 May. The peak spring count was six on 18 April. Early autumn birds were on Brownsman on 10-11 and 20 August. The main passage period brought sightings of 1-10 on twelve days from 4-18 September, one on 30 September, 1-7 on seventeen days from 6-26 October and singles on 2 and 3 November. The only higher count was a total of twenty (fifteen of which were on Inner Farne) on 10 September.

Scandinavian Chiffchaff *P. c. abietinus*

An uncommon passage visitor.

A bird showing characteristics of this race was present on Brownsman on 16 November.

Willow Warbler *P. trochilus*

A common passage visitor.

Spring passage produced daily sightings of 1-5 from 17-29 April, 2-3 on 1-2 May and 1-8 from 6-22 May (peak count on 6 May). Two were on Brownsman on 7-8 June and one there on 13-16 June. The first autumn records were two on Brownsman on 31 July. There were regular sightings from 3 August-16 September with peaks of twenty-three on 14 August and twenty on 10 September. The last were singles on Brownsman on 23 September and on Inner Farne on 13-14 October.

Goldcrest *Regulus regulus*

A common passage visitor.

It was a quiet year for this species. Light spring passage brought singles to Inner Farne on 27-28 March and on 3, 6 and 7 April. Two were on the outer group on 9 April and one on Brownsman on 7 May. The first autumn birds were on Brownsman on 27 August and Inner Farne on 1 September. 1-22 were noted on twenty-seven dates from 11 September-22 October (peak monthly counts of twenty-two on 22 September and eight on 4 October). Late singles were on Brownsman on 2 November and on Inner Farne on 3 and 18 November.

Spotted Flycatcher *Muscicapa striata*

A well represented passage visitor.

Singles were on Inner Farne on 21 May and 7-8 June and on Brownsman on 6 and 9 June. Autumn passage was similarly light with one on Inner Farne on 30 August, five on 9 September (with one still present the following day) and singles on Brownsman on 9-10 September and 1 October.

Pied Flycatcher *Ficedula hypoleuca*

An uncommon passage visitor.

Two (first summer male and female) were on Inner Farne on 9 May, two females on 10 May and one female on 11 May. Further singles were on Inner Farne from 18-20 May (first summer male) and on Brownsman on 18 May (female) and 8-9 June (female). Two on Brownsman and one on Inner Farne on 7 August were the first of the autumn. One was seen on 11 August, three on 18 August and singles on 19-20 and 26 August. There were daily sightings from 8-17 September with totals of twenty-one on 9 September, thirty-four on 10 September (twenty-five on the inner group), ten on 11 September and 1-5 on the other dates. The last were one on Inner Farne on 3-4 October and two there on 22 October.

Red-backed Shrike *Lanius collurio*

An uncommon passage visitor.

A well watched male on Inner Farne from 6-7 May was the second earliest ever on the islands. The earliest was one on Longstone on 27 April 1952 (Watt, 1953).

Jackdaw *Corvus monedula*

A well represented visitor. Former breeder, last in 1966 (Hawkey, 1991).

One to five were observed on twelve days from 27 March-19 May. Eleven around the pele tower on Inner Farne on 21 September was the highest count of the year. Two flew north past Inner Farne on 1 October, two foraged on Brownsman on 13-14 October and one roosted on Inner Farne on 2 November.

Rook *C. frugilegus*

A well represented visitor.

There were spring sightings of 1-3 on twelve days from 28 March-1 May. In autumn 1-2 were noted on five days from 26 September-4 November. The only higher count was of seven west over Inner Farne on 29 September.

Carrion Crow *C. corone*

A well represented visitor and extremely rare breeding species.

Recorded regularly throughout the season. A pair attempted to nest on the lighthouse cliff on Inner Farne. Birds were noted carrying nesting material from 18 April and two eggs were laid on 23-24 April but both were predated. The peak spring counts were eighteen east at the outer group on 23 April and 11 May while autumn maxima were seven at the inner group on 29 September and over the Wamses on 5 November.

Starling *Sturnus vulgaris*

A common visitor, extremely rare breeder.

There were regular records throughout the season although the species was absent in May. Monthly maxima are shown in Table 18.

Table 18 Peak Starling counts on the Farne Islands in 2002.

	Mar	April	June	July	Aug	Sept	Oct	Nov	Dec
I Group	5	3	16	60	50	20	50	60	40
Date(s)	29	3-6	24	11	14-26	1	22	3-13	3
O Group	-	6	21	84	150	40	80	28	10
Date(s)	-	11-12	15	4	20	6-7	11	14	10

I Group = Inner group, O Group = Outer group.

Chaffinch *Fringilla coelebs*

A common passage visitor.

Singles were seen on five days from 28 March-3 May. Typically autumn passage was heavier with regular sightings of 1-8 from 10 September-3 November. There were higher counts of seventeen on 9 September (fifteen on Inner Farne) and twenty-three on 14 October (twenty on Inner Farne).

Brambling *F. montifringilla*

A common passage visitor.

Two were on Inner Farne on 3 April with one there on 18 April and singles on Brownsman on 17 April and 5-6 May. One over Inner Farne on 13 September was followed by another on 23 September when two were also on Brownsman. There were almost daily sightings from 2-22 October with a major arrival on 8 October when 439 flew west over Brownsman and forty were on Inner Farne. Thirty-one flew west the following day with ten lingering on Brownsman and thirty on Inner Farne, forty were over Inner Farne on 14 October and seventeen flew west over Brownsman on 22 October. 1-24 lingering birds were present on the other dates. Singles were on Brownsman on 30 October and 13-14 November and 1-4 were on Inner Farne on 2-3 and 18-19 November. The last of the year were two west over Brownsman on 6 December.

Greenfinch *Carduelis chloris*

A well represented passage visitor.

Singles were on/over Inner Farne on 18 and 29 March and 3-4 April. A major autumn influx in October (Table 19) produced a Farnes record count of fifty-five on Brownsman on 11 October where sunflower seed placed in front of the cottage proved attractive.

Thereafter thirty-six were over the Wamses on 20 October, a single remained on Brownsman until 25 October and two were present on 5 November. On Inner Farne there were regular sightings of 1-8 from 20 October-22 November, thirteen were present on 23 and 26 November and one on 27-28 November.

Table 19 Greenfinch numbers on the Farne Islands in October 2002.

Date	8	9	10	11	12	13	14	15	16	17	18	19
Brownsman	20	30	41	55	27	13	10	5	4	3	5	3
Inner Farne	15	6	4	3	1	1	4	-	-	-	-	1
Total	35	36	45	58	28	14	14	5	4	3	5	4

Goldfinch *C. carduelis*

A well represented passage visitor.

One flew west over Inner Farne on 3 April, then 1-3 were seen on eleven days from 18 April-11 May. Nine were at or over the outer group on 23 April and five flew west there on 2 May. A flock of twenty-two west over Brownsman on 23 August was the largest group ever recorded on the islands. Another flew west on 28 August, two were on Inner Farne on 26 October, one over Brownsman on 30 October and three on South Wamses on 5 November.

Siskin *C. spinus*

A common passage visitor.

Scarce in spring with singles north-west over Inner Farne on 3 April, north over Brownsman on 22 April and two males on Brownsman from 6-9 June. 1-6 were on Inner Farne on eleven dates from 2-24 October (peaks on 2 and 8 October) and 1-2 on Brownsman/Staple Island on 2, 9, 11 and 13 October.

Linnet *C. cannabina*

A common passage and winter visitor. May have bred in the 1890s (Miller, ms).

There were almost daily records from 26 March-4 May and regular sightings from 21 September-19 November. The peak spring count was nineteen west over Inner Farne on 7 April while autumn produced monthly maxima (all Inner Farne) of fourteen on 14 September, forty on 24 October and thirty from 3-6 November. The peak count on Brownsman was ten on 1 October. The species was scarce in the intervening period with one north over Brownsman on 27 May, one south over Inner Farne on 7 June, two on Inner Farne on 27 August and six north-west there on 11 September. Three over Brownsman on 29 November were the last of the year.

Twite *C. flavirostris*

A well represented passage visitor.

Most records came from Brownsman. One at the south end on 23 September was the first. Another was at the feeding station outside the cottage daily from 21-26 October and twenty-three flew towards the Wamses on 31 October. Thirteen were present on 5 November and eleven flew south on 23 November. On Inner Farne, 1-2 were seen on four days from 4-14 November.

Lesser Redpoll *C. cabaret*

An uncommon passage visitor.

One west over Inner Farne on 21 April and one on Brownsman on 25-26 April were the only spring records. In the autumn 1-2 were noted on twenty-one days from 5 September-26 November. The only higher count was five on Brownsman on 3 November.

Mealy Redpoll *C. flammea flammea*

An uncommon passage visitor.

Singles were on Brownsman on 23 April and 9 November.

Crossbill *Loxia curvirostra*

Normally an uncommon passage visitor.

A remarkable year for this species with a record influx from 23 August-14 September (Table 20).

Numbers on 9 September were spectacular when heavy rain from midday grounded at least 300 on Inner Farne and 120 on Brownsman. Many were bedraggled and exhausted with one warden on Brownsman resorting to collecting in a bucket birds unable to fly. The sight of over one hundred birds surrounding a wryneck on the Inner Farne artificial tree and dozens clinging to the side of the pele tower and carpeting the vegetable garden elders is one that will never be forgotten.

Table 20 Crossbills on the Farne Islands in autumn 2002.

	August					September									
Day	23	24	25	29	30	3	4	5	8	9	10	11	12	13	14
IF	-	1	2	2	1	2	-	-	40	300	10+	3	2	1	1
Bm	4	-	-	-	-	105	1	1	5	120	32	-	-	-	-
Tot	4	1	2	2	1	107	1	1	45	420	42	3	2	1	1

IF = Inner Farne, Bm = Brownsman; figures in italics are for westerly passage.

Common Rosefinch *Carpodacus erythrinus*

An uncommon passage visitor.

A female or immature was present on Brownsman on the evening of 4 September.

Lapland Bunting *Calcarius lapponicus*

An uncommon passage visitor.

Two were on Brownsman on 8 April and an adult, initially discovered at the feeding station on Brownsman, was 'resident' from 12-16 October.

Snow Bunting *Plectrophenax nivalis*

A well represented passage visitor.

There were no spring records. 1-5 were recorded on eighteen dates from 30 October-6 December. There were higher counts of eleven north over Brownsman on 17 November, eight south there on 23 November, seven on Knoxes Reef on 24 November and ten north and two south over Brownsman on 29 November.

Yellowhammer *Emberiza citrinella*

An uncommon passage visitor.

Singles were on Inner Farne on 13-14 and 21 October and on 2 November with four present on 22 October. On Brownsman one was seen daily from 15-18 October, one from 22-29 October and one from 2-4 November. Another flew over Staple Island on 22 October.

Ortolan Bunting *E. hortulana*

An uncommon passage visitor.

A first winter bird was briefly on the courtyard wall on Inner Farne on 8 October.

Yellow-breasted Bunting *E. aureola*

A rare visitor.

A bright first winter bird initially heard on Inner Farne on the evening of 3 September was eventually located near the chapel at 17:00 on 4 September. It was present all day on 5 September favouring the central meadow and the area behind the pele tower. Ninth record for the islands and the eleventh for Northumberland (Kerr, 2001) Last recorded in 1996 (Walton, 1997).

Reed Bunting *E. schoeniclus*

A well represented passage visitor.

A female on Brownsman from 5-8 May was the only spring record. 1-9 were recorded almost daily from 2-6 October, 17-26 from 8-14 October and 5-10 from 15-22 October. Included in the peak passage period were twenty-three west over Brownsman on 8 October and at least twenty on Brownsman (plus six on Inner Farne) on 11 October. Thereafter singles were on Brownsman on 29 and 31 October and 2, 3, 4 and 14 November, two were on Inner Farne on 2 November and singles were present on 3 and 14 November.

Rarities committee decisions 2001

The following records for 2001 were not accepted:

Black-headed Wagtail *Motacilla flava feldegg*, male, Brownsman on 16 June.

Sardinian Warbler *Sylvia melanocephala*, female, Inner Farne on 20 August.

Farnes Ringing Report – 2002

This year was marked by the publication of the *Migration Atlas* by the BTO (Wernham et al. 2002). It may not be immediately obvious why this statement is relevant to the 2002 Ringing report; however, seabirds have been ringed on the Farne Islands for over fifty years and during this time Farnes-ringed seabirds have accounted for over 40% of the national ringing totals for Sandwich tern, arctic tern and kittiwake, over 20% of eider and significant numbers of shag (8%). Therefore, the ringing effort on the Farnes has had a substantial impact on our knowledge of the migrations and movements of these species, providing essential information for future conservation.

Ringing recoveries

As a marking technique, ringing has many uses. Information on the locations of recovered birds and the method of recovery (whether found dead or 'controlled' – caught by other ringers), can tell us about their movements in relation to seasons, age and (sometimes) sex, and about causes of mortality which may have implications for the long term viability of breeding populations. Since the last report, there have been recoveries of shags, arctic terns, Sandwich

terns, kittiwakes, eiders, puffins and guillemots. Although many of these were actually recovered in 2002, others were recovered in 2001 or before – variable reporting delay by other ringing schemes and finders of ringed birds means that we may not get to hear of them straight away.

Arctic terns have the longest migration of any species, and travel to Antarctic waters to spend the winter. The remoteness of these wintering grounds means that we receive few long-distance recoveries. In keeping with this, only four recoveries of arctic terns were received during the year, and all four were breeding season recoveries from the north-east. One which had returned to breed in its natal colony, ringed on Brownsman in July 1982, was found dead there in March 2001. Chicks ringed on Inner Farne in 1985 and 1986 were recovered dead on the Long Nanny in June 2002 and the Isle of May in June 2001, respectively. A chick ringed on Coquet in 1999 (one of ours as it happens since the Natural History Society also rings seabirds on Coquet Island) reached its demise on Inner Farne in June 2001. These three recoveries are in keeping with natal dispersal between colonies (dispersal of young birds to breed in colonies other than their natal colony). However, substantial or expanding colonies of arctic terns on the Long Nanny and Isle of May are relatively recent developments and these movements may also reflect a dispersal of breeding adults from the Farnes. Indeed, the numbers of arctic terns breeding on the Farnes has declined substantially over the last ten years, and these birds may be taking up residence on the Long Nanny instead, or further north on the Isle of May.

In contrast to the arctic tern, Sandwich terns spend the winter months along the west coast of Africa, usually from Senegal south to Cape Town and north to Mozambique. Their proximity to coastal towns, cities and villages means that more recoveries are reported, and causes of death are frequently a direct result of human activities. The twenty-three recoveries reported in 2002 can be divided into four categories: those from the UK, recoveries along the Netherlands coast, recoveries from elsewhere in Europe, and ones from Africa. Within the UK, there were seven Farnes Sandwich terns seen by a ringer on the Isle of May, all between 8 and 10 June 2001. These birds were ringed as chicks on Brownsman (three) and Inner Farne (four) in 1998 (five birds) and 1997 (two birds). These are in addition to the three birds on the Isle of May in 2001 described in the previous report, and which were ringed in 1996. Since the Isle of May colony is expanding, juveniles dispersing from their Farnes natal colony may be one source driving this expansion. Elsewhere in the UK, a chick ringed in 1996 was controlled on Brownsea Island, Poole, in September 2002, and another chick from 1996 was found dead near Alnmouth in July 2002.

Slightly further afield, two Sandwich terns were reported from the Dutch coast. A chick from Brownsman in 1981 was controlled in Texel in April 2002, and one from Inner Farne a year later was seen in June this year in the well-watched colony at Griend. This latter bird was also seen there in 1999 and 2000, so is presumably well-established as a breeding bird in the Griend colony. There were two recoveries from elsewhere in Europe. One caught with a fishing rod in Coruna, north-west Spain, towards the end of March 2002 and then released, was on the well-characterized migration route for our Sandwich terns, following the western coastline of Europe. The other European recovery is somewhat more intriguing, and was of a 1976 Brownsman chick controlled in April 2002 at Comacchio, North-east Italy (ca 80 km south of Venice). Another Farnes bird (a chick ringed in 1983) was controlled in the same region in 1999. These two Italian recoveries are part of a cluster of breeding-season Sandwich tern recoveries around the Po delta. Although the Sandwich terns from the UK migrate along the western coasts of Europe to their wintering quarters in west Africa, there have been other recoveries of Sandwich terns along northern shores of the Mediterranean eastwards as far as the Danube delta (Noble-Rollin and Redfern, 2002). The Atlantic/North Sea populations of Sandwich terns are estimated to number approximately 50,000 pairs, and there are up to 40,000 pairs in the Black Sea/Sea of Azov in eastern Europe with smaller numbers (est. 1500 pairs) along the Mediterranean from Spain eastwards to Northern Italy and Greece (Hagemeijer and Blair 1997). Since Sandwich Terns from the Black Sea and Mediterranean populations can winter west to Iberia and occasionally Western Africa (Hagemeijer and Blair, 1997), it is possible that these are joined by birds from the UK and followed back to their breeding colonies. Whatever the explanation, it is clear from the ringing recoveries that interchange

between Atlantic/North Sea populations and Mediterranean/Black Sea populations may occur regularly.

The west African coast tends to be a hot spot for recoveries of Sandwich terns, particularly juvenile birds. However, although ten recoveries of Sandwich terns were reported from Africa this year, remarkably few were of juvenile birds. The only juvenile recoveries in this batch were a bird ringed as a chick on Inner Farne in June 2001 and recovered, alive but fate unknown, in Sierra Leone in February 2002, and a chick ringed (also on Inner Farne) in June 2002 and recovered alive, but in poor condition, and released four days later) in Monrovia, Liberia, in November the same year. The majority of the remaining recoveries (seven) were birds ringed as chicks on either Brownsman or Inner Farne between 1978 and 1985, with one from 1996, and controlled in Senegal by teams from the Brussels and Paris ringing schemes in January 2002 (with one in November 2001 and one in March 2000). Further east along the coast in Ghana, a bird from 1985 was recovered alive, but its fate was not recorded, in November 2002. It is heartening that very few birds this year have been reported dead as a result of catching by local people.

Like the arctic tern, ringing totals for kittiwakes on the Farnes comprise over 40% of the national totals for this species. As our most oceanic gull outside the breeding season (Coulson, 2002), relatively few are recovered outside their breeding colonies. A sight record on Inner Farne in April 2001 (ring read in the field) of a bird ringed as a chick on the Isle of May in 1987, is evidence of interchange between colonies. Two longer movements were a bird ringed on Inner Farne in June 1973 and recovered dead in Skagen, the most northern-most tip of Denmark, in October 2001, and a bird from 1996 recovered as skeletal remains on the Île d'Yeu, in the northern part of the Bay of Biscay, France, in December 2001. These recoveries are consistent with previous patterns of kittiwake recoveries distributed along the eastern coast of the North Sea and down to the Bay of Biscay (Coulson, 2002).

It is now over fifteen years since puffins were ringed in large numbers annually on the Farnes, but recoveries are still being reported. Amongst five recoveries reported in 2002, there were four long distance movements. One of these was a bird from Inner Farne recovered dead on Cleveland Beach in May 2002; this bird was ringed in 1996, and is one of only a few that have been ringed on the Farnes since 1986. Longer distance movements all involved birds ringed as adults and recovered dead in Scotland: one from Brownsman in 1979 was recovered on North Ronaldsay, Orkney, after violent weather in November 2002, another from Brownsman in July 1984 was found in Balmelie, Grampian, in October 2002, and a bird from the Wideopens in May 1980 was recovered in Caithness, Highland Region, in October 2002. Only a few guillemots are now ringed on the Farnes, as the risk of disturbance is too great to warrant a large-scale ringing programme, but birds from the Isle of May are regularly seen in the colonies. Four reported on the Farnes in 2002 were all identified individually from their colour rings: three of these were also present in 1999 and one of these three was also present in 1997.

Since over 20% of the eiders ringed in the UK have come from the Farnes, this is another species for which the Farnes ringing programme has made important contributions to elucidating patterns of movements. However, most of the eiders ringed on the Farnes are adult females caught on the nest, so we have virtually no information on the movements of adult male birds or the extent of natal dispersal. The adult females at least do not travel very far, and most recoveries have been in Northumberland. 2002 was no exception, and of the four recoveries, three were birds found dead on the Farnes, while the fourth was found dead on the beach at Bamburgh in May 2002.

Shags, on the other hand, present greater opportunities for data gathering: chicks and adults of both sexes can be caught at the nest, and the adults can often be sexed (the females make less noise, usually just a hiss). Recoveries of shags reported in 2002 are considered in four categories: birds from the Isle of May recovered on the Farnes, Farnes-ringed birds recovered elsewhere in Scotland, Farnes-ringed birds recovered further south, and local recoveries. All except one of these were ringed as chicks. Four of the six Isle of May birds recovered (three deaths, one sight record) on the Farnes were ringed as chicks in 2000; the others were a chick ringed on the Isle of May in 1997 and recovered dead in May 2001, and an adult ringed on the Isle of May in July 1994, identified from its engraved colour-ring, found breeding on Staple

Table 21 Ringing totals for 2002 compared to 2001.

Species	Ringed in 2002	Ringed in 2001
Arctic Tern	116	196
Sandwich Tern	362	196
Roseate Tern	2	1
Kittiwake	200	233
Shag	190 (+54 retraps)	120 (+33 retraps)
Eider	72 (+111 retraps)	35 (+ 48 retraps)

Island in 1997, 1998, 1999 and again in 2002. This bird may be an example of breeding dispersal (movements of breeding adults between colonies). Elsewhere in Scotland, shags were recovered dead between December 2001–November 2002 in Buchan, Grampian (two birds, ringed in 1998 and 2002), Eyemouth and Burnmouth, Borders (three birds, ringed in 2002, 2001 and 1999, respectively), Arbroath, Tayside (ringed in 2001), and Queensferry, Fife (ringed in 1998). In addition, a chick from 1996 was controlled in North Sutor, Highland, in June 2002. Further south, birds were recovered dead from Portsmouth (ringed in 2000), Eastbourne (ringed 2001), Orfordness, Suffolk (ringed in 2001), and Humberside (ringed in 2001). The two local recoveries were chicks from 1981 and 2000 recovered dead on Holy Island in March 2002.

Ringing totals in 2002

The ringing totals for all species on the Farnes Islands are shown in Table 21. These totals are broadly in line with those for 2001, but are very modest in relation to the overall size of the seabird populations on the Farnes. Clearly, there is scope for much improvement, given the value of ringing to ornithological science and conservation.

Monitoring growth and retrapping adults for survival estimates

The monitoring of arctic tern growth continued as in previous years, and we obtained total head length (a measure of age), weight and primary length measurements from a sample of eighty-two chicks on Brownsman and Inner Farne. This has been analysed along with data for previous years and for Coquet Island to produce a growth index. After the disastrous season in 1999, this growth index is beginning to return slowly to 1997 levels, but is still below that of the Coquet Island birds. Understanding the causes of variation in growth from year to year and between Coquet and the Farne Islands, teasing out the potential contributions of weather and fish abundance, is one of the aims of the sandeel and seabird foraging studies described in the next section.

Although the numbers of eider and shags ringed each year on the Farnes is relatively low, the team puts a great deal of effort into retrapping as many ringed adults as possible on the Inner Farne (eiders) and Staple Island (shags) study areas. The total of birds retrapped (111 and fifty-four for eiders and shags, respectively), is quite respectable and within the next few years we will be able to use these data to provide estimates of annual mortality. In the past, bird mortality has been estimated from ring recovery rates, but obtaining such estimates from retrapping samples of birds over a number of years is much more efficient in terms of effort and the quality of the data obtained. The ringing and retrap data for eiders and shags is submitted to the BTO each year as part of their 'Retrapping Adults for Survival' (RAS) programme. Detailed ringing studies over a number of years can also raise unexpected issues. While ringing the shags and their chicks, we often catch both adults of each pair at the nest. An earlier study on shags nesting on the Farnes and the Isle of May (Aebischer, Potts *et al.* 1995), reported that shags tended to remain paired with the same mate from year to year. However, while carrying out the RAS study on Staple Island, we have noticed that very few of the adults remain paired to the same mate in subsequent years. The reason for the difference between studies is not known,

but it will be valuable to look at site and mate-fidelity within the Farnes group as a whole over a number of years.

Sandeels and Seabirds – studies by the Farnes Islands Marine Research Group (FIMRG)

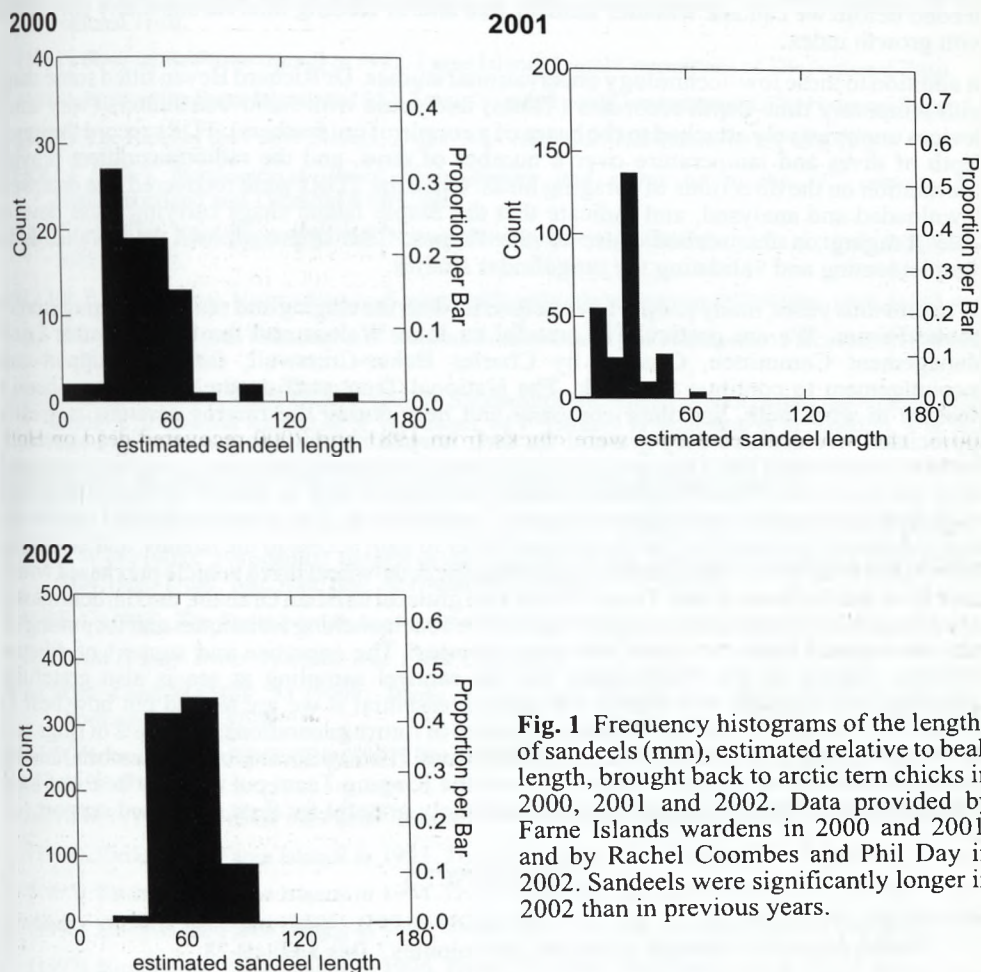


Fig. 1 Frequency histograms of the lengths of sandeels (mm), estimated relative to beak length, brought back to arctic tern chicks in 2000, 2001 and 2002. Data provided by Farne Islands wardens in 2000 and 2001, and by Rachel Coombes and Phil Day in 2002. Sandeels were significantly longer in 2002 than in previous years.

In 2001, the National Trust Wardening staff carried out pilot studies with an optical co-incidence rangefinder and compass to locate the positions of foraging seabirds around the Farne Islands. These were successful and showed that this approach could be used to get unbiased data on foraging locations. Consequently, we enlisted the full-time services of two research assistants who remained on Inner Farne and Brownsman for 6-8 weeks during the 2002 breeding season, gathering rangefinder data on the locations of foraging puffins, terns and shags, and recording the intervals between feeds and fish sizes brought back to arctic tern chicks. Data were gathered in a structured way throughout the range of combinations of tide and daylight hours. The data are currently being analysed by Matt Edwards as part of his PhD studies with Dr Richard Bevan of the FIMRG; preliminary results indicate that this approach is yielding valuable data in defining the relationship between foraging areas, patterns of tidal flow and seabed sediments. We hope to continue these observations over several years in order to study annual variations in foraging patterns and to test the associations between foraging activity, location, tides and weather more rigorously. The data on chick feeding intervals and

fish sizes brought back to arctic tern chicks are also valuable: these show that feeding intervals have remained constant over the last three years with a median interval of five minutes. However, this year the sizes of fish brought back to the chicks were significantly larger than in previous years (Figure 1). Tantalisingly, sandeels sampled close to the Farnes by Judy and Bob Foster-Smith using the RV *Bernicia* were also bigger than in previous years. More data are needed before we can ask whether sandeel size and/or feeding interval show any correlation with growth index.

In addition to these low-technology observational studies, Dr Richard Bevan fitted some shags with temporary time-depth recorders (TDRs) and some with radio-transmitters (very small devices unobtrusively attached to the bases of a couple of tail feathers). TDRs record the times, depth of dives and temperature over a number of days, and the radiotransmitters provide information on the directions of foraging birds. Once the TDRs were recovered, the data were downloaded and analysed, and indicate that the Staple Island shags carrying these devices were foraging on the seabed close to the Farnes. This approach will be invaluable in complementing and validating the rangefinder studies.

As in previous years, many people have helped us with the ringing and seabird foraging studies on the Farnes. We are particularly grateful to John Walton and the Farne Islands Local Management Committee, Chaired by Charles Baker-Cresswell, for their support and encouragement to continue the work. The National Trust staff on the islands have been a pleasure to work with, and their company and help during the ringing sessions is greatly appreciated. We are also very grateful for their hospitality towards our two field assistants, Rachel Coombes and Phil Day, and to John Walton for allowing them to stay on the Islands and carry out this work. Rachel and Phil worked particularly hard to collect the rangefinder and chick feeding data, and their efforts are greatly appreciated. The ringing team still rely on the boat generously provided by Northumbrian Water to gain access to the islands, and launching the boat has been made considerably easier with the four-wheel drive vehicle purchased with a grant from the Sir James Knott Trust. We are also grateful to Brian Graham, the Harbourmaster at Seahouses, for his pleasant company, advice on boat launching techniques and for putting up with the unusual hours in which the team operates! The expertise and support of Alistair Simpson, skipper of the RV *Bernicia*, for the sandeel sampling at sea is also gratefully acknowledged. Funding to continue the work is essential if we are to find out how best to manage the Farnes environment for the enjoyment of future generations. The costs of rings and other essential equipment has been met by the Natural History Society of Northumbria, and by personal contributions from the team. As ever, the Ringing Team put in many hours of hard work to continue these studies and we are extremely grateful for their continued support.

REFERENCES

- AEBISCHER, N J, POTTS, G R, J C COULSON (1995). 'Site and mate fidelity of Shags *Phalacrocorax aristotelis* at two British colonies.' *Ibis* **137**: 19-28.
- BOLAM, G (1912). *The birds of Northumberland and the eastern borders*. Alnwick: H H Blair.
- BOOTH, H P (1911). The nesting of the Common Gull on the Farne Islands. *Naturalist* **652**, 179.
- (1913). The nesting of the Common Gull on the Farne Islands. *Naturalist* **667**, 237.
- BROWN, W (1866). A short account of a visit to the Farne Islands during the breeding season of 1865. *Zoologist*, 2nd edition series 1, 483.
- COULSON, J C (2002). Black-legged Kittiwake. The Migration Atlas: movements of the birds of Britain and Ireland. C V Wernham, M P Toms, J Marchant et al. London, T & A D Poyser: 377-380.
- GODDARD, T R (1925-48). Field notes. Ms.
- (1946). *The Farne Islands Ornithological Report for 1946*. Prepared for the Farne Islands Committee of the National Trust.
- HAGEMEIJER, W J M and BLAIR, M J (1997). *The EBCC Atlas of European Breeding Birds*. London, T & A D Poyser.
- HARVEY, R (2002). Birds on the Farne Islands in 2001. *Trans. Nat. Hist. Soc. Northumbria* **62**, 37-87.

- HARVEY, R and WALTON, J (2001). Birds on the Farne Islands in 2000. *Trans. Nat. Hist. Soc. Northumbria* **61**, 37-70.
- HARVIE-BROWN, J A, CORDEAUX, J, BARRINGTON, R M and MORE, A G (1884). *Report on the migration of birds in the spring and autumn of 1883*. London: West, Newman and co.
- HAWKEY, P (1974). *Birds on the Farne Islands in 1974*. Farne Islands Local Committee of The National Trust.
- (1981). *Birds on the Farne Islands in 1981*. Farne Islands Local Committee of The National Trust.
- (1983). *Birds on the Farne Islands in 1983*. Farne Islands Local Committee of The National Trust.
- (1991). The Birds of the Farne Islands. *Trans. Nat. Hist. Soc. Northumbria* **55**, 155-192.
- KERR, I (2001). *Northumbrian Birds: their history and status up to the 21st century*. The Northumberland and Tyneside Bird Club.
- MARCH, H (1916). Ms letter to E Miller. Natural History Society of Northumbria archives (NEWHM: 2002. H1002).
- MILLER, E, ms. (diaries). Natural History Society of Northumbria archives (NEWHM: 1996. H313.4).
- (ca 1959). Ms letter to G Hickling, n.d. Natural History Society of Northumbria archives (NEWHM: 2002. H1002).
- NOBLE-ROLLIN, D and REDFERN, C (2002). Sandwich Tern. The Migration Atlas: movements of the birds of Britain and Ireland. C V Wernham, M P Toms, J H Marchant et al. London, T & A D Poyser.
- NORTHUMBERLAND AND TYNESIDE BIRD CLUB (2002), monthly bulletins.
- PAYNTER, J de C (1894). Report on the breeding of the heron on the Farne Islands. *Field* **83**, 536.
- PYBUS, W M (1903). Presidential address to the members of the Tyneside Naturalist's Field Club, 2 May 1902. *Trans. Nat. Hist. Soc. Northumbria* **14**, 176
- THORP, C (1943). The Farne Islands Association Report, 1943.
- TRISTRAM (1860). *Trans. Tyneside Nat. Field CL*. **4**, 212.
- WALTON, J and MAHER, M (1999). Birds on the Farne Islands in 1998. *Trans. Nat. Hist. Soc. Northumbria* **59**, 37-59.
- WALTON, J and RICHARDSON, R (1991). *Birds on the Farne Islands in 1991*. Natural History Society of Northumbria.
- WALTON, J (1993). *Birds on the Farne Islands in 1992*. Natural History Society of Northumbria.
- (1994). Birds on the Farne Islands in 1993. *Trans. Nat. Hist. Soc. Northumbria* **56**, 115-133.
- (1995). Birds on the Farne Islands in 1994. *Trans. Nat. Hist. Soc. Northumbria* **56**, 205-224.
- (1996). Birds on the Farne Islands in 1995. *Trans. Nat. Hist. Soc. Northumbria* **56**, 393-414.
- (1997). Birds on the Farne Islands in 1996. *Trans. Nat. Hist. Soc. Northumbria* **57**, 93-113.
- (1998). Birds on the Farne Islands in 1997. *Trans. Nat. Hist. Soc. Northumbria* **58**, 323-345.
- (2000). Birds on the Farne Islands in 1999. *Trans. Nat. Hist. Soc. Northumbria* **60**, 37-58.
- WATT, G (1950). *The Farne Islands Ornithological Report for 1950*. Prepared for the Farne Islands Committee of the National Trust.
- (1951) a. *The Farne Islands Ornithological Report for 1951*. Prepared for the Farne Islands Committee of the National Trust.
- (1951) b. *The Farne Islands: their history and wildlife*. London: Country Life.
- (1953). The Farne Islands Ornithological Report for 1953. *Trans. Nat. Hist. Soc. Northumbria* **11**, 41-60
- WERNHAM, C V, TOMS, M P, et al., eds. (2002). The Migration Atlas: movements of the birds of Britain and Ireland. London, T & A D Poyser.
- WILSON, A E (2000-2002). A History of the Bird Numbers on the Farne Islands. (Ms and computer database).

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THE EXOTIC ARTEFACTS FROM GEORGE ALLAN'S MUSEUM, AND OTHER 18TH CENTURY ETHNOGRAPHIC COLLECTIONS SURVIVING IN THE HANCOCK MUSEUM, NEWCASTLE UPON TYNE

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INTRODUCTION

This paper documents an ethnographic collection that has survived largely intact in Newcastle for two centuries and is now in the Hancock Museum. The principal part of the collection is that of George Allan, acquired by the Newcastle Literary and Philosophical Society in 1822. However, there were other smaller collections of ethnographic material in Newcastle at that date and these are incorporated in the discussion. For completeness, the small number of Oceanic artefacts of 18th century origin, but presented during the 20th or later 19th centuries, have also been included.

The artefacts represent material cultures that have changed enormously in recent centuries and techniques and styles that are no longer practised and are important for those reasons alone. The large amount of surviving 18th century material plus the individual rarity of several items places the collection as being a resource of international importance.

The present paper is part of a wider recent trend to document surviving early material in detail. Several other museums have published catalogues of their 18th century ethnographic collections in recent years (Kaeppler, 1978b; King, 1981; Augustin, 1993; Hauser-Schäublin and Krüger, 1998; Tanner, 1999). Kaeppler (1978a) has also presented a synoptic catalogue of artefacts with recorded 'Cook Voyage' associations. This paper continues the process of documentation of the Hancock Museum's collections, for which a synoptic catalogue of the Oceanic collections has recently been published (Jessop and Starkey, 1998).

HISTORY OF THE COLLECTION

The ancestry of the collections at the Hancock Museum can be traced directly back to 1793, with the foundation of the Newcastle Literary and Philosophical Society (after referred to as the 'Lit. & Phil.'). The Lit. & Phil. soon became the most prestigious academic institution in a city that was the financial and administrative hub of the Northumberland and Durham coalfield and it quickly built collections of books, scientific instruments and artefacts. Even in its first year of existence, among the several donations to the Society was an ethnographic one (Anon, 1794). This was 'various curiosities of Nature and Art from the Islands in the South Sea, and from China' given by Mr Flower Humble. Other donations continued to accrue throughout the first twenty years of the Lit. & Phil.'s existence, including Polynesian artefacts given in 1799 by Captain Wilson of the missionary vessel *Duff*, some of which still survive today.

The year 1822 saw a crucial event in the development of museum provision in Newcastle, when the Lit. & Phil. acquired the collection of the late George Allan of Darlington. Including over 600 specimens of birds, as well as dried plants, mollusc shells, minerals, insects and other animals, the collection set the tone for the future Newcastle Museum. Allan's collection also included a number of antiquities and ethnographic items. An itemised catalogue was soon compiled by George Townshend Fox (Fox, 1827), the man mainly responsible for bringing Allan's collection to Newcastle.

The year 1822 was momentous for another reason. Until then, the Lit. & Phil. had rented rooms in a succession of buildings (Watson, 1897), but in 1822 the foundation stone of the Lit. & Phil.'s own headquarters was laid. The new building was finished in July 1825 and in the intervening period George Allan's collections were put into storage. The museum was

opened in December 1825 in what is now the Committee Room of the Lit. & Phil. This room, only 40 feet by 20 feet, must have already been too small to hold the collection displayed in it. Pressure on space was relieved in 1834 when a new, purpose-built, museum was erected behind the Lit & Phil's library, and the Newcastle Museum remained in this building until 1884.

The late 1820s and early 1830s saw a period of division. The Lit. & Phil. members seem to have felt unable to manage the museum themselves, and the Natural History Society of Northumberland, Durham and Newcastle upon Tyne (after referred to as the 'N.H.S.') was founded in 1829 with a major function being the care of the collections. A pre-existing society, the Society of Antiquaries of Newcastle upon Tyne (the 'S.A.N.T.', founded in 1813) took an interest in the antiquities and some of the modern artefacts, and part of the Allan collection was passed to their care in 1834 on the opening of the new building. A catalogue of items in the care of the S.A.N.T. was published in 1839 (Anon, 1839). Subsequently, the S.A.N.T. not only moved out of the building and along the street (to the Castle) but they also decided to concentrate on antiquities in a stricter sense and some objects were transferred back to the Newcastle Museum. The early history of the Newcastle Museum and the relevant academic bodies was discussed in detail by Philipson (1981); the story of the first century of the Lit. & Phil. by Watson (1897). The history of the Newcastle Museum was detailed by Russell Goddard (1929), Hickling (1980) and Jessop (1999a).

The natural history collections of the Newcastle Museum were vastly improved and extended throughout the 19th century and most of the natural history specimens from Allan's Museum had been discarded and replaced by 'better' material by the time of the move to a new building in 1884 (called the Hancock Museum since 1891). Fortunately, the same fate did not befall the ethnographic collections. Although many artefacts were added to the collection throughout the 19th and 20th centuries, there has been no wide-scale replacement of items. It is sobering to realise on looking through old lists of acquisitions that not a single ethnographic item has been purchased for the collections since 1822!

There has never been an ethnographer permanently employed either at the Newcastle Museum or in its successor, the Hancock Museum. As a result, the displays possessed a stability that other parts of the collection lacked. Until the Ethnography Gallery was taken down in 1992 to make way for a new display on ancient Egypt it retained the same overall appearance as when erected in 1884, with larger items held in a long wall-case running the length of the gallery and smaller ones in mahogany-framed sloping desk cases. Items were added to, or removed from, the displays from time to time, but change was mostly slow. It is probably reasonable to assume that a similar stasis had occurred in the Newcastle Museum between 1834 and the removal to a new site in 1884.

Because many of the ethnographic items were on display for most of the period between 1822 and 1992, they have not been subject to the attrition through damage, disposal, exchange and theft that occurs in collections that are frequently 'used' by students, researchers, collectors and curators. About 60% of the ethnographic items from George Allan's Museum survive: an impressive figure, compared with the 5% survival rate of his birds.

It is perhaps worth noting that when the collection was assembled in the late 18th century most of the ethnographic items were either newly made or had recently passed into British hands. The Chinese carved ivories and Burmese manuscript for instance appear to be 18th century in date; some of the Polynesian items may have been curated within the island cultures for centuries but they had been recently brought to Britain by Cook and others. Their interest at that time lay not only in their attractiveness as curiosities, but also their contemporary interest ('novelty') and artistic merit. Conversely, much of their interest now lies in their historical status and the way they represent old material cultures. In several instances, their artistry still has power to inspire.

It is also interesting to realise that there is an almost total lack of African artefacts in the early collections. Allan's collection included only one, an item of currency – a 'Manillo, worn on the wrists by Africans'. This is a little puzzling, given the large volume of British trade with West Africa in the 18th century and the position of the Cape of Good Hope on the sea route to India.

The situation might reflect the general lack of African objects in the 'curiosity' market of the time (a similar trend is observable in the contemporary auction catalogues) rather than the individual taste of George Allan.

George Allan

George Allan (1736-1800) the antiquary of Blackwell, near Darlington in County Durham, was in his day a well known figure locally, and later also nationally through his contributions to Nichols's *Literary Anecdotes* (Nichols, 1812-1815). George Allan was born on 7 June 1736, the son of James Allan, a lawyer and antiquary. James Allan inherited the estates at Blackwell, including the house known as Blackwell Grange (sometimes known simply as 'Grange'), following the death of a cousin. George Allan followed his father both in profession and interests. In 1766 he 'added considerably to his comforts, and to his property' (*teste* Fox, 1827) by marrying Anne Nicholson of Scruton in Yorkshire. They had six children, and Anne Allan died in 1787.

On the death of his father in 1790, George Allan inherited his estates and, presumably, seeing no further need to work he gave up the legal profession. The inheritance gave him the wealth to indulge his interests: for instance, he spent £700 on acquiring part of Marmaduke Tunstall's collection in 1791 and he also built up a Library and collection of paintings (listed in Anon, 1822). He died on 18 May, 1800.

Although Allan published numerous tracts on local history and local antiquities, unfortunately he never published an account of the objects in his Museum. There is no evidence that he was seriously interested academically either in natural history or ethnography, and his collection of artefacts generally followed the trend of what was being collected by other gentleman-antiquaries of the time.

George Allan's Museum was exhibited to the general public in Darlington from 1792 to 1794, before being moved to his home at Blackwell Grange (Philipson, 1981) where it was on show until his death. Following George Allan's demise in 1800, his son bought the Museum from the estate's executors and it remained at Blackwell Grange for a further twenty-two years. The house contents were scheduled to be sold by auction in July 1822 and a catalogue was prepared (Anon, 1822). The auction catalogue, arranged by room, places most of the natural history items in the 'Museum' and most of the ethnographic items in the 'Indian Room'.

Through the efforts of George Townshend Fox and others, the collection was bought by private treaty before the auction on behalf of the Lit. & Phil., for £400. It was then moved to Newcastle. Fox's catalogue of 1827 described the history of the collection to date and provided a complete list of the specimens. Fox's list of the artefacts in the Allan Museum comprised 265 catalogue entries, some covering multiple objects. There were eighty-four antiquities, sixty-five 'Curiosities' (Asiatic artefacts, modern curiosities and dresses, shoes etc.), fifty seals and sixty-six 'Utensils of Savage Nations'.

Fox's *Synopsis of the Newcastle Museum*

On reading Fox's *Synopsis* (Fox, 1827) one gets the impression that he could not quite cope with the task of cataloguing the collection. However, due allowance must be made for the shortcomings of this book given the scale and complexity of the undertaking – there were 600 birds alone – and the fact that Fox had few prior models on which to base his catalogue.

When describing the artefacts, Fox appears to be on very shaky ground indeed. He was certainly hampered by lack of information. George Allan had prepared a three-volume manuscript catalogue of his entire collection, apparently for publication, but it was never printed. Fox had access to two volumes of Allan's manuscript, but not the one describing the ethnographic items. This volume, which has never subsequently surfaced, was titled 'A large collection of curiosities, brought by Captain Cook from Otaheite, &c ...'. So, although Fox could call on Allan's notes for the descriptions and identification of the birds, for the artefacts he had to rely solely on Allan's labels glued on the specimens and on the brief descriptions in the sale catalogue of 1822 (Anon, 1822). Indeed, in many instances he simply repeated the

entries in the sale catalogue word for word.

There are several instances of items being given an incorrect provenance in Fox's *Synopsis*. For example, three clubs said to be from New Zealand, Otaheite and Owhyhee are all typologically West Polynesian, as is a headrest 'from Otaheite'. These mistakes are excusable given the constraints under which Fox worked – and who is to say that the objects had not already been traded in the 18th century with a false provenance? Some of the catalogue entries are simply wrong: there is for instance 'the Lord's Prayer in Hindoo characters' (actually a Farsi manuscript), 'Chinese writing, enamelled on Papyrus' (a Burmese palm-leaf manuscript) and a 'Wooden whistle ... that yields a shrill sound' (a Maori feeding funnel). Because of this confusion, and because some items have not survived, two lists are presented in the present paper. First, there is a catalogue of the surviving objects arranged geographically by source (including the few 18th century items received from sources other than the Allan Museum), and secondly items are listed as they appeared in Fox's *Synopsis*. This second list contains information gained through curatorial research – the history of the item, the presence of labels, etc. – which is not presented in the descriptive section. Items now missing are also listed there.

Sources of artefacts in George Allan's collection

George Allan is known to have acquired objects from several sources. The major part of his natural history specimens were purchased from the estate of Marmaduke Tunstall, and Fox (1827) mentioned three other private collectors from whom Allan had bought antiquities and ethnographic items: George Humphrey, Daniel Boulter and Sir Ashton Lever.

Marmaduke Tunstall

In 1791, George Allan bought part of the extensive collection of Marmaduke Tunstall (1743-1790). In 1760, when he was seventeen years old, Tunstall came into a substantial inheritance, which included the Wycliffe estates in North Yorkshire. During the 1760s and 1770s he occupied a house in London's Welbeck Street and moved north to Wycliffe in 1776. His Museum remained in London until 1783, when he transported it to Wycliffe (Boyd and Jessop, 1998). It is likely, therefore, that Tunstall was more actively acquiring material prior to 1776 than afterwards, when he appears to have lived a somewhat secluded existence at Wycliffe. However, Hawaiian material known to have been in his collection must have been acquired after his move north. Tunstall's collection was most famous in his lifetime mainly for its systematic collection of birds, some specimens of which still survive in the Hancock Museum (Jessop, 1999a; Jessop, 1999b).

A suggestion by Russell Goddard (1929) that Tunstall acquired specimens directly from Captain Cook, because Cook was a native of Whitby, 'only a few miles' (actually, about fifty) from Wycliffe, has no supporting evidence and should be discounted. However, Tunstall is known to have acquired at least some natural history items from Cook's voyages: he sent some first-voyage shells to Linnaeus in 1772, and received second-voyage insects in 1775 (Whitehead, 1969). An undated letter from Tunstall to an unknown correspondent in Hamburg (possibly the 'Dr Bolten' mentioned in a natural history manuscript of Tunstall's now in McGill University) shows that he owned a range of South Seas material, enough to send duplicates to his friend ('J'ai pris la liberté de vous envoyer un petit paquet des vêtements des habitants, quelques coquilles, & quelques petites instruments ou de guerre ou de ménage' Bodleian Library, Oxford: MS English Letters C229). Some exotic birds from Cook voyages, *ex* Tunstall's collection, were present in the Newcastle Museum in 1827 (Fox, 1827), but none now survives.

Although it has been widely assumed that George Allan bought the whole of Marmaduke Tunstall's Museum in 1791, in fact he acquired only part of it: mainly the birds, for which he paid £700. The remainder was sold by auction, by Christie's of Pall Mall, London on 14-15 May, 1792 (Anon, 1792; Boyd and Credland, 1984). The auction catalogue contained a small number of ethnographic artefacts, including items from Tierra del Fuego, New Zealand, Tahiti and Hawaii. Lot 122 was 'a feather cloak, uncommonly large, such as is worn by the chiefs in the Sandwich Islands'.

It is highly likely George Allan acquired the bulk of Marmaduke Tunstall's ethnographic collection (i.e. the items not sold at auction), but unless further evidence is forthcoming, it is

safer to assume that material did not pass through Tunstall's hands.

Daniel Boulter and the Museum Boulterianum

Allan is known to have acquired objects from Daniel Boulter (1740-1802) of Great Yarmouth. Boulter opened a museum in the market place of his home town in 1778 (Southwell, 1909). His book-plate, reprinted by Southwell, styled him as a 'dealer in curious books antiquities and natural productions', which indicates that the museum was placed on a semi-commercial footing. Boulter produced a catalogue of items for sale, the *Museum Boulterianum*, which is undated. Southwell saw a copy with the year 1793 on the title page, although the British Library's *Union Catalogue* gives the date of publication as 1810: the death of George Allan in 1800 can rule 1810 out as a date for this publication. Unless the *Museum Boulterianum* can be shown to predate 1790, Marmaduke Tunstall could not have acquired items from this catalogue.

Allan's own marked copy of the *Museum Boulterianum* was seen by Fox in 1827, and Fox cross-referred several items in Allan's collection to the catalogue. The copy has survived to date in the library of the N.H.S. There are crosses in ink against a number of items, but not all of these items were apparently present even in 1827. However, it has been possible to match some items listed by Fox against entries in the *Museum Boulterianum*, and in some cases additional information has been obtained about their provenance from Boulter's catalogue.

George Humphrey and the Museum Humfredianum

The London collector George Humphrey (?1745-1825), sold his collection by auction in 1779. The auction catalogue, the *Museum Humfredianum* (Humphrey, 1779) is a very scarce piece of ephemera, only three surviving copies being known (Whitehead, 1977). One of the copies was once in George Allan's possession, and Fox (1827) noted that it was annotated to show apparent purchases. This copy was housed in the library of the N.H.S. until 1905, when it was sent to the Natural History Museum in London as part of an exchange (Sherborn, 1905), and is now in the General Library there.

A second copy of the *Museum Humfredianum*, the 'Oslo' copy, is annotated to show names of buyers and prices. Access to a photocopy of the 'Oslo' copy has been obtained via the librarians of the Natural History Museum, and it has been possible to cross-check the names of buyers against the marked items in Allan's copy. Neither George Allan nor Marmaduke Tunstall's names are entered in it as buyers.

Some items are marked with ink crosses in Allan's copy of the *Museum Humfredianum*, but the number of cross-marked lots is very few: items 81, 85, 87, 91, 95, 97, 99 and 100 on page 53, and item 73 on page 67. Additionally, three lots are marked with pencil crosses: items 41, 43 and 45 on page 156 (these three are shells, not artefacts).

These lots, with prices and names of buyers are:

p. 53

- | | |
|-----|--|
| 81 | A piece of fine white cloth made of the inner bark of a tree, from <i>Otaheite</i> [Herman, 3s.]. |
| 85 | A piece of a similar kind of cloth, glazed, from <i>New Amst.</i> [Yates, 3s.6d.]. |
| 87 | A cloak wove by hand, made of fine silky flax, <i>N. Zealand</i> [Herman, 5s.]. |
| 91 | A grass apron, worn by the dancing girls of Otaheite, and a matted belt; <i>New Zealand</i> [Herman, 5s.]. |
| 95 | A club, from <i>New Amsterdam</i> [Herman, 2s.]. |
| 97 | A stone mallet, <i>Otaheite</i> ; and a wooden ditto, <i>New Amst.</i> [Clark, 2s. 6d.]. |
| 99 | A hatchet or adze, headed with stone, <i>Otaheite</i> [Roper, 4s.]. |
| 100 | Two stools used as pillows, from <i>ditto</i> , and <i>New Amst.</i> [Gaml(?), 1s.6d.]. |

p. 67

- | | |
|----|--|
| 73 | A piece of Otaeite cloth, made of the inner bark of a tree, from its use called the cloth tree [Hurlock, 2s.]. |
|----|--|

Several of the cross-marked lots may have been later acquired by George Allan. However most of the specimens were of a type that circulated widely in the late 18th century (bark cloth, sleeping stool, club, adze), and it is not possible to equate them with certainty as being the objects in Allan's collection. It is quite possible that these lots were marked because Allan had similar items – not these actual items – in his collection.

It has been possible to assign somewhat tentative links between several of Humphrey's items and ones catalogued by Fox, and these are discussed elsewhere in this paper. The 'cloak wove by hand, made of fine silky flax, *N. Zealand*', and the 'matted belt' are not identifiable in Fox's catalogue, and if they were once acquired by Allan then they must not have survived up to 1827.

The existence of a copy of the *Museum Humfredianum* in Allan's library should, of course, not blind us to the possibility that either Allan or Tunstall bought items from Humphrey at times other than that auction. Humphrey was a leading dealer in curiosities in London during the second half of the 18th century. It was through Humphrey, for instance, that a collection of artefacts was organised to be sent to Göttingen in 1782 (Hauser-Schäublin and Krüger, 1998) and it is quite possible that a ready-built collection was ordered from him to be sent to North-East England.

Sir Ashton Lever

The third catalogue of an 18th century collection used by Fox was a marked copy of the *Companion* to Sir Ashton Lever's Museum (Anon, 1790). Allan had, apparently, used this in preparing his own manuscript catalogue, but it is unlikely that he actually acquired items from Lever's Museum. Allan died before the auction sale of the Leverian Museum in 1806, so we can rule out any items appearing in the auction catalogue (Anon, 1806) as being in Allan's Museum. If he acquired any items listed in the *Companion*, then the purchase must have been by private treaty between Allan and Parkinson, who owned the collection between 1790 and 1800. It is more likely that Allan took information about similar items in his own collection from the *Companion* than that he acquired the actual objects listed in it.

Allan's annotated copy of the *Companion* to the Leverian Museum has apparently not survived. The one copy of this work found locally, in the library of the Lit. and Phil., has no annotations.

Some of the artefacts in Lever's Museum were figured by Sarah Stone in the 18th century (and facsimiles were published in Force and Force, 1968). None of the surviving items in the Hancock Museum agrees with any of these figures.

Jane Gomeldon connections?

Jane Gomeldon (*née* Middleton) was a member of the Newcastle sector of the network of Quaker families that included the Backhouses, Hoares, Gurneys and Frys. Lysaght (1979) has summarised all that is known so far about her. When young, Jane Middleton married Captain Gomeldon but then absconded to France dressed in men's clothing. When her husband died in 1751 Jane returned to Newcastle, where she died in 1780. Living in one of the towers in Newcastle's mediaeval city wall, she exhibited her collection of birds and shells as well as some religious relics taken from a French nunnery.

Jane Gomeldon was a cousin (*sens. lat.*) of Sydney Parkinson, and Lysaght (1979) cited a letter written from Batavia in which Parkinson noted 'I have spared no pains during the voyage, to pick up every thing that is curious for thee; and I flatter myself that I shall make a considerable addition to thy museum.' The fate of Parkinson's collection subsequent to the return to England of the *Endeavour* was documented in the introduction to the published version of his journal (Parkinson, 1784). Sir Joseph Banks kept the collection, for which he paid a large sum to Sydney Parkinson's brother Stanfield, but not satisfied with this Stanfield Parkinson engaged in a bitter feud with Banks. Dr John Fothergill acted as an intermediary, and at one stage, Fothergill looked over the shell collection as Stanfield had requested him 'to lay aside a few of such as I thought rare for his cousin at Newcastle' (Parkinson, 1784 p. 7). Sydney Parkinson's ethnographic collection remained in Banks's hands.

If there was any evidence that some artefacts had passed to Newcastle, it would be easy to postulate a path from Gomeldon to her Quaker cousins the Backhouses of Darlington, thence to Marmaduke Tunstall or George Allan. However, there is no evidence, and we are left with one tantalising mention of shells and the fact that the only item in Allan's collection definitely attributable to the *Endeavour* voyage is a Maori paddle that was sketched by Sydney Parkinson.

Captain Cook connections

George Allan mentioned 'curiosities, brought by Captain Cook' in the title of one volume of his manuscript catalogue, but there is only one item in his collection that has a certain association with Cook's voyages, the painted paddle mentioned above. For other Pacific items such as the material from Tonga, Hawaii and New Caledonia, a 'Cook' provenance is likely because of the small number of people that visited the islands before 1800, but it is important to draw a distinction between likelihood and certainty.

The absence of evidence has not stopped supposition in the past. It has been widely believed by staff at the Hancock Museum that the *rei puta* in Allan's Museum was brought back to England on the *Endeavour* and was the actual object figured by Parkinson (*in* Hawkesworth, 1773). However, there are clear differences between the appearance of the item drawn by Parkinson and the specimen in the museum.

No Keate connections

Fox referred several times to a book he cited as Keate's 'Pelew Islands', an account by George Keate of the shipwreck of the *Antelope* on Palau in 1783. The book was first published in 1789 and went through several editions, of which I have seen a quarto of 1803 (Keate, 1803).

Fox noted the similarity of several items to those figured in Keate's book, but did not suggest that they are the actual items figured. There is no evidence that any of the items in Allan's Museum originated in Palau.

Curatorial history of specimens from Allan's Museum

While the artefacts were in George Allan's collection, he glued oval-shaped labels onto them. The labels either bear basic information as to the type of object or its supposed place of origin, or they are more descriptive. The descriptive labels were sometimes cited by Fox as '*Allan MS*', which must not be confused with Allan's manuscript catalogue of his collection of artefacts (which Fox had not seen).

Some of Allan's labels survive and some are perfectly legible. Unfortunately, many have become detached: indeed, Fox commented in 1827 that some labels on the natural history specimens had already suffered and become illegible. The former presence of these labels can often be detected because of a dark, oval-shaped patch or occasionally an oval patch with traces of ink where the lettering soaked through onto the item. The presence of Allan's distinctive oval labels or of these oval marks is the only certain indication that a specimen was once in Allan's Museum.

Most (but not all) of the objects surviving from the period of the Newcastle Museum have the letters N H S written on them in black ink. These items were probably so-labelled in the 1830s when the collections in the Newcastle Museum were being divided between the Natural History Society and the Society of Antiquities.

Oblong labels with a distinctive style of printed lettering were glued to objects in the Newcastle Museum. It is not known when these labels were first used or when they ceased being printed, but the earliest ones relate to Allan Museum specimens (i.e. postdating 1827), and the latest are fixed to paddles presented by C K Brown in 1855. For the purposes of this paper, these are referred to as 'old-style' labels. The old-style labels on Allan Museum objects usually give the appropriate catalogue number in Fox's *Synopsis* in addition to stating country of origin, source collection and type of object. Their presence is a reasonable indication that an item originated in Allan's Museum, but not a certain one; for instance an

old-style 'Allan Museum' label on an Austral Islands paddle is wrong as that object could not have been part of George Allan's collection.

Later in the 19th century, or perhaps early in the 20th, the curator E L Gill affixed tie-on labels to many specimens. He did not cross-refer items to Fox's *Synopsis*, because there are several objects labelled as 'Allan Museum', or as '?Allan Museum' that could not have been part of Allan's collection. For instance, virtually all of the pieces of *tapa* in the museum that were of unknown provenance – many more than those actually owned by Allan – were so-labelled.

Printed display labels, possibly dating from the time of the move to the new building in 1884, give the provenance, donor and object type of each item. Most of these labels were preserved when the ethnographic display at the Hancock Museum was dismantled, and it is sometimes possible to check them against individual items. However, the information on these labels is not totally reliable.

In the 1970s and 1980s, a succession of graduate trainees catalogued the ethnographic collections by compiling a system of loose-leaf folders of catalogue entries, the data being later computerised. The cataloguers categorised items by geographic region, prefixing the catalogue number with a letter, as A (Africa); B (Australasia); C (Oceania); D (Asia); E (Europe); F (South and Central America); G (North America). Objects were numbered sequentially within each letter category. In recent years a different numbering system, of year followed by object number (e.g. 1997.H101), has been introduced. To place these catalogue numbers in the context of the many museums internationally, when citing these numbers fully the prefix NEWHM is added.

Some of the graduate trainees took the cataloguing process further and made a certain amount of progress with recognition of Allan Museum items. However, none took the research to the stage where all objects were thoroughly cross-checked with Fox's *Synopsis* and with the original 18th century literature, and there was no analysis of the actual items.

Some similar errors have persisted in documentation since the early days of the Newcastle Museum. The first is the failure to distinguish between items from Allan's collection and other early acquisitions, so that some specimens have been erroneously labelled and catalogued as being *ex* Allan Museum. There are old-style labels, tie-on labels, display labels and computerised catalogue entries all making this error. The second is the separation of items from their labels (or the removal of glued-on labels), and although some artefacts were almost certainly once part of the Allan Museum they are not now readily identifiable as such. Despite the current awareness of preserving old documentation, it was disheartening to see two photographs of the Maori *rei puta* taken in 1969, one showing Allan's label present and the second with just a brown oval stain where the label had been removed, and also to see old-style labels that were defaced or partly removed during the 1970s or 80s.

The Franks notebook

The Museum of Mankind (London) holds a notebook by A W Franks (SS19), containing figures and descriptions of items in the Newcastle Museum and elsewhere. The notebook is undated, but a narrow range of dates can be estimated from internal evidence. The description of one item in Edinburgh mentions 'Paris Ex. 1867', giving an earliest date. At another place, Henry Brady is described as Secretary of the N.H.S., a post he did not hold after 1871. The date of the visit to Newcastle by Franks was, therefore, probably between 1867 and 1871. (For further information on Franks and his notebooks, see King, 1997.)

The Franks notebook is important because it provides evidence that the figured artefacts were present in the Newcastle Museum in the late 1860s or early 1870s. Unfortunately, the data provided by Franks are very patchy. In a few instances the specimen label appears to have been transcribed, with information between quotation marks (thus: 'New Zealand'), but the origin of very few specimens is noted and there are no items cited as belonging to George Allan's Museum.

Edge-Partington's *Album*

In 1895, James Edge-Partington issued the second in his series of *Albums*, illustrating many artefacts from the Pacific region in museums, eight being in Newcastle. One of the items illustrated is the maori *pukaea* from George Allan's Museum.

Two further items, a lime box from the Solomon Islands and an engraved gourd from New Zealand, are said to be in the Museum of the 'Lit. Phil. Soc.' rather than the 'Nat. Hist. Soc.' This is the only evidence that some ethnographic material may have remained in the *Newcastle Museum* building when the rest of the collection was moved in 1884. If these artefacts were still in the Lit. & Phil. building in 1893, they almost certainly perished in the serious fire of that year (Watson, 1897).

OTHER EARLY ETHNOGRAPHIC MATERIAL

In addition to the material from George Allan's Museum, there are several other 18th century artefacts surviving in the Hancock Museum. Some were donated before 1800, others, like Shaw's book of *tapa* are 18th century in origin but were given later.

'Humble' beginnings of the Newcastle Museum

The Newcastle Museum received South Seas material early in its existence. Two separate donations of ethnographic items are mentioned in the early annual reports of the Lit. and Phil.

Mr Flower Humble

In 1793 Mr Flower Humble presented 'various curiosities of Nature and Art from the Islands in the South Sea, and from China' (Anon, 1794). No pieces from Flower Humble's donation have so far been traced.

Flower Humble was an honorary member of the Lit. & Phil. from its foundation in 1793. The annual reports of the Society give his address first as Liverpool, and later Bradford (1796), Walker near Newcastle (1815) and Durham (1821). According to the register of Rev. William Turner's school, Humble made two voyages to the East Indies (Roger Hawkins, pers. comm.) and still lived in Durham *circa* 1847. No further evidence has been traced of his local influence in furthering the collections of the Lit. & Phil.

Captain Wilson of the Duff

James Wilson was Captain of the *Duff*, the vessel that took the first batch of missionaries sent by the London Missionary Society to Tahiti and other Pacific Islands: a voyage that formed an important development in European relations with the Pacific (Wilson, 1799; Lovett, 1899). An annual report of the Lit. & Phil. (Anon, 1800) mentions, in May 1799, 'a very valuable present of various articles from the South Seas was delivered by Mr John Langlands, from Captain Wilson, of London, late of the *Duff*', but unfortunately did not list the items individually.

Among Fox's (1827: 251) list of material passed from the Lit. & Phil. to the Newcastle Museum in the 1820s were 'Certain Savage Weapons and Implements from the South Sea Islands', which were brought back to Britain by Captain Wilson of the *Duff* (called by Fox *The Dove*). Fox described only two of Wilson's items: first, a barbed spear, 'like that in Cook's Voyage, Vol. i. t. no 21, p. 220', and secondly a wooden gorget. There is a possibility that some Wilson specimens may have been mislabelled as being *ex* Allan Museum at an early date. Certainly, both Tongan barbed spears and a Marquesan wooden gorget survive in the collections today.

Two pieces of white bark cloth have a certain connection with Wilson. Written on them in ink is 'Literary Society, Newcastle, care of Mr John Langland' – the intermediary mentioned in the Lit. & Phil.'s annual report.

THE BARK CLOTH PROBLEM

At some time, probably early in the 20th century, a label was tied to all of the older pieces of bark cloth in the collection, claiming that they were *ex* Allan Museum. All of these are listed below, although there is no certainty that any individual piece came with Allan's collection. Three pieces are clearly part of Captain Wilson's donation and others may have come with material donated in 1834-35 by William Row.

According to Fox, there were eight pieces of Tapa in the Allan collection:

- 27 Two yards of white cloth from Tahiti; apparently acquired from Daniel Boulter.
- 28 Two yards of buff cloth from Tahiti.
- 29 Piece of thick buff cloth, like fleecy hosiery, from Tahiti.
- 30 Two yards of white do.
- 36 Piece of cloth from George's Island [i.e. Tahiti].
- 39 Piece of stained cloth, like floor cloth, from Tonga, said to be 8ft x 6ft.
- 40 Piece of thin, reddish cloth from Tonga.
- 41 Piece of thick, stained red and ribbed, from Tonga.

The auction catalogue of Allan's collection calls for:

- lot 48 Two yards of white cloth, Tahiti [=Fox 27 or 30].
- & Buff coloured cloth, 2 yards by 1¼, Tahiti [= Fox 28].
- lot 49 Piece of stained cloth, resembling floor-cloth, Tonga [= Fox 39].
- & Piece of thin, reddish cloth, Tonga [= Fox 40].
- & Piece of thick cloth, stained red on one side and ribbed, Tonga [= Fox 41].
- lot 50 Two yards of white cloth, Tahiti [= Fox 27 or 30].
- lot 51 Piece of thick buff cloth, resembling fleecy hosiery, Tahiti [= Fox 29].
- & Another piece, ditto (missing from Fox's list).

There was also, among lot 90, a table with 'a beautiful Otahetian cover', which was not listed by Fox.

The three pieces that were supposedly from Tonga probably equate to three of the surviving Hawaiian *kapa* panels. There is, however, no piece as large as the one 6ft by 8ft listed in Boulter's catalogue. The only exceptionally large early piece in the collections is 1998.H225, which is Tongan and *circa* 16ft by 7ft (and could be about 6ft x 8ft if folded once).

Of the surviving early pieces, three have 'old-style' labels equating them individually with items listed by Fox. These are: 1998.H236 (possibly = Fox's 29); 1998.H227 (possibly = Fox's 39), and C703 (possibly = Fox's 41).

The pieces are listed below under the relevant country: Polynesia (1 piece), Tonga (1), Tahiti (17) and Hawaii (5). Some of the Tahitian pieces should more correctly be listed as originating in Central Polynesia, as they may have been collected on the Cook Islands.

LIST OF SURVIVING ITEMS

This list, arranged geographically, includes only those items known to survive to the present. The analytical and descriptive entries on this list are distinct from the curatorial descriptions in the annotated copy of Fox's list presented below (Appendix One).

Several artefacts have by tradition (either ancient, or quite recent) been attributed to Allan's collection with little or no convincing evidence of any real association. These are mentioned in the annotated copy of Fox's list, but are not described in detail.

Some of the objects are now of extreme rarity and of considerable interest in terms of art or heritage. To treat some of the items (for instance the *rei puta*, Maori paddle, Hawaiian wicker head) properly would require a thesis rather than a paragraph, but this catalogue aims to document all material only to a basic level so detailed analysis is deferred.

EUROPE

- E35 Sabot** Fox, p. 192 no. 53
- Blue-painted wooden sabot with upturned toe and slight heel. A crack in the upper part has been repaired by boring two holes on each side and tying two lengths of string across: this string is also painted blue. A hole of 8mm. diameter has been bored through one side. Length 280mm, maximum width 110mm. (See figure 9)

ASIA

FROM TURKEY

- D340 Pair of ladies' shoes** Fox, p. 192 no. 49
- Pair of Turkish ladies' shoes with pointed toes and high (50mm) heel. Leather sole; heavily embroidered blue silk upper; blue silk inner; red leather insole. Length 215, maximum width 70mm. (See figure 1)
- D339 Pair of men's shoes** Fox, p. 192 no. 48 (part)
- Pair of Turkish men's shoes with upturned pointed toes and high (10mm) heel. Leather sole and uppers. Decorated with red cloth, sequins, and yellow, white and blue embroidery. Length 265mm, maximum width 90mm. The number 351 is written on the sole. An old-style label is fixed to the outside of the heel of one shoe. (See figure 2)
- D502 Man's shoe** Fox, p. 192 no. 48 (part)
- Turkish man's shoe with upturned pointed toe and flat heel. Leather sole; inners lined with cotton; uppers heavily embroidered with sequins and yellow thread. Length 270, maximum width 110mm. The number 352 is written on the sole. (See figure 3)
- D341 Pair of men's shoes** Fox, p. 192 no. 48 (part)
- Pair of Turkish men's shoes, with upturned pointed toes and high (25mm) heel. Leather sole and inners; uppers of red cloth, decorated with sequins and yellow and white embroidery. Sole of heel strengthened by an iron strip fixed to the shoe by three studs. A flap of the leather upper folds down to pad the heel: this flap is painted to echo the style of the embroidery. Length 270mm, maximum width 100mm. (See figure 4)

FROM CHINA

- D342** **Pair of shoes** Fox, p. 192 no. 45 (part)
 Pair of Chinese shoes, the toe broadly rounded and upturned. Leather sole; woven brown cane uppers and cotton inner. String fixing the sole is bound around the circumference of the leather, and medially. Length 270mm, maximum width 95mm. The number 355 is written on each insole and on one sole. (See figure 6)
- D231** **Pair of shoes** Fox, p. 192 no. 45 (part)
 Pair of Chinese shoes with upturned, chisel toes. Leather sole; woven brown cane uppers and cotton inner. Length 255mm, maximum width 80mm. The number 356 is written on the sole of each shoe. (See figure 5)
- D227** **Pair of shoes** Fox, p. 192 no. 45 (part)
 Pair of Chinese shoes, the toe broadly rounded and upturned. Leather sole; woven brown cane uppers and cotton inner. String fixing the sole is bound around the circumference of the leather, and medially. Length 278mm, maximum width 85mm. Written on the sole is: Chinese shoe's [sic], 112 and 1/2. The number 112 probably refers to the lot number of the auction catalogue of Allan's collection. (See figure 7)
- D228** **Shoe** Fox, p. 192 no. 46
 Chinese shoe, the toe broadly rounded and upturned. A thick layer of felt above the leather sole; uppers of two varieties of blue silk, and lined internally with cotton. Leather sole fixed to the adjoining felt by means of string, which is fastened in a regular, decorative pattern. The panels of blue silk are edged with a double line of embroidery. Length 284mm, maximum width 95mm. (See figure 8)
- D124** **Abacus** Fox, p. 191 no. 1 or 10
 Chinese wooden abacus with thirteen spokes. Each spoke bears seven obovoid beads, divided into five and two between the two portions of the frame. Frame bears a metal ring for suspension. The whole is backed by a sheet of wood, on which George Allan has written a legend. Frame 225mm long, 120mm wide, 22 mm deep. Beads 13mm diameter, 9mm high. (See figure 11)
- D126** **Abacus** Fox, p. 191 no. 1 or 10
 Chinese wooden abacus with seven spokes. Each spoke bears seven obovoid beads, divided into five and two between the two portions of the frame. Frame 140mm long, 110mm wide, 18 mm deep. Beads 15mm diameter, 10mm high. A paper label bears the number 121 in manuscript, which equates to the lot number of an abacus in the catalogue for the auction of Allan's collection. (See figure 10)
- D117** **Carved ivory figure of Zhong Kui** Fox, p. 191 no. 3 or 4
 A Chinese carved ivory figure of Zhong Kui in his drunken form. Carved from a halved section of elephant tusk. Height of carving 147mm. Two holes of 4mm diameter, 13mm between centres, have been bored into the base, probably for fixing onto a stand. (See figure 12)

Carved in a lively fashion, Zhong Kui, the Demon Slayer, is being helped (or led) by a demon. Remains of green staining around the hat of Zhong Kui and the coat of the demon indicate a late date (probably 18th century) for the carving. There is no maker's mark.

Depictions of Daoist deities and immortals in ivory became increasingly popular during the Ming and Qing dynasties. Most of the figures exported to Europe, in a trade that increased greatly in the 18th century, were made in Canton. (see Bushell, 1924; Fong, 1983; Little, 1988).

D118 Carved ivory figure of Shoulao

Fox, p. 191 no. 3 or 4

A Chinese ivory figure of Shoulao, carved from a section of elephant tusk. Shoulao is seated and accompanied by a deer, crane, frog and tortoise. Height of carving 136mm. Some of the finer carved elements are broken: one leg of the deer, one leg of the crane and the neck of the crane. A paper label bears the inscription 'L.S.' [i.e. 'Literary Society']. (See figure 13)

Traces of green stain on the *queue* indicate a late date (probably 18th century) for this carving; there is no maker's mark.

Shoulao was a Daoist god of longevity and one of the triad Fu, Lu and Shou, who are collectively known as 'the three stars'. Conventionally, Shoulao is portrayed as a corpulent man having a large, domed cranium, a fine beard and three long wrinkles over his eyebrows. His accompanying animals, a crane, frog, tortoise and deer all symbolise longevity in Daoist iconology. He often carries a scroll representing the Book of Life.

D119 Carved ivory ball, with concentric carved layers Fox, p. 191 no. 17

A Chinese carved ivory ball with separate ivory chain. The ball is divided into at least twelve concentric spheres, all carved in different patterns of filigree openwork decoration; the outer being of stylised foliage, the remainder in geometric patterns. Chain is of twenty links carved from a single piece of ivory; the last link having a hook for suspension of the whole. The chain fits into a 4mm diameter hole in the ball. Sphere 85mm diameter. Links of chain 12mm long. (See figure 17)

There is a discrepancy between the number of layers listed in two early catalogues (seven *teste* Boulter, 1793; sixteen *teste* Fox, 1827). It is not easy to count the number of layers within the object, especially towards the centre of the ball, but there are definitely more than seven and at least twelve. None of the early catalogues mentioned the chain.

Carved decorated balls of ivory were manufactured in China as early as the 14th century and as late as the 20th (Laufer, 1925), and most British museums own at least one example. Bushell (1924) perceptively described such spheres as being more 'distinguished for bizarre complexity of pattern than artistic feeling'.

D211 Dotchin and case Fox, p. 191 no. 5 (part)

Wooden case of two halves, joined by a metal rivet. Fitting into cavities in one half of the case are: a bone measuring yard with graduations marked in blackened dots; a brass pan with strings attached for suspension, and a brass weight. Case 315mm long, maximum of 80mm wide and 21mm deep, pivoted 70mm from one end. Yard 274mm long. Pan 65mm diameter. Weight 38mm diameter and 6mm deep. George Allan's oval label is attached to case: it reads 'Chinese dotchins or steelyards for weighing money'. (See figure 16)

D120 & D212 Dotchin and case Fox, p. 191 no. 5 (part)

Guitar-shaped wooden case of two halves joined by a metal rivet at the tip. On the 'guitar body' of one half is a miniature abacus of five metal spokes, each with six metal beads divided into five and one between the two halves of the frame. Two ideograms are marked by dots near the abacus. A plaited cane ring on the 'guitar neck' serves to hold the case closed. Fitting into cavities in one half of the case are a bone measuring yard (which is broken) with graduations marked in blackened dots, and a brass pan with strings attached for suspension. The weight is missing. Case 279mm long, 59mm wide. Cane ring 17mm diameter, 4mm deep. Yard now 80mm long, formerly about 10mm longer. Pan 50mm diameter. A label on the case bears the inscription 'Antiquarian Society'. (See figure 14)

There has been previous confusion in cataloguing this item, because the steelyard (D120) was catalogued independently of its case (D212). Apparently, the items were separated whilst in the possession of the S.A.N.T. and were transferred from them to the Hancock Museum at different times. The two portions were re-assembled in the course of the present project.

D757

Chinese hat

Fox, p. 191 no. 7

Conical cane hat with reinforced crown and circular cane rim. Inner of cane strips woven into a zigzag pattern; outer of radiating strips of cane; crown reinforced with a cap of parallel strips of light-coloured cane arranged into a pentaradial design. String chin strap present. Diameter 28.5cm. Old-style label reading CHINESE HAT. (See figure 15)

This may be the Chinese hat from Allan's collection, or it could have been one of the Chinese items donated in the 1850s by Captain Richard Collinson: both donations are early enough to bear the 'old-style' labels.

FROM IRAN

D275

Farsi manuscript

Fox, p. 191 no. 16

An elongate bag of red and white striped cloth, tied at one end and fastened with a wax seal bearing an impression in Farsi. Bag contains four pieces of folded paper which have on one side brown flecks and pieces of gold leaf. Two pieces of paper are blank, the other two bear Farsi inscriptions. Seam of bag split. Length of bag 30cm, width 6.5cm; seal 4.7cm diameter. (See figure 18)

FROM IRAN OR INDIA

D134 & D135 Two sets of implements

Fox, p. 191 no. 11

D134. A long wooden case of square cross-section, covered with a blackwood veneer and with bone and mother-of-pearl inlay in elongate lozenges, rings and a floral motif; case edged with strips of bone; brass furniture, including a suspension chain. Length 20.2cm, section 1.8cm square. Several long holes are bored into the case, which now holds:

- a) a bone-handled steel knife, the handle with brass furniture. Length 22cm.
- b) a pair of bone chopsticks, each 18.6cm long.
- c) a brush with long bone handle, most of the bristles now worn away. Handle 1.8cm long.
- d) two copper strips, each with a length of solder at one end. These pieces were probably formerly joined to make a pair of tweezers. One piece 13cm long, 0.3cm wide, the other broken (now 3.7cm long).
- e) an iron file (?a nail file) with brass handle. Overall length 8.9cm, length of handle 2.2cm. (See figure 20)

There are cavities for three more implements.

D135. A wooden case similar to D134

This is now in poor condition. Most of the blackwood veneer is missing, as is the brass chain. Length 19cm. The case holds:

- a) a knife with bone handle, the brass cap to the handle now missing. Length 20cm.
- b) a brass fork with bone handle, the handle stained green. Length 12.6cm.
- c) a small steel knife with a bone handle, the handle stained green. Length 12.4cm.
- d) a brass fork with no handle. One tine broken. Length 5cm. (See figure 19)

FROM THE PHILIPPINE ISLANDS

- G122 **Hat** Fox, p. 200 no. 49
 Conical twined cane hat with slightly concave profile and an apical aperture. Bicolored dark brown and light brown in a pattern of concentric rings and chequerwork. Diameter 330mm, height 110mm, hole in centre 15mm diameter.

This hat has long been catalogued as being from North America, and it does bear a general similarity to conical Nuu-chah-nulth hats that have an apical aperture. However, it differs from typical Northwest Coast work in the material used and in the overall design. An alternative origin of the Philippine Islands has been suggested, and if this is correct, a silver finial should at one time have projected through the apical hole. (See figure 21)

FROM BURMA

- D711 **Manuscript on bamboo strips** Fox, p. 191 no. 6
 Burmese manuscript written on approximately 300 strips of bamboo, joined together between two red-lacquered wooden end-boards. The manuscript was identified by Sir Robert K Douglas in 1907 as 'the Nyāsa, a super commentary upon the grammar of Pali composed by Kachchāyana. By Vinala-buddhi'. Douglas dated the manuscript at about 1800 AD. Boards 530mm long, 65mm wide and 14mm thick. An old label bears the inscription 'L.S.' [i.e. 'Literary Society'].

POLYNESIA

- C645 **Cloth beater** Fox, p. 199 no. 34
 Wooden barkcloth beater with conical knob and pointed end. Two faces coarsely ribbed and two finely ribbed. Length 32cm, maximum width 4cm. Place of origin uncertain: the pointed end might indicate Hawaii or Samoa. Labels give Tonga and alternatively Fiji as provenance. Possibly, although doubtfully Allan Museum; is labelled as 'NHS' written in a mid-19th century hand. (See figure 22)

If from Samoa or Fiji, then this should not be an 18th century piece (but see club C537 *infra*!) and could be excluded from the Allan Museum. If from Hawaii, then it could have been donated in 1834 with other items from the island group by William Row.

1998.H243 **Tapa**

Panel of thin, pinkish-white barkcloth. An old label tied to the cloth with, in manuscript '2ft 7 by 2ft': which is the size of the piece. Length 75cm, width 59cm. Labelled at the turn of the 20th century as being *ex* Allan Museum.

C181 **Shaw's book of tapa** (donated by Miss Mary Jane Hancock in 1885)

A copy of Shaw, 1787. *A Catalogue of the different specimens of cloth collected in the three voyages of Captain Cook, to the Southern Hemisphere, with a particular account of the Manner of manufacturing the same in the various islands of the south seas, partly extracted from Mr. Anderson, and Reinhold Forster's observation and the verbal account of some of the most knowing of the navigators with some anecdotes that happened to them among the natives*. Bound, with original marbled paper over boards, and calf spine. Title page, dedication. pp [3]-6 + 38 barkcloth samples. Dedication on verso.

The copy is a cut-down re-issue of the first edition (which had fifty-six specimens) and lacks the catalogue. The leather spine is badly worn but despite the dilapidated state of the cover the samples are in a good state of preservation. The book contains samples 1-38 of barkcloth, which are bound generally in reverse order, i.e. number 1 is the last sample in the book (but some of the pieces are out of sequence). A supernumerary piece has been bound before the

title page; samples 8 and 36 are missing. Samples vary from full page size to only a few centimetres in width. Numbers are handwritten on the interleaved pages and most samples bear numbered paper labels.

There are about thirty surviving copies of the book known, with varying numbers of samples (Kaeppler, 1975; Kaeppler, 1978a). Hall (1921) gave a detailed description of a copy in the Peabody Museum, comparing the samples with original catalogue of 1787. Most of the samples in the Hancock Museum copy agree with those described by Hall. The majority of samples are from Hawaii or Tahiti, a few being from Tonga.

FROM TONGA

C697, C698 Clubs

All three of the Polynesian clubs listed by Fox were assigned a wrong provenance, as being from New Zealand, Hawaii and Tahiti. Two of the surviving clubs are typically Tongan; a third is Fijian.

- C697 (listed by Fox as being from Tahiti) Fox, p. 199 no. 31
Large wooden club, *'akau-ta*, with flared head of diamond cross-section, carved with projecting plain bands alternating with chevron and cross-hatched panels in incised geometric patterns. Long shaft with roughly scratched lines. An iron nail is driven into the butt, with traces of coir cord attached. Overall length 132cm, length of shaft 87cm, length of head 45cm, maximum width of head 15cm. C697 bears one of Allan's handwritten labels; barely legible, but appearing to read 'War Club, from one of the Soci[ety Islands]'. A patch of glue indicates the former presence of another label. (See figure 24)

Kaeppler (*pers. comm.*, 1998) has suggested that, judging from the style of carving on the head, this club was made with stone tools, rather than with the iron tools introduced during the first European contact with Tonga.

- C698 (listed by Fox as being from Hawaii) Fox, p. 198 no. 13
Small wooden club, *'akau-ta*, with flared head of diamond cross-section, short shaft and pierced butt lug. Head with incised geometric patterns. Corner of head chipped. Overall length 83cm, length of shaft 57cm, length of head 25cm, maximum width of head 13cm. An oval patch indicates the former presence of one of Allan's labels. Written on the club in ink is 'NHS', and in pencil 'Navigator's Island' [i.e. Samoa] and 'Tonga'. (See figure 23)

The carving, which has been executed with iron tools (Kaeppler, *pers. comm.*, 1998), rules out a 'Cook second voyage' provenance, but not his third voyage.

- C674 Headrest (listed by Fox as being from Tahiti) Fox, p. 199 no. 23
Headrest of long slender form, carved from a single piece of wood. Cross bar with a medial carina ventrally; two pairs of bifurcated legs with four pad feet. Three legs have been broken at some time, and repaired with bone glue: enough remains to see that the legs were never joined together at their lower extremities by a wooden tie. Lightly chipped at edges. Length 66cm, maximum width 8cm, height 16cm. Old labels give provenance variously as Tonga, Tahiti and Fiji. (See figure 25)

Labels:

1. A dark oval patch indicates the former presence of one of George Allan's labels. Glued over the patch is a square label with in manuscript [? of Joseph Wright, a 19th Century curator of the Newcastle Museum] 'Stool from Otaheite / used by the natives / No 20 of Cat.'
2. Old-style label glued on. 'SLEEPING STOOL. / So[ciety Islan]ds / Allan Museum. Cat. No.'. Where the words 'Society Islands' have been scratched away, 'Fiji' has been written on the label in pencil.

The headrest is similar in overall shape to one figured by John Cleveley in 1774 (British Library Add. MS 23920, f. 109), but differs in that the feet are not joined at the base.

C740 Bag Fox, p. 199 no. 37

Flat, rectangular coir bag with two loop handles; edges overbound. Shell disc beads sewn on to bag in zigzag patterns. Length 38cm, width 24cm. Recorded as being *ex* Allan Museum by tradition.

Although Fox identified this as being an item figured in plate XXI of Cook's account of the second voyage (Cook, 1777), there is only a general agreement between the artefact and the figure. The item in the Allan Museum is certainly not any of those illustrated by 18th century artists (see figures in Joppien and Smith, 1985b). (See figure 26)

C465, C466, C467, C569, C570 Five Spears Fox, p. 200 no. 57

Fox listed five barbed spears from St Vincent (West Indies) in the Allan Museum, but also noted a barbed spear 'like that in Capt. Cook's Voyage, vol. i. t. no. 21, p. 220' among the material donated by Captain Wilson of the *Duff* (who had visited Tonga) to the Lit. & Phil. in 1799, and the surviving items may have been part of this latter gift.

Three of the spears bear old-style labels wrongly giving the provenance as St Vincent. None bears the marks of Allan's oval labels. All five spears are from Tonga.

NEWHM: C465

Long wooden spear with intricately carved head, having a plain point, then a section of multiple small barbs, then three sets of long, radiating, curved barbs. All barbs carved in one piece with head. Length 375cm, length of head 104cm, length of shaft binding 76cm. Old label stuck to spear, gives St Vincent as provenance, and a more recent label gives Fiji. (See figure 27)

NEWHM: C466

Long wooden spear with intricately carved head, having a plain point, then a section of multiple small barbs, then two sets of long, radiating, curved barbs. Sets of barbs have intricately woven vegetable fibre binding (sennit) between them, and a long section at top of the shaft is also bound with vegetable fibre. All barbs carved in one piece with head. Length 375cm, length of head 104cm, length of shaft binding 76cm. Old label stuck to spear, gives St Vincent as provenance, and more recent label gives Fiji. (See figure 28)

NEWHM: C467

Long wooden spear with intricately carved head, having a plain point, then a section of multiple small barbs, then three sets of long, radiating, curved barbs. Sets of long barbs have shell (possibly *Tridacna* clam) beads on vegetable fibre cord bound between them. All barbs carved in one piece with head. Some shell beads detached. Length 409cm, length of head 113cm. (See figure 29)

NEWHM: C569

Long wooden spear with intricately carved head, having a plain point, then a section of multiple small barbs, then three sets of long, radiating, curved barbs. All barbs carved in one piece with head. Length 366cm, length of head 98cm. Old label stuck to spear gives St Vincent as provenance, and more recent label gives Fiji. (See figure 30)

NEWHM: C570

Fishing spear with four-pronged head, attached to shaft with elaborate binding of plaited vegetable fibre cord. Binding damaged and one prong of head loose. Length of head 108cm, length bound to shaft 60cm, overall

length 372cm. The multiple head suggests that this may be a fishing spear. (See figure 31)

1998.H225 Bark cloth

Large panel (*ngatu*) of bark cloth, covered with a feather motif using sepia-coloured dye, and with discs of a darker colour. Size 460cm x 210cm. Possibly Allan Museum, but like all early bark cloth in the Hancock Museum the provenance is uncertain. (See figure 53)

FROM FIJI

C537

Club (listed by Fox as being from New Zealand)

Fox, p. 198 no. 10

Fijian wooden spurred club (*vivia qata*) with twenty transverse ridges; 4th and 11th ridges from base have deeply incised zigzag motif; shaft lacking terminal flange, and pierced transversely subapically. Head with carina (*tebetebe*); crotch of spur and head with rounded ridge (*teretere*). A length of plaited flat coir is wrapped four times around the shaft in each of the three basal grooves. Length 64cm, maximum width 15cm. Broad crack near middle. An old-style label present: 'WAR CLUB/ New Zealand [crossed through, and with 'Fiji' added in ms]/ Allan Museum/ Cat. No.'. Written on the object in ink is 'NHS' and '16'; faint but definite indication of former presence of one of Allan's oval labels. (See figure 32)

The transverse hole was probably bored with a European drill: it is uniform in width; where the drill has pushed through one face the wood has been pushed outwards as a circular lip, and the other face has slightly splintered when the drill bit was withdrawn. It is also $\frac{1}{4}$ inch in diameter, a common British drill size.

This club is of interest in being a very rare example of an 18th century Fijian artefact. No western explorers are known to have visited Fiji in the 18th century, but there were a small number of Fijian clubs in Britain at that time: at least two were in Sir Ashton Lever's Museum, where they were sketched by Sarah Stone (Force and Force, 1968). These Fijian artefacts were probably collected during the visit of Cook's ships to Tonga during his last voyage. There was regular contact between people of the two island groups, and Cook's crew encountered a few Fijians in 1777, the ships' diarists commenting on their distinctive appearance. William Anderson, who learned some words of Fijian (Beaglehole, 1967), noticed their superior workmanship including their 'clubs and spears which are carv'd in a very masterly manner'.

None of the consulted catalogues of surviving collections of 18th century Pacific material include any Fijian artefacts, but since curators would tend to dismiss them as being 18th Century on grounds of improbability some may lie unrecognised in museums. Indeed, this club would have been dismissed but for Allan's label.

FROM NEW ZEALAND

C630

Bone cleaver (*Patu paraoa*)

Fox, p. 198 no. 1

Well-balanced *patu* made of whalebone, with pierced rounded butt lug threaded with substantial plaited flax suspension cord. Polished, glossy patina. Length 43.5cm, maximum width 9.5cm, length of cord 32cm. An oval dark patch indicates the former presence of one of George Allan's labels. (See figure 35)

The term *patu paraoa* refers to hand-held cleavers, or *patu*, made of whale bone (*paraoa*). *Patu* of similar shape were illustrated by Cook's contemporaries (*vide* figures in Joppien and Smith, 1985a), all apparently made of stone rather than bone.

A passage in Hawkesworth (1773) confirms that *patu paraoa* were seen on Cook's first visit to New Zealand: 'there are whales also upon this coast, and though the people did not appear to have any art or instrument by which such an animal could be taken and killed, we saw pattoo-pattoos in the possession of some of them, which were made of the bone of a whale, or of some other animal whose bone had exactly the same appearance'.

The glossy patina indicates that this *patu paraoa* had been valued and curated by Maori for a long period before the arrival of Europeans.

C636 Wooden cleaver (*Kotiate*)

Fox, p. 198 no. 2

Wooden 'fiddle-shaped' cleaver; butt with carved *tiki* head, the tongue slightly skewed, and cheeks puffy. Rectangular hole for suspension loop. A wooden peg has been inserted to strengthen a knot in the wood and stop the wood splitting, but the wood is cracked in several places. The letter 'F' is engraved in an old, possibly 18th century hand. Length 36.5cm, maximum width 15.5cm. An oval dark patch indicates the former presence of one of George Allan's labels. (See figure 36)

The term *kotiate* refers to cleavers with a sinuation in the edge of each long side of the blade. They are often described, not quite accurately, as being 'fiddle-shaped'. *Kotiate* were made in whalebone as well as (in this case) in wood.

Several *kotiate* were figured in the 18th century, although none of the drawings seen matches C636 precisely: usually the sinuation divides the body of the weapon into two roughly equal halves, in C636 the sinuation is not central (see figures in Joppien and Smith, 1985).

C765 Neck ornament (*Rei puta*)

Fox, p. 198 no. 3

Neck ornament, the pendant made from the tooth of a sperm whale (*Physter catodon*) with two engraved blackened 'eyes' dorsally. A finely plaited flax cord and bird bone toggle attachment serve for hanging around the wearer's neck. Length 17cm, width 4.5cm, length of cord 45cm, length of toggle 7.5cm. An oval dark patch indicates the former presence of one of George Allan's labels. (See figure 37)

Rei puta were seen during Cook's first visit to New Zealand: 'The men had sometimes hanging to a string, which went round the neck, a piece of green talc, or whalebone, somewhat in the shape of a tongue, with the rude figure of a man carved upon it; and upon this ornament they set a high value' (Hawkesworth, 1773). Early examples are very rare, and other than C765 there seems to be only one other 18th century *rei puta* in Britain: it is in the British Museum.

It has been long believed by staff at the Hancock Museum that the *rei puta* in Allan's Museum was brought back to England on the *Endeavour*-voyage, and was the actual object figured by Parkinson (Plate 13 in Hawkesworth, 1773). This suggestion has appeared in print (Duff, 1969), but doubts have been expressed elsewhere (Kaeppler, 1978a) and close examination of the *rei puta* reveals that there are indeed significant differences between the actual object and Parkinson's figure. C765 differs from the *rei puta* drawn by Parkinson in the shape of the 'eyes', in the lack of decoration on the toggle, in the attachment of the neck-cord to the tooth, and the presence of some natural marks on the tooth.

That the cord attachment varied from specimen to specimen is shown in the few examples sketched in the 18th century. Parkinson's *rei puta* had three evenly-spaced holes pierced through it, and simple ties (?or rings) through the holes attaching the tooth to the neck cord (vide Joppien and Smith, 1985a, pl. 1.126 – 1.127). A *rei puta* drawn by John Frederick Miller in 1771 has four unevenly-spaced holes and a doubled attachment cord passing through the holes and apparently threaded through the neck-cord (vide Joppien and Smith, 1985a, pl. 1.162). The *rei puta* figured by Herman Diedrich Spöring circa 1769-1770 has five evenly-spaced holes, with the attachment cord neatly fanning out between the holes and the neck-cord. (vide Joppien and Smith, 1985a, pl. 1.161).

A photograph of the specimen taken at Newcastle in 1969, shows that a substantial portion of Allan's oval label was still glued to the tooth. A second photograph, taken in the same year and published in Duff (1969) shows a dark patch where the label had been removed. Presumably, the item was cleaned in order to be displayed as part of the *No Sort of Iron* exhibition at Christchurch, New Zealand. Correspondence from Christchurch, preserved at the Hancock Museum, indicates that conservators in New Zealand needed to make repairs to the cord; they also made a facsimile, at which time the 'eyes' were tinted with acrylic paint.

The importance not only of the pendant but also of the cord should be highlighted, it being one of the few surviving (and arguably the finest) examples of 18th century Maori cord-making.

C624 Feeding funnel (*Korere*)

Fox, p. 198 no. 4

Wooden feeding funnel, elaborately carved with cursive figures in relief on each side, and at rear. Slightly cracked with a small amount of insect damage. Length 21.5cm, maximum width 10cm, height 13cm. Allan's label, very dirty and partly defaced, still survives. The first line reads 'New Zealand Whistle' the rest is illegible, although the whole label was quoted by Fox as reading 'A New Zealand Whistle, that yields a shrill sound, and is worn by the men about their necks'. (See figure 42)

Korere are funnels used to feed high-ranking Maori undergoing facial tattooing: highly nutritious food was ground down to form a broth, and poured down the *korere* by a helper. Water was also poured down the funnel. On a prosaic level, the face would be very tender and open to infection, and the use of a *korere* combined practical considerations with the reduction of hygiene risks. On a socio-religious level, they were highly important in Maori society because of their associations with the head (the most *tapu* part of the body) of high-ranking individuals undergoing a procedure surrounded by profound *tapu*.

Korere were usually finely carved, with both the figures on the outside of the funnel and the groundwork in-between elaborately decorated. On C624 the figures have been carved in outline, but there is very little surface decoration and the adze marks of 'roughing out' still remain visible, strongly suggesting that this *korere* is unfinished. This could be because no artist was willing to complete a piece that had been started by – and thus imbued with the *mana* of – a previous artist (who, perhaps, died before he could finish it). Alternatively, it may simply not have been finished and had never been used for its destined function: this could explain why a Maori would be prepared to part with what is normally a very sacred object.

The *korere* was listed by Fox as being a whistle. It is understandable how someone in 18th century England, unfamiliar with the social practices surrounding *moko* (tattooing), could misidentify a *korere*, although it might be asked whether George Allan had actually succeeded in getting a musical tone out of it! The label possibly misinterprets descriptions of *nguru* in accounts of the *Endeavour* voyage, the earliest surviving example to have been brought out of New Zealand: I have not seen evidence of any other *korere* of 18th century date.

C620 and 621 Two whistle-flutes (*Nguru*); C623 bugle-flute (*Putorino*) Fox, p. 198 no. 18

Only one of C620-621 and C623 may be an Allan Museum item. It must equate to an artefact catalogued by Fox as originating in Hawaii, as the only other musical instrument catalogued, Fox's 'Wooden Whistle' from New Zealand, is actually a *korere*.

Which, if any, equates to the entry in Fox's catalogue is unclear. Both of the *nguru* may have been in the Newcastle Museum by the 1830s, since they are labelled as 'N.H.S.': the shallow incised decoration on C621 indicates it may be the earlier example, but both could conceivably have been part of William Row's donation of 1834. The old manuscript label on C623 indicates a possible 18th century origin, but there is no strong evidence as to its origin.

C620 Wooden whistle, or nose flute, (*nguru*) carved with deeply incised elaborate decoration in sharp relief, probably with metal tools. A carrying thong of dog's hide with hair is still present, but detached from flute. Length 13cm, diameter 4cm, length of carrying thong 64cm. Stylistically northern North Island. Labelled 'N.H.S.' in ink.

C621 Wooden whistle, or nose flute, (*nguru*) with carved incised decoration of spiral patterns showing a complete *tiki*, a bird with eye, beak and wing, with its face about the suspension lug, amid scrolls. Carrying strap of plaited flax, now broken. Very shallow carving. Length 9.5cm, diameter 3cm, length of carrying strap 100cm. Stylistically northern point of North Island. Labelled 'N.H.S.' in ink. (See figure 38)

Neither of these *nguru* appears to have been figured by 18th century artists. The surface decoration is markedly different to the one drawn by J F Miller (British Library Add. MS 23920, f. 73), and C Praval's sketch (British Library Add. MS 7085, f. 33) is too imprecise to equate the figure with the artefacts.

- C623 Simple, flat wooden pipe or bugle-flute (*putorino*) with heart-shaped aperture. Made in two lateral sections, bound together with plaited flax cord binding. Length 36cm, maximum width 4cm. Bears a label with a legend in an unknown hand: '590 A musical pipe from the [illegible – Society or Sandwich?] Islands 61' (See figure 39)

The artefact lacks the surface decoration often found in these instruments, and the binding is more extensive than usual. The style of handwriting on the label indicates an early (late 18th-early 19th century) provenance. Plaited flax binding rather than rattan found in later examples also indicates that it is an early piece.

- C589 **Paddle (*Hoe*)** Fox, p. 198 no. 5

Wooden canoe paddle, with traces of negative-resist painted scroll pattern (*kowhaiwhai*) on the blade. There is open-work carving of a bird's head (*manaia*) at the handle-end of the shaft, and relief carving at the head-end. Length 178cm, maximum width of blade 13cm. Acquired in Poverty Bay, North Island, New Zealand, October, 1769. An oval patch indicates the former presence of one of Allan's labels: the ink from this has partly soaked through on to the wood although the words are barely legible, the last line reading 'New Zealand'. (See figure 41)

There has long been a suspicion that Pacific artefacts in Allan's Museum have an association with the voyages of Captain Cook, even if only because very few other ships brought such items to England in the 18th century. However, there is only one artefact that can be definitely linked with a Cook voyage, and it is this painted *hoe*. It was figured by Sydney Parkinson during the voyage of the *Endeavour*. Parkinson died on 26 January 1771, when the vessel was returning to England, and the paddle was subsequently brought back to England by one of the crew. Parkinson's original sketch survives in the British Library (Add. MS 23920, f.71a), and was reproduced in colour by Joppien and Smith (1985a).

- C588 **Club / quarterstaff (*Tewhatewha*)** Fox, p. 198 no. 6

Wooden *tewhatewha* with plain, uncarved tongue. Lacks feather tassel. Length 139cm, maximum width of head 32cm. Probably made about the same time as it was collected, late in the 18th century. Two of George Allan's labels are still present, although barely legible. (See figure 40)

The blade-like end of a *tewhatewha* is reminiscent of a European hatchet, as Fox's catalogue entry suggests, but the weapon was not used as a 'hatchet' and the similarity in form is merely coincidental. Best (1924) described how the weapon was used. The pointed end of the *tewhatewha* was used in attack, but the blow was usually struck with the back of the bladed end. Bunches of feathers were usually suspended through a small hole usually pierced in the lower part of the blade, to distract the attention of the opponent.

The bunch of feathers is missing in C588, and in fact there is no hole through the lower part of the blade through which they could be fixed. There is, however, a hole through the upper part of the blade.

Several *tewhatewha* were figured in the 18th century. Those engraved by Chambers (Plates 15 and 26 in Parkinson, 1784) have an ornamented shaft. Praval's sketch (British Library Add. MS 7085, f.33 – reproduced in Joppien and Smith, 1985a, pl. 1.153) is plain, like our specimen, but the figure is not detailed. Neither of these has a bunch of feathers. John Frederick Miller drew a *tewhatewha* with a single bunch of feathers and a decorated shaft (British Library Add. MS 23920, f.70 – reproduced in Joppien and Smith, 1985a, pl. 1.157), and this is definitely not our specimen.

C622

Trumpet (*Pu-kaea*)

Fox, p. 198 no. 7

Wooden trumpet, with forked bell mouth; made in two lateral sections, bound together with *kiekie* (*Freycinetia baueriana*) root. Length 67cm, diameter of mouthpiece 2.5cm, diameter of bell 10cm. Figured in Edge-Partington's *Album* (1895, p.232); cited by Best (1924). Part of Allan's label is present, although the writing is now barely legible. (See figure 33)

Praval's sketch (British Library Add. MS 7085, f.33 – reproduced in Joppien and Smith, 1985a, pl. 1.153) of a *pu-kaea* brought back on the *Endeavour* is very similar to the item in the Hancock Museum, but the shape of these artefacts may not be sufficiently individually distinctive to equate the surviving object with the one figured.

Best (1924) described the *pu-kaea* as a bell-mouthed trumpet used for signalling, ranging from about three to six feet in length. A piece of wood was rough hewn, then split down the middle. Each half was fashioned and hollowed out and the two halves lashed together. Sometimes the bell-shaped mouth, termed the *whara*, was cut out of the solid, in others it was made of several pieces, lashed together. The *tohe* or *potohe* was a wooden contrivance fixed in the tube and which had some effect on the sound. Best noted that "a specimen in the Natural History Museum at New-Castle-on-Tyne, is said to have five projections in its interior, three on one side and two on the other".

C422, C423, C591, 1998.H220 *Taiaha* (four)

Fox, p. 198 nos 8, 9, 11

Three *taiahas* came to Newcastle with the Allan Museum in 1822, and a further one, allegedly from the collection of Sir Joseph Banks, was acquired from Wilfred Hall with the Bompas collection in 1936.

C422

(Allan Museum)

Wooden *taiaha*, lacking vegetable fibre or feather tassels. The letters 'N.H.S.' are written along the blade; near the base is a very faint oval patch indicating George Allan's label, with lines of ink where the writing has soaked through. The carving on the tongue is coarse; the tip of the tongue is smoothed through wear. All four mother-of-pearl 'eyes' are present. Length of shaft 165cm, length of head 23cm, total length 187cm. Probably Rotarua school, North Island. (See figure 43)

C423

(Allan Museum)

Wooden *taiaha*, lacking vegetable fibre or feather tassels. Old label. 'spontoon or spear carried by the chiefs of New Zealand curiously carved and ornamented with eyes formed of the beautiful pearl of the iris shell.' An unfinished artefact, there is no surface carving on the tongue, the head has 'eyes' on one side only and the tip of the blade is unfinished. Shaft slightly cracked and pitted. Length of shaft 145cm, length of head 21cm, total length 166cm. Probably Rotarua school, North Island. Has a dark oval mark surviving from Allan's label. (See figure 44)

1998.H220

(Allan Museum)

Wooden *taiaha* with plain head with short tongue, and lacking vegetable fibre or feather tassels. Length 183.5cm, maximum width of head 5cm, maximum width of butt 7cm. Probably Rotarua school, North Island. Has a dark oval mark surviving from Allan's label. (See figure 46)

C591

(ex Sir Joseph Banks's collection; acquired with Bompas collection, donated by Wilfred Hall in 1936)

Wooden *taiaha*, with finely carved head with shell eyes, but lacking typical vegetable fibre or feather tassels. Length 147.5cm. Probably Rotarua school, North Island, New Zealand. A donation from Dr Wilfred Hall (56/1937), ex Bompas collection. Old label: '... [illegible] from Sir Joseph Banks collection. Given to Dean Buckland by the late Robert Brown of British Museum, New Zealand /T...i ...' (See figure 45)

The history of C591, as given on the label, is quite plausible. Robert Brown (1773-1858) was librarian to Sir Joseph Banks, later moving to the British Museum where he was Keeper of the botanical department between 1827 and 1857. William Buckland (1784-1856) could only be styled 'Dean' after 1845, when he was appointed Dean of Westminster, thus giving an earliest possible date for the label. Even though from Banks's collection, the *taiaha* could not be from an *Endeavour* voyage, as the carving was executed with metal tools – therefore it was not collected personally by Banks in New Zealand.

The uncarved tongues on some of the *taiaha* in Allan's collection resonate with the unfinished *korere* mentioned above. Did these originate within a tradition in which a carver would not finish another carver's work, or were they simply unfinished (therefore not rich in *mana*, and more readily disposable)?

FROM THE MARQUESAS ISLANDS

C162 Wooden gorget

Fox, p. 252, no. 122

Gorget in the form of a crescent, formed of seventeen carved soft wooden panels covered in black gum to hold *Abrus* seeds (which are all missing). the panels held together by thick twist of coir, caught in two places in slots. Coir neck fastening present. Diameter 24cm, width of gap at top 10.5cm. Franks noted, *circa* 1870 that the item was 'broken and wanting the seeds'. Probably donated to the Lit. & Phil. by Captain Wilson of the *Duff* in 1799. (See figure 48)

The *Duff* arrived at the Marquesas on 2 June 1797 and departed on 26 June, leaving William Crook on Tahuata as a Christian missionary. On 6 June 1797, while at Tahuata, a man called Tenae presented Captain Wilson with a staff and a few head and breast ornaments – was this gorget among those presents? A figure of a man of Tahuata wearing a similar gorget was published on plate XXXVI in Cook's (1777) account of his second voyage.

The gorget has a paper label glued on, with the legend 'Allan Mus.', and also a tie-on label stating it is an Allan Museum item. However, there is no evidence from the presence of Allan's oval labels that this was ever part of the Allan Museum, and indeed the only item with which it could be equated in the list of the Allan Museum is his 'Neck Ornament from Hawaii'. The gorget was illustrated by A W Franks in his notebook.

C162 agrees with Fox's description of an artefact presented by Wilson in that it is a gorget made of light wood covered with gum on the upper and outer surface, but it does not have the 'red peas'. The gum has many dimples, where the 'peas' have fallen off. Franks noted 'broken and wanting the seeds', so this must have happened early in its history. It seems reasonable to accept this item as being part of the Wilson donation.

The significance of gorgets of this type is uncertain, but early accounts refer to them being worn by men of importance. Krusenstern (1813), whose informant had lived among the Marquesans for five years, noted that 'this ornament is the particular mark of a priest'. Crescentic feather gorgets were worn by high-ranking men (*ari'i*) in pre-contact Tahiti, and were figured by several 18th century artists; their crescentic shape also finds an echo in the crescentic feather capes worn by high-ranking Hawaiians.

FROM THE HAWAIIAN ISLANDS

C584 Wickerwork religious figure

Fox, p. 198 no. 16

A stylised human head, the mouth defined by rows of the canine teeth of dogs. Made of a wickerwork '*ie'ie* (*Freycinetia arborea*) frame covered with vegetable fibre netting (*nae*); once covered with feathers, these have almost all been lost. The bases of some feather shafts remain, but not enough to discern their colour. There is no shell inlay in the oval eye sockets, and both the framework and netting are damaged in places. Height 80cm, maximum width 18cm, depth 37cm. (See figure 50)

Fox's comment 'has been covered with the red feathers of the Hook-billed Red Creeper' indicates perhaps that the feathers were already missing by 1827. They certainly were lacking when seen by Franks in the late 1860s/early 1870s.

This item represents probably the most intriguing type of artefact surviving from Allan's collection. There are nineteen known surviving wicker heads (see Buck, 1957) all comprising a framework of split aerial rootlets of the 'ie 'ie vine (*Freycinetia arborea*) arranged into warps and wefts. This wicker framework is covered with a netting made of *olona* (*Touchardia* sp.) fibre; feathers are tied into this netting with thin sennit, and often when the feathers have deteriorated there still remains the secondary netting of knotted sennit used to tie in the feathers. The facial features are represented by the addition of pearl-shell eyes, usually with a wooden pupil, and a mouth indicated by rows of the canine teeth of dogs (in one instance, of sharks' teeth).

No examples are known from Hawaii of wicker figures representing other parts of the human body or of animals or plants, except for the few enigmatic 'idols eyes'. These are flat circular wicker discs, with a pearl-shell eye fixed in the centre; their use is unknown, but they are recorded from as early as 1779 (Kaeppler, 1978: 53). The miniature wicker 'oracle tower' (*anu 'u* tower), of which there is only one known example (Kaeppler, 1978: 59) might also be mentioned in passing. Nor is there anything approaching the habitus of wicker heads in any other medium in the corpus of Hawaiian art, neither in overall form (isolated large heads) nor in type of expression.

The structure and construction of heads was described in detail by Buck (1957), who noted significant individual differences in manufacture. These include the way the nose is made (sometimes formed with the rest of the face, sometimes made separately then tied on), the way the eyes are fixed in place and the way the teeth are tied into the mouth. The heads vary individually in several ways: all but three were adorned with either a crest (as is C584), or human hair. One in the British Museum has a double crest. The eyes, made of pearl-shell, are usually elliptical, although a few were round or crescentic.

Brigham (1899) was the first to associate wicker heads with the deity *Kukailimoku*, but there is no evidence from early Western-Hawaiian contact to support this view. While they were clearly important items of religious importance their true nature remains elusive.

There is no clue as to the movements of C584 prior to its presence in the Allan Museum. It may have been part of Marmaduke Tunstall's museum: whereas Tunstall generally retired from society on moving north to Wycliffe in 1776 (before Hawaiian items could be available to collectors) he did not move his Museum from London until 1783 (Boyd and Jessop, 1998), by which time it could have included 'Hawaiiana'. It is perhaps worth noting that the 1792 sale of his collection included several items from Hawaii, one of which was a 'feather cloak, uncommonly large, such as is worn by the chiefs in the Sandwich Islands'. It is possible that George Allan bought C584 along with the other part of Tunstall's collection he purchased in 1791. Unfortunately, a label with information in manuscript, that was visible [but not legible] in a photograph published in Brigham (1903), is now missing.

If not from Tunstall, then it is not known how Allan acquired the wicker head. His main source of ethnographic items, Daniel Boulter, did not include such an item (Boulter, 1793) and no other possible source has been traced.

Hawaiian Kapa

The following five specimens of Hawaiian barkcloth have all been formerly labelled in some way as originating in the Allan Museum. None is certainly traceable to Allan's collection, and given that further Hawaiian material was donated in 1834-35 it is unwise to assign an 18th century origin to any piece. Fox's catalogue does not call for any Hawaiian *Kapa*, but given the general confusion then prevailing about provenances it is also perhaps unwise also to rule out an Allan Museum origin for any following individual piece:

C702

Kapa

Fine panel of barkcloth made from the inner bark of the paper mulberry tree (*Brousenettia papyrifera*). Formed of two pieces of cloth neatly sewn together.

Painted with elongate lozenges (**See figure 51 for pattern**) in black, on dark yellow cloth length 109cm, width 54cm. Probably no later than early 19th century.

C703

Kapa

Fine, large panel of barkcloth, decorated with black and red lines and bands, with paired black dots. Length 430cm, width 75cm. Bears an old-style label glued on the cloth, 'Native Cloth, Friendly Islands, Allan Museum, Cat. no. 41' (**See figure 52**)

C705

Kapa

Large panel of glossy dark brown barkcloth with three panels of designs, with black lines. Length 220cm, width 109cm. (**See figure 55**)

1998.H239

Kapa

Large panel of barkcloth. Decorated with scattered diagonal clusters, with a broad border Length 260cm, width 98cm. (**See figure 54**)

1998.H241

Kapa

Panel of thin, gauze-like brown barkcloth. Length 92cm, width 50cm. Previously labelled (in error) as being from Tonga.

FROM THE SOCIETY ISLANDS

C067

Food pounder (*Penu*)

Fox, p. 200, no. 43

Shiny dense basalt *poi* pounder with convex, circular base and concave sides, narrowing to handle. Top of handle has a cross-piece, triangular in section, with a flat upright ear at each end. One ear broken. Maximum height 19.5cm, diameter of base 12.5cm, length of cross-piece 8.3cm. (**See figure 49**)

The provenance of this artefact is uncertain. Unfortunately, there are no indications from old labels that this item once belonged to George Allan. It was definitely figured by A W Franks in Newcastle between 1867 and 1871: one of the ears is distinctively broken, as shown in Franks's sketch. If C067 is to be equated with any entry in Fox's list, then it must be the 'stone hammer for pounding Cassada', which Fox said was from [Central] America.

Several Tahitian pounders were figured in the 18th century. John Frederick Miller drew one in 1771 (British Library Add. MS 23921, f.54 (a)). An engraving by Record, after Miller's drawing, was reproduced in Hawkesworth (1773; plate 9). A second pounder figured by Miller (British Library Add. MS 15508, f.31) is subtly but definitely different in shape. A stone pounder surviving in the British Museum has been equated with this latter artefact (Kaeppler, 1978). Other Tahitian pounders were drawn by Charles Praval in 1771 (British Library Add. MS 7085, F.9) and by S H Grimm (engraving by W Darling after Grimm in Parkinson, 1784).

There are slight but definite variations in the shape of the early illustrated *penu*. It is difficult to state categorically that the one surviving in the Hancock Museum was one of those figured: it is very similar to the one drawn by John Frederick Miller, but in the Hancock specimen the groove down each side of the ears extends the full length of each ear, whereas Miller's figure shows these grooves stopping short at top and bottom of the ear.

A monographic study of Society Islands pounders by Silverthorne (1936) provided a useful typology of *penu*. Out of 221 pounders examined by Silverthorne, 62 were of the same form as C067.

C686

Nose flute

Fox, p. 198, no. 20

Bamboo transverse nose flute, bound with plaited sennit. Sennit is arranged in coloured bands in similar style to the binding on the bow C444. Binding loose in part, bamboo cracked, and coloured bands faded. Length 44cm, diameter 3.5cm. Oval patch indicates the former presence of Allan's label. (**See figure 56**)

With the exception of a piece of plaited binding at the base that is now missing, this flute agrees with the one figured on plate 9 of Hawkesworth (1773). The engraving, by Record, was based on a drawing made by John Frederick Miller (British Library, Add. MS 23921, f.54(a)) in 1771, after the return of the *Endeavour*. Another Tahitian nose flute figured by Miller, also in 1771 (British Library, Add. MS 15508, f.31), is significantly different in the arrangement of the cord binding and can not be the same specimen. Both drawings, and the engraved plate, were reproduced by Joppien and Smith (1985).

An engraving of another Tahitian nose flute, by W Darling after S H Grimm, was published on plate 13 of Parkinson (1784).

C518 Adze Fox, p. 199, no. 22
 Large, functional adze with black basalt blade affixed to angled wooden haft with plaited coir cordage (sennit). Elbow of haft chipped. Overall length 65cm, length of blade 29cm, width of blade 7cm, length of shaft 58cm.

The overall form of C518 is right for an 18th century Tahitian adze, but there is no firm evidence that it formed part of the Allan Museum, i.e. there is no indication of an oval label. However, it does bear a square label with manuscript writing in a typically 18th century hand 'stone adze fixed to a handle of wood with plaited cordage from Otaheite'. The last two letters on the label, possibly somebody's initials, are unclear: they are RH, or KH, or WW, or KW. There is a striking similarity between this legend and the description in Boulter's catalogue, suggesting a possibility that Allan did not feel the need to add a further label.

Tapa (see also comments in the introduction, above)

C701 Tapa bedsheet
 Large panel of plain, white barkcloth, about eight metres long. Labelled in manuscript 'Literary Society Newcastle care of Mr John Langland Esq'. Presented by Captain James Wilson of the *Duff* in 1799 (see introduction for details of Wilson's donation). Probably from Tahiti.

C704 Tapa
 Panel of white soft barkcloth. Dirty and damaged by rusty nails. Length 121cm, width 71cm. Probably from Tahiti.

1998.H226 Tapa
 Panel of thick russet brown barkcloth with central white band. Length 570cm, width 100cm. An 'old-style' label equates this with Fox's number 41 (a piece of thick cloth, stained and ribbed said to be from Tonga).

1998.H227 Tapa tiputa
 Fine quality barkcloth *tiputa* (poncho), with gussets either side of the head opening. Decorated with red bands and with patterns made by pressing a fern into red dye, which is a typical Tahitian motif. Length 104cm, width 89cm. An 'old-style' label equates this with Fox's number 39 (which was described as 'a piece of stained cloth, like floor cloth').

1998.H228 Tapa
 Panel of thick white soft barkcloth. Dirty and damaged by rusty nails. Length 166cm, width 139cm. Probably a part of a larger piece, with 1998.H229. Probably from Tahiti.

1998.H229 Tapa
 Panel of thick white soft barkcloth. Old (?18th century) label in manuscript 'cloth from Friendly Islands. Length 5ft x 3ft'. Dirty and damaged by rusty nails. Length 150cm, width 80cm. Possibly part of a larger piece, with 1998.H228. Probably from Tahiti.

- 1998.H231 *Tapa tiputa*
Very wide, but short, *tiputa* (poncho) made of soft, white, plain barkcloth. Dirty and damaged by rusty nails. Length 88cm, width 120cm. Bears a printed label resembling an auction house's lot number, reading 75: this does not equate with numbers in any of the relevant lists consulted. From Tahiti.
- 1998.H232 *Tapa*
Large, but dirty, panel of white coarse barkcloth. Length 244cm, width 188cm. Probably from Tahiti or the Cook Islands.
- 1998.H233 *Tapa bedsheet*
Large bed sheet of a panel of thin white barkcloth. Very soft and supple, of good quality, but dirty. Length 332cm, width 114cm. Probably from Tahiti. Labelled in manuscript 'Literary Society Newcastle care of Mr John Langland Esq'. Presented by Captain James Wilson of the *Duff* in 1799 (see introduction for details of Wilson's donation).
- 1998.H234 *Tapa*
Large, but dirty, panel of thick plain white coarse barkcloth. Length 132cm, width 130cm. Probably from Tahiti. Labelled in manuscript 'Literary Society Newcastle care of Mr John Langland Esq'. Presented by Captain James Wilson of the *Duff* in 1799 (see introduction for details of Wilson's donation). Probably from Tahiti.
- 1998.H235 *Tapa*
Panel of yellow barkcloth. Very dirty, thin and brittle. Similar to 1998.H236. Length 270cm, width 160cm. From Tahiti.
- 1998.H236 *Tapa*
Panel of thin yellow barkcloth. Very dirty. Length 240cm, width 72cm. From Tahiti. An 'old-style' label equates this with Fox's number 29 (piece of thick buff cloth, like fleecy hosiery).
- 1998.H237 *Tapa*
Small panel of dark russet-brown barkcloth with central white stripe. Length 200cm, width 85cm. Possibly from Tahiti or the Cook Islands.
- 1998.H238 *Tapa*
Panel of plain white barkcloth. Length 31cm, width 30cm. Probably from Tahiti or the Cook Islands.
- 1998.H240 *Tapa*
Panel of thin, stained, white barkcloth. Dirty. Length 195cm, width 140cm. Possibly from Tahiti or the Cook Islands.
- 1998.H242 *Tapa*
Panel of thin, stiff, yellow barkcloth. Very dirty. Length 48cm, width 31cm. Probably from Tahiti.
- 1998.H244 *Tapa*
Panel of plain white barkcloth. Dirty and damaged by rusty nails. Length 87cm, width 65cm. Labelled Friendly Islands (i.e. Tonga), but probably from Tahiti.

- C444 **Bow-stave** Fox, p. 198, no. 19
A slightly curved bow-stave of light-weight wood (*Hibiscus* sp.?), of circular section; wrapped at both ends and at centre with bands of flat sennit. A rectangular light patch 2.4 x 4.5cm indicates the position where a label has been glued. Length 169cm, diameter at centre 4cm, length of sennit bands at ends, 12.5 and 13cm; at centre 8cm. (See figure 47)

This 'thick bow, wrapped with platted cordage' was listed by Fox (1827) as originating in 'Owhyhee', but there are doubts about its provenance. Cook and King (1784) said of the Hawaiians that 'They have also bows and arrows; but, both from their apparent scarcity, and their slender make, it may almost be presumed that they never use them in battle'. Buck (1957) only mentions Hawaiian bows being used for killing rodents – not for war. Similarly, Dixon (1789) remarked that Hawaiian bows are so slender that he couldn't think they are of any great use.

On the other hand, thick bows from Tahiti were figured by 18th century artists: C Praval's sketch (British Library Add. MS 7085, f. 9) showed a bow with no platted binding; Miller (British Library Add. MS 23921, f. 57 (b)) drew one with binding at each end.

Ellis (1829, vol. 1, pp. 299-302) gave an account of Tahitian archery:

The *te-a* or archery was also a sacred game, more so, perhaps, than any other. The bows, arrows, quiver, and cloth in which they were usually kept, together with the dresses worn by the archers, were all sacred, and under the special care of persons regularly appointed to keep them. It was usually practised as a most honourable recreation, between the residents of a place and their guests. The sport was generally followed either at the foot of a mountain, or on the sea-shore. My house, in the valley of Haamene at Huahine, stood very near an ancient *vahi te-a*, place of archery. Before commencing the game, the parties repaired to the marae, and performed several ceremonies; after which, they put on the archers' dress, and proceeded to the place appointed. They did not shoot at a mark; it was therefore only a trial of strength. In the place to which they shot the arrows, two small white flags were displayed, between which the arrows were directed.

The bows were made of light, tough, wood of the *purau* [*Hibiscus tileaceus* according to Ellis] and were, when unstrung, perfectly straight, about five feet long; an inch, or an inch and a quarter, in diameter at the centre, but smaller at the ends. They were neatly polished, and sometimes ornamented with finely braided human hair, or cinet of the fibres of the coca-nut husk, wound round the ends of the bow in alternate rings. The string was of *romaha*, or native flax; the arrows were made of small bamboo reeds, exceedingly light and durable. They were pointed with a piece of *aito*, or iron-wood, but were not barbed. Their arrows were not feathered; but, in order to their being firmly held while the string was drawn, the lower end was covered with a resinous gum from the breadfruit tree. The length of the arrows varied from two feet six inches, to three feet. The spot from which they were shot was considered sacred; there was one of these within my garden at Huahine. It was a stone pile, about three or four feet high, of a triangular form, one side of the angle being convex.

When the preparations were completed, the archer ascended this platform, and kneeling on one knee, drew the string of the bow with the right hand, till the head of the arrow touched the centre of the bow, when it was discharged with great force. It was an effort of much strength in this position to draw the bowstring so far. The line often broke, and the bow fell from the archer's hand when the arrow was discharged. The distance to which it was shot, though various, was frequently three hundred yards. A number of men, from three to twelve, with small white flags in their hands, were stationed to watch the arrows in their fall. When those of one party went farther than those of the other, they waved the flags as a signal to those below. When they fell short, they held down their flags, but lifted up their foot, exclaiming, *ua pau*, beaten.

This was a sport in the highest esteem, the king and chiefs usually attending to witness the exercise. As soon as the game was finished, the bow, with the quiver of arrows, was delivered to the charge of a proper person: the archers repaired to the marae, and were obliged to exchange their dress, and bathe their persons, before they could take any refreshment, or even enter their dwellings. It is astonishing to notice how intimately their system of religion was interwoven with every pursuit of their lives. Their wars, their labours, and their amusements, were all under the control of the gods.

The bows were plain, but the quivers were often truly elegant in shape and appearance. They were usually made with the single joint of a bamboo cane, three feet six or nine inches long, and about two inches in diameter. The outside was sometimes handsomely stained, and finely polished at the top and the bottom; they were adorned with finely braided cinet, and platted human hair. The cap or cover of the quiver was usually a small, handsome, well-formed

cocoa-nut, of a dark brown chocolate colour, highly polished, and attached to the quiver by a braided cinet passing up the inner side of the quiver, and fastened near the bottom.

The bow and arrow were never used by the Society Islanders, excepting in their amusements; hence, perhaps, their arrows, though pointed, were not barbed, and they did not shoot at a mark ... it is now altogether laid aside, in consequence of its connection with their former idolatry. I do not think the missionaries ever inculcated its discontinuance, but the adults do not appear to have thought of following this or any other game, since Christianity has been introduced among them.

A second bow from Tahiti (C443) in the Hancock Museum differs from C444 in lacking the sennit bands, and therefore does not agree with Fox's (1827) description. It is 176cm long, and 4cm diameter at centre, and made of the same light-weight wood. There is a transverse groove cut into one end for fitting a bowstring. A patch indicates the former presence of an 'old-style' label. There is no record of a donation of a Polynesian bow among the accession files at the Hancock Museum, and while C443 cannot be from Allan's Museum, it is an artefact of a rare and early type: perhaps part of the Wilson donation of 1799?

MELANESIAN

FROM NEW CALEDONIA

C528

Club

Fox, p. 199, no. 42

New Caledonian war club of yellow wood; head of six broad radiating spikes; expanded flange at butt. Head and top of shaft cracked and a fragment broken from one spike. Length 70cm, diameter of head 21cm. Allan's oval label present, which reads 'A War Club from New Caledonia'; an 'old-style' label, 'WAR CLUB / New Caledonia / Allan Museum Cat. no. 42'; also a square label, with 'NHS' in manuscript. (See figure 34)

Although Fox (1827) believed that this club was the one figured in plate XX of Cook (1777), this hypothesis is unsustainable unless the illustration is not particularly accurate. Both clubs have a stellate head, but there are five points visible on the one figured and (when viewed from the same angle) only four visible on Allan's specimen. Another club, similar to the one in Allan's collection, was figured by Sarah Stone in Sir Ashton Lever's Museum (Force and Force, 1968), and it is likely there were several others circulating among British collectors in the late 18th century.

This club was almost certainly collected on Cook's second (*Resolution* and *Adventure*) voyage, since no other British ships are known to have touched on the island prior to 1800. Cook's vessels were in the vicinity of New Caledonia 5-28 September 1774, and on 6 September he noted that some natives 'brought with them some arms such as Clubs, darts &c which they exchanged away' (Beaglehole, 1961, p. 531). The next visitor after 1774 was d'Entrecasteux, who was on New Caledonia in 1792: his return to Europe is unlikely to pre-date the Boulter catalogue.

FROM NORTH AMERICA

There are several western nearctic items in the ethnographic collections at the Hancock Museum that are typologically 'right' for an 18th century origin. These include a 'Slave Killer', that could arguably have come to Newcastle with the Allan Museum – but only if it equates to a 'stone hammer for pounding Cassada' listed by Fox (but there is a stronger candidate for this item (see above)).

A Tlingit club, G098, previously catalogued as being from the Allan Museum, is discussed below. It is of an early, and rare, type, the only other known similar example being collected probably by Juan de la Bodega y Quadra in 1792 (see Brown, 2000). There is no definite provenance for G098, but it was definitely not part of the Allan collection. The source of

these artefacts is unknown: they may for instance have been given in the mid 19th century by Captain Collinson, a Gateshead man who led an expedition that traversed the Northwest Passage between 1850 and 1854.

- G105 Paddle** Fox, p. 199, no. 21
Woodlands paddle with elongate blade and short barrel knop. Marks indicate former presence of several labels, including an oval Allan label and 'old style' label. Length 158cm. Written on blade are 'NHS' and the number 19. Catalogued by Fox as being from Tahiti. (See figure 57)

Given the long period of contact between Europe and North America (from the late 15th century onwards), it is surprising how few American artefacts survive in early European collections. Indeed, no Woodlands paddles are listed in Feest's (1992) synopsis of pre-1750 artefacts in European *Wunderkammer*, and G105 represents a type of artefact that is probably rarer than it should be. G105 is plain and unadorned with engraved scenes, thus appearing to be a functional paddle rather than one produced for trade to Europeans.

- G099 Model of a canoe** Fox, p. 200, no. 46
Model of an Algonquian-type 'fur trade' canoe. Constructed of wooden gunwales to which are attached flat strips of wood forming the ribs; flat strips of wood are then laid longitudinally to form the shape of the hull, and this is covered externally with birch bark. Two thwarts present, one with a central hole. The gunwales are overbound with strips of cane. Outside of hull painted with lines and triangles in red and blue. Length 79cm. No labels. (See figure 58)

G099 is a canoe model typical of those made in Eastern Canada for trade (see Phillips, 1998).

- G113 Aleut cap** Fox, p. 198, no. 15
An Aleut circular sealgut hat, the crown with a red embroidered disc and four radial red embroidered bands. Rim edged with red embroidered band. Some caribou hair decoration. Diameter 24cm. Doubtfully Allan Museum, it could only be accepted as such if it equates to a 'curious bag from Owhyhee' listed by Fox. In favour of this is Franks's description of G113 as 'A flat skin bag ornamented with red and brown embroidery and fringes', which possibly copied the display label of the time. (See figure 59)

G113 is very similar to a cap figured by John Webber *post* October 1778 and published in the account of Cook's last voyage (Cook and King, 1784, plate 56). There are, however, sufficient differences to rule out this cap as being the one figured: G113 lacks an embroidered band around the edge of the top of the cap, lacks a pattern of concentric rings on the top and the spokes of the radial pattern are broader. Another cap of this sort was figured by Langsdorff (1813), who commented that they were not worn in daily use, but were reserved for use in their 'dancing festivals'.

There is no definite evidence of an Allan Museum origin, and G113 may have formed an assemblage together with an Aleut gut coat and bag donated to the Newcastle Museum by Captain Richard Collinson in the 1850s.

- G003 Pair of moccasins** Fox, p. 192, no. 56
A pair of soft-sole moccasins, the vents and cuffs with panels of fine orange-and-white quillwork within thicker borders; tin cones with orange hair tassels, similar strips at back with some blue quillwork; black and white beads at the front of cuffs; skin ties. Probably Huron. Length 26cm, width 9cm. (See figure 60)

- G126 Pouch and strap** Fox, p. 200, no. 48
A dark blue Métis stroud and skin pouch with two applied bands of green, yellow and white beads; coloured bead tassels. Long green-and-red fibre strap with white pony beads. Pouch 15cm wide, 20cm deep. Strap 101cm long, 2.5cm wide. (See figure 61)



Fig. 1 D340 Pair of Turkish ladies' shoes



Fig. 3 D502 Turkish man's shoe



Fig. 2 D339 Pair of Turkish men's shoes



Fig. 4 D341 Pair of Turkish men's shoes

PLATE 2



Fig. 5 D231 Pair of Chinese shoes



Fig. 6 D342 Pair of Chinese shoes



Fig. 7 D227 Pair of Chinese shoes



Fig. 8 D228 Chinese shoe

PLATE 3



Fig. 9 E35 Sabot



Fig. 10 D126 Abacus

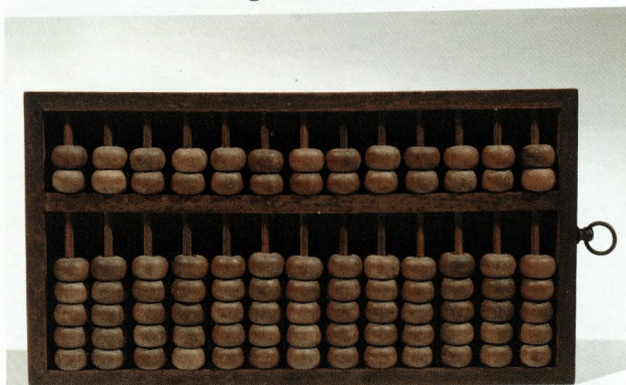


Fig. 11 Front and back of D124, Abacus, showing George Allan's handwritten label

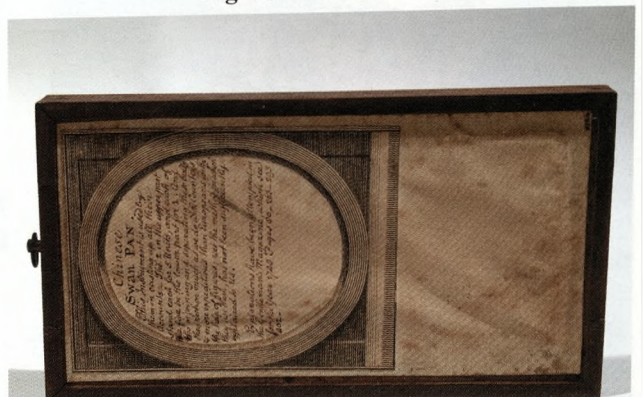


PLATE 4



Fig. 12 D117 Carved ivory figure of Zhong Kui
(rear view below)



Fig. 13 D118 Carved ivory figure of Shoulao

PLATE 5



Fig. 14 D120/D212 Dotchin and case: (a) closed and (b) open



Fig. 15 D757 Chinese hat



Fig. 16 D211 Dotchin and case



Fig. 17 D119 Carved ivory ball, with concentric carved layers



Fig. 18 D275 Farsi manuscript in its cloth bag, with seal

Fig. 20 D134 Set of implements and case: (b) assembled



Fig. 19 D135 Set of implements and case



Fig. 21 G122 Hat from the Philippine Islands



Fig. 22 C645 Cloth beater

PLATE 8

Fig. 23 C698 Tongan club



Fig. 24 C697 Tongan club



PLATE 9



Fig. 25 C674 Tongan headrest



Fig. 26 C740 Tongan bag

PLATE 10

Fig. 27 C465 Tongan spear



Fig. 28 Sennit binding around base of the head of Tongan spear C466



Fig. 29 Tip of C467 Tongan spear



Fig. 30 Tip of C569 Tongan spear



Fig. 31 Tip of C570 Tongan spear



PLATE 11

Fig. 32 C537 Fijian club



Fig. 33 C622 Trumpet (*Pu-Kaea*) from New Zealand



Fig. 34 C528 New Caledonian club



PLATE 12



Fig. 35 C630 Bone cleaver (*Patu Paraoa*) from New Zealand



Fig. 36 C636 Wooden cleaver (*Koriate*) from New Zealand



Fig. 37 C765 Neck ornament (*Rie puta*) from New Zealand

PLATE 14



Fig. 38 C621 Whistle-flute (*Nguru*) from New Zealand



Fig. 39 C623 Bugle-flute (*Putorino*) from New Zealand



Fig. 40 C588 Club/quarterstaff (*Tewhatewha*) from New Zealand

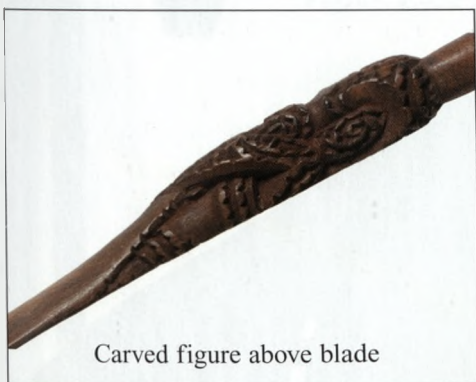
PLATE 15

Fig. 41 C589 Paddle (*Hoe*) from New Zealand

Blade



Manaia figure at head of paddle



Carved figure above blade



Blade (other side)

PLATE 16

Fig. 42 C624 Feeding funnel (*Korere*) from New Zealand



PLATE 17

Fig. 47 C444 Tahitian bow-stave



Fig. 43 C422 *Taiaha*



Fig. 44 C423 *Taiaha*



Fig. 45 C591 *Taiaha*



Fig. 46 1998.H220 *Taiaha*



Fig. 48 C162 Marquesan wooden gorget: a and b



Fig. 49 C067 Tahitian food pounder (*Penu*)



Fig. 50 C584 Hawaiian wickerwork religious figure

PLATE 20



Fig. 51 C702 Hawaiian bark cloth (area of image 60 x 45cm)

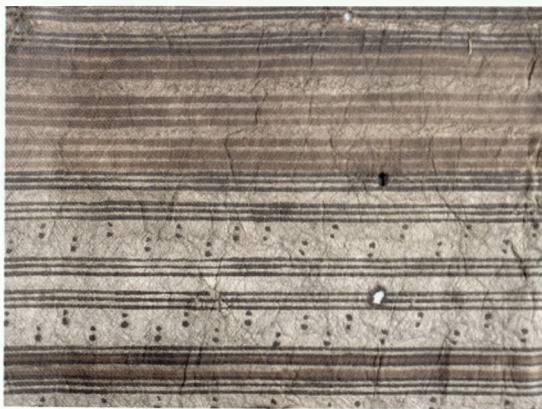


Fig. 52 C703 Hawaiian bark cloth (area of image 15 x 19cm)



Fig. 53 1998.H225 Tongan bark cloth (area of image 55 x 73cm)

PLATE 21

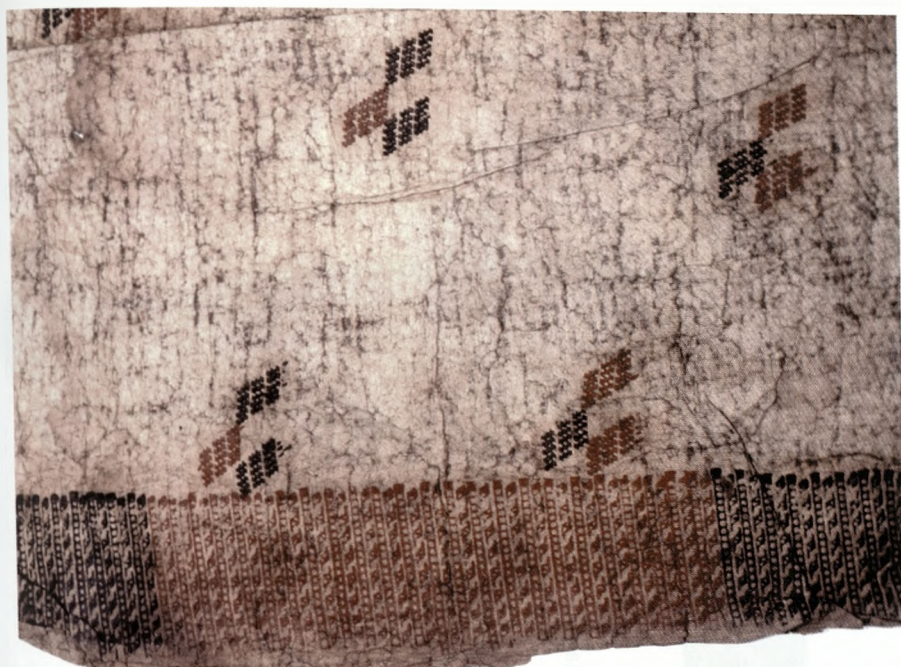


Fig. 54 1998.H239 Hawaiian bark cloth (area of image 30 x 23cm)



Fig. 55 C705 Hawaiian bark cloth (area of image 18 x 24cm)

PLATE 22



Fig. 56 C686 Tahitian nose flute



Fig. 57 G105 North American woodlands paddle

PLATE 23



Fig. 58 G099 Model of an Algonquian-type 'fur trade' canoe



Fig. 59 G113 Aleut cap

PLATE 24



Fig. 60 G003 Pair of moccasins, possibly Huron



Fig. 61 G126 Métis stroud and skin pouch

FROM CENTRAL AMERICA

Fox listed all of these items as originating in St Vincent. If the provenance is correct, then it is possible that they were collected during the Carib wars of 1770-83 and 1795-1805 (which were described by Gullick, 1976). Although spears, bows and arrows rarely inspire interest, these represent rare surviving examples of 18th century Carib culture.

The three separate listings of St Vincent weapons in Fox's catalogue (p. 200) makes it impossible to tally surviving artefacts against individual entries. Several have square labels with information in manuscript, now barely legible.

- | | | |
|------|--|-------------------------------|
| F065 | Arrow or spear | Fox, p. 200, no. 55-59 (part) |
| | Long cane arrow with heavy iron head; fletched with two black feathers bound on with string; nocked; tip blackened; band of string binding near tip of shaft; elongate iron head, fixed in place with pieces of string; cane strip loosely wound round shaft near tip. Length of shaft 132cm, length of head visible 16.5cm. Possibly originally made as an arrow, and converted for use as a spear. | |
| F072 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow fletched in similar style to F065. Cane main shaft, which is nocked; wooden foreshaft; juncture of two pieces bound with string, which is blackened (with pitch?). Length of main shaft 105cm, length of foreshaft visible 37cm. | |
| F071 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F072 but the fore shaft with sixteen biserial barbs; foreshaft with sinuous lines of a black substance; fletching missing. Length of main shaft 127cm, length of foreshaft visible 49cm. | |
| F068 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F072. Main shaft broken; foreshaft with one large barb. Length of main shaft remaining 80cm, length of foreshaft visible 24.5cm. | |
| F069 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F072. Fletching now missing; foreshaft with four series of barbs so carved as to be arranged spirally clockwise from tip (23 barbs in total). Length of main shaft 140cm, length of foreshaft visible 50cm. | |
| F073 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow with cane main shaft, wooden foreshaft, iron head and subapically-fixed iron barb. Nocked but unfletched; head and barb bound to foreshaft with string coated in pitch (?); band of string at juncture of main shaft and foreshaft. Length of main shaft 131cm, length of foreshaft visible 46cm, length of head visible 3cm. | |
| F074 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F073. Length of main shaft 126cm, length of foreshaft visible 45cm, length of head visible 6cm. | |
| F075 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F073. Length of main shaft 142cm, length of foreshaft visible 49cm, length of head visible 3.5cm. | |
| F076 | Arrow | Fox, p. 200, no. 55-59 (part) |
| | Arrow, similar to F073. Length of main shaft 141cm, length of foreshaft visible 51cm, length of head visible 4cm. | |

- F077** **Arrow** Fox, p. 200, no. 55-59 (part)
Arrow, probably originally similar to F073 but main shaft now broken and iron fixtures missing. Length of main shaft remaining 92cm, length of foreshaft visible 47cm.
- F066** **Bow** Fox, p. 200, no. 55-56 (part)
Bow, the stave of a heavy, dark brown wood ('Letta' wood according to early catalogues). In section with a concave face and convex belly. Both tips narrowed, to hold string. Thin string, tied into a loop to fit over tip of bow. Length 170cm.
- F067** **Bow stave** Fox, p. 200, no. 55-56 (part)
Bow stave similar to F066; string missing. Length 160cm.
- F070** **Bow** Fox, p. 200, no. 55-56 (part)
Bow, the stave similar to F066. Thick string attached to stave by being wound around in several turns about 30cm from each end. Length 178cm.

G T Fox's catalogue (1827)

The following list follows that published by Fox, with information interpolated from other sources that may help to identify individual surviving artefacts with those catalogued. The compilation of this evidence has been a crucial part of the re-cataloguing process. The 'marked items' in the *Museum Boulterianum* refer to George Allan's own copy of that book; the *Allan sale catalogue* is that of the auction of 1822; the S.A.N.T. catalogue is Anon (1839); the original of the Franks notebook is in the British Museum (and a photocopy in the Hancock Museum).

Status is listed as 'definitely Allan Museum' only if there are indications of Allan's labels. Other categories of status depend on probability weighed against available evidence.

CURIOSITIES

1. ASIATICK

1. and 2. Chinese Swan Pans, or machines for keeping accounts.

Museum Boulterianum, marked item: p. 52 item 20, 'Swan Pan, or Chinese Counting Table' (7s. 6d.).

Allan sale catalogue: p. 68 lot 120, 'Chinese swan pan, for accounts'; also p. 68 lot 121 (part), 'Ditto [i.e. swan pan]'.

S.A.N.T. catalogue, 1839: listed.

Current location: In Hancock Museum. D124 and D126; two Chinese abacusses.

Status: D124 definitely Allan Museum; D126 almost certainly Allan Museum.

3. Chinese Pagod, curiously carved in Ivory.

4. Do. Ninesi or idol; priced 1 guin. in Mus Boul. Cat. p. 46.

Museum Boulterianum, marked item: p. 46 item 37, a 'Ninise', price 1l. 1s.

Allan sale catalogue: p. 67 lot 111 (part), 'Chinese Pagod, very curiously carved in ivory, 6 inches high'; and p. 67 lot 112, 'Chinese Ninisi or idol, in ivory, 6 inches high'.

S.A.N.T. catalogue, 1839: Two chinese ivory figures were listed: one, 'a figure of a chinese, beautifully carved in ivory, with a deer, a toad, a tortoise and a bird attending him'. The second, 'a chinese embracing a demon, beautifully carved in ivory'.

Franks notebook: 'Two small ivory statuettes (Chinese) neatly sculptured'.

Current location: Both in the Hancock Museum, D118 and D117; ivory carvings of Shoulao and Zhong kui.

Status: Both almost certainly Allan Museum. The use of the word 'Pagod' could be misleading: it does not refer to a Pagoda (i.e. a temple), but equates to 'idol'. The word 'Ninisi' or 'Ninesi' has not been found in any dictionary, but one of the surviving figures is of Shoulao, sometimes called Nanji laoren: could Ninisi be a corruption of Nanji?

5. Do. Steelyards.

There are two dotchins in Fox's catalogue, this and number 10 (*infra*).

Museum Boulterianum, marked item: two 'Chinese Dotchin or Steelyard' are marked – p. 52 item 21, price 2s. 6d., and p. 56 item 142 (which was given to Boulter by Richard Turner of Yarmouth; no price suggested).

Allan sale catalogue: p. 59 lot 6 (part), 'Chinese dotchins or steelyards for weighing money'; also p. 60 lot 24 (part), 'Chinese dotchins'.

S.A.N.T. catalogue, 1839: both listed.

Franks notebook: 'Chinese steelyards, chopsticks & other odds and ends of no interest'.

Current location: In Hancock Museum. D120/D212 and D211; two Chinese dotchins.

Status: D211 is definitely Allan Museum, D120/212 almost certainly Allan Museum.

6. Do. Writing, enamelled on Papyrus.

Allan sale catalogue: p. 62 lot 53, 'Curious Chinese writing, enamelled on the papyrus with gold'.

S.A.N.T. catalogue, 1839: listed as 'Large Hindoo manuscript on papyrus, divided into sections, with red enamel backs'.

Current location: In Hancock Museum. NEWHM: D711; a Burmese manuscript.

Status: Almost certainly Allan Museum.

7. Do. Hat.

Allan sale catalogue: p. 61 lot 45 (part), 'Indian hat'.

Franks notebook: figured; 'Small conical hat of strips of bamboo worked across with finer Do'.

Labels: 'CHINESE HAT', cut from an old-style label, is glued on to the upper surface.

Current location: In Hancock Museum. D757; a Chinese hat.

Status: questionably Allan Museum.

Comment: Although the hat was present in the collection as early as *circa* 1870 (*teste* Franks's notebook), this is no certain indication that it formed part of Allan's Museum. It may, for instance have been donated along with other Chinese material by Captain Collinson in the 1850s.

8. Do. Compass.

Allan sale catalogue: p. 64 lot 76 (part), 'Chinese compass'.

S.A.N.T. catalogue, 1839: present.

Current location: In Hancock Museum, D138. This item is missing. It was listed *circa* 1980 and given a catalogue number, but has apparently not been seen since then.

9. Three Do. Bows and 3 sets of Arrows.

Allan sale catalogue: p. 60 lot 32 (part), 'Chinese bow and arrows'; alternatively, p. 60 lot 33 (part), 'Chinese bow and arrows'. Another alternative could be the Tartar bow and arrows (*vide* no. 20, *infra*).

Current location: Not found. There are several Chinese bows and arrows in the Hancock Museum's collection, but none can be traced to the early collections.

10. Do. Dotchins or Scales.

[see notes to item 5, *supra*.]

11. Persian Knife and Fork, 2 sets, "with 10 other instruments, in a black sheath inlaid with pearl, mounted in metal and gilt." *Ex. Mus. Boulton. Cat.* p. 55, no. 116.

Museum Boultonianum, marked item: p. 55 item 116. Boulton added, 'very curious'. Price 10s. 6d.

Allan sale catalogue: p. 66 lot 106 (part), 'Persian knife and fork with 10 other instruments, tortoiseshell sheath, very curious'; also listed p. 67 lot 109 'Persian knife and fork, with 10 instruments, in a black sheath, inlaid with pearl, mounted in metal gilt, very curious'.

S.A.N.T. catalogue, 1839: listed as 'A chinese knife and chopsticks, and other instruments in a black case'.

Current location: In Hancock Museum. D134.

Status: Almost certainly Allan Museum.

12. Do. Knife and Fork, in a tortoise shell sheath.

S.A.N.T. catalogue, 1839: 'Chinese knife and chopsticks of ivory'.

Current location: In Hancock Museum. D135.

Comment: Confusion is possible because Fox listed two sets of implements under item 11, and a set under item 12, implying a total of three sets. There was only one set listed in the Museum Boultonianum, and Allan may have only ever had two sets in total.

Status: Almost certainly Allan Museum.

13. Three Do. Hooka, or smoaking machine.

Allan sale catalogue: p. 60 lot 30 (part), 'Persian hooka'.

Current location: Missing.

14. Malay Creese, the dagger of the Malays or natives of Malacca, with which they sometimes run a muck.

Allan sale catalogue: p. 69 lot 139 (part), 'Curious Malay crease'.

S.A.N.T. catalogue, 1839: listed.

Franks notebook: Mentions two ordinary Malay krisses with bird handles, one of which *may* have been the Allan Museum item.

Current location: Missing? Neither of the early krisses with bird handles in the Hancock Museum shows any indication of old labels.

15. Hindoo Idol, bronze.

Allan sale catalogue: p. 67 lot 115, 'A beautiful bronze hindoo idol'.

S.A.N.T. catalogue, 1839: listed.

Current location: Missing. Three bronze figures of Krishna in the Hancock Museum were donated by the S.A.N.T., but they appear to form a set rather than being an individual 'idol'.

16. Papyrus M.S., 2 fasciculi, containing the Lord's Prayer in Hindoo characters.

Allan sale catalogue: p. 68 lot 135, 'The Lord's prayer, &c &c. written in Hindoo characters on the papyrus'.

S.A.N.T. catalogue, 1839: listed.

Current location: In Hancock Museum. D275; a Farsi manuscript.

Status: Almost certainly Allan Museum.

17. Sixteen Ivory Balls, one within each other loose, most curiously cut out of one solid piece, beautifully perforated in the carving.

Museum Boulterianum, marked item: page 46 item 55, 'curious fancy carving, in Ivory, containing seven loose balls, cut out of one piece', price 7s. 6d.

Allan sale catalogue: p. 68 lot 131, 'Curious carving in ivory, containing sixteen loose balls, one within another, cut out of one solid piece, beautifully perforated in the carving'.

S.A.N.T. catalogue, 1839: listed.

Franks notebook: 'Carved ivory balls, one within the other D. 3½ in'.

Current location: In Hancock Museum. D119; a Chinese carved ivory sphere with chain.

Status: Almost certainly Allan Museum.

18. Turkish Bow String, for strangling.

Allan sale catalogue: p. 60 lot 30 (part), 'Turkish bow-string'.

Current location: Missing.

19. Do. Bashaw's Tail or Standard. This is a natural horse tail of fine white hair, with the bones included, which is attached to a silver handle, weighing about six ounces.

Allan sale catalogue: p. 60 lot 33 (part), 'Turkish Bashaw's tail or standard'.

Current location: Missing.

20. Quiver and Bunch of Arrows (Tartar?).

Museum Boulterianum, marked item: possibly, p. 76 item 1, 'Ancient Indian Quiver, made of Leather, curiously ornamented, containing eight Arrows pointed and barbed with Iron', price 7s. 6d. and a 'Curious Pouch (to match)', price 2s. 6d.

Allan sale catalogue: p. 60 lot 32 (part), 'Chinese bow and arrows'; alternatively, p. 60 lot 33 (part), 'Chinese bow and arrows'. (*vide* no. 9, *supra*).

Franks notebook: Two quivers are figured, neither is said to be Tartar.

Current location: Missing. There are several quivers of arrows in the Hancock Museum, including one Tartar item, but no indication that they came from the Allan Museum.

21. Spear, Bow and Arrows, from Sumatra.

Allan sale catalogue: p. 59 lot 10, 'Spear, bow and arrows, richly ornamented, from Sumatra'.

Current location: Missing.

22. Indian Basket.

Museum Boulterianum, marked item: p. 76 item 14, 'Basket, curiously made of coloured Indian Grass', price 2s. 6d.

Allan sale catalogue: not listed.

Current location: Missing.

[2. MODERN CURIOSITIES]

[Of antiquarian interest: outside the scope of the present paper]

3. DRESSES, SHOES, &c.

45. Two and a half pairs of Chinese Slippers, made of Cane, with broad Toes, and lined with Linen.

Allan sale catalogue: p. 57, lot 106, 'a pair of ornamented Chinese slippers'; lot 111 'a pair of curious shoes of a chinese mandarin'; lot 112 'ditto'.

Current location: In Hancock Museum. D342, D227, D231; three pairs of Chinese shoes (all three are pairs, there is no single cane slipper labelled as an Allan Museum specimen).

Status: Almost certainly Allan Museum.

46. One Chinese Shoe, with very thick Sole.

Allan sale catalogue: p. 57 lot 113 (part), 'A Chinese shoe'.

Current location: In Hancock Museum. D228; a Chinese shoe.

Status: Almost certainly Allan Museum.

47. One Do. very small, female.

Museum Boulterianum, marked item: p. 52 item 4. price 5s. Two other items of Chinese footwear were also marked: 'Pair of richly ornamented Chinese Slippers' (7s. 6d.) and 'Pair of Mandarin's Stockings' (5s.).

Allan sale catalogue: p. 57 lot 114 (part), 'Shoe of a chinese lady'.

Current location: Missing.

48. Two and a half pairs of Turkish Men's Shoes, richly ornamented, with Toes turned up.

Allan sale catalogue: p. 57 lot 108 (part), 'Ornamented Turkish slipper'.

Current location: In Hancock Museum. D339, D341, D502; five Turkish men's shoes.

Status: Almost certainly Allan Museum.

49. One Pair of Turkish Sultana's Shoes, blue velvet, embroidered with gold.

Allan sale catalogue: p. 57 lot 107, 'Slippers of a turkish sultana'.

Current location: In Hancock Museum. D340; pair of Turkish ladies shoes.

Status: Almost certainly Allan Museum.

[50-52 outside of the scope of the present paper]

53. One French Wooden Shoe, painted blue.

Allan sale catalogue: p. 57 lot 113 (part), 'A wooden shoe'.

Current location: In Hancock Museum. E35; a sabot.

Status: Almost certainly Allan Museum.

[54-55 outside of the scope of the present paper]

56. One Pair of American Maucussons, or Leather Buskins, ornamented with beads and painted straw.

Allan sale catalogue: p. 57 lot 115, 'Two pair of American Maucassons or leather boots, beautifully ornamented with bead and stained straw'.

Current location: In Hancock Museum. G003; pair of moccasins.

Status: Probably Allan Museum.

57. One Pair of Do. with red leather tops.

Allan sale catalogue: (see item 56, *supra*).

Current location: Missing.

[58-59 outside of the scope of the present paper]

60. Leather Frock, ornamented with Tassels, from Cook's River, in North America. – Ex. Lev. Mus. – See Com. to L.M. p.8 no. 24.

The *Companion* to Lever's Museum (p. 8, no 24) reads: 'One of the common close Frocks or Dresses, made of leather, ornamented with tassels, or fringe, and narrow thongs, worn by the inhabitants of Cook's River'.

Allan sale catalogue: p. 61 lot 35 (part), 'Leather frock, painted and ornamented with tassels'.

Franks notebook: 'Gut skin dress or tunic, two'.

Current location: Missing: it is probable that one, or both, of the coats seen by Franks were those presented by Captain Collinson in the 1850s. Labels from former displays indicate that the one Aleut *Kamleika* extant in the Hancock Museum was given by Collinson.

61. Two aprons, worn by Otaheitan Dancing Girls.

Allan sale catalogue: p. 60 lot 34 (part), also p. 61 lot 35 (part), 'Apron made of the fibres of plantain leaf, worn by the dancing girls of Otaheite'.

Current location: Missing.

[62-65 outside of the scope of the present paper]

UTENSILS OF SAVAGE NATIONS

1. FROM NEW ZEALAND

1. Bone Patapatoo, or War Bludgeon.

Museum Boulterianum, marked item: p. 79 item 64, 'another [Patta-pattoo], made of the Bone of a Grampus from ditto [New Zealand]', price 5s.

Allan sale catalogue: p. 60 lot 21 (part), 'Bone Patapatoo'.

Franks notebook: Figured. 'Bone meri about 16 in. long'.

Current location: In Hancock Museum. C630; a Maori *patu paraoa*.

Status: Definitely Allan Museum, as an oval dark patch indicates the former presence of one of George Allan's labels.

2. Wooden Do.

Museum Boulterianum, marked item: p. 79 item 62, 'another [Patta-pattoo] (fiddle-shaped) New Zealand', price 7s. 6d.

Allan sale catalogue: p. 60 lot 21 (part), 'Wooden Patapatoo ... New Zealand'.

Franks notebook: Figured. 'Flat wood meri. L.c. 12 inches' Separately is written, 'Patoe Patoo New Zealand' – possibly a transcription of the display label.

Current location: In Hancock Museum. C636; a Maori *kotiate*.

Status: Definitely Allan Museum, as an oval dark patch indicates the former presence of one of George Allan's labels.

3. Bone Neck Ornament.

Allan sale catalogue: p. 60 lot 21 (part), 'Bone ornament for the neck, New Zealand'.

Current location: In Hancock Museum. C765; a Maori *rei puta*.

Franks notebook: Figured, annotated as to material composing the toggle, cord and pendant.

Status: Definitely Allan Museum, as an oval dark patch indicates the former presence of one of George Allan's labels, and a photograph shows this label to be present up until 1969.

4. Wooden Whistle.

Allan sale catalogue: p. 60 lot 22 (part), 'Wooden whistle from new Zealand, curiously carved'.

Franks notebook: Figured. Franks correctly identified the object, then added 'wooden whistle New Zealand' – presumably a transcription of the display label.

Current location: In Hancock Museum. C624; a Maori *korere*.

Status: Definitely Allan Museum, as Allan's label, very dirty and partly defaced, still survives. The first line reads 'New Zealand Whistle' the rest is illegible, although the whole label was quoted by Fox as reading 'A New Zealand Whistle, that yields a shrill sound, and is worn by the men about their necks'.

Comment: Fox listed two Polynesian 'whistles', this item and one from Hawaii (item 18, *infra*). C624 was misidentified by Allan and others: it is a food funnel, not a whistle. There is no doubt, from Allan's label, that the food funnel equates with Fox's number 4.

5. Oar, or Paddle.

Allan sale catalogue: p. 59 lot 14, 'Oar or paddle from New Zealand'.

Current location: In Hancock Museum. C589; a Maori paddle.

Status: Definitely Allan Museum, as there is an oval patch indicating one of Allan's labels. The ink from this has partly soaked through on to the wood: the words are barely legible, the last line reading 'New Zealand'.

Comment: There are four paddles in the Hancock Museum that are all labelled in some way as being 'Allan Museum'. C589 can be equated with Fox's number 5 from the last line of the label: the others are discussed under 21 (*infra*).

6. War Hatchet.

Allan sale catalogue: p. 59 lot 15 (part), 'War hatchet ... from New Zealand'.

Current location: In Hancock Museum. C588; a Maori *tewhatewha*.

Franks notebook: A *tewhatewha* that was presented to the Newcastle Museum by Wm Moreton is described and figured, then is added 'Another, similar, larger, no feathers. old label on it'.

Status: Definitely Allan Museum, as two of George Allan's labels are still present.

7. Trumpet.

Allan sale catalogue: p. 59 lot 19 (part), 'New Zealand trumpet'.

Franks notebook: Figured, 'Wooden trumpet bound with reed ? binding. L. 2 ft.'

Other citation: figured by Edge-Partington (1895), p. 232.

Current location: In Hancock Museum. C622; a Maori *pukaea*.

Status: Definitely Allan Museum, as part of George Allan's label is present, although the writing is now barely legible.

8. Spontoon, or Spear, carried by the Chiefs of New Zealand, most curiously carved and ornamented, with eyes, formed of the beautiful pearl of the Iris-ear Shell.

Confusion is possible as to the number of 'spontoons' in the Allan Museum. Fox listed: '8. Spontoon; 9. 10. Spontoon and Club, and 11. Do.' This begs the question: are numbers 9, 10 and 11 composite spontoon-clubs, or is 9 a spontoon and 10 a club – if so, what is 11? The question can be resolved by reference to the list of Allan's house contents prepared for auction (Anon, 1822). This calls for three spontoons (p. 59, lots 15, 16, 17) and one club from New Zealand (p. 59, lot 16). It should therefore be assumed that Fox's number 11 is a spontoon.

Museum Boulterianum: One is probably the item marked, p. 78 item 35 'A very singular Carving in Wood, from New Zealand, having a Mask or Face (supposed to be an Idol) on each end of it, with Eyes formed of the Iris Ear-Shell, and are similar to the Masks on the New Zealand Trumpets', price 11. 7s.

Current location: In Hancock Museum. Three Maori *taiaha*, C421, C422 and 1998.H220.

Status: All three are definitely Allan Museum, as they have dark oval marks surviving from former labels.

9. Spontoon (*vide 8, supra*)

10. Club

Allan sale catalogue: p. 59 lot 16 (part), 'New Zealand club'.

Franks notebook: Figured. L. c. 22 inches. The sennit bands are indicated.

Current location: In Hancock Museum. C537; a Fijian *vivia qata*.

Status: definitely Allan Museum, as it has faint but definite marks (more strongly visible under ultra-violet light, but traceable with daylight) surviving from an oval label. An old-style label 'WAR CLUB/ New Zealand [crossed through, and with 'Fiji' added in ms]/ Allan Museum/ Cat. No.' is glued on, partly over the oval patch. Written on the object in ink is 'NHS' and '16'; the number 16 equating to the lot number of a 'New Zealand club' in the auction catalogue of Allan's collection.

11. Do. [i.e. a spontoon] (*vide 8, supra*)

12. Fish-hook of Pearl. – Qu? of New Zealand.

Museum Boulterianum, marked item: p. 80 item 91, 'another [Fish-Hook], of the Black Mother of Pearl, Otaheita', price 2s. 6d., and 'another, 2s.'

Allan sale catalogue: p. 59 lot 8 (part), 'Two fish hooks of pearl, pointed with tortoise shell, Another of pearl, New Zealand'.

Current location: Not found. There are two unprovenanced Pacific Islands fish hooks in the collection: one could possibly be the Allan Museum example, but there is no firm evidence of it being so.

2. OWHYHEE, AND OTHER SANDWICH ISLANDS

13. War Club.

Allan sale catalogue: p. 59 lot 18 (part), 'War-club ... from Owhyhee, curiously carved'.

Franks notebook: Figured. 'Red wood. L. 2-6. 'New Zealand' *.

Current location: In Hancock Museum. C698; A Tongan club.

Status: Definitely Allan Museum, as there is an oval patch indicating the former presence of one of Allan's labels. Written on the club in ink is 'NHS', and in pencil 'Navigator's Island' and 'Tonga'.

Comments: Three Polynesian clubs are called for in Fox: from New Zealand (no. 10 = C537), from Tahiti (no. 31 = C697) and from Hawaii (no. 13). By a process of elimination, C698 equates with Fox's number 13.

14. Wooden Dagger, called Pahooa.

Allan sale catalogue: p. 59 lot 18 (part), 'wooden dagger, from Owhyhee, curiously carved'.

Current location: Missing.

15. Curious Bag.

Allan sale catalogue: p. 61 lot 41 (part), 'Curious bag from Owhyhee'.

Comment: An Aleut cap G113 was illustrated by Franks as 'A flat skin bag ornamented with red and brown embroidery and fringes. ? if engraved in Cook.' If the 'bag' illustrated by Franks originally formed part of the Allan Museum (and there is no proof that it ever did), then the only item listed by Fox with which it could equate is this 'Curious bag from Owhyhee'.

16. Indian God, or Idol. Has been covered with the red feathers of the Hook-billed Red Creeper (*Certhia vestiaria*, Gm. & Lath.) Similar, but better specimens of this Idol, are in the British Museum.

Allan sale catalogue: p. 59 lot 3 (part), 'Indian god from Owhyhee, and mahogany bracket'.

Franks' notebook: Figured. 'Wicker work head, the feathers are all perished. Sandwich Is. (B.M.)'.

Current location: In Hancock Museum. C584; Hawaiian wicker head.

Status: Almost certainly Allan Museum. There is no evidence from old labels that C584 formed part of Allan's collection, but it certainly fits the description. Feather-covered wickerwork figures from Hawai'i are so exceedingly rare that there was never likely to be a second one donated to the Newcastle Museum.

17. Neck Ornament

Allan sale catalogue: p. 60 lot 32 (part), 'Curious neck ornament, Sandwich Islands'.

Current location: Missing.

Comment: Recent curators have identified C688, a *lei niho palaoa*, as this 'curious neck ornament'. However, a label surviving in the Hancock Museum indicates that C688 was donated with the Cresswell cabinets in 1924. Allan's neck ornament may have been a feather *lei* that disintegrated through time and was discarded.

18. Whistle.

Allan sale catalogue: p. 60 lot 32 (part), 'Whistle or call ... Sandwich Islands'.

Current location: In Hancock Museum. Probably either C620 or C621; two Maori *nguru*.

Status: One of the two is questionably Allan Museum, the other one therefore being of unknown provenance. Both C620 and C621 have 'N.H.S.' written on them, in ink, thus date at least to the 1830s.

Comment: It is very unlikely that a whistle from Hawai'i was in Allan's collection. The only musical instruments noted by Cook (1784) were both percussion instruments: 'having neither flutes, nor reeds, nor instruments of any other sort, that we saw, except drums of various sizes'. The whistle listed by Fox had probably been given a wrong provenance. The two most likely candidates for Fox's no. 18 are two, similar, carved Maori *nguru*, differing in size and in carving. Franks illustrated one of these, and commented that there were 'two specimens, 3½ and 4½ inches long'.

An alternative candidate is a *putorino* (C623). This is a simple wooden whistle bound with plaited cordage: it is much more crudely made than other, figured, examples of the type. A paper label is glued on, with a legend in an unknown hand: '590 A musical pipe from the

[illegible – Society or Sandwich?] Islands 61'. Against an Allan Museum origin for the *putorino* is the printed label also glued on it: the first line of an old-style label reading 'MUSICAL PIPE'. As the old-style labels generally follow Fox's nomenclature, it follows that this label should read 'WHISTLE'.

19. Thick Bow, wrapped with platted cordage.

Current location: In Hancock Museum. C444; a Tahitian bow.

Status: Probably Allan Museum, although there is no sign that an oval label was ever present.

Comment: A second 'thick' bow, C443, has also, by tradition, been regarded as being an Allan Museum item. C443 has no cordage, nor any indication by means of old labels, that it was an Allan Museum specimen.

[19, bis] Piece of curious matting.

Museum Boulterianum, marked item: p. 80 item 85, 'Mat curiously wrought, made of the Leaves of the Pandanus, 5½ feet by 4½, Sandwich Islands', price 7s. 6d.

Allan sale catalogue: p. 62 lot 52 (part), 'Piece of curious matting'.

Current location: Missing.

Comment: A mat (NEWHM: C706) has a tie-on label giving the provenance as '?Allan Museum'. There is no indication by other old labels that this mat is an Allan Museum artefact. Assuming that Allan's mat was the one listed by Boulter, C706 can be ruled out, as, at ca 10ft x 6ft, it is much larger than is called for.

3. OTAHEITE AND SOCIETY ISLANDS

20. Nasal Flute. Made of a hollow bamboo, with 2 holes.

Museum Boulterianum, marked item: Two Tahitian flutes were marked in Allan's copy of the *Museum Boulterianum*.

1) On p. 78, item 40, 'A Flute made of Bamboo, neatly banded with fine plaited Twine, which is performed on by the Natives of Otaheite blowing through one of the Nostrils, the other being stopped with the Thumb, 15 in'. long, price 4s. This is two inches shorter than C686.

2) On p. 77 item 4, the dress of a musical boy, 'with his Nose-flute of Bamboo, Otaheite. Park. Journ. Plate 9'. Price 11. 1s. The sennit binding on the flute in plate 9 of Parkinson (1784) does not agree with that on C686.

Allan sale catalogue: p. 59 lot 19 (part), 'Nasal flute ... from Otaheite'.

Franks notebook: Figured. 'Wooden flute. L. 16 inches, bound with cinet'.

Current location: In Hancock Museum. C686; a Tahitian nose-flute.

Status: Definitely Allan Museum, as there is an oval patch indicating the former presence of one of Allan's labels.

21. Paddle, or Oar.

Allan sale catalogue: p. 59 lot 19 (part). 'Paddle ... from Otaheite'.

Franks notebook: Figured. 'Label "Otaheite", red wood, L. 5 ft.'

Current location: In Hancock Museum. Probably G105; North American woodlands paddle.

Status: Definitely Allan Museum, as there are marks of his oval label.

Comment: There are four paddles in the Hancock Museum labelled in some way as being from Allan's Museum. However, Fox's list calls for only two. One can be equated with Fox's Number 5 (*vide supra*), and the other is G105 from North America.

The other two paddles, labelled as being *ex* Allan Museum, are C691 and C693, both from Ra'ivavae. It is highly unlikely that decorated Austral Islands paddles would be in English

collections prior to 1800: they can also be ruled out because the early documentation does not call for them to be present.

22. Stone Adze. This is correctly represented in a plate of a scene at the New Hebrides, in Cook's Voyages, vol. ii. pl. 46. Quere, if the stone be the same as the Punama Stone (so called after one of the New Zealand Islands, where the natives make hatchets &c. of it) which is considered a variety of Jade. See Brit. Mus. Cat. p. 29. It seems basaltic. See also Keate's Pelew Islands, pl. 2. f. 1, 2.

Museum Boulterianum, marked item: p. 79 item 71, 'An Adze, affixed in an ingenious manner to a handle of Wood, with plaited Cordage, Otaheite', price 7s. 6d.

Museum Humfredianum, marked item: A 'stone mallet, Otaheite', page 53, item 97. This was sold, together with a 'wooden ditto' to Clark for 2s. 6d. Alternatively, 'a hatchet or adze, headed with stone, Otaheite', item 99 on the same page. That lot was sold to Roper for 4s.

Allan sale catalogue: p. 59 lot 20 (part), 'Adze fixed to a handle of wood with plated [sic] cordage, Otaheite'.

Franks notebook: Two Polynesian adzes were figured.

Current location: In Hancock Museum. Probably C518; a Tahitian adze.

Status: Questionably Allan Museum.

Comment: There are two items in the collections of the Hancock Museum that have been identified as Fox's no. 22. They are:

1) G098, a club from the American Northwest Coast. This bears an old-style label which once read 'Stone Adze Otaheite Allan Museum'. However, the label has been defaced in recent decades, possibly when it was realised that it is North American in origin. The stone blade of G098 has a superficial resemblance to nephrite, which agrees with Fox's query as to whether it was the 'Punama Stone', but there are several reasons why G098 can not equate to Fox's number 22. The blade is fitted axe-fashion rather than as an adze; the artefact is not from Tahiti; in no way could it be said to be 'correctly represented in a plate of a scene at the New Hebrides, in Cook's Voyages, vol. ii. pl. 46' (Cook, 1777), as Fox claimed, and the stone is fixed to the handle with leather thongs, not plaited cordage thus disagreeing with Boulter's description. It should be concluded that the label was affixed in error.

2) C518, typologically a Tahitian adze. It bears an old label with, in manuscript, 'stone adze fixed to a handle of wood with plaited cordage from Otaheite'. The last two letters on the label, possibly somebody's initials, are unclear: they are RH, or KH, or WW, or KW. There is a striking similarity between the wording on the label present and the description in Boulter's catalogue, suggesting that Allan perhaps did not feel the need to add his own, oval label.

23. Epupa, or sleeping Stool.

Museum Boulterianum, marked item: p. 79 item 47, 'Ebupa or Stool, used as a Pillow, Otaheite', price 5s.

Museum Humfredianum marked item: Lot 100 on page 53 was 'Two stools, used as pillows, from [Otaheite], and New Amst.' It was sold to Gaml[?] for 1s. 6d.

Allan sale catalogue: p. 59 lot 20 (part), 'Ebupa or stool used as a pillow'.

Franks' notebook: Figured by Franks. 'Wood (c.c.) L 2ft 2 in'.

Current location: In Hancock Museum. C674; a Tongan headrest.

Status: Definitely Allan Museum, as there is an oval patch indicating the former presence of one of Allan's labels.

24. Bone Fishing Hook, pointed with Tortoise Shell.

Museum Boulterianum, marked item: p. 80 item 92, 'another [Fish-Hook] Shank-made, of Grampus Bone, backed with Mother of Pearl and pointed with Tortoiseshell, Otaheite', price 7s. 6d.

Allan sale catalogue: p. 59 lot 7 (part), 'Another [fish-hook], shank grampus bone, backed with mother of pearl, and pointed with tortoise shell, from Otaheite'.

Current location: In Hancock Museum. C115. A Tongan fish hook.

Status: Possibly Allan Museum. There are no old labels, but the artefact agrees with descriptions in early catalogues. However, the type is quite common and many Tongan fish hooks are similar in appearance so the attribution to the Allan Museum is doubtful.

25. Two Aprons of Dancing Girls, made of the undressed fibres of Plantain Leaf.

Museum Boulterianum, marked items: 'An Apron, made of the Fibres of the Plantain Leaf, worn by the Girls of Otaheite in their Dances, 5s. Another, stained red and yellow, 7s. 6d. a pair'.

Museum Humfredianum, marked item: Page 53, lot 91, 'A grass apron, worn by the dancing girls of Otaheite', is marked. It was sold to Herman for 3s. 6d, together with 'a matted belt'.

Current location: Missing.

26. Ornaments for Legs of Dancing Girls.

Allan sale catalogue: p. 61 lot 41 (part), 'Ornaments for the legs, worn by the dancing girls at Otaheite'.

Current location: Missing.

27. Two yards of white Cloth.

Museum Boulterianum, marked item: p. 81 item 114, 'another [piece] of thin white Cloth, Otaheite', price 5s.

Museum Humfredianum, marked items: Page 53, item 81, 'A piece of fine white cloth made of the inner bark of a tree, from Otaheite', sold to Herman for 3s. A second piece of tahitian bark cloth marked in the Museum Humfredianum was lot 73 on page 67 'a piece of Otaheite cloth, made of the inner bark of a tree, from its use called the cloth tree'. It was sold to Hurlock for 2s.

Allan sale catalogue: p. 61 lot 48, 'Two yards of white cloth, made of the inner bark of a tree, Otaheite'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

28. Two do. buff. do.

Museum Boulterianum, marked item: p. 81 item 109, 'another [piece of Cloth], Buff-colour, Otaheite, 6 feet by 5', price 7s. 6d. (this could be Fox's no. 28 or no. 29)

Allan sale catalogue: p. 61 lot 48 (part), Another buff colour, 2 yards by 1¼".

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

29. Piece of thick buff Cloth, like fleecy hosiery.

Museum Boulterianum: [see 28, above, for reference]

Allan sale catalogue: p. 62 lot 51, 'Piece of thick buff cloth, resembling fleecy hosiery, from [the Friendly Islands]'; alternatively, p. 61 lot 52 (part), 'Another piece, ditto'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

30. Two yards of white do.

Allan sale catalogue: p. 62 lot 50, 'Two yards of white cloth, from the Friendly Islands'.

Comment: Note the discrepancy between the provenance in the auction catalogue and that given by Fox.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

31. War Club.

Museum Boulterianum, marked item: p. 79 item 57, 'curious War-bludgeon, Otaheite', price 7s. 6d.

Allan sale catalogue: p. 59 lot 14 (part), 'War club from the Friendly islands, curiously carved'.

Franks notebook: Figured. 'Brown wood club (c.c) "Society Is." old oval label'.

Current location: In Hancock Museum. C697: a Tongan club.

Status: Definitely Allan Museum, as his oval label is still present. Allan's label is barely legible, but appears to read 'War Club, from one of the Soc[iety Islands]' as inferred from the entry in the Franks notebook. It is not unreasonable to associate C697 with Fox's number 31.

32. Calabash to carry water in.

Allan sale catalogue: p. 69 lot 144 (part), 'Large calabash shell cup, Ditto curiously carved and painted'; also lot 145, 'Ditto'; also lot 146, 'Calabash shell, 2 cups of ditto'.

Current location: Missing.

Comment: Fox listed six Calabash shells and also two carved specimens among the botanical collection. None has been found.

4. GEORGE'S ISLAND

Fox believed these items to have originated in the island called George's Island, which lies between the Marquesas and Tahiti. However, for a short period early in its post-contact history Tahiti was also known as King George's Island and there is a possibility the items were Tahitian in origin.

33. Three Combs. *See* Cook's Voy. i. tab. no. 21, p. 220.

Allan sale catalogue: p. 60 lot 21 (part), 'Comb made of wood, another of bamboo reeds, another of fish bone, from George's land'.

Current location: Missing. There are three Polynesian combs without provenance (C094, C664 and C667), but no evidence linking any of them to the Allan Museum.

34. Instruments for dressing Cloth.

Allan sale catalogue: p. 60 lot 21 (part), 'Instrument used in George's land to dress cloth'.

Current location: In Hancock Museum. C645; a Polynesian *tapa* beater.

Status: Questionably Allan Museum.

35. Piece of the Cloth.

Allan sale catalogue: p. 60 lot 21 (part), 'Piece of the cloth'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

36. 2 Household Gods, 3 inches long!

Allan sale catalogue: p. 59 lot 6 (part), 'Household god or idol of George's Island'; also p. 59 lot 9 (part) 'Household god or idol from George's Island'.

Current location: Missing.

5. NEW AMSTERDAM, or TONGATABOO, one of the FRIENDLY ISLANDS

37. Matted Bag. (Cook's voy. i. t. no. 21, p. 220) 'Basket made of the fibres of the Cocoa Nut, studded with beads made of Shells and Bones' — *Allan MS.*

Allan sale catalogue: 'Basket made of the fibres of the cocoa nut, studded with beads, New Amsterdam'.

Franks notebook: Figured, 'Satchel bag. 14 by 10 in, of netted brown cord ornamented with a few backs of small helix shells'.

Current location: In Hancock Museum. C740; a Tongan bag.

Status: Almost certainly Allan Museum.

38. Remarkably fine plaited thread of Hair. N.B. in Brit. Mus. the same is marked from Otaheite. See Comp. to L.M. p. 16.

Museum Boulterianum, marked item: p. 81 item 102, 'Fishing-lines made of Human Hair, Otaheite', price 2s. 6d.

Current location: Missing.

39. Piece of stained Cloth, like floor Cloth.

Museum Boulterianum, marked item: p. 81 item 110, 'another [piece of Cloth] of stained Cloth, resembling some of our Floor-Cloths, New Amsterdam, 8 feet by 6', price 10s. 6d.

Museum Humfredianum, marked item: Page 53, lot 85 'a piece of a similar kind of cloth [i.e. bark-cloth], glazed, from New Amst.' It was sold to Yates for 3s. 6d.

Allan sale catalogue: p. 62 lot 49 (part), 'Piece of stained cloth, resembling floor-cloth, New Amsterdam'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

40. — of thin, reddish Cloth.

Museum Boulterianum, marked item: p. 81 item 112, 'another [piece of Cloth] of thin red Cloth, New Amsterdam', price 2s. 6d.

Allan sale catalogue: p. 62 lot 49 (part), 'Piece of thin reddish cloth ... New Amsterdam'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

41. — of thick, stained red and ribbed.

Museum Boulterianum, marked item: p. 81 item 113, 'another [piece of Cloth] of thick stained black and red Cloth, New Amsterdam', price 3s. 6d.

Allan sale catalogue: p. 62 lot 49 (part), '[Piece] of thick cloth, stained red on one side and ribbed, New Amsterdam'.

Current location: Possibly one of several *tapa* panels in the Hancock Museum.

6. From NEW CALEDONIA, a large Island adjoining the NEW HEBRIDES

42. War Club of yellow wood, with eight projecting knotty Processes. See Cook's Voy. v.ii. t. no 20, at p. 120, fig. 7, where it is exactly represented.

Museum Boulterianum, marked item: p.79 item 61 'Curious Patta-pattoo, or War-Bludgeon, New Caledonia', price 6s. 6d.

Allan sale catalogue: p. 59 lot 17 (part), 'War-club from New Caladonia'.

Franks notebook: Figured. 'Buff Wood, 'New Caledonia' L 2-6. N.H.S.'

Current location: In Hancock Museum. C528; a star-headed club from New Caledonia.

Status: Definitely Allan Museum, because his oval label is still present; there are, however, only six 'knotty processes', not eight.

7. AMERICA

43. Stone Hammer for pounding Cassada [cassava]. [Description of method of processing Bread Fruit given]. See comp. to L.M. p. 30.

Museum Boulterianum, marked item: p.79 item 50 'Pestle of Black Basaltes, used for pounding the Bread-Fruit into Paste, Otaheite', price 10s. 6d, and 'Another, different', price 8s.

Allan sale catalogue: p. 67 lot 117 (part), 'Stone instrument for pounding the casada [sic] bread'.

Current location: Possibly C067.

Status: Questionably Allan Museum.

Comment: C067 is a black basalt Tahitian *poi* pounder, figured in the Franks notebook with the data 'Bread pounder, New Zealand' (perhaps a copy of the display label). The pounder is broken in such a distinctive way that there is no doubt that the surviving object is the one figured by Franks. However, there is no certain link backwards from there to the Allan Museum.

44. Scalping Knives.

Allan sale catalogue: p. 60 lot 21 (part), 'Scalping knives and sheath from America'.

Current location: Missing.

45. Fish Spear from Oonalaska, one of the Fox Islands, near Behring's Straits, and Fishing line. It is darted by means of a very singular and ingenious instrument made for the purpose. See Comp. to L.M. p. 22 no. 20.

Allan sale catalogue: p. 60 lot 24 (part), 'Fish spear pointed with bone, barbed, from Onalaska, and fishing line'.

Current location: Missing.

46. Model of a Canoe of Bark, used in the interior of America. Vide ante, no. 5. It is made of the bark of birch sewed together.

Museum Boulterianum, marked item: p. 76 item 20. 'Model of a Canoe, made of Beech-Bark, Hudson's Bay'. price 5s.

Allan sale catalogue: p. 60 lot 29 (part), 'Model of a canoe of bark'.

Current location: In Hancock Museum. G099; a birchbark canoe model.

Status: Possibly Allan Museum.

47. **Leather Frock, from Cook's River, on the N.W. coast of America.** *Vide supra*, curios. no. 60.

48. **Pouch and necklace, from Hudson's Bay.**

Allan sale catalogue: p. 61 lot 41 (part), 'Apron, pouch and necklace, curiously fringed and studded with beads, from Hudson's Bay'.

Current location: In Hancock Museum. G126; a pouch and strap.

Labels: An old-style label housed inside the pouch reads 'Pouch & Necklace Hudson's Bay Allan Museum Cat. No. 48'. This is tied to a label with, in an unknown MS, 'Pouch & Necklace Hudson's Bay'.

Status: Probably Allan Museum.

49. **Conical Cap, from N.W. Coast of America.**

Current location: In Hancock Museum. G122; a hat, probably from the Philippines.

Status: Probably Allan Museum.

50. **Two matted Baskets.**

Museum Boulterianum, marked item: p. 76 item 19. 'Dish made of Beech-Bark, Hudson's Bay', price 1s. and 'Another, larger', price 2s.

Allan sale catalogue: p. 62 lot 54 (part), 'Two curious matted baskets'.

Current location: Missing.

51. **Indian wooden Spoon.**

Allan sale catalogue: p. 58 lot 6 (part), 'Indian wooden spoon'.

Current location: Missing.

52. — **Tortoise Shell Do.** An exactly similar spoon to no. 52, is represented in *Keate's Account of the Pelew Islands*, pl. 4, f.2; qu.? if from thence.

Allan sale catalogue: p. 59 lot 9 (part), 'Indian tortoise shell spoon'.

Current location: Missing.

53. **Collar of Shells (*Bulla Ovum*, *Lin.*) from Nootka Sound.**

Allan sale catalogue: p. 61 lot 47 (part), 'Bracket with two figures and a collar of shells, from Nootka sound'.

Current location: Missing.

Comment: The two figures listed in the sale catalogue could have been the two 'Household god or idol of George's Island' listed as number 36 above. If so, it is likely the collar of shells was also from Tahiti.

54. **Manillo, worn on the wrists by Africans.**

Allan sale catalogue: p. 68 lot 134 (part), 'Manillo, worn by the Africans about their wrists'.

S.A.N.T. catalogue, 1839: Listed.

Current location: Missing.

8. **ST VINCENT'S, West Indies**

A note by Fox bracketing items 55-59 states '*Ex dono* James Gordon, New Court, Temple, London, Dec. 8, 1810'. The question left unanswered was, to whom did James Gordon give the material? Some items at least were in the Allan collection, as they were catalogued as part of the auction of the contents of Blackwell Grange in 1822 (Anon, 1822). There is no record

in the Lit. & Phil. annual reports of Gordon giving material to their collection at that time. Possibly, James Gordon gave the items to George Allan's son, who added them to his late father's collection.

Franks referred to this Caribbean material as 'a number of ordinary arrows, of British Guiana types'.

55. One Spear, 2 Bows of Letta Wood, and 2 Darts.

Allan sale catalogue: p. 59 lot 11, 'Spear, bow of letta wood, and 2 darts, from St Vincent's'; also p. 59 lot 13 (part), 'Bow made of letta wood'.

Current location: In Hancock Museum (see below).

56. One Bow and 2 Darts.

Allan sale catalogue: p. 59 lot 12, 'Bow and 2 darts, from St Vincent's'.

Current location: In Hancock Museum (see below).

57. Five barbed Spears.

Current location: All in Hancock Museum.

Franks notebook: A note 'Various Fiji or Friendly Is. spears n.p.' probably refers to these items.

Current location: In Hancock Museum. Some of C465, C466, C467, C569, C570 (some of these may have been donated by Captain Wilson in 1799); Tongan spears.

C570 is divided into four prongs at the tip, and is not barbed. It has an old-style label: 'Spear, Friendly Islands, Allan Museum'. There is no sign of an oval label.

The other four spears have backwardly-pointing barbs:

C569 and C466 have oblong patches, the size of an old-style label.

C465 has no sign of old labels.

C467 has a badly-worn old-style label, 'St Vincent's Allan Museum. Cat No.'

58. Three Spears or Arrows.

Allan sale catalogue: p. 59 lot 13 (part), 'Two spears pointed with iron, barbed, St. Vincent's'; alternatively, p. 60 lot 32 (part), 'Three spears from St Vincent's'; alternatively, p. 60 lot 33 (part), 'Three spears from St Vincent's'. [some may equate to Fox's no. 57].

Current location: In Hancock Museum (see below).

Note on St Vincent weapons:

Taking together items 55, 56 and 58 there should be three bows, one spear, four 'darts' (presumably, arrows) and three 'spears or arrows' – a total of eleven artefacts. The relevant surviving material catalogued as being *ex* Allan Museum includes three bows (F066, F067 and F070) and ten arrows (F065, F068, F069, and F071- F077) – a total of thirteen artefacts.

59. One Knife.

Current location: Missing

9. From LABRADORE, [sic] the Country of the Esquimaux

60. 1 Pair of Snow Shoes, large.

61. 1 Pair of Do. small.

Museum Boulterianum, marked item: p. 76 item 22, 'Pair of Snow-Shoes, Lapland', price 2s. 6d. (Either this, or Fox's no. 61.)

Allan sale catalogue: p. 60 lot 29 (part), 'Snow shoes'; alternatively, p. 60 lot 31 (part), 'Snow shoes'.

Current location: There are two pairs of snow shoes (G092 and G119) that possibly originated in Allan's Museum, but there is no evidence by way of old labels to link them to Allan. They possibly came to the Hancock Museum much later, as there have been several donations of Inuit material (including snowshoes) in the 19th and 20th centuries.

62. Two bows, represented in Parry's voyage.

Allan sale catalogue: p. 60 lot 31 (part), 'Two Esquimaux's bows'.

Current location: An Inuit bow (G124) is by tradition *ex* Allan Museum, but there is no evidence by way of old labels to link it to Allan. Like the snowshoes, it possibly came to the Hancock much later.

63. Model of a Canoe, Do.

Museum Boulterianum, marked item: p. 76 item 25, 'Small Model of a Canoe covered with Seal-Skin, and a Man in his Seal-Skin-Dress, with Implements for Fishing, from Eskimaux', price 5s.

Current location: There are two sealskin-covered model kayaks (G090 and G091) in the Hancock Museum. It is impossible to say which, if either, is an Allan Museum item.

64. Fish-hook of Wood, pointed with Bone.

Allan sale catalogue: p. 59 lot 7 (part), 'Fishhook of wood pointed with bone'.

Current location: Missing.

65. Cane Basket.

Current location: Missing.

69 [*sic*, should be 66]. **A Stone Knife**, precisely similar to the article we have before enumerated as a Flint Celt, is figured in *Keate's* Pelew Islands, at pl. 3, fig. 2.

Current location: Missing.

ACKNOWLEDGEMENTS

I would like to thank the librarians of the Durham University Library, Lit. and Phil., McGill University, Newcastle Central Library, National Library of Scotland, National Museum of Scotland, Natural History Society of Northumbria, Natural History Museum (London), Newcastle University Library, and the S.A.N.T. for providing access to, and loan of, various volumes. Also to Dr Ngarino Ellis (University of Auckland) for information on Maori material culture; Professor Peter Isaac for the loan of his copy of Keate (1803); Jonathan King (Museum of Mankind) for comments and for arranging a photocopy of the Franks notebook; June Holmes (N.H.S.N.), Adrienne Kaeppler, Mariella Marzano and Hermione Waterfield for discussions and Roger Hawkins for information on the Humble family. Photography by Tony Richardson and Graham Steane.

REFERENCES

1. Unpublished

FRANKS, A W (Undated [1867-1871]). Notebook containing 51 folios of pencil and ink drawings of collections in Newcastle and Edinburgh (Museum of Mankind, London: catalogue no. SS19).

2. Published

ANON (1790). *A companion to the Museum, (late Sir Ashton Lever's) removed to Albion Street, the Surry[sic] End of Black Friars Bridge*. pp 118. London: no publisher stated.

- (1792). *A Catalogue of the Genuine Museum of Natural and Artificial Curiosities, of William Constable, esq.; late of Yorkshire, Chiefly collected by the late Marmaduke Tunstall, Esq.* pp 14. London: Christie.
- (1794). *Laws of the Literary and Philosophical Society of Newcastle upon Tyne with a list of members.* Pp 18. [Newcastle: Literary & Philosophical Society].
- (1800). *Seventh year's report of the Literary and Philosophical Society of Newcastle upon Tyne.* Pp 17. Newcastle: [Literary & Philosophical Society].
- (1806). *Catalogue of the Leverian Museum ... the Sale of the Entire Collection.* Pp 296 + 17. London: King & Lochee. (Reprinted in facsimile in 1979 by Harmer Johnson & John Hewett, London).
- (1822). *A catalogue of the elegant Household Furniture, Valuable Paintings, Books and Museum, consisting of Birds, Reptiles, Insects, Scarce Shells, Fossils, Spars, Antiquities, and a variety of Curiosities, which will be sold by auction at Grange, near Darlington, by Mr W. Crow.* Pp 69. Darlington: Crow.
- (1838). List of Presents. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne* 2: 414-432.
- (1839). *A catalogue of the manuscripts, books, Roman and other antiquities, belonging to the Society of Antiquities of Newcastle upon Tyne.* Pp 95. Newcastle: Hodgson.
- AUGUSTIN, S (1993). *Kunstsachen von Cooks Reisen. Die Sammlung und ihre Geschichte im Völkerkundemuseum Herrnhut.* Pp 200. Hamburg: Staatliches Museum für Völkerkunde.
- BEAGLEHOLE, J C (ed) (1955). *The journals of Captain James Cook on his voyages of discovery. The voyage of the Endeavour 1768-1771.* Pp cclxxxiv + 684. Cambridge: Hakluyt Society at Cambridge University Press.
- (1961). *The journals of Captain James Cook on his voyages of discovery. The voyage of the Resolution and Adventure 1772-1775.* Pp clxiv + 1021. Cambridge: Hakluyt Society at Cambridge University Press.
- (1967). *The journals of Captain James Cook on his voyages of discovery. The voyage of the Resolution and Discovery 1776-1780.* Pp ccxxiv + 1647 in two volumes. Cambridge: Hakluyt Society at Cambridge University Press.
- BEST, E (1924). *The Maori. Memoirs of the Polynesian Society* 5. Two volumes: pp xv + 528, ix + 637.
- BOULTER, D [1793]. *Museum Boulterianum. A catalogue of the curious and valuable collection of natural and artificial curiosities in the extensive museum of Daniel Boulter, Yarmouth.* Pp 165. London: Gardner *et al.*
- BOYD, M J and CREDLAND, A (1984). 'Hippocephaloides of Dr Plot', or how one thing leads to another. *Geological Curator* 4 (1): 43-44.
- BOYD, M J and JESSOP, L (1998). A 'Truly Amiable Gentleman': new light on the life and work of Marmaduke Tunstall (1743-1790) of Wycliffe, North Yorkshire. *Archives of Natural History* 25: 221-236.
- BRIGHAM, W T (1898). Report of a journey around the world undertaken to examine various ethnological collections. *Bernice P. Bishop Museum Occasional Papers* 1 (1): 1-72.
- (1899). Hawaiian Feather Work. *Memoirs of the Bernice Pauahi Bishop Museum* 1 (1): 1-81.
- (1903). Additional notes on Hawaiian Feather Work. *Memoirs of the Bernice Pauah Bishop Museum.* 1 (5): 3-19
- BROWN, S (2000). *Spirits of the Water. Native Art collected on Expeditions to Alaska and British Columbia, 1774-1910.* Pp 207. Seattle: University of Washington Press.
- BUCK, PH (Te Rangi Hiroa) (1957). *Arts and Crafts of Hawaii.* (Bernice P. Bishop Museum Special Publication no. 45). Pp. xv + 606. Honolulu: Bishop Museum Press.
- BUSHELL, S W (1924). *Chinese Art.* Two volumes, pp xi + 142; xii + 157. London: Victoria and Albert Museum.
- CLUNIE, F (1977). Fijian Weapons and Warfare. *Bulletin of the Fiji Museum* 2. Pp. ix + 121.
- COOK, J (1777). *A Voyage towards the South Pole, and round the World.* Two volumes, pp. xl + 378; 396. London: Strahan, Cadell.

- COOK, J and KING, J (1784). *A Voyage to the Pacific Ocean*. Three volumes, pp. xcvi + 421; 548; 556. London: Nicol.
- DIXON, G (1789). *A voyage round the world ... in the King George and Queen Charlotte*. Pp. xxxix + 360 + 47. London: Goulding.
- DUFF, R (1969). *No Sort of Iron*. Pp. 91. Christchurch: Art Galleries and Museums Association of New Zealand.
- EDGE-PARTINGTON, J (1895). *An album of the weapons, tools, ornaments, articles of dress &c. of the natives of the Pacific Islands. Second Series*. Pp 238. (Issued for private circulation by J. Edge-Partington and C Heape).
- ELLIS, W (1829). *Polynesian researches, during a residence of nearly six years in the South Sea Islands*. Two volumes; pp. 536 & 576. London: Fisher, Son & Jackson.
- FEEST, C F (1992). North America in the European *Wunderkammer* before 1750. *Archiv für Völkerkunde* 46: 61-109.
- FONG, M H (1983). The iconography of the popular gods of Happiness, Emolument, and Longevity (Fu Lu Shou). *Artibus asiae* 44: 159-199.
- FORCE, R W and FORCE, M (1968). *Art and Artifacts of the 18th Century*. Pp 232. Honolulu: Bishop Museum Press.
- FOX, G T (1827). *Synopsis of the Newcastle Museum, late the Allan, formerly the Tunstall, or Wycliffe Museum*. Pp xxii + 313. Newcastle: Charnley.
- GULLICK, C (1976). The Black Caribs in St Vincent: the Carib War and its aftermath. *Actes du XLII^e Congrès International des Américanistes. Congrès du Centenaire* 6: 451-465.
- HALL, H U (1921). A book of tapa. *The Museum Journal* 12 (1): 8-29.
- HAUSER-SCHÄUBLIN, B and KRÜGER, G (eds) 1998. *James Cook. Gifts and treasures from the South Seas. The Cook/Forster collection, Göttingen*. Pp 351. Munich & New York: Prestel.
- HAWKESWORTH, J (1773). *An account of the Voyages undertaken by the order of His Present Majesty for making Discoveries in the Southern Hemisphere*. 3 Volumes. Pp 456, 393, 410. London: Strahan and Cadell.
- HICKLING, G (1979). The Natural History Society of Northumbria 1929-1979. *Transactions of the Natural History Society of Northumbria* 45: 1-54.
- HUMPHREY, G (1779). *Museum Humphredianum. A catalogue of the large and valuable museum of Mr George Humphrey*. Pp 168. London: Paterson.
- JESSOP, L (1999a). The fate of Marmaduke Tunstall's collections. *Archives of Natural History* 26 (1): 33-49.
- (1999b). Bird specimens figured by Thomas Bewick surviving in the Hancock Museum, Newcastle upon Tyne. *Transactions of the Natural History Society of Northumbria* 59 (3): 65-82.
- JESSOP, L and BOYD, M J (1999). An "uninteresting scrawl" ... some correspondence of Marmaduke Tunstall (1743-1790). *Archives of Natural History* 26: 121-142.
- JESSOP, L and STARKEY, J (1998). *No Contemptible Workmanship. Material Culture of the Pacific Region represented in the Hancock Museum, Newcastle upon Tyne*. Pp 110. Newcastle: Tyne & Wear Museums.
- JOPPIEN, R and SMITH, B (1985a). *The Art of Captain Cook's Voyages. Volume I, the voyage of the Endeavour 1768-1771*. Pp. xv + 246; New Haven and London: Yale University Press.
- (1985b). *The Art of Captain Cook's Voyages. Volume II, the voyage of the Resolution and Adventure 1772-1775*. Pp. xiii + 273. New Haven and London: Yale University Press.
- (1988). *The Art of Captain Cook's Voyages. Volume III, the voyage of the Resolution and Discovery*. Pp. xxi + 669. New Haven and London: Yale University Press.
- KAEPPLER, A L (1975). *The fabrics of Hawaii (bark cloth)*. Pp 16 + 55 plates. Leigh on Sea: Lewis.
- (1978a). *Artificial Curiosities. Being an exposition of native manufactures collected on the three Pacific voyages of Captain James Cook, R.N.* (Bernice P. Bishop Museum Special Publication no. 65). Pp. xvi + 293. Honolulu: Bishop Museum Press.
- (1978b). *Cook Voyage Artifacts in Leningrad, Berne, and Florence Museums*. (Bernice P. Bishop Museum Special Publication 66). Pp 186. Honolulu: Bishop Museum Press.

- KEATE, G (1803). *An account of the Pelew Islands, situated in the western part of the Pacific Ocean; composed from the journals and communications of Captain Henry Wilson*. Pp xvii + 244 + 72. London: Nicol.
- KING, J C H (1981). *Artificial Curiosities from the Northwest Coast of America. Native American Artefacts in the British Museum collected on the Third Voyage of Captain James Cook and acquired through Sir Joseph Banks*. Pp 117. London: British Museum Publications Ltd..
- (1997). Franks and Ethnography. Pp136-159 and 346-351 in Caygill, M & Cherry, J, *Nineteenth Century Collecting and the British Museum*. London: British Museum Press.
- KRUSENSTERN, A J von (translated by R B Hoppner) (1813). *Voyage round the world, in the years 1803, 1804, 1805 & 1806 ... on board the ships Nasheda and Neva*. Two volumes, pp xxxii + 314; 414. London: Murray.
- LANGSDORFF, G H von (1813). *Voyages and travels in various parts of the world, during the years 1803, 1804, 1805, 1806 and 1807*. Two volumes, pp. xxi + 362; 386. London: Colburn.
- LAUFER, B (1925). Ivory in China. *Field Museum of Natural History, Department of Anthropology, Leaflet 21*: 1-78.
- LITTLE, S (1988). *Realm of the Immortals. Daoism in the arts of China*. Pp 67. Cleveland: Cleveland Museum of Art.
- LOVETT, R (1899). *A History of the London Missionary Society 1795-1895*. Two volumes, pp. xiv + 832; vi + 778. London: Frowde.
- LYSAGHT, A M (1979). Banks's Artists and his *Endeavour* collections, in Mitchell, T C (ed) *Captain Cook and the South Pacific. The British Museum Yearbook*. 3: 9-80.
- NICHOLS, J (1812-1815). *Literary anecdotes of the eighteenth century*. 9 volumes. London: for the author.
- OLDMAN, W O (1946). Skilled handiwork of the Maori, being the Oldman collection of Maori artifacts illustrated and described (second edition). *Memoirs of the Polynesian Society* 14, pp 41.
- PARKINSON, S (1784). *A journal of a voyage to the South Seas, in His Majesty's Ship the Endeavour ... to which is now added, remarks on the preface, by the late John Fothergill*. Pp xxiii + 212. London: Dilley and Phillips.
- PHILIPSON, J (1981). The Sebroke Crozier and the Nineteenth-Century Newcastle Museum. *Archaeologia Aeliana* (5th series) 9 : 317-332.
- PHILLIPS, R B (1992). *Trading Identities. The Souvenir in Native North American Art from the Northeast, 1700-1900*. Pp xvii + 334. Seattle & London: University of Washington Press.
- PORTLOCK, N (1789). *A voyage round the world ... in the King George and Queen Charlotte*. Pp. xii + 384 + xl. London: Stockdale and Goulding.
- RUSSELL GODDARD, T (1929). *History of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*. Pp xvi + 195. Newcastle: Reid.
- SHERBORN, C D (1905). Note on the 'Museum Humfredianum,' 1779. *Annals and Magazine of Natural History*. 16: 262-264.
- SILVERTHORNE, H (1936). Society Islands pounders. *Bernice P. Bishop Museum Occasional Papers* 6 (17) : 3-17.
- SOUTHWELL, T (1909). Notes on an eighteenth Century Museum in Great Yarmouth. "Museum Boulterianum". *The Museums Journal* 8: 110-123.
- TANNER, J (1999). *From Pacific Shores. Eighteenth-century Ethnographic Collections at Cambridge. The Voyages of Cook, Vancouver and the First Fleet*. Pp viii + 90. Cambridge: University of Cambridge Museum of Archaeology and Anthropology.
- VANCOUVER, G (1801). *A voyage of discovery to the north Pacific ocean, and round the world ... in the Discovery sloop of war, and armed tender Chatham*. Six volumes: pp. 410; 418; 435; 417; 454; 412. London: Stockdale.
- WATSON, R S (1897). *The History of the Literary and Philosophical Society of Newcastle-upon-Tyne (1793-1896)*. Pp xii + 384. London: Walter Scott.
- WHITEHEAD P J P (1969). Zoological specimens from Captain Cook's voyages. *Journal of the Society for the Bibliography of Natural History*. 5 (3): 161-201.

(1977). Emanuel Mendes da Costa (1717-91) and the *Conchology, or natural history of shells*. *Bulletin of the British Museum (Natural History). Historical Series*. 6 (1): 1-24.

WILSON, J (1799). *A missionary voyage to the southern Pacific Ocean performed in the years 1796, 1797, 1798*. Pp. c + 420. London: Chapman.

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**ANNUAL REPORT
OF THE
COUNCIL
FOR THE
YEAR ENDED 31 JULY 2003**

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

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2001 - Dr M McKay, P Ranner
2002 - J Angel, M Turner

(2) Nominated by sections: H H Chambers (library), J Holmes (archives - resigned), J Simkin (botany), Dr G A L Johnson (geology), Dr C P F Redfern (ornithology and Gosforth Park), Dr B J Selman (publications), S Lowe (mammals)

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Coquet Island Research Sub-committee: Dr C P F Redfern, D C Noble-Rollin

Lindisfarne National Nature Reserve:

Advisory Committee: D G Bell

Wildfowl Panel: D C Noble-Rollin

Museum Management Committee:

Dr D Gardner-Medwin, D C Noble-Rollin, I D Moorhouse, Dr B J Selman

STAFF D C Noble-Rollin (Secretary), M Hughes (office manager), S Carter

GOSFORTH PARK NATURE RESERVE Warden: P Drummond

THE HANCOCK MUSEUM Senior Curator: I Watson
Curator and Principal Keeper, Natural Sciences: S McLean

* Died during the report year

ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING 31 JULY 2003

The Natural History Society of Northumbria is a registered charity and is governed by the rules of the Charity Commission. The members of Council are all Trustees, nine of them having special responsibility in relation to the land, buildings and collections. The Trust Deed dated 30 December 1965 was last amended following the annual meeting on 28 November 1997. Our rules state that 'The objects of the Society shall be the encouragement by every means of the study of natural history in all its branches; the protection of the local flora and fauna; the maintenance and extension of the Society's library and collections; the publication of *Transactions* and other scientific papers, the organisation of lectures, discussions and field meetings and co-operation with other scientific societies or associations with similar objects'. The following annual report outlines the main achievements of the year in relation to the charity's objects.

INTRODUCTION

It is a pleasure to introduce this Annual Report of the Council. The year ending 31 July 2003 has been an exciting one, and we hope that you will find much of interest in what follows.

Good steady progress has been made on membership which has increased by fifty-five giving the Society a total year-end membership of 841. This is a very real achievement and thanks are due to all who have helped – particularly to all those members who have encouraged friends to join. Members are the lifeblood of the Society and without a steady inflow of new recruits we cannot expect it to flourish.

A considerable amount of time and effort has been put into seeking grants to help increase our activities and to enable us to do more. June Holmes and David Noble-Rollin worked extremely hard on an application to the Heritage Lottery Fund for funds for the archives. To everyone's delight a grant of £45,000 was awarded to the Society for a project over three years. Part of the money is to go towards publicising the archives, which will, of course, result in publicity for the Society. Also pleasing was the grant of £2,000 obtained through Tyne & Wear Museums Services from the Heritage Lottery Fund towards 'The Many Faces of Bewick', an exhibition in the Hancock Museum in which the Society played a major role. For our coastal research project we were very pleased to receive two grants of £4,000 each from the Sir James Knott Trust and Northumbrian Water towards the work on the Farne Islands over the next two years. We have also received a number of other smaller grants and donations during the year. These are mentioned under the appropriate sections of the report.

Although it was disappointing that Newcastle-Gateshead were unsuccessful in the bid to become European City of Culture, the University submitted a bid for the Combined Museums project (incorporating the Hancock, Shefton and Museum of Antiquities) to the Heritage Lottery Fund at the end of June. Feedback is currently awaited. This is an important project for both the Society and the museum. Members of Council, particularly David Gardner-Medwin, Brian Selman and Ian Moorhouse, contributed to the bid preparation and to ensuring that the interests of both our members and of the collections were protected. A large amount of time was invested in the preparation of a detailed agreement with the University. For their own good reasons, the University decided at the last moment not to sign the agreement with the Society until they had taken legal advice, and that is still the position at the end of the year. However, as owners of the Hancock, our agreement to the proposals will be necessary if the project is ever going to come to fruition.

At the last Annual Meeting, Douglas Johnson, one of our members, was unanimously elected as honorary treasurer. Prior to his retirement from full time employment last year, Doug had been the Treasurer of Newcastle City Council and we can count ourselves very fortunate to have a person of this calibre as an honorary officer. His beneficial presence in the management of the Society has already been felt. We are very grateful to Doug for taking on this vital role and wish him well in the post.

The remainder of the report is now for you, the members, to read. It chronicles great days in the field – what birdwatcher will ever forget seeing merlin, marsh harrier and hobby all in one day

(on a field trip to Yorkshire) – and reveals the tremendous breadth of interest within our Society, from 'Scum and Slime' as one botany talk was entitled, through cetacean watching to ornithological research and geology via many other aspects of the natural world. But then, this is, after all, exactly what the Society is about!

And, perhaps best of all, most of these activities are down to the enthusiasm of our volunteers many of whom put in huge amounts of time to provide you with a wealth of fascinating activities in which to participate. Our thanks to them all as well as to David, Martin and Siu in the office without whom we could not cope!

MEMBERSHIP

The total membership on 31 July 2003 (with 2002 figures in brackets) was 841 (786). This was made up of 6 (7) honorary members, 43 (41) life members, 491 (466) members who receive *Transactions*, 259 (241) members who do not receive *Transactions*, 29 (19) associate members, 0 (0) schools and 13 (12) complimentary members. This shows an overall increase of fifty-five members over last year, which has turned around the recent decline in membership and it is hoped that this trend can be continued into the next year. Thirty-four people also make payments under long-standing bankers' orders ranging from £2 to £16, made when these amounts were the current subscription rates, and they are regarded as donors and not members.

The Council reports with much regret the death during the year of eight members: Mr R V H Benson (1949), Mrs M Nelson (1972), Mr R H Hay (1973), Mr N B Cox (1974), Mr J E Miller (1977), Mr E Fawcett (1977), Mr D Stobart (1980) and Mr D F D Adamson (1993).

As this report was being prepared we were very sorry to hear that Mr R W T Thorp (1948) had died on 3 August 2003 at the age of eighty-eight years.

ANNUAL MEETING

The annual meeting was held on 29 November and Lord Ridley presided. The annual report and financial statement were adopted unanimously and the president and vice-presidents were re-elected. It was also with great pleasure that Ian Moorhouse was able to propose the election of Douglas Johnson, a member of the Society since 1993, as our honorary treasurer. Douglas Johnson is also the honorary treasurer of the Northumberland Wildlife Trust and the Literary and Philosophical Society. He was elected unanimously and it is hoped that he will enjoy his association with the Society in his new capacity.

Council proposed the election of two new members, Janet Angel and Michael Turner. Janet was elected to the Society in 1992 and has worked as a volunteer for many years, particularly concerned with correlating the members' logs from Gosforth Park. She is also very active in the mid-week botany group and undertakes the organisation of its programme. Michael was elected to the Society in 1998 and his particular interest is in ornithology. He is involved in monitoring the effect on wildlife of the restoration of Saltwell Park in Gateshead.

After the business of the meeting, the museum staff, who had prepared some exhibitions of some of the less well-known collections, took members to different areas of the 'back' of the museum. Samples of the bone collections were seen with Paddy Cottam, coin collections with Les Jessop, some of the recent accessions of geological material with Sylvia Humphrey and some unusual skins with Eric Morton, including a Buffy fish owl, *Ketupa ketupa* that was used to confirm the occurrence of this rare species in India. The members who went round were absolutely fascinated by this glimpse into the variety of the collections and Council thanks the museum staff for putting on such an excellent display.

COUNCIL

The Society's officers and members of Council are listed on page 4. The Council met as usual on four occasions during the year in October, January, April and June to discuss the normal business. There were also two extra Council meetings on 16 April and 6 June to deal with matters arising from the University's bid to the Heritage Lottery Fund. These meetings were

arranged so that Council could assess the proposals for the Cultural Quarter and included presentations by members of the University Cultural Quarter team.

During the year the following elected members resigned by rotation, John North Lewis, David Gardner-Medwin and John Walton. Alec Coles resigned when he became the Director of Tyne & Wear Museums and June Holmes also resigned during the year. The Council would like to thank them for their help and advice. The following were in attendance at Council meetings: June Holmes after resigning continued to represent the interest of the Archives at Council meetings and Iain Watson and Steve McLean represent Tyne & Wear Museums. In addition the Secretary and Office Manager attend all Council Meetings.

PUBLICATIONS

The final part of volume 62 (part 3) was published in November 2002 and contained several papers on natural history. These are as follows: 'The distribution, size and structure of northern brown argus butterfly *Aricia artaxerxes* populations in North East England' by S Ellis; 'The importance of exposed riverine sediments for beetles (coleoptera) in Northumberland' by M D Eyre and M L Luff; 'The future of farm grassland as a diverse, productive environment' by R S Shiel; 'Specimens of bird species now threatened, or made extinct in recent times, in the collections of the Hancock Museum Newcastle upon Tyne' by L Jessop and R H Stobbart; 'The parasites of pastureland leatherjackets (*Tipula* spp., Tipulidae: Diptera) in the North East of England and their potential for biological control' by M K Er, B J Selman, G R Port and A Gökce and 'Dental anomalies in the Chillingham wild white cattle' by B Ingham. This was followed in November by volume 63 part 1 'The annual report for 2002', 63 part 2 'Birds on the Farne Islands in 2002', again compiled by Robin Harvey and edited by Margaret Patterson and, in June, part 3 '18th century ethnographic collections in the Hancock Museum' by Les Jessop, a beautifully illustrated volume of some of the fascinating artefacts in the museum. The Council would like to thank Brian Selman and Margaret Patterson for the editing of the *Transactions* and Joan Holding for supplying the art work for maps and diagrams, including the cover for Volume 62 part 3.

OFFICE MANAGEMENT

Staff

David Noble-Rollin is secretary of the Society and is in overall charge of the office and the running of the Society. He reports to the chairman and Council and the main part of his job is to implement the decisions of Council. The areas that he has been concentrating on during the year have been the acquisition of grant aid to help the Society's financial position. This included working with June Holmes on the archive project, with Chris Redfern on grant applications for the ringing group, and looking into the possibilities of grant aid to Gosforth Park. His other work is on preparing programmes, reports and bulletins and making certain that these come out on time. During the year he has been assistant editor of the *Transactions* and prepared all this year's publications, which included two large issues, one of a mixture of papers and one of the ethnographical collections. A fair amount of his spare time is taken up in doing voluntary work with the ringing group.

Martin Hughes Martin has continued to work in the Society office throughout the year. His enthusiasm and dedication to the Society becomes more apparent as time goes on. The bulk of his work is in dealing with the membership and the day-to-day correspondence and queries that come into the office. He has taken on the role of promoting the Society and ensuring that our membership is increasing. No-one can get out of the office these days without joining! Members will also be aware that he undertakes a great deal of voluntary work for the Society including leading many of the field trips, a big commitment to the ringing group and generally helping out in any areas that appear to need his assistance.

Siu Carter Siu's main duties are still the day-to-day finances and helping Martin to maintain the membership database. She also deals with much of the correspondence generated by the

Secretary. During the year she has put on an exhibition in the museum of her special edition prints inspired by the Hancock's Egyptian collections.

Volunteers

The Society is very grateful for the enormous amount of work that is undertaken by members in a voluntary capacity. We are particularly grateful to the members who work on a regular basis for the Society, usually contributing from half a day to two days a week of their time. Some of these volunteers are mentioned under the area of this report concerned with their work, however a number help with the running of the office and preparation of the publications. Without this constant help it is difficult to see how we could complete so many of our tasks. The following have all devoted their precious time to the running of the Society during the last year: Graham Ashley, Hugh and Stella Chambers, Margaret Evans, Barbara Harbottle, Joan Holding, June Holmes, Ian Johnston, Michael Kerr, Simon Lowe, Margaret Patterson, Nigel Sprague, Graham Steane, Ann Stephenson, Anne Wilson and Rita Wolland.

There are also a large number of other volunteers whose contribution may not be as frequent but is nevertheless of great importance to the smooth running of the Society. We would like to take this opportunity to thank particularly the thirty-six deliverers who, every time there is a bulletin or *Transaction* to send out, walk the streets of our towns delivering our mail and consequently saving the Society a great deal of money in postage. There are also a number of members who sit on internal Society committees, preparing winter programmes and summer field meetings for the sections and also adding their expertise to the management of Gosforth Park. The Council of the Society would like to thank them all for their efforts.

MUSEUM MANAGEMENT COMMITTEE

This committee reports to the Society's Council and the University's Museums and Galleries Board. The Society has four representatives on this committee, shown on page four of the report. During the year Roger Stobbart resigned due to ill health and was replaced by Brian Selman. We would like to thank Stobbart for all his input into this committee and are pleased to report that he is now recovered and back at work in the Museum helping with curation of the collections.

The Chairman of the Museum Management Committee, Eric Cross, has been put in overall charge of the preparation and organisation of the Cultural Quarter project which involves the creation of a combined museum including the collections of the Hancock, Shefton Museum, Hatton Gallery and Museum of Antiquities. Throughout the year there have been numerous meetings to discuss the plans and the necessary funding. The Society's Council nominated Ian Moorhouse, David Gardner-Medwin and Brian Selman to look after the interests of the Society and its collections and report back to Council. The culmination of this year's efforts has been the preparation of a bid to the Heritage Lottery Fund that was completed by June 2003. It is not expected that the outcome of this application will be known until December this year. However the planning will continue and we hope that this will lead to a successful conclusion of this tremendous opportunity for the Museum.

Iain Watson and Steve McLean have continued to manage the Museum successfully and to attract both exhibitions and the public. An outline of the exhibitions is shown below. They have also put a great deal of effort into the Cultural Quarter bid, burning the midnight oil with all the other participants in this great enterprise.

Hancock Museum

Despite an impressive range of exhibitions and events at the Museum, visitor figures for the academic year were disappointing at 77,293. A number of factors are having an adverse effect on the Museum's ability to maintain and increase its audience. Not least of these is the difficulty in securing true 'blockbuster' exhibitions, which can attract a large and broad audience. The Museum is also facing pressure from other venues which are competing directly with our traditional market. At least one other venue in Newcastle, for example, is now hosting large-scale natural science exhibitions. These combined with the fact that the Museum requires

major investment in order to re-develop its entire service and remain competitive in the current market place, are all affecting its attraction to the public.

Nevertheless, a great deal has been achieved this year. Major funding has been secured towards new gallery developments, and the exhibition programme has been as busy as ever. Considerable progress has been made in collections management and documentation and, of course, staff have been extensively involved in the preparation of a major development bid to the Heritage Lottery Fund as part of the University's Cultural Quarter proposals.

Major Exhibitions

Shark! (13 July 2002 - 2 March 2003)

This exhibition, which explored the natural history of sharks, was designed and created in-house with collaboration from the Yorkshire Museum and the Blue Reef Aquarium in Tynemouth. It utilised full-size models, including a great white shark, live sharks and video footage from the BBC Blue Planet series. There were also a considerable number of impressive specimens from the national collections, including large fossil sharks from the Natural History Museum in London and a variety of extinct and modern shark specimens from The Royal Museum of Scotland in Edinburgh. This exhibition was supported by the Natural History Museum, London, National Museums of Scotland, University College London, National Museums and Galleries of Wales, National Museums and Galleries on Merseyside, Birmingham Museum, Yorkshire Museum, Blue Reef Aquarium, The Shark Trust, BBC Worldwide, LWT, Universal Music Ltd and University of Glasgow Zoological Museum.

The Upright Ape (5 April - 7 September 2003)

The exhibition was launched at the Museum to coincide with the release of the BBC television series, *Walking with Cavemen*. The main exhibits were produced by the Yorkshire Museum but impact was significantly enhanced by the addition of mammoth material from Oxford and specimens from the Museum's own collections, including a skeleton of an elephant and the Chillingham cattle which had not been on display for over fifteen years. This was supported by Yorkshire Museum, National Museums of Scotland, Oxford Brooks University, Donald Baden-Powell Quaternary Research Centre and National Museums of Wales.

Other Exhibitions

No Evil Star by Marion Coutts (11 July - 31 August 2002)

A large-scale video-projected installation in the bird gallery of the Museum. This was supported by Locus+.

Under 4s' Activity Centre (28 September - 22 November 2002)

A temporary installation of displays and educational resources which was used as a 'test-bed' for the development of The Den which opened in July 2003.

Everything He Ever Said! (4 December 2002 - 2 February 2003)

An exhibition celebrating the 40th anniversary of the death of Sparkie Williams the famous talking budgerigar. This exhibition attracted an incredible amount of publicity including BBC Radio Scotland, BBC Radio East Midlands, BBC Radio Newcastle, Radio Ontario and Tyne Tees TV and appeared in most regional and some national newspapers. Produced by local artists, William Heard (VANE) and Geoff Weston (Newcastle College) and grant-aided by the Arts Council.

Hibernate at the Hancock (15 February - 11 May 2003)

A small exhibition outlining the plight of captive bears throughout the world and supporting the work of the World Society for the Protection of Animals (WSPA) Liberty Campaign. This was supported by The Bear Factory, WSPA, numerous local celebrities and businesses.

A Burnish'd Throne (24 May – 13 July 2003)

An exhibition of special edition prints based on Ancient Egypt by local artist Siu Carter and grant-aided by the Arts Council.

The Many Faces of Bewick (26 July – 5 October 2003)

This exhibition, curated by June Holmes (Natural History Society) to coincide with the 250th anniversary of the birth of Thomas Bewick, included the loan of the James Ramsay portrait of Bewick from the National Portrait Gallery, as well as the unique assemblage of a range of portraits from institutions and collections throughout the region. The exhibition received some extremely favourable press coverage including reviews in the national press. This was grant-aided by the Heritage Lottery Fund, Arts Council and Sir James Knott Trust and supported by the National Portrait Gallery, the Bewick Society, Newcastle City Library, Literary and Philosophical Society of Newcastle, University of Newcastle, University of Northumbria, and the Laing Art Gallery.

Touring exhibitions and new displays

Claws!

The Museum's touring exhibition *Claws!* completed its tour to Truro on 29 September 2002, where it was a great success. After eight years of touring, the exhibition has finally been dismantled. *Claws!* was displayed at the following sites: Barrack Street Museum Dundee, Bolton Museum, Discovery Museum Newcastle, Dorman Museum Middlesbrough, Gloucester Museum, Hancock Museum, Kirkleatham Old Hall, Oldham Museum, Peterborough Museum, Plymouth Museum, Royal Cornwall Museum Truro, South Shields Museum, Sunderland Museum, Warrington Museum and the Yorkshire Museum. It was seen by approximately 1.5 million people!

The Den

This project, led by our Education Officer, Gillian Mason, was completed on 16 July when The Den was opened by the main financial sponsors. Funding was provided by The Northern Rock Foundation, NEMLAC and The Tyne and Wear Museums Business Partners. Following consultation with project partners (nurseries, libraries and early years advisors) the Den was designed to provide an interactive learning experience for young children (up to the age of 7). This new facility has been very well received by general visitors and nursery groups alike and, as part of the funding package received from the Northern Rock Foundation, a part-time gallery 'explainer' will be appointed in the near future to act as facilitator for groups using the Den. The Den is situated in the 'Green Room' gallery adjoining the main exhibition gallery.

Fossil Zone

We were delighted to achieve significant funding for the re-development of the balcony displays above the Earth Galleries. HLF awarded a grant of £50,000 and DCMS/Wolfson a grant of £65,000 with £2,000 coming from Tyne and Wear Museums Business Partners. This is a major achievement for the Museum and will allow us to replace part of the existing 'A-Z of Geology', which is now over forty years old. The project includes the documentation and re-storage of the fossil collections currently stored in 102 cabinets beneath the existing displays. Eric Johnson, an ex-BGS geologist, was employed on a six-month contract to assist with this project, which will be completed by the end of March 2004.

Bewick Gallery

As the lead partner in a consortium of societies and institutions associated with Thomas Bewick, a grant of £50,000 was made to Tyne & Wear Museums through the HLF 'Your Heritage' scheme, £13,000 of which has been directed to the re-display of the Bewick gallery currently next to the lecture theatre. Our intention is to relocate this display to one side of the

balcony above the Earth Galleries (the opposite side to the new Fossil Zone). This project is also scheduled to be completed by the end of March 2004.

Education Activities – Schools

The Ancient Egypt and Ancient Greek Living History play ran for sixteen weeks during the autumn and spring terms, attracting 8,500 children. The Upright Ape exhibition was supported by a special event during which children met a caveman and heard stories about his life.

Education Activities – Informal Activities

Thirty-six days of Family Fun events took place during the year: They were as follows:

The Shark exhibition was supported by a series of activities including: Fishy Mini-Mosaics and Marine Mobiles (6 August 2002), Sea, sand and sky (13 August), Shark-o-ramas (20 August), Clay Crustaceans (27 August), Shark Art (23 and 24 October), Shark Art and Marine Mosaics (25 and 26 February 2003).

The Sparkie William exhibition was supported over the Christmas period by a special quiz-trail through the Museum and Mr Windbags the magician provided four shows over the weekend of 18 and 19 January. Special activities were run to coincide with 'The Hibernator at the Hancock' event: Hibernator at the Hancock (15 and 16 February), Teddy Bear Timeline (17 February), Teddy Bear Portraits (19 February), Teddy on a T-shirt (20 and 24 February), Become a Bear (27 February) and Teddy Bear Tales (28 February). Easter events supported the Upright Ape exhibition and included: Cave Art (14 and 16 April) and Meet your Ancestors (14 to 18 April and 21 to 25 April), both these events were funded through the Newcastle Science Festival. Whit Holidays included a wide range of popular activities including: Bouncy Castle, Face Painting and Mr Windbags the Magician (27 May), Bouncy Castle, Face Painting and Create a Cave Scene (28 May), Fossil Roadshow, Live Snakes and Insects (29 May), Fossil Roadshow, Live Snakes and Insects, Monkey Business (30 May). Finally the summer programme until the end of July 2003 included: Famous Faces (29 July) and Fly a Kite for Bewick (31 July).

Adult Education and Training

Staff taught on the collections management module of the University of Newcastle's Museum Studies course and also ran a five-week programme on 'An Introduction to Museology' for third year Zoology students. Staff also presented four sessions on Bird Conservation to first year Biology students. Supervision and tutorial sessions were provided for two Museum Studies students undertaking placements at the Museum and a further two students from the post graduate Museum and Artefact Studies course at Durham University also undertook placements. The Centre for Lifelong Learning used the Museum's Egyptian collections for teaching purposes and as part of the Vertebrates Evolution and Diversity course (AES256), a hundred students used the bird collections at the Museum during a gallery visit. In addition, approximately a hundred undergraduate students from the University of Newcastle attended visits to the Museum to view and learn about the fossil plant collections. The Museum's ethnographic collections were also the subject of a teaching seminar delivered to twenty students from the Durham University anthropology course. PGCE students from the University of Newcastle visited the Museum to learn about teaching science for Key Stages 1-3. The Senior Curator has also taught on the MA in Museum and Artefact Studies at the University of Durham.

Collections Management

Despite the ever increasing pressures on staff, many this year specific to the number of large-scale projects under way, a great deal of work has taken place on the collections. Some of the more notable projects are highlighted below.

Work is now well under way to digitally photograph and re-describe specimens for the current TWM New Opportunities Fund (NOF) digitisation project, IMAGINE. Over 1,000 specimens

from the Hancock collections have been photographed for this project, represented by approximately 1,500 images. Staff are now working on the enormous task of writing captions for each of the specimens in order to make the information about them as accessible as possible to the public when accessing them through the World Wide Web. Linda Morris has spent a great deal of time working on this project and her role was recently taken over by Daniel Gordon as she moved to work on the Bewick project. In addition, as part of the new Fossil Zone project, the fossil collections within the current balcony store (approximately 30,000 specimens) will be re-located to a new purpose built store within the Museum. Eric Johnson was employed to work on this project and has almost completed the documentation of this part of the collection prior to its move to the new store, which was constructed at the end of Abel's Ark.

Lucy Ashdown from the postgraduate Museum and Artefact Studies course at Durham University continued to catalogue the birds' eggs. James Lowe, a postgraduate Museum Studies student at the University of Newcastle, spent four weeks reorganising and cataloguing the Achanarras fish collections.

Volunteers and staff continue to work on the backlog in the cataloguing of eggs, birds, plants, fossils and bones. Russell Society volunteers are systematically working their way through the Hancock mineralogy collection, adding information where appropriate and assessing the collection's remedial conservation and cleaning requirements.

A new phase of work has begun on the enormous task of rationalising and standardising the MODES collections databases (which currently contain over 200,000 records). This work is being co-ordinated by TWM's Registrar. New records are currently entered in a standardised way, but this project will modify and upgrade records that were transferred to the MODES databases from the old SPIRES database when TWM took over the management of the museum in 1992. Much of this work is already complete but it is hoped that significant further progress can be made over the coming year. This is particularly important given the existing plans to make data available over the internet in the future.

The spirit collections are currently being re-located from an unsuitable exterior building to the rear of the Museum into a new 'fire-secure' store within it. The collection will undergo a complete conservation audit and subsequent cleaning and re-spiriting programme in order to bring it up to current standards in the care of biological material.

Staff have also updated the archaeology computer records and computerised the old card index system for this part of the collection.

Finally, the North East has been selected by Government agency Resource to be the pilot area for the launch of its Phase III Registration scheme. The necessary documents have now been completed by staff at the Hancock and lodged with NEMLAC before presentation to Resource. It is important that the Museum achieves Phase III Registration as this recognises our professional status both within the Museum community and the wider sector as a whole.

Research

Several researchers have visited the Museum over the last year. An edited selection of these is described below.

Anne Warren and Jillian Garvey from La Trobe University, Melbourne, Australia, have made two separate visits to study the internationally important fossil Rhizodont fish collections and Lesley Hendra has been researching the Bowman Herbarium and archive. Andre Delsaerd, Honorary President of the Belgian Society for Conchology, based at the Royal Belgium Institute of Natural Sciences in Brussels, has been studying the Angas gastropod collection.

Geoff Hilton of the RSPB is co-ordinating a project to locate the unknown breeding and moulting grounds of slender-billed curlews, by using stable isotope analysis of the feathers of museum specimens. Sample feathers from our museum are being used in the project. Other feathers have been obtained from Copenhagen, Paris, Vienna, Florence and Bologna.

A researcher from the University of York visited to study our holdings of wasps, staff from the Oriental Museum in Durham have been investigating the archaeology collections, and a Durham University PhD student has been using the Egyptology collections to look for object repairs made in antiquity. There has also been some interest in the archive collections, particularly the Winch correspondence.

A researcher visited to investigate the albatross specimens held at the Museum and University researchers working on Egyptian excavations came to study our holdings of Middle Eastern shells. Peter Lurz from the University is using our holdings of red squirrels to investigate the question of sub-speciation and we have also had the Mammal Society looking at the possibility that some of the water shrews in the collection are a British sub-species. Finally, we have had numerous requests, too many to list here, for loans of specimens from the collections for research purposes. The Hancock has by far the largest number of research loan requests of any of the museums in Tyne and Wear, indicating the undoubted research importance of the collections.

Arts and Humanities Research Board (AHRB)

A number of meetings took place with the Arts and Humanities Research Board (AHRB) which was conducting site visits to AHRB-funded Museums. These include the Museum of Antiquities, the Hatton Gallery and the Hancock Museum. A great deal of effort was spent showing AHRB the sort of important research work that takes place at the Museum, but it is unlikely that our situation, where the funding that the University receives from AHRB comes to an end in 2005, will be re-assessed until the next funding round in 2007.

Regional Museums Hub

The North East Regional Museums Hub, led by TWM (and including the Hancock Museum), has been selected as one of the three 'Phase One' Hubs to take forward *Renaissance in the Regions*. This means that the Hub partners in the North East will receive substantial funding to increase capacity, build audiences and extend delivery of museum services to the region. It is a massive vote of confidence in the region, in the Hub, in its partners (TWM, Beamish, The Bowes Museum and Hartlepool), and indeed in the relationship that exists between our Museums and our Single Regional Agency (NEMLAC). The Hancock will shortly benefit through extra education provision provided from the employment of four new assistant education officers throughout TWM (one member of staff will be based for three days a week at the Hancock). This is only the first phase of funding and support for other aspects of our operation, including potential collections work, will be decided later this year.

Important Physical Improvements to the Museum

Library Ceiling

The ceiling in the Library has been replaced following major deterioration. The work, commissioned and implemented by the University of Newcastle, has been completed. In addition, the re-decoration of the library itself has significantly improved this part of the Museum.

Lecture Theatre

The lecture theatre has been completely re-decorated and a new sink has been installed. This, combined with the re-upholstering of the seating last year, has significantly improved the appearance of the lecture theatre and it is hoped that this may also provide more hiring opportunities.

Developments

Staff at the museum, as well as the Council of the Society, have undertaken extensive work in order to assist the University of Newcastle in the preparation of a major bid to the Heritage Lottery Fund for the development of a Cultural Quarter (which includes a major

re-development of the Hancock). Some extremely exciting ideas have been generated and, if successful, will undoubtedly place the Museum at the forefront of visitor attractions and research facilities in the North East of England. The Stage 1 application was submitted to HLF on 30 June and of course work continues on the plans for the development. It is hoped that the University will be notified of the outcome at the end of 2003.

Table 1
Grants and Support

The Museum has once again received a considerable number of grants and other support.

Project	Source	Amount £
Displays, Exhibitions and Collections		
Fossil Zone	DCMS/Wolfson	£65,000
	Heritage Lottery Fund	£50,000
	University Conservation Fund	£1,000
	TWM Business Partners	£2,000
Locus + residency	Arts Council	£3,050
Representing Bewick	Heritage Lottery Fund	£50,000
Many Faces of Bewick	Arts Council	£1000
	Sir James Knott Trust	£1000
A Burnish'd Throne	Arts Council	£1000
The Den	Northern Rock Foundation	£13,500
	NEMLAC	£9,000
	TWM Business Partners	£2000
Education		
Science Festival Programme	Science Festival Fund	£2300

Staffing

It was with much sadness that it was reported earlier in the year that John Connell, our Senior Attendant, died after a fight with cancer. John has been greatly missed since his death and our thoughts continue to be with his wife and family. Deborah Hunter was later appointed as Senior Attendant and, although she would be the first to wish that it had been in better circumstances, our congratulations go to her for achieving this promotion. As is becoming more common these days, in the light of a variety of project-funded initiatives, we have yet again had a number of temporary staff working for us this year. Their contribution has been essential to the success of the Museum. Linda Morris has continued to provide invaluable assistance with the numerous projects undertaken over the last year including the New Opportunities Fund (NOF) digitisation project, the Bewick project and the Shark and The Upright Ape exhibitions. Eric Johnson (an ex-British Geological Survey geologist) was appointed on short-term contract to work on the Fossil Zone project, and Daniel Gordon, a recent graduate from Oxford University, was appointed on short-term contract to continue to work on the NOF digitisation

project. Angus Thompson joined us temporarily from Arbeia Roman Fort to bring our attendant staff back up to its full complement.

The current permanent staffing complement is:

Iain Watson (Senior Curator)
 Fiona Fenwick (Senior Curator's Assistant)*
 Steve McLean (Curator, Principal Keeper (Natural Sciences), Keeper of Geology)
 Les Jessop (Keeper of Biology - based at Sunderland Museum)
 Sylvia Humphrey (Assistant Keeper, Geology - based at Sunderland Museum)
 Eric Morton (Assistant Keeper, Biology)
 Nicola McNicholas (Biology Assistant)
 Gillian Mason (Education Officer)
 Sheryl Muxworthy (Press and Marketing Officer)*
 John Pratt (Chief Attendant)
 Deborah Hunter (Senior Attendant)
 Mark Cutts (Attendant)*
 Anthony Goodfellow (Attendant)*
 Alan Lister (Attendant)*
 Angus Thompson (Attendant)
 (*indicates part-time)

Short-term Contract Staff

Daniel Gordon: NOF Digitisation Project
 Eric Johnson: Fossil Zone Project
 Linda Morris: Bewick Project

Volunteers

Once again the Museum has benefited from the tremendous work undertaken by a considerable number of volunteers and work placement students who have given up their own time to contribute in a variety of important ways. Our sincere thanks for their continued and invaluable support. They are:

Elin Bornemann	Palaeontology curation /exhibitions	Alex Magin	Education support
Trevor Bridges	Mineralogy curation	Joan and Jim Malligan	Reptile educational events/animal care
Ron Cook	Botany/oology curation	Michael Mann	Insect events/animal care
Paddy Cottam	Osteology curation	Alan Pringle	Mineralogy curation
Jess Fermie	Palaeontology curation	Roger Stobbart	Entomology and bird curation
Michael Frankis	Northumberland bird records	Lucy Storey	Education support
Lawrence Heslop	Geology curation	Robert Tyer	Education support
Ann Hobson	Education support	June Waites	Education support
June Holmes	Archive collections		
Clare Loughney	Education support		
Susan McLean	Education support		

Selected Acquisitions

Pharangeal teeth of a Chub (Tony Tynan, Ryton), blackbird skeleton (Vincent Lawford, Colchester), seven Maltese coins (David Gardner-Medwin, Northumberland), pair of beaded moccasins and a resin model totem pole imitating argillite (Les Jessop, Sunderland), axe from southern Africa (Mr Lowdon, Whitley Bay), two kukris and two Nigerian knives (Mr I Hughes, Newcastle), six decorated gourds from South America (Ann Bowes, Bristol), collection of Frit Flies made by Alan Ibbotson (Brian Selman, Northumberland), mineral collection (Mary Grey, Northumberland), *Stigmara* fossil (John Scott), two boxes of UK minerals (Trevor Bridges, Northumberland), Coelacanth fossil from Quarrington Quarry (Miss Gomersall, Northumberland)

LIBRARY

This year has seen the Library virtually closed for six months from the end of January. Because of the deteriorating condition of the ceiling and in particular the cornice, the room was declared unsafe. After a scaffold-supported floor was erected above the shelf stacks, limited access was allowed and some sections became accessible under protective plastic sheeting. The problems inherent in this sort of repair to a listed building meant that it was not until May that the ceiling was repaired. The scaffolding was removed by the end of June after painting to that level was completed and new lighting fitted. Now by the end of July the complete library is available again and ready for the mammoth task of cleaning its 10,000 books. The University estate office staff arranged, organised and carried out the work and, despite some of the frustrations involved, were a pleasure to work with. The ceiling repairs and the decorating have transformed the library into a pleasant working environment and we must thank all those concerned.

The direction of library affairs was controlled by the Library committee, which meets four times a year. The members are Hugh Chambers (chairman), Paddy Cottam (mammals), Peter Davis (marine biology), David Gardner-Medwin (history of natural history), Trevor Hardy (geology), June Holmes (archives), David Noble-Rollin (ornithology) and Trevor Walker (botany).

This year 101 books were added. Sixty-eight were donated and we must thank all those who gave so generously to the Society. One donor who deserves particular mention was W Ralph Watson who gave us twenty-one geological books, mostly covering Scotland and including the notable 1907 *Geological structure of the North-West Highlands* by B N Peach and other Geological Survey Memoirs. Six offprints and papers were also donated.

Purchases were limited by financial constraints but the Collins New Naturalist's series has been maintained with the four issued *Moths*, *Nature Conservation*, *Lakeland* and *British Bats*. Other purchases that were in the 'must have' category included *The Quaternary of Northern England*, *The New Atlas of the British Flora*, *The Breeding Birds of Cumbria*, *The BTO Migration Atlas*, ten booklets from Scottish Natural Heritage in the Landscape Fashioned by Geology series, *The Geology of the Morpeth District*, Eric Ennion's, *A Life of Birds* from The Wildlife Art Gallery and Matt Ridley's *Nature via Nurture*. In addition to these another twelve books were purchased.

More than 394 items of serial publications (journals, transactions etc.) were received from more than eighty sources by exchange, subscription and donation. All these were recorded, scanned for any articles or papers that are particularly relevant to the Society and then shelved, to be available ultimately for binding.

The library continued to be serviced by the office staff; the binding of journals and periodicals was handed over by Ian Johnston to Margaret Evans and this year twenty volumes were bound to become a permanent part of our collection. Margaret also dealt with the recording of incoming periodicals and all the work involved in the exchange arrangements we have with other organisations throughout the world.

In addition to Ian Johnston and Margaret Evans, other volunteers gave valuable assistance during the year, in particular Stella Chambers and Trevor Hardy, and the Society thanks them all for their indispensable work.

The Library Evening, held on 31 January, was devoted to reminiscences of the life of Grace Hickling, distinguished naturalist and our Honorary Secretary for thirty-eight years. Her friend and associate Derek Shannon gave the talk most ably. He based it on the obituary he wrote at the time of her death and which was published in our *Transactions*, embellished by personal details of her life. On a bitterly cold winter evening it was attended by forty members, with a number braving the snow to travel from Alnwick and even further north. After the talk, photographs and items of memorabilia were viewed in the Council Room, expertly arranged by June Holmes. It was a most enjoyable and successful evening and all concerned must be congratulated for their efforts.

ARCHIVES

Cataloguing and research work on the archives was severely disrupted by the closure of the library; volunteers had to either halt their work or find other accommodation within the office.

However, this lull in the normal work of the Archivist provided an opportunity for the Society to prepare a carefully considered 'Your Heritage' grant application, with the intention of employing a part-time archivist for three years and providing funds for conservation and research.

A successful application was made to the Heritage Lottery Fund in March 2003 and the Society was delighted to be awarded a grant for £45,000 with the new *Archive Project* starting on 28 July 2003. The main requirement expressed by the HLF in giving the grant is for the Archivist to publicise and promote our archival material more widely as a reference tool for students, researchers and the general public.

To fulfil these criteria an event was organised with the local City Guides based at the Tourist Information Office. On the evening of 30 July 2003 the Museum was opened allowing a group of thirty members of the public access to the Council Room to see an exhibition of the original watercolour and pencil drawings of Thomas Bewick. The visitors were extremely enthusiastic and enjoyed seeing original archive material.

Further Open Day 'Archive Events' are planned for September 2003 through the Civic Trust as part of our commitment to Heritage Open Days and Archive Awareness Month.

Another major grant from the Heritage Lottery Fund was awarded to a number of partners to celebrate the 250th birthday celebrations of Thomas Bewick, our famous wood engraver and naturalist. This grant was administered by Tyne & Wear Museums.

The Natural History Society was allocated £2,000 from this grant to prepare the exhibition *The Many Faces of Bewick* (26 July-5 October). This exhibition was organised to look at the Bewick phenomena in a different way, not purely at his work but at the man himself as other artists and contemporaries saw him. A collection of over forty portraits, engravings and images of Bewick from youth to old age helped bring this eminent artist to life. Loans were generously made by the Laing Art Gallery, The Literary and Philosophical Society, The National Trust, the Pease Collection at the City Library and the National Portrait Gallery. In addition two delightful contemporary paintings were provided for the exhibition, a modern view of Bewick's workshop by watercolour artist Peter Quinn and a drawing of Bewick's dog Witch by wildlife artist James Alder. Many of the items required major conservation work before they could be framed, involving numerous paper and easel conservators throughout the North East. The Society's oil painting of Bewick by Ramsay, after having some conservation work for the exhibition, was photographed and used for much of the publicity surrounding the events. This conservation work was funded by the Sir James Knott Trust.

The exhibition opened with a flurry of interest from the media and continues to attract attention, generating some excellent publicity for the Society.

During the year June Holmes continued as Honorary Archivist managing the work in the archives and supervising the volunteers. There are currently three volunteers working diligently on archive material. Ann Stephenson, who is transcribing the letters of John Hancock, Barbara Harbottle, who is cataloging the watercolour drawings of Margaret Dickinson and Nigel Sprague, who is preparing an early members database. With the re-opening of the library it is hoped that more volunteers will come forward to offer their expertise in the field of archival research and enjoy our collections for themselves.

In our on-going efforts to publicise our diverse and interesting archives to the public a number of other venues have been used. A selection of items were photographed and utilised by Tyne & Wear Museums for the new IMAGINE website project; a taster selection can now be found on the internet at www.imagine.org.uk.

Also working closely with the Newcastle City Libraries and Information Service the Society provided a number of images for a new book published in July 2003 on *Thomas Bewick* by Glendinning, Flowers & Flowers. Colour plates of some of Bewick's finest watercolours held in our collections grace the centre pages.

The watercolour painting of the Cartonnage of Bakt-Hor-Nehkt, recently restored by the department for the conservation of Fine Art, Northumbria University, has been framed and is now on display in the Land of the Pharaohs Gallery.

This has been a very significant year in the management of the archives. We have made it our duty to raise the awareness of and promote our archives as part of the North East's natural history cultural heritage. Continuing with this important task will now be made much easier over the next three years with the aid of the generous grant from the Heritage Lottery Fund.

FINANCE

During the year, income exceeded expenditure by £10,684, in contrast to last year's deficit of £8,587. This was largely the result of a high level of donations, including £8,000 for coastal research which has been only partly spent, the balance being reserved for such research in future years.

A sign of promise for the future is the growth in membership numbers, with subscription income increasing to £21,611 compared to £19,537 last year. Direct Debit collection will be offered to all members shortly.

Expenditure was reduced from last year, largely because of low spending on Farnes research and on repairs and renewals, although all heads have been tightly controlled throughout the year.

The Society's investments continue to be managed by Brewin Dolphin Securities producing a net realised gain of £11,476. Over the first part of the financial year, the stock market continued to perform poorly. In more recent months, performance has improved and partially reversed earlier unrealised losses. However, by the year end the recovery had not been sufficient to eliminate all of those earlier unrealised losses and the figure stood at £14,188 in the accounts compared to £129,095 in the previous year. The overall value of the portfolio stood at £484,903 (plus £45,037 cash) at 31 July 2003 compared to £514,279. The cash of £45,037 is ready for re-investment in the market at an appropriate juncture. This explains both the apparent overall decline in the portfolio and the high balance of cash the bank.

Financial Reserves Policy

It is the policy of the charity to maintain unrestricted funds, which are the free reserve of the charity, at a level which equates to approximately one year of unrestricted expenditure. This provides sufficient funds to cover management, administration and support cost and to respond to emergency applications for funds which arise from time to time. Unrestricted funds were maintained at a higher level than this through the year.

Risk Management

The Council as Trustees are assessing the major risks to which the charity is exposed, in particular those relating to its operations and finances, in order to be satisfied that systems are in place to mitigate the exposure to the major risks. The financial regulations approved by Council in the previous year have been in operation throughout this period.

CONSERVATION

Copies of several planning applications were received for comment during the year. Our responses to these are reported to Council and planning now appears as a standing item on Council agendas.

Several applications on which we commented were later withdrawn by the applicants, such as that for a new all-weather racecourse at Gosforth Park (it would have had potentially harmful effects on listed grassland and on the drainage to the lake). Others such as a plan for a permanent holiday chalet park not far from the Long Nanny (where little terns breed) were refused by the Local Authority.

Bit by bit the extensive development of North Tyneside around the northern part of the A19 motorway, on which we commented at a public inquiry, is being put in place. Many of the applications no longer really concern wildlife, but we need to remain vigilant for the few which do, and urge changes when we can. Even more importantly, the long-expected development of the area north of Sandy Lane, and the proposed new highway there, have been the subject of a flurry of recent applications. We and others are doing all we can to preserve the Strategic Wildlife Corridor that crosses the route of the highway by insisting on the importance of adequate underpasses, planting and fencing to encourage animals (especially the larger mammals) towards safe crossings. We are also trying to make sure that the habitats which lie in the corridor and to the north of the developments are conserved and improved in mitigation. These matters are of enormous importance to the wildlife of Gosforth Park, which in recent years has been beset with development to the east, west and north, and which is in danger of becoming not only inaccessible to deer, otters and badgers but of becoming a genetically isolated 'island' for many other species.

Another area which may pose problems for the future is the coastline of North Tyneside. Although this is nominally protected by many designations of its importance to wildlife, there is much pressure towards piecemeal developments and the important geological exposures along the cliffs are threatened both by natural coastal erosion and by (we think) misguided urges to prevent it by the liberal use of concrete. We gave careful thought to the plans for the new Tyne Tunnel, and concluded that the safeguards which are to be put in place during construction are generally appropriate and that the chemical and other dangers to river life will thereby be minimised, so we did not lodge a formal objection.

ACTIVITIES

Pybus Memorial Lecture

This year the Pybus Memorial Lecture was given on 22 November by Professor Bill Heal on 'The Arctic: a system in transition'. The meeting attracted a lot of interest and so was held in one of the University's lecture theatres and attended by 140 members and guests. Bill outlined some of the changes that have taken place in the Arctic and showed that only looking at one particular part gave an unsatisfactory view of the problems facing this important region. He looked at both short term change and change in geological terms. This gave the audience a clearer perspective of the 'global warming debate' and on how short a time scale the figures are based, if compared with the history of the Arctic ice-ages. He also discussed his interest in the University of the Arctic and its holistic approach to the region in which eight nations have a direct interest.

General field meetings

On 8 August 2002 Martin Hughes ran the Society's 'Family outing to Gosforth Park Nature Reserve'. The previous night a moth trap had been operated at the Lodge and for half an hour the group examined the catch prior to release. Seven Longworth mammal traps had been set producing wood mouse and bank voles. Rotten logs and boulders were searched for mini beasts. At the lake the group spent some time pond-dipping with great success.

On 27 April 2003 the Society held a 'New members meeting'. David Noble-Rollin took about twenty new members around the nature reserve showing them points of interest, introducing them to the warden and visiting the hides and the ringing group. Chris Redfern, chairman of the reserve management committee and the ringing group, gave a demonstration of ringing techniques and explained why it is important to monitor the species numbers in the reserve and to understand the changes that our management has on bird numbers.

In May Ian Moorhouse led a walk entitled 'The River Tees around Cotherstone'. Not the most delightful day of a long hot summer, but the rain held off for most of the time as the party walked from Cotherstone to the ancient village of Romaldkirk en route to Cotherstone Moor. A variety of interesting plants were identified thanks to the mid-week botany group, including fine specimens of meadow saxifrage and a large bank of green hellebore. The woods along the river held magnificent displays of ransoms in full bloom. Birds were surprisingly scarce but included several chiffchaff, a wood warbler adjacent to the river Balder and, unusual in Teesdale nowadays, a pair of tree pipits. The day ended with afternoon tea at Ian's home.

Ornithology Section

The season of bird lectures got off to an excellent start on 4 October with Jimmy Steele's superbly entertaining and informative talk about the joys of local patch birding. His local patch at Newbiggin might not be the most beautiful area in the North East but, since Hancock realised its potential more than a hundred years ago, it has certainly been revealed as one of the most exciting spots for rare migrants. Jimmy, a member of the BBRC National Rarities Panel, has been wise in his choice of a local patch where some 230 species of birds have been recorded in the last fifteen years.

The second lecture entitled 'Parrots, puffins, pythons and terns' was to have featured the RSPB's husband and wife team, Dave and Rebecca Barrett. Due to imminent maternal duties, Rebecca was unable to attend and her part was taken by Paul Morrison, warden of Coquet Island. The talk looked at conservation issues in Ecuador, with the globally threatened great macaw, and compared and contrasted them with those relating to the roseate tern on Northumberland's Coquet Island.

The complexities of large white-headed gull identification were skilfully covered by Nick Rossiter in his talk on 10 January. The number of species involved could be more than ten, or depending on your point of view, only one. Nick, who has based many of his holidays around the Mediterranean so that he can study the local gulls, gave a fascinating explanation of the field work involved and of the genetic studies used to verify relationships.

Ken Day, for many years a member of the Society, treated the audience to a wonderful display of his photographs of birds in Kenya and Tanzania on 7 February. Watching one magnificent slide after another, it was quite clear to see why Ken has gained his enviable reputation as a photographer of outstanding ability.

Perhaps the title of Geoff Barber's talk, 'Conservation at Teesside and INCA', did not inspire interest, and the audience for this excellent talk was disappointingly small. INCA is a little-known (only one member of the audience had ever heard of it!) conservation organisation based on Teesside and supported by English Nature and local industries. Its achievements in advising and assisting industries on conservation aspects of their land holdings and in creation of new habitats (such as a saline lagoon network at Greatham Creek) are most impressive.

The ornithological field meetings began on 14 September when Martin Hughes took a group of members to Blacktoft Sands and Fairburn Ings. The Blacktoft Sands reserve looked

disappointing at first but as the group moved from hide to hide waders included spotted redshank, curlew sandpiper and green sandpiper and birds of prey began to appear, first a hunting sparrowhawk, then a marsh harrier quartering the reed beds followed by kestrel and merlin. Add to this two sightings of kingfishers and a water rail and the morning was a success. In the afternoon Fairburn Ings produced a hobby which was performing directly overhead and continued to hawk dragonflies for the next hour giving spectacular views.

On 12 October the annual trip to Holy Island took place. David Noble-Rollin met a group of members on the landward side of the causeway on a windy, rain-threatening day. The winds had been north-easterly and there were possibilities of unusual birds. However, trying to see anything and identify small brown birds cowering in bushes or on the ground taxed everyone's ability. The best views were in the village on the island where the birds were feeding and the birdwatchers were out of the wind. Towards the end of the day there was a report of a great grey shrike on the Snook. The party, now slightly smaller due to some members being too wet to continue, bravely covered the Snook dunes but only turned up some very wet redwings and a fieldfare.

Martin Hughes took the next trip to Aberlady Bay and Musselburgh on 18 January. The weather gave ideal conditions for bird watching. At Musselburgh the group saw waders, a mixed finch flock including twite, and sea rafts of eider and common scoter, velvet scoter, long-tailed duck as well as Slavonian, great-crested and red-necked grebes. At Aberlady Bay in the afternoon flocks of wigeon with small number of shelduck and red-breasted mergansers were seen and at Gullane fieldfares were observed in the fading light.

On 8 March Steve Westerberg took a party to Loch Ken, Laurieston forest and Mersehead. Unfortunately by the time they reached Dumfries rain had started and that set the tone for the rest of the day. A brief search for lesser scaup at Milton was abandoned due to cold, heavy rain and the large numbers of diving ducks being on the far side of the loch. Geese were scarce at Loch Ken and the only birds of prey seen were buzzards sitting miserably in trees and hedges. Moving on to the Mersehead RSPB reserve, where the rain eased slightly, they saw large numbers of barnacle geese and a variety of other wildfowl. The last stop was at Carsethorn, where the rain actually stopped. The falling tide was causing hundreds of waders to move past the group onto the freshly exposed mudflats and out in the bay were a large number of great crested grebes as well as the usual parties of scaup.

On 3 May Martin Hughes led a party to Weardale. The first stop was the heather clad moorland between Blanchland and Stanhope. Red grouse, displaying lapwings, curlews, golden plover and snipe were joined by a pair of short-eared owls. The day continued to produce breeding waders including a woodcock flushed from a bog and sightings of ring ouzel and wheatear. In the afternoon a party of sixteen blackcock rounded off the day.

On the morning of 21 May, at 4 am, Martin Hughes met six dedicated members at Lake Lodge for a 'Dawn chorus in Gosforth Park'. They were serenaded by a couple of song thrushes followed by blackbirds, robins and wrens. As the party quietly proceeded through the woodland, the whole array of resident and migrant songbirds added their voices to the chorus, with reed, sedge warblers and reed buntings as they reached the lake. A bonus was a fox that seemed to be as interested in the party as the party was in it!

On 14 June Martin Hughes led the Society's bus trip to Leighton Moss. The reed beds shimmered in the haze and the birds seemed to spend most of their time lazing out of sight. An occasional warbler was seen but most obvious were the marsh harriers quartering the reed beds where several were hunting at the same time. Open stretches of water held wildfowl including shoveler, gadwall and pochard. In the afternoon the party visited the tidal lagoon with outstanding views of avocets and black-tailed godwits

The 3 July Roseate Tern evening was postponed because of bad weather. The new date falls within the next financial year and will be covered in next year's annual report.

8-11 May Cairngorms trip

Steve and Anne Westerberg led another four day trip to the Cairngorms. On the way they visited Vane Farm RSPB Reserve, Loch Leven. At the hides they saw a flock of over sixty pink-footed geese, grey lag geese with goslings, gadwall and two peregrines were seen. The group continued their journey to Speyside with views of buzzard and osprey, and stayed at the Skye of Curr Hotel where the grounds produced a downy young tawny owl in trees by the entrance gate, calling frequently, and several woodcock.

Next day an early start to the osprey centre gave the group the opportunity to see two male capercaillies lekking in an open area in front of the forward hide. A female osprey was near her nest and at the feeding station there were siskins, jays, great spotted woodpecker and three red squirrels. Then on to Findhorn Valley with views of golden eagles, peregrines and ravens. On the drive back a male osprey was watched hovering at eye-level over a lochan. Loch Vaa did not produce any Slavonian grebes but a goldeneye and a male wigeon were seen. Finally for the day, a visit to Abernethy Forest Lodge produced two crested tits feeding in the pines together with coal tits and more than twelve crossbills.

On the Saturday visits were made to Glen Feshie, Loch Insh and Lochindorb but the strong winds and rain reduced the number of birds. Throughout the trip roe and red deer were seen and in all over fifty buzzards were counted.

Mammal Section

Northumbria Mammal Group, together with the Natural History Society of Northumbria and the Wildlife Trusts (North East), held the following events:

The first winter meeting was held on Saturday, 26 October when Sara Churchfield ran a workshop on water-shrews. After an excellent illustrated lecture 'Where are the water-shrews?' on water-shrew morphology, diet, distribution, habitat preferences and field signs, Sara gave a demonstration of her preferred survey technique using bait-tubes and casters (blow-fly pupae), and showed how to identify the droppings thus collected and distinguish water shrew scats from those of rodents and other shrew species. Judging by the enthusiastic requests at the end of the day to borrow the bait-tubes, Sara clearly succeeded in transmitting her love for these elusive mammals and the workshop was a great success.

On 24 January, Robbie Macdonald, senior research scientist at the Game Conservancy Trust, gave a fascinating insight into the ecology of stoats and weasels. He went on to discuss likely causes of changes in their status in Britain over the last forty years, attributing the decline in weasel populations at least in part to secondary poisoning from a build up of rodenticides in the diet. He concluded with a description of gamekeepers' attitudes to these two small predators, pointing out that trapping was more intense on wild bird estates than on estates where the birds are reared by hand and the keepers simply do not have the time for trapping. His infectious enthusiasm was an inspiration to all and we enjoyed a most informative and entertaining evening.

Last summer, Kevin O'Hara, Wetland Conservation Officer for the Northumberland Wildlife Trust, co-ordinated a survey for water vole along the surface watercourses of North Tyneside, and on 28 February he presented his results. After a brief introduction on water vole biology, status (about a 95% drop in numbers in this area), and national distribution, Kevin explained the protocol for the survey and then showed the data – a few scattered populations at a handful of locations within the borough. He explained the probable reasons for the decline in this species: development pressure and mink predation leading to fragmentation and isolation of populations. He outlined proposed work programmes and finished with a challenge: the future is in our hands! This talk, to which members of the public were invited, formed part of the Natural History Society's contribution to a week of activities in association with the BBC 'Life of Mammals' Exhibition.

The mammal section began its field meetings on 7 May when Bob Wilkin led a series of badger watches. Sixteen members attended over three nights. This was again very successful on all

nights, very good close views of badgers and on two nights fox cubs were seen. Again over the three nights bats, great spotted woodpecker and a tawny owl were also seen.

The programme continued on 28 May with Bob Wilkin leading 'A mammal walk in Gosforth Park Nature Reserve' for which sixteen members turned up. As with the badger watches, the group was given a brief history of the reserve. The party looked at squirrel signs and were rewarded by good views of a red squirrel twice during the evening. A visit was made to Fox Island where a fox den, scats and prey species were examined and several badger setts were viewed and discussed. The muddy causeway to the island produced some good badger and fox prints. Finally the boardwalks at the lake produced several different otter spraints showing the animals' various diets. Roe deer slots and lying up places were observed and the evening was brought to a close with good views of a roe deer.

Other Northumbria Mammal Group activities that Society members were invited to were 'Dormice At Briarwood Banks' on 10 May when Darren Smith led a visit to Briarwood Banks to check thirty nest boxes, put up last September, for evidence of dormice. Although the habitat was considered highly suitable, there was no evidence of dormice having used the tubes. The tubes will continue to be checked on a monthly basis between May and October. In July 'Cetacean Watching at Druridge Bay' was attended by thirty-five people. Although no cetaceans were seen the group learned a lot about techniques for viewing these mammals. During the week before the outing twelve white-beaked dolphins and a minimum of eight harbour porpoises had been seen.

Geology Section

The last field meeting of the summer was a visit to the coast at Whitburn in September. Derek Teasdale took members along the shore to see the Devensian glacial deposits. Northumbria was largely shaped by the last ice age and sea erosion has exposed important deposits in this region. Derek explained the impact of glaciation but also pointed out that the story is by no means complete and that a lot of work remains to be done before it is all fully understood.

The programme of winter talks started off with a slight hiccup when the speaker went down with flu but Mick Jones stepped into the breach with an impromptu talk. Not unexpectedly he took coal as his topic and gave us an extremely entertaining evening. Michelle Morrison dealt with a subject that has exercised many minds in the North East, that of the problem of dealing with the after-effects of mining and in particular drainage from abandoned mines. Michelle offered a unique solution, which can be very effective in the right conditions. This involves using the natural characteristic of wetlands to clean up mining effluent. This has the advantage of requiring very little maintenance once set up and, being essentially low tech, is sustainable and can even improve the surrounding environment. Mike Leddra gave a talk on the origin of ground disturbances in the area. It had always been assumed that these were caused by mining subsidence but research has shown that holes, fissures and fractures continue to form long after mine closure. The underlying cause for many of them is geological activity independent of mining. Derek Teasdale continued the theme of the impact of the Quaternary on Northumberland and outlined some of the techniques that are now being used to inform models of glaciation. Steve Larter described some of the recent views on the ways in which petroleum forms. In spite of the economic importance of these deposits there are still many unanswered questions. Alan Judd finished up the season of talks with an intriguing account of an alternative explanation for some of the food chains in the North Sea. The importance of producer communities using methane seeping from the sea bed as an energy source was explained. One lesson to be learned from Alan's talk is that exchange of ideas between different academic disciplines can be very productive.

The summer season of field trips started off with a visit to Kilhope Lead Mining Centre and Museum. This was essentially a DIY venture without a geological leader as such. However, the simulated mine at Kilhope is so good and informative that everyone had an enjoyable visit. The final trip in July was once again led by Derek Teasdale who probably now holds the record for maximum contribution in one season. Derek continued his theme of Ice Age Northumbria by taking us along the cliffs at Sandy Bay. He explained some of the controversial views on the

direction of glaciers in this region. A season with two talks and one field trip given with enthusiasm and knowledge by the same person meant that members could form a more complete picture of the events that shaped their environment.

Botany Section

The winter lecture programme began in October, when Richard Pankhurst of the Royal Botanic Garden, Edinburgh, spoke on *The flowering plants of the Outer Hebrides*, for which he is the recorder for the Botanical Society of the British Isles. The islands have a distinctive flora because of their generally thin, poor soils and cool, wet climate, and are famous for their extensive west-coast machairs, created from wind-blown calcareous sand. The machair is home to an unusual range of orchids, and the associated lochs and lochans have a great variety of pondweeds.

In November Dave Mitchell of English Nature described *The flora and vegetation of the Canary Islands*. Although many people from the North East holiday in the islands each year, for subtropical sunshine, sand and sangria, away from the beaches there is spectacular volcanic scenery and a diverse and fascinating flora and vegetation found nowhere else in the world. Many of the flowering plant families are familiar to British botanists, but many of the species are rare and restricted to a single island, whilst some genera have undergone rapid speciation due to the isolation of these islands. The unique vegetation ranges from coastal sand dunes and cliffs to dry lowland scrub, relict laurel rainforest, pine woodland and montane communities. The first lecture/demonstration in 2002 was by Gordon Beakes, Reader in Developmental Mycology in the School of Biology at the University of Newcastle. His *Scum and slime: a hidden natural history* revealed, with the range of modern microscope equipment now available, some of the plants and animals that we normally know nothing of. Resolution to less than half a millionth of a metre showed us, among other organisms, bacteria, protists and microscopic algae.

Finally, in March, Professor John Richards, Professor of Botany in the School of Biology, in *The birds and the bees (or the various contrivances by which flowers cause animals to pollinate them)*, described both a menagerie of pollinators – purveying vicarious sex – and the co-evolved adaptations of plants to their pollinators. Adaptations involved flower shape, size, colour, guide marks, spurs, traps and scents, and various forms of deceit.

Summer field meetings at the time of writing have been, firstly, a visit in June to *Smardale Gill* and *Waitby Greenriggs* in the Kirby Stephen area of Cumbria, led by Bill Pickering. Both are nature reserves of Cumbria Wildlife Trust, and both are primarily limestone habitats. At Smargill, apart from its famous railway viaduct, we saw a sheet of herb Paris *Paris quadrifolia*, plus blue moor-grass *Sesleria caerulea*, horseshoe vetch *Hippocrepis comosa*, mountain melick *Melica nutans* and alpine bistort *Persicaria vivipara*. Waitby Greenriggs was an orchid site with, among others, fly orchid *Ophrys insectifera*, frog orchid *Coeloglossum viride*, lesser butterfly orchid *Platanthera bifolia*, fragrant orchid *Gymnadenia conopsea* and marsh helleborine *Epipactis palustris*. It also had sheets of bird's-eye primrose *Primula farinosa*.

In July Dorothy Hardy and Angus Lunn led a two-pronged excursion in the Borders. The first destination was Yeavinger Bell in the Cheviots, to see serrated wintergreen *Orthilia secunda* at its only known Northumberland site. It was found, thanks to a helpfully planted flag by John Steele, but seemed to be struggling somewhat amidst heather and bilberry. The party then travelled just over the Border into Roxburghshire to the Scottish Wildlife Trust reserve of Din Moss/Hoselaw Loch. Although the bog was not botanically outstanding (and was extremely rough walking), the fen and carr by the loch were species-rich, with the rarity cowbane *Cicuta virosa* (long extinct in Northumberland), and other plants including gypsywort *Lycopus europaeus*, marsh cinquefoil *Potentilla palustris* and narrow buckler-fern *Dryopteris carthusiana*.

Midweek Botany Group

The Midweek Botany Group continued its programme of field excursions throughout the autumn of 2002 with trips to Plessey Woods and Chopwell Woods in search of fungi and late-flowering plants.

The 2003 season started early in March with a trip to Tony's Patch to find yellow star of Bethlehem *Gagea lutea*, toothwort *Lathraea squamaria* and an unexpected discovery of alternate-leaved golden saxifrage *Chrysosplenium alternifolium* growing up through a patch of the opposite-leaved species *C. oppositifolium*. The highlight in April was an outing to Slit Wood in Weardale where we recorded 117 species of early-flowering woodland plants on a beautiful spring day. In May we joined Ian Moorhouse and the ornithologists of the Society in Teesdale where this year the plants were as rewarding as the birds, and the tea and cakes surpassed both! The limestone cliffs of Blackhall Rocks proved interesting with a spectacular display of bird's-eye primrose *Primula farinosa*, and later a patch of the uncommon round-leaved wintergreen *Pyrola rotundifolia*. June is a busy month for botanists and this year was no exception, with several outings including one to the Blanchland area where we were able to visit the site of one Britain's rarest plants, the May lily *Maianthemum bifolia*. The Heathery Burn provided alpine bistort *Persicaria viviparous* and frog orchid *Coeloglossum viride*, and Wingate Quarry had a variety of orchids.

July started with a visit to derelict industrial land in Hexham where the bee orchid *Ophrys apifera* had been discovered, apparently continuing to extend its range in the north of England. Trips to Great Bavington Crag, Howdiemont Sands near Longhoughton and the Spetchels at Prudhoe followed, all providing a good range of plants in a wide variety of habitats. A walk at Whitley Chapel gave us more butterflies than flowers and, even late in the season, was full of interest.

On all our excursions we note every species found, from the very common to the most unusual, and these records are valued by the County Recorder. Thus we fulfil a useful scientific role as well as increasing our own knowledge and having an enjoyable time!

Entomology

On 27 September Brian Selman lectured on 'Insects: the great revolutionaries of the animal kingdom'. He spoke of the insects' unrivalled evolutionary success and diversity and discussed some of the reasons: their remarkable, one might almost say competitive, co-evolution with other organisms, most obviously the flowering plants; their chemical and anatomical adaptability; and the ingenious ways in which they seem to put their successive stages of development to use in adapting to their varying environments. Brian's huge experience (and his rich collection of slides) enabled him to draw on a deliciously varied and entertaining series of illustrative examples.

Saturday 21 June dawned bright and sunny though the weather forecast was equivocal for the 'Insect Day at Close House'. Nine stalwart Society members of all ages arrived for the annual entomology field day at Close House laboratories. They were soon sorting out the light traps and chasing escaped moths across the room. Then out into the field sweeping the vegetation with nets, mastering the art of catching insects using a pooter and beating trees into umbrella-like collapsable trays while Gordon Port and Brian Selman did their best to lead their charges through the intricacies of identifying the insects captured. The rain stayed away and after releasing their captures back into the wild the participants set off home after a very enjoyable and rewarding day.

Teas before indoor meetings

Once again tea and biscuits were provided before each Friday evening meeting and we would like to thank Stella Chambers for organising this and doing most of the work.

Image and Membership Group

The Image and Membership Group was formed during the previous financial year to create a group that could concentrate on particular matters of interest to Council and bring recommendations on how the Society could move forward. Its initial focus was on membership, putting together ideas on better publicity and ways to improve recruitment. This included preparation of travelling display boards and the continual stocking of membership leaflets in libraries and other outlets. The committee meets regularly and will continue to devise ways of trying to improve our membership figures.

During the year it began consideration of updating the constitution of the Society. It is expected that in the next financial year it will produce a draft constitution that can be considered by Council before being put to members at the Annual Meeting.

Ringling Group

The Ringling Group has continued its three main ringling programmes this year: constant-effort ringling at Gosforth Park Nature Reserve, seabird ringling on Coquet Island and the Farne Islands, and migration ringling at Low Newton-by-the-Sea. In addition, individual group members carry out their own individual projects as time permits, and a newly-fledged member of the team has been pursuing a number of new ringling initiatives in the Alnwick area. The ringling effort this year brings the total number of records (newly-ringed birds and retraps) in our database since 1988 to in excess of 31,500. This is a valuable resource, both in terms of the information that can be obtained from these data now, and the future knowledge of migrations, movements and survival that will be based on the patterns of recoveries.

The Ringling Team's programme of constant-effort ringling in Gosforth Park Nature Reserve got under way in late April this year, and by the end of July 515 new birds had been ringed. The totals for the period 1 August 2002- 31 July 2003 are summarised in Table 2. The grand total of new birds ringed has risen to 808, and compared to the same period last year there have been a number of changes in species composition. For example, the number of new sedge warblers ringed has nearly doubled from sixty-three last year to 116 in the same period this year. Warblers overall seem to be doing quite well: the numbers of new reed warblers ringed has gone up slightly from thirty-nine to forty-eight, and the numbers of chiffchaffs and willow warblers have more than doubled. Reed warbler numbers in the reserve are in a healthy state, and an article summarising changes over the last five years will be published in the annual report for the area, *Birds in Northumbria*. This ringling project generates valuable data, not just for monitoring our local bird populations but also in a national context as part of the British Trust for Ornithology's Constant-effort Site scheme.

The ringling team has continued its work on Coquet Island and the Farne Islands, achieving respectable totals of Sandwich, arctic and common terns, kittiwakes, eiders, shags, fulmars and black-headed gulls (Table 3). A significant proportion of the arctic terns and all the common terns were ringed by Vivienne Booth on Coquet Island. Viv was able to help with the Society's tern growth index project on Coquet Island while carrying out her PhD research on common and arctic terns. The 2003 season has been successful in generating data for the tern growth index project, and for the Society's Ringling Adults for Survival (RAS) projects on arctic terns, eiders and shags. For the tern growth project, data on arctic tern chick total head length, third primary length and weight (for Coquet Island and the Farne Islands) has now been added to the previous eight-years' worth of data. Estimates of chick mortality (weather-related and starvation-related) have been obtained, and these will be analysed together with weather data from the Boulmer station for June and July in each year from 1995. This study has provided some of the data on which the sandeel project is based and will continue to feed into that project. Although the shag and eider RAS projects have gone well, the arctic tern RAS project has faltered slightly due to problems with staying on the island for sufficient time to carry out the trapping. However, the team has investigated alternative trapping strategies and we hope to apply these either to Coquet or a new RAS project on arctic terns based on the Farnes instead. An article summarising the patterns of controls and recoveries for 2002 will shortly be published in *Birds in Northumbria*.

Table 2 New birds ringed at Gosforth Park Nature Reserve, 1 August 2002-31 July 2003
(1 August 2001 - 31 July 2002 in brackets).

	Full grown	Nestlings	Total
Common Tern		0 (1)	0 (1)
Kingfisher	2 (1)		2 (1)
Great Spotted Woodpecker	1 (2)		1 (2)
Swallow	4 (0)	3 (0)	7 (0)
House Martin	3 (0)		3 (0)
Wren	43 (31)		43 (31)
Dunnock	12 (11)	1 (0)	13 (11)
Robin	24 (18)		24 (18)
Blackbird	15 (33)	3 (0)	18 (33)
Song Thrush	0 (3)		0 (3)
Redwing	0 (6)		0 (6)
Sedge Warbler	116 (63)	0 (4)	116 (67)
Reed Warbler	48 (39)	0 (1)	48 (40)
Whitethroat	6 (1)		6 (1)
Garden Warbler	8 (2)		8 (2)
Blackcap	50 (26)		50 (26)
Chiffchaff	55 (23)		55 (23)
Willow Warbler	124 (45)		124 (45)
Goldcrest	0 (5)		0 (5)
Spotted Flycatcher	0 (1)		0 (1)
Long-tailed Tit	13 (53)		13 (53)
Willow Tit	0 (1)		0 (1)
Coal Tit	5 (1)		5 (1)
Blue Tit	175 (155)	0 (3)	175 (158)
Great Tit	31 (42)	22 (26)	53 (68)
Nuthatch	1 (0)		1 (0)
Treecreeper	5 (6)		5 (6)
Jay	0 (1)		0 (1)
Starling	0 (2)		0 (2)
Chaffinch	2 (0)		2 (0)
Greenfinch	0 (1)		0 (1)
Bullfinch	10 (4)		10 (4)
Reed Bunting	25 (23)	1 (0)	26 (23)
Total	778 (604)	30 (35)	808 (639)

Table 3 Seabirds 2003 breeding season (2002 totals in brackets)

	Full grown	Pulli	Retraps	Total ringed
Fulmar		26 (19)		26 (19)
Shag	62 (58)	133 (132)	50 (54)	195 (190)
Eider	29 (72)		73 (111)	29 (72)
Black-headed Gull		189 (108**)		189 (108**)
Kittiwake	0 (1)	204 (199)	3	204 (200)
Sandwich Tern		912 (1137)		912 (1137)
Common Tern		81 (185)		81 (185)
Arctic Tern	94 (74)	496 (499)	45* (115)	590 (573)
Total	185 (205)	2041 (2281)		2226 (2486)

*21 of these were on Coquet ** these totals are still being collated

The total for birds ringed at Low Newton has increased from 225 in autumn 2001 to 401 in autumn 2002 (Table 4). This increase has been partly due to ringing being extended into November and well into the winter, but there have also been welcome increases in the numbers of migrants ringed, particularly warblers. The highlight was a yellow-browed warbler, but the range of species, including grasshopper warbler and twite, have added to the interest and enabled the team to experience a wider range of birds, a vital aspect of ringing training.

As always, the Ringing Group demands a high level of commitment from its members and we are very grateful for their continuing enthusiasm for the Society's projects. The Sir James Knott Trust supports the Group through its grant which enabled the purchase of a four-wheel drive vehicle for towing and launching the boat. Northumbrian Water continues to support the Group through the provision of the boat without which the team would be unable to reach the islands. We are grateful to the Farnes wardens for their continued enthusiasm and support. On Coquet Island, Vivienne Booth made an immense contribution by ringing the arctic tern chicks in our study area as they hatched, and we are very grateful to the RSPB Warden Sarah Lowes and to Dave Barrett of the RSPB North-East office for their enthusiastic support and encouragement of our work. As in previous years, the Group is very grateful to Major Carr Ellison for allowing the Group use of his beach hut at Low Newton.

Sandeels and Seabirds Research

The ringing group's programme of ringing and monitoring on Coquet Island and the Farnes Islands since 1995 has emphasized our lack of understanding of why breeding success can vary markedly between years. Seabirds breeding in the North East depend largely on sand-eels for food, and our knowledge of sand-eel populations, whether they vary substantially from year to year and the factors which affect their availability as food to different species of seabird, is at best rudimentary. In an attempt to address this issue, the Society is involved in a collaborative programme of research with Richard Bevan, Judy Foster-Smith, Bob Foster-Smith and Steve Rushton of Newcastle University, aimed at understanding the link between sand-eels on the seabed and their availability to terns (surface feeders), puffins (mid-water feeders) and shags (benthic or seabed feeders). This project involves the use of the University research boat *Bernicia* to survey the seabed and the distribution of sand-eels, and the collection of data on the foraging locations of seabirds around the Farnes and the provision of food to arctic tern chicks. Radiotags and dataloggers fitted to individual birds by Richard Bevan are being used to complement data on foraging locations obtained using optical coincidence rangefinders. Funding to carry out the work has been provided by Northumbrian Water and the Sir James

Table 4 Ringing Totals for Low Newton-by-the-sea, autumn 2002 (autumn 2001 in brackets).

Full grown		Full grown	
Great Sp. Woodpecker	1 (1)	Blackcap	9 (1)
Swallow	0 (2)	Yellow-browed Warbler	1 (0)
Tree Pipit	1 (0)	Chiffchaff	6 (2)
Meadow Pipit	15 (14)	Willow Warbler	10 (0)
Rock Pipit	14 (5)	Goldcrest	15 (14)
Pied Wagtail	2 (2)	Spotted Flycatcher	0 (1)
Wren	42 (17)	Long-tailed Tit	10 (0)
Dunnock	36 (19)	Willow Tit	1 (0)
Robin	35 (16)	Coal Tit	2 (1)
Redstart	0 (2)	Blue Tit	24 (3)
Whinchat	1 (0)	Great Tit	7 (5)
Stonechat	5 (2)	Starling	9 (17)
Wheatear	1 (0)	House Sparrow	14 (18)
Blackbird	6 (9)	Chaffinch	8 (15)
Song Thrush	6 (9)	Greenfinch	5 (3)
Redwing	0 (4)	Goldfinch	7 (22)
Grasshopper Warbler	1 (0)	Siskin	2 (0)
Sedge Warbler	27 (0)	Linnet	5 (3)
Reed Warbler	2 (1)	Twite	1 (1)
Lesser Whitethroat	6 (0)	Yellowhammer	1 (0)
Whitethroat	5 (0)	Reed Bunting	56 (14)
Garden Warbler	2 (1)	Total:	401 (225)

Knott Trust, and this has enabled the Society on behalf of the research team to employ two research assistants, Vicky Edward and Tori Summerell, who spent nine weeks each living and working on the Farnes collecting data for the project in the 2003 breeding season. Data from the first season's work (in 2002) is currently being written up for submission to a mainstream ecological journal, and the project has been outlined in a recent issue of the Seabird Group Newsletter (June 2003). The Society is very grateful to the Sir James Knott Trust and Northumbrian Water for their support of this collaborative project, and to Vicky and Tori for their hard work during the summer.

GOSFORTH PARK NATURE RESERVE

Gosforth Park emerged from the winter looking rather balder in parts than previously. Hard work by members and the University Conservation Society had cleared some of the ageing willows along the access to the Pyle Hide. The 'brash' resulting from the willow clearance has been reduced to chippings with the aid of a hired chipper, and this material is being spread along some of the paths to improve access. New willow shoots and vigorous reed growth have now healed the scars. However, the islands of willows developing in the otherwise-healthy reed beds serve as a reminder that controlling the willow carr, both on the bunds (where birch also takes hold) and the reed beds, is going to be an annual event if the Society is to maintain

this reserve as the North East's number-one spot for reed warblers. English Nature is being approached for funding to help with the annual reedbed maintenance. As well as using the brash from future willow clearance to improve the paths, the Society plans to plant willow stakes along the reserve boundaries, forming a hedge to improve security. Security and maintenance of the reserve have suffered a blow this year with the Warden, Paul Drummond, being laid up with a back injury. We wish him a speedy recovery. Vandalism in the reserve has been a continuing problem, with hides being severely damaged on several occasions. Damage to the laminated glass windows of the ringing hut that occurred last year has not yet been repaired.

The lake was restocked with about 500 roach early in the year with the aid of a generous donation from a Society member, and this will no doubt help the otter population. Otters have been active in the reserve, although unfortunately a young male was killed on the road outside Lake Lodge in January. Breeding birds in the reserve have had mixed success. One event for the record books is the raising of a brood of six cygnets, the first in the reserve for many years. Through the efforts of the local swan expert, Jon Coleman, and the ringing team, three of these young birds now carry bright-red colour rings (the others refused to be caught) and this will allow their progress and breeding success to be monitored throughout their life. This year, the common terns failed to breed; although there were encouraging signs and at least one egg late in the season, no chicks have resulted and we suspect that predation, possibly by the lesser-black backed gulls that were hanging around earlier in the year, has put paid to their breeding efforts. The gravel island constructed after much effort has failed to attract terns to breed so far. While it has proved to be an attractive loafing area for grey herons, excessive vegetation growth will necessitate some extended gardening over the winter.

The Society is keen that greater use is made of the reserve for research purposes to increase in our knowledge of the flora and fauna of this SSSI. The constant-effort ringing this year has been complemented by an MSc project on reed warblers, undertaken in the reserve by Chris Thaxter and supervised by Richard Bevan. Chris has used our reed warbler data since 1988 to estimate the annual survival rate for male and female birds, and is attempting to compare survival of adults and nests at Gosforth Park with Wicken Fen, a much more extensive reedbed site in the Cambridgeshire Fens. His nest-searching efforts resulted in nests from at least seven pairs being located; given the difficulty of locating nests in a reedbed habitat, this is an excellent result and fits in well with rough 'guestimates' of the likely number of breeding pairs (10-20) based on ringing captures. Chris's study extended to the use of radiotracking to locate the foraging habitats and 'home-ranges' of reed warblers. Four adult males were fitted with lightweight radiotags and tracked within the reserve over the course of a couple of weeks. The data obtained will give a valuable insight into the range of habitats that these birds use during the breeding season, and is currently being written up as an MSc thesis. An article on the reed warblers at Gosforth Park over the last five years will appear in the 2002 bird report *Birds in Northumbria*, and we hope that Chris Thaxter's results will be written up for the *Transactions* or another scientific journal.

The expanding areas of reed growth in recent years have been achieved with grants from English Nature and the hard work of volunteers. We are grateful to English Nature for their financial help as well as to the volunteers for giving up their spare time and energy. Students from the Newcastle University Conservation Society, led by David Morris, spent several weekends helping to clear willows, and this was a tremendous help. Members of the Ringing Team also put down their ringing pliers to cut, saw and shift timber, and we greatly appreciate their efforts.

COQUET ISLAND ADVISORY COMMITTEE

The Committee advises the RSPB on management issues concerned with the island; it has, amongst others, two representatives from the Society and two from Northumberland Wildlife Trust. Currently the Society holds the chairmanship and during the year the rules governing the remit of the Committee were finally agreed.

The season began rather badly when most of the puffins left soon after their initial arrival. The birds began to return shortly after with a count for the year of 11,292 (last year 18,729). Although this is a very sudden drop other colonies have experienced this type of fluctuation before. It may be a year or two until it can be established if this is part of a trend or an isolated occurrence. The black-headed gulls increased to 2,272 pairs (2,045) and the lesser black-backed and herring gulls appear to be in similar numbers to last year. This was rather disappointing as it was hoped that the decrease last year in larger gulls would continue, thus reducing predation on both the tern chicks and eider eggs and young. Largely due to the insistence of the Society representatives, a meeting of Society representatives, senior members of the RSPB and English Nature was convened to discuss gull management on the island. As a result of the meeting a workable strategy is evolving.

Unfortunately the terns also showed slight decreases in number with common tern 923 pairs (1083), Arctic terns 765 pairs (874) and Sandwich terns 1,238 pairs (1689). None of these changes are necessarily significant as they fall within the normal yearly fluctuation. However, that they are all down in a particular year is perhaps more worrying. The good news of the year was once again that roseate terns numbers have increased and the final total for the year was seventy-two pairs (57) with eighty-two fledged young. This is a big increase and suggests that the colony, already the largest in the country, is attracting new individuals as well as birds bred on Coquet. The roseate tern season is also interesting as some of the pairs do not commence breeding until August. The wardens are staying longer this year so we may learn more about the success of these late breeding pairs.

LINDISFARNE NATIONAL NATURE RESERVE

Lindisfarne Advisory Committee

The Advisory Committee to English Nature met twice during the year, on 8 November and the 22 May. The committee has representatives from local organisations that have an interest in the Holy Island area. It considers the likely impacts of developments on the wildlife of the Lindisfarne National Nature Reserve and as well as the reports of the monitoring that is being carried out to ensure the survival of the important species on the reserve. Major issues discussed included the developments at Waren Mill, the proposal for a hovercraft service to Holy Island and the feasibility study into an extension to the island harbour. All of these could have a damaging effect on the mudflats and their potential as wintering and breeding areas.

Other issues included reports of winter bird populations in winter (see under Wildfowl Panel) and the success of the breeding terns. Four species of tern bred in the nature reserve. Little terns had been successful during the current year in comparison with other coastal colonies, eight pairs producing one young each. Some concern was expressed that oystercatcher predation was continuing on the colony, mainly on the Sandwich terns (twenty pairs bred, eighteen were predated).

Lindisfarne Wildfowl Panel

The Wildfowl Panel is concerned with the more detailed management of the wildfowling and the wardening of the refuge at the south of the Holy Island Slake. It was reported to the panel that again the number of wigeon present has increased by 7%, pale-bellied brent had rather fluctuated in numbers over the winter possibly due to the mild conditions. It is thought that many of them may have returned to the continent during the winter. The monitoring of the *Zostera* and *Spartina* showed that the food for the geese and ducks held out through the winter and that there was sufficient for the larger numbers of waterfowl on the slake.

Ian D Moorhouse
Chairman of Council

Obituary

Antony Havergal Dickinson

In last year's report we mentioned that Antony Dickinson had died on 6th September 2002, at the age of almost one hundred and one. Tony joined the Society in 1927 and was one of its longest standing members. He was justly proud that his relationship with the Society was a family affair. His was the third generation to devote a great deal of spare time to the Society and the family's interest spanned an uninterrupted period from 1865, when I G Dickinson joined the Society, until Tony's death in September 2002.

Tony was born in Gosforth in 1901, went to school at Loretto College, Musselburgh, and on, in 1920, to Pembroke College, Cambridge. His early ambition had been to be an analytical chemist, but after the death of his elder brother in the Great War, Tony decided to follow his father, Adolphus Havergal Dickinson, into the Law. In 1927 he was elected to membership of the Law Society of Newcastle upon Tyne and by 1939 he was a partner in the Solicitors' firm of Mather, Dickinson and Stafford. He became a senior partner in successive firms and as late as 1999 was still a consultant to their successor, Eversheds. In 1939 Tony also became a Trustee of the Natural History Society and in 1941 began to take over responsibility for the Society's legal matters from his father after whose death, in 1946, he became the Society's honorary legal advisor. His most important contribution was in 1958 during the negotiations with the University of Durham concerning the Society's agreement to lease the Museum to the University for 99 years. He often recalled his preparation of the document and his anxiety to make it binding on the University. He took the draft to London and asked one of his barrister friends who specialised in this type of work to look through it and make sure that the document would hold up to scrutiny in the future. He was also the architect of the 1974 agreement with the University (by then the University of Newcastle), which forms the basis of our current arrangements for the Hancock Museum. The 1961 Annual Report of the Society reports on the formation of the General Purposes Committee. This committee was to deal with purely Society, as distinct from museum matters and reflected the new role of the Society in relationship to the Hancock Museum. As our honorary legal advisor, Tony was a founder member of this Committee. He continued to serve on it until 1994, when, at the age of 94, he was finding it difficult to both look after his wife and get to the meetings. However he remained a Trustee and Vice-President until his death and his advice was sought and given to the end of his life. Tony had many other interests. He and his father were keen anglers, and he took a great interest in cricket among other sports. In the Second World War, he became Controller of Civil Defence for the west area of the Tyne & Wear sub-region.

In 1928 he married Eunice Mylchreest; she died in the 1990s and they are survived by their daughter Elisabeth Pestell.

Many members will not have known or perhaps even heard of Tony Dickinson but his contribution to the success of the Society cannot be overstated. A D Hobson, a previous Chairman of the Council, wrote of the honorary officers of the Society: 'The average member can have little notion of the unsparing service which is devoted to the work of the Society, and it is those who are in day to day touch with these men and women that realise the time and patience given so willingly to the furtherance of the Society's objects.' Tony, his father A H Dickinson, and his grandfather I G Dickinson were all devoted honorary officers and deserve our thanks for 137 years of continuous service to the Society.

FINANCIAL STATEMENTS

31 JULY 2003

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA TRUSTEES' REPORT FOR THE YEAR ENDED 31 JULY 2003

CHARITY NUMBER 526770

Review of Developments and Activities

The detailed report of the Society's activities during the year appears on pages 5 to 32 of the Annual Report.

Accounts Presentation

The format of the accounts complies with the requirements of Statement of Recommended Practice No. 2 (Revised) – Accounting and Reporting by Charities (SORP 2). SORP 2 requires investments to be valued at market value rather than cost (Note 1).

Statement of Trustees' Responsibilities

Law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial period which give a true and fair view of the charity's financial activities during the period and of its financial position at the end of the period and adequately distinguish any material trust or other restricted fund of the charity. In preparing financial statements giving a true and fair view, the trustees should follow best practice and:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether the policies are in accordance with applicable accounting standards and statements of recommended practice on accounting by charities subject to any departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation.

The trustees are responsible for keeping accounting records which disclose, with reasonable accuracy at any time, the financial position of the charity, and which enable them to ensure that the financial statements comply with the Accounting Standards and Statements of Recommended Practice and the regulations made under s44 of the Charities Act 1993. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Investments

All investment transactions during the year under review have been carried out in accordance with the trustees' powers.

Financial Review

Net Incoming/(outgoing)Resources

2003	2002
£10684	£(8587)

Independent Examiners

Tait Walker have expressed their willingness to continue in office as independent examiners, and a resolution to reappoint them will be proposed at the Annual Meeting.

Signed on behalf of the Trustees

IAN D MOORHOUSE
Chairman and Trustee

10 October 2003

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 JULY 2003

	2003		2002
	Restricted	Unrestricted	Total
	£	£	£
Income and expenditure			
Incoming resources			
Members' subscriptions		21611	21611
Grants and donations	8000	8625	16625
Activities for generating funds:			
Investment income		25594	25594
Interest receivable		3573	3573
University of Newcastle upon Tyne		8529	8529
Proceeds from the sale of <i>Transactions</i>		1922	1922
Miscellaneous income		629	629
Total incoming resources	<u>8000</u>	<u>70483</u>	<u>78483</u>
Resources expended			
Charitable expenditure (note 2)	3785	52751	56536
Management and administration (note 3)		11263	11263
Total resources expended	<u>3785</u>	<u>64014</u>	<u>67799</u>
Net incoming/(outgoing) resources for the year	4215	6469	10684
			(8587)
Other recognised gains and losses			
Realised		11476	11476
Unrealised		(14188)	(14188)
Total investment gains/(losses)		<u>(2712)</u>	<u>(96561)</u>
Net movement in funds	4215	3757	7972
Transfer between reserves (note 11)	(1678)	1678	0
Balance brought forward	3209	578290	581499
Total funds carried forward 31 July 2003	<u>5746</u>	<u>583725</u>	<u>589471</u>

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
BALANCE SHEET AS AT 31 JULY 2003

	2003	2002
	£	£
Fixed assets		
Tangible assets for use by the charity (note 6)	8100	9957
Investments (note 7)	484903	514279
	<u>493003</u>	<u>524236</u>
Current assets		
Debtors (note 8)	9634	4858
Cash at bank and in hand	93931	60552
	<u>103565</u>	<u>65410</u>
Creditors: Amounts falling due within one year (note 9)	7097	8147
Net Current Assets	<u>96468</u>	<u>57263</u>
Total Assets Less Current Liabilities	<u>589471</u>	<u>581499</u>
Funds		
General Fund	173252	184398
Expendable Endowments:		
TB Short Memorial Fund	220654	203700
Grace Hickling Memorial Fund	173212	172394
	<u>567118</u>	<u>560492</u>
Life Members Fund	1926	2124
Designated Capital Funds (note 10)		
Gosforth Park Nature Reserve Restoration Fund	14312	15674
Ringing Group Fund	369	-
Restricted Funds:		
Archive/Coquet/ Farnes Research Fund (note 11)	5746	3209
	<u>589471</u>	<u>581499</u>

Approved by Council on 10 October 2003
IAN D MOORHOUSE - Chairman and Trustee
DOUGLAS JOHNSON - Honorary Treasurer

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 JULY 2003

1 Accounting Policies

1.1 Basis of Accounting

The accounts are prepared under the Historical Cost Convention as modified for the revaluation of Fixed Asset Investments and comply with the Statement of Recommended Practice 'Accounting and Reporting by Charities'.

1.2 Realised and Unrealised Gains and Losses on Investments are recognised in the Statement of Financial Activities in the period in which they arose.

1.3 Listed Investments are stated at market value at 31 July 2003.

1.4 Tangible Fixed Assets

Tangible fixed assets are stated at cost less depreciation which is provided in equal annual instalments over the estimated useful lives of the assets.

No value was attributed to the Hancock Museum at the date of its completion in 1884. The building is leased to the University of Newcastle upon Tyne which is normally responsible for all repairs and improvements.

The cost of Lake Lodge, less donations and grants received, of £3899 is depreciated at 2% per annum. The cost of installing mains electricity at Lake Lodge, less donations received, of £5300 has been fully depreciated

The cost of the hides, equipment and office furniture is depreciated at 10% per annum and computers and office equipment at 20% per annum.

1.5 Statement of Financial Activities

Donations are recognised when received unless the receipt is certain, when they are recognised as accrued income. Expenditure is accounted for on an accrued basis. Any excess of income over expenditure for the year is arrived at after making appropriations to special funds for the purpose of setting aside temporary surpluses of income to meet future expenditure.

1.6 Fund Accounting

The General Fund is unrestricted, and is expendable at the discretion of the trustees in the furtherance of the objects of the charity. The T B Short and Grace Hickling Memorial Funds were created from legacies and are invested in accordance with the Trustee Investment Acts and are subject only to expenditure for special projects. The Life Members Fund consists of amounts received in payment of life subscriptions and they are released to income over a period of 20 years in equal annual instalments.

2 Charitable Expenditure

Unrestricted	2003	2002
	£	£
Salaries, pension contributions and national insurance (note 4)	28711	28112
Printing and stationery	2132	2402
Postage and telephone	2615	2430
Insurance	2788	2250
General expenses	633	1103
Subscriptions to societies	593	487
Lecture and field meeting expenses	871	2122
Transactions	6445	5558
Library	1877	1994
Gosforth Park Nature Reserve		
Net of: transfer from Restoration Fund	1862	950
Coastal research	2351	2413
Depreciation	1857	2406
Archives	-	1678
Repairs and renewals	16	1727
Repairs to Lake Lodge	-	153
	<u>52751</u>	<u>55785</u>
Restricted		
Farnes research	2495	5000
Archives	1081	440
Vehicle	209	-
	<u>3785</u>	<u>5440</u>
	<u>56536</u>	<u>61225</u>

3 Administration Expenses

	2003	2002
	£	£
Salaries, pension contributions and national insurance (note 4)	7708	8171
Printing and stationery	112	126
Postage and telephone	138	128
Insurance	310	250
General expenses	407	400
Accountancy and book keeping fees	1865	2768
Independent review	723	699
	<u>11263</u>	<u>12542</u>

4 Information regarding Employees and Trustees

	2003	2002
Average number of employees during the year	<u>2</u>	<u>4</u>
Total emoluments	<u>£36419</u>	<u>£36283</u>

No trustee, or person related or connected by business to them, has received any remuneration from the charity during the year.

During the year, payments were made to four (2002 - two) trustees in respect of reimbursement of expenses incurred on the Charity's behalf totalling £291 (2002 - £222).

5 Coastal Research

Coastal Research comprises boat and vehicle costs together with ringing expenses for Farne Islands and Coquet Island research.

6 Tangible Fixed Assets for use by the Society

	2003	2002
	£	£
Hancock Museum	Not valued	
Lake Lodge: Cost	3899	3899
Electrical installation	<u>5300</u>	<u>5300</u>
	9199	9199
Less: Depreciation to date	<u>7328</u>	<u>7250</u>
Net book value	1871	1949
Hides, equipment, office furniture and computers		
Cost	38315	37363
Additions	-	952
	<u>38315</u>	<u>38315</u>
Less depreciation to date:	<u>32086</u>	<u>30307</u>
Net book value	<u>6229</u>	<u>8008</u>
Total net book value	<u>8100</u>	<u>9957</u>

There were no capital commitments at 31 July 2003

7 Investments held as Fixed Assets

Investments in trustee securities, at market value, were held as follows:

	2003	2002
	£	£
Listed		
On a recognised stock exchange	<u>428231</u>	<u>461222</u>
Unlisted		
Charities Official Investment Fund	<u>56672</u>	<u>53057</u>
The portfolio investments include the following material investments:		
Short Fund - Schroder UT's Ltd		
82,000 Retail Corporation Bonds which represent 7.84% of the market value of the portfolio.		
General Fund - Charity Funds Investment Income		
7,000 units which represent 11.69% of the market value of the portfolio.		
General Fund - Schroder UTs Ltd		
61,500 Retail Corporation Bonds which represent 5.88% of the market value of the portfolio.		

8 Debtors

	2003	2002
	£	£
Trade debtors	431	228
Prepayments and accrued income	<u>9203</u>	<u>4630</u>
	<u>9634</u>	<u>4858</u>

9 Creditors	2003	2002
	£	£
Accruals	7097	8147
	<u>7097</u>	<u>8147</u>

10 Designated funds

Gosforth Park Nature Reserve Restoration Fund			2003	2002
			£	£
General restoration			5812	7174
Sir James and Lady Steel donation for lake rejuvenation			<u>8500</u>	<u>8500</u>
			<u>14312</u>	<u>15674</u>
	2002	New designations	Utilised	2003
	£	£	£	£
Gosforth Park Nature Reserve	15674	721	(2083)	14312
Ringling Group fund	-	690	(321)	369
	<u>£15674</u>	<u>1411</u>	<u>(2404)</u>	<u>14681</u>

Incoming resources in respect of the Ringling Group were only partly utilised in the year and the Trustees have designated the balance as funds to be utilised in future periods.

11 Restricted funds

	2002	New designations	Utilised/ transferred	2003
	£	£	£	£
Archives/Coquet/Farnes research	<u>3209</u>	<u>8000</u>	<u>(5463)</u>	<u>5746</u>

During the year, further grants were received in respect of Farnes research of £4000 from the Sir James Knott Trust and £4000 from Northumbrian Water.

Research costs of £2495, archive repair and restoration costs of £1081 and utilisation of the balance of the support vehicle funds of £209 occurred this year.

In addition, the trustees have recognised that archive costs of £1678 were incorrectly applied to unrestricted funds in the previous year and have been made an appropriate transfer from restricted funds.

INDEPENDENT EXAMINERS REPORT TO THE TRUSTEES
OF THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

I report on the financial statements of the charity for the year ended 31st July 2003, which are set out on pages 34 to 40.

RESPECTIVE RESPONSIBILITIES OF TRUSTEES AND EXAMINER

As the charity's trustees, you are responsible for the preparation of the accounts; you consider that the audit requirement of Section 43(2) of the Charities Act 1993 (the Act) does not apply. It is my responsibility to state, on the basis of procedures specified in the General Directions given by the Charity Commissioners under Section 43 (7)(b) of the Act, whether particular matters have come to my attention.

BASIS OF INDEPENDENT EXAMINER'S REPORT

My examination was carried out in accordance with the General Directions given by the Charity Commissioners. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from you as trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

INDEPENDENT EXAMINER'S STATEMENT

In connection with my examination, no matter has come to my attention:

- (1) which gives me reasonable cause to believe that in any material respect the requirements:
 - to keep accounting records in accordance with Section 41 of the Act; and
 - to prepare accounts which accord with the accounting records and to comply with the accounting requirements of the Acthave not been met; or
- (2) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

G J Moore
Independent Examiner
Chartered Accountant
Tait Walker
Bulman House
Regent Centre
Gosforth
Newcastle upon Tyne
NE3 3LS

15 October 2003

BIRDS ON THE FARNE ISLANDS IN 2003

compiled by
DAVID STEEL¹
National Trust Warden

ringing report by
CHRIS REDFERN²

cetacean report by
JOHN THOMPSON³

edited by
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INTRODUCTION

The wardens sailed out to the islands on 26 March and both the inner and outer groups were manned until 4 December. The season will long be remembered for its hot, dry summer which resulted in a very successful breeding season. During the critical months of May, June and July only 283mm of rain fell on the islands compared with 1565mm during the same period in 2002. The season also provided record numbers of breeding birds, with several species experiencing peak breeding counts with an estimated population of 97,500 nesting pairs. The year brought about the first full puffin census in ten years, which resulted in huge increases with an overall rise of 60% in occupied burrows.

Twenty-one species bred and the mild spring encouraged birds to start constructing nests and laying early, as shags were sitting on eggs by 5 April, guillemots by 14 and puffins on 22 April. Increases were noted for shag (31%), eider (4%), ringed plover (33%), black-headed gull (167%), kittiwake (3%), Sandwich tern (6%), arctic tern (33%), guillemot (11%), razorbill (6%), puffin (60%) and pied wagtail (25%). Other breeding species experienced similar numbers to recent years with only common tern, dropping to their lowest breeding total since 1975, giving cause for concern. The first confirmed record of breeding shelduck since 1994 was offset by the decline of breeding roseate tern on the islands. This hit rock bottom, as for the first time on record the species failed to breed.

Passage birds were represented by 167 species with an overall total of 188 (outer group 168–161 inner group) representing a new record total for the islands. Four species were added to the island list: surf scoter, goshawk, Bonaparte's gull and white-winged black tern, bringing the islands' total to 290. Other notable records included the second ever little egret the third record of citrine wagtail, fourth record of raven (2), fifth of spoonbill (2), sixth of dusky warbler, ninth Richard's pipit and osprey sightings, tenth of Sabine's gull and yellow-

breasted bunting and tenth and eleventh records of hen harrier. Other species of note included blue fulmar (2), Balearic shearwater (7), storm petrel (5), dark-bellied brent goose (12), quail, corncrake (latest ever Northumberland record), coot (2), curlew sandpiper, spotted redshank (2), wood sandpiper, grey phalarope (3), long-tailed skua (4), Mediterranean, Iceland and glaucous gulls, turtle dove (2), great spotted woodpecker, shore lark, bluethroat, icterine, barred (4), Pallas's (2) and yellow-browed warblers (5), *abietinus* chiffchaff, firecrest, common redpoll, common rosefinch (2), ortolan bunting and little bunting (3).

Thanks go to the 2003 wardening team of Alex Ash, Neil Dawson, Phill Day, Nigel Fairney, David Kirkland, David Parnaby, Alein Shreeve, David Steel and John Thompson, and to various boatmen and visitors, for supplying the records which make up this report. The following is a day-by-day summary of the highlights of 2003. 'First record' means the first record for the year and species in bold are of particular interest; for more details refer to the species accounts.

March

- 26 Jack snipe, chiffchaff (first record)
- 27 Jack snipe, sandwich tern (first record), grey wagtail, wheatear (first record), greenfinch, siskin
- 29 Golden plover (30), woodcock, greenfinch
- 30 Manx shearwater (first record), first shag eggs, red-breasted merganser (2)
- 31 Manx shearwater, greylag goose, red-breasted merganser (2), chaffinch (first record)

April

- 1 Manx shearwater, short-eared owl
- 2 Great northern diver, long-tailed duck, goldeneye
- 4 Rook (4)
- 6 **Mediterranean gull**, common gull (130)
- 7 First cormorant eggs, merlin
- 8 **Blue fulmar**, goldeneye (2), lapwing, 'white' wagtail, jackdaw
- 10 Wigeon (6, spring peak)
- 11 **Mediterranean gull**
- 12 Red-throated diver (7, spring peak)
- 13 **Tree sparrow**, twite (2)
- 14 Merlin, **tree sparrow**, brambling (first record), goldfinch (first record), twite (2)
- 15 First mallard eggs, red-breasted merganser (6), green sandpiper, **Iceland gull**, short-eared owl, whitethroat (first record), blackcap (first record), jackdaw, **tree sparrow**, twite (2)
- 16 Tree pipit (first record), yellow wagtail (first record), blue-headed wagtail, grey wagtail, willow warbler (first record), jackdaw (8), **tree sparrow**, twite (2), reed bunting (first record)
- 17 First eider eggs, common tern (first record), arctic tern (2, first record), **tree sparrow**, twite(2)

- 18 **Tree sparrow**
- 19 First ringed plover eggs, water rail
- 21 Sooty shearwater (first ever spring record), swallow (first record), yellow wagtail, redstart (first record), garden warbler (first record)
- 22 Spotted redshank, first puffin eggs, sand martin (first record), redstart, rook (8)
- 23 Jackdaw (4)
- 25 Common sandpiper (first record), grasshopper warbler (first record)
- 26 Sparrowhawk (first record), first great black-backed gull eggs, little tern (first record), house martin (first record)
- 27 Sandwich tern (3,000 spring peak), first rock pipit eggs, carrion crow (11)
- 28 Whimbrel (first record), arctic skua, **Mediterranean gull**, lesser whitethroat (first record)
- 30 Greylag goose (6), jackdaw (2)

May

- 1 Canada goose (7), sanderling (12), whimbrel (4, spring peak), roseate tern (first record)
- 2 *tristis* chiffchaff
- 3 Purple sandpiper (200), arctic skua
- 4 Arctic skua, great skua, goldfinch (16)
- 5 Blue-headed wagtail, redstart, wheatear (31, peak count), sedge warbler (first record)
- 6 First herring gull eggs, collared dove, yellow wagtail, 'white' wagtail, redstart
- 8 First shag young, greylag goose (4), first shelduck eggs, cuckoo
- 9 Sparrowhawk
- 11 Cuckoo, whinchat (first record), jackdaw (2)
- 12 First sandwich tern eggs, little tern (65, peak count)
- 14 First fulmar eggs, tufted duck (3), first arctic tern eggs, first rock pipit young
- 15 Knot (92), bar-tailed godwit (205, record count), great skua, first puffin young
- 16 First oystercatcher eggs, **turtle dove**, swift (first record), lesser redpoll
- 17 First eider young, **hen harrier**, lesser redpoll (2)
- 18 First cormorant young, first ringed plover young, lesser redpoll
- 21 First kittiwake eggs
- 22 First common tern eggs
- 24 Yellow wagtail
- 29 First mallard young, first great black-backed gull young
- 31 Shoveler, first Sandwich tern young, siskin

June

- 1 **Icterine warbler**
- 3 **Spoonbill**, first shelduck young
- 7 **Spoonbill** (2)
- 8 **Spoonbill** (2), greylag goose
- 9 **Spoonbill**

- 10 Kestrel (first record)
- 11 **Spoonbill** (2), bar-tailed godwit (62), first kittiwake young
- 12 **Spoonbill, Mediterranean gull**
- 13 **Spoonbill**, first oystercatcher young
- 14 **Little egret, spoonbill**, great skua
- 15 **Spoonbill**, knot (115), arctic skua, swift (9)
- 16 **Spoonbill**, mute swan (4), **surf scoter** (first ever record)
- 17 Mute swan (2), collared dove (2)
- 18 First cormorant fledgling, greylag goose, wheatear
- 19 **Osprey**
- 21 Manx shearwater (648, record count)
- 25 First shag fledgling, little gull (first record), wheatear
- 26 Common scoter (126)
- 27 **White-winged black tern**
- 29 Black-tailed godwit (2), arctic skua, first common tern young
- 30 Red-throated diver, first fulmar young, arctic skua

July

- 3 Whimbrel (first autumn record)
- 9 Golden plover (6, first autumn record), black-tailed godwit (10)
- 10 **Little egret**
- 11 Black-tailed godwit (16)
- 12 Black-tailed godwit, greenshank (first record), **crossbill** (male)
- 13 **Coot, Mediterranean gull** (2), wheatear
- 14 **Little egret**, common sandpiper (first autumn record)
- 16 **Quail**
- 19 **Little egret**, black redstart (first record)
- 20 Purple sandpiper (173), black tern
- 21 Black tern
- 23 Black tern
- 24 **Little egret**, black tern
- 25 Black tern
- 26 First puffin departure
- 28 Whimbrel (14)
- 30 **Storm petrel** (2), whimbrel (18), grasshopper warbler (first autumn record)

August

- 1 **Little egret, crossbill** (3)
- 3 **Little egret**, black-tailed godwit (28)
- 4 **Storm petrel** (3), **little egret**, black-tailed godwit, most puffins gone
- 5 Ruff (first record), greenshank (3), black tern, black redstart
- 6 **Curlew sandpiper**, black tern
- 7 **Curlew sandpiper**, whimbrel (10), whinchat (first autumn record), reed warbler (first record), pied flycatcher (first record)

- 8 Sooty shearwater (first autumn record), **curlew sandpiper**, wheatear (first autumn record)
- 9 **Curlew sandpiper**
- 10 Black-tailed godwit, **curlew sandpiper**
- 11 **Curlew sandpiper**, sedge warbler (last record)
- 12 Greenshank (3), black tern, willow warbler (14)
- 13 Sparrowhawk, greenshank (3)
- 14 **Little egret**
- 15 **Balearic shearwater**, black tern (3)
- 16 **Balearic shearwater**, black tern,
- 17 Red-throated diver (first autumn record), shoveler, wood sandpiper, black tern
- 18 **Blue fulmar**, black tern (2)
- 19 First fulmar fledgling, sparrowhawk, knot (58), black-tailed godwit, spotted redshank, black tern (2)
- 20 House martin (last record)
- 22 Sand martin (last record)
- 24 **Sabine's gull**
- 25 Manx shearwater (268), wigeon (3, first autumn record), pomarine skua (2), arctic skua (23), **long-tailed skua** (2), great skua (16)
- 26 Manx shearwater (176), **Balearic shearwater** (2), velvet scoter (first record), sanderling (5), pomarine skua, arctic skua (8), **long-tailed skua** (2), great skua (32), **barred warbler**
- 27 Manx shearwater (350), pomarine skua (2), **barred warbler**
- 28 Pomarine skua (4), **barred warbler**
- 29 Sooty shearwater (20 peak count), Manx shearwater (115), gadwall (6), pomarine skua (6), great skua (75)
- 30 Brent goose (6, first record), gadwall (4)
- 31 Kestrel (first autumn record)

September

- 1 **Balearic shearwater** (2), pomarine skua, **yellow-breasted bunting**
- 2 Mute swan (3), wigeon (107), teal (450), pintail (2), common scoter (146), **common rosefinch**
- 3 Roseate tern (last record)
- 4 Golden plover (1,025 peak count), **barred warbler**
- 5 Pomarine skua, redstart (first autumn record)
- 6 Shoveler
- 8 Reed warbler, **barred warbler**
- 9 Great northern diver (first autumn record), reed warbler, **barred warbler**
- 10 Tufted duck (6), **barred warbler** (2)
- 11 **Barred warbler**
- 12 Common sandpiper (last record), **barred warbler**
- 13 Lapwing (2, first autumn record), greenshank (last record), **barred warbler**

- 14 **Ortolan bunting**
- 15 **Turtle dove**, reed warbler (last record), **raven** (2), lesser redpoll (first autumn record)
- 16 Pink-footed goose (first record), meadow pipit (169)
- 17 **Goshawk** (first ever record), **great spotted woodpecker**
- 18 Pintail (2), **goshawk**, greylag goose, swift (last record)
- 19 Scaup (2), rook (2)
- 20 Red-throated diver (34, autumn peak), great northern diver (15, autumn peak), mute swan (3), barnacle goose (first record), **little stint**, pomarine skua, ring ouzel (first record), **yellow-browed warbler**, spotted flycatcher (first record), Brambling (5, first autumn record)
- 21 Lapwing (89), grey wagtail (first autumn record), **yellow-browed warbler**
- 22 Pintail (4), tufted duck, whitethroat (last record)
- 23 **Balearic shearwater**, brent goose (139, peak count), **hen harrier**
- 24 Manx shearwater (185), pink-footed goose (598, peak count), barnacle goose (127), tufted duck
- 25 **Little egret**, mute swan (2), pomarine skua (2)
- 27 Sooty shearwater (19), **bluethroat**
- 28 Barnacle goose (217), tufted duck, common tern (last record), garden warbler (last record), **yellow-browed warbler** (2), spotted flycatcher, pied flycatcher (last record), **little bunting**
- 29 Grasshopper warbler (last record), **yellow-browed warbler**, willow warbler (last record), **common rosefinch**, Lapland bunting (2)
- 30 Pochard (2), tufted duck, goosander, little gull (217), **Richard's pipit**

October

- 1 Pomarine skua, whinchat (last record)
- 2 Red-necked grebe, little gull (262), **citrine wagtail**, stonechat (2), **little bunting**
- 3 Goosander, arctic skua (10), little auk (8, first record)
- 5 Velvet scoter (9), jack snipe (first autumn record), Sandwich tern (last record), arctic tern (last record), short-eared owl (first autumn record), redstart (last record)
- 7 Fieldfare (first autumn record)
- 8 Lapland bunting
- 9 Barnacle goose (240), goldeneye (first autumn record), Lapland bunting
- 11 **Grey phalarope** (3), rook
- 12 Woodcock, **little bunting**
- 13 Jack snipe (2), short-eared owl (2), ring ouzel, fieldfare (237), redwing (567), **yellow-browed warbler**, chaffinch (13), Brambling (103), greenfinch (first autumn record), **little bunting**, snow bunting (first record)
- 14 Wigeon (76), **shore lark**, tree pipit (last record), black redstart (2), fieldfare (218), redwing (356), robin (40), wheatear (last record), ring ouzel, **Pallas's warbler**, yellowhammer
- 15 Red-breasted merganser (6), peregrine (3), short-eared owl (first autumn record), black redstart (2), ring ouzel, fieldfare (332), **Pallas's warbler**, goldcrest (60), **firecrest**, lesser redpoll (5)

- 16 Red-necked grebe, short-eared owl (2), black redstart (2), **Pallas's warbler**
- 17 Black redstart (2), **Pallas's warbler**
- 18 Red-necked grebe, little gull (200), black redstart (3), reed bunting (10),
- 19 Pochard, velvet scoter (12, peak count), great skua (18), little auk (20), black redstart (2)
- 20 Long-tailed duck (22, peak count)
- 22 Great crested grebe (only record)
- 23 Red-necked grebe, mute swan (2), long-eared owl, short-eared owl (2), grey wagtail (last record), yellowhammer
- 24 **Corncrake**, black guillemot, carrion crow (10)
- 26 Black guillemot
- 27 Swallow
- 28 Little auk (15)
- 29 Mute swan (5), greylag goose, swallow (last record), goldfinch (last record)
- 30 Slavonian grebe (only record), mute swan (10), teal (90), sparrowhawk (2), lesser whitethroat (last record)

November

- 1 Red-necked grebe (2), Manx shearwater, arctic skua, great skua, black guillemot (2)
- 2 Mistle thrush, black guillemot, *abietinus* chiffchaff
- 3 Sparrowhawk (2), *abietinus* chiffchaff
- 4 *abietinus* chiffchaff
- 5 Ruff (last record), *abietinus* chiffchaff
- 6 Yellow-legged gull (first ever record), black guillemot, black redstart, *abietinus* chiffchaff
- 7 Common scoter (229), goosander, black guillemot, black redstart, **dusky warbler**
- 8 Shoveler (8), goldeneye (10), goosander, great skua, black guillemot, short-eared owl (last record), black redstart, **dusky warbler**, **common redpoll**, yellowhammer
- 9 Manx shearwater (last record), dark-bellied brent goose (12), pintail, tufted duck, long-tailed duck (5), goldeneye (17), goosander (6), woodcock (6), arctic skua, great skua, **Bonaparte's gull** (first ever record), little auk (64, peak count), **common redpoll**, yellowhammer
- 10 Yellowhammer (2), reed bunting (last record)
- 11 Yellowhammer (2)
- 12 Greylag goose (4), chiffchaff (last record), brambling (last record)
- 13 Greylag goose (110), wigeon (61), arctic skua, mistle thrush, twite (36), lesser redpoll (last record)
- 14 Greylag goose (13)
- 15 Whooper swan (6, only record)
- 20 Lapland bunting (2)
- 22 Mute swan, mallard (144, peak count), little gull

- 23 Scaup (5), **coot**, little gull, common gull (58), twite (23), Lapland bunting
- 24 Lapland bunting (9)
- 25 **Glaucous gull**, dunlin (100+)
- 26 Sooty shearwater (last record), lapwing (34), greenfinch (26)
- 29 Great skua (last record)

December

- 1 Black-throated diver (3, first record), long-tailed duck (5), arctic skua (latest ever record)
- 2 Black-throated diver, red-necked grebe, lapwing (65), blackcap (last record)
- 3 Moorhen (corpse), black guillemot, snow bunting (35)
- 4 Snow bunting (40)

Details of all the birds are given in the following list: this follows the order and scientific nomenclature of Professor Dr K H Voous' list of Holarctic species (1977), except for the shearwaters and gannet which adopt the new changes recommended by *Ibis* 133, p438. Where appropriate, the figures for 2002 breeding birds are included in brackets for comparison.

The status of each species/sub species is classified using the following categories:

abundant	>1,000 occurrences per annum
common	101-1,000 occurrences per annum
well represented	11-100 occurrences per annum
uncommon	no more then 10 occurrences per annum but more than 10 in total
rare	6-10 occurrences
extremely rare	no more than 5 occurrences in total

SYSTEMATIC LIST

Red-throated Diver *Gavia stellata*

A common winter and passage visitor.

Well represented during spring and autumn with records shared between Inner and Staple Sounds. The spring produced one to five from 30 March-3 May with a peak of seven flying north through Inner Sound on 12 April. An unusual mid-summer record concerned a summer plumage adult on the sea in Inner Sound on 30 June. Autumn was marked by return passage from 17 August-3 December, usually involving one to six birds. Heavy passage occurred in mid-September with thirty-four south on 20 September (twenty-two through Inner Sound, twelve through Staple Sound) and fourteen south the following day.

Table 1 Total number of days passage Red-throated Divers recorded each month.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Inner Sound	2	6	0	1	0	1	7	10	7	2
Staple Sound	0	5	2	0	0	0	9	8	8	1

Black-throated Diver *G. arctica*

A well represented winter and passage visitor.

A very quiet year with the only confirmed records involving three south through Inner Sound on 1 December (a single and two together). Another was on the sea off the lighthouse cliff at Inner Farne on 2 December with both other diver species.

Great Northern Diver *G. immer*

A well represented winter and passage visitor.

The only spring record was a single north through Staple Sound on 2 April. Return autumn passage was marked by reports on twenty-six dates between 9 September and 2 December. Most records were of individuals through Inner Sound on eight dates, Staple Sound on twelve dates and from the south end of Brownsman on three dates. Multiple records concerned two through Inner Sound on 16 and 29 November and 2 December. The highest count of the year was an unprecedented fifteen south past the islands during heavy diver passage on 20 September.

Great Crested Grebe *Podiceps cristatus*

An uncommon visitor.

The only record of the year was a single north through Staple Sound on 22 October.

Red-necked Grebe *P. grisegena*

A well represented winter and passage visitor.

A modest year with birds reported on six dates between 2 October and 2 December. Singles were on the sea in Staple Sound on 2 and 23 October and 1 November and another flew north past the south end of Brownsman on the latter date. Inner Sound produced singles on 16 and 18 October and 2 December.

Slavonian Grebe *P. auritis*

An uncommon winter and passage visitor.

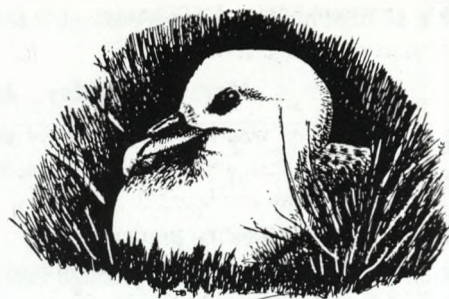
Despite good numbers wintering in north Northumberland the species is uncommon around the Farnes (probably due to the lack of observers during the winter), and the only record concerned an individual seen on the sea off Brownsman late on 30 October.

Fulmar *Fulmarus glacialis*

A common breeder, abundant on passage.

Small numbers were noted at their breeding sites when the wardens arrived on 26 March and

following the usual brief 'honeymoon' in early May many were back holding territory by the second week of the month. The first eggs were discovered on 14 May on both Knoxes Reef and Brownsman, while the same islands produced the first young on 30 June. There was a slight decrease in breeding numbers with 246 (255) pairs nesting as follows: Inner Farne 22 (26), West Wideopens 12 (17), East Wideopens 27 (21), Knoxes Reef 22 (20), Staple Island 36 (35), Brownsman 55 (75), North Wamses 29 (27), South Wamses 37 (24), Big Harcar 3 (10), Longstone End 3 (0). The first young fledged on 19 August on the inner group and 25 August on the outer group. On the inner group the average productivity dropped for another year down to 0.50 although the outer group experienced similar results to recent years with an overall productivity of 0.48. Once the breeding season was complete the species became scarce in September and October before birds returned to the islands from early November, where they remained until the wardens departed in early December.



The season brought two reports of a '**Blue Phase**' Fulmar, an uncommon morph. The first, which showed extremely well, was discovered on Brownsman on 8 April, landing on the north-west rocks with other fulmars. The second record concerned one north on 18 August at the south end of Brownsman during a moderate seabird passage.

Sooty Shearwater *Puffinus griseus*

A well represented to common passage visitor.

The lack of any favourable winds during mid-autumn accounted for smaller numbers reported, especially compared with the record numbers of the previous two seasons. However the season brought two extremes, the earliest and second-latest ever records. A single was discovered on the sea off Inner Farne lighthouse cliff on 21 April before it drifted off behind the Wideopens, representing the first spring record for both the islands and Northumberland. A bird noted flying south through Staple Sound on 26 November was the second-latest record, following the latest noted on 2 December 1986. Passage was generally quiet with birds recorded between 8 August and 26 November with peak counts of twenty north on 29 August (fourteen north past Brownsman south end, six north through Staple Sound), and nineteen north on 27 September (seven north past Brownsman south end, twelve north through Staple Sound).

Table 2 Monthly totals of Sooty Shearwaters past the Farne Islands, 2003.

Month	No. of Days Recorded		Total
	Inner Group	Outer Group	
August	4	9	48 north
September	0	10	52 north
October	4	8	19 north, seven south
		52	

Manx Shearwater *P. puffinus*

A common passage visitor.

It was an interesting season, with reports from the outer group covering seventy-one days while the species was recorded on only twenty-six days from the inner group. Spring passage brought early records north through Staple Sound on 30-31 March, while the south end of Brownsman produced one north on 1 April and one-four on five dates between 14 and 29 May. Mid-summer produced a spate of records, with 1-59 reported on twelve dates during June and July. The exception was a staggering 648 north off Brownsman south end in just two hours on the evening of 21 June, representing a new Farnes day record and breaking the record set in September 1997. Autumn brought heavy passage during the last week of August with 268 north on 25, 176 north on 26, 350 north on 27 and 115 north on 29 August. September continued to produce regular records, peaking with 185 north past Brownsman south end on 24 September. October saw a decline in numbers and the final records concerned late passage birds north through Inner Sound on 1 November and south through Staple Sound on 9 November.

Table 3 Monthly totals of Manx Shearwaters past the Farne Island, 2003

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group									
Days recorded	0	0	1	3	5	6	6	4	1
Monthly Total	0	0	2	6	7	468	14	6	1
Outer Group									
Days recorded	2	1	5	5	12	17	18	10	1
Monthly Total	2	1	10	728	171	1411	544	48	1

Balearic Shearwater *P. mauretanicus*

An uncommon passage visitor.

A good year with a total of seven recorded during late August and early September. August produced four birds, with singles north through Staple Sound on 15, 16 and 26 and a different bird noted past the south end of Brownsman on the latter date. Further reports included two north through Staple Sound on 1 September, with a final record of a bird north past the south end of Brownsman on 23 September.

Storm Petrel *Hydrobates pelagicus*

An uncommon passage visitor. Some evidence of possible breeding in 1998-99 (Walton and Maher, 1999; Walton, 2000).

A combination of tape-luring and 'chumming' (attracting birds with smelly fish offal and oil) from Brownsman attracted two of these magical nocturnal visitors on the evening of 30 July, with at least three lured in on the evening of 4 August.

Gannet *Morus bassanus*

An abundant passage and non breeding summer visitor.

Recorded almost daily throughout the season as birds headed to breeding grounds in East Yorkshire to the south and East Lothian to the north. April and August provided the heaviest passage, with 1,430 north on 6 April and 902 north on 29 August (both one hour counts). Counts were generally lower in May-July and smaller numbers were recorded from September-December.

Cormorant *Phalacrocorax carbo*

A common breeding resident.

Nest building was well advanced at the two colonies when the wardens arrived on 26 March. The first eggs were found on East Wideopens on 7 April and North Wamses on 8 April, while the first young were noted on East Wideopens on 18 May and North Wamses on 20 May. A total of 179 (190) pairs nested as follows: East Wideopens 101 (105), North Wamses 78 (85). Despite the presence of large gulls nesting in the two colonies it appeared to be another successful season, with good numbers of fledged young noted around the islands in mid-summer. The first fledged young were reported from East Wideopens on 24 June and North Wamses on 18 June. The East Wideopens colony was monitored for the first time, with fifteen monitored nests producing an overall average of 1.93 fledglings each. There were no significant counts outside the breeding season.

Shag *P. aristotelis*

An abundant breeding resident.

The mild spring encouraged birds to nest early and the first eggs were discovered on the early date of 30 March (the earliest date since 1997) on Inner Farne south cliff, with the first eggs on Brownsman on 5 April. The first young hatched on Inner Farne on 8 May and Staple Island on 9 May, and a total of 1,678 (1,282) pairs nested, representing the highest island breeding total since 1993. Pairs nested as follows: Megstone 34 (32), Inner Farne 463 (290), West Wideopens 117 (66), East Wideopens 162 (81), Skeney Scar 80 (72), Staple Island 369 (354), Brownsman 138 (121), North Wamses 30 (31), South Wamses 66 (72), Roddam and Green 19 (15), Big Harcar 130 (80), Longstone End 70 (68). The first fledgling was on Staple Island on 25 June and the usual lengthy breeding season continued until the last young fledged from a nest on Brownsman on 19 September. Productivity dropped from the previous season, with 317 monitored nests producing an average of 0.52 fledglings each. Although good success was reported on Inner Farne (0.97) and Brownsman (0.71) it was clear to see that some colonies were suffering, chiefly Staple Island (0.24) and West Wideopens (0.17). Large numbers remained around the islands outside the breeding season.



Little Egret *Egretta garzetta*

An extremely rare visitor.

As this species continues to colonise Britain, it may be safe to assume that the number of records on the Farne Islands may increase in future years. The year brought an unprecedented number of records from the islands on ten dates during the summer, all involving the same adult which summered along the coastline of North Northumberland. The first sighting was of it drifting eastwards over Staple Island on the morning of 14 June, while the outer group wardens were participating in a cliff count. The bird was rediscovered feeding on South Wamses, but soon disappeared pursued by angry gulls and terns. It was then recorded on four occasions during July with the first report of it flying west over the outer group on 10 July before eventually settling on Knoxes Reef to feed. On 14 July it was seen flying over South Wamses before landing on Staple Island and eventually departing to the west. On both 19 and 24 July it was observed flying west over the outer group towards Megstone and the mainland. Further sightings were reported on 1 and 3 August on the inner group, on 4 August over the outer group and on Inner Farne churn pool on 14 August. The final report was of it feeding in a pool on Knoxes Reef on 25 September. This represents only the second record for the islands – the only previous report concerned a bird on 2 May 1994.

Grey Heron *Ardea cinerea*

A well represented visitor. Bred in 1894 (Paynter, 1894).

Spring reports indicated singles on the inner group on nine dates and on the outer group on five dates, peaking with four over Staple Island on 2 July. The species became more regular in the autumn with singles on the inner group on fourteen days until the end of the season, with six on 28 September and 1 November. The outer group recorded one-two on fifty-one dates and it became evident that at least one bird was resident, with daily sightings in October and November. On the outer group the only count to exceed the norm was five on Longstone main rock on 20 September.

Spoonbill *Platalea leucorodia*

An extremely rare visitor.

Early June provided an exciting series of records involving two birds (an adult and an immature) which represent the fourth records for the island, following two records from last year and another in 1988. A single was observed on 3 June flying south through Staple Sound before eventually drifting over Inner Farne and west towards Budle Bay on the mainland. Four days later, on 7 June, two birds (an adult and an immature) drifted over the inner group and west towards the mainland, with both birds roosting on Big Scarcar during the following morning's high tide. 9 June brought only one report, of a single flying west over Inner Farne, with no reports on 10 June. On 11 June, both the adult and immature were present on the inner group and this proved to be the last sighting of the adult. Thereafter the immature roosted daily on Knoxes Reef at high tide between 12 and 16 June, ending the fine series of records.

Mute Swan *Cygnus olor*

An uncommon visitor.

An excellent year with reports on nine dates covering four months, with the majority of

sightings through Inner Sound. The first records involved four south through Inner Sound on 16 June and two north the following day. Inner Sound continued to produce records with three reports during September, including three south on 2, three north on 20 and two north on 25 September. Other records concerned two north through Inner Sound on 23 October, five north-west over South Wamses on 29 October, ten south over Brownsman on 30 October and a juvenile which circled Knoxes Reef on 22 November before eventually flying back towards the mainland.

Whooper Swan *C. cygnus*

An uncommon winter and passage visitor.

Following last season's blank year the species was recorded on passage, with six adults noted flying south past the south end of Brownsman on 15 November.

Pink-footed Goose *Anser brachyrhynchus*

A well represented passage and winter visitor.

Reports peaked in late September as birds passed the islands on their way to southern wintering grounds. Day counts were of 11-189 passing the islands on eight dates between 16 September and 3 October with heavy passage noted on 24 September, when a total skein of 598 moved north through Inner Sound. The only other records came from mid-November with sixty-six south on 16 and forty-one south on 19 November.

Greylag Goose *A. anser*

An uncommon passage and winter visitor.

Spring passage involved one low over the Inner Farne chapel on 31 March, a flock of six landing briefly on Staple Island before heading north over Big Harcar on 30 April and four on West Wideopens on 8 May. A tame feral bird was seen on West Wideopens on 8 and 18 June. Autumn records included singles north through Staple Sound on 18 September and another on Knoxes Reef on 29 October. November produced the bulk of reports with four north over Inner Farne on 12, a large skein of *ca* ten flying south through Inner Sound on 13 and thirteen which were flushed off Brownsman Pond on the morning of 14 November, having evidently roosted there overnight.

Canada Goose *Branta canadensis*

An uncommon passage visitor.

A very quiet year, with the only report being on 1 May when a flock of seven flew from the inner group and out over the outer group before eventually tracking north.

Barnacle Goose *B. leucopsis*

A well represented passage and winter visitor.

Autumn passage was noted on twenty days between 20 September and 15 November, with the bulk of reports being in late September and early October. Passage over the islands usually involved skeins flying in from the open sea to the east and over the islands before turning north through Inner Sound. Total day counts of between one and sixty-nine were the norm with peak counts of 127 north on 24 September, 217 north on 28 September and 240 north on 9 October, in several skeins. A tame, possibly feral, bird became resident on East Wideopens from 12-29 October and as known as 'Barney' during its stay.

Brent Goose 'Light-bellied' *B. bernicla hrota*

A well represented passage and winter visitor.

Following a party of six which flew north through Inner Sound on 30 August, 1-22 were recorded on nine dates between 2 September and 26 November (four dates through Inner Sound, five dates through Staple Sound). The only count to exceed these small numbers was when 139 passed north on 23 September.

A party of twelve '**Dark-bellied**' Brent Geese *B. b. bernicla* alighted in the Kettle off Inner Farne on the morning of 9 November. The birds, two adults and ten juveniles, lingered for most of the morning before eventually heading off south. This represents the largest known flock of this race to have occurred on the Farne Islands, constituting the sixth record and last reported in 1990.

Shelduck *Tadorna tadorna*

A well represented visitor and occasional breeder (Walton, 1995).

The season brought a stunning highlight, the successful breeding of the species on Inner Farne, the first success since 1994. The indications were good, following a pair which spent last summer unsuccessfully prospecting for a nest site on the islands. The pair appeared in late March and were seen daily on several islands, on both island groups throughout the early spring period. On 22 April it looked increasingly likely that they had found a suitable nest site, as the female was seen leaving a hole on Inner Farne. Breeding was confirmed with eight eggs discovered down the hole on 8 May and all eight hatched on 3 June. The pair was last seen leading eight ducklings to the water and the season was a success. Records of passage birds came from Inner Sound with five south on 23 April, four north on 26 April and three north on 3 October. The only other record concerned a single north through Staple Sound on 27 July.

Wigeon *Anas penelope*

A common passage and winter visitor.

Spring passage was light with 1-2 recorded on 27 and 30 March and 1 April. A flock of six flew south through Staple Sound on 10 April. The first returning autumn passage birds were logged through Staple Sound with three south on 25 August and six south on 29 August. Thereafter reports of 1-49 were recorded on forty dates between 1 September and 30 November with 58% of records through Staple Sound and 42% through Inner Sound. Peak counts included 107 north on 2 September, seventy-six north on 14 October and sixty-one north on 13 November. Between one and four were present on Knoxes Reef and occasionally Brownsman Pond during this period.

Gadwall *A. strepera*

An uncommon visitor.

Late August produced a surprise on Staple Island, with six birds noted in the central gully on the afternoon of 29 August. The party appeared to be settled and remained until the following morning, when at least four were still present. Last recorded in 2000.

Teal *A. crecca*

A common passage and winter visitor.

The early part of the season produced small numbers of 1-4 lingering around the islands, utilising the ponds on Inner Farne, Knoxes Reef, Staple Island and Brownsman between 26 March and 30 April. Unseasonal records involved males on Crumstone on 9 June, Knoxes Reef on 26 June and Staple Island on 3 July. Autumn produced 1-41 on forty-five days between 8 August and 30 November: 71% of the records were of birds passing through Staple Sound compared with 29% through Inner Sound. Peak autumn counts included 450 north on 2 September and ninety north on 31 October. Small numbers built up on Knoxes Reef peaking at sixty on 17 November with a peak of fifty on Staple Island on 25 October.

Mallard *A. platyrhynchos*

A common winter and passage visitor. Uncommon breeder.

Well reported throughout the season, with almost daily records. Nesting attempts were made on several islands, with the first eggs discovered on Inner Farne on 15 April and the first young reported from the same island on 29 May. Thirteen pairs nested as follows: Inner Farne 4 (1), West Wideopens 2 (2), East Wideopens 0 (1), Knoxes Reef 1 (1), Staple Island 1 (0), Brownsman 2 (1), North Wamses 1 (1), South Wamses 2 (1). Although predation took its toll a good number of young fledged, especially on Inner Farne with at least seventeen reaching fledging stage. Numbers built up in the latter part of the year on Knoxes Reef with from three to twenty-six present during August and September, increasing during the autumn with forty on 13 October, ninety-one on 17 November and eventually peaking with 144 on 22 November. Smaller numbers were reported on the outer group with a peak of twenty-eight on Staple Island on 22 November.

Pintail *A. acuta*

An uncommon passage and winter visitor.

Passage birds were recorded in the autumn with the bulk of records in September, usually associating with mixed duck flocks. Staple Sound produced reports in September of two north on 2 and 18 and four north on 22, and an adult male was observed on Knoxes Reef on 9 November.

Shoveler *A. clypeata*

A well represented passage and winter visitor.

The only spring record was of a male drifting into eclipse plumage on Brownsman pond on 31 May before eventually flying north. Autumn brought an eclipse male to Knoxes Reef on 17 August, a female toured several islands on the outer group on 6 September, and a party of eight flew south through Inner Sound on 9 November.

Pochard *Aythya ferina*

An uncommon passage visitor.

There were two reports of two males flying north through Staple Sound on the morning of 30 September with a common scoter flock, and a female flew north through Inner Sound on 19 October. Last recorded in 2001.

Tufted Duck *A. fuligula*

A well represented visitor.

The only spring report came from the inner group where two males and a female were noted on the east shore of West Wideopens on 14 May. September produced the bulk of passage birds with six north through Staple Sound on 10, and singles recorded on 22, 24, 28 and 30 September. The final record on 9 November concerned a female south with goldeneyes through Staple Sound.

Scaup *A. marila*

An uncommon passage and winter visitor.

A modest year produced reports of a male south through Staple Sound on 19 September followed by a female later that day. The only other record involved five (two males, three females) south through Staple Sound on 23 November.

Eider *Somateria mollissima*

An abundant breeding resident.

It was a good year, with breeding numbers reaching the 1,000 pair mark for the first time in three years. Prospecting birds were first seen on Inner Farne on 1 April and the first eggs were discovered on 17 April on the central meadow on Inner Farne, the same spot as the previous three seasons. Many followed thereafter although predation by large gulls was noted as early as 19 April. On the outer group the breeding season began slightly later, with the first egg discovered on Staple Island on 22 April. 1,036 (997) ducks nested as follows: Inner Farne 705 (698), West Wideopens 27 (30), East Wideopens 10 (10), Knoxes Reef 7 (8), Staple Island 23 (21), Brownsman 240 (209), North Wamses 6 (4), South Wamses 8 (12), Big Harcar 6 (2), Northern Hares 1 (1), Longstone main rock 1 (0), Longstone End 2 (2). The first chicks were found on Inner Farne on 17 May and on Staple Island on 21 May. A total of 399 monitored nests produced 1,173 young, an average productivity of 2.93, showing a slight increase on recent years. Peak monthly counts are shown in Table 4. The November record of 626 concerned a huge movement north through Inner Sound in a twenty-minute period on 1 November.

Table 4 Peak monthly counts of Eiders around the Farne Islands, 2003.

	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group	453	367	N/a	79	N/a	28	345	626
Outer Group	220	174	127	122	27	33	50	121

Long-tailed Duck *Clangula hyemalis*

A well represented passage and winter visitor.

There was only a single spring report, a female north through Staple Sound on 2 April. Reports in the autumn between 20 October and 1 December were of between one and four through Inner Sound on four dates in October and six dates in November. In comparison,

one-two were recorded through Staple Sound on four days in October and three days in November. Other than these dates, peak numbers flew north through Inner Sound with twenty-two on 20 October and five on 9 November and 1 December.

Common Scoter *Melanitta nigra*

A common passage and winter visitor.

Well recorded throughout the season from 27 March-2 December with reports on 112 dates, with 64% of all passage logged through Staple Sound and 36% through Inner Sound. Peak counts for the year included 126 north on 26 June, 146 north on 2 September and 229 north on 7 November.

Table 5 Records of Common Scoters past the Farne Islands, 2003.

Month	Low Count	High Count	Number of Dates
March	4	7	3
April	3	53	15
May	2	44	10
June	7	92	11
July	4	80	9
August	2	74	7
September	5	146	21
October	1	49	22
November	1	229	12
December	3	5	2

Surf Scoter *M. perspicillata*

An extremely rare visitor – first record.

A cracking first-year male was discovered rafting amongst thousands of puffins just off the Wideopens during the afternoon of 16 June, but did not linger as it was spooked by a visitor boat and flew off south. This was the first record of this North American sea duck at the Farne Islands, although with over eighteen records in Northumberland it was long overdue. The bird had been seen off Holy Island earlier in the spring and was a real contender for 'bird of the year'.

Velvet Scoter *M. fusca*

A well represented passage and winter visitor.

The first records of the year were one north through Inner Sound on 26 August, another north through Staple Sound on 1 September and three below the Inner Farne cliff on 20 September. October produced the bulk of the records with one-six through Inner Sound on five dates, while passage through Staple Sound included nine north on 5 and twelve north on 19 October. The last few records of the year involved two north on 9 and four north on 12 November and a single north on 2 December, all through Inner Sound.

Goldeneye *Bucephala clangula*

A common passage and winter visitor.

The only spring reports involved a female lingering near the Bridges area of Inner Farne on 2 April while two were present on 8 April. Autumn produced one-five through Inner Sound on seven dates between 9 October-9 November and peaked with six south on 13 November. Birds were recorded through Staple Sound on four dates, with ten north on 8 November, seventeen south on 9 November and two to six on 12 and 19 November. As in spring, birds lingered around the Bridges area of Inner Farne with one on 6 November increasing to six by 17, eight on 27 November and twelve on 2 December.

Red-breasted Merganser *Mergus serrator*

A well represented passage and winter visitor.

A scattering of records, with two spring records involving a pair in Inner Sound on 30-31 March and seven (six males, one female) south through the Kettle on 15 April. A quiet autumn produced one-two on 17, 19 and 26 September and 2 and 10 November. The largest flock reported during this period involved six north through Staple Sound on 15 October.

Goosander *M. merganser*

An uncommon passage visitor.

There were no spring records with single 'redheads' noted flying north through Inner Sound on 30 September, Staple Sound on 3 October, a male south through Inner Sound on 7 November and one west past Brownsman south end on 8 November. A party of six seen on the sea behind Knoxes Reef on 9 November eventually flew south.

Hen Harrier *Circus cyaneus*

A rare visitor.

For the third consecutive year the islands boasted this splendid raptor. Following south-easterly winds an adult female was seen flying down the length of Brownsman on 17 May, mobbed by large gulls, before drifting towards Longstone and out of sight. This represents only the second ever spring record. A second bird, a 'ringtail', was watched as it quartered Inner Farne for thirty minutes early on the morning of 23 September, but soon departed west. These are the tenth and eleventh records for the islands.

Goshawk *Accipiter gentilis*

An extremely rare visitor – first record.

This species is regarded as an uncommon breeding resident in Northumberland, although coastal records are extremely rare with only one record from North Northumberland, at Bamburgh in 1952. This made the first record on the Farnes even more staggering and a big surprise to those who saw it. An immature bird was seen to disappear into the hemlock patch on West Wideopens on 17 September, having put up hundreds of gulls on the island. It eventually flew low to Inner Farne, landing briefly on the dock bank before flying off to the mainland where it was reported by boatmen through Inner Sound. It was possible that the bird had been present on West Wideopens the previous evening, but views of a 'large raptor' were inconclusive. Amazingly it was then rediscovered the following day, 18 September, having been flushed off the dock bank on Inner Farne, before again flying west to the mainland.

Sparrowhawk *A. nisus*

An uncommon visitor.

Two spring records were of singles west over Inner Farne on 26 April and a female west over Brownsman on 9 May. Single females then appeared on Brownsman on 13 and 19 August and another female toured the islands between 19 and 27 September. Thereafter individuals were reported from the inner group on five dates between 6 October and 25 November and from the outer group on five dates between 30 October and 30 November. Multiple sightings included two soaring in thermals over the south end of Brownsman on 30 October and two hunting over Brownsman on 3 November. The last record was of a female over Staple Island on 3 December. Kills included pied wagtail, blackbird and redwing.

Osprey *Pandion haliaetus*

A rare passage visitor.

On 19 June a visitor observed a bird, mobbed by gulls, flying north through Inner Sound. This represents the ninth Farnes record and was last noted in 2002.

Kestrel *Falco tinnunculus*

A well represented passage visitor. May have bred in 1916 and 1943 (March, 1916; Thorp, 1943).

A quiet spring with one record of a female flying west over the inner group on 10 June. Autumn passage began with a juvenile on Inner Farne on 31 August and 2 September, and a single on Brownsman on 29 September. An immature arrived during heavy thrush passage and became resident on the islands from 17-25 October, visiting both island groups and preying on tired migrants during its stay, including goldcrest and starling. Possibly the same immature was responsible for sightings on the outer group between 3 and 6 November. Further November records included a female from 9-14 and an adult male on 28-29 November.

Merlin *F. columbarius*

A well represented passage and winter visitor.

The number of records was well below average compared with recent years with only two spring reports, both from Brownsman and concerning singles on 7 and 14 April. October brought sporadic sightings on the islands with single immature birds reported on seven dates during the month. Interestingly, during strong south-easterly winds a bird attempted to get into a window of the Pele Tower on Inner Farne on the evening of 22 October. November produced a female on Brownsman on 7, a bird lingered on the outer group from 8-15, another was noted on South Wamses on 23 and a bird was attacking passerines on Inner Farne on 22 November.

Peregrine *F. peregrinus*

A well represented passage and winter visitor. May have bred in 1925 (Watt, 1951a).

Well reported with at least three different birds seen on the islands during spring (immature female, adult male and adult female) between 26 March and 16 April, with a bird observed chasing a puffin over Inner Farne on 13 May. An immature noted flying off Staple Island on

6 July may have been responsible for the majority of the records on twenty-six dates from 10 July-13 September. However, during this period an adult female was also noted on 10-16 and 26-28 August. Frequent sightings of one-two were made from 28 September-4 December involving at least four different individuals (two immatures, adult male and adult female) with three west over Inner Farne on 15 October. Prey was varied, from turnstone to arctic tern and feral pigeon.

Quail *Coturnix coturnix*

An uncommon passage visitor.

For the seventh consecutive year the islands claimed one of these elusive summer visitors. A female was flushed from Brownsman on 16 July and then flew to the north rocks, where she showed extremely well on the seaweed-covered rocks. She eventually flew back into cover on the island and was not seen again. Interestingly, since 2000 a lone female has been seen each spring on Brownsman, raising questions about the possibility of it being the same bird stage-stopping on migration.

Water Rail *Rallus aquaticus*

An uncommon passage visitor.

Much to the wardens' surprise an adult was discovered feeding in lesser celandine *Ranunculus ficaria* on a bankside on Brownsman flats on 19 April and when alarmed would disappear down puffin burrows. Last recorded in 2001.

Corncrake *Crex crex*

An uncommon passage visitor.

For the third consecutive year (and only the seventh record in the past thirty years) a very skulking individual was discovered on Inner Farne on the very late date of 24 October. Disappointingly, only one observer saw it before it disappeared into thick cover, never to be seen again. This is the latest ever record for Northumberland, eclipsing the previous latest by nineteen days.

Moorhen *Gallinula chloropus*

An uncommon passage visitor. Bred in 1901 (Miller, 1959) and 1947-48 (Hawkey, 1991)

As poor weather prevented the wardens from leaving the islands for the winter, the final departure was delayed by two days and during this period, on 3 December, a weather window enabled a final visit to the seal colony on North Wamses. Amazingly, needing just one new species to break the all-time Farnes record, a warden discovered the fresh corpse of a moorhen, evidently having been killed by a raptor. The wardens had broken the old record with a corpse, the day after they were due to leave, something which they could never have scripted.

Coot *Fulica atra*

An uncommon passage visitor.

A good year with two sightings, both from the inner group, bringing the overall Farnes total to twenty-two records. A bird was discovered sleeping on Knoxes Reef late on the afternoon of 13 July, while a second appeared in the Kettle off Inner Farne on 23 November.

Oystercatcher *Haematopus ostralegus*

A common winter and passage visitor and well represented breeder.

The species was widespread and seen daily on both island groups, with a good number of pairs breeding. The first eggs were located on 16 May on Staple Island and on 22 May on West Wideopens with the first young on 13 June on Staple Island and 14 June on West Wideopens. 36 (37) pairs nested as follows: Inner Farne 6 (6), West Wideopens 4 (6), East Wideopens 2 (2), Knoxes Reef 4 (3), Staple Island 6 (5), Brownsman 9 (9), North Wamses 1 (2), South Wamses 2 (1), Northern Hares 0 (1), Big Harcar 1 (0), Longstone main rock 1 (1), Longstone End 0 (1). It was a mixed breeding season with the inner group reporting eight fledged chicks from nine monitored nests (a productivity of 0.89), while the outer group had one of its best seasons on record with thirteen nests fledging twenty-one young (a productivity of 1.61). Peak counts during the season are shown in Table 6.

Table 6 Monthly peak counts of Oystercatchers on the Farne Islands, 2003.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group	40	50	-	-	28	146	113	139	
Outer Group	18	49	-	38	41	41	49	52	101

Ringed Plover *Charadrius hiaticula*

A common passage visitor, uncommon and declining as a breeding species.

Birds were recorded on both the inner and outer groups throughout the season. Displaying birds were discovered on 26 March when the wardens arrived and early peak numbers included twenty-six west over Inner Farne on 17 April and six on Brownsman on 10 April. The first eggs were found on Inner Farne on 19 April and on Brownsman on 20 April with the first chicks discovered on Inner Farne on 18 May, and eventually on Brownsman on 25 June, due to predation. 8 (6) pairs nested as follows: Inner Farne 4 (3), West Wideopens 0 (1), Brownsman 3 (2), Staple Island 1 (1). On the inner group five attempts eventually produced two fledged young, but again predation took a heavy toll. On the outer group the season was just as eventful as a number of clutches were predated, washed out or deserted, but finally two pairs fledged two young. Outside the breeding season post-breeding flocks brought good numbers to the inner group, with fifteen on 11 August increasing to forty-five on 31 August before declining to twenty-eight on 25 September, fifteen on 25 October and three on 25 November. On the outer group, smaller numbers were reported during this period with a maximum of twenty on 4 September and eighteen on 18 October.

Golden Plover *Pluvialis apricaria*

A well represented passage visitor.

A spring record involved thirty south through Staple Sound on 29 March. Thereafter the post-breeding flock built up from six on 9 July to a peak of 1,025 on 4 September. The flock utilised both the inner and outer group, especially Staple Island but also Knoxes Reef and

Longstone main rock to a lesser degree. Figure 1 shows the increase and decrease of the flock size during early autumn. The final report of the year was a bird north past Brownsman on 1 December.

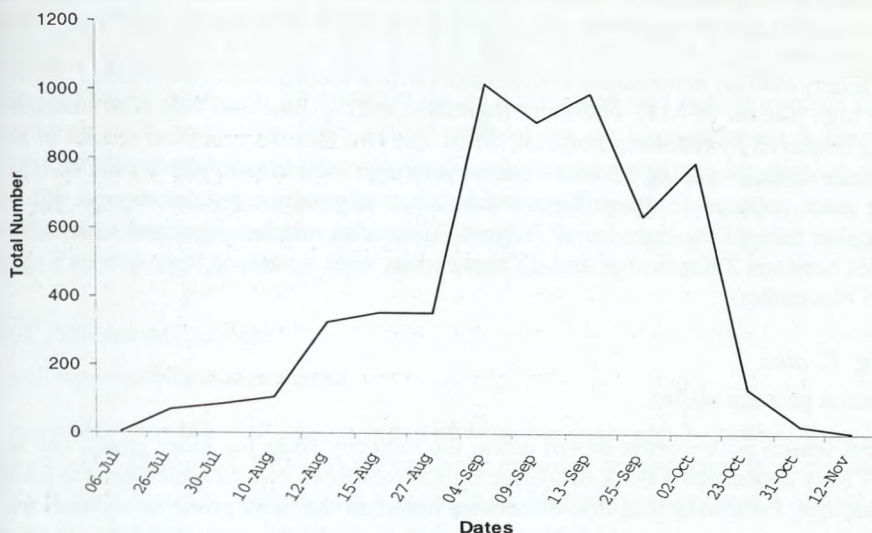


Figure 1 Flock size of Golden Plovers.

Grey Plover *P. squatarola*

A well represented passage visitor.

Spring passage brought one-two to Knoxes Reef and Longstone main rock on eight dates between 1 April and 16 May, peaking with three in summer plumage on Knoxes Reef on 12 May. The first birds of the autumn, in stunning summer plumage, returned to Staple Island on 12 August with three on Knoxes Reef the following day. Thereafter one-two were on Knoxes Reef and Longstone on nine days from 29 August-22 November, with a peak of three on the outer group on 26 October. Away from the usual localities, one flew north through Inner Sound on 22 October.

Lapwing *Vanellus vanellus*

A well represented passage visitor. Sporadic breeder in past; last attempt in 1962 (Hawkey, 1991).

The only spring report was a bird on the central meadow of Inner Farne on 8 April. The first autumn record concerned two west over the outer group on 13 September with a single lingering on Staple Island from 18-20 September. As the wintering flock increased in Seahouses harbour the number of records from the islands did likewise and 1-12 were reported on eleven dates between 13 October and 3 December. Peak counts included eighty-nine north through Inner Sound on 21 September, thirty east over Inner Farne on 13 November, thirty-four on Knoxes Reef on 26 November and sixty-five south through Inner Sound on 2 December.

Knot *Calidris canutus*

A well represented passage visitor.

An excellent season, with reports of birds on spring and autumn passage through the islands. The first indication of spring passage involved four on South Wamses on 26 April, then one-nine were reported on six dates between 1 and 28 May. The exception during this period was a flock of ninety-two on Brownsman north rocks (with a record flock of bar-tailed godwits) during the high tide on 15 May. Numbers fluctuated during June and July with summering birds being bolstered by returning northern birds. The two months produced records of 1-52 on thirty-three dates, including several summer plumage individuals, with a peak of 115 on Longstone main rock on 15 June. August continued to produce regular reports with the highest number being fifty-eight on 19 August. Thereafter numbers declined with 1-34 on fifteen dates between 2 September and 22 November, with a peak of forty-two on Knoxes Reef on 25 November.

Sanderling *C. alba*

An uncommon passage visitor.

An excellent season with reports on ten dates, the majority from the inner group. The first record on 1 May concerned a flock of twelve on Knoxes Reef, two of which were in partial summer plumage. Following this, one-three were noted on the inner group on six dates from 19 June-20 September, peaking with five winter plumage birds in St Cuthbert's Cove on Inner Farne on 26 August. The outer group boasted a summer plumage adult on Staple Island on 20 July and a moulting adult commuting between Brownsman and Staple Island from 6-8 August.

Little Stint *C. minuta*

An uncommon passage visitor.

Passage through the north-east was generally quiet this year and this was reflected by only one record from the islands, a confiding juvenile on a pool on North Wamses on 20 September.

Curlew Sandpiper *C. ferruginea*

An uncommon passage visitor.

A moulting adult was discovered on Brownsman flats and lingered on the island from 6-11 August. Last recorded in 2001.

Purple Sandpiper *C. maritima*

A common passage and winter visitor.

Recorded in all months throughout the year, with large numbers noted in spring and autumn. Spring produced good numbers of between twenty-nine and eighty daily from 26 March-31 May on several islands, with Longstone main rock attracting the spring peak of 200 on 3 May. The only mid-summer record was a single on Big Harcar on 24 June. July saw the now annual influx of the first returning birds from 2 July, with sixty-two on 5, increasing to ninety-five on 16 and eventually peaking at 173 on 20 July. Thereafter the species was numerous with peak counts of 145 on 19 August and 150 present on the islands throughout the autumn.

Dunlin *C. alpina*

A common passage and winter visitor.

Well represented in all months. The inner group produced 1-10, mainly on Knoxes Reef, on twelve dates from 15 April-28 May with a peak count of fifteen on Inner Farne on 5 May. One-three were recorded on the outer group on twenty-two dates between 30 March and 30 May, peaking with four on Brownsman on 30 April. June had regular records of one-five summering birds on twelve dates with a peak of ten on Crumstone on 9 June. Autumn passage produced regular reports with the first juveniles noted passing through the islands from 26 July. Autumn peak counts included twenty-three on Longstone main rock on 5 August with twenty present the following day. This was however eclipsed by a very large flock of 100+ noted on Knoxes Reef on 25 November.

Ruff *Philomachus pugnax*

A well represented passage visitor.

A reasonable showing with singles reported from the outer group on eight dates between 5 August and 2 September. The species was only recorded on two dates from the inner group, both on Inner Farne in August with a juvenile on 10 and two over on 28 August. The final record was one west over Brownsman on 5 September.

Jack Snipe *Lymnocyptes minimus*

A well represented passage visitor.

There was a spring sighting of a bird on Inner Farne on 26-27 March while autumn produced reports on eleven dates between the two island groups. On Inner Farne singles were noted on 8-9, 13 and 15 October with further records on 7 and 27 November. On the outer group, the first record occurred on 5 October with a bird flushed from Brownsman and singles were reported on a further five dates until the last was seen on 25 October. The only multiple record of the season concerned two discovered on Brownsman on 13 October.

Snipe *Gallinago gallinago*

A well represented passage visitor.

Light spring passage was recorded with singles on Inner Farne on 26-27 and 31 March and 4 and 12 April, and two on 17 April. On Brownsman four were flushed on 9 April with one lingering from 10-15 April. The final spring record concerned a bird flushed from Staple Island on 21 April. Autumn passage began with one on Brownsman on 30 July, with further singles on Staple Island on 7 and 11 August and on Brownsman on 18 August. From early September one-two were on the outer group on thirty dates and the inner group on nineteen dates, with a peak of three on Brownsman on 28 September and Inner Farne on 13 October.

Woodcock *Scolopax rusticola*

A well represented passage visitor.

The only spring record was a single flushed off the north rocks of Inner Farne on 29 March.

Following the record influx of last autumn, reports returned to normality with the first autumn migrant flushed from Brownsman on 12 October. Thereafter one-two were reported on twenty-five dates from 14 October-3 December, with light influxes noted in late October and early November. The autumn peak count concerned at least six on Brownsman on 9 November.

Black-tailed Godwit *Limosa limosa*

An uncommon passage visitor.

A good year with a number of records from both island groups. The first handful of records were of small flocks flying over the islands with two north through Staple Sound on 29 June, ten south through the Kettle on 9 July, sixteen west past the south end of Brownsman on 11 July and twenty-eight south through the Kettle on 3 August. There were reports of one-two summer plumage individuals settled on islands, with reports from Knoxes Reef on 12 July and 4 August, Staple Island on 10 August and Longstone main rock on 19 August.

Bar-tailed Godwit *L. lapponica*

A well represented passage visitor.

Well reported during the season with regular records from both island groups, including the outer where the species is considered a scarce visitor. May produced exceptional numbers with regular counts of 40-80 on the islands with a hundred on the inner group on 5 May. However on 15 May all this was eclipsed by a huge flock of 205 roosting at high tide on the north rocks of Brownsman, representing a new Farnes record count. Thereafter smaller numbers of 1-14 were reported on eleven days between 10 June and 26 November, the majority noted on Knoxes Reef. However larger flocks were still reported on three dates, sixty-two on Brownsman on 11 June, thirty-seven on Staple Island on 5 September and twenty-seven on Knoxes Reef on 26 November.

Whimbrel *Numenius phaeopus*

A well represented passage visitor.

The first bird of the year was discovered lingering on Knoxes Reef between 28 and 30 April. Thereafter spring produced regular sightings of one-two on the islands on fifteen dates between 1 May and 24 June, peaking with four on 1 May. Return autumn passage was marked on the outer group by one-six on twenty-five dates from 3 July-8 September with peak counts of fourteen south over Longstone on 28 July and eighteen west over South Wamses on 30 July. The inner group produced one-two on only five days between 8 July and 11 September. An unusual record concerned calling birds on nocturnal migration over Brownsman cottage in the small hours of the morning of 7 August, and although numbers were difficult to ascertain, at least ten were involved.

Table 7 Monthly peak counts of Curlews on the Farne Islands, 2003.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group	150	124	180	100	210	57	150	80	400
Outer Group	0	12	9	60	19	10	22	38	89

Curlew *N. arquata*

A common passage and winter visitor.

As usual the larger numbers were reported regularly from Knoxes Reef. The outer group reported smaller numbers throughout, although any sizeable flocks were usually fly-over reports.

Spotted Redshank *Tringa erythropus*

An uncommon passage visitor.

The season produced two records of this summer visitor with an adult in summer plumage noted calling as it flew along the dock bank and over the north rocks on Inner Farne on 22 April. The second record involved a moulting adult over the lighthouse on Inner Farne on 19 August. Last recorded in 2001.

Redshank *T. totanus*

A common passage and winter visitor. Bred in nine years 1924-46 (Goddard, ms; Hawkey, 1991; Wilson, ms).

There were regular records throughout the season with the monthly peaks shown in Table 8. The outer group attracted the most numbers in autumn, especially Staple Island which provided large roost counts at high tides, peaking with sixty-nine on 18 October.

Table 8 Monthly peak counts of Redshanks on the Farne Islands, 2003.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group	3	13	1	4	14	23	12	11	59
Outer Group	2	8	2	8	48	68	47	69	55

Greenshank *T. nebularia*

A well represented passage visitor.

Passage birds were recorded on the islands on twenty-five dates between 12 July and 13 September. On the inner group the first bird appeared on Knoxes Reef on 12 July with further individuals on 5, 29 and 31 August, and two flew west over Inner Farne on 11 September. In comparison, the outer group experienced greater numbers with the first noted commuting between Staple Island and Brownsman between 21-25 July. Thereafter one-two were noted on fourteen dates between 4 August and 13 September with three together on Staple Island on 5, 12 and 13 August.

Green Sandpiper *T. ochropus*

An uncommon passage visitor.

A very quiet year with a single spring record on 15 April (the first spring record since 1998), of a single flying over the dock bank before landing on the pond on Inner Farne.

Wood Sandpiper *Tringa glareola*

An uncommon passage visitor.

The only record concerned a single on 17 August, which flew over the Kettle and round Inner Farne before heading back onto West Wideopens.

Common Sandpiper *Actitis hypoleucos*

A well represented passage visitor.

The first bird of the year appeared on Brownsman on 25 April with further spring records involving singles in May at West Wideopens on 12, Knoxes Reef on 13, Brownsman flats on 16 and South Wamses on 26 May. The first returning autumn passage bird was discovered on Brownsman pond on 14 July and thereafter one-two were recorded on twenty-one dates on the outer group until last seen on 12 September, and one-two on the inner group on eleven dates until last noted on 1 September. Unlike recent years, no substantial numbers were recorded during autumn migration.

Table 9 Monthly peak counts of Turnstones on the Farne Islands, 2003.

	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inner Group	12	100	15	49	144	300	150	169	27
Outer Group	30	112	83	109	341	463	305	210	281

Turnstone *Arenaria interpres*

A common passage and winter visitor, uncommon in summer.

Present all year round with peak counts shown in Table 9. The outer group witnessed some very large counts during autumn passage with birds scattered throughout the island group, although Longstone main rock provided the greatest number. The majority of the larger counts on the inner group occurred on Knoxes Reef.

Grey Phalarope *Phalaropus fulicarius*

An uncommon autumn passage and winter visitor, extremely rare in spring.

The species was recorded from the islands for the sixth consecutive year, following a light influx down the north-east coast in mid-October. The boatmen of *Glad Tidings* informed the wardens on Brownsman that three birds, possibly all first-winters, were on the sea near Sunderland Hole off Longstone End on 11 October. The wardens were able to view them from the cottage but later approached with the Zodiac boat and obtained spectacular views down to less than five metres.

Table 10 Peak adult Pomarine Skua passage in late August past the Farne Islands, 2003.

August	25	26	27	28	29
Staple Sound	1	1	0	4	4
South End Brownsman	1	0	2	0	2

Pomarine Skua *Stercorarius pomarinus*

A well represented passage visitor, common in some years.

During the last week of August the winds switched to the north-east, producing ideal seawatching conditions resulting in a small northerly movement of adult birds, as shown in Table 10. During September reports included an adult north past Brownsman south end on 1, a juvenile through the Kettle on 5, one south through Staple Sound on 20 and an adult north through Staple Sound and a juvenile south through Inner Sound on 25 September. The final report concerned a bird south through Inner Sound on 1 October.

Arctic Skua *S. parasiticus*

A common passage visitor.

Spring sightings involved a dark phase bird north through Staple Sound on 28 April, a pale phase south through the Kettle on 3 May and a dark phase north through Inner Sound on 4 May. The first returning birds were seen on 15 and 29-30 June with singles south through Staple Sound. Reports became regular thereafter with one to three on sixteen dates in July, one-six on eighteen dates in August, one to nine on twenty-one dates in September and one to five on thirteen dates in October. Heavy passage was noted in late August with seventeen north and six south on 25 and eight north on 26 August. Also ten were recorded north on 3 October and late passage birds were noted heading north past the islands on 1, 9 and 13 November. A first-winter bird was observed flying north through Inner Sound on 1 December, representing the first ever December record for the islands.

Long-tailed Skua *S. longicaudus*

An uncommon passage visitor, well represented to common in 'invasion' years.

Following a spell of north-easterly winds in late August, four birds were recorded on passage. On 25 August an immaculate adult flew south over Knoxes Reef while later that day a dark phase juvenile drifted north off the south end of Brownsman, at one stage being harried by an arctic skua. The following day saw an adult north through Staple Sound and a dark phase juvenile harrying kittwakes behind West Wideopens before eventually drifting south.

Great Skua *S. skua*

A common passage visitor.

Light spring passage was recorded on three days with singles north on 4 May through Staple Sound, on 15 May past the south end of Brownsman and on 14 July when one flew south over Knoxes Reef. Mid-season reports involved two north and one south past Brownsman on 1 July and one north through Inner Sound on 4 July. Thereafter one to ten were reported on forty-four dates between 25 July and 29 October. Late August brought north-easterly winds and good numbers passed the islands, with sixteen north on 25, thirty-two north on 26 and seventy-five north on 29 August. The only other sizeable count involved sixteen north and two south on 19 October. Late passage was reflected by one to three on 1 and 8-9 November, with the final report of a single north on 29 November.

Mediterranean Gull *Larus melanocephalus*

An uncommon passage and winter visitor.

All records were from the inner group. A first-summer bird was discovered in the evening roost of Sandwich terns on Knoxes Reef on 6 April and was seen again in the roost on 11 and 28 April and again on 12 June. The only other report concerned two adults together on 13 July, flying north over Knoxes Reef and out into Staple Sound.

Little Gull *L. minutus*

Normally a well represented passage and winter visitor.

Another good year, following on from record numbers in 2002. The first sighting of the year, a first-summer bird, was seen on the north rocks of Brownsman on 25 June amongst the roosting terns. Thereafter, two first-summer birds appeared daily in the roost on 1-14 July with sporadic sightings into early August. During this period what were possibly the same birds were responsible for sightings on the inner group on three July dates. As autumn approached numbers started building up with five through Inner Sound on 29 August and one to eight reported on seven dates in September. The first substantial movement occurred on 30 September with 217 north, the majority through Staple Sound. October brought even bigger numbers with one to fifty-five reported daily with peak counts of 262 north on 2 and 200 in a feeding flock in Inner Sound on 18 October. The final reports of the year concerned single birds on 1 and 22-23 November.

Sabine's Gull *L. sabini*

A rare passage visitor.

This rare North American species was recorded on the islands for only the tenth occasion, when on 24 August a juvenile drifted south through Staple Sound before eventually heading north-east towards the Wamses and out of sight. Last recorded in 1997.

Bonaparte's Gull *L. philadelphia*

An extremely rare visitor – first record.

Another North American gull graced the islands, although this was considerably rarer with only just over 115 records for Britain. A first-winter bird was discovered dip-feeding with a flock of black-headed gulls behind the Bridges off Inner Farne on the afternoon of 9 November. The bird remained in the area until dusk at 16:30 when it appeared to go to roost, but was not present the following day. This represents the first record for the islands and only the third for Northumberland, following records in 1955 and 1998.

Black-headed Gull *L. ridibundus*

A well represented breeding species and common visitor.

Birds were present throughout and nest building began in late April with the first eggs found on 4 May. The population increased dramatically although it suffered from predation, with 218 (85) pairs nesting as follows: Inner Farne 216 (81) Brownsman 2 (4). The first chick was found on 29 May, and despite predation one fledged from Brownsman. Numbers were generally low round the islands in autumn, although a large influx occurred on the inner group in late November, with thirty-three on 22, increasing to 162 on 23, 192 on 24, 274 on 25 and eventually peaking at 379 on 26 November.

Common Gull *L. canus*

A common visitor. Bred in four years 1910-14 (Booth, 1911, 1913; Miller, ms), probably in 1916 (March, 1916) and attempted breeding in 1974 (Hawkey, 1974).

Spring passage birds were logged flying north-east over Inner Farne on 6 April, with a day total of 130. Other spring reports included one to three around Knoxes Reef on eight days in April and one to twelve on the outer group on seventeen days between 29 March and 22 May. A mid-summer record concerned a first-winter bird on 14-15 June on Brownsman. Autumn produced up to fifty throughout, with the first juveniles noted on 14 August. The exception to these reports involved fifty-eight on the inner group on 23 November.

Herring Gull *L. argentatus*

A common breeding species, abundant in winter.

Present throughout the season and the main culprit of egg and chick predation on other nesting seabirds. The first eggs were discovered on 6 May and 414 (538) pairs nested as follows: Inner Farne 0 (2), West Wideopens 19 (33), East Wideopens 48 (35), Knoxes Reef 23 (14), Skeney Scar 13 (26), Staple Island 17 (17), Brownsman 4 (26), North Wamses 101 (143), South Wamses 66 (75), Roddam and Green 11 (14), Big Harcar 72 (96), Longstone main rock 6 (10), Longstone End 10 (15), Northern Hares 24 (32). Large numbers roosted nightly on the islands during autumn, an example being 456 on Knoxes Reef on 16 October. Northern *argentatus* birds were seen in small numbers from early November.

Yellow-legged Gull *L. cachinnans*

An extremely rare visitor – first record.

The first confirmed record on the islands was a first-winter bird in the gull roost on Knoxes Reef on 6 November.

Lesser Black-backed Gull *L. fuscus*

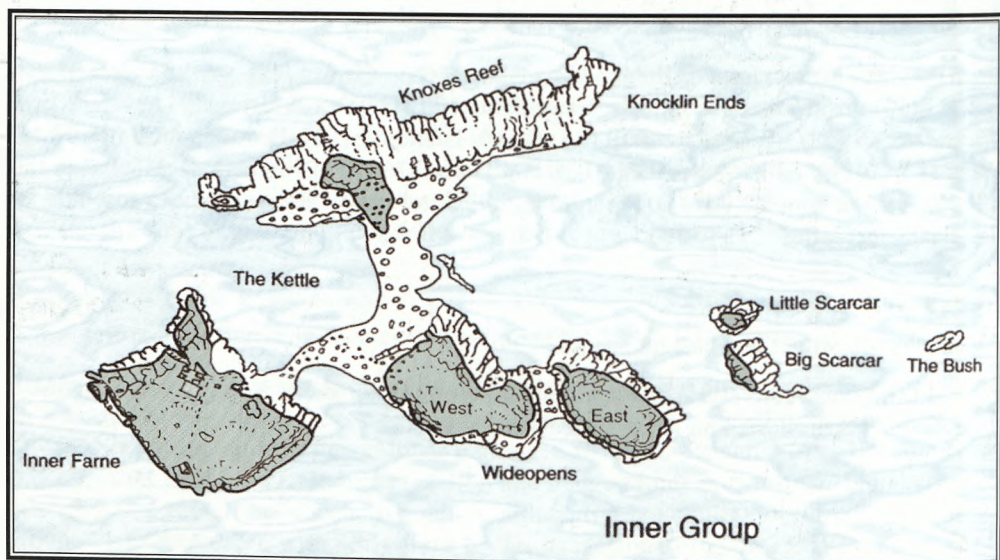
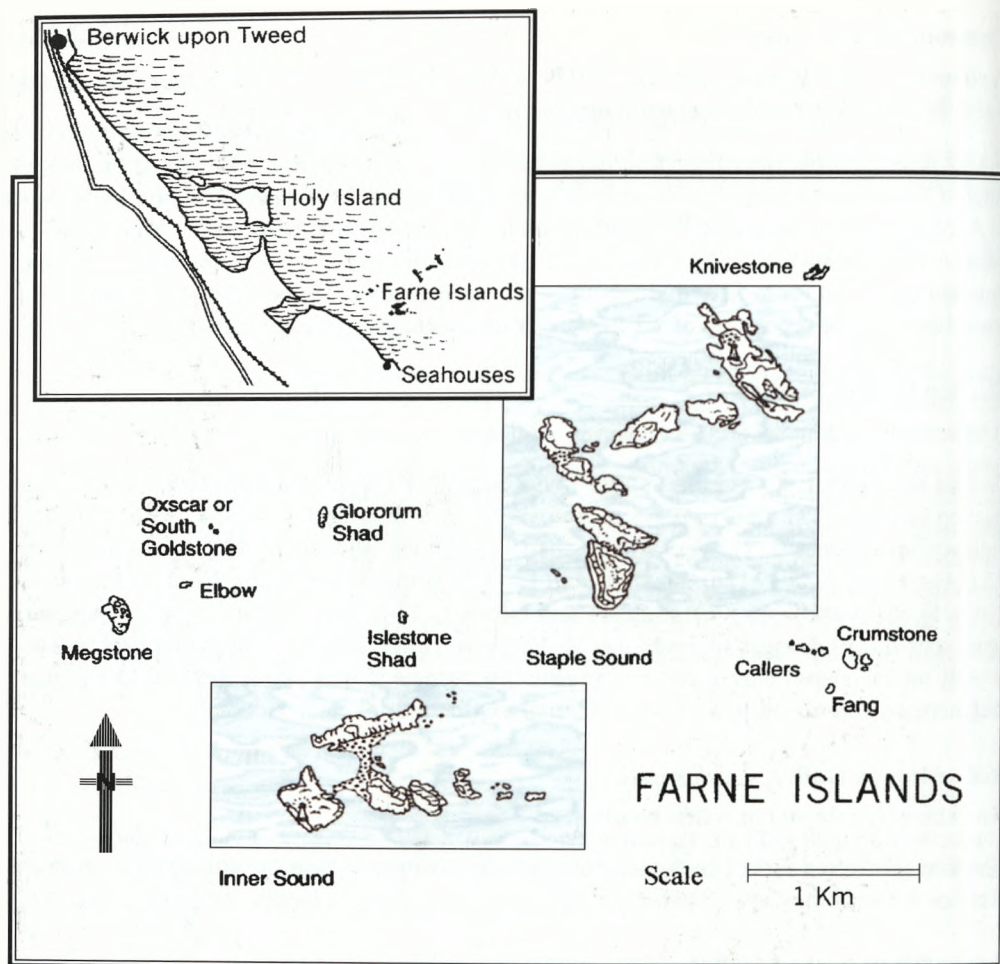
A common breeding species and passage visitor.

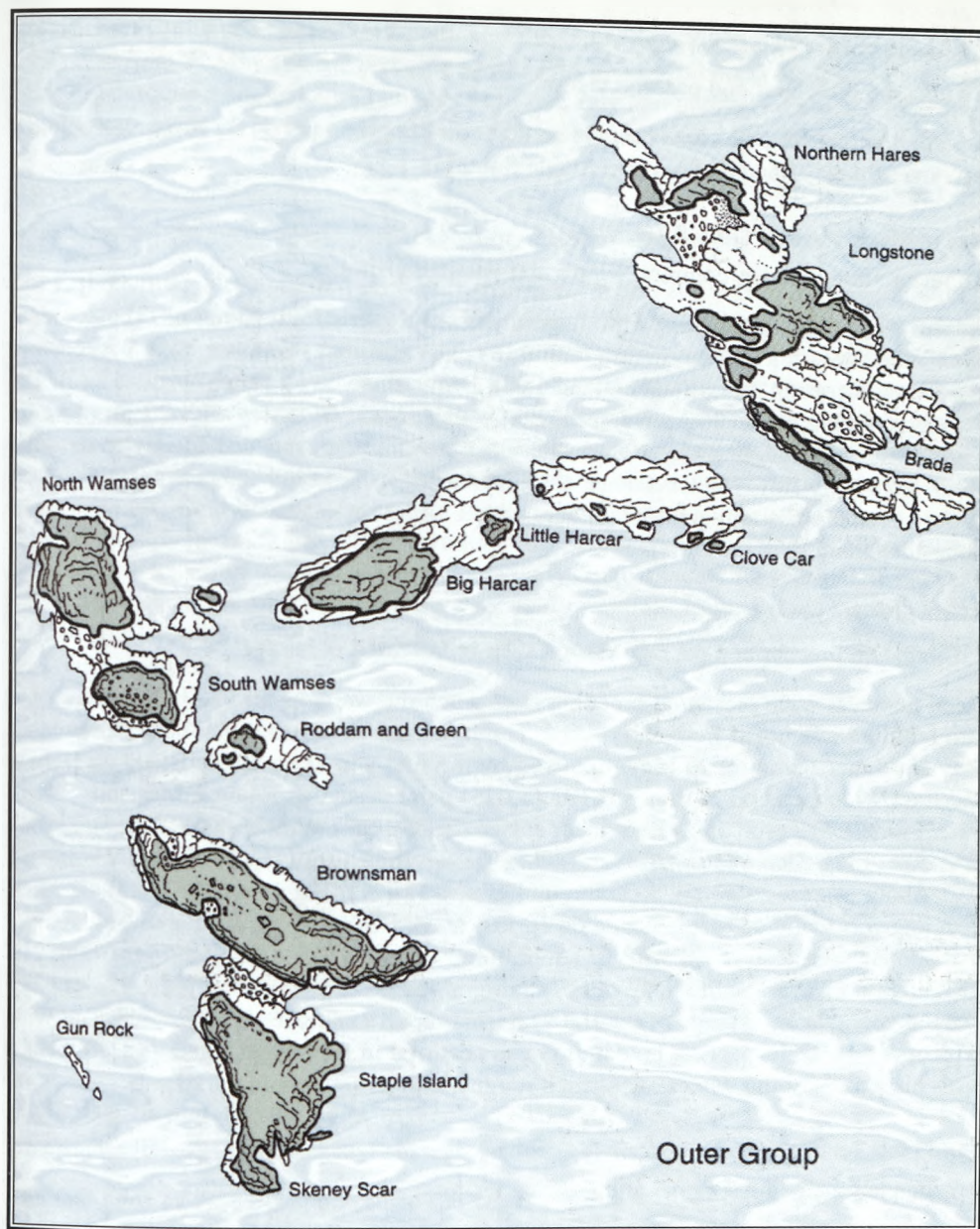
Good numbers were present on the breeding islands when the wardens arrived in late March and 427 (533) pairs nested as follows: Inner Farne 19 (21), West Wideopens 115 (153), East Wideopens 36 (58), Knoxes Reef 18 (26) Staple Island 31 (35), Brownsman 8 (4), North Wamses 36 (68), South Wamses 88 (118), Big Harcar 76 (50). Numbers declined after the breeding season with the last few reported in mid-October and the species was absent from the islands thereafter.

Iceland Gull *L. glaucoides*

An uncommon winter and passage visitor.

For the third consecutive year the species was seen on northerly spring passage, when a third-summer bird roosted on Knoxes Reef on 15 April.





Glaucous Gull *L. hyperboreus*

An uncommon winter and passage visitor.

A second winter-bird was noted on the south end of Brownsman on 25 November before it flew over Staple Island and out into Staple Sound.

Great Black-backed Gull *L. marinus*

An uncommon breeder, common winter and passage visitor.

Present throughout the year, with large numbers reported in autumn. The breeding population showed a slight decrease with 6 (8) pairs nesting as follows: West Wideopens 1 (3), East Wideopens 2 (4), Staple Island 1 (0), Brownsman 1 (1), South Wamses 1 (0). The first eggs were found on 26 April and the first young noted on 29 May with at least two pairs rearing young to fledgling stage. Thereafter post-breeding birds arrived, mainly on the outer group from early July, with seventeen on 2, increasing to 135 on 8 and peaking with 500 on 20 July. Autumn brought greater numbers with a typical count involving 1,000 roosting on Longstone main rock on 11 September.

Kittiwake *Rissa tridactyla*

An abundant breeder and passage visitor, well represented in winter.

Good numbers were present at breeding sites when the wardens arrived in late March and nest building was noted from early April. The first eggs were found on Staple Island on 21 May and Inner Farne on 29 May, followed by the first young on Staple Island on 11 June and East Wideopens on 21 June. 5,192 (5,055) pairs nested as follows: Megstone 9 (16), Inner Farne 1,512 (1,502), West Wideopens 262 (256), East Wideopens 318 (336), Skeney Scar 209 (182), Staple Island 1,382 (1,334), Brownsman 1,236 (1,181), North Wamses 88 (60), South Wamses 58 (62), Roddam and Green 32 (21), Big Harcar 86 (105). The first fledgling was found on Staple Island on 20 July and on 26 July on Inner Farne. Productivity was similar to recent years, with 251 monitored nests on the inner group producing 210 fledglings at an average of 0.84, while 395 monitored nests on the outer group brought 331 fledged young at an average of 0.83. An unusual report concerned a leucistic bird on West Wideopens on 27 June. Post breeding flocks occurred in late August on the islands before birds dispersed for the winter, with small numbers lingering around the islands.

Sandwich Tern *Sterna sandvicensis*

An abundant breeding summer and passage visitor.

The first bird of the year arrived typically in late March and was heard calling in thick fog as it flew over the inner group on 27 March. The evening roost on Knoxes Reef increased during the following few days, with two on 29, five on 30 and fourteen on 31 March. April saw a rapid build up of numbers in the roost with twenty-eight on 2, sixty-nine on 5 and 231 on 8 April. As numbers continued to build the roost switched from 17 April to the north rocks of Inner Farne with 750 present that evening. The roost continued to increase in size, with 1,500 on 21, 2,000+ on 23, peaking at 3,000 on 27 April. Throughout this period lots of displaying occurred and on 1 May the first birds were noted investigating nest sites on Inner Farne. The first eggs were discovered on 12 May, and 1,999 (1,881) pairs nested, all on Inner Farne. The population on the island was split into three colonies: north-east rocks

122 pairs, St Cuthbert's Cove 1,357 pairs and the top meadow 520 pairs. The first young were noted from 31 May and the breeding season was good, with many fledged young seen. Birds began to leave the colony gradually from late July and numbers dwindled thereafter, with the last record involving one south through Inner Sound on 5 October.

Roseate Tern *S. dougallii*

A well represented summer and passage visitor, uncommon breeding species.

The first returning bird appeared on 1 May over Inner Farne and was in the large tern roost that evening. Thereafter numbers increased, peaking with five adults displaying over Inner Farne on 29 May, but sadly this was not a sign of things to come. Despite sightings of individual birds dropping down in their favoured nesting area on the top meadow of Inner Farne during June, there was no real evidence of a nesting pair. This represented the biggest disappointment of the season, as the species had failed to breed on the Farne Islands for the first time since records began. From the peak numbers of a hundred pairs nesting in 1961 the species has now become an extinct breeder, although the construction of a second 'terrace' may help in future. Post breeding arrival (presumably from Coquet Island) produced one to two in late July, with peaks in early August including four on 10 and eight on 11. Throughout the summer birds were regularly reported from the outer group with a peak of four on 5 and 21-22 July. The final records of the season were three on Inner Farne on 1 and 3 September.

Common Tern *S. hirundo*

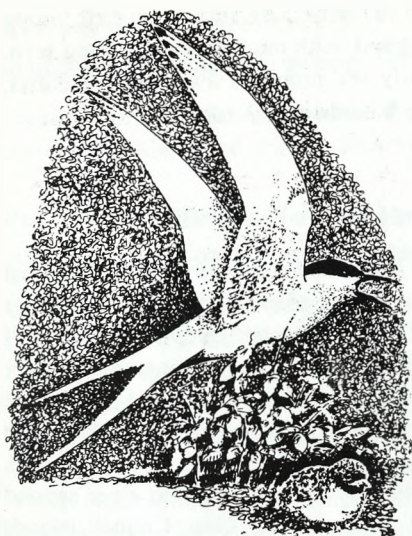
A common breeding summer and passage visitor.

The first arrival was a single in the large tern roost from 17-24 April and thereafter numbers increased rapidly with display much in evidence from late April. The population continued to dwindle on the islands with 76 (91) pairs nesting, all on Inner Farne, the lowest number of breeding birds since 1975. The first eggs were discovered on 22 May with the first chick on 29 June. Although not monitored, a count of thirty-three fledglings around the top pond on Inner Farne on 19 July suggested a reasonable year. Numbers declined after the breeding season, with the final record involving a small group flying north with arctic terns through Inner Sound on 28 September.

Arctic Tern *S. paradisaea*

An abundant breeding summer and passage visitor.

The first birds of the year appeared in the large evening roosts on the inner group on 17 April. Numbers increased rapidly during the rest of the month with fourteen on 18, twenty-nine on 24 and 300+ on 27 April. Numbers eventually peaked with 2,000 on 14 May, and displaying was very evident over the island throughout this period. On the outer group up to 300 roosted on Brownsman north rock in early May. The first eggs were discovered on Inner Farne on 14 May and on Brownsman on 15 May. It was an excellent breeding season, with breeding figures peaking at 1,727 (1,301) nesting pairs, the highest figure in six years. Pairs nested as follows: Inner Farne 1,326 (1,120), Brownsman 393 (181), Staple Island 8 (0). The warm, dry summer helped the breeding success and 210 monitored nests on Inner Farne produced 140 fledged young, an average of 0.67. Even greater success was recorded on the outer group and this was demonstrated by young fledging from five separate areas of



Little Tern *S. albifrons*

A well represented passage visitor.

The first record of the year was a bird amongst arctic terns on 26 April and numbers increased thereafter at the traditional evening roost at St Cuthbert's Cove on Inner Farne in May. Table 11 shows the increase and decrease of the roost throughout May. The only other record was a bird fishing in Staple Sound on 24 May.

Table 11 Little Tern evening roost counts on Inner Farne in late May, 2003.

May	1	3	4	6	7	8	12	13	14	23
St Cuthbert's Cove		14	31	39	42	43	54	65	60	21 3

Black Tern *Chlidonias niger*

An uncommon passage visitor.

A good year, especially on the outer group with at least four different birds involved. A moulting adult was discovered in the tern roost on the north rocks of Brownsman on 20-21 and 23-25 July. It lingered into the following month as it was present on Longstone main rock on 5-6 and on Inner Farne on 11 August. A small influx then occurred between 12 and 19 August with two adults (including the moulting adult) and two juveniles frequenting the outer group between Longstone and Brownsman. During this period a juvenile was noted off the south end of Inner Farne on 15 August.

White-winged Black Tern *C. leucopterus*

An extremely rare visitor – first record.

This spectacular rare tern, originating from Eastern Europe, put in an appearance in the



Brownsman tern roost on 27 June. The bird, an immaculate summer plumage adult, was discovered on the north rocks with the massing arctic terns at 16:00 but disappointedly did not linger, and was seen flying strongly south at 16:20. Arguably the 'bird of the year' it represents the first record for the islands. This bird was considered to be the same individual which took up residence

for the summer at East Chevington in Northumberland.

Guillemot *Uria aalge*

An abundant breeding resident and passage visitor.

Although birds were present in huge numbers when the wardens arrived in late March, they did not settle until the second week of April. The first eggs were found on 14 April on Brownsman, and 22 April on Inner Farne, with the first young on Staple Island on 27 May. Record numbers bred, as 42,338 (38,056) individuals nested as follows: Megstone 260 (207), Inner Farne 5,119 (4,078), West Wideopens 2,072 (1,926), East Wideopens 3,074 (2,555), Skeney Scar 2,770 (1,568), Staple Island 19,686 (18,573), Brownsman 6,896 (6,880), North Wamses 1,462 (1,410), South Wamses 490 (520), Roddam and Green 180 (93), Big Harcar 327 (246), Longstone End 2 (0). An indication of potential future expansion was noted by the colonisation of Longstone End, with two pairs successfully breeding for the first time. The first chick jumped from Staple Island on 11 June and thereafter the mass exodus of young took place with most of the cliff ledges empty by mid-July. As usual heavy gull predation was noted on eggs, especially on the outer group. Small numbers remained around the islands until the wardens departed in early December.

Razorbill *Alca torda*

A common breeding resident and passage visitor.

Birds were present on their breeding ledges in good numbers when the wardens arrived in late March, although they did not settle until early April. The first eggs were found on both Inner Farne and Brownsman on 8 May with the first chick noted on 7 June on Staple Island. The first 'jumping' was noted leaving its ledge on Staple Island on 27 June and on Inner Farne the day after. A total of 222 (209) pairs (the highest ever total) nested as follows: Inner Farne 81 (72), West Wideopens 43 (47), East Wideopens 22 (16), Skeney Scar 9 (8), Staple Island 30 (30), Brownsman 8 (8), North Wamses 7 (7), South Wamses 10 (10), Big Harcar 12 (11). The breeding season was good with thirty-five monitored nests on the inner group resulting in twenty-six fledged young (0.74) and eighteen monitored nests on the outer group producing twelve fledged young (0.66). Small numbers remained around the islands after the breeding season.

Black Guillemot *Cepphus grylle*

A well represented winter and passage visitor. Bred in the 17th and possibly 18th centuries (Kerr, 2001).

A quiet year with only small numbers reported wintering around the islands. The first returning bird was on the sea just off the south end of Brownsman on 24 October and another was near Gun Rock in Staple Sound on 26 October. Early November produced reports from Inner Sound with two north on 1 and singles on 2 and 7 November. During this period two were near Gun Rock in Staple Sound on 6 and another on 8 November. The final report was a bird off the north end of Knoxes Reef on 3 December.

Little Auk *Alle alle*

A well represented winter and passage visitor. Large numbers can occur after northerly gales.

The lack of any really strong northerly winds during late autumn was the main reason for the lack of any good numbers. The first report concerned seven north through Staple Sound and one south through Inner Sound on 3 October. Thereafter one to twelve were recorded on twenty-seven dates from 4 October-29 November, with most heading north through Staple Sound. However peak passage during this period included sixty-four south on the morning of 9 November, twenty south on 19 October and fifteen on the sea on 28 October.

Puffin *Fratercula arctica*

An abundant breeding summer and passage visitor.

The year will long be remembered for the first full breeding census of all the islands in ten years, which revealed an impressive number of breeding pairs. The survey indicated a population of 55,674 pairs, representing a 60% increase on the 1993 total. Very small populations were lost on both Megstone and Longstone End due to the lack of any nesting habitat, but this was compensated for by huge increases elsewhere, with Staple Island now having the largest number of nesting puffins on the Farne Islands. Pairs nested as follows: Megstone 0 (1), Inner Farne 13,069 (8,826), West Wideopens 8,704 (5,795), East Wideopens 1,676 (1,474), Staple Island 15,583 (8,334), Brownsman 14,438 (9,392), North Wamses 977 (288), South Wamses 1,059 (1,038), Big Harcar 168 (101), Longstone End 0 (62). The first eggs were found on 22 April on both Brownsman and Staple Island and on Inner Farne on 24 April. Indications of first young were reported from Brownsman on 15 May and Inner Farne on 31 May. The warm, dry summer enabled large numbers of young to fledge from 29 June and monitored nests on the inner group indicated a success of 0.84 compared to 0.94 on the outer group. The first real departures of birds occurred on 26 July and most were gone by 4 August. Small numbers were at sea throughout the autumn until the wardens departed in early December.

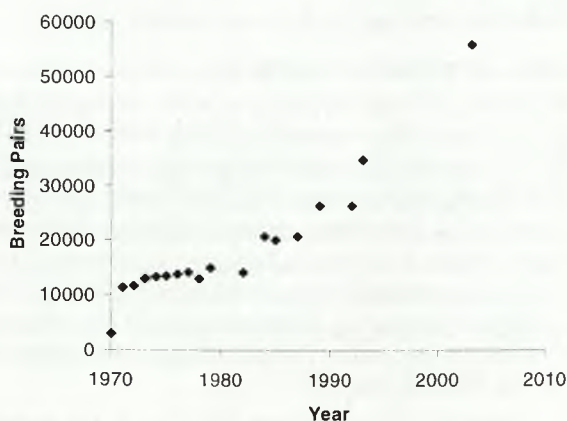


Figure 2 Puffin populations on the Farne Islands between 1970-2003.

Table 12 Puffin counts for each individual island, 2003.

	Inner Farne	West W'opens	East W'opens	Staple Island	B'man	North Wamses	South Wamses	Big Harcar
No. of Burrows	16,336	11,453	3,352	17,317	17,301	1,159	1,153	234
No. Occupied	13,069	8,704	1,676	15,583	14,438	977	1,059	168
Change	+4,843	+2,909	+202	+6,566	+5,995	+725	+258	+83

Feral Pigeon *Columba livia*

A common breeding resident.

Present all year in large numbers with up to 400 counted on Inner Farne in autumn.

Woodpigeon *C. palumbus*

An uncommon passage visitor.

Spring passage produced singles on the inner group on three dates between 26 March and 27 April, peaking with three north on 8 April, while singles were recorded on nine dates between 1 April and 3 June on the outer group. Autumn passage began with a single west over Brownsman on 13 October with further individuals noted on Brownsman on four dates from 20 October-7 November. The final record of the year was a single west over Inner Farne on 27 November.

Collared Dove *Streptopelia decaocto*

An uncommon passage visitor.

Two records involved a single on Brownsman all day on 6 May with two noted on 17 June flying west through Staple Sound.

Turtle Dove *S. turtur*

An uncommon passage visitor.

This species is becoming increasingly rarer in Northumberland and two records from the islands were the first since August 2000. An adult was discovered on Brownsman late in the afternoon of 16 May and soon disappeared to South Wamses but was glimpsed again at dusk, back on Brownsman. The second record was a juvenile in autumn, flushed from its roost on the observatory roof of Brownsman cottage on 15 September, before being watched as it flew strongly high to the south.

Cuckoo *Cuculus canorus*

An uncommon passage visitor.

Spring passage birds were noted on Inner Farne in early May, as one was flushed from the cemetery bank on the morning of 8 May before being lost to view. Three days later on 11 May, another bird was seen on the dock bank and re-found near the lighthouse before it flew west to the mainland. Last recorded in May 2000.

Long-eared Owl *Asio otus*

An uncommon passage visitor.

A roosting bird was discovered in the information centre on Inner Farne on 23 October before it stunned itself against a window. It was released unharmed and eventually circled high over the island, where it was joined by a short-eared owl. Amazingly the bird was seen again soon after as it swooped down the stairwell of the Pele Tower at the three wardens who were re-entering the building – a very stunning birthday present for one member of staff.

Short-eared Owl *A. flammeus*

An uncommon passage visitor.

Birds were noted on spring passage for the second consecutive year (only recorded on spring passage in four of the previous ten years) as singles were noted on Inner Farne on 1 April and on Brownsman on 15 April. The first autumn bird was discovered sheltering in high winds on the east shore of Brownsman on 5 October and thereafter singles were on the outer group on 14, 17, 19 and 22 October with one on the inner group on 15 October. Other records concerned two on Brownsman on 13, South Wamses on 16 and Inner Farne on 23 October, with the final record of the year being a single on Inner Farne on 8 November which possibly roosted on the cliff below the lighthouse.

Swift *Apus apus*

A well represented summer and passage visitor.

The first bird of the year was seen flying around Inner Farne Pele Tower on 16 May and thereafter one-five were recorded over the inner group on thirteen dates between 9 June and 1 August, with a peak of nine north on 15 June. On the outer group one-five were noted on fifteen dates between 1 June and 18 August with peak counts of seven on 28 June, 6 and 10 July. The final record was one west over Inner Farne on the late date of 18 September.

Great Spotted Woodpecker *Dendrocopos major*

An uncommon passage visitor.

A juvenile was flushed from near the Inner Farne pond on 17 September but disappeared shortly after and frustratingly could not be relocated. Only noted in twelve previous years and last recorded during the unprecedented influx of 2001.

Skylark *Alauda arvensis*

A common passage visitor. May have bred in 1865 and 1883 (Brown, 1866; Harvie-Brown *et al.*, 1884).

Light spring passage commenced on 26 March with two over Brownsman followed by one-two over the islands on eleven dates, with the final spring record being a single on Inner Farne on 25 April. Autumn passage began unexpectedly in early August as a juvenile appeared on Inner Farne on 6 and lingered until the end of the month. Thereafter one to thirteen were reported regularly from 9 September to the end of the season, with peak counts of twenty-four west over Inner Farne on 18 September and twenty on Brownsman on 23 October.

Shore Lark *Eremophila alpestris*

An uncommon passage and winter visitor.

One of these charismatic northern visitors put in a brief appearance on the east shore of Inner Farne on the morning of 14 October.

Sand Martin *Riparia riparia*

A well represented summer and passage visitor.

The first birds of the year were noted on 23 April as two circled the Inner Farne lighthouse. Further spring records concerned singles north over Brownsman on 29 April and 20 May and over Inner Farne on 31 May. Autumn passage was light with three south over Staple Island on 31 July and one to two over Inner Farne on 15, 17 and 22 August.

Swallow *Hirundo rustica*

A common summer and passage visitor. Bred in 1857, 1984 (Hawkey, 1991) and 1990-1997 (Walton, 1991-1998).

The first passage birds were recorded on 21 April when a single was noted near the lighthouse on Inner Farne and thereafter the species was recorded in each of the following six months. Spring produced small numbers of one to ten until 18 June, peaking at sixteen north over Inner Farne on 26 April. Return autumn passage began early, with a single over Brownsman on 19 July followed by a party of fourteen heading south over Staple Island on 29 July. As autumn progressed reports of birds moving south increased with thirty over Inner Farne and thirty-two over Brownsman on 5 September. Very late passage birds were noted in late October, with a single over Brownsman on 27 and another over Inner Farne on 29 October.

Table 13 Peak swallow passage over the Farne Islands 2003.

Month	No. of Days Recorded		Peak Count
	Inner Group	Outer Group	
April	7	7	16N Inner Farne on 26
May	16	15	9N Inner Farne on 3
June	4	6	10N Brownsman on 1
July	-	2	14S Staple Island on 29
August	7	6	7S Brownsman on 1
September	9	7	32S Brownsman on 5
October	2	1	2S Inner Farne on 11

House Martin *Delichon urbica*

A well represented summer and passage visitor. Six pairs attempted to breed in 1950 (Watt, 1950).

A single west over Inner Farne on 26 April was the first of the year and was quickly followed by another north the following morning over the same island. May brought a steady stream with one to two north on seven dates, predominately on the outer group on 2, 4, 15, 18, 20 and 21 with a single on Inner Farne on 26 May. A quiet autumn involved only two records of single birds over the inner group on 10 July and 20 August.

Richard's Pipit *Anthus novaeseelandiae*

A rare visitor.

This Siberian vagrant was recorded for only the ninth time on the islands when a bird was located by its distinctive call as it flew over Inner Farne on 30 September. It landed briefly on the island top but did not linger and soon departed in a westerly direction towards the mainland, much to the disappointment of all but one of the wardens.

Tree Pipit *A. trivialis*

A common passage visitor.

The first bird of the year was discovered on the south end of Brownsman on 16 April followed by regular records of one to three until last reported on 22 May. The outer group fared better than the inner group during spring passage, as birds were recorded on fourteen dates on the outer in comparison with only four on the inner. Peak count for this period concerned six north over Inner Farne on 5 May. The first returning autumn birds appeared on the islands from mid-August when an individual took up 'residence' on Brownsman from 18-27 August, whilst singles were logged on Inner Farne on 21 and 23, with three present on 24 August. Between 4 September and 2 October one to two were noted on Inner Farne on eight days and on Brownsman on six. The final record of the year was a very late bird on Inner Farne on 14 October, representing the latest record since an individual was noted on 29 October 1996.

Meadow Pipit *A. pratensis*

A common passage visitor. Bred in ten years 1946-1973 (Hawkey, 1991; Wilson, ms).

Light spring passage was noted as the wardens arrived in late March with three to six present from 26-31 March. Spring passage gathered momentum during April with one to ten over the islands daily, with peak counts of twenty-three west on 4 and thirty-five on 14 April. More unusual was a bird noted singing on territory on the dock bank area of Inner Farne from 9-25 April. May saw only a handful of birds moving through the islands with the last spring record being a single on Brownsman on 17 May. Autumn passage began with a juvenile on Longstone main rock on 20 August with one to six recorded on a further six dates during late August. September produced daily sightings of one to twenty-five with prominent passage logged mid-month. 169 were recorded on 16 September flying south-west over the outer group in small flocks throughout the day and the following morning saw the remnants of the movement with at least fifty-five scattered on the island tops. A second surge of birds moved through the islands during favourable conditions on 20 September, with sixty-eight recorded. October saw a decline in records with one to eighteen on several dates and fifty on Inner Farne on 1 October. The final scattering of records occurred in November with one to six noted before the final report of a single on Brownsman on 19 November.

Rock Pipit *A. spinoletta*

A common resident, well represented as a breeding species.

Present throughout. Singing birds were active during April and the first eggs were discovered on 27 April. Pairs again utilised man-made structures, with nests discovered in the Fishe House of Inner Farne, and the stone walls and disused lighthouse of Brownsman. The population decreased slightly with 28 (32) pairs nesting as follows: Inner Farne 5 (5),

West Wideopens 2 (1), East Wideopens 2 (1), Staple Island 5 (7), Brownsman 9 (15), North Wamses 1 (1), South Wamses 1 (1), Longstone main rock 1(1), Longstone End 1 (0), Big Harcar 1 (0). The first young fledged on 14 May and pairs raising second broods were reported on several islands. Small numbers remained after the breeding season, with peak counts of twenty on Brownsman on 14 September and fourteen on Inner Farne on 2 November.

Yellow Wagtail *Motacilla flava flavissima*

A well represented passage visitor.

A poor showing with only five records, all in spring. A male appeared near the lighthouse on Inner Farne on 16 April (with a male blue-headed wagtail *M. f. flava*) and represented the second earliest record for the islands, the earliest being on 14 April 1995. Further records included males on Inner Farne and Brownsman on 21 April and a female on Staple Island on 6 May, with the final record of a single on the West Wideopens on 24 May.

On the morning of 16 April there were two records, both of stunning males, of **Blue-headed Wagtails** *M. f. flava*, followed by a single near the lighthouse on Inner Farne and another at the south end of Brownsman on the afternoon of 5 May.

Citrine Wagtail *M. citreola*

An extremely rare visitor.

A stunning first-winter bird was discovered on Brownsman on the afternoon of 2 October as the wardening staff returned from a sealing trip. Despite the close attention of the resident rock pipits the bird lingered for several hours and visited nearby Staple Island during its stay. It was found following a spell of easterly winds which had given way to south-westerlies during that day. There are two previous Farne records, both from the inner group, on 11-12 September 1989 and 26 September 2000.



Grey Wagtail *M. cinerea*

An uncommon passage visitor. May have bred in the 1890s (Miller, ms).

Two spring records, both from Brownsman, as singles flew north-west over the island on 27 March and 16 April. A bird west over Brownsman on 21 September heralded the start of autumn passage and an individual over the same island on 29 September was seen later that day on Inner Farne. Passage in October was evident with singles on the outer group on 11, 12 and 14 with the final record of the year being a single north over Inner Farne lighthouse on 23 October.

Pied Wagtail *M. alba*

A well represented summer and passage visitor and uncommon breeding species.

Recorded regularly from March-early September with fewer records in autumn. Birds were noted displaying in April and 5 (4) pairs nested as follows: Inner Farne 2 (2), Brownsman 2 (1), Staple Island 1 (1). The first eggs were found on 9 May, the first chicks on 24 May and

the first fledgling was seen on 6 June. After the breeding season small numbers lingered into early September with a peak count of twelve on 7 August. The species became scarce in autumn with records of one to two on two dates in October and two dates in November.

It was a quiet year for **White Wagtail** *Motacilla a. alba*, with singles on Inner Farne on 8 April and 6 May. This sub-species is an uncommon passage visitor, with pure pairs breeding in 1991-92 (Walton and Richardson, 1991; Walton, 1993) and mixed pairs (with *M. a. yarrelli*) in 1994 and 2000 (two) (Harvey and Walton, 2001).

Wren *Troglodytes troglodytes*

A common visitor and passage migrant. May have bred in the 1880s. (Bolam, 1912).

Well represented during spring and autumn with one to two on the inner group from 26 March-22 April and one to two on the outer group from 26 March-29 April with three noted on 14 April. Autumn passage brought daily sightings from 10 September-3 December with one to three resident on the islands. Peak autumn passage counts included ten on the inner group on 8 November with four on the outer group on 2 October.

Dunnoek *Prunella modularis*

A common passage visitor. May have bred in the 1890s (Pybus, 1903).

Arguably the worst-ever year on record, with only a handful of reports. The only spring (and only outer group record) concerned an individual on Brownsman from 14-16 April. Autumn was marked by singles on Inner Farne on 28 September and 14, 20 and 22 October.

Robin *Erithacus rubecula*

A common passage visitor. Bred in 1951 (Watt, 1951).

Spring passage was represented on the inner group with one to two on ten days from 27 March-24 April. Passage was more evident on the outer group during this period with three on Brownsman on 26-27 March and one to two from 28-31 March. April brought one to two on twenty-two days with three present on 22 April, while birds lingered into early May with one to two on 1-4 and 15 May. Autumn passage began with a single on Brownsman on 3 September followed by daily records of one to eight until the wardens departed on 4 December. The first indication of heavier movements occurred in mid-October with an increase on the inner group with ten to fifteen from 13-18 October. During this period the outer group experienced larger numbers with twenty-five on 13 increasing to forty on 14-15, before a slight decline to thirty on 16-17 and twenty-five from 18-23 October.

Bluethroat *Luscinia svecica*

An uncommon passage visitor, well represented in some years.

A moulting adult male was discovered on Brownsman on 27 September, showing well around the cottage area throughout the day. Interestingly it was the first time since 1968 that the species had occurred in autumn but not in spring. It has only failed to appear in four of the previous thirty-six years.

Black Redstart *Phoenicurus ochruros*

A well represented passage visitor.

An average year with the first sighting not occurring until mid-summer, when a bird was caught and released from the Inner Farne visitor centre on 19 July. Later that day what was probably the same bird put in a brief appearance on Brownsman. An immature was then present all day on 5 August on Longstone main rock. A spate of records in mid-October involved at least three different birds, with a single on Brownsman from 14-18 and another on Inner Farne on 14-17 October. The latter bird was joined by a second on 18 and both were last seen on 19 October. The final records of the year concerned singles on Brownsman on 6-7 November and Inner Farne on 8 November.

Redstart *P. phoenicurus*

A common passage visitor.

A very quiet year began with spring adult males being discovered on Inner Farne on 21-22 April (originally caught in the visitor centre) and another on Brownsman on 5-6 May. During autumn the now expected 'falls' did not occur and single birds were only recorded on six dates. On Inner Farne the only autumn record was a bird on 6 September, while singles were noted on Brownsman on 5, 11, 15 and 20 September with the final record of the year on 5 October.

Whinchat *Saxicola rubetra*

A common passage visitor.

An ordinary year with the majority of records from the outer group, as birds were recorded on eighteen dates compared with only three on the inner group. All spring records occurred in May, with a female on Inner Farne on 11, another female on Brownsman on 16 and a male on Inner Farne on 30 May. Autumn passage began with a lingering bird on Brownsman from 7-11 August with one to two on the outer group on five further dates in August. The only autumn inner group record concerned a male on Inner Farne on 25 August. Further reports were all from Brownsman with one to two on 6, 9-11, 29 and 30 September with the final record of one on 1 October.

Stonechat *S. torquata*

An uncommon passage visitor. Bred in 1946 (Goddard, 1946).

A very quiet year with two different birds recorded on autumn passage, both lingering on Inner Farne and Brownsman on 2 October.

Wheatear *Oenanthe oenanthe*

A common passage visitor. Bred in six years 1931-59 (Goddard, ms).

The first bird of the year, a cracking male, appeared on Inner Farne on 27 March, with one to two on the island until the end of the month. However the outer group struggled early on, having to wait until 8 April before the first birds arrived on Brownsman. The spring months produced a good number of records from the islands until the last was reported on 29 May with two on Inner Farne and a single on Staple Island on the same day. Spring peak counts included twenty-two on Brownsman on 5 May and twelve on Inner Farne on 15 April. Fresh juveniles were reported in mid-summer, with singles on Brownsman on 18 and 25 June and

Table 14 Peak wheatear passage on the Farne Islands 2003.

Month	No. of Days Recorded		Combined Island Peak Counts
	Inner Group	Outer Group	
March	4	-	Two on 28 March
April	22	19	Twenty on 15 April
May	19	15	Thirty-one on 5 May
June	-	2	Singles on 18 & 25 June
July	1	-	Single on 13 July
August	13	12	Thirteen on 25 August
September	16	15	Ten on 16 September
October	2	1	Singles on three dates

Inner Farne on 13 July. Autumn passage began with single birds on Staple Island and Longstone main rock on 8 August, with regular reports until the last was recorded on Inner Farne on 14 October. Autumn peak counts included ten on Brownsman on 19 September and five on Inner Farne on 25 August.

Ring Ouzel *Turdus torquatus*

An uncommon passage visitor.

A disappointing season with no spring records and only four autumn birds, the first of which appeared towards dusk on Inner Farne on 20 September. A handful of records occurred in mid-October with an adult female briefly on Brownsman on 13, a first-winter on Brownsman 'flats' on 14 and another female on Inner Farne on 15 October. The latter bird was discovered dead on 17 October, half-plucked, having evidently been taken by a raptor.

Blackbird *T. merula*

An abundant passage visitor. Bred in three years 1893-1914, 1934, 1962 then annually 1964-74 Miller, ms; Hawkey, 1991).

Well represented on spring passage as four were present on Inner Farne on 26 March with one to two noted on twelve dates between 27 March and 8 May. On the outer group one to two were present from 26 March-4 May with a late male discovered on Staple Island on 23 May. An unusual mid-summer record concerned a juvenile which appeared on Inner Farne on 25 June and became resident until 30 July. The first autumn migrant, a female, was noted on Brownsman on 28 September and thereafter birds were present daily on the islands until

Table 15 Peak Fieldfare arrival on the Farne Islands, autumn 2003.

Date	Total Passage Counts	
	Inner Group	Outer Group
12 October	22 west	39 west
13 October	237 west	174 west
14 October	218 west	35 west
15 October	332 west	115 west
16 October	24 west	38 west
7 November	88 west	101 west
8 November	47 west	12 west
9 November	64 west	32 west

the wardens departed on 4 December. Notable counts included fifty on Brownsman and Staple Island on 14-15 October and forty on Brownsman on 16 October. Passage continued in November with a peak of fifty-one west and sixty on the islands on 7 November.

Fieldfare *T. pilaris*

A common passage visitor.

North bound spring migrants appeared on the islands from 28 March until last recorded on 28 April. Records from the inner group concerned one to four on fourteen dates from 28 March-28 April, peaking with six on 24 April. In comparison the outer group had one to three on eight dates between 16 and 25 April, peaking with four on 21 and 24 April. Typical autumn arrival occurred on 7 October with the appearance of a lone bird on Brownsman which was soon followed by two spells of heavy passage, as shown in Table 15. Away from the main passage, one to twenty-one were recorded almost daily until 4 December.

Song Thrush *T. philomelos*

A common passage visitor.

There was a light scattering of spring records with birds recorded on thirteen dates. On the outer group a single was discovered on Brownsman on 28 March, two on 13 April and further singles on 14, 17 and 21-24 April. The final spring record was a single on Brownsman on 2-3 May. The only spring reports from the inner group were individuals on nine dates between 1 and 26 April. An unusual mid-summer record was a bird lingering on Brownsman on 19 July. The first autumn passage migrants arrived on 14 September on Brownsman and were recorded regularly until the last was reported on Staple Island on 2 December. The first most notable influx occurred on 13 October resulting in twenty-five on Brownsman and a further thirteen on Inner Farne. The outer group continued to attract good numbers with twenty from 14-16 October and thirty-nine on 7 November, with one to fifteen between 14 September and 2 December. In comparison the inner group attracted one to four between 21 September and 30 November.

Redwing *T. iliacus*

An abundant passage visitor.

Spring produced a healthy number of reports with one to four on the islands from 26 March-28 April (fourteen dates on the inner group and fourteen dates on the outer group). A very late spring passage bird was noted on Staple Island on 15 May. Autumn produced a typical

Table 16 Peak westerly Redwing passage over the Farne Islands, autumn 2003.

Date	Total Passage Counts	
	Inner Group	Outer Group
12 October	147 west	150 west
13 October	567 west	267 west
14 October	356 west	220 west
15 October	137 west	110 west
22 October	129 west	70 west
7 November	91 west	92 west

plethora of records with the first returning birds involving a group of five west over the islands on 20 September. The following week saw further immigrants over the islands with one to two recorded on 21, 29 and 30, with nine west over Brownsman on 28 September. Thereafter one to fifty-five were on the island tops on most days until the end of the season. October brought the expected large numbers with some impressive totals recorded flying west over the islands, as shown in Table 16.

Mistle Thrush *T. viscivorus*

An uncommon passage visitor.

Two sightings, both of singles, were recorded on the outer group. One was discovered around the Brownsman cottage on the morning of 2 November but soon disappeared, while another was seen flying west over South Wamses on 13 November.

Grasshopper Warbler *Locustella naevia*

A well represented passage visitor.

All records came from the outer group. The first of the year (and the only spring record) involved a bird discovered near the pond on Brownsman on 25 April and remaining until 28 April. Another was then found on 30 July on the same island and represented the earliest autumn record for the islands. Further autumn passage birds were seen, all on Brownsman: on 25 August, and on 28 September with one of these birds lingering until the next day.

Sedge Warbler *Acrocephalus schoenobaenus*

A well represented passage visitor.

The majority of records were from the outer group, with reports on sixteen dates compared with five dates from the inner group. Typical early May arrival brought two to Brownsman on 5 with one lingering until 7, with further singles on the island on 6-7, 16-17 and 19 May. A very interesting record concerned a singing male discovered in the vegetation surrounding the Brownsman pond on 28 May-1 June. It could be heard singing throughout each day of its stay and another was present with it on 28-30 May and was suspected to be a female. A tailless bird, possibly one of the pair, was seen on Brownsman on 2-3 June. The inner group claimed its first record on 16 July, with a singing bird on the dock bank of Inner Farne, with it or another noted on the same island on 30-31 July. There were further records of singles on the islands on 5, 7 and 8 August, with peak counts of four on Inner Farne on 6 August and three on the outer group on 11 August.

Reed Warbler *A. scirpaceus*

A well represented passage visitor.

A very poor showing, highlighting the lack of any common migrant 'falls' during the season. Following a blank spring the first bird appeared on Brownsman on 7 August, with another lingering on the same island from 8-9 September. A single was on Inner Farne on 15 September.

Icterine Warbler *Hippolais icterina*

An uncommon passage visitor.

A stunning summer plumage bird was discovered in vegetation around the Brownsman pond on the morning of 1 June. The bird remained all day, showing well and was heard singing briefly from a song post, indicating it to be a male. Last recorded in 2001.

Barred Warbler *Sylvia nisoria*

An uncommon passage visitor.

Following last season's record total of five individuals the year produced four first-winter birds this year, albeit all on the outer group. On the backing of north-easterly winds in late August a bird appeared on Brownsman from 26-28 August and became typically skulking during its stay. On 4 September another individual, initially seen flying in off the sea, showed well on Brownsman but did not stay beyond that day. The third record was not long in arriving and proved to be the second longest-staying bird in the island's history. It appeared on 8 September and lingered for six days around Brownsman until last seen on 13 and, at times, was the only passerine to be found on the island. The fourth and final record concerned a single on Staple Island on the morning of 10 September.

Lesser Whitethroat *S. curruca*

A common passage visitor.

The first bird of the year appeared on Brownsman on 28 April and further spring passage birds were noted on Inner Farne on 2-4 May with both islands having singles on 16 May. The first returning autumn migrant, a first-winter, lingered on Inner Farne from 11-16 September with singles on Brownsman and Inner Farne on 28 September. October brought the expected late flurry of autumn migrants with singles on Inner Farne on 13 and 15, and individuals on Brownsman on 5 and 29-30 October.

Whitethroat *S. communis*

A common passage visitor.

The appearance of a female on Inner Farne on 15 April was the earliest ever record of the species on the islands. Following this early arrival the inner group had singles on 4-5 May and 1 June. On the outer group, a female was on Brownsman on 21 and 30 April with a male present on 28 May. An unusual mid-summer record concerned a bird on Brownsman on 2 July. As with spring migration, autumn passage was quiet with just a scattering of records. On the inner group the only record was of a single on Inner Farne on 11-12 August. On the outer group two were present on Brownsman on 7 August, with singles on 11-12 and 27-28 August. The final record of the year was a bird on Brownsman from 20-22 September.

Garden Warbler *S. borin*

A common passage visitor.

A quiet year in comparison with recent years, with a total of two spring and fourteen autumn records. The first of the year, a ringed bird, arrived on Inner Farne on the early date of 21 April and remained until the following day. The only other spring sighting was a single on Brownsman on 10 May. Autumn began with a single on Staple Island on 7 August followed

by a small influx on 11 bringing three to the outer group. Thereafter in August singles visited Brownsman on 12-14, Inner Farne on 18, Staple Island on 25 and Inner Farne again on 27-29 August. The only September records concerned singles on Brownsman and Staple Island on 8 and Brownsman on 10 and 28 September.

Blackcap *S. atricapilla*

A common passage visitor.

Spring passage commenced on 15 April with a male on Brownsman which lingered until the following day. Thereafter the outer group had one to three on twelve dates until the final spring record of a female on Brownsman on 1 June. In comparison, the inner group recorded one to three on nine dates between 16 April and 4 May. An unusual mid-summer record involved a female on Staple Island on 10 July. Autumn passage commenced on 20 September, with males on Inner Farne and Longstone End and reports were regular thereafter until 20 November. Numbers were low compared with recent autumns with a peak count of five on 28 September (four on Brownsman and one on Inner Farne). There were two very late migrants, possibly birds heading for British wintering grounds, with a male on Brownsman on 28 November and a female in the vegetable garden of Inner Farne on 2 December (the first December record for the islands).

Pallas's Warbler *Phylloscopus proregulus*

A rare visitor.

A bird appeared on Inner Farne on 14 October during an influx which brought no less than a record thirteen individuals to Northumberland. The following morning the bird had departed but later that day a second, more confiding, individual was found, suggesting a different bird. This latter bird lingered for three days, being admired by all warden staff, and was last noted on 17 October. This represents the ninth and tenth Farnes records and was last recorded in 2001.

Yellow-browed Warbler *P. inornatus*

An uncommon passage visitor. Fourteen in 1999 was exceptional.

It was an excellent season for these Siberian gems, with a total of five gracing the islands during autumn. The first appeared on Brownsman on 20-21 September having arrived during a light 'fall' of common migrants as the wind swung around to the east. Inner Farne then got into the act with two discovered on 28 September, both together on the dock bank area of the island. However, both birds had departed by the following day, although one appeared briefly on Brownsman that morning and was considered to be a different bird (eventually observed flying west). The final record on 13 October concerned one all day on Brownsman.

Dusky Warbler *P. fuscatus*

An extremely rare visitor.

One of these eastern vagrants was on Brownsman on 7-8 November and was located by its distinctive call near the cottage on the morning of its first day. It showed well during its stay, favouring the upper vegetable garden, and represented the sixth Farnes record for the islands following individuals in 1989, 1990, 1991, 1997 and 1999.

Chiffchaff *P. collybita*

A common passage visitor.

Well represented on spring passage with one to three noted from 26 March-16 May with the last bird of spring lingering on Brownsman from 19-25 May. The peak spring count was seven on 15 April, with five on Inner Farne and singles on Brownsman and West Wideopens. Autumn passage was represented with the first returning bird on Brownsman on 16 September and thereafter one to three were reported regularly until the last was noted on Brownsman on 12 November. The autumn peak was a moderate count of five on 14 October: three on Brownsman with singles on Inner Farne and Staple Island.

A bird showing characteristics of the 'Scandinavian' Chiffchaff *P. c. abietinus* was present on Brownsman from 2-6 November and was distinctive in plumage tones, call and behaviour, as it could be seen running along the ground to feed. A 'Siberian' Chiffchaff *P. c. tristis* was also discovered on Inner Farne on 2 May. It was a very confiding individual showing characteristics of this eastern race and represents only the third occurrence of this sub-species. Last recorded in 1998.

Willow Warbler *P. trochilus*

A common passage visitor.

The spring brought reports on thirteen dates from the inner group and twenty-four dates from the outer group. The first bird of the year appeared on Brownsman on 16 April and one to four were noted until last seen on Inner Farne on 24 May. The spring peak count was six on Brownsman on 21-22 April. Single birds on Brownsman on 5 July and on Inner Farne on 30 July were considered early returning autumn migrants. The species was more numerous in autumn with almost daily sightings of one to four from 3 August-29 September. Peak counts included seven on the outer group on 5 and 13 August with a total of fourteen counted on 12 August (ten on Brownsman and four on Staple Island).

Goldcrest *Regulus regulus*

A common passage visitor.

The wardens arrived on the islands on 26 March to be greeted by a small number of birds on the two island groups with three on Inner Farne and eight on Brownsman. Birds were then present daily with one to five on the respective islands until last seen on Brownsman on 16 April and Inner Farne on 22 April. One on Inner Farne with a damaged left leg became known affectionately as 'Leftie' by the wardens and was present on the island from 1-22 April. The first autumn bird appeared on Staple Island on 19 August and thereafter one to fifteen were seen on forty dates until the last was noted on Brownsman on 29 October. The only large influx occurred in mid-October as over forty descended onto Brownsman on 14-15, with thirty still present on 16 October. It was a similar story on Inner Farne during this period, with a peak count of twenty on 15 October. More unusual was a partially leucistic bird on Inner Farne on 27 August.

Firecrest *R. ignicapillus*

An uncommon passage visitor.

A superb male was discovered on Brownsman early on the morning of 15 October during a fall of 'crests'. The bird lingered for the day and represented the nineteenth Farnes record. Last noted in 2001.

Spotted Flycatcher *Muscicapa striata*

A well represented passage visitor.

A dismal year, the worst on record, with only two birds noted, both on Brownsman. The first appeared on 20 September favouring vegetation around the pond and the second on 28 September.

Pied Flycatcher *Ficedula hypoleuca*

An uncommon passage visitor.

There were no spring records, with the first bird appearing on Staple Island from 7-8 August. The rest of August brought individuals to the islands on a further five dates (Brownsman on 10 and 12-13 and Inner Farne on 11 and 26). As with most migrants, birds never appeared on the islands in great numbers with the peak count of five (four on Brownsman, one on Inner Farne) on 18 August. September was just as quiet with the only record from Inner Farne involving a single on 20 September. The outer group fared slightly better, with singles on 10 and two on 11 and 20, and the final record of the year seen on Brownsman on 28 September.

Jackdaw *Corvus monedula*

A well represented visitor. Former breeder, last in 1966 (Hawkey, 1991).

All records involved spring sightings, the majority from the inner group. Inner Farne records during April included one on the Pele Tower on 8, a single on 15, eight flying east on 16 and four on 23 April, with two of these birds noted on the Pele Tower. The only outer group records came from Brownsman with two flying high east on 30 April and another two on the south end before flying off towards Big Harcar on 11 May.

Rook *C. frugilegus*

A well represented visitor.

All spring records occurred in April with records from the inner group involving three west over Inner Farne on 4 and one to two on four other dates. On the outer group a flock of eight flew east before eventually heading back towards the mainland on 22 and three were noted on 26 April. Birds were scarce in autumn, with two west over Brownsman and then Inner Farne on 19 September and a final record of one over Inner Farne on 11 October.

Carrion Crow *C. corone*

A well represented visitor and rare breeding species.

Recorded regularly throughout the season in all months with peak counts of eleven south over Brownsman on 27 April and ten over Inner Farne on 24 October.

Raven *C. corax*

An extremely rare visitor.

Without doubt one of the unexpected highlights of the year was the sight of two of these impressive corvids, calling as they flew west over Inner Farne on 15 September. The fourth Farnes record, following birds in May 1951, June 1972 and May 1989.

Starling *Sturnus vulgaris*

A common visitor, extremely rare breeder.

Recorded regularly throughout the season with reports from all ten months. Spring brought counts of one to eleven, peaking with fourteen on 27 March. Early summer saw the arrival of the first fledged juveniles associating with adults from 5 June and reports were then regular to the end of the season. Throughout autumn local birds were commuting daily to the islands and these numbers were swelled by continental immigrants, with peak counts of 110 on 7 November and approximately 200 on 25 November.

Tree Sparrow *Passer montanus*

An uncommon visitor.

A single was discovered feeding near the Brownsman cottage on 13 April and lingered for six days, being last noted on 18 April. The bird favoured the upper vegetable garden during its stay and could often be heard calling from the rooftop of the pump house. Recorded in thirteen years since 1970.

Chaffinch *Fringilla coelebs*

A common passage visitor.

Only two spring records: one flew west over Brownsman on 31 March and a female was noted on the chapel roof of Inner Farne on 12 April. In autumn, birds were recorded on four dates in September, nineteen in October and eight in November. Passage started with a single west over Brownsman on 12 September followed by regular reports of one to three until the last sighting on Inner Farne on 11 November. The autumn peak count involved thirteen west over Inner Farne on 13 October with six on Brownsman on the same day.

Brambling *F. montifringilla*

A common passage visitor.

Spring passage was light through the islands, with one to two on Inner Farne on four dates between 14-24 April and one to two on the outer group on five dates from 22-26 April. Autumn passage began with five over Brownsman on 20 September, with the next report on 28 September concerning twenty-one west over the islands. Thereafter reports became numerous with one to twenty-five on thirty-one days between late September and 12 November. Heavy passage was again recorded with an autumn peak of 103 west over Inner Farne on 13 October. Other high October counts included a flock of forty-three resident on Brownsman on 13-14 and forty-one on Inner Farne on 22 October. The final autumn record was four on Brownsman on 12 November.

Greenfinch *Carduelis chloris*

A well represented passage visitor.

Two spring reports concerned singles over Brownsman on 27 and 29 March. The first autumn record involved five on Brownsman on 13 October and one to five were recorded on the outer group on eight dates until the end of the season, peaking with nine on 14 October. Birds were noted on the inner group from 15 October to the end of the season, with a build up in mid-November. On Inner Farne numbers built up from eight on 10 increasing to thirteen on 15 and peaking with twenty-two on 26 November before eventually declining to four on 3 December.

Goldfinch *C. carduelis*

A well represented passage visitor.

Spring passage was light with reports from the inner group on eight dates and from the outer group on six dates between 14 April and 4 May. During this period one to five were noted on the islands with a peak count of six over Brownsman on 4 May, probably part of the sixteen recorded over Inner Farne later that day. The only autumn records were a juvenile on Brownsman and then Inner Farne on 11 October with another on Inner Farne on 29 October.

Siskin *C. spinus*

A common passage visitor.

Typical light spring passage was recorded through the islands with one to two over Brownsman on 27 and 31 March and 22 April. The only spring record from the inner group was one on Inner Farne on 28 March. A very late spring bird, a male, was seen feeding on seed-heads on Brownsman on 31 May. The first returning birds appeared on 11 September with two over Inner Farne and a tame immature which lingered on Brownsman until 14 September. Further records involved one on Brownsman on 21 September, six west over the outer group on 2 October and two west over Brownsman on 22 October, with a male on Inner Farne the same day.

Linnet *C. cannabina*

A common passage and winter visitor. May have bred in the 1890s (Miller, ms).

There were almost daily records from 26 March-13 May with a peak of sixteen over Staple Island (twelve west, four east) on 22 April. A very interesting record concerned a female observed carrying nest material on the dock bank of Inner Farne on 30 April, although nothing more became of it. Late spring records came from Inner Farne with a pair on 26 and a male on 31 May. Autumn passage commenced on 21 September with two over Brownsman and one to thirty were regular throughout the autumn months until the wardens departed on 4 December. Peak autumn counts included fifty-one on Brownsman on 28 October, forty on Inner Farne on 2 November and forty on Brownsman on 24 November.

Twite *C. flavirostris*

A well represented passage visitor.

A quiet year began with a pair on Brownsman from 13-17 April which showed well, feeding

on seed provided by the wardens. Only two autumn records: a flock of thirty-six briefly on the top meadow of Inner Farne on 13 November and twenty-three west over Brownsman on 23 November.

Lesser Redpoll *C. cabaret*

An uncommon passage visitor.

The only spring record involved one on Brownsman on 16 May and two the following day, declining back to one on 18 May. Following the first autumn record of two on Inner Farne on 15 September, the inner group recorded one to two on eight dates until the last was noted on 13 November. One to four were present on the outer group on fourteen dates from 2 October-12 November, with a small influx in mid-October peaking with five on Brownsman on 15 October.

Common Redpoll *C. flammea*

An uncommon passage visitor.

A small influx of lesser redpolls brought one of these recently 'split' species to Brownsman during a spell of south-easterly winds on 8-9 November. Last recorded in 2002.

Crossbill *Loxia curvirostra*

An uncommon passage visitor.

Following last season's remarkable influx (over 420), the pattern of occurrence returned to normal. An immature male landed on Crumstone on the evening of 12 July and looked bemused at the lack of any trees, having to resort to picking through seaweed covered rocks for any signs of food. The only other record concerned a party of three (a male and two females) noted flying west over the Inner Farne lighthouse on 1 August.

Common Rosefinch *Carpodacus erythrinus*

An uncommon passage visitor.

For the fifth consecutive year the islands boasted this east coast drift migrant, as a vocal first-winter/female appeared on Inner Farne on 2 September. It did not linger, having been harried by the resident rock pipits, while another first-winter/female was noted briefly on Brownsman on 29 September.

Lapland Bunting *Calcarius lapponicus*

An uncommon passage visitor.

A small number passed through the islands on autumn migration, with two (adult and first-winter) noted on the north rocks of Inner Farne on 29 September. Further records followed, all on the outer group, with a confiding first-winter lingering on Brownsman on 8-9 October. Mid-November produced reports from Brownsman of two on 20, a single commuting between Brownsman and nearby Staple Island throughout the day of 23 and a party of nine seen flying west on 24 November.

Table 17 Late autumn build up of Snow Buntings on the Farne Islands 2003.

	November										December			
	21	22	23	24	25	26	27	28	29	30	1	2	3	4
Knoxes Reef	23	23	21	19	19	19	19	19	19	20	29	29	30	-
Brownsman	1	5	1	8	18	-	-	1	-	1	1	5	35	40

Snow Bunting *Plectrophenax nivalis*

A well represented passage visitor.

Despite no spring records, autumn produced good numbers including the largest congregation for five years. The first bird of the autumn, a male, was discovered in the vegetable garden on Inner Farne on 13 October, with two on Knoxes Reef on 23 October. During this period three went over Brownsman on 25 and 29, with one (an adult male) lingering on the island until 31 October. November brought records of one to eight passage birds over the outer group on fifteen dates and over the inner group on twelve dates. A flock built up in size on Knoxes Reef in the latter half of November before moving to Brownsman in early December (as shown in Table 17). At least forty were present on Brownsman on the morning the wardens left the islands on 4 December,

Yellowhammer *Emberiza citrinella*

An uncommon passage visitor.

A light scattering of late autumn migrants arrived on the islands, with a male near the lighthouse on Inner Farne on 14 October followed by another seen circling Brownsman cottage on 23 October. Final reports concerned a first-winter on Brownsman on 8-11 November with a male on nearby Staple Island from 10-11 November.

Ortolan Bunting *E. hortulana*

An uncommon passage visitor.

A first-winter bird was discovered on the north end of Brownsman on 14 September and despite the close attention of the resident rock pipits it lingered for the day, showing well at times. Last recorded in 2002.

Little Bunting *E. pusilla*

An uncommon passage visitor.

Following last season's blank year (the first in ten years) the autumn produced three records of this small distinctive visitor. A first-winter bird, located through its distinctive call, was on Brownsman in the early afternoon of 28 September and remained there for the rest of the day. Five days later, on 2 October, another was discovered on Inner Farne on the dock bank area of the island and this latter island had a second on 12-13 October, although it was more elusive than the previous two birds.

Yellow-breasted Bunting *E. aureola*

A rare visitor.

The islands have a virtual monopoly of the Northumberland records of this rare eastern bunting, with nine previous records accepted from the islands and only one mainland record. The islands' tenth record involved a first-winter bird appearing on Brownsman on the morning of 1 September which was present until dusk. The bird was highly elusive at times, disappearing into long grass, but did show well on the 'artificial tree' near the cottage in mid-afternoon. Last recorded in 2002.

Reed Bunting *E. schoeniclus*

A well represented passage visitor.

Spring passage was more evident on the outer group with single females on Brownsman on 16 and 18-20 April and a male on 25-26 April. The only spring sighting on the inner group was a male which was on Inner Farne briefly on 18 April. The first autumn record involved two on Brownsman on 20-21 September and this was followed by a spate of records from mid-October. A lone female appeared on Brownsman on 12 and numbers soon increased with eight on 16, peaking at ten on 18 before declining to four on 25 October. Smaller numbers were noted on Inner Farne during this period with five on 13 and one to two until 28 October. Final late passage birds were recorded in November with between two and ten on both island groups, peaking with four over Brownsman on 7 November.

Exotica

Saker Falcon *Falco cherrug*

A bird hunting over East Wideopens on 28 October was thought to be this species. Both a carrion crow and a very vocal adult peregrine mobbed the bird, but being considerably larger than both it appeared to be not too distracted and eventually drifted off. This represents the first record for the islands. Despite having no visible jesses, the species is thought more likely to be an escape than to have arrived in Britain in a wild state.

RINGING REPORT 2003

Ringing totals

Ringing totals for 2003 are compared with the previous year in Table 18. The team tends to do a similar number of visits each year, but this is more by chance (weather, work etc) than design. However, the similarity in ringing totals for some species is remarkable: Sandwich terns, kittiwakes and shag totals were within a few birds in each of the two years. Conversely, eiders were rather fewer in 2003, and the numbers of arctic terns ringed were swelled by the capture of eighty-two new adults and twenty-five retraps. The new emphasis on the capture of adult arctic terns was deliberate: although the ringing of chicks is valuable, in practice few fledged birds get recovered away from their natal or breeding colonies as their wintering areas in the south Atlantic are so remote, but by recapturing a sufficient sample of adult birds each year we can use this information to estimate annual mortality rates. So, in 2003, we tried out a method of catching adult arctic terns to see if this would give us an adequate sample size each year to maintain a 'Retrapping Adults for Survival'

(RAS) project. In the event this was successful, and arctic terns on both Brownsman and Inner Farne seemed (relatively) happy to succumb to the charms of the ringing team. The eiders on Inner Farne and shags on Staple Island are already the subject of RAS studies, and these data are being added to the national datasets for survival analyses each year. Although the numbers of Sandwich terns ringed on the Farnes are relatively modest compared with pre-1986 totals, the Natural History Society Ringing team also rings Sandwich terns on Coquet Island, some 30 km to the south, and the combined totals for the Farnes and Coquet Island each year are around 1,000 birds. So, for the north-east coast as a whole, we are able to maintain a good sample size of Sandwich tern chicks ringed each year.

Recoveries of ringed birds

In 2003 we received thirty-six reports of recoveries from birds ringed on the Farne Islands. Exactly half of these were Sandwich terns, recovered throughout the known migration route from the British coastline to West Africa. Taking the three African recoveries first, one of the chicks ringed on Inner Farne in 2002 was controlled (captured intentionally by another ringing team) in Swakopmund, Namibia in December the same year. The wintering range of first-year Sandwich terns is usually centered on the West African coast from Senegal to Ghana (Noble-Rollin and Redfern, 2002) and recoveries this far south of the equator are relatively unusual. A particular feature of the African coast south from Angola to Namibia is the Benguela current, a cold-water upwelling that is one of the richest in the world for its organic sediments attractive to marine life including vast shoals of anchovies. It is possible that the concentration of Sandwich tern recoveries further north is more to do with the relative human population abundance than a real reflection of the relative distribution of Sandwich terns along the coast. The other two African recoveries were more conventional: a chick ringed on Brownsman in 1996 was recovered dead at sea off Guinea Bissau in December 2002 and another one from Brownsman, ringed in 1982, was found sick in Banjul, Gambia, in November 2003 and then released.

Of the ten European (and non-UK) recoveries of Sandwich terns, six were sight records (ring number read in the field) of birds on the island of Hirsholm, off the Jutland Peninsula, Denmark, between 20 May and 21 June 2003. These six birds were ringed on Brownsman in June 1998 (three birds) and Inner Farne in June 1980 (two birds) and 1984. Hirsholm, and the archipelago of which it is a part, is an EC-designated Special Protection Area and one of the most important sites for breeding Sandwich terns in Denmark. These breeding-season sightings of birds of breeding age indicate the extent to which 'our' Sandwich terns disperse and breed in other colonies in the North Sea and the Baltic. Two of the other European recoveries, both in September 2003, were of birds ringed on Inner Farne in 1996 and recovered on the Iberian Peninsula: one died in a gill net off Portugal (half-way down the west coast of the Iberian Peninsula), and the other was controlled in Huelva, on the south coast of Spain. Finally, two Sandwich terns were recovered in Zeebrugge, Belgium in April-May 2003, and these were also ringed in the same year as each other: a chick ringed on Inner Farne in 1985 was recovered dead in May, while the other, from Brownsman, was controlled in April. The Inner Farne bird had previously been seen at the Dutch colony at Griend in May 1999, so both Belgian birds may have been making their way north to breed at the time of their recovery.

Recoveries of Sandwich terns in the UK (five) were dominated by sight records from ornithologist Johan Bos at Joppa, near Edinburgh, in September 2003 (two birds, ringed on

Table 18 Ringing totals for 2003 compared to 2002.

Species	Ringed in 2003	Ringed in 2002
Arctic Tern	285 (+25 adult retraps)	116
Sandwich Tern	360	362
Roseate Tern	0	2
Kittiwake	204	200
Shag	196 (+52 retraps)	190 (+54 retraps)
Eider	29 (+73 retraps)	72 (+111 retraps)

Inner Farne in 1984 and 2003), and by controls of roosting birds (an Inner Farne juvenile from June 2002 and a Brownsman adult ringed as a chick in 1985) caught in cannon nets at Seal Sands, Teesside, by Robin Ward on 20 July 2002. The Edinburgh and Seal Sands terns emphasise how mobile these birds are, ranging north and south along the coast before starting their migration to West African wintering grounds. In addition, a Brownsman bird from 1986 was found dead at Cheswick, Northumberland, in June 2003.

Arctic tern recoveries have proved more interesting than usual this year; of the four recoveries involving Farnes birds, two were recovered outside British waters. A chick ringed on Inner Farne in June 2003 made it into the Indian Ocean but was found dead near Durban, Republic of South Africa, in October the same year. This juvenile bird joins a scattering of other recoveries in this part of the African coastline (Monaghan, 2002). Since the prevailing ocean currents in this part of the world run south, parallel with the coastline, it is unlikely that birds have died elsewhere and been carried there from more southerly waters; it is possible that birds cross the Indian Ocean from these areas in a south-easterly direction to join the antarctic pack ice wintering grounds. We still have a great deal to learn about the migratory movements of these fantastic birds. The other long-distance recovery of an arctic tern was of one ringed as an adult on Inner Farne in 1977, and found dead in Sunne, Varmland, Sweden, in October 2003. This is perhaps rather late for an arctic tern to be this far north, so it may have died earlier in the year. At 160 km inland, this tern may well have been breeding in one of the arctic tern colonies in this part of Sweden. In addition to its age (at least twenty-five years old) it is a potentially interesting example of long-distance (*ca* 1,000km) breeding dispersal. Closer to home, an arctic tern ringed as a chick on Brownsman in 1981 was found dead on the Long Nanny in June 2003, and a chick ringed on Coquet Island in June 1999 was controlled by the ringing team on Inner Farne in June 2003 (an example of natal dispersal – a bird likely to be breeding away from its natal colony).

Although we do not get many recoveries of kittiwakes each year, those we do get are often interesting. The two of the three reported in 2003, all originally ringed as chicks, were from opposite sides of the North Atlantic. One ringed on Brownsman in 1998 was recovered dead on the Jutland Peninsula, Denmark, in March 2003; 3,000km across to the other side of the North Atlantic, one from Inner Farne, also ringed in 1998, was shot in the Davis Strait near Nuuk, Greenland, on 30 September 2003. There is increasing concern at the potential impact of hunting on Greenland birds, but it clearly affects our birds as well! Hunting is at least controlled and monitored to some extent in Greenland: kittiwakes are only permitted to be taken between 1 September and 15 February, and all rings found on hunted birds must be

forwarded to the Greenland Institute of Natural Resources (Greenland Home Rule Executive Order no. 38). It is to be hoped that hunting can be kept under control and reduced substantially in the future. The last kittiwake recovery is more mundane: one from Inner Farne in 1985 was found dead on the beach at Bamburgh in April 2003.

Recoveries in Jutland, Denmark, seem to have been the theme for 2003, continued by the dead recovery there, in January 2003, of a puffin ringed on Brownsman as an adult in 1984. Two other puffin 'recoveries' were reported: a chick ringed on Brownsman in 1976 was retrapped on Inner Farne in June 2003 and another, ringed as an adult on Brownsman in 1981, was recovered dead on Orkney in April 2003.

In previous years, shags from the Farnes have been recovered along the length of the east coast of Britain. This year the pattern is no different, with the eight shag recoveries, all of birds ringed as chicks on Staple Island, ranging from Portknockie, Grampian (ringed June 2002, recovered dead June 2003) to Fryerning, Essex (ringed June 1986, recovered dead January 2004). However, rather more birds seem to travel north: three were recovered along the Fife coast (two ringed in 2002 and recovered dead in February and May 2003, and one from 1984 recovered dead in July 2003), and singles were recovered at Burmmouth (ringed 1980, recovered dead March 2003) and Leith (ringed June 2003, recovered dead September 2003). There was one local recovery in Bamburgh of a recently-fledged shag in July 2003.

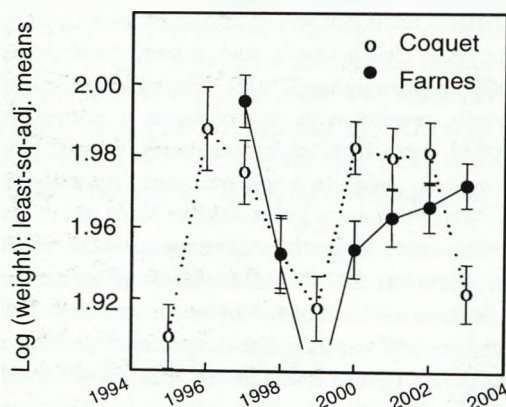


Figure 3 Arctic Tern growth index: 1995-2003 Farnes and Coquet Island.

Growth Index for arctic tern chicks on the Farne Islands and Coquet Island. Each point is the least-squares mean \pm SEM for Log10 (chick mass), standardised against Log10 (total head length), from an Analysis of Covariance. For this index, total head length is used as a structural measure of chick age. In 1999, an apparent absence of food led to breeding failure of arctic terns on the Farnes.

Most of these birds were long dead when discovered, and for three of them only the ring or leg and ring were found.

Finally, there were two recoveries of eiders, both at Bamburgh, of females ringed in 1999 and 2002.

Scientific projects

Scientific projects on the Farnes range from standard monitoring programs, such as RAS and the arctic tern chick growth index, through to projects involving more-detailed observational studies coupled with technological solutions to discovering what seabirds are

doing and how they are doing it. Measurements of chick weight and total head length were taken for arctic terns on Brownsman and Inner Farne, and compared with similar data for previous years and with data obtained from arctic tern chicks on Coquet Island (Figure 3). These data are beginning to display intriguing trends: while birds on the Farnes and Coquet Island have, in the past, shown similar growth indices, in 2003 there was a clear difference between the two sets of data, with Coquet Island birds having an unexpectedly low growth index, comparable to 1995 when this study began. It will be interesting to see if patterns continue to emerge with the addition of data for 2004. Unfortunately, there are still too few data to apply statistical methods which can be used to distinguish cyclical changes from random noise, but this will hopefully be possible with a longer run of data. Unravelling the cause of annual variation in growth index is one of the aims of the Farne Islands Marine Research Group (FIMRG), a multidisciplinary team from the University of Newcastle and the Natural History Society of Northumbria. As in the last few years, the FIMRG team attacked the problem on three fronts: trawl surveys of sandeel size and abundance on designated sandbanks around the Farne Islands, observations of the foraging locations of adult birds around the Farnes and feeding frequencies of arctic tern chicks, and telemetry and data-logging studies of shag and puffin feeding behaviour. Trawl surveys were supervised by Drs Judy and Bob Foster-Smith using the University Research Vessel *Bernicia*, and data are currently being analysed as part of student projects at the University of Newcastle. Dr Richard Bevan persuaded some puffins and shags to carry light-weight radio transmitters and dataloggers for a few days, enabling the foraging depths and activities of these birds to be monitored. Finally, Victoria Edward and Victoria (Tori) Summerell spent nine weeks each on Inner Farne and Brownsman respectively, recording the feeding frequency and sizes of fish fed to arctic tern chicks, and using our 1970's Wild optical co-incidence rangefinders to record the foraging locations at sea of terns, shags and puffins. A state-of-the-art laser rangefinder was also used but, while excellent for estimating distances close to the islands, could not match the much older (superbly-made), mechanically driven, optical co-incidence instruments for range. Data obtained in 2002 using these methods have been analysed by Matt Edwards, and show that there are tidally-related variations in foraging behaviour, with birds feeding closer to the islands at high tide. Paradoxically, foraging locations tend to be in areas where the sea-floor habitat is heterogeneous, rather than over the homogeneous sand habitat where the sandeels are known to occur. These results are currently being written up for publication. With the addition of data for 2003, and hopefully 2004, we will gain a more complete understanding of the factors that make sandeels available for capture by terns and other seabirds.

The various ringing and scientific projects carried out on the Farnes would not be possible without the support and encouragement of John Walton and his wardening team, and the Farne Islands Local Management Committee, chaired by Charles Baker-Cresswell. We are very grateful to National Trust staff on the islands for their hospitality towards us and our two field assistants, Victoria Edward and Tori Summerell. Victoria and Tori have made important contributions to the accumulating data on feeding rates and foraging locations, and their efforts are greatly appreciated. The boat generously provided by Northumbrian Water, allowing the Ringing team to gain access to the islands, is still performing well (although needs pumping up more frequently these days!). We are also indebted to Northumbrian Water and the Sir James Knott Trust for their financial support of the seabird foraging project. As always, Brian Graham, Harbourmaster, has been supportive of our unusual hours, and we appreciate his skill in keeping a straight face while we launch the boat

in as professional a manner as possible. We would also like to thank Alistair Simpson, Skipper of RV *Bernicia*, for his enthusiastic contributions to the sandeel surveys. The costs of rings and other essential equipment has been met by the Natural History Society of Northumbria, and by personal contributions from the team, whom we thank for their hard work and continued support.

CETACEAN REPORT

Harbour Porpoise *Phocoena phocoena*

A total of forty-seven sightings of harbour porpoises were reported from around the islands on thirty-six days throughout the season between 29 March and 24 November. Most sightings comprise groups of up to five though exceptionally groups of twelve to fifteen were present in late October. The first young were reported on 13 May. The majority of reports came from Inner Sound or south of the inner group of islands, except in early June when all sightings came from Staple Sound or beyond. A noticeable record involved groups of five and eight 'porpoising' clear of the water and moving rapidly south through Inner Sound on 14 October. This behaviour is rarely observed in this normally slow and unsociable species and is thought to be associated with feeding. The figure 4 and 5 show respectively the distribution of monthly sightings and the changes in the maximum group size observed.

Figure 4 Number of sightings per month.

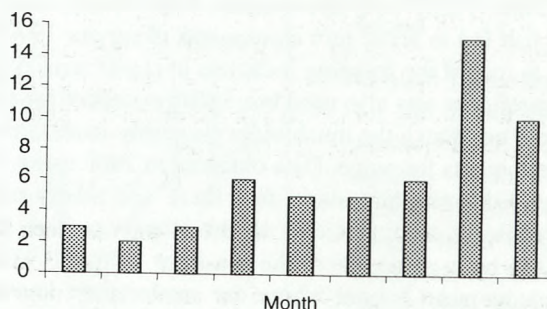
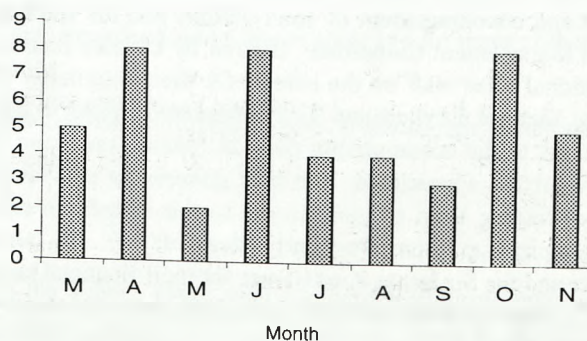


Figure 5 Maximum Group Size per month.



Minke Whale *Acutorostrata balaenoptera*

The only baleen whale and indeed the only whale reported from around the Farne Islands in 2003. The Minke whale is distinguished by its small size (7-10m) and relatively tall sickle shaped fin two-thirds towards the back of the dorsal surface. The season brought seven sightings during the year, all occurring between 9 June and 3 October. The records included three to four animals amongst a large feeding frenzy of gannets *Morus bassanus* on 9 June approximately one mile east of Longstone main rock and on 16 June a 'small' (ca 7m) animal moved north through Staple Sound. Further records included another observed 'resting' on the surface east of Longstone on 21 June in the company of two harbour porpoises. The next sighting was not until 14 September when one was noted heading south through Inner Sound. In October one surfaced unexpectedly beside the National Trust Zodiac east of Crumstone on 1, another passed Knivestone on 2 and possibly the same animal was responsible for a sighting near Crumstone on 3 October.

White-beaked Dolphin *Lagenorhynchus albirostris*

The species is the most abundant dolphin in the North Sea and for much of the year they spend their time in more offshore waters, though seasonal movements inshore usually produce sightings along the north-east coast. In 2003 there were seven sightings on the Farne Islands between 24 June and 16 August. A party of six was seen heading north through Inner Sound on 24 June and a further group of five, of what were believed to be this species, headed north through the same area between 8:10 and 8:30 on 27 June. Further records continued during this period, with eight, including at least one young, north through Inner Sound on 29 June which provided a highlight for a few lucky visitors and wardens, as they were watched moving slowly north between 14:00-15:00pm. On 5 July, six headed north past South Wamses with three moving quickly through Inner Sound on 15 July, including one individual which breached the water completely, showing the distinctive markings on the flanks. The final few records concerned four south through Staple Sound on 12 August and three off the south end of Brownsman on 16 August.

Bottlenose Dolphin *Tursiops truncatus*

Only a single record of six animals, believed to be this species, seen by visitor boats and then from Inner Farne as they headed north through Inner Sound on 3 August. The large size, large dorsal fin and relatively uniform colour of the upperparts suggested that these were bottlenose dolphins.

REFERENCES

- BOLAM, G (1912). *The birds of Northumberland and the eastern borders*. Alnwick: H H Blair.
- BOOTH, H P (1911). The nesting of the Common Gull on the Farne Islands. *Naturalist* **652**, 179.
- (1913). The nesting of the Common Gull on the Farne Islands. *Naturalist* **667**, 237.
- BROWN, W (1866). A short account of a visit to the Farne Islands during the breeding season of 1865. *Zoologist*, 2nd edition series **1**, 483.
- GREENLAND INSTITUTE OF NATURAL RESOURCES. Greenland Home Rule Executive Order no. 38.
- GODDARD, T R (1925-48). Field notes. Ms.
- (1946). *The Farne Islands Ornithological Report for 1946*. Prepared for the Farne Islands Committee of the National Trust.
- HARVEY, R (2002). Birds on the Farne Islands in 2001. *Trans. nat. Hist. Soc. Northumbria* **62**, 37-87.

- HARVEY, R and WALTON, J (2001). Birds on the Farne Islands in 2000. *Trans. nat. Hist. Soc. Northumbria* **61**, 37-70.
- HARVIE-BROWN, J A, CORDEAUX, J, BARRINGTON, R M and MORE, A G (1884). *Report on the migration of birds in the spring and autumn of 1883*. London: West, Newman and Co.
- HAWKEY, P (1974). *Birds on the Farne Islands in 1974*. Farne Islands Local Committee of The National Trust.
- (1981). *Birds on the Farne Islands in 1981*. Farne Islands Local Committee of The National Trust.
- (1991). The Birds of the Farne Islands. *Trans. nat. Hist. Soc. Northumbria* **55**, 155-192.
- KERR, I (2001). *Northumbrian Birds: their history and status up to the 21st century*. The Northumberland and Tyneside Bird Club.
- MARCH, H (1916). Ms letter to E Miller. Natural History Society of Northumbria archives (NEWHM: 2002. H1002).
- MILLER, E. Ms. (Diaries). Natural History Society of Northumbria archives (NEWHM: 1996. H313.4).
- (ca 1959). Ms letter to G Hickling, n.d. Natural History Society of Northumbria archives (NEWHM: 2002. H1002).
- MONAGHAN, P (2002). Arctic Tern. *The Migration Atlas: movements of the birds of Britain and Ireland*. C V Wernham, M P Toms, J H Marchant, J A Clark, G M Siriwardena and S R Baillie. London, T & A D Poyser.
- NOBLE-ROLLIN, D and REDFERN, C P F (2002). Sandwich Tern. *The Migration Atlas: movements of the birds of Britain and Ireland*. C V Wernham, M P Toms, J H Marchant *et al.* London, T & A D Poyser.
- NORTHUMBERLAND AND TYNESIDE BIRD CLUB (2002), monthly bulletins.
- PYBUS, W M (1903). Presidential Address to the members of the Tyneside Naturalist's Field Club, 2 May 1902. *Trans. nat. Hist. Soc. Northumbria* **14**, 176.
- THORP, C (1943). The Farne Islands Association Report, 1943.
- TRISTRAM (1860). *Trans. Tyneside Nat. Field Club.* **4**, 212.
- WALTON, J (1993). *Birds on the Farne Islands in 1992*. Natural History Society of Northumbria.
- (1994). Birds on the Farne Islands in 1993. *Trans. nat. Hist. Soc. Northumbria* **56**, 115-133.
- (1995). Birds on the Farne Islands in 1994. *Trans. nat. Hist. Soc. Northumbria* **56**, 205-224.
- (1996). Birds on the Farne Islands in 1995. *Trans. nat. Hist. Soc. Northumbria* **56**, 393-414.
- (1997). Birds on the Farne Islands in 1996. *Trans. nat. Hist. Soc. Northumbria* **57**, 93-113.
- (1998). Birds on the Farne Islands in 1997. *Trans. nat. Hist. Soc. Northumbria* **58**, 323-345.
- (2000). Birds on the Farne Islands in 1999. *Trans. nat. Hist. Soc. Northumbria* **60**, 37-58.
- WALTON, J and MAHER, M (1999). Birds on the Farne Islands in 1998. *Trans. nat. Hist. Soc. Northumbria* **59**, 37-59.
- WALTON, J and RICHARDSON, R (1991). *Birds on the Farne Islands in 1991*. Natural History Society of Northumbria.
- WATT, G (1950). *The Farne Islands Ornithological Report for 1950*. Prepared for the Farne Islands Committee of the National Trust.
- (1951). *The Farne Islands Ornithological Report for 1951*. Prepared for the Farne Islands Committee of the National Trust.
- WILSON, A E (2000-2002). A History of the Bird Numbers on the Farne Islands. (Ms and computer database).

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Peregrine Falcon in the Cheviot Hills *by Joan Holding*

THE PREY OF PEREGRINES *FALCO PEREGRINUS* AT BREEDING TERRITORIES IN NORTHUMBERLAND

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SUMMARY

Analysis of prey remains found at peregrine breeding territories in Northumberland revealed variation in the composition of the diet between summer (April-September) and winter (October-March). Domestic pigeons, mainly in the form of racing pigeons, were the most frequently killed prey species during the summer, coinciding with the pigeon race season from April-September. Domestic pigeons comprised 36% of kills by frequency and 51% by weight during the summer. In the winter, migrant thrushes and wood pigeons were the most frequently killed prey species, accounting for 73% of kills by frequency and 67% by weight. The majority of the racing pigeons killed came from lofts in Scotland and north-east England (69%). Pigeons racing north to lofts in the Scottish Borders, East Lothian, Midlothian, Edinburgh, Falkirk and Fife are predicted to pass through Northumberland and pigeons from these regions made up 25% of all the racing pigeons killed at peregrine territories in this study. Pigeons racing south from Scottish liberation sites to lofts in North Yorkshire and the East Midlands are also predicted to pass through Northumberland and pigeons from these regions comprised 14% of racing pigeons killed. In addition, pigeons from lofts in rural parts of north and west Northumberland made up a further 7% of racing pigeons killed. Many, though not all, of the remaining 54% of racing pigeons were likely to be significantly off-course from their intended flight lines or else were strays already lost to their owners prior to being killed.

INTRODUCTION

There have been a number of studies investigating the prey of peregrines *Falco peregrinus* at their breeding territories in Britain, all of which have revealed the wide range of avian prey killed and the predominance of domestic pigeons *Columba livia* in the diet during the breeding season (Ratcliffe, 1993). In addition, extensive studies conducted in southwest Scotland (Mearns, 1982; 1983) and south Wales (Richards and Shrubbs, 1999) have also highlighted the difference in the composition of the diet between the summer and winter hunting periods. Unfortunately, the peregrine's predilection for domestic pigeons has brought the species into conflict with racing pigeon owners in many widespread areas, whilst their depredation of red grouse *Lagopus lagopus* has meant that they have incurred the wrath of gamekeepers in the uplands of northern Britain. Such conflicts have often resulted in sustained persecution, particularly in districts close to aggregations of pigeon lofts and on managed grouse moors (UK Raptor Working Group, 2000). Whilst the conflict between peregrines and red grouse has been the focus of attention for a number of years the conflict between peregrines and racing pigeons has only recently been the subject of research studies (Shawyer et al., 2000; Dixon, 2002). Furthermore, the detrimental consequences of persecution arising from the peregrine and racing pigeon conflict has tended to overshadow the potential beneficial influence of pigeon racing for peregrine populations.

In this study I provide data on the prey species killed by peregrines occupying breeding territories in Northumberland throughout the year and particular attention is paid to the racing pigeon component of the diet. It must be noted that the data in this study are unlike-

ly to be representative of the range and composition of prey species in the diet of individual peregrines throughout the year. This is because prey that is killed and eaten away from the breeding territory is not included in the analysis. Peregrines do not confine their hunting and feeding within a restricted area around the nesting site (Enderson and Craig, 1997). This is particularly true outside the breeding season when peregrines can range widely in search of prey and some individuals, of either sex, may leave their nesting areas for extended periods of time outside the breeding season (Ratcliffe, 1993). Thus, prey remains found at breeding sites may reflect the species killed by both sexes or by one sex only at different time periods throughout the year. In particular, this study may under-record the frequency of red grouse, ducks and coastal waders in the diet of individual birds outside the breeding season. In addition, it must be borne in mind that the diet of non-breeding adults and immature peregrines may differ significantly from that reported at breeding territories in this study.

METHODS

Prey remains and racing pigeon rings were collected from twenty different peregrine breeding territories in Northumberland between July and March from 1998-2002. All the peregrine territories were located in the west and north of the county. Prey remains were collected from eyries and plucking areas in the immediate area of the nesting cliff of each breeding territory. The breeding territories were systematically searched for prey remains and each plucking area was carefully inspected in order to reduce the likelihood of missing the feather remains from small, dull-coloured prey species. In cases where there were the remains of more than one individual of a particular species the minimum number of individuals was recorded.

Pigeon rings were located using a metal detector, with particular attention paid to eyries and areas below favoured perches (see Dixon and Lawrence, 2000 for further details). Pigeon rings provide information on the union that issued the ring, the year that the ring was issued and an individual identification number. The main British homing unions issuing racing pigeon rings are the Royal Pigeon Racing Association (ring prefix GB), the Scottish Homing Union (ring prefix SU), the North of England Homing Union (NEHU) and the Welsh Homing Pigeon Union (ring prefix WHU). Using ring registration lists provided by the respective homing unions, it was possible to identify the pigeon club and/or federation to which the ring was issued. This information was used to identify the geographical location of the home loft of each pigeon. The home loft location of racing pigeons that had been transferred between owners in different regions would have been incorrectly identified using this method, however such 'transfers' make up less than 5% of pigeon race flocks (A Dixon, unpublished data).

RESULTS

Prey species composition

In total I collected the remains of 230 different prey items at peregrine breeding territories in Northumberland; 124 from the summer period (April-September) and 106 from the winter period (October-March; see Appendix). There were thirty-four different species represented within this sample and the range of prey was greatest during the summer period; twenty-nine different species found during the summer compared with fifteen

during the winter. During the summer domestic pigeons were by far the most important prey species, comprising nearly 36% of prey by frequency and 51% by weight. Other significant prey species during the summer were wood pigeons *Columba palumbus* (7% by frequency and 11% by weight) and starlings *Sterna vulgaris* (19% by frequency and 6% by weight). Many of the starlings killed were juveniles, indicating that the roving post-breeding flocks are an important food source from June onwards. During the winter, i.e. outside the pigeon race season, the proportion of domestic pigeons killed dropped dramatically to just 4% by frequency and 10% by weight, indicating that most of the domestic pigeons killed during the summer are racing pigeons as opposed to feral pigeons. Migrant thrushes (fieldfare *Turdus pilaris*, redwing *T. iliacus* and blackbird *T. merula* comprising 65% by frequency and 42% by weight combined) and wood pigeons (8% by frequency and 25% by weight) were the most important prey species killed during the winter. Woodcock *Scolopax rusticola* also featured significantly in the prey remains (6% by frequency and 13% by weight) during the winter.

Unusual prey species found included a whimbrel *Numenius phaeopus* which was probably killed whilst on spring passage and a yellow budgerigar *Melopsittacus undulatus* which was found at a territory in the west of the county during the winter. In addition, I recovered three wild bird rings from a starling, a mistle thrush *Turdus viscivorus* and a song thrush *Turdus philomelos*. The starling and mistle thrush were recovered within 15 km of their ringing sites in Alnwick and Coquetdale respectively whilst the song thrush was ringed at Gibraltar Point near Skegness in September 1965. As the latter peregrine breeding territory was not reoccupied until the late 1970s at the earliest this song thrush was probably at least twelve years old when killed.

Racing pigeons as prey

Age profile of racing pigeons killed at peregrine breeding territories

Pigeons are raced according to their age with 'old birds' (i.e. pigeons hatched at least one calendar year before they are raced) racing from April to July and 'young birds' (i.e. pigeons hatched the same calendar year as they are raced) racing from July to September. The 'old bird' racing season coincides with the main peregrine breeding period, whilst the 'young bird' racing season coincides with the fledging period prior to dispersal from the breeding territory. I was able to identify thirty-two pigeons killed during the 'old bird' race season at two breeding territories, of which twenty-three were 'old birds' and nine were 'young birds' (Table 1). The 'old birds' were predominantly one or two years old but some were up to five years old.

The 'young birds' that were killed during the 'old bird' race season were mainly from lofts in the northeast of England (6/9; 67%), whilst the 'old birds' were mainly from lofts in Scotland (13/23; 57%). Over the entire pigeon race season (April-September), the age profile of the racing pigeons killed at peregrine breeding territories differed significantly in relation to the home origin of the pigeon (Table 2). Significantly more pigeons from lofts in the north-east of England were killed as 'young birds' than from lofts in Scotland and elsewhere (47% cf. 24%; Chi square corr. = 3.763, 1 df, $P = 0.05$).

Home origin of racing pigeons killed at peregrine breeding territories

Out of a sample of 1627 racing pigeon rings that were recovered from peregrine breeding territories in Northumberland, 46% were issued by the SHU, 27% by the RPRA, 23% by the NEHU, 3% by the WHU and the remaining 1% by homing pigeon unions from

Table 1 Age profile of racing pigeons killed at Peregrine breeding territories during the 'old bird' race season (April-July)

Racing Pigeon Age (years old)						
Age (years)	Young Bird	1	2	3	4	5
Number killed	9	10	6	3	3	1

Ireland, France, Belgium and Holland. For the ten-year period from 1991 to 2000 the annual proportion from the four main British Homing Unions fluctuated but none showed any particular trend. Thus, for example, there was no tendency for the proportion of Scottish racing pigeons killed at peregrine breeding territories to either increase or decrease over the ten-year period.

I compared the proportion of rings issued to the twenty-one different pigeon racing federations in Scotland with the proportions recovered at peregrine breeding territories in Northumberland (Table 3). Racing pigeons from lofts located in regions around the Firth of Forth, i.e. East Lothian, Midlothian, Edinburgh, Falkirk and Fife, together with those from the Scottish Borders were killed more frequently than would be expected by chance. Pigeons from lofts in these areas made up 54% of all Scottish racing pigeons killed by peregrines in Northumberland; i.e., nearly 25% of all the racing pigeons killed. Conversely, racing pigeons from lofts in western Scotland, i.e. Dumfries & Galloway, Ayrshire and Glasgow, together with those from Aberdeenshire and Moray, were killed less frequently than would be expected by chance.

If the relative proportions of the pigeon federations in the sample of rings recovered at breeding territories accurately represent the proportions available as prey, it is tempting to speculate on the race routes of pigeons from the different regions of Scotland. It is possible that pigeons from the Ayrshire, Solway (Dumfries and Galloway) and Glasgow federations pass to the west of Northumberland, probably through Cumbria, whilst those from the Aberdeen and North East (Moray) federations pass to the east, perhaps along the Northumbrian coastline. Conversely, racing pigeons from lofts in the Scottish Borders, Pentland (East Lothian), Midlothian, Central (Edinburgh), North West (Falkirk) and Fife federations are predicted to pass through Northumberland on their normal race routes (Figure 1).

Table 2 Age in relation to the home origin of racing pigeons killed at Peregrine breeding territories in Northumberland over the entire race season (April-September).

Age of Racing Pigeon when killed (years old)						
Homing Union	Young Bird	1	2	3	4	5
NEHU	16	12	4	1	1	0
SHU	19	23	14	10	4	3
GB	9	12	10	5	5	2
Belgium	1	0	0	1	0	0
Ireland	0	2	0	0	0	0
Holland	0	1	1	0	0	0



Figure 1 Representation of the main race routes for Scottish racing pigeons from lofts in the borders, East Lothian, Midlothian, Edinburgh, Falkirk and Fife.

For rings issued by the NEHU, 32% were issued to just five of the thirty-seven federations within the union. A greater proportion of the rings recovered at breeding territories came from these five federations than would be expected by chance (Chi square corr. = 292.8, 1 df, $P < 0.001$). The federations were all based in the more rural parts of Northumberland and were in the same geographical area as the peregrine sites sampled in this study; i.e. the Coquetdale, Northumberland Premier, Border, Tyne & Derwent and Consett federations. Many of the lofts concerned were likely to be within the hunting range of the breeding peregrines and the pigeons were likely to have been killed within a relatively short distance of their home lofts. Racing pigeons from these five federations comprised approximately 7% of all the racing pigeons killed. The remainder of the NEHU rings were mostly issued to federations located to the south of the main sampling area to pigeon clubs in

Tyne & Wear, Durham and Cleveland.

For rings issued by the RPRA, 32% were issued to pigeon clubs in north-east England (mainly North Yorkshire) and 19% were issued to pigeon clubs the East Midlands region. Many of these clubs regularly fly on the 'north road' and race their pigeons from liberation points north of the lofts, including sites in Northumberland and Scotland. The remainder of the RPRA rings were issued to clubs in north-west England and North Wales (11%), Cumbria (9%), Derbyshire and South Yorkshire (8%), West Midlands (8%), London (8%), south-west England (4%) and Ireland (1%). Pigeons racing home to lofts in North Yorkshire and the East Midlands from Scottish liberation points are predicted to pass through peregrine breeding territories in Northumberland during racing and pigeons from these areas comprised nearly 14% of all the racing pigeons killed.

DISCUSSION

Prey species composition

The method of collecting prey remains is likely to be biased towards larger prey species such as domestic pigeons as the feathers can be detected more easily and remain on site for longer. Non-avian prey is also likely to be under recorded and the remains of rabbits *Oryctolagus cuniculus* were found at breeding sites but it was not certain that these were the result of peregrine kills. At one site quarrymen reported seeing peregrines passing rabbits to juveniles in flight (per. R Jewitt). Elytra from small beetles were also found in many pellets but it was possible that these came from the guts of starlings that were eaten. Shotgun pellets were found within a matrix of pigeon feather pulp in one pellet hinting at the possibility of some carrion feeding or else the capture of a live pigeon with shotgun injuries.

In a study conducted between 1975-80 in south Scotland, Mearns (1983) found that between March-July domestic pigeons made up 49% of kills. Within this total there was variation among breeding habitats with the percentage of domestic pigeons killed ranging from 39% in mixed inland habitats to 50% on sheepwalks. Redpath and Thirgood (1997) reported that domestic pigeons comprised 55% of kills on grouse moors in south-west Scotland and 46% in northern England during the summer (June to September), whilst Ratcliffe (1993) presented data for the period 1945-77 indicating that domestic pigeons comprised 53% of peregrine kills in Lakeland. My estimate of 36% domestic pigeons in the prey of Northumberland peregrines compares most favourably with that of Mearns (1983) who reported a figure of 39% by frequency in mixed habitats. However, the data from other studies are not directly comparable because of differences in the times of year used and the types of breeding habitats under study. The peregrine territories sampled in this study were in forestry, sheepwalk and mixed inland habitats. None was on managed grouse moors.

The breeding density and or breeding success of peregrines is likely to be influenced by food supply and in particular, the availability of racing pigeons (Dixon et al., Submitted A). A reduction in the supply of racing pigeons could have a serious impact on breeding peregrines in Northumberland. Whether this would be reflected in a reduction in breeding numbers or breeding success is unclear and any effect would be influenced by their ability to switch to alternative prey species. Few wild bird species are as profitable as racing pigeons in terms of their ease of capture and weight, and thus a switch to alternative prey is likely to increase energy demands on breeding peregrines through more time spent hunt-

ing and the need to make a greater number of kills. The number of pigeon fanciers in Britain is currently declining at a rate of around 5% per annum, a situation which does not bode well for the future of the internationally significant peregrine population in the UK. There are many reasons for the decline in the sport but increased losses due to raptor predation is often cited as a major cause, particularly in Scotland (Scottish Homing Union, 1998).

During the winter, the reduced availability of domestic pigeons is compensated to some extent by the arrival of winter migrants. Redwings, fieldfares and blackbirds are frequently killed at breeding territories in the winter, together with wood pigeons. The latter can be found in large flocks throughout Northumberland in the winter and it seems that peregrines have a propensity to hunt flock-forming species at all times of the year. The high frequency of wintering woodcock in the diet is likely to reflect the suitability of conifer plantations in the uplands of Northumberland for this species but their frequency in the prey remains is also likely to be biased. Plucked woodcock feathers are highly visible and the head or bill is frequently left uneaten; furthermore they are most active at dusk and dawn when peregrines are most likely to be near the breeding site before and after roosting during winter.

Racing pigeons as prey

For the period April-September, the majority of the domestic pigeons killed at breeding territories are racing pigeons as opposed to free-living feral pigeons (Dixon and Richards, 2003). As there were few lofts and little arable land in close proximity to the peregrine sites investigated in this study it is reasonable to assume that most of these birds were caught as they passed through the breeding territories. Some of these pigeons would have been killed as they returned to their home lofts on race or training flights, some may have been 'young birds' ranging during exercise and others would have been killed as they passed through the breeding territory after they had already become lost i.e. strays.

In Northumberland, racing pigeons registered with the SU and the NEHU were killed most frequently, comprising 69% of all racing pigeon kills. A further 14% were from lofts in north-east England (mainly North Yorkshire) and the East Midlands, many of which race on 'north road' routes. Only 17% of racing pigeons killed by peregrines in Northumberland originated from lofts outside these areas. These pigeons came from lofts elsewhere in England (13%), Wales (3%), Ireland and continental Europe (1%). Pigeons originating from lofts in Wales, Ireland and continental Europe represent a relatively insignificant proportion of all the racing pigeons killed by peregrines in Northumberland. In addition, racing pigeons from Ireland and continental Europe are likely to have already been lost to their owners prior to being killed by peregrines as no race or training routes to these destinations pass through Northumberland. Most lofts within the WHU now fly from the south-east, many having switched from 'north road' racing during the mid to late 1990s (Dixon, 2002).

Most lofts within the NEHU are located south and east of the peregrine territories sampled in this study, mainly in the conurbations of Tyne & Wear, Durham and Cleveland. Pigeons in this area are mainly trained and raced from liberation points to the south of their home lofts, so few would be expected to pass through the peregrine breeding territories during a direct homing flight or during normal exercise around the loft. Consequently, most of the pigeons with NEHU rings would have either overshot their lofts during homing flights or strayed from their home loft prior to being killed. However, 32%

of the NEHU pigeons were from federations in rural parts of Northumberland that coincided with the peregrine territories sampled in this study. Many of these pigeons were likely to have been killed in relatively close proximity to their home lofts either during racing, training or exercising. During normal exercise from the loft young birds range widely when developing their homing skills (normally during May and June), thus 'young birds' from lofts in rural Northumberland are particularly susceptible to attack by local peregrines. This is a possible explanation for the finding that more 'young birds' from the NEHU were killed than from other unions and that most of the 'young birds' killed during the 'old bird' race season were from the NEHU.

The potential impact of peregrine predation on Scottish racing pigeons is currently the subject of a research study being conducted by the Central Science Laboratory on behalf of Scottish Natural Heritage and the Scottish Homing Union. It is outside the scope of this study to try and quantify the detrimental impact of predation on racing pigeons by peregrines in Northumberland. However, the data indicate that most of the direct losses are borne by fanciers with lofts in the same geographical area as the peregrine territories, i.e. regions around the Firth of Forth and Scottish Borders, together with those in north-east England and the east Midlands who fly the 'north road' route. The race routes to these locations pass directly through Northumberland. Pigeons originating from lofts in these regions comprise 46% of all the racing pigeons killed by peregrines in Northumberland. Many, but not all, of the racing pigeons originating from lofts in other areas are likely to be stray birds already lost to their owners or which have deviated significantly from a direct homeward flight route. It is impossible to determine the proportion of racing pigeons that would have homed successfully if they had not been killed by peregrines. However, it is likely that the pigeons that were killed whilst far away from their home loft and intended flight route would have been less likely to return home than their counterparts that were closer to home or their intended flight route.

REFERENCES

- DIXON A (2002). Attacks by Birds of Prey on Racing Pigeons. Report to the Confederation of Long Distance Racing Pigeon Unions of Great Britain and Northern Ireland, University of Lancaster.
- DIXON A and LAWRENCE A M (2000). The past and present status of the Peregrine *Falco peregrinus* in Breconshire (vc 42). *Welsh Birds* 2: 280-291.
- DIXON A and RICHARDS C (2003). Estimating the number of racing pigeons killed at Peregrine territories in South Wales. *Welsh Birds* 3: 344-353.
- DIXON A, RICHARDS C, LAWRENCE A and THOMAS, M (2003). Peregrine (*Falco peregrinus*) predation on racing pigeons (*Columba livia*) in Wales. pp. 255-261. In: *Birds of Prey in a Changing Environment*. (Ed. Thompson D B A, Redpath S M, Fielding A H, Marquiss M and Galbraith C A). TSO, Edinburgh.
- ENDERSON J H and CRAIG G R (1997). Wide ranging by nesting Peregrine Falcons (*Falco peregrinus*) determined by radiotelemetry. *Journal of Raptor Research* 31: 333-338.
- MEARNS R (1982). Winter occupation of breeding territories and winter diet of Peregrines in south Scotland. *Ornis Scandinavica* 13: 79-83.
- MEARNS R (1983). The diet of the Peregrine *Falco peregrinus* in south Scotland during the breeding season. *Bird Study* 30: 81-90.

- RATCLIFFE D A (1993). The Peregrine Falcon. Second edition. T & AD Poyser, London.
- REDPATH S M and THIRGOOD S J (1997). Birds of Prey and Red Grouse. Stationery Office, London.
- RICHARDS C and SHRUBB M (1999). The prey of Peregrines *Falco peregrinus* in South Wales. *Welsh Birds* 2: 131-136.
- SCOTTISH HOMING UNION (1998). Attacks by Peregrines and Sparrowhawks on Racing Pigeons in Scotland. SHU, Hamilton.
- SHAWYER C, CLARKE R and DIXON N (2001). A study into the raptor predation of Domestic Pigeons. DETR, London.
- UK RAPTOR WORKING GROUP (2000). Report of the UK Raptor Working Group. HMSO, London.

Appendix

Avian prey remains identified at Peregrine breeding territories in Northumberland.

Prey Species	Summer (April-September)			Winter (October-March)	
	Wt. (g)	Frequency (%)	% Weight	Frequency (%)	% Weight
Mallard <i>Anas platyrhynchos</i>	1063.1	(0.8)	3.3	0	0
Red grouse <i>Lagopus lagopus</i>	637.2	(1.6)	3.9	0	0
Coot <i>Fulica atra</i>	800.1	(0.8)	2.5	0	0
Lapwing <i>Vanellus vanellus</i>	230.3	(2.4)	2.1	1 (0.9)	1.6
Golden plover <i>Pluvialis apricaria</i>	220.1	(0.8)	0.7	1 (0.9)	1.5
Common snipe <i>Gallinago gallinago</i>	110.4	(3.2)	1.3	0	0
Woodcock <i>Scolopax rusticola</i>	300.1	(0.8)	0.9	6 (5.7)	12.5
Curlew <i>Numenius arquata</i>	885.1	(0.8)	2.7	0	0
Whimbrel <i>Numenius phaeopus</i>	480.1	(0.8)	1.5	0	0
Redshank <i>Tringa totanus</i>	175.1	(0.8)	0.5	0	0
Black-headed gull <i>Larus ridibundus</i>	288.1	(0.8)	0.9	0	0
Domestic pigeon <i>Columba livia</i>	375.4	(35.5)	50.6	4 (3.8)	10.4
Wood pigeon <i>Columba palumbus</i>	453.8	(6.5)	11.1	8 (7.5)	25.2
Budgerigar <i>Melopsittacus undulatus</i>	65	0	0	1 (0.9)	0.5
Swift <i>Apus apus</i>	44.1	(0.8)	0.1	0	0
Skylark <i>Alauda arvensis</i>	38.2	(1.6)	0.2	0	0
House martin <i>Delichon urbica</i>	18.1	(0.8)	0.1	0	0
Meadow pipit <i>Anthus pratensis</i>	20.4	(3.2)	0.2	0	0
Robin <i>Erithacus rubecula</i>	17.1	(0.8)	0.1	0	0
Blackbird <i>Turdus merula</i>	103.5	(4.0)	1.6	17 (16.0)	12.2
Fieldfare <i>Turdus pilaris</i>	100.1	(0.8)	0.3	24 (22.6)	16.7
Song thrush <i>Turdus philomelos</i>	65.1	(0.8)	0.2	2 (1.9)	0.9
Redwing <i>Turdus liliacus</i>	63	0	29	(27.4)	12.7
Mistle thrush <i>Turdus viscivorus</i>	125	3 (2.4)	1	1	0
Willow warbler <i>Phylloscopus trochilus</i>	11.1	(0.8)	0	0	0
Goldcrest <i>Regulus regulus</i>	6	0	0	2 (1.9)	0.1
Long-tailed tit <i>Aegithalos caudatus</i>	9	0	0	1 (0.9)	0.1
Blue tit <i>Parus caeruleus</i>	10	0	0	2 (1.9)	0.1
Jackdaw <i>Corvus monedula</i>	223	4 (3.2)	2.7	1 (0.9)	1.6
Carrion crow <i>Corvus corone</i>	505	3 (2.4)	4.6	0	0
Rook <i>Corvus frugilegus</i>	310	1 (0.8)	0.9	0	0
Starling <i>Sturnus vulgaris</i>	78	23 (18.5)	5.5	7 (6.6)	3.8
Chaffinch <i>Fringilla coelebs</i>	24.1	(0.8)	0.1	0	0
Goldfinch <i>Carduelis carduelis</i>	17.1	(0.8)	0.1	0	0
Unidentified small passerine	20.2	(1.6)	0.1	0	0

CHILDREN'S KNOWLEDGE OF BIRDS: HOW CAN IT BE IMPROVED AND CAN IT BE USED TO CONSERVE WILDLIFE?

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SUMMARY

There are calls for increased public involvement in environmental management processes. However, this will require a public that is both motivated to care about the environment and one that is environmentally literate. Hopefully, the introduction of 'Citizenship' as part of each stage of the National Curriculum will help to bring about these reforms in society but it may require innovative approaches to teaching. In the present study, we investigated the possibility that, given appropriate knowledge and experience, schoolchildren are capable of making valuable contributions to local environmental stewardship. The overall knowledge of birds (used as models in this study) of children from Tyneside was poor and, since there was no evidence that children of increasing age improved in their abilities to name them, their current experience in the classroom does not appear to improve this aspect of learning. Nevertheless, children's knowledge of birds did improve when they carried out surveys of garden birds. The improvement was also noted in their parents, presumably because many assisted in the surveys. An encouraging aspect of the study was that a focus group, formed from children participating in additional surveys of local habitats, developed management recommendations, which were considered to be mature and responsible. If implemented, they would almost certainly benefit the conservation of local wildlife.

INTRODUCTION

Traditionally, human communities harvested food from their immediate surroundings. They depended on knowledge of the local environment, both in finding food and, in at least some cases, in managing it at sustainable levels for the benefit of future generations. Some of the best examples come from fisheries science. There is strong evidence, for instance, that members of Pacific island fishing communities were aware of the behaviour, locations and timings of fish spawnings (Johannes, 1981; Ruddle, 1994). Johannes (1978) has even claimed that Palauan fishers' knowledge of fish stocks in local seas surpassed the current base of scientific knowledge. Such information was incorporated into local regulations, such as in restricting fishing to certain seasons, placing taboos on eating certain species, allowing a proportion of the catch to escape or excluding small individuals from the catch so that they could reach maturity and therefore breed before they were harvested (Johannes, 1978; Evans et al., 1997; King, 1997). Each of these measures would almost certainly have enhanced the long-term prospects of the survival of the resource.

However, responsibilities for management of the environment have shifted from local communities to national or international government as subsistence economies have been replaced by capitalist ones (Evans and Birchenough, 2001), and traditional management systems have tended to collapse (e.g. Ruddle, 1996). Sustainable management of local resource becomes less important, as technological developments have enabled people to search for food further afield and for the harvest to be transported to, and sold at, distant locations (Aziz, 1993). Environmental issues also become increasingly global and less controllable at local levels. For instance, the decline of a resource, such as of fish stocks, in one area may be due to factors, such as over-exploitation by commercial fishing inter-

ests or pollution caused by ocean-going vessels or distant industrial sources, rather than local ones.

Unfortunately, efforts to manage environment resources at sustainable levels during this period of technological and economic development have been spectacularly unsuccessful. Science alone has certainly been unable to provide complete answers to the introduction of effective management strategies. For example, the sophisticated bio-economic models, on which fisheries management has become based, have failed to prevent over-exploitation of fish stocks (Ruddle, 1998, Hall, 1999) and at least 60% of the world's major fish stocks are fully- or over-exploited (FAO, 1997). Management failure has now led to calls for us to look more closely at features of traditional management systems and, in particular, the possibility of (re)-engaging communities more closely in environmental planning and decision-making processes. For instance, Ruddle (1998) has argued that there would be substantial benefits if the best practices of traditional management systems could be blended with the best of modern practices in the development of new, cost-effective strategies. (Anon, 2001) has stressed that the value of increased stakeholder involvement in environmental stewardship includes "better decision-making, reduced reliance on regulation, generating a positive role for people and organisations and greater inclusiveness".

However, there are major challenges in engaging the public in environmental management in the modern world. One problem is that the traditional wisdoms that were embodied in many traditional systems have not been recorded and have been forgotten even in communities that once practised them (Soerjani, 1993) so that they are no longer available to us. Another is that public participation will require a citizenship that is both sufficiently motivated to care about the environmental issues to participate in management and also one that has an adequate understanding of the science that can underpin effective management strategies. Regrettably, there are concerns that modern society fails to meet either these criteria. First, Evans (2000) has pointed out that people appear to have 'lost' their affinity with the environment, regarding it as a distant responsibility of 'green activists', scientists, government officials and politicians, rather than a personal concern. Second, lay knowledge of the environment is now poor (Lucas, 1987; Arcury, 1990). Gigliotti (quoted in Gambro and Switzky, 1996) emphasises the problem by suggesting that we seem to have produced a citizenry that is emotionally charged but woefully lacking in basic ecological knowledge.

Environmental education will undoubtedly be the key that is needed to bring about the change in ethic in which human society is prepared to live in harmony with the natural world (World Conservation Strategy, 1980). Not surprisingly, there have been calls for it to play a more significant role in school curricula over the past two or three decades (e.g. Brundtland in Hale, 1993). However, despite exciting new opportunities offered by enlightened teaching developments (Berkowitz, 1993; Hale and Hardie, 1993), Lakin and Burch (1996) still draw attention to the difficulties of establishing environmental science in schools and the problems faced by teachers who are expected to offer courses in it. Nevertheless, the introduction of *Citizenship* into each of the stages of the National Curriculum provides another chance to bring about reform, this time bringing environmental education into a social context. The aim is to develop responsible citizens who can contribute effectively to environmental issues, including sustainable development and Local Agenda 21 concerns, as well as moral, political and social dilemmas.

This project involves three studies relating to the need to develop innovative ways to educate children to be more environmentally literate, and to be able to make a more mean-

ingful contribution to environmental planning and the process of decision-making, than at present. It examines the extent to which participation in 'out of school hours' surveys of local bird life can improve children's knowledge of birds, and to what extent children can develop valuable management plans for the environment. Birds were chosen as the model in this study because they are probably the best-known of all groups of animals to the lay public. The three studies are as follows:

Study 1 The extent of the knowledge of birds by young people of different ages? Tests were made of the abilities of children of different ages (from 7 to 16 years old) to name birds from colour illustrations of them. Is there evidence of improving environmental knowledge with increasing school age?

Study 2 How can we improve the knowledge of birds by young people? Comparisons were made of the abilities of children to name bird species before and after taking part in surveys of local bird life. Parallel tests were also made of the parents who were participating in the surveys because it was believed that they would also become involved in the surveys by helping their offspring.

Study 3 Can the knowledge and experience gained from bird surveys be used by young people to develop management strategies for local areas of conservation importance? Children were asked to produce management plans for local habitats that were surveyed by them.

METHODS

The children involved in these studies were in whole classes of primary and high schools in Cullercoats, Marden and Whitley Bay between October 2000 and September 2001. Their ages ranged from 7 to 16 years old. The catchment area was the borough of North Tyneside.

Study 1 Children's knowledge of birds

In order to assess children's knowledge of birds, and the extent to which it is acquired during the period of attendance at primary and secondary school, knowledge was tested in children in each yearly age group between the ages of 7 and 16 (numbers in each age group are shown in Table 2 below). Knowledge of birds was tested by asking children to write down the names of 18 bird species which were shown to them as colour illustrations (Table 1). The birds chosen included common garden, lowland farmland and wading species. The tests of knowledge were carried out in class during school time, under the supervision of class teachers. Participants recorded birds' names on the answer sheets. A mark was given for each correct answer and half mark for an incomplete answer, such as 'gull' instead of 'herring gull' or 'woodpecker' for 'green woodpecker'. Allowance was made for alternative correct answers, such as hedge sparrow or dunnoek, both of which were considered correct. Misspelling was not penalized and an answer was considered to be correct as long as it was recognisable phonetically. Results were analysed on the basis of yearly age groups, rather than school classes. The numbers of boys and girls in the groups was approximately equal (not significantly different from chance; $P > 0.05$ for each age group; Chi-square Test).

Table 1 Colour illustrations of the bird species shown were used in tests of knowledge

Tests of knowledge in schoolchildren of different ages

Garden birds	Shore birds	Lowland birds
Blackbird	Golden plover	Curlew
Blue tit	Herring gull	Goldfinch
Dunnock	Oystercatcher	Green woodpecker
House sparrow	Puffin	Jay
Robin	Redshank	Kestrel
Starling	Sanderling	Long-tailed tit

Tests given to schoolchildren before and after taking part in garden bird surveys

Blackbird	Greenfinch	Robin
Blue tit	House sparrow	Starling
Chaffinch	Jackdaw	Song thrush
Collared dove	Magpie	Wren
Great tit		

Table 2 Percent correct responses to colour illustrations of birds in schoolchildren between ages 7 and 16.

	Age group (years old)										Overall mean
	7	8	9	10	11	12	13	14	15	16	
Numbers tested	17	14	25	14	18	23	24	22	21	11	
Species:											
Robin	100	100	96	90	83	91	100	77	95	91	92.3
Blackbird	56	93	56	75	70	77	90	64	80	91	75.2
Blue tit	91	71	52	70	76	73	100	50	80	82	74.5
Puffin	31	50	52	70	65	77	100	68	85	82	68.0
Herring gull	38	43	28	40	37	43	45	36	43	50	40.3
G. woodpecker	19	14	17	20	17	23	40	14	25	36	22.5
Kestrel	0	0	0	0	9	18	10	14	20	55	12.6
Starling	0	7	22	5	0	9	20	5	10	27	10.5
Jay	13	0	0	18	4	5	20	9	10	9	8.8
Longtailed tit	13	0	4	10	7	7	25	5	8	5	8.4
Dunnock	9	0	4	5	2	5	15	2	5	18	6.5
House sparrow	6	0	2	5	7	5	20	2	8	9	6.4
Curlew	0	0	4	5	0	9	10	9	10	0	4.7
Goldfinch	0	0	6	5	2	5	15	5	5	0	4.3
Oystercatcher	0	0	0	5	0	5	0	5	0	0	1.5
Golden plover	0	0	0	3	0	0	0	5	0	0	0.8
Redshank	0	0	0	0	0	0	0	0	0	0	0
Sanderling	0	0	0	0	0	0	0	0	0	0	0
Mean	20.9	21.0	19.1	23.7	21.1	25.1	33.9	20.1	26.9	30.8	
(± st. error)	±7.4	±8.2	±6.5	±7.2	±7.2	±7.5	±8.8	±6.1	±8.0	±8.3	

Study 2 Improvement in knowledge through bird surveys

Surveys of garden birds were carried out by children, who were either 12 ($n = 58$) or 13 years old ($n = 160$). They were carried out during the period from January to March, 2000. Each class was given a one-hour illustrated talk on identifying garden birds, and each pupil was provided with a copy of Brooks' (1996) basic guide as an identification aid. Children were then asked to record the numbers of each species of bird seen either in their garden or nearby parkland in four separate 15-minute recording sessions during the forthcoming weekend. These were entered on recording sheets which were returned to school after the weekend.

Knowledge of garden birds was tested in each of the participating children before and after the surveys, using the protocol described above but, in this case restricted to garden birds that they were likely to encounter during the surveys. The same birds were included in both tests, which were carried out in class under the supervision of the class teachers. None of the children was aware that they would be tested on the second occasion. Some of the parents ($n = 125$) were also asked to perform the same tests as the children before and after the surveys, since it was suspected that some of them would assist their children in the surveys. These tests were carried out as individual interviews.

Study 3 The development of management proposals

Groups of volunteers from the children who had been involved in the bird surveys ($n = 4 - 5$ in each group), carried out brief (morning) surveys of the birds inhabiting three local habitats. They were:

St Mary's Island Nature Reserve This is a popular visitor attraction, which is managed by North Tyneside Council. It is a well-known site for waders.

Seaton Sluice sand dunes The dunes, which extend for about 3km, are managed by Blyth Valley Council. They are well-used by dog-walkers and are popular among beach users during the summer.

Marden Quarry This is a disused limestone quarry acquired and developed as a nature reserve by North Tyneside Council. It is located in the urban area of Whitley Bay and consists of 4000m² lake bordered by a stand of mature sycamore trees and elder and hawthorn scrub.

Each group of volunteers was accompanied by an experienced bird-watcher, who assisted in identifying birds and compiling the species list.

A focus group of 12 of these volunteers met with a senior biology teacher from one of the participating schools to consider recommendations for the future use of the first three of these sites (above), and the conservation of birds at them. The teacher acted as rapporteur for the group but avoided influencing its discussions or recommendations.

RESULTS

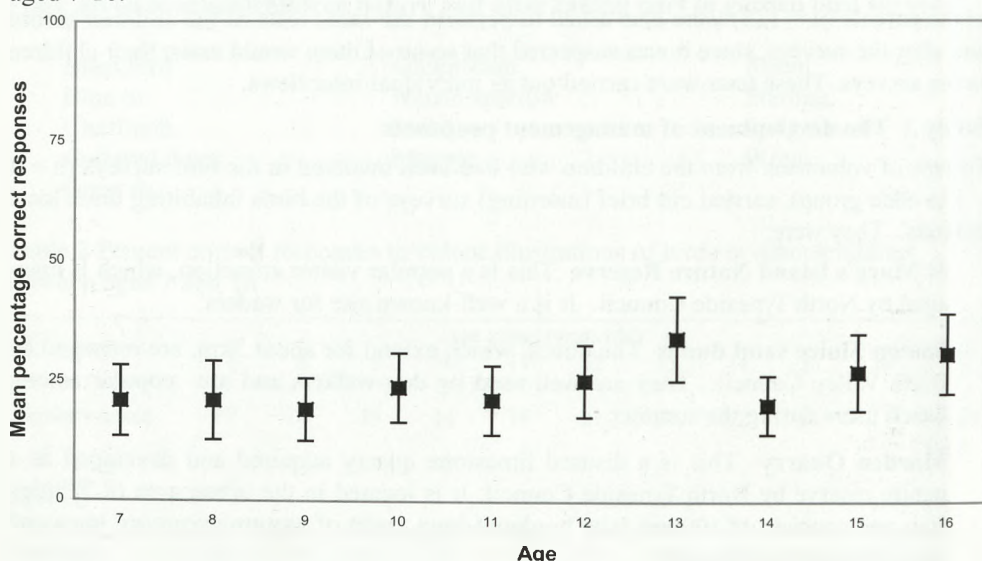
Study 1 Children's knowledge of birds

Knowledge of birds, as indicated by their abilities to name species, in Tyneside children was poor. Many children could name four common land birds, the blackbird, blue tit, robin and green woodpecker, and two shore birds, the herring gull and puffin (Table 2). Scores for two of these species, the herring gull and green woodpecker, were relatively low because many of those tested named them as 'gull' or 'woodpecker' respectively,

attracting half marks only. Most other test species, including common garden birds, such as the house sparrow and starling, were poorly known. Two shore bird species, redshank and sanderling, were not known at all and three, curlew, golden plover and oystercatcher, were named correctly by a small minority of children.

There was relatively little, if any, improvement with school age (Figure 1). The Spearman Rank Coefficient of Correlation (r_s) between mean score and age was 0.6121 ($P < 0.05$). The slight improvement appears to be attributable largely to two species. The kestrel was evidently unknown to children of <ten years old but increasing numbers of older children (and more than half of the sixteen year olds) were familiar with it (Table 2); in this case, r_s 0.93 ($P < 0.001$). Similarly, the puffin was correctly named by only 31% of seven year olds but it was better known to older children ($r_s = 0.83$; $P < 0.01$).

Figure 1 Mean percent correct responses to colour illustrations of birds in schoolchildren aged 7-16.



Study 2 Improvement in knowledge through bird survey

Twenty-seven species were recorded in the survey of garden birds (Table 3). They were all species that were included in the British Trust for Ornithology's national survey of garden birds (Mead, 2000). Thus, blackbirds, house sparrows, starlings and blue tits were common in both studies. There were also some differences: feral pigeons and magpies were evidently more common in Tyneside than they occur nationally. Conversely, species, such as the dunnoek, chaffinch, greenfinch and great tit, were relatively uncommon in the Tyneside returns. There were also six species which were recorded in >10% of returns in the national survey, including the coal tit, which were not recorded at all in the present survey.

There was almost certainly some misidentification of species in the school survey. One report included 136 wrens but no house sparrows, presumably as a result of confusion between the two species. There were also two reports of sightings of a 'green parrot', which had escaped from captivity and had been living at liberty in the area for several weeks. This escapee was well-known locally but, because it is not an indigenous species, it was not included in the results of the survey.

Involvement in these bird surveys increased participants' knowledge of bird species. The Tyneside children showed significant improvements in their abilities to name birds after the census than before it ($P < 0.001$; Mann Whitney U Test) (Table 4). The knowledge of parents was initially higher than that of their children but, nevertheless, it too improved significantly following the surveys ($P < 0.001$ in both cases). The probable explanation is

Table 3 The results of the census of garden birds undertaken by 217 children. The table also presents data from the national British Trust for Ornithology census for comparison. The latter data are taken from Mead (2000).

Species	Number of records with sightings	Mean no. observations per record	Percent records with sightings	BTO: percent records with sightings
Blackbird	114	8.74	52.3	99.5
House sparrow	87	11.11	39.9	90.2
Magpie	73	1.21	33.5	71.3
Starling	48	4.09	22.0	90.1
Blue tit	41	0.83	18.8	99.5
Feral pigeon	40	2.12	18.3	15.0
Crow	31	0.56	14.2	33.6
Robin	31	0.29	14.2	99.2
Song thrush	30	0.71	13.8	61.7
Collared dove	21	0.51	9.6	87.1
Wren	19	0.68	8.7	50.8
Wood pigeon	18	0.36	8.3	53.4
Dunnock	12	0.07	5.5	95.7
Chaffinch	10	0.11	4.6	96.4
Great tit	7	0.05	3.2	97.1
Jackdaw	3	0.07	1.4	48.9
Greenfinch	3	0.03	1.4	96.3
Pied wagtail	2	0.02	0.9	40.5
Mistle thrush	2	0.01	0.9	23.2
Bullfinch	1	0.01	0.5	14.5
Goldfinch	1	0.01	0.5	42.3
Great-spotted woodpecker	1	0.01	0.5	40.5
Long-tailed tit	1	0.01	0.5	48.2
Rook	1	0.01	0.5	23.8
Sparrowhawk	1	0.01	0.5	48.9
Tree sparrow	1	0.01	0.5	10.5
Yellowhammer	1	0.01	0.5	12.6
Coal tit	0	-	-	83.8
Siskin	0	-	-	48.8
Jay	0	-	-	19.7
Pheasant	0	-	-	19.2
Reed bunting	0	-	-	10.8
Nuthatch	0	-	-	23.4

that some parents had assisted in the surveys. Parents were invited to a meeting at which the results were presented. About 20 of them attended and there was general consensus that this had happened.

Study 3 The development of management proposals

Further species were recorded in surveys of five additional habitats in the area by volunteer schoolchildren (Table 5). Overall, there were thirty-four species at St Mary's Island Nature Reserve, twenty-five at Marden Quarry, and seven in the sand dunes at Seaton Sluice. Despite the small number of species in the dunes, the list included skylark and song thrush, both of which have declined nationally (Mead, 2000).

The management recommendations made by the volunteers for three of the survey sites were as follows:

St Mary's Island Nature Reserve The group thought that this was the most enjoyable, informative and attractive of the sites visited, with the highest number of bird species (Table 5). It was recommended that the management methods used there could be employed at other sites. These included:

- restricting public access (including dogs) to certain areas, mainly paths;
- setting aside and creating areas, such as grassland and ponds, thereby establishing refuges for wildlife;
- providing excellent information boards;
- providing special viewing hides for observing birds without disturbing them;
- keeping the site free of litter.

Marden Quarry This site has the potential to be a valuable asset for the local community and wildlife. Unfortunately, it was untidy and maintenance was poor. It suffered from abundant litter, such as discarded tyres, plastic waste and bottles, fouling from dogs, overgrown pathways and information boards that were too few in number and in poor condition. The following recommendations were made:

- people and dogs should be restricted to certain areas;
- there should be no access to areas where birds nested during the spring and early summer;
- new, attractive information boards should be provided;
- nest boxes should be provided for breeding birds;

Table 4 The scores of children and parents in tests of knowledge of birds before and after the survey of garden birds.

Number tested	Mean score (percent)	
	Before	After
217	31.1±0.2	Children
		48.0±0.2
125	59.6±0.3	Parents
		67.0±0.3

Table 5 Species recorded in three areas of North Tyneside (0 = recorded).

Species	St Mary's Island	Marden Quarry	Seaton Sluice sand dunes
Black-headed gull	0	0	0
Blackbird		0	
Blue tit		0	
Canada goose		0	
Carriion crow	0	0	0
Chaffinch	0		
Chiffchaff		0	
Collared dove		0	
Common tern	0		
Coot		0	
Cormorant	0		
Curlew	0		
Fulmar	0		
Goldfinch	0		
Great tit		0	
Greenshank	0		
Grey heron	0	0	
Herring gull	0	0	
House sparrow		0	
Jackdaw	0	0	
Kestrel	0		0
Lapwing	0		
Linnet	0		
Magpie		0	
Mallard	0	0	
Meadow pipit	0		
Moorhen		0	
Mute swan	0	0	
Oystercatcher	0		0
Pied wagtail	0		
Pink-footed goose		0	
Redshank	0		
Reed bunting	0		
Ringed plover	0		
Robin		0	
Rock pipit	0		
Sand martin	0		
Sanderling			0
Sandpiper	0		
Shag	0		
Shoveler	0		
Skylark	0		0
Snipe	0		0
Song thrush			
Starling	0	0	
Swallow	0	0	
Swift	0	0	
Teal		0	
Tufted duck		0	
Turnstone	0		
Wood pigeon		0	
Total species	34	25	7

bird hides should be provided for watching water and woodland birds;
a bird feeding station should be provided;
a sign-posted nature trail (with information boards at intervals describing features of interest) around the lake and in the woodland should be created;
there should be an initial litter clean-up and then regular maintenance of the area to keep it clean;
support should be given for school projects to monitor birds and other wildlife in the area;
the site should be adopted as a 'community' nature reserve.

Seaton Sluice sand dunes The group noted that, despite the relatively small number of bird species there, two of them, the skylark and the song thrush, were in national decline. Plastic litter was a problem at the site, and paths which criss-crossed through the dunes appeared to be damaging the habitat by exposing sand, which was then wind blown. There were too few information boards and they were in poor condition.

The following recommendations were made:

people and dogs should be restricted to certain areas of dunes only, and walkways through the dunes (possibly wooden ones), giving access to the shore, should be provided;
there was a need for more litter bins and these should be cleared frequently;
information on penalties for littering should be displayed;
new, attractive information boards should be provided, giving information about the animals and plants that live in the dunes.

DISCUSSION

The results of these studies tend to confirm Lock's (1993) fears that knowledge of indigenous animals in UK children is poor. None of the age groups tested could name more than a third of the species shown to them. Lock (*loc.cit.*) attributes this to deficiencies in the education system, and this view tends to be borne out by the data presented here. Formal school education appears to be having little impact on knowledge of birds because, with the exception of the kestrel and puffin, there was little evidence of improved abilities to name bird species in schoolchildren between the ages of seven and sixteen. A particularly worrying aspect is that the acquisition of what limited knowledge children do have appears to be unrelated to environmental experience. It may come from sources such as general reading. Watching nature programmes on television or reading magazines and newspapers undoubtedly affect environmental knowledge (Winett et al., 1984; Fortner and Lyon, 1985, Ostman and Parker, 1985). It is noteworthy, therefore, that bird species, such as the house sparrow and starling, which are sufficiently common to be seen on daily basis, were not well known by the children, whereas charismatic ones, such as the robin, blackbird, blue tit, puffin and woodpecker, which are subjects of cartoons or nursery rhymes, and often occur as motifs on Christmas cards or are manufactured as animated toys, were the species that attracted the highest scores in the present study.

There are two major concerns about this lack of public knowledge of the environment, which is evident in adults (Lucas, 1987; Gambio and Switzky, 1996). First, Arcury (1990)

found that people's attitudes towards the environment were linked to their knowledge of it. Second, it is unrealistic to expect people to care for the local environment if they are unaware of the organisms that live in it. There appears, therefore, to be an obvious case for increasing the time spent on practical ecological studies in schools. It is depressing that the reverse trend is apparent in both school and university teaching (Davenport, 1998, Ducrotoy, 1998). Safety concerns and curriculum demands are often cited as reasons for it. However, as the current studies have shown, simple surveys are feasible as 'out of hours' activities, and they can be effective in improving environmental knowledge. Such surveys may also have other desirable features. Some parents became involved in the surveys and their interactions with children will have certainly been beneficial in motivating them and helping them to make correct identifications of species. There is probably also valuable transfer of information in the opposite direction. Children may raise some of their own environmental concerns, acquired in the classroom, to their parents. Evans et al. (1997) have shown previously that knowledge gained from children can influence the attitudes of their parents towards re-cycling wastes, suggesting that projects in which they are involved jointly may be a beneficial means of transferring information from children to adults.

The most encouraging aspect of the studies was the demonstration that, given appropriate encouragement, motivation and experience, even young members of community groups have the potential to contribute towards local environmental planning and management processes. We believe that recommendations made by the children for management of local sites are responsible and mature and, if they were adopted, would be of great benefit to the conservation of bird biodiversity in the area. It might be argued that the value of the management recommendations was reduced because some of the data generated by the surveys was unreliable. There was, for example, an almost certain misidentification of the wren by one recorder, and this will have led to an over-estimate of the abundance of this species. However, the list of species recorded in the school survey of garden birds was in close accord with those reported in national surveys (Mead, 2000). These latter data are widely accepted as being of value, even though they too will inevitably include some invalid data based on misidentifications. Nevertheless, such surveys are probably sufficiently robust to provide baselines against which changes in abundance of species, such as the house sparrow, song thrush and starling, whose declines have caused national comment (Mead, 2000), can be assessed. The local, rather than national, nature of the surveys described here also adds to their power because they can be used to address local issues. For example, the recordings of skylarks and song thrushes, both of which are in national decline (Mead, 2000), in the survey of coastal sand dunes at Seaton Sluice adds to the value of the habitat as one of conservation value, and therefore to the value of the recommendations made for their protection.

ACKNOWLEDGEMENTS

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REFERENCES

- ANON (2001). House of Common Select Committee on Public Administration. Sixth Report: Innovations in Citizen Participation in Government. HMSO, London.
- ARCURY, T A (1990). Environmental attitude and environmental knowledge. *Human Organisation* **49**: 300-304.
- AZIZ, M A (1993). Role of environmental engineering and technological education for sustainable living. In *Proceedings of the Asean Region Conference on Environmental Education*, UNESCO, Jakarta, 64-75.
- BERKOWITZ, A R (1993). New opportunities for ecology education in the United States. In *Ecology in education*, ed. M Hale, pp. 45-59. Cambridge University Press, Cambridge.
- BROOKS, F (1996). *Birdwatching: A spotter's guide to the birds of Britain & Ireland* Usborne Publishing Ltd, London.
- DAVENPORT, J (1998). Executive summary. In *Marine Biology Field Teaching Forum*, ed. J Davenport, pp. 2. University Marine Biological Station Millport, Occasional Publication 7.
- DREYFUS, A (1995). Biological knowledge as a prerequisite for the development of values and attitudes. *Journal of Biological Education* **29** (3): 215-219.
- DUCROTOY, J-P (1998). The discipline network in coastal sciences and management: a framework for sharing courses and resources. In *Marine Biology Field Teaching Forum*, ed. J Davenport, University Marine Biological Station Millport, Occasional Publication 7: 14.
- EVANS, S M. (2000). Protection of the marine environment: a joint responsibility. In *The TBT Ban: What Next? Proceedings of ENSUS 2000*, eds. S.M. Evans, A.C. Birchenough and M.P. Quigley, pp. 3-6. Alphagraphics, Newcastle-Upon-Tyne.
- EVANS, S M and BIRCHENOUGH, A C (2001). Community-based management of the environment: lessons from the past options for the future. *Aquatic Conservation: Marine and Freshwater Ecosystems* **11**: 137-147.
- EVANS, S M, GILL, M E, RETRAUBUN, A S W, ABRAHAMZ, J and DANGEUBUN, J (1997). Traditional management practices and the conservation of the gastropod *Trochus nilitocus* and fish stocks in the Maluku Province (eastern Indonesia). *Fisheries Research* **31**: 83-91.
- FOALE, S (1999). Local ecological knowledge and biology of the Land Crab *Cardisoma hirtipes* (Decapoda: Gecarcinidae) at West Nggela, Solomon Islands. *Pacific Science* **53** (1): 37-49.
- FORTNER, R W and LYON, A E (1985). Effects of a Cousteau television special on viewer knowledge and attitudes. *The Journal of Environmental Education* **16** (3): 12-20.
- GAMBRO, J S and SWITZY, H N (1996). A national survey of high school students' environmental knowledge. *Journal of Environmental Education* **27** (3): 28-33.
- HALE, M and HARDIE, J (1993). *Ecology and environmental education in schools in Britain*. In *Ecology in Education*, ed. M Hale, pp. 10-22. Cambridge University Press, Cambridge.
- JOHANNES, R E (1978). Traditional marine conservation methods in Oceania and their demise. *Annual Reviews of Ecology and Systematics* **9**: 349-364.
- JOHANNES, R E (1981). Working with fishermen to improve coastal tropical fisheries and resource management. *Bulletin of Marine Science* **31**: 673-680.

- KING, T D (1997). Folk management and local knowledge: lobster fishing and tourism at Caye Caulker, Belize. *Coastal Management* **25**: 455-469.
- LAKIN, L. and BURCH, G. (1996). Environmental education. *NERC News*, Autumn 1996, 18-19.
- LOCK, R (1993). Animals and the teaching of biological science in secondary-schools. *Journal of Biological Education*, **27** (2): 112-114.
- LUCAS, A (1987). Public knowledge of biology. *Journal of Biological Education* **21**:41-45.
- MEAD, C (2000). *The state of the nations birds*. BTO. Thretford, Norfolk.
- OSTMAN, R E and PARKER, J L (1987). Impact of education, age, newspapers and television on environmental knowledge, concerns and behaviours. *Journal of Environmental Education* **19** (1): 3-9.
- RUDDLE, K. (1994). Local knowledge in the future management of inshore tropical marine resources and environments. *Nature and Resources* **30** (1): 28-37.
- SOERJANI, M (1993). Degree programmes in environmental science. In *Proceedings of the Asean Region Conference on Environmental Education*, UNESCO, Jakarta, 40-56.
- WINETT, R A, LECKLITER, I N, CHINN, D E and STAHL, B (1984). Reducing energy consumption: The long-term effects of a single TV program. *Journal of Communication* **34** (3): 37-51.
- WORLD CONSERVATION STRATEGY (1980). *World Conservation Strategy. Living Resource Conservation for Sustainable Development*. IUCN, UNEP and WWF. Gland, Switzerland.
- ZAMPARO, J (1996). Informing the fact: Inuit traditional knowledge contributes another perspective. *Geoscience Canada* **23**: 261-266.

Leeches (Hirudinea) in County Durham (VC66)

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While they are not one of the most popular groups for recording, a number of records of leeches have been collected by workers studying amphibians and by the Environment Agency. There are sixteen species nationally, of which we have records for ten. Most of the missing six are rare and are probably not present locally, but one or two may have been overlooked. Most of the records mapped here are from the Environment Agency's surveys 1995-2000, and D Green's great crested newt surveys for the Durham Wildlife Trust in 1983/84 and 2001. Others are my own, also mainly from amphibian survey work, and a small number of records are from Wildlife Trust invertebrate surveys and from Gateshead MBC countryside staff. There is, therefore, a good spread of records from rivers and from lowland and amphibian-rich ponds.

Leeches are most easily found under stones or on water plants, at the edge of the pond or river. They are not usually caught by netting, unless you are 'kick-sampling' in moving water. The horse leech is sometimes seen swimming like a small eel.

The Environment Agency records are numerous but, apart from the Tees catchment, mostly identify leeches only down to family level, that is, to *Piscicolidae*, *Glossiphoniidae*, *Hirudinidae* and *Erpobdellidae*. The piscicolids are referable to a single species, the fish parasite *Piscicola geometra*. The erpobdellids found in rivers are most likely to be *Erpobdella octoculata*, and have been mapped as such with a different symbol to the specific records. *E. testacea* is found occasionally in riverside reedbeds, but is much less likely. The glossiphonids, however, include most of our local species, so these non-specific records have not been mapped. There are very few hirudinid records from rivers. The Environment Agency records for the Tees and its tributaries are identified down to species level, and include most of the records for several of the rarer species.

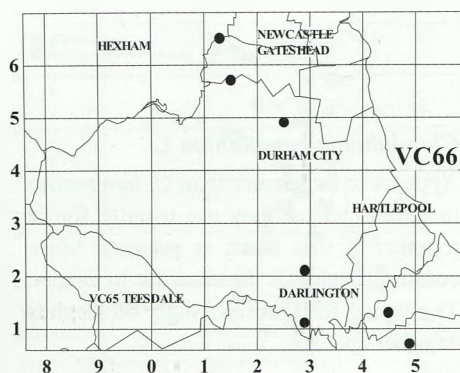
The Maps

The map symbols show 2km tetrad dots for records 1983-2002. All of the species recorded have been personally confirmed by me from at least one location. Tees tributary records have been included for VC62 and VC65, south of the main river, because they include important records of scarce species.

The leeches recorded in Durham are:

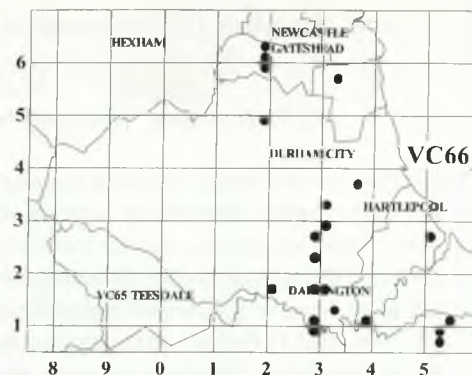
Piscicola geometra L.

Feeds on the blood of fishes, and lives in lakes and fast-flowing rivers. This species is unlikely to be found by amphibian recorders, and may be more common but overlooked in our county. There are only single records from Walldridge, (NZ2449), the Derwent at Lintzford (NZ1457), the Tyne at Wylam (NZ1264) and several Environment Agency records from tributaries of the Tees.



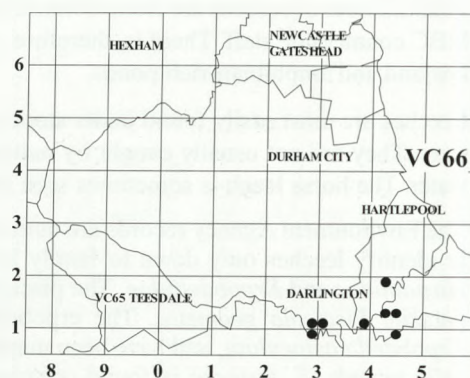
***Theromyzon tessulatum* Muller.**

Feeds on the blood of birds, and so usually found in the larger ponds and in the stretches of rivers that support concentrations of waterfowl.



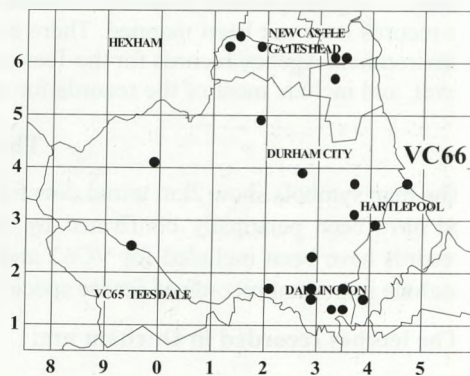
***Hemiclepsis marginata* Muller.**

Feeds on fish and tadpoles. Not rare nationally, but locally recorded only by the Environment Agency in the Stockton-Darlington area of the Tees catchment. There are no records from ponds or lakes.



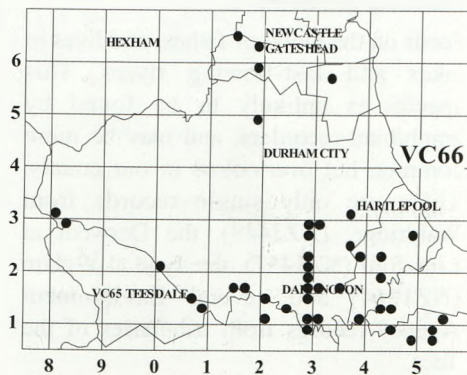
***Glossiphonia heteroclita* L.**

Feeds on molluscs, and hence is more common in neutral or basic ponds. One of the most common species.



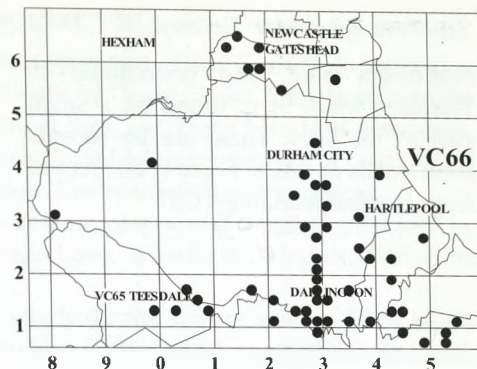
***Glossiphonia complanata* L.**

Appears to be scarcer than *G. heteroclita* in ponds, where they are usually found together if this leech is present. More common than *G. heteroclita* in rivers. The young feed preferentially on leeches of other species.



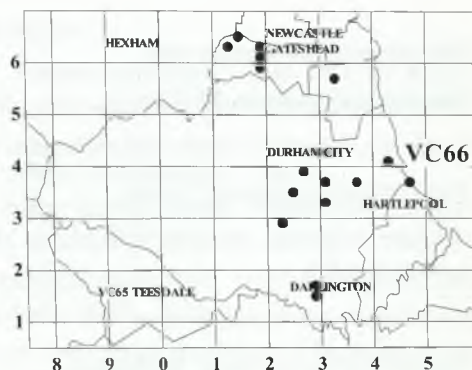
Hellobdella stagnalis L.

Able to live in ponds which dry out in summer, but also frequent in rivers.



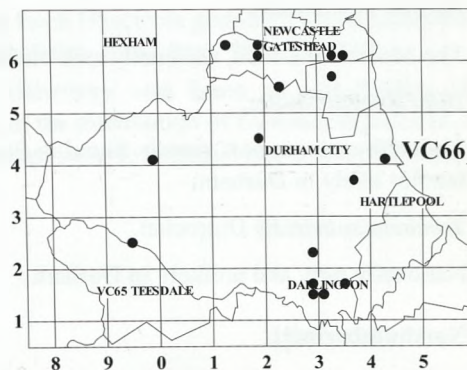
Haemopsis sanguisuga L.

The horse leech, our largest species, and the one most likely to be noticed. Rarely recorded in the Environment Agency rivers survey.



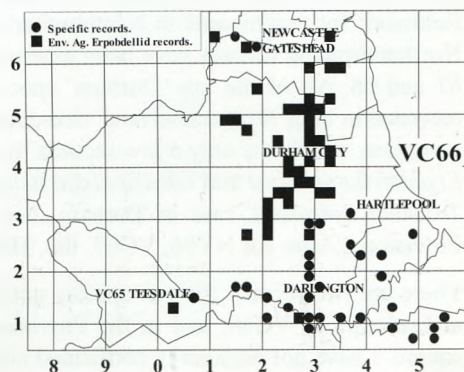
Erpobdella testacea Savigny.

Common in eutrophic ponds, can tolerate slightly polluted water. Reaches its northern British limit in Durham.



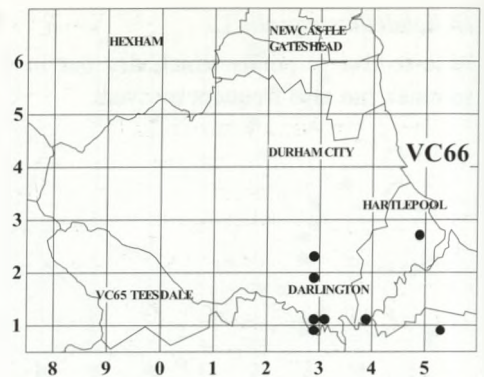
Erpobdella octoculata L.

Less common than *E. testacea* in ponds, but often recorded in the lowland, non-tidal stretches of rivers and streams.



Trocheta bykowskii Gedroyc.

Nationally rare, and uncommon in Durham, where it is found on a small part of the Tees. There are no records from ponds or lakes. There is one record from Northumberland, VC67.



The unrecorded species are:

Haementaria costata Muller.

Feeds on the blood of birds and mammals, rare nationally and unlikely in Durham.

Batrachobdella paludosa Carena.

Not rare nationally, possible in Durham. There are two Northumberland records, one in each vice-county.

Boreobdella verrucata Muller.

Rare nationally, not likely in Durham.

Hirudo medicinalis L.

The Medicinal Leech, nationally rare but occurs in the Lake District and north Yorkshire.

Dina lineata Muller.

Nationally uncommon, mostly found in Scotland. A possibility in north Northumberland, but not likely in Durham.

Trocheta subviridis Dutrochet.

Nationally rare, and unlikely in Durham.

Northumberland

This article is concerned mainly with the vice-county of Durham. In the course of my fieldwork for amphibians in Northumberland and in compiling these records, sufficient Northumberland records have been assembled to give a sketchy picture for vice-counties 67 and 68. All of the ten 'Durham' species, except *Hemiclepsis marginata*, have been recorded in both Northumberland vice-counties, in broadly similar proportions. *Piscicola geometra*, which has only a few records in Durham, has three in VC67 and one in VC68. *Erpobdella testacea* and *Glossiphonia heteroclita* seem to become scarcer south to north. *Trocheta bykowskii*, rare in Durham, has a single record for Northumberland, in the Provisional Atlas for NY96, VC67, the 'Hexham' square.

There are two records for one species not recorded in Durham, *Batrachobdella paludosa*, at Littlemill in VC68, and in the Provisional Atlas at NZ08, VC67, the 'Bolam Lake' square. I have not personally confirmed either of these.

ACKNOWLEDGEMENTS

Numerous people have contributed records which form part of this account. In particular, many of the pond-based records are from field-work by David Green. I am grateful to the Environment Agency, particularly Elaine Axford at York and Fiona Morris at Newcastle, for allowing access to their very extensive records from biological surveys of rivers. Most of the records for several species are derived from Environment Agency surveys.

The maps are produced using 'D-MAP', an excellent, easy-to-use program produced by Alan Morton of Blackthorn Cottage, Chawridge Lane, Winkfield, Windsor, Berkshire, SL4 4QR.

Further records would be very welcome, particularly for the scarcer species. Some of the reference material is difficult to obtain; the Freshwater Biological Association can usually advise on this.

REFERENCES

- ARMITAGE, P D (1977). Development of macro-invertebrate fauna of Cow Green Reservoir (Upper Teesdale) in the first five years of its existence. *Freshwater Biol.* 7: 441-454.
- BALL, S G (1987). *Invertebrate Site Register* Nature Conservancy Council.
- ELLIOT, J M and MANN, K H (1979). *A key to the British Freshwater Leeches* Freshwater Biological Association.
- ELLIOT, J M and TULLET, P A (1982). *Provisional Atlas of the Freshwater Leeches of the British Isles*. Freshwater Biological Association.
- GREEN, D (1984). *A Study of the Great Crested Newt (Triturus cristatus) in Durham and Tyne and Wear, South*. Durham County Conservation Trust.
- MILLS, D H (1967). The occurrence of the fish leech (*Piscicola geometra* L.) on salmonid fish in the River Tweed and its tributaries. *Salm. Trout Mag.* 181: 234-235
- SUTCLIFFE, D W (1972). Notes on the chemistry and fauna of waterbodies in Northumberland with special emphasis on the distribution of *Gammarus pulex* (L.) *G. lacustris* Sars. and *Asellus communis* Say. (new to Britain). *Trans. Nat. Hist. Soc. Northumb.* 17: 222-248

THE ENTOMOLOGICAL HISTORY OF PRESTWICK CARR

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Introduction

Prestwick Carr is an area of lowland wetland, generally about 53m above sea level and approximately 5km² in area, between Dinnington and Ponteland in the south of the old Northumberland (Figure 1). Most of the remaining carr, containing the Site of Special Scientific Interest (SSSI) and the Newcastle upon Tyne council nature reserve, is now in Tyne and Wear, with the western areas of the armed forces firing range and the Prestwick Mill Farm still in Northumberland.

Prestwick Carr has long been of entomological interest, especially for beetles. It originally had a considerable amount of open water as well as a number of terrestrial habitat types but was changed by extensive drainage in the mid 1850s. The habitat pattern on the carr was affected by agriculture, with the nature reserve area used as pasture for sheep and cattle and the drier northern area surrounding the SSSI a mixture of pasture and arable land. The northern half of the nature reserve is now the wettest part of the carr, with standing water in the winter on a substrate of peat. The effects of ploughing and reseeded appear to have reduced the peat component in the soil of fields in the south of the nature reserve and the fields in the south-west of the reserve have clay soils. However, Prestwick Carr is still one of the few areas in the region with lowland peat, a substrate that can profoundly affect invertebrate species distributions, especially beetles (Luff, Eyre and Rushton, 1989).

The insect species recorded from Prestwick Carr provide an insight into the types of invertebrate habitat present before changes brought about by more intensive agriculture, especially drainage. They also show temporal change in habitat types and show the effects of

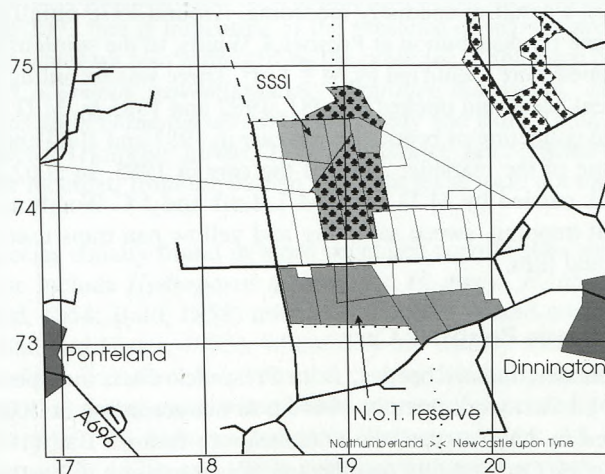


Figure 1 Map showing the location of Prestwick Carr, in the 1km NZ national grid squares, showing the Northumberland/Newcastle upon Tyne border, the Site of Special Scientific Interest (SSSI) (with shading showing woodland) and the Newcastle upon Tyne (N.o.T.) nature reserve.

the continuing agricultural use on the carr. The old and present habitat types and the changes through time are discussed below, as are the nationally rare and scarce species recorded from Prestwick Carr.

History of entomological recording on Prestwick Carr

The first published records of invertebrates appear to be beetle species in the catalogue of Hardy and Bold (1850). These authors collated a number of records generated by George Wailes in the 1820s and some other species records were incorporated into the journals of Thomas John Bold, now held in the Hancock Museum. Bold worked in a corn merchant in central Newcastle in the 1840s and with James Hardy, a school teacher then resident in Gateshead, started the systematic recording of invertebrate species in north-east England. Records in Bold's journals, extracted by D A Sheppard, indicate that he started collecting beetles in Prestwick Carr in 1844 and he appears to have continued work there until 1865, after which he became ill, limiting field work. Bold's journals contain records generated by John Hancock and James Hardy in the years before 1850 but Bold appears to have been the only regular visitor to Prestwick Carr between 1844 and 1865, with James Hardy concentrating on sites to the south of the River Tyne such as Gibside, Boldon Flats and South Shields. Most of the published records from Prestwick Carr appear in the early beetle catalogues of Hardy and Bold (1850, 1854) with some more records in the national entomological press and in Bold's final catalogue (Bold, 1872).

There was some limited recording on the carr by R S Bagnall in the early years of the twentieth century (Bagnall, 1907). There was more systematic work in aquatic sites in the area by Joyce Omer-Cooper in 1930 who published records from 'Prestwick' (Omer-Cooper, 1931). Woodcock (1954) gives records for Prestwick Carr by the Rev C E Tottenham in 1930 but there are a considerable number of errors in this paper (Eyre and Foster, 1984) and care is needed in interpretation. Eales (1970) listed a number of water bug species records but the most active work on the aquatic habitats about this time was carried out by G N Foster in 1967 and 1970, with some recording of beetles by I. Wallace in 1970, probably as a result of caddisfly recording. Around 1970 pitfall traps were being used to monitor crane fly distribution at Prestwick Whins, to the south of the carr, and the ground beetles trapped were identified by M L Luff. There was recording of water beetles from both permanent pools and ditches in 1981, 1982 and 1985 by M D Eyre and C A M Reid did some hand collecting of beetles on the carr in 1983 and 1984 and M D Eyre used pitfall traps on some of the marshier areas of the carr in 1985. In 2002, English Nature commissioned work carried by M D Eyre, M L Luff and J C Woodward on the nature reserve, with pitfall trapping, sweep sampling and yellow pan traps used to sample beetles, bugs, spiders and flies.

Invertebrate habitats on Prestwick Carr

Records of invertebrates, mainly beetles, from Prestwick Carr, incorporating T.J. Bold's oldest records and his first work there in 1844 up to our recording in 2002, are shown in the Appendix, listed by habitat type; the nomenclature follows Ball (1997). The oldest records from Prestwick Carr indicate that the area was a mixture of heathland, wet grassland and a number of types of aquatic habitats. The moth species noted in Bold's journal for 1844 (*Phragmatobia fuliginosa*, *Lasiocampa quercus*, *Macrothylacia rubi* and *Pavonia pavonia*), as well as the record for the large heath butterfly (*Coenonympha tullia*) by John Hancock, are all heathland Lepidoptera. These tie in with the records of the ground beetle species *Carabus arvensis* and *C. nitens* and the older record by George

Wailes of the leaf beetle *Calomicrus circumfusus* (Hardy and Bold, 1850), which are also heath species. The two ground beetle species now only occur on moorland in the region (Eyre, Luff and Ball, 1986). The ground beetle *Bradycellus ruficollis* and the weevil *Micrelus ericae* are both associated with heather and were recorded from the carr in the 1840s (Hardy and Bold, 1850, 1854) whilst the heather beetle (*Lochmaea suturalis*) was still on Prestwick Carr in 1905 (Bagnall, 1907). No specific heath and moor species appear to have been recorded from Prestwick Carr since the beginning of the twentieth century.

A number of wet grassland ground beetle species (*Agonum moestum*, *Bembidion biguttatum*, *Pterostichus nigrata*) were also recorded by Bold from Prestwick Carr in the 1840s. These species were found again in the 1970s and 1980s in the pitfall trapping and they are still abundant on the carr, as are other species of this habitat such as *Agonum piceum* and *Pterostichus diligens*. Two species thought of as too common by Bold for him to give localities in his catalogues, *Carabus granulatus* and *Pterostichus versicolor*, were found to be abundant on the carr in 1985 and are still present on the wet grassland. However, these are now rare species in the region (Eyre, Luff and Ball, 1986) and they are good examples of species badly affected by the systematic drainage of agricultural land. The effects of drainage and increased use of the carr as pasture for sheep and cattle was reflected in the recording in the 1970s and 1980s of ground beetle species preferring open habitats (*Amara apricaria*, *A. aulica*, *A. plebeja*, *Bembidion guttula*, *B. lampros*), species which were also found in 2002.

In addition to the species of wet grassland, there are old records (Hardy and Bold, 1850) of ground beetle species with a preference for marshes and the edges of open water (*Agonum marginatum*, *Blethisa multipunctata*, *Elaphrus cupreus*, *E. riparius*, *Pterotichus anthracinus*). Bold also records weevil species feeding on water plants (*Litodactylus leucogaster*, *Phytobius comari*) whilst there are also records for aquatic reed beetles (*Donacia bicolora*, *D. cinerea*, *D. crassipes*) (Hardy and Bold, 1854; Bold, 1872), indicating emergent vegetation in large, open water bodies. *Pterostichus minor*, a ground beetle of very wet sites including marshes, now appears to be the only species recorded both in the 1980s and in 2002 that is indicative of the presence of marshy areas on the carr. The presence of open water was also indicated by the presence of the large pond and lake water beetle species *Coelambus novemlineatus*, *Hygrotus inaequalis*, *H. quinquelineatus*, *Hyphydrus ovatus* and *Potamonectes assimilis* (Hardy and Bold, 1850; Bold, 1858, 1866). Open water species (*Haliphus fulvus*, *H. immaculatus*, *Laccophilus minutus*, *Hygrotus inaequalis*) were recorded from the carr in 1970 but these were not recorded in the 1980s or in 2002.

Water beetle species usually found in more vegetated aquatic sites were also recorded in the 1850s. These include *Hydroporus melanarius*, *H. morio*, *H. obscurus* and *H. tristis* (Hardy and Bold, 1854; Bold, 1858) now only found in upland mires and mosses in the region (Eyre, Ball and Foster, 1985), where they are usually found in Sphagnum moss. *Agabus unguicularis* was recorded from the carr by Bold (Hardy and Bold, 1850) but Omer-Cooper (1931) found more water beetle species of vegetated ponds and ditches in 1930 (*Agabus sturmii*, *Hydroporus palustris*, *Ilybius guttiger*). All these species were found on the carr in the 1970s and 1980s, together with other species of this type of habitat (*Hydroporus angustatus*, *H. erythrocephalus*, *H. memnonius*). A number of these species now occur in the large ditches traversing the carr, including the scarce *I. guttiger*. Specialised water beetle species of temporary water bodies (*Agabus labiatus*, *A. montanus*, *A. nebulosus*) were also recorded by Bold in the 1840s (Hardy and Bold, 1850). *A. montanus* was found on the carr in the 1980s, together with other temporary water species

(*Coelambus impressopunctatus*, *Helophorus aequalis*, *H. brevipalpis*, *H. grandis*). The presence of the *Helophorus* species, *A. montanus* and *Hydroporus planus* in a number of water bodies on the carr in 2002 indicated that temporary water was likely to be the main aquatic habitat now present. *Agabus guttatus* and *A. paludosus*, species of slow-flowing vegetated streams, were found by Bold on the carr in the 1840s and another, *A. didymus*, was recorded by Omer-Cooper (1931) in 1930. The ditches on the carr now appear to act as long, thin ponds with no or very slow flow. No species of slow-flowing water have been recorded from the carr since 1930. Omer-Cooper also recorded a number of fast-flowing stream species (*Oreodytes sanmarkii*, *O. septentrionis*, *Platambus maculatus*, *Stictotarsus duodecimpustulatus*) from Prestwick whilst the Rev C E Tottenham is given as the source of a record for *Brychius elevatus* in 1930 by Woodcock (1954). *B. elevatus* is a species usually in fast-flowing rivers and it may be that the River Pont is more likely to provide the habitat for these fast-flowing stream and river species than anything on the carr.

Nationally rare and scarce species on Prestwick Carr

A number of nationally rare and scarce invertebrate species have been recorded from Prestwick Carr, both in the past and in 2002. These species are listed below and the national statuses are given by Kirby (1992) and Hyman and Parsons (1992, 1994) (Red Data Book 2 (Vulnerable), RDB2; Red Data Book Insufficiently Known, RDBI; Nationally Scarce A, Na; Nationally Scarce B, Nb; Nationally Scarce, Ns).

Hemiptera

Capsus wagneri Ns. This is a bug species of long established wetlands (Kirby, 1992), such as those found at Prestwick Carr. It was found at sites all over the carr in 2002 but there are few other local records.

Coleoptera

Carabus nitens Nb and *Calomicrus circumfusus* Na. Both these species were recorded on the carr before 1850 (Hardy and Bold, 1850, 1854) and whilst *C. nitens* is found on the drier moorland in the region, *C. circumfusus* is a southern British species, usually associated with gorse (Hyman and Parsons, 1992).

Blethisa multipunctata and *Pterostichus anthracinus*, both Nb. These are ground beetles of marshy sites, both recorded from Prestwick Carr before 1850 (Hardy and Bold, 1850). *B. multipunctata* is rare in the region but we have recent records from Callerton (NZ1768) in 1991 and near Prestwick Carr at Brenkley (NZ2275) in 2002 whilst *P. anthracinus* is a mainly southern British species (Luff, 1998) and there are no other north-east England records.

Donacia bicolora RDB2, *Donacia crassipes*, *Litodactylus leucogaster*, *Phytobius canaliculatus* and *Phytobius comari*, Nb. The *Donacia* reed beetle species were recorded by George Wailes from Prestwick Carr before 1830. *D. bicolora* is associated with bur-reed and now very rare in Britain and confined to southern England whilst *D. crassipes* is found throughout Britain with water lilies as its foodplant. The other species are wetland weevils recorded before 1850 (Hardy and Bold, 1854; Bold, 1872). We have no recent records of these species in the region and they have probably been badly affected by land drainage.

Coelambus novemlineatus, *Hygrotus quinquelineatus* and *Stictonectes lepidus* Nb. These lake water beetle species were found on the carr before and in the 1850s and 1860s (Hardy and Bold, 1850; Bold, 1858, 1866). There are post-1970 records of *C. novemlineatus* from

two loughs in the west of Northumberland, a record of *H. quinquelineatus* from Big Waters in 1960 and several recent records of *S. lepidus* from quarry ponds in the region (Eyre, Ball and Foster, 1985).

Agabus labiatus Nb. A temporary water beetle found on the carr in 1844 and 1846 by Bold (Hardy and Bold, 1850). It was not found in a survey of temporary water bodies in the late 1980s in the south of Northumberland (Eyre *et al.*, 1992) and there are no recent records in north-east England.

Agabus unguicularis and *Ilybius guttiger*, both Nb. *A. unguicularis* was recorded by Bold on the carr in 1846 (Hardy and Bold, 1850) and found by in the old peat cutting in the middle of the carr in 1982 and 1985. It was not found in 2002 when there was no standing water other than that in the ditches. It is not uncommon in the region. *I. guttiger* was first recorded from Prestwick by Omer-Cooper (1931) in 1930 and in the old peat cutting to the east of the north of the nature reserve in the 1980s. This cutting now appears to have no standing water but it was found in the ditch to the west of the nature reserve and the west-east ditch in 2002. It is a species of lowland vegetated sites with permanent water and we have a number of other recent records for this species in north-east England.

Oxystoma cerdo and *Mantura rustica*, both Nb. *O. cerdo* is a seed weevil species of rough grassland that has been taken a number of times in the region (Luff, Eyre and Jessop, 1996) whilst *M. rustica* is a leaf beetle associated with *Rumex*, usually on sites with sandy soils (Hyman and Parsons, 1992) and recorded from a sediment by the River Tyne (Eyre, Luff and Lott, 2000).

Cercyon lugubris Ns. A species found in dung of various kinds (Hyman and Parsons, 1992), it is a widespread but local species. It was found in a pasture to the south of the carr used by both sheep and cattle.

Cercyon tristis Nb. This is a water beetle and was found in the west-east ditch between the SSSI and the nature reserve in 2002. It is a species of vegetated ponds and ditches and we have six post-1970 records for County Durham and one for Northumberland.

Bryoporus crassicornis RDBI. This is a very rare rove beetle species, taken from a yellow pan trap near the south-western corner of the nature reserve in 2002. The four post-1970 records in Britain for this species are all from the region, including this one, and all recorded by M L Luff and M D Eyre. One was taken in a net on a vehicle-mounted net near Riding Mill in 1976, one in a pitfall trap in conifer plantation at Allerwash by the River Tyne in 1991 (Luff, Eyre and Jessop, 1996) and another on the chalk heaps at Prudhoe in 1995 (Eyre, Luff and Woodward, 2002). There appears to be no obvious habitat preference for this species.

Gabrius bishopi Nb. A rove beetle species that has been taken recently in a number of pitfall trap surveys (Eyre, Luff and Lott, 1998, 2000), it is unlikely that it is as uncommon as Hyman and Parsons (1994) thought. It was taken in a number of pitfall sites in 2002 and when sampling temporary water in November 2002.

Stenus nigritulus and *Stenus niveus*, both Nb. These are wetland rove beetle species, with *S. nigritulus* found in the pitfall trap catches at the south-west corner of the nature reserve in 2002 and *S. niveus* in aquatic samples in two ditch sites in 2002, one to the west of the nature reserve and the other in the ditch running west-east. These species are indicative of long-term wetland conditions.

The present position and future management

The northern half of Prestwick Carr, with the SSSI, has had only a limited amount of

invertebrate survey work since the early twentieth century, mainly because it is used as a rifle range for the armed forces. The SSSI has areas of raised ground, now mainly birch woodland, and these may still have relict invertebrate species present. However, if the situation is similar to that on the nature reserve and adjacent pasture, it would be likely to lack the historical habitat diversity and the major problem with the nature reserve is the lack of both terrestrial and aquatic invertebrate habitats. The terrestrial habitats on the nature reserve are a mixture of a number of types of wet grassland whilst the aquatic sites appear to be restricted to temporary water. A number of scarce wetland species were recorded in 2002, indicating continuing importance of the carr as a refugia for these invertebrates in a landscape with few old wetlands. There were also scarce dung-associated species recorded with the continuing use of most of the carr as pasture.

Any future management procedures designed to improve the nature reserve for invertebrates must concentrate on providing as much variety as possible. The damp grassland habitats present on the carr are too uniform with poor vegetation structure and the rank vegetation on various parts of the nature reserve is poor invertebrate habitat. Management procedures, such as cutting and removal, providing vegetation structure complexity would be worthwhile. The provision of open water would improve aquatic habitat diversity. Some ditches on the carr not on the nature reserve have been cleared recently and have standing water. This water does not appear to be draining off the carr and similar management could be carried out on the reserve, providing long, thin ponds with open water. The provision of any sort of running water would also increase aquatic habitat diversity.

REFERENCES

- BAGNALL, R S (1907). Notes on some additions, etc., to the Coleoptera of the Northumberland and Durham district. *Natural History Transactions of Northumberland (N.S.)*, **1**: 224-247.
- BALL, S G (1997). *RECORDER 3.3. A database for site-based, species occurrence records*. Joint Nature Conservation Committee, Peterborough.
- BOLD, T J (1858). Entomological notes, for 1855, with a record of coleopterous insects new to the fauna, and additional localities for, some of the rarer species of our catalogue. *Transactions of the Tyneside Naturalist's Field Club*, **3**: 88-92.
- BOLD, T J (1866). *Hydroporus quinque-lineatus*. *Entomologist's Monthly Magazine*, **2**: 158.
- BOLD, T J (1872). A catalogue of the insects of Northumberland and Durham (Revision of Coleoptera). *Natural History Transactions of Northumberland*, **4**: 1-117.
- EALES, H (1970). Notes and records. *Vasculum*, **55**: 7.
- EYRE, M D, BALL, S G and FOSTER, G N (1985). *An Atlas of the Water Beetles of Northumberland and County Durham*. Hancock Museum, Newcastle upon Tyne.
- EYRE, M D, CARR, R, MCBLANE, R P and FOSTER, G N (1992). The effects of varying site-water duration on the distribution of water beetle assemblages, adults and larvae (Coleoptera: Halipidae, Dytiscidae, Hydrophilidae). *Archiv für Hydrobiologie*, **124**: 281-291.
- EYRE, M D and FOSTER, G N (1984). A revision of the aquatic Coleoptera of Northumberland and County Durham. *Entomologist's Gazette*, **35**: 111-135.
- EYRE, M D, LUFF, M L and BALL, S G (1986). *An Atlas of the Carabidae (Ground Beetles) of Northumberland and County Durham*. Hancock Museum, Newcastle upon Tyne.

- EYRE, M D, LUFF, M L and LOTT, D A (1998). Rare and notable beetle species records from Scotland from survey work with pitfall traps, 1992-1996. *Coleopterist*, **7**: 81-90.
- EYRE, M D, LUFF, M L and LOTT, D A (2000). Records of rare and notable beetle species from riverine sediments in Scotland and Northern England. *Coleopterist*, **9**: 25-38.
- EYRE, M D, LUFF, M L and WOODWARD, J C (2002). Rare and notable Coleoptera from post-industrial and urban sites in England. *Coleopterist*, **11**: 91-101.
- HARDY, J AND BOLD, T J (1850). A catalogue of the insects of Northumberland and Durham, drawn up at the request of the Tyneside Naturalist's Field Club. *Transactions of the Tyneside Naturalist's Field Club*, **1**: 37-94.
- HARDY, J AND BOLD, T J (1854). A catalogue of the insects of Northumberland and Durham (Part iii). *Transactions of the Tyneside Naturalist's Field Club*, **2**: 164-287.
- HYMAN, P S and PARSONS, M S (1992). A review of the scarce and threatened Coleoptera of Great Britain. Part 1. *UK Nature Conservation*, **3**: 1-484.
- HYMAN, P S and PARSONS, M S (1994). A review of the scarce and threatened Coleoptera of Great Britain. Part 2. *UK Nature Conservation*, **12**: 1-248.
- KIRBY, P (1992). A review of the scarce and threatened Hemiptera of Great Britain. *UK Nature Conservation*, **2**: 1-267.
- LUFF, M L (1998). *Provisional Atlas of the Ground Beetles (Coleoptera, Carabidae) of Britain*. Biological Records Centre, Huntingdon.
- LUFF, M L, EYRE, M D and JESSOP, L (1996). Records of new and local Coleoptera in north-east England. *Entomologist's Gazette*, **47**: 257-265.
- LUFF, M L, EYRE, M D. and RUSHTON, S P (1989). Classification and ordination of habitats of ground beetles (Coleoptera, Carabidae) in north-east England. *Journal of Biogeography*, **16**: 121-130.
- OMER-COOPER, J (1931). Some notes on Dytiscidae collected in Northumberland and Durham in 1930. *Vasculum*, **17**: 43-50.
- WOODCOCK, A J A (1954). The aquatic Coleoptera of North and South Northumberland. *Entomologist's Monthly Magazine*, **90**: 25-31.

Appendix

Invertebrate species diagnostic of habitat types on Prestwick Carr showing the species, year of recording, recorder and reference (where applicable).

Species	Common name	Year	Recorder	Reference
Moor and heath				
<i>Calomicrus circumfusus</i>	a leaf beetle	<1830	G Wailes	Hardy and Bold (1854)
<i>Phragmatobia fuliginosa</i>	ruby tiger moth	1844	T J Bold	Bold's Journals
<i>Lasiocampa quercus</i>	oak eggar moth	1844	T J Bold	Bold's Journals
<i>Macrothylacia rubi</i>	fox moth	1844	T J Bold	Bold's Journals
<i>Pavonia pavonia</i>	emperor moth	1844	T J Bold	Bold's Journals
<i>Coenonympha tullia</i>	large heath butterfly	<1850	J Hancock	Bold's Journals
<i>Bradycellus ruficollis</i>	a ground beetle	<1850	J Hardy	Hardy and Bold (1850)
<i>Carabus arvensis</i>	a ground beetle	<1850	J Hancock	Hardy and Bold (1850)
<i>Carabus nitens</i> NB	a ground beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Micrelus ericae</i>	a weevil	<1850	T J Bold	Hardy and Bold (1854)
<i>Lochmaea suturalis</i>	heather beetle	1905	R S Bagnall	Bagnall (1907)
Acid mire				
<i>Hydroporus obscurus</i>	a water beetle	1852	T J Bold	Bold's Journals
<i>Hydroporus morio</i>	a water beetle	1854	P J Selby	Bold (1858)
<i>Hydroporus melanarius</i>	a water beetle	1855	T J Bold	Bold (1858)
<i>Hydroporus tristis</i>	a water beetle	1852	T J Bold	Bold's Journals
Wet grassland				
<i>Pterostichus nigrata</i>	a ground beetle	1844	T J Bold	Bold's Journals
<i>Agonum moestum</i>	a ground beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Bembidion biguttatum</i>	a ground beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Agonum fuliginosum</i>	a ground beetle	1970	G N Foster	
<i>Agonum thoreyi</i>	a ground beetle	1983	C A M Reid	
<i>Pterostichus diligens</i>	a ground beetle	1983	C A M Reid	
<i>Agonum moestum</i>	a ground beetle	1985	Eyre and Luff	
<i>Carabus granulatus</i>	a ground beetle	1985	Eyre and Luff	
<i>Pterostichus versicolor</i>	a ground beetle	1985	Eyre and Luff	
<i>Agonum piceum</i>	a ground beetle	1985	Eyre and Luff	
<i>Agonum fuliginosum</i>	a ground beetle	2002	Eyre and Luff	
<i>Agonum moestum</i>	a ground beetle	2002	Eyre and Luff	
<i>Carabus granulatus</i>	a ground beetle	2002	Eyre and Luff	
<i>Pterostichus nigrata</i>	a ground beetle	2002	Eyre and Luff	
<i>Pterostichus versicolor</i>	a ground beetle	2002	Eyre and Luff	
Open, managed grassland				
<i>Amara apricaria</i>	a ground beetle	1970	M L Luff	
<i>Amara plebeja</i>	a ground beetle	1970	M L Luff	
<i>Bembidion guttula</i>	a ground beetle	1970	M L Luff	
<i>Bembidion lampros</i>	a ground beetle	1970	M L Luff	
<i>Amara aulica</i>	a ground beetle	1985	Eyre and Luff	
<i>Amara apricaria</i>	a ground beetle	2002	Eyre and Luff	
<i>Amara plebeja</i>	a ground beetle	2002	Eyre and Luff	
<i>Bembidion guttula</i>	a ground beetle	2002	Eyre and Luff	
<i>Bembidion lampros</i>	a ground beetle	2002	Eyre and Luff	
Marsh and pond edge vegetation				
<i>Blethisa multipunctata</i>	a ground beetle	1826	G Wailes	Hardy and Bold (1850)
<i>Donacia bicolora</i>	a reed beetle	<1830	G Wailes	Hardy and Bold (1854)
<i>Donacia cinerea</i>	a reed beetle	<1830	G Wailes	Hardy and Bold (1854)

<i>Donacia crassipes</i>	a reed beetle	<1830	G Wailes	Hardy and Bold (1854)
<i>Elaphrus cupreus</i>	a ground beetle	1844	T J Bold	Bold's Journals
<i>Elaphrus riparius</i>	a ground beetle	1844	T J Bold	Bold's Journals
<i>Pterostichus anthracinus</i>	a ground beetle	1844	T J Bold	Bold's Journals
<i>Phytobius comari</i>	a weevil	1847	T J Bold	Bold's Journal
<i>Agonum marginatum</i>	a ground beetle	<1850	G Wailes	Hardy and Bold (1850)
<i>Litodactylus leucogaster</i>	a weevil	<1850	T J Bold	Hardy and Bold (1854)
<i>Elaphrus cupreus</i>	a ground beetle	1970	G N Foster	
<i>Elaphrus cupreus</i>	a ground beetle	1983	C A M.Reid	
<i>Pterostichus minor</i>	a ground beetle	1985	Eyre and Luff	
<i>Pterostichus minor</i>	a ground beetle	2002	Eyre and Luff	

Lake and open water

<i>Hyphydrus ovatus</i>	a water beetle	1846	T J Bold	Bold's Journals
<i>Hygrotus inaequalis</i>	a water beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Potamonectes assimilis</i>	a water beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Coelambus novemlineatus</i>	a water beetle	1855	T J Bold	Bold (1858)
<i>Hygrotus quinquelineatus</i>	a water beetle	1865	T J Bold	Bold (1866)
<i>Hygrotus inaequalis</i>	a water beetle	1970	I D Wallace	
<i>Laccophilus minutus</i>	a water beetle	1970	I D Wallace	
<i>Haliphus fulvus</i>	a water beetle	1970	G N Foster	
<i>Haliphus immaculatus</i>	a water beetle	1970	G N Foster	

Vegetated ponds and ditches

<i>Agabus unguicularis</i>	a water beetle	1846	T J Bold	Bold's Journals
<i>Graptodytes granularis</i>	a water beetle	1855	T J Bold	Bold (1858)
<i>Agabus sturmii</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)
<i>Hydroporus palustris</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)

<i>Ilybius guttiger</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)
<i>Hydroporus angustatus</i>	a water beetle	1970	G N Foster	
<i>Hydroporus palustris</i>	a water beetle	1970	G N Foster	
<i>Agabus sturmii</i>	a water beetle	1970	G N Foster	
<i>Agabus unguicularis</i>	a water beetle	1982	M D Eyre	
<i>Ilybius guttiger</i>	a water beetle	1982	M D Eyre	
<i>Hydroporus angustatus</i>	a water beetle	2002	Eyre and Foster	
<i>Hydroporus palustris</i>	a water beetle	2002	Eyre and Foster	
<i>Ilybius guttiger</i>	a water beetle	2002	Eyre and Foster	

Temporary ponds and pools

<i>Agabus labiatus</i>	a water beetle	1844	T J Bold	Bold's Journals
<i>Agabus nebulosus</i>	a water beetle	1844	T J Bold	Bold's Journals
<i>Agabus montanus</i>	a water beetle	<1850	T J Bold	Hardy and Bold (1850)
<i>Helophorus brevipalpis</i>	a water beetle	1967	G N Foster	
<i>Helophorus obscurus</i>	a water beetle	1967	G N Foster	
<i>Helophorus aequalis</i>	a water beetle	1970	G N Foster	
<i>Hydroporus planus</i>	a water beetle	1970	G N Foster	
<i>Hydrobius fuscipes</i>	a water beetle	1970	G N Foster	
<i>Agabus montanus</i>	a water beetle	1985	M D Eyre	
<i>Helophorus brevipalpis</i>	a water beetle	2002	Eyre and Luff	
<i>Helophorus obscurus</i>	a water beetle	2002	Eyre and Luff	
<i>Helophorus aequalis</i>	a water beetle	2002	Eyre and Luff	
<i>Hydroporus planus</i>	a water beetle	2002	Eyre and Luff	
<i>Hydrobius fuscipes</i>	a water beetle	2002	Eyre and Luff	
<i>Agabus montanus</i>	a water beetle	2002	Eyre and Luff	

Slow flowing streams and ditches

<i>Agabus guttatus</i>	a water beetle	1846	T J Bold	Bold's Journals
<i>Agabus paludosus</i>	a water beetle	1846	T J Bold	Bold's Journals
<i>Agabus didymus</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)

Fast flowing streams

<i>Brychius elevatus</i>	a water beetle	1930	C.E. Tottenham	Woodcock (1954)
<i>Oreodytes sanmarkii</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)
<i>Oreodytes septentrionis</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)
<i>Platambus maculatus</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)
<i>Stictotarsus 12pustulatus</i>	a water beetle	1930	J Omer-Cooper	Omer-Cooper (1931)

COLEOPTERA (BEETLE) SPECIES AND SITE QUALITY OF COASTAL AND POST-INDUSTRIAL SITES IN NORTH-EAST ENGLAND

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INTRODUCTION

As well as the sampling of riverine sediments in north-east England for beetles using pitfall traps in the mid 1990s (Eyre and Luff, 2002a), work has also been carried out throughout the 1990s on coastal and post-industrial sites. The coastal sites included dune, dune slack and saltmarsh sites ranging from Teesmouth in the south to Holy Island in the north whilst the post-industrial sites were spoil sites from coal mining, fertiliser production and sand extraction. The survey work on these sites produced a number of nationally rare and scarce beetle species records. This paper uses these to generate site quality assessments similar to that applied to riverine sediment sites by Eyre and Luff (2002a). A number of these records have been reported by Eyre and Luff (1995) and Luff, Eyre and Jessop (1996).

Sites

Of the coastal sites, the most southerly was Coatham Sands (national grid reference NZ5725), just south of the mouth of the River Tyne. This area was a mixture of habitats with loose and fixed dunes, slack and three ponds and was sampled in 1995. To the north of Teesmouth, the North Gare Sands (NZ5327) loose dunes and slack were sampled in 1996, as were the loose and fixed dunes of Seaton Sands (NZ5328). Saltmarsh sites by Greatham Creek and on Cowpen Marsh (both NZ5025) were sampled in 1992 and 1996 respectively. In Northumberland, saltmarsh at Seaton Sluice (NZ3376) was sampled in 1996, whilst loose and fixed dune and slack areas at Druridge Bay (NZ2894) were sampled in 1995 and 1996. Saltmarsh and fixed dune at Alnmouth (NU2409), saltmarsh at Beal (NU0842) and Budle Bay (NU1434) and saltmarsh (NU1043) and dune and slack sites (NU0943) on Holy Island were all sampled in 1996.

The post-industrial sites included calcium carbonate (chalk) waste, a product of fertiliser production, dumped along the southern edge of the River Tyne at Prudhoe (NZ0963, NZ0964, NZ1064) after the Second World War. There has been the development of vegetation on these large heaps but they remain well-drained areas with little soil and ruderal vegetation. These heaps were sampled in 1994 and 1995. A considerable number of the colliery spoil heaps in north-east England have been removed or landscaped. However, we have sampled a number of these sites, especially those of the old Marley Hill colliery (NZ1857, NZ1957, NZ2057) in 1993 and 1995. Other heaps sampled were at Chilton Moor (NZ3248) in 1990, Hedley Hill (NZ1542) in 1991 and New Herrington (NZ3353) in 1991. Sand extraction south of the River Tyne at Crawcrook (NZ1263) produced areas of spoil with varying amounts of vegetation, sampled in 1995 and 1996. An area of old sand workings at Stargate (NZ1763) was subject to opencast coal extraction in the early 1990s and the resulting sandy substrate, with very little vegetation, was sampled in 1996.

The distribution of the sites in north-east England is shown in Figure 1. Sampling was carried out by pitfall traps at all sites, whilst the aquatic sites were sampled with a pond net.

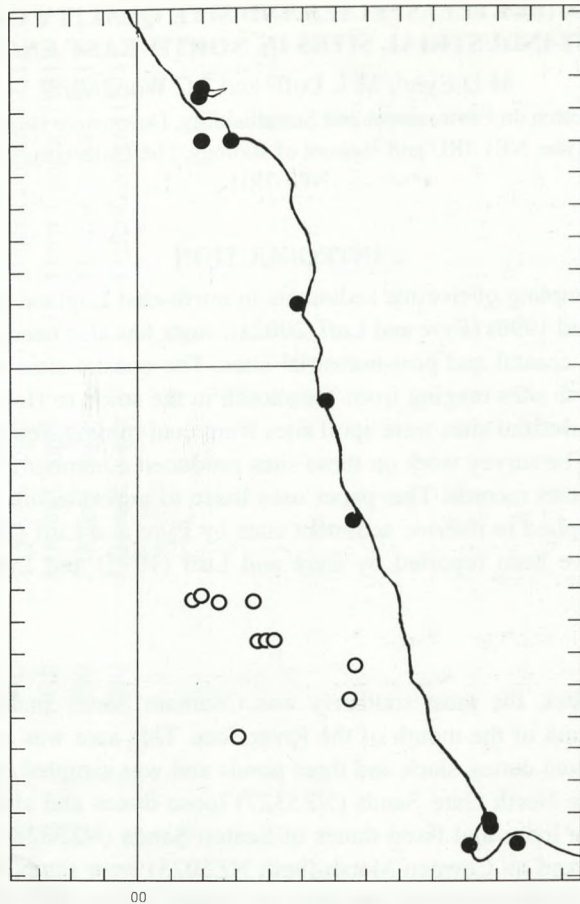


Figure 1 Map showing the distribution of national 1km grids where sampling was carried out on post-industrial sites (O) and coastal sites (●). For full details, see text.

Rare and scarce species and site quality

National rarity and scarcity statuses were designated for beetles in the United Kingdom by Hyman and Parsons (1992, 1994). These were:

Red Data Book K (RDBK). Insufficiently known. Species where there is not enough data for a more precise status to be assigned.

Nationally Scarce A (Na). Species thought to occur in between 16 and 30 10km squares.

Nationally Scarce B (Nb). Species thought to occur in between 31 and 100 10km squares.

Nationally Scarce (Ns). Species thought to occur within 16 and 100 10km squares but where subdivision was not possible.

These rarity and scarcity statuses can be used to generate species rarity scores from which site rarity totals (SRT) and species quality scores (SQS) can be generated in order to rank sites for conservation purposes. Geometric scales have been used previously by Eyre, Lott and Garside (1996) and Eyre and Luff (2002b) with beetle data from pitfall surveys of a

number of habitat types. If a score of 1 is assigned to the commonest species, then Ns and Nb species are scored 2, Na is 4, RDBK and RDB3 is 8, and RDB2 would be 16 and RDB1 32. The species scores for a site are summed to give the SRT and this total is divided by the number of species to give the SQS.

Species recorded

A total of sixty-nine nationally rare and scarce species were recorded from the coastal and post-industrial sites and they are listed below, together with the appropriate statuses, and information on where they were recorded and habitats. Nomenclature follows Hyman and Parsons (1992, 1994).

***Cantharis obscura* Nb**

This soldier beetle appears to have no specific habitat preference and was recorded from the chalk heaps at Prudhoe.

***Amara fulva* Nb**

A sandy site ground beetle species found on north-east England riverine sediments (Eyre, Luff and Lott, 2000), it was also found on the dunes at Druridge Bay and on the old sand extraction sites at Crawcrook and Stargate.

***Amara lucida* Nb & *Amara spreta* Nb**

These are dune ground beetle species and were both recorded from Coatham and Seaton Sands with *A. lucida* also found on North Gare Sands. These are rare species on the east coast, with the records for both species the most northerly recent records in Britain (Luff, 1998).

***Amara praetermissa* Nb**

This is usually a sandy site species and occurred on Seaton Sands in the 1980s (Luff, Eyre and Jessop, 1996) but it has more readily been found on dry colliery spoil at Chilton Moor, New Herrington and Marley Hill and on the chalk heaps at Prudhoe. There is a record from an old railway line at Close House (NZ1365) in Eyre and Luff (1995).

***Asaphidion pallipes* Nb and *Bembidion monticola* Nb**

These ground beetle species are usually associated with riverine sediments but *A. pallipes* was found abundantly on the sand workings at Crawcrook and *B. monticola* was found on dry colliery spoil at Hedley Hill and Marley Hill.

***Bembidion clarki* Nb and *B. pallidipenne* Nb**

Found in wet, densely vegetated sites, *B. clarki* was recorded from the dune slack areas of Coatham and North Gare Sands whilst *B. pallidipenne* was found on wet sand by a stream running through the Druridge Bay dunes in 1985 (Eyre and Luff, 1987). The only other records for *B. pallidipenne* on the east coast are Scottish (Luff, 1998).

***Calathus ambiguus* Nb**

This is a sandy site species recorded from the dunes at Coatham and Seaton Sands. These are the most northerly recent records in Britain (Luff, 1998).

***Bembidion laterale* Nb and *Dyschirius impunctipennis* Nb**

These are saltmarsh species with *B. laterale* found at Beal and Holy Island and *D. impunc-*

tipennis at Budle Bay. The record for *D. impunctipennis* is the only one for Northumberland and is the most northerly British record (Luff, 1998).

***Miscodera arctica* Nb**

This upland moor species was found on the wet spoil at Marley Hill in association with *Pterostichus adstrictus* and *Olisthopus rotundatus*, other ground beetles normally recorded from upland sites.

***Lebia chlorocephala* Nb and *Pterostichus cristatus* Nb**

These ground species prefer unmanaged grassland and woodland sites but *L. chlorocephala* was found on the chalk heaps at Prudhoe whilst *P. cristatus*, which is common only in north-east England (Luff, 1998), was recorded from colliery spoil at Hedley Hill and Marley Hill and on sand at Crawcrook.

***Mantura rustica* Nb**

A leaf beetle preferring sandy sites, it was found on both Crawcrook and Stargate as well as from the fixed dune at Druridge Bay.

***Scymnus schmidtii* Nb**

A small ladybird previously found on riverine sediment (Eyre, Luff and Lott, 2000), it was recorded from fixed dune on Holy Island.

***Barynotus squamosus* Nb, *Ceutorhynchus punctiger* Nb, *Cneorhinus plumbeus* Nb, *Orthochaetes setiger* Nb, *Stenocarus umbrinus* Nb, *Strophosoma faber* Nb, *Tropiphorus obtusus* Na, *T. terricola* Nb**

These are all weevil species found on open, well-drained sites and all were recorded from the old sand workings at Crawcrook. A number (*C. punctiger*, *O. setiger*, *S. faber*, *T. terricola*) were found on the chalk heaps at Prudhoe, whilst *B. squamosus* was found on the coast by Greatham Creek, *C. punctiger* was taken at Druridge Bay, *O. setiger* recorded from Marley Hill and *S. faber* and *T. terricola* were both found at Stargate.

***Apion cerdo* Nb, *Brachysomus echinatus* Nb, *Omiomima mollina* Na, *Otiorhynchus desertus* Nb**

These weevil species also prefer well-drained sites and were all found on the chalk heaps at Prudhoe. *A. cerdo* was also recorded from Druridge Bay, *O. desertus* was found on fixed dunes at Alnmouth and Holy Island and *O. mollina* was taken on the Holy Island salt-marsh.

***Cleonus piger* Nb, *Pelenomus zumpti* Na, *Phyllobius vespertinus* Nb**

These are coastal site weevil species with *C. piger* found on the dunes at Druridge Bay and Holy Island, *P. zumpti* on the saltmarsh at Seaton Sluice and *P. vespertinus* on dunes at Coatham, North Gare and Seaton Sands and Druridge Bay and Alnmouth. The record for *P. zumpti* appears to be the first for Northumberland (Hyman and Parsons, 1994).

***Grypus equiseti* Nb**

A weevil species feeding on horsetails *Equisetum*, it does not appear to have any habitat preference. It was found on the dune and slack areas of Coatham and North Gare Sands, on the dune slack at Druridge Bay, on the chalk heaps at Prudhoe and on the old sand workings at Crawcrook and Stargate.

***Otiorhynchus raucus* Nb**

Usually found inland, this weevil was recorded on the coast by Greatham Creek.

***Geotrupes mutator* Nb**

A dung beetle found on the slack area at Druridge Bay where there was horse dung on adjacent pasture.

***Hydnobius punctatus* Ns, *Leiodes ciliaris* Ns, *Trichohyd nobius suturalis* RDBK**

These leioid species are thought to live on subterranean fungi. They were all recorded from the loose dunes at Coatham Sands and *H. punctatus* was also found on the chalk at Prudhoe and *L. ciliaris* on the loose dunes at North Gare Sands.

***Choleva glauca* Ns and *Colon latum* Ns**

Thought to be associated with small mammal nests, *C. glauca* was taken on the chalk at Prudhoe and *C. latum* on the spoil at Marley Hill.

***Euheptaulacus villosus* Na**

A dune scarabaeid species recorded from North Gare Sands, geographically between recent records for Yorkshire and Angus (Hyman and Parsons, 1992).

***Aclypea opaca* Na**

A silphid beetle known to attack beet in cultivated fields, it was recorded from a number of Scottish riverine sediments by Eyre, Luff and Lott (2000) and was found on the fixed dunes at Druridge Bay. There is an old record for 'South Northumberland' (Hyman and Parsons, 1992) and this seems to be the only recent one for Northumberland.

***Aleochara ruficornis* Ns**

A rove beetle species recorded from a number of different habitats (Eyre, Luff and Lott, 1998, 2000), it was recorded from the coast at Greatham Creek, on the spoil at Marley Hill and on the sand at both Crawcrook and Stargate.

***Bryoporus crassicornis* RDBK**

A rare rove beetle with recent records in Britain limited to those from near Riding Mill and Acomb, both in Northumberland (Luff, Eyre and Jessop, 1996), it was also found on the Prudhoe chalk heaps.

***Chiloporata rubicunda* Ns**

A riverine sediment rove beetle species, this was taken on the sand at Crawcrook.

***Diglossa submarina* Ns**

A species of the fore dune, it was taken near the high tide mark on Coatham Sands.

***Gabrieus bishopi* Nb, *Mycetoporus piceolus* Ns, *Ocypus fuscatus* Nb, *O. nero* Na, *Oxypoda spectabilis* Ns, *Quedius fulvicollis* Nb, *Q. longicornis* Nb, *Q. puncticollis* Nb, *Stenus fuscicornis* Nb**

These rove beetle species show no specific habitat preference (Hyman and Parsons, 1994). Four (*O. nero*, *Q. fulvicollis*, *Q. longicornis*, *S. fuscicornis*) were recorded on the sand workings at Crawcrook whilst *O. spectabilis* and *Q. puncticollis* were found on the spoil at Marley Hill. *O. nero* was also taken on the chalk at Prudhoe and on the Holy Island

saltmarsh and *O. fuscatus* was found at Stargate. There were coastal records for *G. bishopi*, from Druridge Bay and North Gare Sands, and for *M. piceolus* from Coatham.

***Gabrius keysianus* Nb and *G. osseticus* Nb**

These are coastal rove beetle species and *G. keysianus* was found on dune slack at Holy Island, a record which appears to be new for Northumberland (Hyman and Parsons, 1994). *G. osseticus* was recorded from the slack area of Coatham Sands.

***Crypticus quisquilius* Nb and *Scaphidema metallicum* Nb**

Two tenebrionid species of which one, *C. quisquilius*, is a coastal species found on the fixed dune at Alnmouth and Druridge Bay. *S. metallicum* has no obvious habitat preference and was recorded from Seaton Sands.

***Agabus biguttatus* Nb and *Laccobius sinuatus* Nb**

These water beetle species were taken in pitfall traps on the Stagate site situated near a pond.

***Haliphus apicalis* Nb and *Ilybius subaeneus* Nb**

Both these water beetle species were found in ponds on Coatham Sands and *H. apicalis* was taken in a pitfall on the North Gare Sands slack area.

***Helophorus fulgidicollis* Nb**

Taken in pitfall traps on the North Gare Sands slack area, this is usually a saltmarsh water beetle.

***Cercyon depressus* Ns and *Enochrus bicolor* Nb**

These scavenger water beetle species are associated with saltmarshes and *C. depressus* was recorded from Budle Bay and *E. bicolor* from Cowpen Marsh.

***Cercyon tristis* Nb & *C. ustulatus* Nb**

These are wetland species and *C. tristis* was recorded from the dune slack areas of Coatham and North Gare Sands and from Cowpen Marsh whilst *C. ustulatus* was found on the Druridge Bay slack.

***Ochthebius bicolon* Nb**

A water beetle species of wet, usually open, muddy or sandy sites, there are a number of recent records from riverine sediments (Eyre, Luff and Lott, 2000) and it was found on open saltmarsh mud at Cowpen Marsh, Seaton Sluice, Alnmouth, Beal and Holy Island and it was also taken on the North Gare Sands slack.

Site quality

Sixty-three nationally rare and scarce species recorded from four coast and four post-industrial sites are listed in the Appendix with species totals, site rarity totals (SRT) and species quality scores (SQS). The other sites did not have sufficient rare and scarce species. Of the coastal sites, Coatham Sands and North Gare/Seaton Sands both had the same SRTs but Coatham had a better SQS. Druridge Bay, with a similar number of species recorded as the Teesmouth sites, had a lower SRT than these sites and a similar SQS to North Gare/Seaton Sands. Holy Island had the fewest rare and scarce species, the lowest SRT but the highest SQS. The chalk heaps at Prudhoe and the old sand workings

at Crawcrook both had higher SRTs than any of the coastal sites. Prudhoe also had the highest SQS of all eight sites but that for Crawcrook was lower. The colliery spoil site at Marley Hill and the sand workings at Stargate had the minimum SQS of 2.00, with low SRTs.

DISCUSSION

The most interesting observation concerning the records from the coastal sites was the lack of similarity in the lists of rare and scarce beetle records from the Teesmouth sites compared with those of the Northumberland coast. The only coastal habitat species found on the dune systems of both areas was the weevil *Phyllobius vespertinus*. The only other two species these areas had in common were the rove beetle *Gabrius bishopi* and the weevil *Grypus equiseti*, both species without specific habitat requirements. This pattern was also seen with the records from saltmarshes where the only species common to the two areas was *Ochthebius bicolon*. This is a non-specific habitat water beetle, usually found on mud by rivers (Eyre, Luff and Lott, 2000) but also in other situations. None of the scarce saltmarsh species (e.g. *Bembidion laterale*, *Enochrus bicolor*) was common to both Teesmouth and the Northumberland coast. The common species found on the dune and saltmarsh systems of both areas were similar (Eyre and Luff, 2002c) but the differences in the distribution of the rarer species may be due to differences in dune size, structure and formation. The Teesmouth dune systems have much greater width than those at Alnmouth and Druridge Bay and are composed of finer sand. The dunes are of greater size on Holy Island but the vegetation on the fixed dunes of all the Northumberland sites is far more scrubby than that on the Teesmouth dunes. The River Tees provides the alluvial sand found to the north and south of the mouth whilst the sand on the Northumberland coast appears to be shell sand and derived from sea action.

The records from a number of the post-industrial sites indicate that some are important for invertebrates. The other interesting aspect of these sites is the number of species usually found on other habitat types. The species found on the old sand workings at Crawcrook were mainly those associated with sandy grasslands and heaths but there was also the presence of riverine sediment species (e.g. *Asaphidion pallipes*, *Chiloporata rubicunda*). A number of these sandy site species, especially the weevils, were found on the chalk heaps at Prudhoe whilst the species recorded from the colliery spoil at Marley Hill included those of upland moors (*Miscodera arctica*), riverine sediments (*Bembidion monticola*) and sandy heaths (*Orthochaetes setiger*).

The number of nationally rare and scarce beetle species recorded from the coastal and post-industrial sites were generally fewer than the number recorded from riverine sediment sites in Northumberland (Eyre and Luff, 2002a). The species rarity totals were, therefore, lower than most sediment sites but the species quality scores for Coatham Sands and Holy Island and for the chalk heaps at Prudhoe compared well with most of the riverine sites. Coastal and post-industrial sites have other rare and scarce invertebrates of interest such as leafhoppers (Eyre, Woodward and Luff, 2001) and the invertebrates of these sites need due consideration under conservation procedures. There are likely to be a number of changes in the coastline brought about by sea level rise which will affect the distribution of coastal invertebrates

whilst post-industrial sites should not be ignored as potentially important invertebrate sites because they are generally thought to be an eyesore in the landscape. The records presented here provide part of a necessary baseline for future change and site assessment with

which to compare the effects of potential and future coastal and land use change and development.

REFERENCES

- EYRE, M D, LOTT D A and GARSIDE A (1996). Assessing the potential for environmental monitoring using ground beetles (Coleoptera: Carabidae) with riverside and Scottish data. *Annales Zoologici Fennici*, **33**: 157-163.
- EYRE, M D and LUFF, M L (1987). Additions and corrections to the Carabidae (Coleoptera) of north-east England. *Entomologist's Gazette*, **38**: 75-81.
- EYRE, M D and LUFF, M L (1995). Coleoptera on post-industrial land: a conservation problem? *Land contamination & Reclamation*, **3**: 132-134.
- EYRE, M D and LUFF, M L (2002A). The importance of exposed riverine sediments for beetles (Coleoptera) in Northumberland. *Natural History Transactions of Northumbria*, in press.
- EYRE, M D and LUFF, M L (2002B). The use of ground beetles (Coleoptera: Carabidae) in conservation assessments of exposed riverine sediment habitats in Scotland and northern England. *Journal of Insect Conservation*, **5**: 25-38.
- EYRE, M D and LUFF, M L (2002C). The distribution of epigeal beetle (Coleoptera) assemblages on the north-east England coast. *Journal of Coastal Research*, in press.
- EYRE, M D, LUFF, M L and LOTT, D A (1998). Rare and notable beetle species records from Scotland from survey work with pitfall traps, 1992-1996. *Coleopterist*, **7**: 81-90.
- EYRE, M D, LUFF, M L and LOTT, D A (2000). Records of rare and notable beetle species from riverine sediments in Scotland and northern England. *Coleopterist*, **9**: 25-38.
- EYRE, M D, WOODWARD, J C and LUFF, M L (2001). The distribution of grassland Auchenorrhyncha assemblages (Homoptera: Cercopidae, Cicadellidae, Delphacidae) in northern England and Scotland. *Journal of Insect Conservation*, **5**: 37-45.
- HYMAN P S and PARSONS M S (1992). A review of the scarce and threatened Coleoptera of Great Britain. Part 1. *UK Nature Conservation*, **3**: 1-484.
- HYMAN P S and PARSONS M S (1994). A review of the scarce and threatened Coleoptera of Great Britain. Part 2. *UK Nature Conservation*, **12**: 1-248.
- LUFF M L (1998). *Provisional Atlas of the Ground Beetles (Coleoptera: Carabidae) of the British Isles*. Institute of Terrestrial Ecology, Huntingdon.
- LUFF, M L, EYRE, M D and JESSOP, L (1996). Records of new and local Coleoptera in north-east England. *Entomologist's Gazette*, **47**: 257-265.

ROBERT BENSON BOWMAN - an early Newcastle botanist

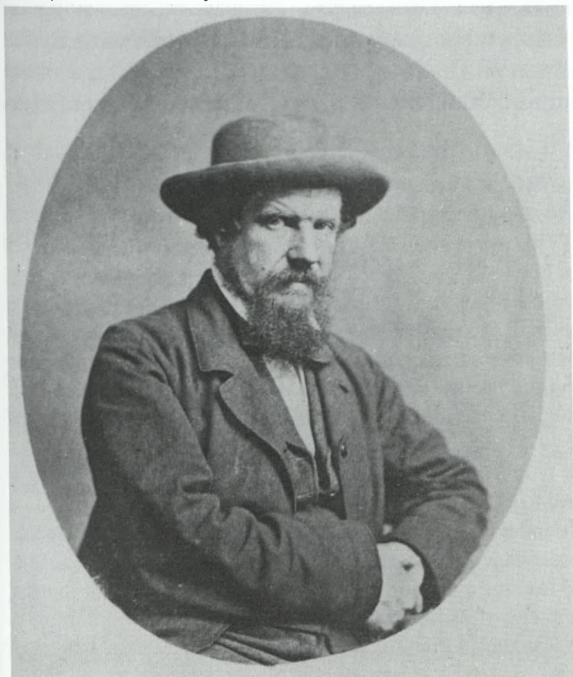
Leslie Anne Hendra

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Robert Benson Bowman was born on 14 May 1808 in Richmond, North Yorkshire, the last of seven children of Thomas Bowman, printer and bookseller, whose shop was located in the town's Market Square. Thomas Bowman had risen from his job as a stationer with a side-line in patent medicines and perfumery to a position as a leading printer who produced everything from election, theatre and horse-racing posters to books of literature, religion, and history, perhaps being most noted for printing Christopher Clarkson's distinguished work, *The History of Richmond*, in 1821. He held, in addition, various official positions during his life, including Clerk to the Commissioners of Taxes, Clerk to Magistrates, and Deputy Lieutenant of Gilling West.

The Bowman family were intellectually lively, artistic and active in cultural and political circles in Richmond. One of Robert's sisters, Mary Ann, married George Croft, who later became Mayor of Richmond. Margaret married the banker Thomas Smurthwaite. Robert's sisters, Ann and Margaret, ran a ladies' boarding and day school in Richmond for a number of years. Ann, the eldest of the siblings, was noted for her musical ability as well as her talent for writing poetry. She and her brother, Thomas Johnston, eventually took over their father's printing business and operated it as partners for more than two decades under the name T and A Bowman.

Robert was educated at Richmond School under the headmaster and famous Greek scholar James Tate (1771-1843), who later became a Canon of St Paul's Cathedral. He appears to have become interested in botany quite young. In his late teens he was regarded by his friends as one of the most authoritative of their little circle of collectors, grandly called the Richmond Botanical Society. The society was composed of Robert, his closest friend, Henry Wood, Henry's brother Edward (later a geologist), Thomas Smurthwaite, John



Photographic portrait of Robert Benson Bowman. With the kind permission of Newcastle upon Tyne City Libraries and Information Service.

Ewbank Leefe,¹ James Ward (a correspondent of Hewett Cottrell Watson), James Sanderson, John Tindal and a few others. Robert's elder and only surviving brother, Thomas Johnston, also gathered plants, but despite being an exchange member of the Botanical Society of Edinburgh (Desmond, 1994), he was apparently too busy in his career as printer and bookseller to pursue his interest as far as his brother did.

In about 1824, Robert, free from the necessity of succeeding his father in business, went on his own to Newcastle upon Tyne, where he began working as a druggist at the shop of Robert Currie at 19 Sandhill. Although his duties kept him very busy, he maintained a regular exchange of correspondence and specimens with his friends in the Richmond Botanical Society. In 1825, Bowman became a member of The Literary and Philosophical Society of Newcastle upon Tyne (Lit. and Phil.), possibly even before July of that year when it moved to its present location on Westgate Road.

Over time there had arisen a certain amount of friction concerning funding between members devoted to the library and those partial to the museum and in 1829 Albany Hancock, together with his friends Joshua Alder, William Hutton, George and Robert Burnett, R B Bowman, William C Hewitson² and others, founded the Natural History Society, with the museum at its heart. For some time previously, these men had met every Wednesday evening at each other's houses to discuss natural history and other topics and had made regular summer excursions for the purpose of collecting specimens (Goddard, 1929). The new society, known initially as The Natural History Society of Northumberland, Durham and Newcastle upon Tyne, was under the patronage of the Duke of Northumberland. It eventually purchased a small piece of land next to the Literary and Philosophical Society and built a museum, connecting it to the Lit. and Phil.'s library by a short gallery (Anon, 1837). Bowman was a committee member of the new Society from 1833 to 1841 and held the position of Honorary Curator of Botany for the same period.

It was in the early 1830s, when Bowman was about twenty-three, that he began corresponding with William Jackson Hooker (1785-1865) of Glasgow. In the earliest surviving letter, dated 28 July 1831, he sent specimens to the professor respectfully requesting confirmation that they were indeed *Gymnostomum Donianum* rather than "imperfect specimens of *Weissia recurvata*," as Nathaniel Winch believed.³ He received confirma-

¹Later the Rev. J E Leefe, Vicar of Cresswell. He became a member of the Tyneside Naturalists' Field Club (TNFC) in 1849 and rose to President of the Club in 1873-74. James Ward of Richmond, elected a member of the TNFC in 1869-70, was eulogised after his death by Leefe in his 1874 Presidential Address (Leefe, 1874).

²Albany Hancock (1806-1873) joined the Literary and Philosophical Society of Newcastle upon Tyne in 1836 and was the central figure in founding the Natural History Society. He was an all-round student of natural history, with a particular interest in marine animals and fossils in coal. The Hancock Museum is named after him and his brother John. Joshua Alder joined the Lit. and Phil. in 1821. A conchologist and marine biologist, his collection of British shells was one of the finest in the Newcastle area. William Hutton (1797-1860), a founder member and later a Secretary of the Natural History Society, was a geologist with an interest in fossil plants, a collection of which is held by the Hancock Museum. George and Robert Burnett became members of the Lit. and Phil. in 1821 and 1825 respectively and were founder members of the Natural History Society. George Burnett was, in addition, witness to the marriage of Robert Benson Bowman and Ellen Pattinson. William Chapman Hewitson (1806-1878) became a member of the Lit. and Phil. in 1828. A founder member of the Natural History Society and one of its Secretaries, he was primarily an ornithologist, but also collected plants now held by the Hancock Museum. He eventually left the Newcastle area.

tion and wrote back, *I confess that I had very little doubt of its being the true plant, but as I am but a young botanist, & have had but little time to bestow on the fascinating science, I was unwilling to trust entirely to my opinion.*⁴ In the next several years, the men exchanged information and numerous *desiderata*, Bowman sending so many specimens to Sir William from the north east that he was credited as a significant contributor in the introduction to Hooker's fourth edition of *British Flora* (Hooker, 1838).

As the friendship between Bowman and Hooker grew, the tone of the letters grew more intimate, Bowman several times confiding his impatience with the life of a druggist and his desire to make a trip abroad to gather plants. At one point, Hooker encouraged him to join George Back's 1833-1835 expedition to the Great Fish River, which required a medical man with natural history expertise, but his letter went astray and Bowman did not receive it until after the expedition had sailed. He replied, saying that as a dispenser of medicines he could not be considered a medical man as such and further, he did not have sufficient knowledge of natural history to have qualified. He added, *had there been one wanted with as much love for the science as man can have, to have gone out for the purpose of forming collections, none would have entered on it with more delight or alacrity than myself.*⁵

In January 1834 Currie and Bowman left their profession as druggists. Bowman wrote to Sir William, *I am just on the point of taking upon my shoulders a load of cares, in the shape of business & am consequently over head and ears in bustle — a most excellent opening in the bookselling way (the profession of my father) has occurred in Newcastle — one of the first shops in the Town — & this Mr Robt. Currie & I have taken.*⁶ They had bought the business of Charles Empson⁷ at 32 Collingwood Street and, under the name Currie and Bowman, sold a variety of engravings, drawings and books, in English and foreign languages, on the fine arts, natural history, history, literature, theology and other subjects. One of the books they published was *British Oology: being illustrations of the eggs of British birds* by William Hewitson (Hewitson, 1831-38). The shop, which expanded to include number 31 next door, was also the depot for the books of The Society for Promoting Christian Knowledge. *Everything about this shop bore an aristocratic, Churchy and Conservative tone*, commented a contemporary (Hetherington, 18??).

In the midst of the move to Collingwood Street, Hooker's son, William Dawson (1816-1840), a keen student of ornithology, arrived in Newcastle at Bowman's invitation. He had written to the boy's father, *John Hancock is full of glee in the anticipated pleasure of exhibiting to a fellow-student his various specimens & he will have infinite satisfaction in shewing his mode of skinning & setting up birds, & pointing out any thing that may hitherto have escaped your son's observation.*⁸ William was royally entertained by the members of the Natural History Society. Delighted with the boy, Bowman wrote to Hooker

³Director's Correspondence, v. 3, 1832-1835. Royal Botanic Gardens, Kew. Bowman to Hooker, 28 July 1831. Nathaniel Winch, 1768-1838, was a Fellow and Associate of the Linnean Society. He is credited with the discovery of *Pyrola media*. He published various books and articles and was one of the fathers of botany in the northeast.

⁴*ibid*, Bowman to Hooker, 5 September 1831.

⁵*ibid*. Bowman to Hooker, 15 March 1833.

⁶*ibid*, Bowman to Hooker, 25 January 1834.

⁷Empson was a founder member of the Natural History Society.

inviting William back to Newcastle in the summer along with his younger brother, Joseph Dalton (1817-1911) whom, because of his interest in botany, he referred to as *my little fellow student that I am all anxiety to see*.⁹ When Bowman eventually made his first collecting trip abroad, to Norway in 1835, he and his travel companion sought permission to take William with them but this was refused. Later, William and Joseph visited Newcastle several times and Bowman, praising the younger boy to his father, said, *I think that he will make a good and ardent Naturalist*.¹⁰ He did, indeed!

Among the many botanists that Bowman corresponded and exchanged specimens with were Hewett Cottrell Watson (1804-1881), for whose book *Topographical Botany* (Watson, 1883) he contributed plants in over 140 categories, George Wailes¹¹, George Johnston (1797-1855), George Wilson, W Christy, William Alexander Stables (1810-1890), factor of Cawdor Castle, Nathaniel John Winch (1768-1838), and J Gentle of Edinburgh. Bowman collected widely in the field of botany and his herbarium merited mention in an article "State of Natural History in Newcastle-upon-Tyne". *In botany Mr Winch's fine herbarium takes the lead, but those of Mr William Robertson and Mr R. B. Bowman also contain a very extensive series of British plants, to which the latter has in his late tour in Norway added many interesting plants from that country* (Anon, 1837).

The disposition of the Winch herbarium was to cause the Natural History Society some trouble. In 1838, after Winch's death, Bowman wrote to Hooker, *I shall after a while send a begging petition to you on the part of the Newcastle Museum for specimens — for, as poor old Mr Winch has not fulfilled his engagement to leave us his collections we must commence to do that which has hitherto been neglected*.¹² The collection had, in the event, been bequeathed to the Linnean Society, where it remained for twenty-five years until that Society voted to return it to the Natural History Society in Newcastle. In the interval, members apparently canvassed for specimens to fortify their collections

Bowman discovered no new species, but writing to Hooker in the autumn of 1840, he said, *I have discovered the enclosed moss, which I think is 'Phascum Flörkeanum' though it does not entirely agree with Schwaegrichen's figure — You will oblige me by examining it at your leisure & giving me your opinion. It occurs on the Magnesian limestone of the Coast of Durham*.¹³ It turned out to be the first identification of this particular moss in Britain.

⁸*ibid*, Bowman to Hooker, 25 Jan 1834. John Hancock, brother of Albany, joined the Lit. and Phil. in 1835. He was an ornithologist and distinguished taxidermist, noted for his beautiful and dramatic taxidermic displays.

⁹*ibid.*, Bowman to Hooker, 5 February 1834.

¹⁰*ibid*, Bowman to Hooker, 26 August 1835.

¹¹George Wailes, born circa 1802, became a member of the Lit. and Phil. in 1821. He was an original member of the Tyneside Naturalists' Field Club and its President in 1860. According to his obituary, *He devoted himself chiefly to Entomology and the growing of Orchids and Alpine plants. He formed a good collection of British Butterflies and Moths, and contributed a Catalogue of the local Lepidoptera to the Transactions of the Club* (Wright, 1884). He died in Gateshead in 1882. George Wilson joined the Lit. and Phil. in 1822.

¹²Director's Correspondence, v. 10, 1838. Bowman to Hooker, 18 July 1838.

¹³Director's Correspondence, v. 14, 1840. Bowman to Hooker, 14 Oct 1840.



Illustration of *Phascum floeckeanum* from Wilson's *Bryologia Britannica* (Wilson 1855).

His discovery was later recorded in the supplement to Sowerby *et al*, *This very interesting addition to our list of British Phasca is perhaps the very least of all known mosses. Its discovery in Britain is due to Mr R. B. Bowman of Newcastle, who found it in 1840 on the Durham coast, while in quest of Phascum crassinervium, in fields half-way between Sunderland and South Shields* (Sowerby *et al*, 1843-4).

He remained as a bookseller in Collingwood Street until 1841, when he left the partnership, moved to London and took up residence in St Katherine Cree. His membership in the Natural History Society was allowed to lapse and it was many years before he renewed it.

He returned briefly to Gateshead to marry Ellen, eldest daughter of Hugh

Lee Pattinson, the distinguished chemist and metallurgist, at St Mary's Church on 13 October 1842. Returning soon afterwards to the London area, the couple produced three sons over the next four years, all of them born in Stockwell, Surrey. The only clue to Bowman's profession in London during this period is the notation 'Indian Agent' on his children's birth certificates.

The family moved back to the North East around 1852 and Bowman joined the Washington Chemical Company, founded by his father-in-law, Pattinson, in Washington, Durham. The two younger daughters of Pattinson had married Isaac Lowthian Bell, iron-master of Newcastle and Middlesbrough, and the engineer Robert Stirling Newall. It should be mentioned that Pattinson, Bell and Newall all belonged to the Natural History Society and the Tyneside Naturalists' Field Club, as did several other members of this extended family. Following the death of Pattinson in 1858, the brothers-in-law continued running the company in partnership with a few others and Bowman remained there in the capacity of chemical manufacturer for the rest of his working life.

Training for this career probably delayed his return to the Natural History Society, but when he did rejoin in 1859 he was soon appointed Honorary Curator of Botany for the second time, a position he retained from 1861 to 1878, and was a Committee Member between 1861 and 1872. He also joined the Tyneside Naturalists' Field Club, founded in 1846 for the practical study of Natural History in all its branches (Anon, 1846) and made up largely of members of the Natural History Society. Bowman was a member of this Club from 1859 to 1876, a Committee Member from 1866 to 1870, and a Vice President from 1870 to 1871.

His sons, too, belonged to these societies. Henry (1843-1933), who married the eldest daughter of Thomas Bell (1817-1894), brother of Isaac Lowthian Bell, was Honorary Curator of Mineralogy of the Natural History Society from 1864 to 1874, a Committee Member from 1868 to 1870 and Secretary from 1872 to 1874 (Davis and Brewer, 1986). Hugh Torrington (1844-1884), became a member of the Tyneside Naturalists' Field Club

in 1864 and an Associate in 1867 and Walter (1846-1923), joined the Club in 1864. Both were still listed as members in 1876. Bowman's wife, Ellen (1818-1893), was recorded as a member between 1867 and 1872.

The family, like many members in those days, made various contributions to the collections of the Society, some of which were:

270 species of British plants. R. B. Bowman. 1833

Golden Carp. R B Bowman. 1837

Aves (skins). Hugh Torrington Bowman. 1864 and 1866

Saccharoid Limestone & other Minerals. Henry Bowman. 1871

Specimen of Magnesite from Sweden. R. B. Bowman. 1877

Starfishes *Asteria nodosa*? from Aden. Hugh Bowman. 1880

Davis and Brewer's record of The Hancock Museum's holdings shows additional possessions of Bowman, donated posthumously in 1887:

Marine algae, Portugal, 175. collected by F. Welwitsh

Fungi, Portugal. collected by F. Welwitsh (David and Brewer, 1986).

Six years after Bowman's death, his wife presented the Society with his herbarium (other plants went to The Royal Botanic Gardens at Kew), which consisted largely of plants from Norway, the Pyrenees, Switzerland and Germany, as well as some from Britain. It was listed among the important collections presented to or purchased by the Natural History Society during the years 1829-1888 (Anon, 1888a). Accompanying it were the following books and papers (Anon, 1888b):

Bruch and W. P. Schimper. *Bryologia Europaea seu Genera Muscorum Europaeorum*, Fasc. 1-41. Stuttgart: 1837-47

D. F. L. de Schlechtendal. *Adumbrationes Plantarum*, Fasc. 1-3. 1825-26.

Gustav Kunze. *Die Farrnkräuter. Kolorirten Abbildungen*. Leipzig: 1840

J. Sowerby. *The Supplement to English Botany*, parts 67-69. Ser 2

Adriano de Jussieu. *De Euphorbiacearum Generibus*. Paris: 1824

Anon. *Cariceae*. 44pp., 10 coloured plates. 1840

In his lifetime Bowman not only contributed plants and information towards Hooker's *British Flora* and Watson's *Topographical Botany*, but also to Winch's *Flora* (Winch, 1838), Hewett Cottrell Watson's *New Botanists' Guide* (Watson, 1835) and to the publication of *A New Flora of Northumberland and Durham* (Baker and Tate, 1868). He is credited in *English Botany* (Sowerby and Smith 1843-44) and noted in a more recent work, *The Flora and Vegetation of County Durham* (Graham, 1988). In addition to his botanical contributions, he apparently also sent zoophytes to Dr George Johnston (Johnston, 1892). At the time of his death on 24 November 1882, Bowman was in the museum of the Natural History Society. His last moments are fully and rather movingly described in an obituary in *The Newcastle Daily Journal*.

Of late it was his custom about eleven o'clock in the morning to call at the

Lit. and Phil. Institution, and after having some conversation with Mr Lyall, to go on to the Museum, where he frequently met Mr James Clephan, Mr R. Y. Green, and Mr Howse (the curator). Yesterday morning, as usual, he went to the library of the Lit. and Phil. Institution, offered Mr Lyall a pinch of snuff, and in reply to the ordinary inquiries as to his health, stated himself to be as usual. After a short conversation he went to the Museum, sat down near the stove, and entered into conversation with Mr Howse and Mr Wright (the keeper). Suddenly he seemed to bend forward, and would have fallen to the ground had not Mr Wright caught him in his arms. Mr Howse hastened out to get assistance, and in a short time Dr H. E. Armstrong, Medical Officer of Health, Dr Mears, and Dr Hume, arrived and pronounced Mr Bowman dead, expressing their opinion that the cause of death was heart disease. In the afternoon, an inquest was held by Mr Theodore Hoyle, deputy coroner, at the Wellington Hotel, Collingwood Street, on the body, and the jury found a verdict to the effect that death was the result of natural causes. About eight o'clock at night the body was removed to the residence of the deceased in Windsor Terrace" (Anon, 1882).

Although perhaps a shock to Society members, this place of death was not unfitting. Bowman had retired only two years earlier, but it is evident that he frequently visited the Natural History Society, which was the centre of his lifelong interest in botany and which he had helped to found fifty-three years before.¹⁴ Summing up his character, Joseph Wright, Keeper of the Museum, wrote that Bowman was *an ardent sympathizer with all students in Natural History [. . .] devoting himself chiefly to Botany, and occupied a distinguished position among its leading investigators, and became an authority whose opinion was always of weight. He was a genial kindly man, and ever ready to impart his knowledge to earnest students* (Wright, 1882/83).

He was typical of his class in that he had the education, the money and the leisure to pursue a 'hobby.' George Johnston once wrote of local natural history societies and clubs, *I feel quite satisfied that clubs of the trifling character of ours will produce more effect in forwarding natural history than learned and unwieldy societies.*¹⁵ Many men and women of the day were engaged as 'amateurs,' in the true sense of the word, in scientific pursuits. Their names and their work may now be forgotten. They were, however, instrumental in laying the foundations of various fields of science with their painstaking and enthusiastic contributions.

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Permission to quote from the Director's Correspondence was kindly granted by the Trustees of the Royal Botanic Gardens, Kew.

The portrait of Robert Benson Bowman is reproduced by kind permission of the Newcastle upon Tyne City Libraries and Information Service.

¹⁴He is buried in the family vault of Hugh Lee Pattinson at the Parish Church, Washington, Durham, along with his wife Ellen, his son Hugh Torrington Bowman and a Bowman grandson.

¹⁵Johnson G (1892). Johnston to Joshua Alder, December 1834.

REFERENCES

- ANON (1837). State of Natural History in Newcastle-upon-Tyne. *Magazine of Zoology and Botany* **1**: 203-205. Edinburgh: W. H. Lizars
- ANON (1846). *Trans. nat. Hist. Soc. Northumb.* **1**: 1
- ANON (1882). The Newcastle Daily Journal. Saturday, 25 November 1882.
- ANON (1888). *Trans. nat. Hist. Soc. Northumb.* **10**: 180a and 171b
- BAKER, J G and G R TATE (1868). A New Flora of Northumberland and Durham. *Trans. nat. Hist. Soc. Northumb.* **2**: 1-316.
- DAVIS, P and BREWER, C (1986). *A Catalogue of Natural Science Collections in North-East England*. North of England Museums Service.
- DESMOND, R (1994). *Dictionary of British and Irish botanists and horticulturists*. London: Natural History Museum.
- GODDARD, T R (1929). *History of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne 1829-1929*. Newcastle upon Tyne: Andrew Reid & Co.
- GRAHAM, G G (1988). *The Flora and Vegetation of County Durham*. The Durham Flora Committee and the Durham County Conservation Trust.
- HETHERINGTON, W (18?). *Newcastle Fifty Years Ago*. Quoted in: *North Country Printers, Booksellers, etc.* R Welford scrapbook (Local Studies, Newcastle City Library).
- HEWITSON, W C (1831-38) *British Oology, being illustrations of the eggs of British Birds*, 2 Vols. Newcastle: Vol. 1 Epsom, Vol. 2 Currie & Bowman.
- HOOKE, W J (1838). *British Flora*, I. London: Longman, Orme, Brown, Green and Longmans.
- JOHNSTON, G (1892). *Selections from the Correspondence of Dr. George Johnston*, edit. J Hardy. Edinburgh: David Douglas.
- LEEFE, J E (1874). Presidents Address. *Trans. nat. Hist. Soc. Northumb.* **5**: 106-7.
- SOWERBY, J and SMITH, J E (1843-1844). *English Botany* Ed. 2. [arranged by C Johnson]. 11 vols, London: C E Sowerby.
- WATSON, H C (1835). *The new botanist's guide to the localities of the rarer plants of Britain*. London: Longman.
- WATSON, H C (1883). *Topographical Botany*. London.
- WHEELER, J (1884). President's Address. *Nat. Hist. Trans. Northumb, Durham and Newcastle upon Tyne*. **VIII**: 209.
- WILSON, W (1855) *Bryologia Britannica*. London: Longman, Brown, Green and Longmans
- WINCH, N J (1838). Flora of Northumberland and Durham. *Trans. nat. Hist. Soc. Northumb.* **2**: 1-149.
- WRIGHT, J (1882/3). Obituary Notices. *Trans. nat. Hist. Soc. Northumb.* **8**: 209.

TAILESSNESS (ANURY) IN A CHILLINGHAM WILD WHITE CALF

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The Chillingham Wild White cattle have been a closed herd for several centuries. Other than the provision of minerals, the feeding of hay and, recently, the offering of concentrates in winter, there is no intervention, and the animals are never handled. Autopsies in recent years and examination of museum specimens have established that specific dental anomalies have been occurring in the cattle for at least 130 years (Ingham, 2003) but, apart from occasional infertility, there are no known records of any other phenotypic abnormalities.

Since 1980, some 200 calves have been born. Some 73% survive to thirty days of age and about 64% to one year (Hall and Hall, 1988), with most deaths occurring in late winter. In April 1999, a female calf was born which was observed to be tailless (Figure 1). The animal died in March, 2000. Gross examination and autopsy, without dissection of the spinal column, revealed no other abnormalities. In particular, the perineal region was of normal conformation. The carcase was wrapped in hessian and buried. After six months the skeleton was disinterred and cleaned.

Two bones were recovered from the sacral region (Figure 2). The larger specimen consisted of four fused sacral vertebrae (S1–S4). S1 was clearly demarcated by a complete ventral suture line, but the divisions between S2 and S3, and S3 and S4, were evident only as sutures some 10mm in length at the posterolateral aspects of left ventral foramina 2 and 3. The right half of the spinous process of S4 was fused with the sacral crest only at its anterodorsal aspect. The crest inclined to the right and showed a slight longitudinal curve in that direction. The wings were asymmetrical, the left being 10mm wider than the right. The lateral crest was incomplete on the right side. Three dorsal foramina were present bilaterally, but ventrally there were three on the right and two on the left. What was evidently the reduced right portion of the dorsal spinous process of S5 was attached to the base of the sacral crest of S4.

The second bone comprised S5 and a coccygeal vertebra (C1). Fusion was complete except for a possible line of demarcation on the left lateral aspect. The spinous process of S5 was present on the left and, in life, there may have been a tenuous fusion between it and the base of the spinous process of S4 over a 7x2mm area. The sacral canal was open dorsally over the length of S5 (spina bifida) and it veered to the left to emerge at a lateral foramen between S5 and C1. Only the distal half of the right transverse process of S5 was present. C1 showed some asymmetry on the right side and had no vertebral canal. A small foramen was present at the base of the left spinous process. All other vertebrae were anatomically normal.

Huston and Wearden (1958) cited twenty-five cases of anury in Angus, Ayrshire, Guernsey, Hereford, Holstein, Jersey and Shorthorn cattle in the USA. In females, the area of the rump immediately posterior to the end of the vertebral column was often deeply depressed, and the anus and vulva were sometimes at sites anterior or dorsal to their normal positions. Greene *et al.* (1973) observed the condition in 104 calves (sixty-six Holstein-Friesian, eight Shorthorn, seven Jersey, five Hereford, two Aberdeen Angus, two Brown Swiss, one Ayrshire and eleven crossbreds) and conducted test matings which



Figure 1 Tailless female calf born in April 1999.

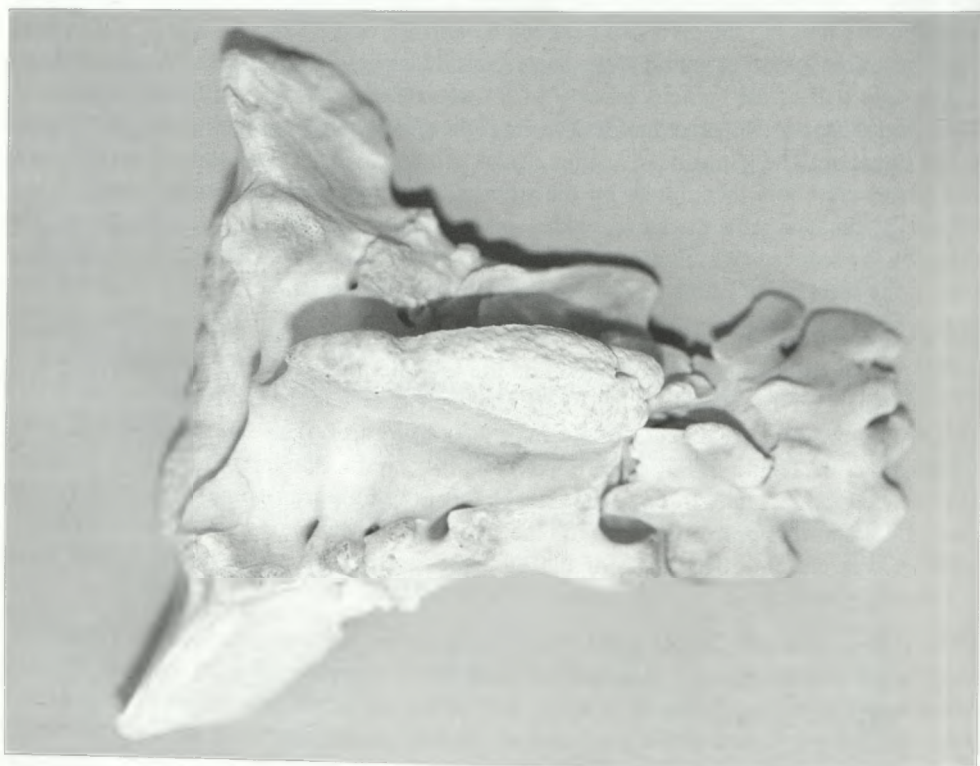


Figure 2 Two bones from the sacral region.

showed that the defect was not a simple dominant or recessive trait. Liepold *et al.*, (1983) stated that anury and brachyury of the caudal part of the spinal column are found commonly in cattle and are often associated with defects in other organs such as heart and eyes. Causes of these defects were said to be unknown. Kloppert (1986) estimated the population frequency of anury in German purebred and crossbred cattle at 1 in 17,700. Szabo (1989) mentioned that defects of the tail are highly variable, ranging from a slight bend, twist or reduction in length, to complete absence or duplication, and cited sixty-four cases of anury or brachyury in a total of 2303 congenitally defective calves of various German breeds. One case, in a Friesian, was listed with a recessive mode of inheritance. In White Park cattle in the USA, a breed with a claimed partial derivation from the Chillingham herd, two cases of anury are known (Alderson, personal communication).

The cause of this case of taillessness is obscure. There is no evidence of environmental contaminants, pollutants or teratogenic vegetation in Chillingham Park. It is unlikely to have been caused by a single recessive or closely linked group of genes; if it were it would surely have been observed previously in this closely inbred herd.

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REFERENCES

- GREENE, H J, HUSTON, K and LEIPOLD, H W (1973). Taillessness in cattle. *Giessener Beitrage zur Erbpathologie und Zuchthygiene*, **5**: 158-170.
- HALL, S J G and HALL, J G (1988). Inbreeding and population dynamics of the Chillingham cattle (*Bos taurus*), (1988). *Journal of Zoology London*, **216**:479-493.
- HUSTON, K and WEARDEN, S (1958). Congenital taillessness in cattle. *Journal of Dairy Science*, **41**: 1359-1370.
- INGHAM, B (2003). Dental anomalies in the Chillingham Wild White cattle. *Trans. Nat. Hist. Soc. Northumb.*, **62**:169-175
- KLOPPERT, B (1986). *Caudal, sacral and lumbar spinal column agenesis in cattle in Hessen and the associated congenital abnormality syndrome (caudo-rectouro-genital syndrome and anury-anophthalmia syndrome)*. Thesis, Justus-Leibig University, Geissen, Germany, 265pp.
- LEIPOLD, H W, HUSTON, K and DENNIS, S M (1983). Bovine congenital defects. *Advances in Veterinary Science and Comparative Medicine*, **27**: 197-271.
- SZABO, K T (1989). *Congenital malformations in laboratory and farm animals*. Academic Press, San Diego & London, pp 93 and 174.

THE STATUS OF THE OTTER IN NORTHUMBERLAND FROM 1991 TO 2003

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SUMMARY

The Northumberland Wildlife Trust has carried out an annual countywide survey for otter signs since the winter of 1990/91. This has provided an almost complete set of results for the county, which indicate a very convincing recovery trend in the presence of otters over the past decade.

The results from the 2002-03 survey show a continued recovery of the otter while at the same time displaying the continued depressed state of feral mink populations in the county. The presence of otters has increased from 16% of surveyed sites in the county in 1990/91 to 88% in 2002/03. After a major decline in the 1990s, mink have remained present at around 14% of sites surveyed.

Otters appear to be consolidating their presence within the county as continued evidence of breeding is recorded. They continue to occupy somewhat sub-optimal areas, such as the urban watercourses of Tyneside, and to show how adaptable they are even in such extreme circumstances. The threats from the motor car, habitat loss and human disturbance are discussed.

INTRODUCTION

The Eurasian otter *Lutra lutra* (L.) is an uncommon mammal and is still very rare in some parts of the UK, though it is generally accepted to be recovering in others. Across its wider international range, the otter is faring less well. It is still declining in most parts of its range and is extinct in others, such as in the Netherlands. The success of the otter in the UK can now give some encouragement to the conservation of the otter elsewhere as it demonstrates how tough legislation and a strong conservation effort on the ground can assist recovery.

The fourth National Otter Survey results for 2000/02 (Environment Agency, May 2003) show a regional population presence at 51% of sites between the rivers Tweed and Tees, an increase of 96% since 1991-94, a fair reflection of the advance the otter population has made in recent years: otters are now present in all catchments in this region.

We have no reliable way of determining true population size but may deduce that as recorded presence has continued to rise and maintain high levels in recent years, the population must have increased simultaneously. However, we still do not know how many otters there are in Northumberland, only that their presence is a healthy one. Otters, like other predators, live at relatively low densities, so actual numbers are never going to be very high.

First hand sightings and anecdotal records of otters from around the county have continued to provide valuable additional information, particularly when breeding is noted.

As their numbers have increased over recent years, otters have had to adapt to a very much altered environment. Many of these changes were expected to be constraints to its recovery. It has proved such expectations wrong by the rate of its recovery in some areas. Evidence has begun to accumulate showing which factors influenced the otter's decline and which have assisted its recovery.

In the modern world there are many different threats to the survival of wild mammals, not least of which is the motor car. The car can deal untimely and lethal blows to a recovering otter population, taking out individuals before the population has had time to establish itself. This has become the single most threatening factor in the return of the otter.

Development can remove access to large parts of newly cleaned waterways and the otter has had to adapt to this too. Increased flooding and its associated human problems tend to attract engineering solutions rather than ones that are more sustainable and cost effective in the long-term.

The age-old foes of tidiness and 'riverbank improvement', land drainage, habitat loss and pollution are all still present, reminding us not to become too complacent. Illegal persecution, particularly from misinformed fishery interests, always poses a threat and continues to be reported. It is hoped the continued awareness of the species' needs will counteract these possible threats and educate further those who feel threatened by the presence of otters.

Forecasted changes in agriculture and tighter planning controls give us the best possible footing for effecting real changes in policy with consequent benefits for wetland wildlife. The otter is still a rare and elusive animal over much of the UK; if it is not to remain so, the lessons learned and examples set in many parts of Northumberland will have to be applied elsewhere.

METHODS

The 2002/03 survey examined 195 sites along riverbanks, burns and lakes. The same sites were surveyed as in previous years, using the recognised national otter survey technique used to locate the species' signs. The sites are spaced at approximately 3 to 5km intervals along watercourses, giving a reasonably even coverage. The survey was carried out during the winter months to avoid the high summer vegetation and to improve the chances of locating signs (see Map 1).

The standard technique surveys a 600m length, examined once for otter and mink signs. This is often 300m upstream and downstream of a central point, in most cases a road, bridge or footpath signified by a grid reference. Each 600m stretch is searched and all spraints, scats, gels, footprints or prey remains found are recorded.

The months of late February, March and April 2003 were unusually dry and as such surveying conditions were excellent.

RESULTS

Table 1 summarises the findings of the 2002/03 Northumberland Otter Survey in comparison to previous years. Map 1 shows the distribution of positive, negative and new sites, and unsurveyed areas across the county.

Of the 195 survey sites chosen for this year's survey only three (2%) were not surveyed for restricted access reasons. 172 sites (88%) were found to show signs of otter presence during the survey.

Table 2 summarises the findings of mink surveys in 1991 to 2002/03. In the early 1990s mink were recorded as present at most of the surveyed sites in the county. Following a dramatic decline after 1996, the numbers of mink recorded in the past four years' survey results have remained encouragingly low and stable.

Table 1 Northumberland County Otter Survey Results 1991-2002/03

	Autumn 1991 (N=203)	Winter 1992/93 (N=203)	Autumn 1994 (N=203)	Autumn 1995 (N=193)	Autumn 1996 (N=193)	Winter 1997 (N=188)	Winter 1998/99 (N=195)	Winter 1999/00 (N=199)	Winter 2001/02 (N=196)	Winter 2002/03 (N=195)
% Unsurveyed	14	32	11	26	23	14	12	3	5	2
% Negative	70	57	60	36	32	18	31	27	12	10
% Positive	16	11	29	38	45	68	57	70	83	88

(N= total number of survey sites).

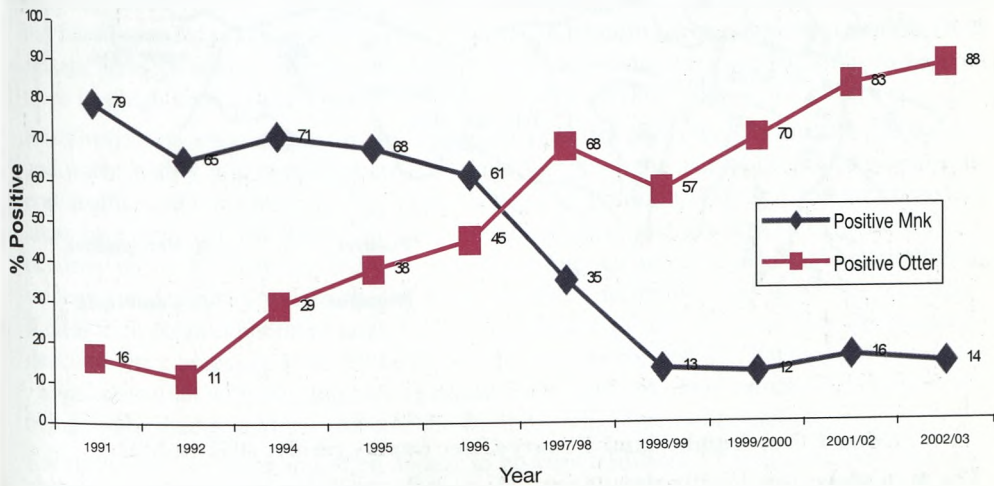
Table 2 The results of the 2002/03 mink survey in comparison to previous years.

	Autumn 1991 (N=203)	Winter 1992/93 (N=203)	Autumn 1994 (N=203)	Autumn 1995 (N=193)	Autumn 1996 (N=193)	Winter 1997 (N=188)	Winter 1998/99 (N=195)	Winter 1999/00 (N=199)	Winter 2001/02 (N=196)	Winter 2002/03 (N=195)
% Unsurveyed	14	32	11	26	23	14	12	3	5	2
% Negative	7	3	18	6	16	48	75	86	79	84
% Positive	79	65	71	68	61	35	13	12	16	14

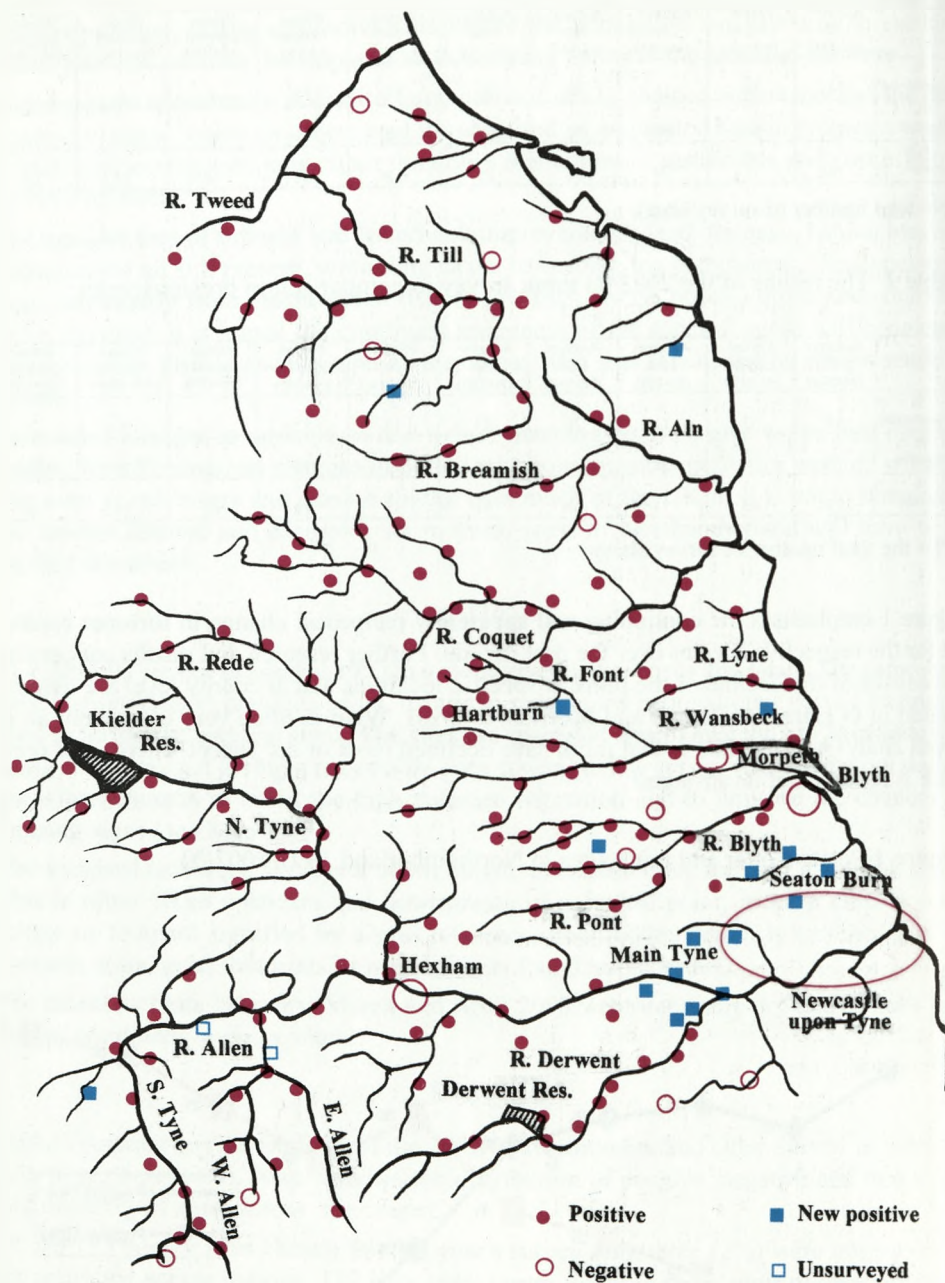
(N = the total number of survey sites)

Figure 1 emphasises the continuing and apparently reciprocal change in fortunes recorded for the respective species over the past decade. Further research and results concerning the causes of the decline of the mink at specific localities and at county level are demonstrated in O'Hara, McDonald and Morrish, *in press*. What is often very clear from an in depth analysis of the data is that mink have declined most or are absent where otter presence is recorded at its strongest.

Figure 1 Positive otter and mink sites in Northumberland 1991-2002/03.



Northumberland County Otter Survey Results 2002 to 2003



Map 1 Northumberland County Otter Survey results 2002 to 2003. The map shows the distribution of positive, negative and new sites, and unsurveyed areas across the county. The main urban areas are outlined.

DISCUSSION

The distribution of the otter

Of the 195 sites visited in 2002-03, 88% proved positive for otter signs. Many displayed quite abundant signs. This was probably partly due to the unusually dry period experienced this spring; many signs remained present for an extended time period, leading to some quite high build-ups. Signs were often found within the first 10m of the start point. The otter appears to be continuing to extend and consolidate its presence in Northumberland and continues to defy both expert and textbook alike by expanding its range into areas previously thought unsuitable and displaying behavioural traits once thought to be unheard of. Signs have been found throughout many of the urban streams in and around Newcastle; for example in Jesmond Dene for the first time in over fifty years, and in the lower Tyne. Presence also appears to be consolidating in the valley of the South Tyne and on the coastal plain around Druridge Bay, with an increase in positive sites recorded consistently over recent years.

Otter presence in Northumberland has more than quadrupled since 1991, and signs of otter presence now occur on all catchments. This is confirmed in the recently published Fourth National Otter Survey of England (Environment Agency, 2003) which indicates a 96% increase in sites with otter presence over the North East region since the previous survey of 1991-1994. This has been largely due to the increase in positive sites in Northumberland although otters are also now present on all the river catchments in neighbouring County Durham. Their increased presence is also indicated by recent records from within the boundaries of the cities of Sunderland and Middlesbrough.

Evidence of breeding and preferences in the location of breeding areas

Evidence of breeding has again been recorded across the county. Twelve separate records of otters with cubs were reported over the year covered by this survey. The dates indicate a preference for late winter and spring births in this region. Many other individual sightings have been recorded by the surveyor from various sources with a total of seventy-six records coming from every catchment in the county.

Sightings of multiple otters or mother and cubs, family units indicating possible breeding, have increased from previous surveys. Most have come from known areas where breeding has been recorded in the past; others are from new breeding areas. Repeated records from certain areas possibly indicated favoured locations. Certainly from the author's records there is a high level of site loyalty shown by females in their choice of natal areas.

It is always very encouraging to note breeding episodes as it clearly indicates that habitat and water quality improvements are working to improve the availability of prey and general health conditions for breeding. But it is also disappointing that some known breeding areas have been lost and others threatened by disturbance and development. Incidents have occurred in Northumberland and will continue to happen unless legislation is strengthened to characterise more specifically the otter's needs in terms of areas used for breeding. Research in Northumberland is assisting the delivery of this evidence. The collated evidence on otter breeding areas in the region has been compiled in a database of such sites. In collaboration with the statutory agencies responsible for otter legislation, a protocol is being established to address some of the frailties in the current legislation.

Locations used for breeding often appear to be very traditional, being used over and over again, sometimes year after year by successive generations. Other sites are complete enig-

mas, being in places you would least expect like scrapyards and poly-tunnels with geese inside. Most, however, demonstrate the key factors needed for successful breeding, such as the almost total seclusion required by females, away from the threat of severe flooding and immediate disturbance risks by people or dogs in the early stages of the breeding cycle. A ready supply of prey is essential as are good secure connections to the remainder of the range.

Evidence collected from known breeding locations suggests that there is not just one den used for breeding but that the natal chamber will be one of several over a sometimes extensive area which can be evacuated quickly at times of stress. The author believes that this is why rabbit warrens feature strongly as breeding locations. They are usually dry, offer extensive tunnels and entrances and may be hidden within dense undergrowth. Because of the wide range of the rabbit, otters are also unlikely to be far from suitable sites.

Locations that have been recorded as being utilised as breeding (natal) sites have included:

Tributary streams in woodland or forest, with an abundance of nesting cavities within fallen trees, root systems, rabbit warrens or other similar cavities.

Riparian woodland/forest blocks, particularly where small tributary streams intersect within a heavy scrub layer in larger rivers and the location is outside the normal flood range.

Where valley sides are steep or there is an area of high land within a wood on a flood plain with many rabbit burrows or other cavities, or rock piles.

Adjacent and inter-connected wetlands, marshes, reedbeds, lakes, pools and ponds provide the most attractive breeding localities, as everything an otter requires is usually concentrated within these features, especially where there are also rabbit burrows.

Actual breeding dens within an identified natal area have included:

Burrows of rabbits and other creatures (badger or fox).

Rock cavities and boulder piles.

Hollow tree root systems under root plates (particularly within thickets).

Thick vegetation like scrub or reedswamp where couches and beds can be hollowed beneath the vegetation.

Cavities within riverside tree root systems or rock formations either natural or artificial (although these appear to be used mainly as resting sites).

Artificial holts, particularly when situated in off-stream locations such as backwaters or ox-bows.

Suitable natal areas are still at a premium but many, because of the difficulties involved in identifying the site, continue to be under threat from development, drainage, felling and other forestry operations, over-zealous river management and of course just simple human

disturbance. There are probably many more breeding sites unsuspectingly destroyed or abandoned every year through the above circumstances than we realise. We simply do not know enough about the breeding preferences of the otter to be able to assess a breeding area accurately without painstaking survey work which few people can carry out adequately or are prepared to do in the course of an environmental assessment, so a precautionary approach needs to be adopted in many instances where there is a possibility that breeding might occur.

Figure 2 Comparison of monthly road traffic accident (RTA) figures for years 2000-2003.

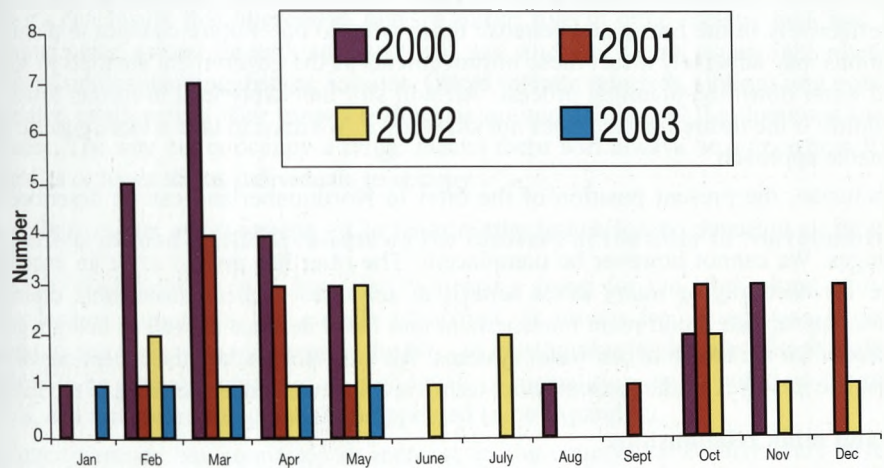
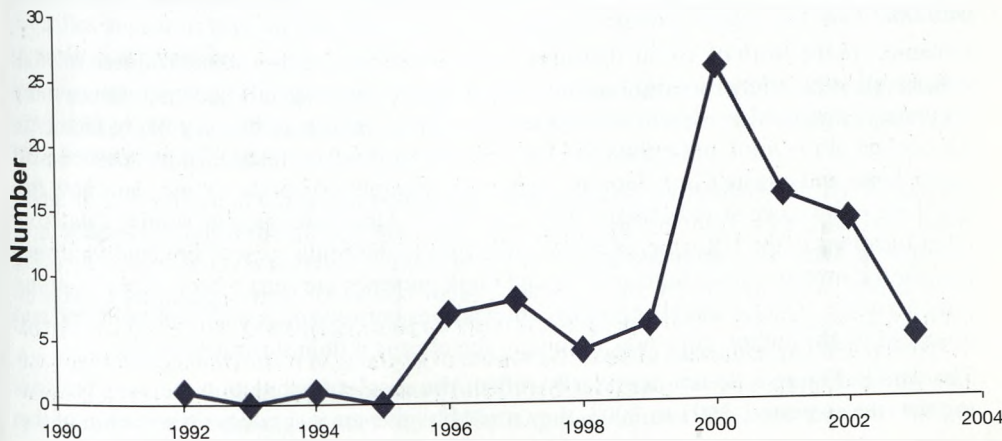


Figure 3 Recorded road casualty otters from Northumberlands roads 1990-2003.



Habitat deficiencies

Even in a rural county such as Northumberland, potentially suitable habitats are sometimes in poor condition or, in places, completely lacking.

The UK has the lowest percentage of woodland cover in Europe, less than 5%, and a large proportion of this is commercial conifer plantation, often heavily managed, with poor biodiversity. Most of our floodplains are under agricultural intensification and continued pressure from flood defences or drainage and associated development. All this makes the success of the otter more fragile as such pressures continue to mount. Will the otter thrive but briefly, only to slide back into oblivion as our attention focuses on the perceived need for new airports, housing and further development, all of which put increased demands on our wetland heritage and envelop more land?

Recently forecast changes in agricultural policy and development control could contribute to restoring some sustainability to these activities but we must use best practice guidelines more effectively in the future and penalise those who do not. Future changes in planning regulations may adversely affect these improvements as the government attempts to speed up and water down the planning process. All will still inevitably lead to further losses to our wildlife if the desire for land does not slow down. We need to take a more generic and sustainable approach.

In conclusion, the present position of the otter in Northumberland can be described as good with its presence consolidating within most of its present range and expanding on the fringes. We cannot however be complacent. The otter has proved to be an excellent vehicle for encouraging many other beneficial activities such as sustainable drainage schemes, appropriate flood plain management and flood defence as well as being a good ambassador for the health of our water systems. We must not let the misconceptions of the past and the mistakes of the present short-term view influence our decisions in the future.

Otter and mink relationships

The relationship between otters and mink is both mysterious and perplexing. Figure 1 shows that an overall decline in the presence of mink can hardly be denied but there are several locations or even whole catchments where there is a higher level of presence than the county average. Further research is needed into why these situations occur. It is surmised that many of these local hot spots occur in areas where there are plenty of resting sites and abundant and varied prey, such as on the River Wansbeck. If this is the case then there may be sufficient resources for both species to survive without too much direct competition.

Evidence, in the form of visual sightings and scat analysis, shows some evidence of what is believed to be an increasingly common occurrence - interspecific competition or more accurately intraguild predation and aggression. These appear to be very likely factors in the decline of the mink in Northumberland. Studies abroad on relationships between wolf *Canis lupus* and coyote *Canis latrans* support the intraguild hypothesis and show how frequent an occurrence it is between some predators. Observations and similar data from other locations in the UK support this assumption. In the south-west of England for example, similar inverse correlations in otter and mink presence are seen where there is a strong otter presence. Several actual aggressive interactions between otter and mink collected and observed by the author show how dominant the otter is within this relationship.

The data in Figure 1 do not necessarily reflect the absolute population numbers but during the survey period, 1991 to 2003, they probably give an accurate representation of the

population trend.

Aggression between otters

Some authors have suggested that aggression is a major factor within otter populations (Simpson and Coxon, 2000), citing evidence derived from autopsied road-kills. The author has examined more than 120 road-kills and other dead otters over a period of more than ten years. Only five animals displayed obvious bite marks that might have been inflicted by another otter and could have been a source of secondary infections. He has also enjoyed several hundred hours watching wild otters in various locations, having watched otters for many years. In all these sightings he has only witnessed a handful of occasions where seriously aggressive actions took place.

Most aggressive episodes witnessed have been little more than noisy squabbles that quickly dissipated or, more frequently, resolved through posturing or social status. It is the author's conclusion that aggression plays a minor role in otter society, rank and social standing being gained through age, size and sex, and that fights occur only when male otters of similar standing dispute females. Otters tolerate relatives, siblings and even other unrelated otters within their ranges as long as no one challenges the dominant male for females. The way otters occupy a range means there will always be somewhere free for juveniles or lower status individuals to occupy.

The effects of road traffic accidents on the recovery of the otter in Northumberland.

The UK Biodiversity Action Plan (BAP) steering group for the otter, along with many other leading authorities, has initially identified the threats from roads as a major constraint to recolonisation by otters in the UK. In Northumberland it was also initially considered to be a major constraint as high levels of mortality were recorded on the region's roads, at a time when the population appeared to be expanding.

As otter presence has continued to increase in the county, these early fears have been somewhat allayed as the numbers of recorded casualties have subsequently declined (see Figures 2 and 3). This suggests that road kills are more frequent as the population initially increases. A possible hypothesis to explain this is that individuals, particularly juveniles, are most at risk as they range widely into new territory, but are less so as the population stabilises and consolidates, and that otters move from their natal catchment less as unoccupied territory decreases. Everywhere they go there are other otters present, which reduces the opportunities to move far. From the evidence available in Northumberland juveniles appear to take up residence on the fringes of existing ranges and wait their turn in the social hierarchy.

The recently reduced but continued low level of recorded road traffic kills apparently reflects the fact that individuals are unable or unwilling to disperse as widely as previously and therefore are not falling victims on our roads as frequently.

There is still sufficient cause for concern in some places, particularly on the advancing front where recolonisation may be held up by frequent road deaths. For instance, two casualties were recorded from urban Tyneside in 2003. We should always advocate appropriate mitigation on bridges, new roads and repairs, as roads are recognised as a considerable barrier to all wildlife. Prioritised work on the trunk road system by the national Highways Agency is being undertaken in an effort to reduce all wildlife casualties and it is being particularly targeted at otters in the hope of fulfilling the Agency's obligations to biodiversity and reducing the damage to newly recolonising populations. We hope this will further

reduce the number of recorded casualties, and hasten progress towards the UK Otter BAP target of otter breeding in all former localities before 2010; and that, following this example, Local Authorities and County Councils with responsibilities for highways will follow suit.

Otters are still killed on the region's roads and inevitably always will be. At present we can be safe in the knowledge that their expansion in Northumberland, while it may have been hindered, has not been prevented by the unfortunate loss of individuals.

Continued threats to the otter in Northumberland

In Northumberland the continued threat of the car may have diminished slightly but it is still the major recorded cause of non-natural mortality in the county and should be considered a serious threat to some local populations.

Illegal persecution in the name of fishery protection may be a threat for the future in certain localities as the otter continues to recover. Fishery interests, especially commercial still-water carp or coarse fisheries and fish farms, may feel particularly threatened by the recovery of the otter. This should not be the case as the overwhelming benefits that otter conservation brings to fisheries far outweigh the limited number of predation risks that are likely to occur.

Conservation efforts on wetlands under an otter conservation banner have restored hundreds of hectares of wetland habitat and many kilometres of riverbank. Habitat restoration in the form of tree planting and re-vegetating river banks measurably improves the habitat of the instream fishery, providing shade, food resources, breeding habitats and refuges.

The vast majority of anglers welcome the return of the otter but a vociferous minority are adamant in their claims that otters are a problem in fisheries. Precautions are easy to implement to safeguard many fisheries at risk and illegal persecution is not the answer to the problem when a simple fence can keep an otter out at a fraction of the cost of lost fish.

There have been several recent otter deaths nationally which have highlighted the need to continue monitoring the amount of contaminants in the environment, particularly polychlorinated biphenyls (PCBs). There are now several documented cases of otters having died in the past five years with brain disorders, which are related to vitamin A deficiency, which in turn is related to PCB contamination (Paul Yoxon, *personal communication*). Evidence has accumulated from Europe of the increased role PCBs have had in the decline of otters and how elevated levels in parts of Europe may still be hindering their recovery (Gutleb and Kranz, 1998). The range of new chemicals being introduced to our environment shows little sign of abating. On past experience, these are likely to have their principal impact on top predators like the otter. The effects on other species are less disputed. Arctic species, such as beluga whales and polar bears, with elevated levels of PCBs in their tissues, are well documented. With cases of contaminated otters already recorded in the UK, it is certainly something environmental watchdogs need to be aware of.

Disturbance was often suggested as a possible limiting factor in the recovery of the otter. With resurgent populations now present in many urban areas, some authors have been prompted to claim that the otter is almost 'immune' to direct disturbance. There is certainly evidence to suggest otter may be tolerant of certain disturbed situations, for example exploiting Jesmond Dene in the City of Newcastle upon Tyne. But there is also increasing evidence suggesting that adverse impacts from more direct forms of disturbance are very problematic, such as physical intrusions into habitats by human beings and dogs, construction work, forestry work, flood defence and turning wetland areas into fish-

eries. Even ostensibly innocuous pastimes such as birdwatching can have direct impacts on the behaviour patterns of breeding females. Females with young cubs have been observed vacating breeding areas under intense and ill-timed surveillance.

Otters, like most wild creatures, may become accustomed to background disturbance from traffic noise and machinery and even to human presence. Changes in diurnal activity patterns are the most obvious result of such unavoidable disturbance and otters have been recorded using quite disturbed areas whilst programming their activities to coincide with relatively quieter periods. Otters have also been seen to use 'intelligence' in navigating an obstacle, remaining hidden until danger has passed. More remains to be discovered about situations that otters can tolerate and accommodate within their behaviour patterns.

At most risk from direct disturbance are females and their potential breeding locations. Otters usually choose the most inaccessible parts of their range for breeding, reducing the impact of disturbance in the early stages of breeding when the young are most vulnerable. The availability of such secluded and much sought after breeding areas is a limiting factor to population recovery, so the risks of disturbance should not be disregarded as the animal continues to recover.

It is perhaps no surprise that because these places are so special to otters we ourselves find them at times attractive for our own recreational pursuits. Several cases have been documented of the adverse effects these situations can have on breeding females. The UK otter BAP group is showing increasing concern over the belief that otters are immune to disturbance.

CONCLUSIONS

The otter in Northumberland is continuing its recovery. The species is present on every catchment in the county and breeding has been recorded at several new as well as known locations.

Road casualties have been low compared to earlier years but are still of local concern.

Further breeding records have been collected and show breeding success across the county. Whilst most births have passed unnoticed a few have generated some unwarranted localised disturbance problems.

In conclusion, the otter is continuing to consolidate its presence in the county and indeed the North East as a whole. In order to maintain this presence and continue the species' recovery it is essential to avoid complacency or believe the job is done. Building on the success of the otter is essential so that many more species and habitats can benefit from good wetland conservation.

At this present time it is the opinion of the author that the otter population in Northumberland is certainly at its highest since the 1950s and it is indeed possible, since there is no accurate account of past populations, that otter presence has never been so healthy in modern times.

ACKNOWLEDGEMENTS

The important work of monitoring Northumberland's otter populations is completely dependent upon the co-operation of the riparian landowners and the hard work of all the volunteers who undertake so much of the survey work. A lot is owed to these people without whose commitment the otter would have far fewer friends in Northumberland. A great deal of thanks is owed to them all.

REFERENCES

- GUTLEB, A C and KRANZ, A (1988). Estimation of polychlorinated biphenyl (PCB) levels in livers of the otter (*Lutra lutra*) from concentrations in scats and fish. *Water Air and Soil Pollution* **106**: 3-4, 481-491.
- GREEN, J, GREEN, R and JEFFERIES, D J (1984). A radio-tracking survey of otters *Lutra lutra* on a Perthshire river system. *Lutra* **27**: 85-145.
- ENVIRONMENT AGENCY (2003). *Results of the Fourth Otter Survey of England (2000-2002)*.
- JOHNSTON, S D (1974). Wild mink in Northumberland. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne* **41**: 165-178.
- O'HARA, K P (1996). *Otter survey of the River Wear*. Unpublished thesis, University of Sunderland.
- O'HARA, K P, McDONALD, R A and MORRISH, D J (2005). The recovery of the otter *Lutra lutra* and the decline of feral American mink *Mustela vison* in the north-east of England. *Journal of Biological Conservation*; in press.
- SIMPSON, V R and COXON, K E (2000). Intraspecific aggression, cannibalism and suspected infanticide in otters. *British Wildlife* **11**: 423-426.
- STRACHAN, R and JEFFERIES, D J (1993). *The water vole Arvicola terrestris in Britain 1989-1990: its distribution and changing status*. The Vincent Wildlife Trust, London.
- STRACHAN, R and JEFFERIES, D J (1996). *Otter survey of England 1991-1994: a report on the decline and recovery of the otter in England and on its distribution, status and conservation in 1991-1994*. The Vincent Wildlife Trust, London.

**THE STATUS OF THE WATER VOLE (*ARVICOLA TERRESTRIS*) IN THE
BOROUGH OF NORTH TYNESIDE: A SURVEY FOR PRESENCE AND
ABSENCE, SUMMER 2002**

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This survey was carried out on behalf of North Tyneside Council.

SUMMARY

The water vole was formerly very common across the whole of the North East, occupying lakes, ponds, streams, rivers and ditches throughout the region. Surveys carried out nationally by the Vincent Wildlife Trust showed that in 1989 55% of sites surveyed in the Northumbrian region still had water vole signs present. A repeat survey in 1996/98 showed this figure to have dropped to 8.7% of surveyed sites, a 84% loss. The current status in the region is unknown but it is thought to be less again than previous figures.

Nationally, this picture of decline has also continued, with water voles lost from two thirds of their former occupied sites and reduced to one tenth of their former population in a period of just over seven years.

The chief reason for this overall decline has been unsustainable predation by non-native feral North American mink *Mustela vison*. This has had the effect of decreasing population viability and increasing fragmentation. Inappropriate riverbank management, development (leading to fragmentation) and habitat loss have also combined to reduce water vole populations to critical levels, so safeguarding the remaining populations is a high conservation priority.

During the course of the survey, signs of water vole presence were discovered at thirteen locations (24%), reflecting the possibility of seven distinct populations from the fifty-three sites surveyed. In relation to the rest of the county, the populations in North Tyneside appear now to represent a significantly large percentage of the remaining core populations between the rivers Tyne and Tweed.

INTRODUCTION

This survey was carried out by Northumberland Wildlife Trust, on behalf of North Tyneside Council, in response to concerns raised over the status of the water vole both nationally and locally in the Borough.

The aim of the survey was to identify the presence of water vole *Arvicola terrestris* colonies throughout the Borough of North Tyneside, Newcastle upon Tyne. The information collected was intended to determine whether or not there is need to prescribe any mitigation and management for this protected species under current legislation.

The background to the survey is the nationally recognised decline that the species has incurred over the past thirty years. The rapidity of this decline has prompted an increased desire to protect and record any remaining populations. Fundamental to this is the need to recognise within planning and development, a duty of care with regard to any works that may impinge upon watercourses which are likely to shelter protected species as directed through current legislation

Water vole populations have declined across the UK by as much as 95% in recent years,

largely as a result of unsustainable predation by non-native feral North American mink and increasing population fragmentation. Inappropriate riverbank management, coupled with development and habitat loss, has also reduced water vole populations to critical levels. Safeguarding the remaining populations is a high priority.

The field survey was carried out during the summer of 2002 and was completed by a suitably experienced ecologist able to determine the presence of water vole and other species commonly associated with aquatic and riparian habitats.

Water voles and the law

Special protection was afforded to the water vole in the 1998 Quinquennial Review of the Wildlife and Countryside Act 1981, which included the water vole in Schedule 5 of the Act in respect of Section 9(4) only. This gives the water vole legal protection, making it illegal intentionally or recklessly to:

1. damage, destroy or obstruct access to any structure or place a water vole uses for shelter or protection;
2. disturb a water vole whilst it occupies such a place.

Importantly, this legislation will not provide licences for intentional destruction of water vole burrows for development management/maintenance operations. It is not the intention of the legislation to prevent development, but to ensure that developers act in accordance with the law taking 'reasonable' steps to avoid unnecessary damage.

N.B. The present Quinquennial Review has recommended that the species be given full protection under current legislation.

Description of survey area

North Tyneside is a metropolitan district, one of five within the County of Tyne and Wear. The Borough is bounded by the North Sea to the east, the river Tyne to the south, Newcastle City to the west and Blyth Valley District in Northumberland to the north.

The northern fringe of the Borough is open countryside consisting largely of arable agriculture with smaller areas of pasture for stock and horse grazing. About one quarter of the Borough is under agriculture, some 2000ha. The main urban areas, including the towns of Wallsend, North Shields and Whitley Bay, extend inland from the river and coastline. There are a number of other settlements between the main towns and the rural hinterland. Large open 'green' areas extend into parts of the urban area in the form of cemeteries, open spaces and golf courses and are therefore largely managed for recreational purposes.

Areas of open water in the Borough are limited to several artificial lakes and ponds of relatively low conservation value, and ponds created by mining subsidence, some which are of considerable value in conservation terms. Areas of running water are also limited, mainly by land management practices, many suffering from severe drainage and engineering modifications, with some streams now almost entirely culverted underground.

Part of the Borough's northern boundary runs along the valley of the Seaton Burn, which provides some of the best examples of woodland and riparian habitat in the district. Wetland habitats are in general impoverished throughout the Borough and limited to a few ditches, streams, relic fens and marshes with small pools.

Methods

The survey was carried out using the methods set out in the *Water Vole Conservation Handbook* (Strachan, 1998). A search and location technique was employed to identify the burrows, feeding remains, footprints, runs and droppings of the animal.

Sites were identified on watercourses and grid referenced either individually, in small groups or as sections of the larger stream courses. Fifty three sites were identified which consisted of ditches, streams, ponds and lakes. Each grid-referenced starting point was allocated a code corresponding to its electoral ward and numbered accordingly. All watercourses were searched comprehensively where conditions allowed, the majority on both banks to a distance inland of 10m for field signs. Signs of presence were recorded as either present, absent or possible. All other species of note were also recorded and transferred to a map of the site, recording form and report.

Observations of the relevant factors associated with the watercourses and other species were also noted for later comment. Sites where water vole presence was noted were given specific management prescriptions where appropriate, whilst others were given more general prescriptions.

All searches were carried out under the relevant health and safety procedure and were undertaken by a competent surveyor experienced in locating and identifying the appropriate signs left by water vole and other associated aquatic and riparian species.

Results

From the fifty-three sites chosen for the survey, twenty (38%) were either unsuitable for water voles, or too difficult to survey (dry ditches, overgrown), or permission from landowners was refused. Of the remaining thirty-three sites twenty (38%) showed no sign of water vole occupancy. Thirteen sites (24.5%) (some adjacent to each other) showed positive evidence of water voles indicating the possibility of up to seven discrete populations.

Other species of note recorded within the Borough were Eurasian otter *Lutra lutra*, water shrew *Neomys fodiens*, great crested newt *Triturus cristatus* and badger *Meles meles*. Important BAP (Biodiversity Action Plan) bird species were reasonably well represented in the Borough with species of note including reed bunting *Emberiza schoeniculus*, skylark *Alauda arvensis*, linnet *Carduelis cannabina*, yellowhammer *Emberiza citrinella*, grey partridge *Perdix perdix*, black-necked grebe *Podiceps nigricollis*, water rail *Rallus aquaticus* all recorded during the survey.

Undesirable species recorded during the survey-included brown rat *Rattus norvegicus* in abundance and ruddy duck *Oxyura jamaicensis*. North American mink *Mustela vison* were not recorded during the survey. However, it is known to be still present on the periphery of the Borough along the Seaton and Ouseburn systems so they should not be regarded as absent.

The invasive plant species that were recorded were chiefly Himalayan balsam *Impatiens glandulifera* and Japanese knotweed *Fallopia japonica*. These two species were particularly invasive along the Wallsend Burn and Seaton Burn, whilst the latter was recorded largely along the Brierdene Burn.

The clearest data from the survey showed a picture of population fragmentation shown by the distribution of scattered positive sites and the broken patchwork of presently occupied surface watercourses. Most populations appeared however to be in a breeding status, with

well maintained latrines found at all but one positive site. The survey also showed the clearest present day threats to the surviving populations.

These were mainly:

- development pressure;
- loss of habitat and population isolation;
- loss of connectivity;
- inappropriate habitat conditions.

Table 1 shows the results of the survey; this is accompanied by a map (see Figure 1) displaying the areas of positive water vole occupancy along the watercourses of North Tyneside.

Results of the 2002 North Tyneside water vole survey

Ward	Site Code	Site name	Grid Ref.	Burrows	Feeding	Latrines
1	NT1	Hadrian Park Pond	NZ311697	Yes	Yes	Yes
1	NT2	Wallsend Burn (trib)	NZ307686	Yes	Yes	Yes
2	NT3	Stream	NZ282693	N/A	N/A	N/A
2	NT4	Stream	NZ277692	N/A	N/A	N/A
2	NT5	Wallsend Burn	NZ278678	Yes	Yes	No
2	NT6	Wallsend Burn	NZ286678	Yes	Yes	Yes
3	NT7	Seaton Burn	NZ265735	Yes	Yes	Yes
3	NT8	Stream	NZ283734	N/A	N/A	N/A
3	NT9	Ditch	NZ272729	N/A	N/A	N/A
3	NT10	Ditches	NZ283726	N/A	N/A	N/A
3	NT11	Killingworth Pond (big)	NZ276708	No	No	No
4	NT12	Drain	NZ324681	N/A	N/A	N/A
5	NT13	Silverlink Ponds	NZ323694	No	No	No
6	NT14	None	None	N/A	N/A	N/A
7	NT15	The Letch	NZ288705	Yes	Yes	Yes
7	NT16	Ditch	NZ288698	N/A	N/A	N/A
7	NT17	Killingworth Pond (small)	NZ277708	No	No	No
7	NT18	Swallow Pond	NZ300693	Yes	Yes	Yes
7	NT19	West Allotment Pond	NZ306705	No	No	No
8	NT20	None	None	N/A	N/A	N/A
9	NT21	The Letch	NZ277698	Yes	Yes	Yes
9	NT22	Westmoor Ditch	NZ267703	Yes	Yes	Yes
10	NT23	Ditch	NZ335718	N/A	N/A	N/A
11	NT24	None	None	N/A	N/A	N/A
12	NT25	Wallsend Burn	NZ288668	Yes	Yes	Yes
12	NT26	Wallsend Burn	NZ298671	No	No	No
13	NT27	Smith's Park stream	NZ348675	No	No	No
14	NT28	Drain	NZ341709	N/A	N/A	N/A
14	NT29	Drain	NZ345713	N/A	N/A	N/A
14	NT30	Drain	NZ326716	N/A	N/A	N/A
15	NT31	St Mary's Island	NZ349749	No	No	No
15	NT32	Briardene Burn	NZ343738	N/A	N/A	N/A
15	NT33	Ditch	NZ338735	N/A	N/A	N/A

15	NT34	Wellfield Burn	NZ328732	N/A	N/A	N/A
16	NT35	Northumberland Park	NZ362694	No	No	No
16	NT36	Tynemouth Paddling Pool	NZ366702	No	No	No
17	NT37	Wellfield Burn	NZ325721	No	No	No
17	NT38	Ditches	NZ287735	?	?	?
17	NT39	Ditches	NZ295726	N/A	N/A	N/A
17	NT40	Ditch	NZ290724	N/A	N/A	N/A
17	NT41	Briardene Burn	NZ305716	Yes	Yes	Yes
17	NT42	Briardene Burn	NZ309725	Yes	Yes	Yes
17	NT43	Briardene Burn	NZ312726	Yes	Yes	Yes
18	NT44	Wallsend Burn	NZ307678	No	No	No
18	NT45	Ditch	NZ303677	N/A	N/A	N/A
18	NT46	Wallsend Burn	NZ301671	No	No	No
19	NT47	Little Waters	NZ235735	No	No	No
19	NT48	Seaton Burn	NZ240735	Poss.	Yes	No
19	NT49	Ditch	NZ254738	No	No	No
19	NT50	Annitsford Pond	NZ266742	No	No	No
19	NT51	Sacred Heart	NZ249724	No	Yes	No
19	NT52	Seaton Burn	NZ259735	No	No	No
20	NT53	Marden Quarry	NZ355715	No	No	No

DISCUSSION

The results of the survey in the Borough accurately reflect the larger regional and national situation. Several viable populations were identified, scattered across the Borough. This gives encouragement for future efforts to conserve the species.

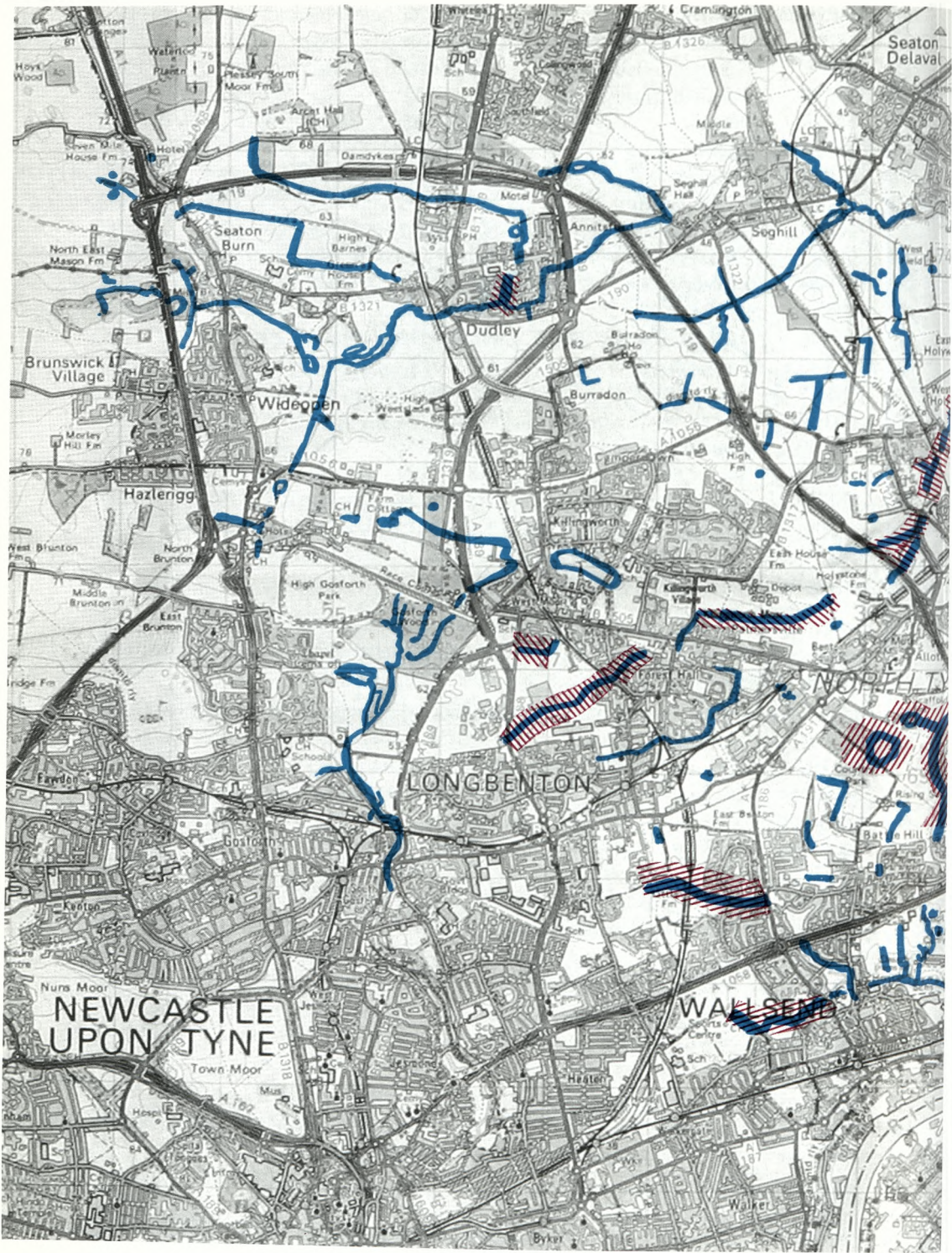
Despite the many constraints encountered throughout the survey some populations were relatively strong, particularly those on parts of the Letch and within the Rising Sun Country Park systems. All were however, extremely vulnerable, very fragmented and in need of enhancement, greater connectivity and positive enforcement of their legal protection. These sites could, in the simplest of terms, be easily enhanced and safeguarded with little capital or expenditure. Additionally, other sites could be improved by restoration of the existing watercourse's riparian structure. Similarly, the creation of further wetlands allowing possible water vole re-colonisation and expansion would be of benefit. Advice and enforcement would deal with some of the more 'tricky' situations such as rat problems and fly tipping.

Some sites, like sections of the Seaton Burn, the Seaton Burn Pools and parts of the Briardene Burn were eminently suited to water voles, but signs of occupation were largely absent. The species had been recorded as being present in the recent past in all these locations, but only the Briardene Burn had a respectable presence.

Without nearby colonies to restock these lost areas and in the continued presence of North American mink with deteriorating habitat qualities, the prospects look bleak for re-colonisation in some parts of the Borough without active intervention.

The presence of otter in the Borough however, is a real bonus and one that can play a vital role in any water vole recovery programme, but only where otter are not restrained by limiting factors such as low prey populations, poor habitat and unsympathetic development. It is also unlikely, because of location and geography, that otter will reach everywhere so otter recovery alone cannot be relied upon to assist the water vole.

Figure 1



Waterways surveyed



Areas of water vole occupancy

Research is now indicating the impact that returning otter populations have on mink presence. It is hoped that, with continued support for the conservation of the otter and its habitats, in parts of the above locations the prospects for the water vole may improve.

With water vole populations at such a perilously low level, it is essential for the Borough, its landowners, tenants and land managers to take active steps not only to safeguard these populations and maintain their continued presence; but actively to promote their enhancement in line with government policy on biodiversity. It is imperative to maintain a reservoir of the species to facilitate successful dispersion where possible and retain the possibility of expansion through natural re-colonisation or reintroduction.

Active habitat management would, in many cases, go a long way to ensuring some of these objectives. Inclusion of the species' requirements in strategic plans and other documents will ensure that the widest possible audience becomes aware of the species, its location in the Borough and its needs.

One of the biggest threats to the remaining water vole populations in the Borough comes from continued pressure for development land. If development is deemed necessary and satisfies the planning need then strict planning controls should be observed where water vole populations exist and are under threat. Developers and planners should seek to enhance situations and prevent loss of any further habitat, striving to increase and enhance opportunities for survival and expansion of the species, where appropriate. Attention to ensuring sufficient aftercare and management is required from the initial planning stage.

All departments involved in development and planning should be made aware of this situation and their obligations under present legislation and planning guidelines. With ready access to the attached database and consultation with the Borough ecologist and other relevant authorities such as English Nature and Northumberland Wildlife Trust, many damaging situations can be avoided.

New criteria for the selection of Sites of Nature Conservation Importance (SNCI) developed by Northumberland Wildlife Trust will now also give some level of protection as well as notification to potential developers and planners through the designation. All sites with water vole presence or unconfirmed absence from previously recorded positive locations from the previous five years are now automatically given this designation, including those identified in this survey.

Twenty (37.74%) of the chosen fifty-three survey sites were not surveyed for various reasons:

The majority were largely unsuitable due to drainage and other land works, resulting in dry or overtly deep ditches.

Inappropriate management of other ditches had resulted in a range of associated problems. Continuous dredging over the years has left many ditches below the water table, too deep and steep sided with increasing silt loads.

Many showed the effects of eutrophication from agricultural practices whilst others were merely convenient waste disposal receptors, where fly tipping was evident in many locations. Some had discharge points situated along them from field and land drains or highways. Water quality was thus highly suspect in many streams and ditches in the Borough and may also have been a limiting factor in the distribution of the remaining water vole populations.

The presence of high brown rat populations encountered during the survey was almost entirely associated with human activities. The most prominent of these was feeding

waterfowl; this ranged from bags of bread and kitchen waste in localised spots to supplementary feeding to attract birds. These activities could be considered detrimental in certain circumstances. Apart from encouraging a public health hazard they encourage birds to congregate in excessive numbers compounding the situation as rats are also drawn to their waste. It also increases the likelihood of predation and habitat degradation as the species overly exploit the situation.

Feeding birds brings pleasure to many members of the public but if the health hazards are ignored and control not properly enforced, rats are attracted and, where present, out compete the water vole. The problem was especially notable at Swallow Pond, Richardson Dees Park and St Mary's. It is unlikely that any real benefit to wildlife populations occurred at these locations from this practice. Feeding creates an unnatural, 'honey pot', dependence in bird populations, e.g. wild swan populations are now considered to be kept at an artificial level due to the extent of public feeding. This is leading to an increasing number of conflicts between different user groups. It is a difficult equation to solve amicably, but increased awareness of the effects of rats might be helpful.

Likewise the practice of fly tipping of domestic, commercial and garden waste in places likely to attract rats was prejudicing some water vole colonies and possibly preventing voles from exploiting other watercourses. The combined results of complaints from the public and the resultant pest control exercises can spell disaster for water vole colonies as they are often mistaken for rats.

The main objective of this report was to ascertain the whereabouts of any water vole populations in the Borough. Although more sites proved negative, those sites that did provide positive evidence varied greatly in quality. All had a common thread of vulnerability, isolation and fragmentation.

The second main objective of this report was to highlight the plight of this important BAP priority species to all parties that may affect their future status in the Borough. It also shows the simple and practical remedies that development and planning authorities can provide to encourage and assist in safeguarding the future of this species. The local authority could lead the way to ensure all future generations do not have to resort to library editions of *Wind in the Willows* to read of the adventures of 'Ratty' on his riverbank.

It is clear that the present water vole population in the Borough is very low and threatened. As a UK BAP priority species there is an urgent need for steps to be taken to improve its situation. Every effort must now be made by all parties implicated in the species' fate to accept their responsibility for attempting to restore water vole populations and the habitats they enjoy. Should this not be attempted, the species will, in all probability, be extinct in the Borough by 2010 or sooner.

A summary of the current status and actions needed to maintain the species' presence in the Borough are outlined below:

Water voles were recorded at thirteen localities in the Borough in seven colonies.

Active colonies need to be monitored annually.

The direct threats facing the colonies were development, unsympathetic land management, drainage, poor water quality, predation by mink, cats and dogs, and competition from brown rats.

This has left the colonies fragmented, isolated and vulnerable to extinction.

Their situation can be described as extremely vulnerable.

Practical steps to assist these populations are largely of minimal intervention with management of existing vegetation types paramount and arrested succession and management of woody riparian vegetation.

Habitat recreation and habitat enhancements should be explored with every opportunity that arises in the Borough from new developments. The implementation of sustainable drainage methods, the use of agri-environment schemes and seeking heritage or other grants for habitat improvement would all be valuable in an attempt to stem the decline of colonies and to increase their connectivity.

Recognition and inclusion into existing and new management plans of identified water vole sites, for example Swallow Pond.

The recognition by the relevant departments and organisations of the species' requirements and plight could be included in existing work programmes.

This can lead to a plan of recovery and management formulated and put into action by these departments and organisations.

Some situations may encourage voluntary community led initiatives to implement habitat improvements.

CONCLUSIONS

The water vole was found at only a handful of locations across the Borough during the course of this survey. The fragmented nature of these populations and the relatively poor condition of most of the occupied habitats indicate that prospects for their survival are, at best, precarious across the Borough. This is displayed by the map in Figure 1. However, on a more positive note breeding was recorded at each occupied site and the populations appeared to be reasonably fecund in their present form.

These populations are extremely important in both a regional and national context. Indeed with such a nationally recognised decline, any population can be described as important. This is particularly so, in relation to the extent of the decline in northern England.

Their importance as a reservoir for future expansion should not be underestimated for if their chief natural predator, the North American mink, continues to decline there may be a possibility for either reintroduction or natural re-colonisation of former areas. The North Tyneside populations represent perhaps the only locations from which populations might realistically expand south of the river Tweed and north of the river Tyne. It is therefore considered that both nationally and regionally the populations are of extreme importance in preserving a reservoir of water voles in North East England.

That these populations have survived is a credit to the species' tenacity in the face of decades of urban expansion and relatively unhindered development, the result of which is a species teetering on the verge of extinction. If these populations are not to be lost, it is these same forces, planning and development, which must act to safeguard the future of these remaining colonies. This paper is offered as a start to a recovery programme for all partners to endorse if we are not to lose forever the water vole from the burns and water-courses of North Tyneside.

ACKNOWLEDGEMENTS

Northumberland Wildlife Trust would like to thank all those involved in producing this valuable survey. We would especially like to thank Proctor and Gamble and North Tyneside Council for sponsoring the survey and providing some valuable assistance throughout the project. We would also like to thank the many individual landowners for co-operating with the survey.

**SOME NORTHUMBERLAND BARKLICE (INSECTA: PSOCOPTERA)
OBSERVATIONS**

B Saville

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INTRODUCTION

During a stay at Haggerston Castle Caravan Park (NU0443) near Berwick-upon-Tweed from 27-30 July 2004 I spent some time investigating the barklice species which occurred in the area.

The Psocoptera is a small order of insects of which about a hundred species have been recorded in Britain. Barklice is the common name for the psocid species that have been recorded out-of-doors (*ca.* sixty species). Although little studied by entomologists, barklice are very common and virtually every bush and tree will be home to some species. Shaking tree branches over a beating tray and brushing the insects off tree trunks are the best ways of finding most species.

Since the stay was essentially a family holiday searches were generally confined to the



Table 1 Summary of the sampling areas where each of the twenty-six species recorded were found.

Species	Deciduous branches	Coniferous branches	Deciduous trunks
<i>Amphigerontia bifaciata</i>	+	+	
<i>Amphigerontia contaminata</i>		+	+
<i>Cerobasis guestfalica</i>	+	+	+
<i>Ectopsocus briggsi</i>	+	+	
<i>Ectopsocus petersi</i>	+	+	+
<i>Elipsocus abdominalis</i>			+
<i>Elipsocus hyalinus</i>		+	
<i>Elipsocus moebiusi</i>	+		
<i>Elipsocus pumilis</i>	+	+	+
<i>Enderleinella obsoleta</i>		+	
<i>Epicaecilius pilipennis</i>		+	+
<i>Graphopsocus cruciatus</i>	+		
<i>Lachesilla pedicularia</i>		+	+
<i>Loensia variegata</i>			+
<i>Mesopsocus immunis</i>		+	
<i>Metylophorus nebulosus</i>	+	+	
<i>Peripsocus didymus</i>		+	
<i>Peripsocus phaeopterus</i>	+	+	
<i>Peripsocus subfasciatus</i>	+	+	+
<i>Philotarsus parviceps</i>	+	+	+
<i>Philotarsus picicornis</i>	+	+	
<i>Psococerastis gibbosa</i>	+	+	
<i>Reuterella helvimacula</i>			+
<i>Stenopsocus immaculatus s.l.</i>	+		
<i>Valenzuela burmeisteri</i>		+	
<i>Valenzuela flavidus</i>	+		

vicinity of car parks at local attractions, trees and bushes at roadside stopping places and within the grounds of the caravan park itself. Locations visited included Holy Island, Bamburgh Castle, Cheswick, Lowick and Etal.

Notes on selected species

Two of the species were of particular interest.

Epicaecilius pilipennis (Lienhard) 1996

Two female specimens of this distinctive, dark species were found on the trunks of beech trees by the side of the main road in the middle of the village of Lowick (NU012397) on 30.vii.2004. A single specimen was also found by shaking the branches of a yew tree in

the nearby churchyard. This species is only known from Madeira and Britain. In Britain it was originally found in the Lothians, Scotland (Saville, 1999) where its occurrence was initially considered to be the result of an isolated introduction. Currently it is known from a few other locations in England - in Sussex (Alexander, 2002), Cumbria (Saville, 2004) and Worcestershire (Saville, *in press*). It has also been recorded at one site in Wales (Whitehead, 2003). It seems likely considering the current low level of Psocoptera recording and the species' known distribution that *E. pilipennis* will prove to be relatively widespread across Britain.

Elipsocus moebiusi (? author of species)

A female specimen was taken from a hawthorn bush in a small car park near to the causeway to Holy Island, Northumberland (NU078427) on 28.vii.2004. This species has only been recorded previously in England at one location in Cumbria (Saville, 2004) and three sites in the Lothians in Scotland (Saville, 2001a, b). As with *E. pilipennis*, it is likely that the currently low number of locations for this species is a result of under-recording.

Further studies

Barklice are a convenient group to study because there are relatively few species and these are generally not too difficult to identify. Identification keys (in English) for most, but not all, species are available in New (1974). Comprehensive keys for all species (in French) are in Lienhard (1998). The group is very under-recorded in Northumberland and Alexander's (2001) studies on the Wallington Estate in 1999 is the only recent work of which I am aware. There is certainly plenty of scope for making further discoveries.

Records

The detailed records of the findings including species names, location, six-figure grid references, species numbers, sampling details and dates have been given to David Noble-Rollin of the North East Environmental Records Centre.

REFERENCES

- ALEXANDER, K N A (2001). The Psocoptera of the Wallington Estate -- a contribution to recording the Northumberland fauna. *Entomologist's Record*, **113**: 231-233.
- ALEXANDER, K N A (2002). *Epicaecilius pilipennis* (Lienhard) (Psocoptera) new to England from West Sussex. *Entomologist's Record*, **114**: 181.
- LIENHARD, C (1998). Psocoptères Euro-Méditerranéens in *Faune de France*, **83**: 1-517.
- NEW, T R (1974). *Handbooks for the Identification of British Insects: Psocoptera*, **1** (7): 1-102.
- SAVILLE, B (1999). The Barklice (Insecta: Psocoptera) of the Lothians (Scotland). *Glasgow Naturalist*, **23** (4): 50-54.
- SAVILLE, B (2001a). New British Barklice (Psocoptera) since 1974. *Entomologist's Monthly Magazine*, **137**: 79-83.
- SAVILLE, B (2001b). Additional notes on the Barklice (Insecta: Psocoptera) of the Lothians (Scotland). *Glasgow Naturalist*, **23** (6): 51-52.
- SAVILLE, B (2004). Cumbrian Barklice (Psocoptera). *The Carlisle Naturalist*, **12** (1): 17-20.
- SAVILLE, B (in press). Some Worcestershire barklice (Insecta: Psocoptera) observations. *Worcestershire Record*, **17**.

WHITEHEAD, P F (2003). *Epicaecilius pilipennis* (Lienhard, 1966) (Psocoptera, Caeciliusidae) new to Wales. *Entomologist's monthly Magazine*, **139**: 237-239.

**FLUORITE-BEARING MARBLE FROM BARRASFORD QUARRY,
NORTHUMBERLAND**

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SUMMARY

Fluorite-rich marble occurs within a large xenolithic raft in the Whin Sill of Barrasford Quarry, Northumberland. Fluorite has not hitherto been reported from the Whin Sill, or any of its contact rocks. Its occurrence in this unusual marble is likely to be the result of very localised fluorine metasomatism within the thermal aureole of the Whin Sill.

GEOLOGY OF THE WHIN SILL

The Whin Sill of North East England is generally regarded as the original or 'type' sill of geological science and as a result is the subject of a voluminous literature. Notable contributions include papers by Hutton (1832), Sedgwick (1827), Tate (1867; 1870), Topley and Lebour (1877), Teall (1884*a,b*), Holmes and Harwood (1928), Tomkeieff (1929), Wager (1929*a,b*), Smythe (1930), Dunham (1990) and Randall (1995). From this work it is clear that the Whin Sill cannot be regarded as a single, or simple, concordant intrusion, but rather as a complex assemblage of closely related transgressive sills and associated dykes, best described as the Great Whin Sill Complex (Johnson and Dunham, 2001). Excellent summaries of the essential features of the Whin Sill suite of intrusions, and comprehensive lists of the most significant literature references, are to be found in Dunham (1970), Randall (1995), Dunham (1990) and Johnson and Dunham (2001). From these literature sources the following very brief general observations may be made.

A remarkable feature of the Whin Sill is the striking uniformity in mineralogy, petrography and geochemistry across its extensive outcrop, though minor variations in texture and composition do occur locally. The dominant lithology is a fine- to medium-grained, dark grey quartz-dolerite composed essentially of orthopyroxene, clinopyroxene and plagioclase with scattered titano-magnetite, a little needle-like apatite, and smaller amounts of interstitial alkali-feldspar and micrographic intergrowths of quartz and feldspar. Hornblende, biotite and chlorite are common secondary minerals. Minor lithological variants include very fine-grained, tachylitic varieties close to the contacts as well as very coarse-grained dolerite pegmatites and fine-grained acid aplitic rocks forming veins within the thicker sills (Dunham, 1990; Randall, 1995).

The clear geological evidence for emplacement of the Whin Sill intrusions during the late Carboniferous (Stephanian) (e.g. Holmes and Harwood, 1928; Dunham, 1932) have been confirmed by K-Ar isotopic ages of 295 ± 6 Ma (Fitch and Miller, 1967).

Joints within the sill at numerous localities commonly exhibit coatings of calcite, quartz, chlorite and a variety of zeolite and zeolite-type minerals, including pectolite, analcite, prehnite, apophyllite, chabazite and stilbite, formed as a result of hydrothermal activity

during the final cooling stages of the intrusion (Holmes and Harwood, 1928; Tomkeieff, 1929; Wager, 1929; Smythe, 1930; Fitch and Miller, 1967; Young *et al*, 1991).

METAMORPHIC EFFECTS OF THE WHIN SILL

Much of the published literature on the Whin Sill is concerned with aspects of the petrography, chemistry, age or mode of intrusion.

Although descriptions of the thermal effects of the intrusion on vitrinite reflectance and coal rank across the sill's outcrop have been published (e.g. Trotter and Hollingworth, 1928; Edwards and Tomlinson, 1957; National Coal Board, 1965; Jones and Creaney, 1977; Creaney, 1980; Jones *et al*, 1995), the contact metamorphic effects on other country rocks have attracted surprisingly little research interest. Hutchings (1898) described metamorphic rocks in Teesdale, and more recently Robinson (1970) outlined soda-metasomatism and metamorphism in the Cowgreen area, also in Teesdale. Randall (1959a) described thermal metamorphism in the Oxford Limestone and adjoining sedimentary rocks at Barrasford Quarry, Northumberland, and further descriptions of the rocks then exposed at this site were given by Frost and Holliday (1980). In a brief review of Whin Sill metamorphism, Randall (1995) noted that andalusite, anthophyllite, biotite, cordierite, garnet, pyroxene, vesuvianite (idocrase) and wollastonite have all been recorded from contact rocks.

THE WHIN SILL AND ITS CONTACT ROCKS AT BARRASFORD QUARRY

Barrasford Quarry [NY916 748] is a large quarry in south central Northumberland at which Whin Sill dolerite is worked for the production of roadstone and aggregate.

The Whin Sill at Barrasford is approximately 30m thick and is intruded into the Oxford Limestone (Dinantian). The often complex relationships of the sill with its country rocks in this area are depicted on British Geological Survey 1:10 560 scale sheets NY97NW and NY97SW. Descriptions of the geology of the Barrasford area, including details of the Whin Sill petrography, have been given by Weyman (1910); Smythe (1930); Randall (1959) and Frost and Holliday (1980).

The Whin Sill here mainly comprises fine- to medium-grained quartz-dolerite typical of much of the sill's outcrop. Randall (1959a; 1989) has described pink to red acid aplitic veins and pockets of coarse-grained pegmatitic dolerite associated with amygdales. Amygdales are a common feature of the sill in the Barrasford area. Those seen here today are filled, or partially filled, mainly with quartz and/or calcite, though Randall (1959a) has recorded datolite and pectolite, the latter in part replaced by stevensite (Randall, 1959b), from amygdales found in Barrasford Quarry.

A feature of the Whin Sill in this part of Northumberland is the presence within it of large xenolithic 'rafts', often several metres across, of the adjoining Carboniferous country rock (Randall, 1959a; Frost and Holliday, 1980). Rafts at Barrasford comprise mainly limestone and shale.

The Oxford Limestone in this part of Northumberland is typically a grey bioclastic limestone, up to about 6m thick, commonly rich in corals and brachiopods (Frost and Holliday, 1980). It is usually overlain by mudstones. Adjacent to the Whin Sill contact in the Barrasford area, much of the limestone has been altered into saccharoidal marble, in places with abundant granular grossularite and euhedral, prismatic vesuvianite (idocrase),

together with aggregates of chlorite, and quartz (Smythe, 1930; Randall, 1959a; Frost and Holliday, 1980). Despite this alteration the outlines of fossils are still commonly recognisable. Very small fibrous crystals within one sample were tentatively identified as fibrolitic sillimanite, though this has not been confirmed. Frost and Holliday (*op cit*) also describe a ugrandite-chlorite-quartz-vesuvianite-micoclone-plagioclase marble from a xenolithic raft of limestone within the sill. The mudstones associated with the Oxford Limestone have been shown by Frost and Holliday (1980) to comprise intergrowths of smectite with albite-oligoclase with accessory leucoxene. They have also described fine-grained rocks consisting of quartz and chlorite with 'spots' of feldspar and stellate aggregates of white mica.

FLUORITE-BEARING MARBLE

During 2000, several large blocks over 1.0m across, derived from a large xenolithic raft then being worked in the north face of the quarry, were conspicuous for their very distinctive bright lilac-purple colour, due to an abundance of disseminated fluorite. The raft from which the fluorite-bearing rock was derived was approximately 20m across, 4m wide and 10m high. It comprised mainly marble and a small amount of hornfelsed mudstone in which the bedding was almost vertical and orientated N-S. Unfortunately, by the time the presence of fluorite had been recognised, quarrying had destroyed the remaining portions of the fluorite-bearing rock and it was not possible to record or study the field relationships in detail. However, sufficient examples of this highly distinctive and unusual lithology were recovered to allow the following description. Quarrying of the face a few metres north of the site of the fluorite-bearing marble subsequently revealed a further striking xenolithic raft composed of hornfelsed mudstone several metres across, though without any sign of mineralisation.

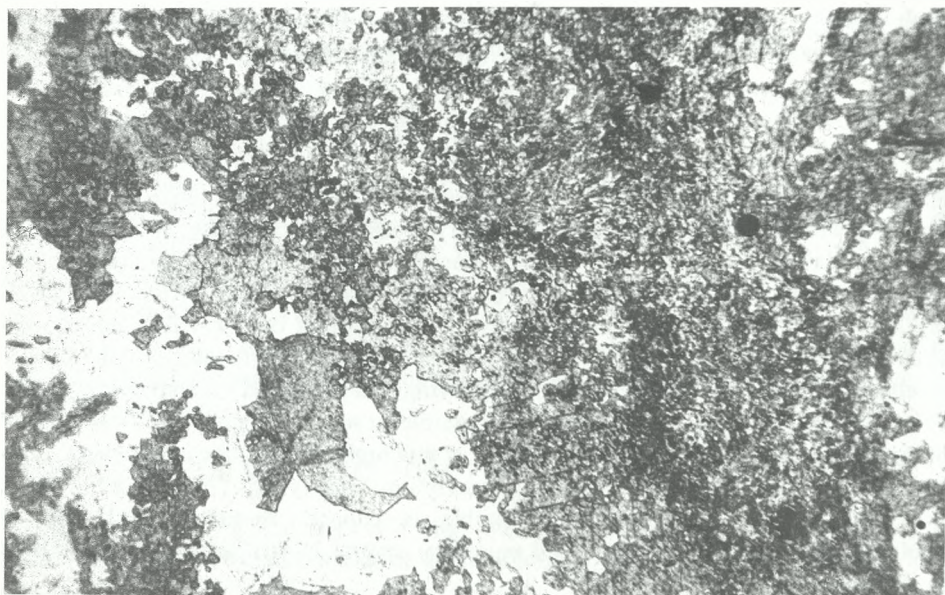
In hand specimen the fluorite-bearing marble is typically a compact very pale purplish grey, to lilac-purple, medium- to coarse-grained crystalline rock. It has numerous rather irregular, discontinuous streaks and patches of moderate to deep purple or vivid lilac-purple colour. Rather irregular cavities, mainly up to 15mm across, are locally present. These are typically lined with white to colourless rhombic crystals of calcite, up to about 1.0mm across, intergrown in places by similar sized, colourless quartz crystals consisting of short prisms with pyramidal terminations. A few rather larger (up to 20mm) crystals of calcite comprising combinations of scalenohedra and rhombohedral were found in some cavities. Very small (mainly between 0.2 and 0.5mm) medium to deep purple, euhedral fluorite crystals locally project into some cavities. The crystals appear to be mainly simple cubes with rather rough or irregular faces, though a few exhibit clear faces which form rhombic dodecahedra {110} and octahedra {111}. Rather patchy colour zoning in shades of deep purple occurs in some crystals. The fluorite exhibits no fluorescence under either long or short wave ultra violet radiation. The minerals in some cavities are coated with small (< 0.25mm) rounded globules of a hard, brittle, black hydrocarbon. In some specimens this black hydrocarbon fills almost the entire cavity. The composition of this hydrocarbon has not, so far, been determined.

In thin section (E71601 and E71602*) the rock is seen to be a medium- to coarse-grained aggregate of carbonate and quartz (Figure 1). Carbonate forms anhedral to irregular crystals which range up to 1.7mm in size. The ready effervescence of the rock in cold 10%

*BGS Thin Section Number in the English Sliced Rock Collection.

Figure 1 Thin section of typical fluorite-bearing marble from Barrasford Quarry.

The rock is a medium to coarse-grained aggregate of carbonate with some quartz. Fluorite is scattered abundantly throughout the rock and is especially conspicuous as black isotropic grains in the view under crossed polars. Field of view approximately 5mm. (E71601).



1a Plane polarised light.



1b Crossed polars.

hydrochloric acid suggests that calcite is the dominant, or perhaps only, carbonate present.

Quartz is strained and, in general, forms anhedral to irregular crystals, though crystal faces are seen on some anhedral to subhedral grains. The quartz appears to be intergranular to carbonate and may form slightly larger sieve-textured/poikiloblastic crystals. Fluorite occurs as grains up to 0.75 mm across. It is colourless to very pale purple in colour (under plain polarised light) and is characteristically isotropic with a high relief. It occurs in sieve-textured patches which contain small rounded inclusions of both quartz and carbonate. Rare, subhedral fluorite crystals possessing well-developed crystal faces were noted locally, typically associated with irregular patches of coarser grained quartz. Dendritic or branching fluorite and quartz intergrowths are present locally.

Traces of fluorite have previously been observed at two other locations within the quarry. A few purple octahedra up to 4 mm across were collected from altered limestone adjacent to a 0.5 m wide lobe of dolerite at the base of the sill [NY9200 7486]. Pale green cubo-octahedra up to 10 mm across, accompanied by quartz and calcite, were also seen at the top contact of the sill [NY9200 7515]. In both instances only a few fragments were collected and it was not possible to record details of the occurrences *in situ*.

DISCUSSION

Although it is extremely disappointing that this rock could not be examined *in situ*, the samples obtained are significant and invite comment.

Fluorite has hitherto not been recorded as a component of the Whin Sill or any of the metamorphic rocks within its thermal aureole. Neither has it been described as a member of the suite of late stage hydrothermal minerals found within amygdaloids or coating joints within the sill. We have been unable to trace any analysis of the Whin Sill which indicates the presence of fluorine. The only known record of a fluorine-bearing mineral associated with the Whin Sill is that of fluorapophyllite found in association with analcite and chabazite within late stage joint coatings at Cambokeels fluorspar mine, Weardale, Co Durham (Young *et al.*, 1991). Although the fluorapophyllite at this locality clearly appears to be part of the distinctive suite of late-stage joint filling minerals formed during the final cooling of the Whin Sill, its occurrence so close to major fluorite-bearing veins within the central zone of the Northern Pennine orefield may be significant. Indeed, Young *et al* comment on the apparent overlap of estimated dates for the emplacement of the Whin Sill at 295 ± 6 Ma (Fitch and Miller, 1967) and the onset on northern Pennine mineralisation at 284 ± 40 Ma (Dunham *et al.*, 1968).

Barrasford Quarry lies several kilometres north of the northernmost margins of the Northern Pennine orefield, and at least twenty-four kilometres north of the nearest known fluorite mineralisation. It thus seems extremely unlikely that northern Pennine mineralising fluids could have had any role in providing the fluorine necessary for the small concentration of fluorite described here from Barrasford Quarry.

It must therefore be concluded that thermal metamorphism of limestone in the Barrasford area may have been accompanied, very locally, by metasomatism involving rare concentrations of fluorine-rich fluids. It is perhaps worth pointing out that the fluorite, reported here, only came to the authors' attention because of its striking purple colour. Less strongly coloured fluorite would almost certainly have been overlooked. In view of the discovery of this mineral in this environment at Barrasford, and in view of the comparatively lit-

the attention so far paid to the metamorphic rocks within the Whin Sill's thermal aureole, a careful search should be made for the presence of fluorite in similar situations elsewhere across the extensive outcrop of the Whin Sill.

ACKNOWLEDGEMENTS

Tarmac Northern Ltd are thanked for allowing access to Barrasford Quarry.

It should be noted that Barrasford Quarry is an operational site and therefore a dangerous place. Any casual and unauthorised visits are prohibited and may result in prosecution. Prior to any visit written permission must be sought from the operating company, currently Tarmac Northern Ltd.

B Young and E R Phillips publish with the approval of the Executive Director of the British Geological Survey (N.E.R.C.).

REFERENCES

- CREANEY, S (1980) Petrographic texture and vitrinite reflectance variation on the Alston Block, north-east England. *Proceedings of the Yorkshire Geological Society*, **42**: 553-580.
- DUNHAM, A C (1970). Whin Sills and Dykes. In: Johnson, G A L and Hickling, G (eds) *Geology of Durham County. Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, **41**: 92-100.
- DUNHAM, K C (1932). Quartz-dolerite pebbles (Whin Sill) in the Upper Brockram. *Geological Magazine*, **69**: 425.
- DUNHAM, K C (1990). Geology of the Northern Pennine Orefield, Volume 1 Tyne to Stainmore (2nd Edition) *Economic Memoir of the British Geological Survey*.
- DUNHAM, K C FITCH, F J, INESON, P R, MILLER, J A and MITCHELL, J G (1968). The geochronological significance of argon-40/argon-39 age determinations on white whin from the northern Pennine orefield. *Proceedings of the Royal Society, London*. **307**: 251-266.
- EDWARDS, A H and TOMLINSON, T S (1957). A survey of low volatile coals in north-east and south-east Durham *Transactions of the Institute of Mining Engineers, London*, **117**: 49-78.
- FITCH, F J and MILLER, J A (1967). The age of the Whin Sill. *Geological Journal*. **5**: 233-250.
- FROST, D V and HOLLIDAY, D W (1980). Geology of the country around Bellingham. *Memoir of the Geological Survey of Great Britain*.
- HOLMES, A and HARWOOD, H F (1928). The age and composition of the Whin Sill and the related dykes of the north of England. *Mineralogical Magazine*, **21**: 493-552.
- HUTCHINGS, W M (1898). The contact-rocks of the Great Whin Sill. *Geological Magazine*, **35**: 69-82 and 123-131.
- HUTTON, W (1832). On the stratiform basalt associated with the Carboniferous formation of the north of England. *Transactions of the Natural History Society of Durham and Newcastle upon Tyne*, **2**: 187-214.
- JOHNSON, G A L and DUNHAM, K C (2001). Emplacement of the Great Whin Sill Dolerite Complex and the Little Whin Sill in relation to the structure of Northern England. *Proceedings of the Yorkshire Geological Society*, **53**: 177-86.

- JONES, J M and CREANEY, S (1977). Optical character of thermally metamorphosed coals of northern England. *Journal of Microscopy*, 109: 105-118.
- JONES, J M, MAGRAW, D and O'MARA, P T (1995). Carboniferous westphalian Coal Measures. In Johnson, G A L (editor) *Robson's Geology of North East England. Transactions of the Natural History Society of Northumbria*, 56: 267-282..
- NATIONAL COAL BOARD (1965). Scientific Department, Coal Survey Seam Maps.
- RANDALL, B A O (1959a). Intrusive phenomena of the Whin Sill, east of the North Tyne. *Geological Magazine*, 96: 385-392.
- RANDALL, B A O (1959b). Stevensite from the Whin Sill in the region of the North Tyne. *Mineralogical Magazine*, 3: 218-225.
- RANDALL, B A O (1989). Dolerite-pegmatites from the Whin Sill near Barrasford, Northumberland. *Proceedings of the Yorkshire Geological Society*, 47: 249-265.
- RANDALL, B A O (1995). Carboniferous igneous rocks. In: Johnson, G A L (editor) *Robson's Geology of North East England. Trans. Nat. Hist. Soc. Northumb*, 56: 317-327.
- ROBINSON, D (1970). Metamorphic rocks. In: Johnson, G A L and Hickling, G (eds) *Geology of Durham. County. Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 41: 119-123.
- SEDGWICK, A (1827). On the association of trap rocks with the Mountain Limestone formation in high Teesdale. *Transactions of the Cambridge Philosophical Society*, 2: 139-196.
- SMYTHE, J A (1930). A chemical study of the Whin Sill. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 7: 16-150.
- TATE, G (1867). The geology of the district traversed by the Roman Wall. Appendix to Bruce, J C *The Roman Wall*, 3rd edition. London: Longmans.
- TATE, G (1870). On the basaltic rocks of Northumberland. *Proceedings of the Berwickshire Naturalists Club*, 6: 197-217.
- TEALL, J J H (1884a). Petrological notes on some north of England dykes. *Quarterly Journal of the Geological Society of London*, 40: 209-247.
- TEALL, J J H (1884b). On the chemical and microscopical characters of the Whin Sill. *Quarterly Journal of the Geological Society of London*, 40: 640-657.
- TOMKEIEFF, S I (1929). A contribution to the petrology of the Whin Sill. *Mineralogical Magazine*, 22: 100-120.
- TOPLEY, W. and LEBOUR, G A (1877). On the intrusive character of the Whin Sill of Northumberland. *Quarterly Journal of the Geological Society of London*, 33: 406-425.
- TROTTER, F M and HOLLINGWORTH, S E (1928). The Alston Block. *Geological Magazine*, 65: 433-448.
- WAGER, L R (1929a). Metasomatism in the Whin Sill of the north of England. Part I. Metasomatism by lead vein solutions. *Geological Magazine*, 66: 97-100.
- WAGER, L R (1929b). Metasomatism in the Whin Sill of the north of England. Part II Hydrothermal alteration by juvinile solutions. *Geological Magazine*, 66: 221-228.
- WEYMAN, G (1910). On the section of the Great Whin Sill near Gunnerton. *Proceedings of the University of Durham Philosophical Society*, 3: 201-205.
- YOUNG, B, DYER, A HUBBARD, N. and STARKEY, R E (1991). Apophyllite and other zeolite-type minerals from the Whin Sill of the northern Pennines. *Mineralogical Magazine*, 55: 203-207.

A LARGE GLACIAL ERRATIC BOULDER OF GYPSUM FROM THE DURHAM COAST

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The sea cliffs of the Durham coast provide very fine sections through the complex sequence of Quaternary deposits of eastern County Durham. Important summaries of the Quaternary geology include those by Smith and Francis (1967), Francis (1970), Lunn (1995) and Bridgland *et al.* (1999), all of which provide extensive lists of the most important publications on this topic.

Shippersea Bay [NZ4440 4530], near Easington Colliery, is well known for fine sections through the Easington Raised Beach, a localised deposit of marine sands and gravels which rest on a platform of Magnesian Limestone at about 30m AOD, currently assigned to Oxygen Isotopic Stage 7 (*ca* 200 000 BP) (Bowen *et al.*, 1991) of the Quaternary. Immediately north of Beacon Point [NZ4435 4545], which bounds the northern end of Shippersea Bay, the cliffs expose a tripartite succession of Pleistocene deposits resting upon Magnesian Limestone. The following section in the cliffs at a locality approximately 18m north of Beacon Point, summarised from a record by Smith and Francis (1967, p207), may be regarded as typical of this section of the coast:

Red-brown stony clay, poorly exposed

(the Durham Upper Boulder Clay of Smith and Francis, 1967)

.....approximately 3.0m

Brown sand and gravel

(the Middle Sands of Smith and Francis, 1967)

.....approximately 6.7m

Dark brown and grey stony clay,

including a 0.6m thick bed of silty sand

(the Durham Lower Boulder Clay of Smith and Francis, 1967)

.....approximately 6.7m

Although inaccessible *in situ* frequent cliff falls bring substantial amounts of these Quaternary deposits to beach level. Much of the material appears to be derived from the lowest unit of boulder clay.

Pebbles, cobbles and boulders within the clays include, in addition to locally derived Magnesian Limestone lithologies, an abundance of Carboniferous limestones and sandstones, lavas and volcanic sediments from the Lake District, granites and greywacke sandstones from the Southern Uplands, blocks of Whin Sill dolerite and some Cheviot volcanic rocks. This erratic assemblage is clearly consistent with deposition from ice moving eastwards from the Lake District and Pennines, and southwards along the coast from the Cheviots and Scottish Borders.

Erosion of a large cliff fall early in 1999, immediately N of Beacon point, revealed, in

addition to examples of these common erratic types, a large boulder of gypsum (Figure 1). When first liberated from the till this boulder was 1.3m across. It comprised white to pale grey, coarsely laminated alabastrine gypsum, in which scattered colourless porphyroblasts locally formed crudely stellate aggregates up to 20mm across. In places concentrations of gypsum porphyroblasts appeared to form discrete laminae up to a few centimetres thick.

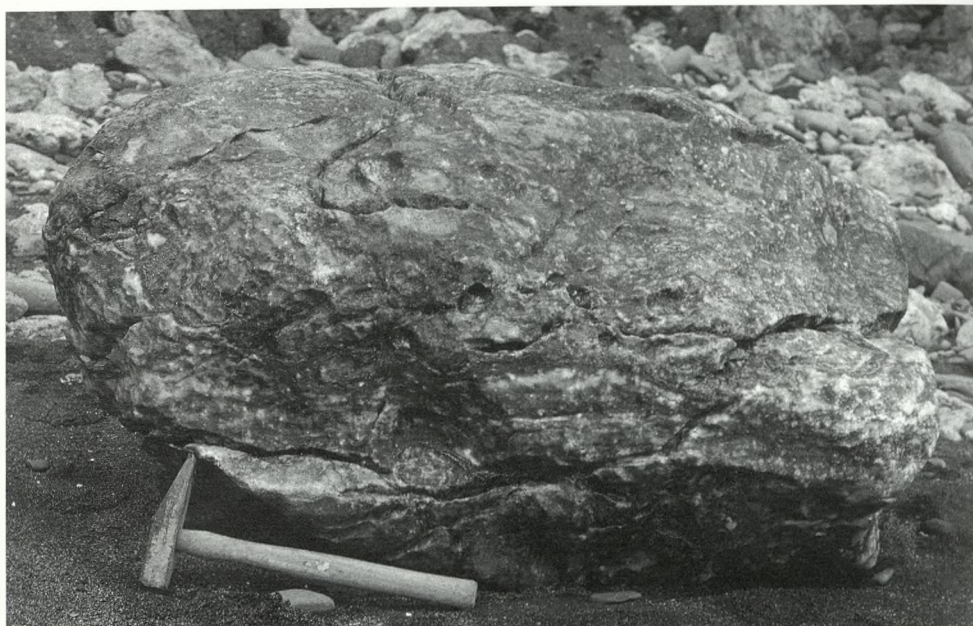


Figure 1 The gypsum boulder, photographed in 1999 shortly after its liberation from boulder clay.

Photograph: B Young

Once exposed to marine erosion within the intertidal zone, the boulder suffered rapid dissolution. By late 2000 the boulder had been reduced to approximately half its original size. Subsequent cliff falls and shifting of beach material have since concealed the remnants of the boulder.

Gypsum is an unusual lithology to encounter as a glacial erratic. Its survival within the till no doubt indicates that the surrounding clays formed an effective seal, protecting it from significant dissolution. The ready solubility of gypsum was clearly demonstrated by its rapid dissolution in the months after it was exposed on the beach.

The origin of the gypsum boulder is intriguing. Although the boulder contained no diagnostic features sufficient to indicate its stratigraphical affinities with certainty, its lamination and pattern of porphyroblasts are reminiscent of the Permian Hartlepool Anhydrite, the nearest evaporite bed known to crop out in the likely source area (D B Smith, *personal communication*). It must therefore be considered likely that the gypsum boulder was derived from an outcrop of the Hartlepool Anhydrite, where altered to gypsum by near-surface hydration. It must have been picked up by the ice sheet from close to a natural outcrop. The nearest outcrops of the Hartlepool Anhydrite lie roughly 20km

south of Easington in the Hartlepool or Teeside areas, or several kilometres immediately to the east in the area now occupied by the North Sea. The generally accepted pattern of ice flow which produced the boulder clays of the Durham coast appear to rule out a southerly source. It thus seems probable that the generally southerly flow of ice along what is now the Durham coast was capable of deriving some erratic material from outcrops that lie seaward of the present coastline.

ACKNOWLEDGEMENTS

Dr Denys Smith is thanked for helpful discussions of the likely stratigraphical affinities of the gypsum boulder. This note is published with the approval of the Director, British Geological survey (N.E.R.C.).

REFERENCES

- BOWEN, D O, SMITH, D B and SYKES, G A (1991). The age of the Easington Raised Beach, County Durham. *Proceedings of the Yorkshire Geological Society*, **48**: 415-420.
- BRIDGLAND, D R, HORTON, B P and INNES, J B (editors) (1999). The Quaternary of North-East England. *Field Guide, Quaternary Research Association, London*.
- FRANCIS, E A (1970). Quaternary. In: Johnson, G A L and Hickling, G (editors), Geology of Durham County. *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, **41**: 134-152.
- LUNN, A G (1995). Quaternary. In: Johnson, G A L (editor), Robson's Geology of North East England. *Transactions of the Natural History Society of Northumbria*, **56**: 297-311.
- SMITH, D B and FRANCIS, E A (1967). Geology of the country between Durham and West Hartlepool. *Memoir of the Geological Survey of Great Britain*.

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NEW RECORDS OF SUPERGENE MINERALS FROM THE NORTHERN PENNINE OREFIELD

B Young¹, E K Hyslop¹, T F Bridges² and J Cooper³.

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SUMMARY

In a recent review Bridges and Young (1998) provided a comprehensive listing of, and brief descriptive comments on, all supergene mineral species then recorded from the Northern Pennine Orefield. For the purposes of this review the authors considered the structural unit known as the Alston Block, which encompasses not only the well known lead-zinc-fluorspar-baryte mineralised areas of the Northern Pennine dales, but also the contiguous Durham Coalfield. Subsequent work has identified several species not hitherto known from the area as well as several species previously reported from only a few localities.

The following brief descriptions will serve to update Bridges and Young's (1998) list:

BEUDANTITE $\text{PbFe}_3^{3+}(\text{AsO}_4)(\text{ON})_6$.

Beudantite has hitherto been recorded from only one Northern Pennine locality, Tynebottom Mine, Garrigill, Cumbria [NY7394 4183] (Dossett (*personal communication* in Bridges and Young, 1998, p9). A second occurrence of the mineral is recorded here from Smallcleugh Mine, Nenthead, Cumbria [NY7877 4298]. Here it has been found as rather powdery, very finely crystalline, bright ochre-yellow masses up to 5mm across (XE 979)* within crusts of crystalline gypsum in heavily oxidised veinstone. The gypsum locally exhibits a strong turquoise-blue colouration due to the presence of finely disseminated, but indeterminate, copper-bearing oxidation products. The specimens were obtained from loose material within an old stope above the Horse Level on Smallcleugh Cross Vein approximately 50m NNW of its intersection with Longcleugh Vein.

CALEDONITE $\text{Cu}_2\text{Pb}_5(\text{SO}_4)_3\text{CO}_3(\text{ON})_6$.

Caledonite has been identified, by X-ray diffraction powder photography (XE 980)* on a single specimen from Closehouse Mine, Lunedale, Middleton-in-Teesdale, Co Durham [NY850 228]. Here it forms tiny acicular, turquoise-blue crystals, up to 0.5mm long, lining a 4mm wide cavity in oxidised baryte-galena veinstone. The only other supergene mineral present in the specimen is cerussite.

Caledonite has not hitherto been recorded from the Pennines, though the mineral has long been well-known from its type locality in the Leadhills-Wanlockhead area (e.g. Heddle, *BGS X-ray number 1901) and the Caldbeck Fells area of Cumbria, where supergene assemblages closely similar to those of the Leadhills area are abundant (e.g. Young, 1987; Cooper and Stanley, 1990). In these and other occurrences, caledonite is commonly closely associated with leadhillite. In describing the occurrence of leadhillite at Closehouse Mine, Young *et al.* (1994) drew attention to the restricted range of chemical conditions necessary for the formation of leadhillite. They postulate that oxidation within the large baryte orebody at Closehouse has allowed the development of chemical micro-environ-

ments more characteristic of the Leadhills and Caldbeck Fells areas than the Pennines. It seems likely that, in the presence of very localised concentrations of oxidising copper minerals, these same conditions have allowed the formation of caledonite, albeit very rarely, at this Northern Pennine locality. No trace of leadhillite was found on the single caledonite specimen and no caledonite is present on any of the handful of known leadhillite specimens from this locality.

ERYTHRITE $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$.

Although well known as a conspicuous member of the supergene assemblage at Tynebottom Mine, Garrigill, and in very small amounts from a handful of other localities, erythrite is a comparatively uncommon mineral in the Northern Pennines.

The mineral has recently been found, in some abundance, within a loose block of mineralised shale breccia within the River Nent, Cumbria [NY785 431] at the foot of the waterfall, near Smallcleugh Mine. This breccia consists of silicified shale clasts cemented by white calcite and quartz, in which occur scattered masses of galena and sphalerite. The erythrite (XE 964)* occurs as very pale rose-pink spherules up to 1.0mm across scattered on fracture surfaces of the breccia. Unfortunately, as the specimen was found as a loose block in the stream, its original provenance cannot be established with certainty. Although some spoil derived from several mines is likely to be present within the stream bed here, much of the mineralised debris appears to be derived from Smallcleugh Mine. Erythrite has not previously been reported from the Smallcleugh workings, though traces of annabergite have been described (Bridges, 1983). Small, post-mining, calcite stalagmites within a shaft on Browngill Vein, at the SW extremity of Smallcleugh Mine locally exhibit a distinctive rose-pink hue reminiscent of erythrite, though it has not been possible to confirm either the presence of this mineral, or any trace of cobalt within this material.

JAROSITE $\text{KFe}_3^{3+}(\text{SO}_4)_2(\text{OH})_6$.

Bridges and Young (1998, p12) suggest that this mineral is likely to be much more widespread within the orefield that might be supposed from the single positive identification reported from Yew Tree Mine, Bollihope, Weardale.

Jarosite has recently been identified, by X-ray powder photography (XE 999)* from Groverake Mine, Rookhope, Weardale, Co Durham [NY 896 442]. Here the mineral has been found as thin, pale yellow earthy crusts on fracture surfaces in dark grey, slightly silicified shale, included in run-of-mine ore from workings in Groverake Vein in the Firestone Level.

PYROLUSITE MnO_2 .

Bridges and Young (1998, p6) suggest that this mineral may prove to be more widespread within the orefield than might be supposed from the very few reported occurrences in the Dun Fell area of the Pennine escarpment.

X-ray powder photography, of a black, botryoidal crust on ferruginous oxidised veinstone from the old dumps at Grasshill Mine, Teesdale [NY 819 355] reveals the mineral to be pyrolusite (XE 945)*.

*BGS X-ray number 1901) and the Caldbeck Fells area of Cumbria, where supergene

assemblages closely similar to those of the Leadhills area are abundant (e.g. Young, 1987; Cooper and Stanley, 1990). In these and other occurrences, caledonite is commonly closely associated with leadhillite. In describing the occurrence of leadhillite at Closehouse Mine, Young *et al.* (1994) drew attention to the restricted range of chemical conditions necessary for the formation of leadhillite. They postulate that oxidation within the large baryte orebody at Closehouse has allowed the development of chemical micro-environments more characteristic of the Leadhills and Caldbeck Fells areas than the Pennines. It seems likely that, in the presence of very localised concentrations of oxidising copper minerals, these same conditions have allowed the formation of caledonite, albeit very rarely, at this Northern Pennine locality. No trace of leadhillite was found on the single caledonite specimen and no caledonite is present on any of the handful of known leadhillite specimens from this locality.

ACKNOWLEDGEMENTS

Mr David Parry is thanked for bringing the latest occurrence of erythrite to our attention. B Young and E K Hyslop publish with the approval of the Director, British Geological Survey (NERC).

REFERENCES

- BRIDGES, T F (1983). An occurrence of annabergite in Smallcleugh Mine, Nenthead, Cumbria. *Journal of the Russell Society*, **1**: 18.
- BRIDGES, T F and YOUNG, B (1998). Supergene minerals of the Northern Pennine Orefield – a review. *Journal of the Russell Society*, **7**: 3-14.
- COOPER, M P and STANLEY, C J (1990). *Minerals of the English Lake District - Caldbeck Fells*. British Museum (Natural History).
- HEDDLE, M F (1901). *The mineralogy of Scotland Parts 1 & 2*. David Douglas, Edinburgh.
- YOUNG, B (1987). *Glossary of the minerals of the Lake District and adjoining areas*. Newcastle upon Tyne: British Geological Survey).
- YOUNG, B, BRIDGES, T F and HYSLOP, E K (1994). Leadhillite from the Northern Pennine Orefield, England. *Journal of the Russell Society*, **6**: 97.

ERRATA

Specimens of bird species now threatened, or made extinct in recent times, in the collections of the Hancock Museum, Newcastle upon Tyne

by L JESSOP and R H STOBART

On page 126 the first entry (under **Procellariidae (Shearwaters, etc.)**) should be:

Jamaican Petrel *Pterodroma caribbaea* Carte, 1866 ----- **NOT**

Black-capped Petrel *Pterodroma caribbaea* Carte, 1866

TRANSACTIONS
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M A PATTERSON

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ERRATA

Fie on't! O Fie! (*Hamlet*)

On page 237, lines 2 and 14, and page 247, line 12, a last minute software mismatch has caused ½ to be printed as **fi**.

On page 139, footnote 12, Burney should read Gurney. We apologise.

YEAR ENDED 31 JULY 2004

**ANNUAL REPORT
OF THE
COUNCIL
FOR THE
YEAR ENDED 31 JULY 2004**

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Dr D Gardner-Medwin	Dr B Selman	¹ Resigned December 2003
Dr G A L Johnson ¹	D R Shannon ¹	² Died during the year

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(2) **Nominated by sections:** H H Chambers (library), J Simkin (botany), Dr G A L Johnson (geology), Dr C P F Redfern (ornithology and Gosforth Park), Dr B J Selman (publications), V Carnell (mammals)

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THE HANCOCK MUSEUM Senior Curator: I Watson, Curator and Principal Keeper, Natural Sciences: S McLean

ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING 31 JULY 2004

The Natural History Society of Northumbria is a registered charity and is governed by the rules of the Charity Commission. The members of Council are all Trustees and the Trust Deed dated 30 December 1965 was last amended following the annual meeting on 28 November 1997. Our rules state that 'The objects of the Society shall be the encouragement by every means of the study of natural history in all its branches; the protection of the local flora and fauna; the maintenance and extension of the Society's library and collections; the publication of *Transactions* and other scientific papers, the organisation of lectures, discussions and field meetings and co-operation with other scientific societies or associations with similar objects'. The following annual report outlines the main achievements of the year in relation to the charity's objects.

INTRODUCTION

31 July 2004 marked the end of another very busy year for the Society, which was particularly active for two main reasons. Firstly, 2004 marks the 175th anniversary of the Society and a varied programme of celebrations was undertaken in addition to the normal members' events. Secondly, the Heritage Lottery Fund application for the Cultural Quarter project involving the Hancock was withdrawn in January by the University. A revised application was submitted in June. Resubmission involved a huge amount of work by the teams involved as well as additional meetings of Council in order for it to approve the revised scheme.

The anniversary celebrations gave us an excellent opportunity for telling the outside world about ourselves, and for this reason members of the general public were invited to join in all the events. Even after 175 years there are many people who have not heard about the Society and the valuable work it does, and will continue to do in the future.

Members are a vital key to our activities and it is satisfying to record that membership has increased for the third successive year and now stands at 865. The best salespeople are you, the existing membership, so please continue to recommend the Society to your friends.

More and more Society activities are possible only by the obtaining of grants, and it is pleasing to note that the three year project funded by the Heritage Lottery for work on our archives has successfully completed its first year under the able guidance of June Holmes. Appropriately, part of the grant is to promote knowledge of our archives to the public. In addition to this major award a small grant has been obtained for the purchase of environmental and monitoring equipment for the library and archives. Elsewhere, we have obtained £5,000 from English Nature for maintenance at Gosforth Park, and the Sir James Knott Trust and Northumbrian Water have provided valuable financial support for our coastal research work. Finally, a grant was obtained for 50% of the purchase price of Peter Brown's *New Illustrations of Zoology* (1774). This is a most appropriate purchase for our anniversary year, containing as it does, illustrations and descriptions of parts of Marmaduke Tunstall's collections, which formed the basis of our own museum collections.

At this stage it is appropriate to mention that Dr Chris Spray, Northumbrian Water's Director of Environment and a great friend of the Society, is leaving the region to take up the post of Director of Environmental Sciences with the Scottish Environmental Protection Agency in Stirling. Since arriving to become Northumbrian Water's

Conservation Manager more than twelve years ago, in which he replaced our chairman Ian Moorhouse, Chris has made a great contribution to conservation in the North-East. We wish him, his wife and family well in their new location.

During the year work has continued on updating the constitution of the Society for which thanks go to the Image and Membership Group as well as to the General Purposes Committee for their patient consideration of the many issues involved in such a venture. At present the draft is with the Charity Commission for comment.

It is particularly pleasing when one of our stalwarts gains national acclaim. In this case it is Council member Chris Redfern who was recently awarded the BTO's prestigious Tucker Medal for services to ornithology. A very well deserved award!

We are sad to be losing our president, Lord Ridley, who retires at the annual meeting. He truly has been a great inspiration and support through the years. See later for the name of his proposed successor!

Before leaving you to peruse the details of Society activities outlined in this report, a word of grateful thanks to our staff, to all our volunteers without whom none of what we do would be possible, and finally to all of you, the members. Without you there would be no Society.

MEMBERSHIP

The total membership on 31 July 2004 (with 2003 figures in brackets) was 865 (841). This was made up of 6 (6) honorary members, 42 (43) life members, 516 (491) members who receive *Transactions*, 268 (259) members who do not receive *Transactions*, 25 (29) associate members and 8 (13) complimentary members. Although the increase in membership overall is only twenty-four, because of a decrease in life, associate and complimentary members, the increase in ordinary membership is thirty-four over that of last year. This represents the third successive year in which membership has increased. Thirty-three people also make payments under long-standing bankers' orders ranging from £2 to £17, made when these amounts were the current subscription rates; they are regarded as donors and not members.

The Council reports with much regret the death during the year of six members: Mr R W T Thorp (joined in 1948), Miss K I Barratt (1953), Mr C Noble-Rollin (1953), Mr E N Walker (1989), Mr A J Forster (1988) and Mrs N McGuire (2000).

ANNUAL MEETING

President to Retire It was with great regret that members of Council heard of Lord Ridley's intention to step down as President at the forthcoming annual meeting in December. He has been a marvellous President, ever supportive and generous, and those in the Society who have dealt with him will miss him greatly. We thank him for all he has done for the Society and wish him and Lady Ridley all the best for the future.

Council is delighted to announce that James Alder, one of the best known and loved of our members, has agreed to have his name put forward at the annual meeting for election as our next President.

GREAT NORTH MUSEUM

Just before Christmas 2003 it was announced that the Heritage Lottery Fund (HLF) had suggested that the University withdraw its application for funding of the Combined Museums project involving the Hancock Museum, the Museum of Antiquities, the Shefton Museum and the Hatton Gallery. Several reasons were given, including the fact

that the awards panel was not convinced that the design proposed within the galleries provided the most appropriate solution to the problem of storage. Withdrawing the application left the possibility of resubmitting at a later date; letting the application stand would have meant that the proposals would almost certainly be rejected. The University, supported by the Society and the Antiquaries, agreed that withdrawal was the better tactic.

The design teams, comprising Terry Farrell Partnership (architects), Casson Mann (museum design) and Walfords (cost consultants), dusted themselves down and started again. The Combined Museum became the Great North Museum. Very importantly, Newcastle City Council became involved as a partner in the project. The Claremont Buildings and the bridge proposed previously have been omitted from the scheme, the Hatton Gallery is to remain in its present position and, finally, aided by proposals to create storage space off site and to build an extension at the back of the Hancock, all the development has now come within the Society's site. This was excellent news and means that the library and the office will no longer be across the road from the council room and lecture theatre. The estimated cost of the current project is now some £25 million.

In addition to Council being regularly briefed by its representatives, Ian Moorhouse, David Gardner-Medwin and Brian Selman, a meeting was held by the University for members of both our Society and the Antiquaries on 24 April at which the plans were outlined.

The University duly resubmitted the bid to the HLF for a substantial proportion of the funding required for the Great North Museum project at the end of June. This was the culmination of a great deal of work by a very large number of people.

Members of Council unanimously approved the proposals subject to satisfactory completion of the legal agreement between the University and the Society. Other funding is also being sought. To help with this, and as an indication of its support for the project, Council agreed at its June meeting to contribute a total of £50,000 to the scheme, to be paid in five annual instalments. Because the scheme has been changing, the agreement between the University and the Society has not yet been finalised. However it is hoped that this can be completed shortly, subject to the HLF granting the award and satisfactory completion of the agreement.

It is now a matter of waiting for the selection process to run its course and hoping for a positive decision early in 2005. The Society has been involved in the development team meetings as the proposals progressed and your representatives have been gratified to see their comments and requests accepted and adopted. There has been a very obvious team spirit, and although this was partly due to the fact that those involved now knew each other, much credit must go to Iain Watson, Senior Curator at the Hancock, who was seconded to manage the project proposals.

COUNCIL

The Society's officers and members of Council are listed on page 4. The Council met on six occasions during the year, in October, December, January, March, May and June, to discuss both the normal business of the Society and matters arising from the University's bid to the Heritage Lottery Fund. These additional meetings were arranged so that Council could assess the proposals for the Great North Museum project and included on one occasion a presentation by Iain Watson. During the year elected members D I Johnston and Dr R Stobbart resigned by rotation. Also during the year three Vice-Presidents indicated that they wished to resign, Professor R Bailey, Dr G A L Johnson and Mr D R Shannon. The

Council would like to thank them and all the other retiring Council members for their help and advice. During the year we also lost one of our longest serving Vice-Presidents, Mr R W T Thorp. There is an obituary for him at the end of this report. The following were in attendance at Council meetings: Mrs June Holmes representing the interests of the Archives; Mr Iain Watson and Mr Steve McLean representing Tyne & Wear Museums; and the Secretary and Office Manager.

PUBLICATIONS

Volume 64 of the *Transactions* began with the Annual Report for 2003. This was followed in March 2004 by 'Birds on the Farne Islands in 2003' (volume 64 part 2) and during the year volume 64 part 3 has been prepared for publication in the autumn of 2004. The Society published less than usual in the current year, due to the fact that two issues came out in the previous year, when a generous grant from the Catherine Cookson Foundation enabled us to publish '18th Century Ethnographic Collections in the Hancock Museum' (volume 63 part 3). The Society also produced a Christmas card for sale to members and their friends. This was from an excellent original drawing by Joan Holding of long-tailed tits in winter. The sales almost covered the cost of the printing and it is hoped that sales this autumn will bring in a profit. The Council would like to thank Brian Selman, Margaret Patterson and David Noble-Rollin for editing the *Transactions* and Joan Holding for maintaining the high standard of our graphics in the publications.

THE OFFICE

Staff

David Noble-Rollin is the Secretary of the Society and is in overall charge of the office and the running of the Society. He reports to the Chairman and Council and the main part of his job is to implement the decisions of Council and to ensure the timely production of programmes, publications and notification of meetings. He has to liaise with the many volunteers who work for the Society and make sure that they have the support that they need to carry forward their projects. This year he has spent time on organising the Blagdon Natural History Day and other aspects of the celebrations.

June Holmes joined the staff in August 2003 as our part-time Archivist, funded for three years by the Heritage Lottery Fund. Council is delighted that she accepted the post (she was offered another archive job in the same week!) and so can continue her association with the Society, which began in 1989 when she volunteered to help the Secretary to catalogue the Society's collection of Bewick watercolours. The rest as they say is history. She has extended her knowledge of the archives held in the Hancock and become an expert on the collections. Her work during the year has been extremely successful in fulfilling the primary criteria for receiving the grant: to publicise and promote our archival material more widely as a reference tool for students, researchers and the general public. The details of this are given in the archive section. Her job includes supervising an ever-increasing number of volunteers who are daily enhancing our knowledge of the material in the archives. She also puts in many hours as a volunteer to deal with all the work generated by the archives, from the backing up of databases to the ever-growing numbers of enquiries.

Martin Hughes joined the office staff in 2001 and became a major asset to the Society by not only undertaking his paid duties but also a large range of voluntary work including becoming a trainer with the ringing group, leading many of the field meetings for the

ornithological section and undertaking supervision of student projects in Gosforth Park for Northumbria University. It was with great sadness we learned that Martin had decided to resign in April 2004. Council wishes him every success in the future and hope that he still enjoys his role in the ringing group.

Siu Carter has continued her work in the office throughout the year, maintaining the day-to-day finance system that has been set up to maintain our accounts. She has assisted the Secretary in maintaining the prime functions of the office, particularly during the period after Martin left and the Society summer programme of celebrations brought great pressure to bear on the office staff. Without her many hours of voluntary work it is unlikely that we would have maintained our standards during this period.

Stuart Will was offered the job as office manager in June 2004. He arrived just after the open day at Blagdon, which had taxed our depleted staff and volunteers and found the office stacked with the debris of preparing seven indoor displays and a nature trail. Stuart was up and running the membership database and basic daily tasks within days. By July we had working desks and files and there was space to walk around the office! It soon became apparent that his knowledge of computers would help greatly in the smooth running of the Society and he is taking an active part in the outdoor meetings.

Volunteers

The Council is very grateful for the enormous amount of work done by its members in a voluntary capacity. We are particularly grateful to the members who work on a regular basis, usually contributing from half a day to two days a week of their time to the Society. Many of these volunteers are mentioned under appropriate headings in this report but there are a number who help with the running of the office and similar administrative tasks. The following have all devoted their valuable time to the running of the Society in the last year: Hugh and Stella Chambers, Margaret Evans, Joan Holding, June Holmes, Ian Johnston, Michael Kerr, Simon Lowe, Margaret Patterson, Nigel Sprague, Graham Steane, Ann Stephenson, Anne Wilson and Rita Wolland.

There are also a large number of other volunteers whose contribution may not be as frequent but is nevertheless of great importance to the smooth running of the Society. Council would like to thank particularly the thirty-six deliverers who, every time there is a bulletin or *Transaction* to send out, walk the streets of our towns delivering our mail, saving the Society a great deal of money in postage. There are also a number of members who sit on internal Society committees, preparing winter programmes and summer field meetings for the sections and also adding their expertise to the management of Gosforth Park. The Council of the Society would like to thank them all for their efforts.

MUSEUM MANAGEMENT COMMITTEE

As usual the committee has continued to meet approximately every three months under the chairmanship of the Dean of Cultural Affairs, Dr Eric Cross. Amongst the matters dealt with during the year have been the revision of the museum's Disposal and Acquisitions policies, the tardiness of the University's annual payment to the Society and the implications to the Committee of the current updating of the Society's constitution. In relation to the last, the University has indicated that, should the Society reduce the size of Council, the University is prepared to reduce its representatives (currently four) proportionally.

LIBRARY

After last year's disruption to the library because of the ceiling repairs and repainting, this year started with the mammoth task of cleaning. Despite all the precautions that were taken to keep dust at bay, with vast amounts of plastic and suction ventilation, every book, shelf and 'nook and cranny' had to be vacuumed, cleaned or polished. The task was undertaken by a number of willing volunteers and the library is very much the better for their efforts; thanks to all those involved.

With the library looking spick and span and a lot more cheerful with its new colour scheme, the normal service to members, researchers and students has been resumed. It has been staffed by volunteers every Wednesday and with the addition of Kati Russell to the 'staff' it is now available on alternate Fridays.

The direction of library affairs is controlled by the Library committee, which meets four times a year. The members are Hugh Chambers (chairman), Paddy Cottam (mammals), Peter Davis (marine biology), David Gardner-Medwin (history of natural history), Trevor Hardy (geology), June Holmes (archives), David Noble-Rollin (ornithology) and Trevor Walker (botany).

This year forty books were purchased covering all aspects of natural history. As usual birds were well catered for and in this respect there are a number of 'ongoing' series which, being relatively expensive, always seem to come at the same time. These included volume 8 of the *Handbook of Birds of the World*, that superb Spanish publication which is without equal, volume 7 of the *Birds of Africa* (the final volume of the series which started in 1982), volume 6 of the *Handbook of Australian, New Zealand and Antarctic Birds* and two volumes of the *BOU checklists* (Morocco and Hispaniola No.20 and 21). Other bird books included *Eric Ennion, A Life of Birds, A Concise History of Ornithology* by M Walters, the second edition of *Bird Migration* by P Berthold, and a Christopher Helm book on *Flight Identification of European Seabirds*.

In geology we purchased *The Geological History of Britain and Ireland* by Woodcock and Strachan; *Revolutions in the Earth, James Hutton and the true age of the World* by Stephen Baxter; *The Geology of Scotland* fourth edition by NH Trewin; and, in the Geological Conservation Review series, *The Quaternary of Wales*.

Botany purchases were *Oak, A British History* by Harris and James, *The Ancient Yew* by R Bevan-Jones, *Ancient Woodland* by O Rackham, *Field Guide to Orchids of Britain and Europe* by K P Butler, *Vice-County Census* by C A Stace, a Natural History Museum book on *Fungi*, the *BSBI Atlas of British and Irish Brambles* and *Plant life of Edinburgh and the Lothians* by P M Smith

Other purchases included two volumes published by the Ray Society; *An Introduction to Copepod Diversity*; *Archaeology in Northumberland National Park* by P Frodsham; two Mammal Society publications on *The analysis of owl pellets*, third edition, and *Roe Deer*; and an especially recommended butterfly book by D Hammersley, *A Butterfly Notebook*. A further thirteen books were bought.

We were very fortunate this year to receive sixty-two books and eight offprints or papers by donation, fourteen of these from the estate of Kathleen Barratt. The Society is very grateful for the generosity shown.

Our most notable donations were botanical, including the two volumes of Phillips and Rix *The Botanical Garden* and *Flowering Plants of the World* by Heywood, but birds were again in the forefront. The Bird Club published its prestigious *Atlas of Wintering Birds in*

Northumbria and a copy was donated to us. The BTO gave a copy of *The Breeding Bird Survey 2002* and we received a copy of Ian Kerr's book *The Birds of Holy Island*. For a while we have been trying to complete our collection of the small Wayside and Woodland books and were given six more this year, an interesting one being on birds edited by Enid Blyton. One of the books received was a copy of *The Times Comprehensive Atlas of the World*, eleventh edition, handsomely bound.

At the end of July the Society made a successful bid at a Bonhams auction for a copy of Peter Brown's *New Illustrations of Zoology* (1774). As expected the book cost more than the auctioneer's estimate, but we were fortunate to obtain a 50% grant from the PRISM fund (for the preservation of industrial and scientific material) of the Museums, Libraries and Archives Council, to whom we are very grateful. It is the only copy of this rare book in the North East and is of great importance to us as it contains, *inter alia*, illustrations and data about many of the most unusual specimens (mostly birds and insects, but with a few mammals) in the museum of Marmaduke Tunstall, which formed the original nucleus of our museum collections. Tunstall supported and helped to fund its publication. Two of the species, described for the first time in this book, are ones for which we still have Tunstall's specimens – the female Cape shelduck and the 'green-headed bunting' – (the latter almost certainly an escaped ortolan bunting whose plumage had been modified by its diet in captivity). There is much important information in the book, to which people studying our collections have, till now, had great difficulty in gaining access.

More than 384 items of serial publications (journals, transactions etc.) were received from throughout the world by exchange, subscription and donation. All of these were recorded, scanned for any articles or papers that are particularly relevant to the Society and then shelved, to be available ultimately for binding. This year eighteen volumes were sent for binding to become a permanent part of our collection.

At the Society's open day at Blagdon Hall in May, the Library committee tabled a well received display concerning its work and contents.

Three books from the collection were on loan during the summer to The Sunderland Museum & Art Gallery for inclusion in their *Plantasia* exhibition of botanical art. They were W Turner's *New Herball*, (1551-1568), J Gerarde's *Herball or General History of plants* (1636) and J W Loudon's *The Ladies Flower Garden (bulbous plants)* (1841).

The library continued to be serviced by the office staff and volunteers. Margaret Evans handled the binding of journals and periodicals most efficiently, and also dealt with the recording of incoming periodicals and all the work involved in the exchange arrangements the Society has with other organisations throughout the world.

In addition to Margaret Evans and Kati Russell, other volunteers gave reliable assistance during the year, in particular Stella Chambers and Trevor Hardy, and Council thanks them all for their indispensable work.

The Library Evening was held on 30 January the subject being *Bird illustration through the ages* given by Tom Lawson, a Council member of the RSPB. While his talk looked at how birds have been depicted throughout history it also showed how field guides had been developed since Thomas Bewick produced bird illustrations for the use of the general public. After the talk there was a display of relevant books and original material from the Society's collection, expertly arranged by June Holmes. It was a most enjoyable and successful evening and all concerned must be congratulated for their input.

ARCHIVES

With the successful 'Your Heritage' grant application to the Heritage Lottery Fund in March 2003 to fund our *Archive Project*, this year has seen the archive section entering a new phase in its development. The grant provided the Society with funds to employ a part-time archivist for three years, with responsibility for managing and publicising the archives. June Holmes, who has worked as a volunteer for fifteen years on our archives, was recruited to this post but still continues to contribute a number of voluntary hours to the project.

With publicity in mind, information about the archives has been added to the Society's website and posters and flyers have been produced and sent out to local libraries. As part of Archive Awareness Month in September 2003, information on the Bewick collection was prepared for the free promotional CD 'Hearts and Heartaches', produced by the North East Regional Arts Council. This gives an introduction to the rich and varied archives collections available to the public in the North East.

A number of events were organised during the year to give members of the public the opportunity to see our fascinating collections of archival material.

Access to the Council room was given during the Civic Trust's Heritage Open Days Event on 13 September 2003 to see an exhibition of the watercolour and pencil drawings by Thomas Bewick. Over 150 people, some of them children, enjoyed the experience of viewing original material. This event was so successful we have agreed to participate again in 2004.

We have forged links with the John Marley and Moorside Local History Groups, formed to encourage senior citizens to re-discover their local history, and so far the groups have had two lectures and seen archive exhibitions on Thomas Bewick and the Hancock brothers. They were amazed by our collections and are very keen to see more of our hidden treasures.

The celebration of the 175th anniversary of the formation of the Society gave us another opportunity to promote our archives to the public. Historical display panels were produced for the Blagdon Hall open day in May and the Wycliffe walk in June.

The City Guides were invited to lead a tour of about forty people to the Hancock again this year, on 14 July 2004. An exhibition named *John Hancock's Cabinet of Curiosities* was set out in the Council room for the evening and proved extremely popular. The next day, a visiting group of children from Marsden High school were equally delighted to have the opportunity to see the exhibition.

A number of items from our archives were put on public display in the White Room of the Hancock Museum in July and August this year, at the request of Tyne & Wear museums. The selection included watercolour and pencil drawings by Thomas Bewick, watercolour drawings of shells by George Gibsone, archives from the Hancock family collection and documents related to the building of the Hancock Museum in the 1880s.

The Heritage Lottery Fund grant enabled us to provide the archive project with new computing equipment, a much-needed light desk for viewing slides and a professional digital camera. The camera, when not in use photographing archives, has become invaluable in helping us to keep visual records of the Society's events. A further grant of £791 was received from the North East Museums, Libraries and Archives Council (NEMLAC), which was used to purchase environmental monitoring equipment for the library and archives as well as book cushions, book weights and other essential archival material.

With June Holmes supervising the work on the archives we now have a very active archive section with a number of new volunteers. Ann Stephenson has completed the transcriptions of the John Hancock letter collection and is preparing them for cataloguing. The cataloguing by Barbara Harbottle of the Margaret Dickinson collection of botanical watercolours nears completion. These two collections have generated a lot of interest and we hope to make part of them available on our web site in due course. Nigel Sprague has continued preparing an early membership database.

Graham Steane has committed hours of his time to photographing archives and events as well as cataloguing slides. Two new volunteers, Megs Rogers and Colin Storey, have been recruited to transcribe the letters and journals of the entomologist Thomas John Bold. Michael Kerr and Simon Lowe have re-located from their general office duties and are now transcribing Gosforth Park manuscripts and scanning Farne Island slides respectively. There are many other volunteers who assist us from time to time with the archive project including Dr David Gardner Medwin, Hugh and Stella Chambers, Joan Holding and Ann Wilson. The project would not function without all of our enthusiastic and willing volunteers and we are extremely grateful for all their hard work.

There have been a number of interesting accessions to the archives this year including the manuscript ornithological notebooks (1960-1996) of Miss Kathleen Barratt, a long-standing member who died recently at the age of ninety-two. James Alder presented his original plaster mould for the commemorative bronze plaque to Grace Hickling made in 1988 for Inner Farne. We received some ringing records for Monk's House Observatory, Northumberland for 1951-1964 from the estate of the late Dr Peter Evans, a well-respected ornithologist and authority on sea birds. Archives relating to the production of Durham Bird Club's *A Summer Atlas of the Breeding Birds of County Durham* 2000 have also been deposited with the Society and Mr Bill Wallace donated an archive cine film of Society trips to the Farne Islands in the 1960s.

With the completion of the first year of our *Archive Project* we have seen an increase in the public's and our members' awareness of and interest in our archive collections. Next year we will be starting conservation projects on some of our more delicate archives as well as carrying on with the promotion of our natural history archive collections as part of the North East's cultural heritage.

FINANCE

During the year, income exceeded expenditure by £10,720, similar to last year's surplus of £10,684. Significant grant aid was received in respect of the Archives project, much of which has been carried forward to be spent in the new year. Other expenditure, such as that for coastal research, has been financed from special funds accumulated for the purpose in previous years. The Society has also established a modest capital programme which allowed it, among other things, to renew its telephone facilities. There were also two items of special expenditure. The first related to the 175th Anniversary celebrations, for which it had been hoped a grant would be forthcoming. The second was the purchase at auction of a rare book to complement the Society's existing collection. This purchase was generously grant aided by the PRISM fund.

The Society's investments continue to be managed by Brewin Dolphin Securities producing a net realised gain of £1,050. The stock market recovery remains weak. However, at the year end unrealised gains of £3,340 were recorded, compared to a loss of £14,188 in the previous year. The overall value of the portfolio stood at £487,937 (plus £46,096 in

cash) at 31 July 2004 compared to £484,903 (plus £45,037 in cash) in July 2003.

Financial Reserves Policy

It is the policy of the charity to maintain unrestricted funds, which are the free reserve of the charity, at a level which equates to approximately one year of unrestricted expenditure. This provides sufficient funds to cover management, administration and support cost and to respond to emergency applications for funds which arise from time to time. Unrestricted funds were maintained at a higher level than this through the year.

The Society has undertaken to offer £50,000 at the rate of £10,000 a year for 5 years from 2006 as a contribution to the Great North Museum project, should the project go ahead as currently conceived. It is not envisaged that such a contribution will detract from the society's current policy on financial reserves within this timescale.

Risk Management

The Council as Trustees have assessed the major risks to which the charity is exposed, in particular those relating to its operations and finances, in order to be satisfied that systems are in place to mitigate the exposure to the major risks. The financial regulations approved by Council have been in operation throughout this period.

CONSERVATION AND PLANNING APPLICATIONS

As usual, the most important proposals for development on which we have had to comment have been those affecting wildlife access to Gosforth Park. For some years we have maintained a 'holding objection' to the proposed Sandy Lane bypass which will bring fast and heavy traffic on a dual carriageway across the northern approach to the Park. This follows developments to the east and west, which are gradually isolating our nature reserve from the surrounding countryside. In June, David Noble-Rollin and David Gardner-Medwin represented the Society on a site visit. The local authority's current plan includes quite promising underpasses for various species, from great crested newts to badgers and roe deer, near the western end of the bypass. However, at the eastern end another underpass is proposed to maintain a route currently used by deer; the link from this underpass to Gosforth Park may be broken in the future by a proposed business park, unless a permanent wildlife corridor is created. The business park is at an early stage of planning, and is a separate project from the highway, but the Society has decided to maintain its objection to all aspects of development to the north of Gosforth Park until a satisfactory and coordinated plan is put forward for the whole area.

We have commented on a number of other plans, all from the Borough of North Tyneside, and mostly affecting wildlife corridors or sites for water voles or bats. The various developments at its northern end that have effectively blocked the A19 corridor as a route for wildlife movements seem to have proceeded by *force majeure* despite our efforts over the last few years. The Northumberland Wildlife Trust has, in general, a much more active role than we have in commenting on planning proposals and Council decided this year to limit our activities mainly to the protection of our nature reserve and to other threats if asked by the Trust for support. Nevertheless, members who are concerned about threats to wildlife from proposals that may not have come to our attention are welcome to report them to the Society's office.

ACTIVITIES

175th Anniversary Celebrations

2004 is the 175th Anniversary of the Society which was created from the Newcastle Literary and Philosophical Society in 1829. Although the exact date of its formation was in August 1829, and therefore falls outside the scope of this Annual Report, several of the events to celebrate the occasion have taken place during the year.

At an early date the Council agreed not only that the occasion should be celebrated, but that it should be used as an opportunity to provide something extra for our members as well as to promote the image of the Society generally. It was agreed that all the events should be open to both members and the public. A wide-ranging programme of events was organised and a lottery fund grant sought to cover the costs. This was unfortunately unsuccessful.

The programme nevertheless went ahead, albeit in a rather more modest way than might otherwise have been the case. It commenced with a Natural History day at Blagdon Hall on 23 May when our President, Lord Ridley, very kindly let us have a free run of the estate. And what a day it turned out to be! The sun shone warmly from start to finish and an estimated 500 to 600 members and public enjoyed the fine exhibitions, activities and refreshments which were available.

A host of people had worked extremely hard to prepare a superb series of displays showing the history of the Society and the work of each section. In addition there were demonstrations of bird ringing, mammal trapping and moth catching. Nest-boxes were assembled with great skill in moments (and available at very reasonable prices!) and both books and geological specimens were on sale. A major attraction was James Alder and an eagle owl. They spent much of the day scrutinising each other, but it was James who produced the drawing, a magnificent pastel of the bird. The picture was auctioned at the end of the day and was won by a non-member, Mr Lyall from Hollywell. James also donated a signed print as the second prize, which was won by Gordon Port's family while he was helping with the moth trapping demonstration. Thanks to this, a generous donation from Lord Ridley, and splendid sales of refreshments the day was self-financing. It also did a great deal to raise the profile of the Society.

More than forty members and friends worked at Blagdon to make the day so enjoyable as well as successful, and a very heartfelt thank you goes to them all.

The second anniversary event during the period of this report was a walk (actually because of the interest shown, two walks on successive days, 5 and 6 June) around Wycliffe-on-Tees. This is an area of considerable interest to the Society as Wycliffe Hall was once the home of Marmaduke Tunstall whose collections formed the basis of its first museum. Each day started in some style with coffee and scones at Whorlton village hall where displays showing the development of the Society were on show. A brief introduction to Marmaduke Tunstall was given by Dr David Gardner-Medwin on the first occasion, and Ian Moorhouse on the following day. A highlight was a visit to Wycliffe church where Tunstall is buried and where the vicar, the Reverend C H Cowper, showed the first party around. The walks revealed a variety of interesting birds and plants including some fine ancient oaks at Wycliffe and a magnificent ash on the river bank, all of which were almost certainly in existence when Tunstall was alive. Particularly pleasing to botanists was the discovery of the rare *Carex divulsa leersii*, known as Leer's sedge, which occurs in the Tees valley.

An evening walk on 23 June at Whittle Dene, led by Tony Tynan, followed along part of

the route of the first field meeting of the Tyneside Naturalists' Field Club, held on 20 May 1846. Tony provided an admirable historical commentary and gave participants plans of the mill and photocopies from the *Transactions* of the report of the original meeting. There were many differences between the two meetings: they (John Hancock actually) found the nests of the grasshopper warbler and long-tailed titmouse; we did no bird nesting but were serenaded with the songs and calls of at least seventeen species of birds. They collected twenty-three species of shells; we naturally collected nothing. They reported that 'the Dene and neighbourhood are rather rich in the number of the plants growing there; not many of them, however, very rare' and published a record of the eleven most interesting species of flowering plant they saw in the Dene, and six others (including *Arenaria [Minuartia] verna* - spring sandwort) from the riverbank or nearby; our list was pitifully small by comparison. Giant hogweed below Ovingham Bridge they did not see. Only four of their seventeen recorded species have been found in recent times in the area, and of these we were able to spot only the spindle tree, found by Angus Lunn. The occasion was a stern reminder of what has been lost since their time.

The final event in this financial year was a Newcastle City Guides tour on 14 July. This included a visit to the Council room where an exhibition relating to the Society's foundation was displayed. Each event has, very gratifyingly, been very well attended by both members and the public.

General Meetings

During the year there were a number of general events to encourage membership and to enhance the year's programme for members. On 10 August there was an Open Day at Gosforth Park Nature Reserve with nature walks around the reserve led by volunteers. The day began well with quite large numbers of people arriving at Lake Lodge. Unfortunately by mid-morning a very heavy thunderstorm brought the event almost to a stop with lots of rather wet people. In the afternoon the conditions improved and the walks around the reserve were restarted. This event was supported by many of our volunteers and Council would like to thank them for their efforts. It proved worthwhile and a number of visitors joined the Society after the event.

Martin Hughes repeated his very successful Family Day on 20 August with fifteen members, including seven children, starting the day at the Lodge. They examined the catch from two moth traps that had been operated the preceding night. The most impressive insects caught were a large number of yellow underwings, silver Y's and an oak eggar. The group slowly made its way towards the lake investigating log heaps for assorted invertebrates and checking Longworth mammal traps. The lake gave good views of assorted ducks and of terns and grebes feeding their young. A pond dipping session followed, although the dry weather meant that it was not easy to get to open water! The walk back to the Lodge finished the day when we had the opportunity to look at butterflies flying along the hedgerow.

On 22 October 2003, James Alder gave a lecture 'Boyhood of Bewick' to a combined meeting of the Natural History Society and the Bewick Society. We were the guests of the University of Northumbria, where the meeting was held in celebration of the publication by the University of James's book *The birds and flowers of the Castle of Mey and Balmoral*. It might be more accurate to describe the occasion as a consummate performance rather than a lecture, for it involved audience participation, a coordinated *son et lumière* display of slides interleaving the wood engravings of Thomas Bewick with some of Alder's own paintings, and photographs of Northumberland wildlife. Interleaved also

were stories of James's own childhood with his account of Bewick's boyhood as an artist, rebel and passionate observer of wildlife – both artists were child prodigies, both made light of their schooling while quite evidently acquiring for themselves a fine education, and both later amiably communicated their affection for and deep knowledge of wildlife to wide audiences.

A joint meeting of the Natural History Society and the Bewick Society was held in the Council room on the afternoon of 7 February in order to celebrate the 200th anniversary of the publication of Thomas Bewick's *History of British Birds* volume II *The Water Birds*. Dr David Gardner Medwin gave a fascinating illustrated lecture sharing his enthusiasm for Bewick's drawings and engravings with an appreciative audience. The occasion also included the formal launch of the Bewick Society's recent publication *Bewick Studies: Essays in celebration of the 250th anniversary of the birth of Thomas Bewick 1753-1828*. A marvellous selection of books by and about Bewick from the Society's library and from the speaker's own collection were placed on display for our perusal after the lecture.

In April and May 2004 Steve Westerberg and the Thornley Woodland Centre invited members to join their public 'Walks along the Derwent Valley'. These walks, looking mainly at the birds of the area, together covered the length of the valley from the Tyne to the source of the Derwent.

Ornithology Section

The ornithological indoor meetings set off to a fine start on 3 October with a look at the autumn and winter birds of Holy Island, given by Ian Kerr. His talk brought to life the thrill of those autumn days when anything can be around the corner, or in the next bush! But Holy Island is not only known for its exciting migrants: it and the remainder of the Lindisfarne reserve are the winter home of thousands of waders, duck and hundreds of pale-bellied brent geese.

Ian Kerr is the author of the recently published guide *The Birds of Holy Island*, and to the delight of the members present had copies with him for sale.

The second meeting, on 31 October, featured Nick Mason, the RSPB's Conservation Manager for the North of England, talking about the conservation of breeding waders in the north Pennines. His fascinating talk concentrated on lapwing, redshank, curlew and snipe, once common breeding birds throughout much of the country but now in steady decline away from the upland areas which thus become more and more important. He described the RSPB's efforts to raise awareness of the local environment and the importance of its conservation amongst rural communities, especially in schools.

The Pybus Memorial Lecture was given this year on 14 November by Professor David Parkin on 'Recent developments in bird taxonomy: molecules, behaviour and song'. Professor Parkin grew up in the North East, but a career in genetics took him away and he ended up as Professor of Genetics at Nottingham University. During his outstanding career he led the way in the application of molecular techniques for studying breeding systems in birds, and latterly has applied the techniques of DNA analysis to the study of taxonomic relationships and speciation in birds. Professor Parkin started his talk by saying that we all think we know what we mean by a 'species', but then pointed out that, in fact, it is quite difficult to decide on a satisfactory set of criteria to define species unambiguously. He went on to outline several different 'species concepts' and his preference for the 'Evolutionary Species Concept'. This depends on analysis of lineage and he showed how analyses of DNA in combination with other biological characteristics such as song and reproductive behaviour should be used in taxonomic studies of birds. It was a thor-

oughly stimulating evening, and the Society is very fortunate to have had a speaker of his international standing in the field.

9 January produced a fascinating and unusual slant on industry and its practices when Ken Smith talked about Nature Link. This sustainable nature conservation programme was created in 1991 by ICI following more than forty years of conservation work on its sites across the world. Even though ICI has now sold off many of its businesses, the Nature Link idea went with them and the programme still continues. Ken, an ecological consultant involved in many of the Nature Link sites across the world, took us from Teesside to Tasmania via France and Spain, the Americas, Asia and South Africa. His superbly illustrated talk covered not only birds but flowers, animals and insects.

On 6 February Dr Richard Bevan, a lecturer in the School of Biology at the University of Newcastle, gave an absorbing and stimulating talk on seabirds and sandeels around the Farne Islands. One was repeatedly surprised at just how much there still is to know about sandeels, a vitally important food source for seabirds, but just as often full of admiration for the skill, ingenuity and technology used by the researchers to add to their knowledge. A fascinating story of some hugely relevant research being undertaken on our very doorstep.

On 5 March Colin Bradshaw gave us a light hearted look at identification of rarities from the point of view of a member of the British Birds Rarity Committee. As always his lecture was both funny and stimulating giving members a chance to try to identify the birds he showed before he told us what they were.

Field meetings

The ornithology field meetings began early in August with the roseate tern evening that should have been held in July 2003. There was another similar outing on 5 July 2004. Both were very successful and members of the North Northumberland Bird Club and the Society attended each visit. Roseate terns were seen well on both trips and the weather was kind, making viewing of the colony very easy.

19 September Steve Westerberg led a small group of members around his work patch of Gateshead. They travelled by minibus to various bird watching spots and saw good numbers of both waders and waterfowl. They also visited the Thornley Woodland Centre and saw the birds at the feeding station.

On 27 September Martin Hughes and sixteen members went to Spurn Point. They enjoyed views of common shore waders and large numbers of migrant hirundines and were treated to excellent views of a first year barred warbler feeding in a hawthorn hedge. They also saw redstarts, reed buntings, goldfinches and a small party of early bramblings. The day finished with a hasty stop to admire a stunning red-breasted flycatcher hawking insects.

On 18 October David Noble-Rollin led the annual autumn trip to Holy Island. It was a good day both for weather and birds, with highlights of peregrine, ring ouzel and yellow-browed warbler. There was a light easterly breeze and plenty of evidence of the migration of warblers, flycatchers, thrushes and goldcrests.

For personal reasons Martin Hughes had to cancel the Aberlady Bay visit at very short notice. However, on 17 February members were invited to join David Noble-Rollin on a visit with his Tuesday ornithology class to Caerlaverock. The morning was disappointing with the pinkfooted geese not in their traditional feeding grounds. However when the group of about twenty-eight people arrived at Caerlaverock reserve there were plenty of birds to see including single Richardson's and Taverner's Canada geese. The waterfowl

were present in large numbers and the day was made by good views of a goshawk.

On 6 March Steve Westerberg led the Loch Ken trip. In contrast to last year's, it was blessed with sunshine and light winds. First stop was at Loch Ken with views of waterfowl including white-fronted geese. About twenty recently released red kites were taking advantage of the good weather and good numbers of buzzards were seen. Laurieston Forest failed to produce any eagles, so the party moved on to Mersehead, where everyone was rewarded with the sight of a hen harrier quartering a nearby field, and a firecrest, which had been wintering on the reserve. This latter bird proved frustrating until the end of the day when everyone had excellent views of it feeding next to the hide.

On 9 May David Noble-Rollin led a group of members around Holy Island looking for spring migrants. The day was fine but there had been little movement of birds. However members had the opportunity of excellent views of a pied flycatcher in small bushes in the sand dunes, whimbrel flying north and a flock of sanderling in summer plumage.

At 4.00am on Wednesday 12 May Martin Hughes and six members were listening to the dawn chorus at Gosforth Park reserve. They were greeted by the early songsters, robin and song thrush, already in full song, gradually joined by other species including, blackbird, wren, blackcap, mistle thrush and chiffchaff. Views of badger and roe deer were also obtained, the latter watching the party as intently as they were watching them. The lake area produced willow, reed and sedge warblers and as they watched the water birds a vixen led a very young cub around the far shoreline, watched also by several herons.

On 12 June David Noble-Rollin led members up the Harthope Valley to look for upland birds. They first went up a side burn to look for ring ouzels. Near the top of the valley they had excellent views of a pair building a second nest. The leader had been there the week before and they had fledged young at the time. Both whinchat and stonechat were seen. Back on the valley floor, redstarts were active and families of both pied and grey wagtail were around the river. Green woodpecker and cuckoo were also heard in the valley.

Mammal Section

The common or hazel dormouse *Muscardinus avellanarius* was the subject of an illustrated talk given by Darren Smith on 24 October, in which he presented the results of research conducted as part of his PhD. This species is now thought to be almost extinct in north-east England except at Staward Gorge, in lower Allendale. Darren briefly outlined the four species of European dormouse, discussing in more detail their historical and current distributions, and the ecology and biology of the hazel dormouse. He concluded by outlining his plans to survey and monitor similar habitats in northern England for signs of dormouse.

On 23 January, ninety people filled the lecture theatre to hear Louise Bessant, Red Squirrel Conservation Officer at Northumberland Wildlife Trust, give an illustrated update on red squirrels and their conservation in Northumberland. She began with a synopsis of red squirrel biology, ecology and current conservation status in relation to the spread of the American grey squirrel *Sciurus carolinensis* across the UK and northern Italy. She explained why greys displace reds and described the current conservation strategy: the creation of 'reserves' of mixed conifer woodlands of no less than 200 ha with 'grey unfriendly' buffer zones of birch and rowan. The enormous interest and concern for our native squirrel was clearly demonstrated by the barrage of questions, suggestions and comments that Louise received from the audience.

On 27 February, on an evening with the worst winter weather we had endured for some

years, Bob Wilkin gave a fascinating account of his experiences while trekking in Ladakh 'the land of the snow leopard'. Using slides and audio presentation, he described the local largely Buddhist population's culture of respect for wildlife, particularly for the snow leopard which they try to protect. Only 5500 to 7000 remain in the wild. Their natural prey species, ibex and blue mountain sheep are culled and Kashmiri insurgency makes wardening difficult. The trek reached 18,350ft, but no leopards were sighted on this occasion. Examples of the leopards' territorial markers and hair samples were shown during the talk.

The field meeting programme for the mammal section began on Saturday 6 September, when a small group of members joined the North Northumberland Bird Club, led by Graham Bell, on what was to prove a memorable pelagic cruise from Seahouses. They had views of grey seals, harbour porpoises, minke whales and white-beaked and bottle-nosed dolphins. They went out over eighteen miles to the Farne Leaps, and were rewarded not only by the mammals but by large quantities of birds including a thousand gannets, six great skuas, six sooty shearwaters, fifty puffins, five hundred guillemots, five razorbills, five hundred kittiwakes, ten great black-backed gulls, ten lesser black-backed gulls, various other gulls, five cormorants, ten shags and fifty eider ducks, but no terns.

On Sunday 23 May Veronica Carnell led the small mammal trapping session at Blagdon Hall, which was part of the 175th Anniversary celebrations. Twenty traps were pre-baited with fly pupae and grain for ten days, and set between 0800 and 1500 on the day. Seven bank voles and one juvenile woodmouse were caught, sexed and weighed during the day.

The annual badger watches led by Bob Wilkin and Paul Drummond this year attracted nineteen people and were spread over four evenings in May. Members were given the usual introduction to the history and present status of the badgers in the reserve. Time was set aside before going to the hide to examine badger footpaths, badger prints, feeding areas and dung pits. Badgers were seen on all the evenings.

Over the years Bob Wilkin has led the Society on a number of otter walks in Northumberland. However, on 26 May he arranged the Society's first urban otter walk. The evening began at Gosforth Park Nature Reserve where the group followed an eighty-metre length of otter tracks along a ditch off the South Path and members were initiated into the delicate art of otter spraint appreciation (similar to wine tasting). The group then visited the Whitecroft Burn, Jesmond Dene and the Ouseburn where they again viewed both old and fresh otter spraint. Later in the evening at another site within the City boundary they watched an otter for fifty-five minutes when the animal entertained the group by diving and porpoising and coming to the surface with a fish. During the period a second otter appeared, with both briefly in view together. Failing light brought an end to what members agreed had been a very interesting evening.

On Friday 23 July Tina Wiffen led a most informative and comprehensive bat night at Thornley Woodlands Centre. The evening started with a talk about bats and bat ecology, with slides and recordings of echolocation used to explain the lives of these misunderstood creatures. The talk was followed by a walk down to the river Derwent. The group saw common and soprano pipistrelle, Daubenton's and whiskered/Brandt bats, and one noctule.

As part of the student project programme run by the Society and Northumbria University, Veronica Carnell took two undergraduate students to visit Gosforth Park Nature Reserve. They are carrying out projects on red squirrel *Sciurus vulgaris* ecology. Tony Gray is working on red squirrel monitoring and distribution and the UK strategy for conservation, and Susan Tierney is investigating the possible advantages and risks of supplementary

feeding. Six red squirrels were seen on this visit. The students returned three weeks later with their tutor, Bruce Carlisle, when eight squirrels were seen at the feeders and in the oak wood. On both occasions, characteristic red squirrel interactive behaviour patterns were observed.

Geology Section

The programme of winter talks started on 10 October with a cosmic overview, 'From stars to sustainability: a planetary life of iron', by Andy Aplin. He explained the role of iron in the formation of stars and its significance in the emergence of life on this and perhaps other planets. This was followed on 7 November by Howard Armstrong talking on 'Palaeo-dentistry: probing the teeth of our earliest vertebrate ancestors'. Howard explained the kind of detective work required to build up a picture of the earliest vertebrates from the fossil teeth record. On 28 November Jon Mills brought us up to date with some of the high tech methods used to obtain geographic data and the ways they can be used to monitor environmental problems in a talk titled 'Geomatics techniques for geo-hazard detection, monitoring and prediction (or 'how to tell if you are going to lose your house'. The 2004 programme began on 16 January with 'Arches and oil: an overview of the geology of the Arches National Park, Utah, USA', by Stuart Clarke who gave us a stunning view of the geology of Utah and the way 3-D imaging and modelling can explain the relationship between the present spectacular landscape and oil reservoirs. On 13 February Jon Davidson talked on 'Fingerprinting volcanoes with plenty of travel and a little chemistry'. He drew on his wide experience of vulcanology around the world to show that we are only now beginning to understand the mechanisms of individual volcanic systems. The winter series finished nearer to home on 12 March with Brian Young's talk on 'A new look at mineralisation in northern England' linking mineralisation in the Northern Pennines with that in the adjacent orefields of the Lake District.

The geology field meetings began on 6 September with a visit to the Cheviot volcanics led by Trevor Hardy. We met on a fine autumn day at Bulby's Wood in the Upper Breamish Valley and after the usual safety briefing and risk assessment proceeded to look at the Cheviot lavas. The afternoon was rather more strenuous as we toured the Cheviot granites. We had the usual very informed description of the area and finished the day tired but knowing a lot more about the geology of this exceptionally beautiful region.

The first field visit of 2004 was planned as a geological site study at Saughtree, Roxburghshire led by Gordon Liddle. Unfortunately, the date (24 April) coincided with the lambing season and we were asked very nicely not to disturb the sheep. We moved a few miles down the road to another site where we had an equally entertaining session. The visit to Saughtree will now take place in 2005 though not during the lambing season!

The field visit on 22 May was led by Mick Jones to the Three Coalfield Dykes. We started in the north at Low Hauxley with the tide low enough to allow us to get a good view of the Hauxley Dyke. A drive south brought us to Newbiggin and the Stakeford Dyke followed by another drive to Cullercoats and the Ninety Fathom. A short drive then took us to Marden Quarry to view the Permian faulting. This field trip must hold the record for the greatest number of miles covered during the visit and all without losing anyone. The final event was a pilgrimage to see the Dyke Stone in Gosforth. Very few of us had any idea what this was and we certainly didn't expect to see a kind of tombstone erected in 1829 to mark the entrance to the Ninety Fathom. Its erection must have been quite an event because a Ball was held on the spot to mark the occasion. If anyone has any historical information on these markers, Denis Scadeng would be pleased to hear it.

On 10 July we had a visit to Roseberry Topping in North Yorkshire led by Bill Scott. The turnout was very poor, possibly because of the terrible weather in the few days beforehand, but numbers as low as this could make field visits problematical in the future. The first part involved a climb to the top to look at the Lower and Middle Jurassic strata, which were exposed by a massive landslip in the early 1900s. The ascent was steep but on a well-defined path except for the traverse to the exposure. When we got to the top to stop for lunch, we found it occupied by family parties and five-year olds who were obviously fitter than we were. After lunch we crossed to Cliff Ridge Wood to examine the exposure of the Cleveland Dyke and the aftermath of quarrying. For most of the trip the weather was excellent with a little rain near the end, only getting heavy as we reached the cars. Warm thanks are due to Bill Scott for a very enjoyable visit.

Botany Section

The winter session began with Dr Veronica Howard, on 17 October, speaking on 'Veteran trees', what they were, their conservation importance and the need for survey work in our region to complement the very limited amount of information that is available. Owing to our somewhat casual historical approach to woodland management, Britain appears to be the veteran tree capital of western Europe. Then, on 21 November, Dr Gavin Hardy spoke on 'Classical Botany: plant-lore from the fourth century BC to the first century AD'. He told us that in fourth century BC Athens, Theophrastus assembled an awe-inspiring encyclopaedia about plants, covering their classification, morphology, ecology, pathology and uses (both medical and otherwise). Several centuries later, in the first century AD, Pliny was writing his *Natural History* and Dioscorides his great herbal, *De Materia Medica*. In between these two periods, the Latin authors Cato, Columella and Varro wrote detailed agricultural treatises.

On 20 February Professor Alan Davison lectured on 'Biodiversity and pollution in the Smoky Mountains National Park of the Appalachians'. The Great Smoky Mountains National Park, which straddles North Carolina and Tennessee, has scenery and an immense diversity of plants and animals, leading to it being declared a World Heritage Site. However that same scenery, and the gambling casinos in nearby Cherokee, attract about 11 million visitors a year. It is also the most polluted Park in the USA, because there are major cities in every direction, so it is a natural laboratory for scientists. The talk described the pollution problems and research on the effects on the natural flora. Finally on 19 March, Bill Burlton, District Forester (Environment) at Kielder, had as his subject 'Kielder Forest: more than just trees'. He outlined the history of the forest, including how changes in Government policy have influenced not only forestry aspirations but also the forest environment. Managing the vegetation, both the forest itself and that of the unplanted areas, is the key to increasing biodiversity, and he described the ways in which plantations are being redesigned to meet the needs of the red squirrel and black grouse, and in which the raised and blanket bogs are being restored and conserved.

On 5 October Mike Cruse led the annual lichen outing to Wanney Crag, near Ridsdale. A small group went through the forest and onto the top of Little Wanney Crag, where the view only distracted us for a short while from the spectacular carpets of mosses and lichens. Highlights on the crags included *Bunodophoron melanocarpum* and *Cladonia bellidiflora*, and in the forest *Peltigera neckeri*, one of the rarer dog lichens. Then on 12 October Dr Gordon Beakes led a fungus foray to Briarwood Banks beside the lower River Allen. The summer drought meant that the number of species found was not as great as usual, and it was wood-rotting species which were most abundant, perhaps because rotten wood holds water.

The summer field visits, up to the time of writing, have included one on 27 June to the classic botanical locality of Widdybank Fell, in upper Teesdale, led by Professor John Richards. We saw, in flushes, on Sugar Limestone, and in various other unusual habitats, moonwort *Botrychium lunaria*, alpine bistort *Persicaria vivipara*, yellow saxifrage *Saxifraga aizoides*, mountain everlasting *Antennaria dioica*, Scottish asphodel *Tofieldia pusilla*, three-flowered rush *Juncus triglumis*, hair sedge *Carex capillaris*, rare spring-sedge *C. ericetorum* and false sedge *Kobresia simpliciuscula*. Most exciting was the rarest Teesdale plant of all, Teesdale sandwort *Minuartia stricta*.

On 14 July, Dr Veronica Howard instructed us in grass identification at Tyne Riverside, Low Prudhoe (The Spetchells). We examined both the riverside and the old lime heaps, and were surprised not to find quaking grass *Briza media* on the latter. Among less common plants of the lime-heaps we noted perennial wall-rocket *Diploxys tenuifolia* (non-native), musk thistle *Carduus nutans* and marjoram *Origanum vulgare*. Then, also in July, John Steele led a visit to 'Upper Coquetdale'. The highlight was a normally out-of-bounds bog on the Ministry of Defence's Otterburn Training Area which is almost certainly the best of the few Northumberland sites for bog orchid *Hammarbya paludosa*. The volume of water in the Coquet prevented a close look at Jacob's ladder *Polemonium caeruleum* (a national Red Data Book species), and the party had to be content to stand on the opposite bank of the river. Towards the end of the day those members keen on lichens travelled further up the valley to hunt for the river jelly lichen *Collema dichotomum*. Northumberland has three of the twenty or so known British localities of this aquatic species, of which two are in the upper Coquet system.

Midweek Botany Group

The Midweek Botany Group has continued its programme of field trips throughout the spring and summer. We started the season early in March with a trip to Moorbank Botanic Garden where Professor John Richards showed us round and talked about the future of the garden. In April we visited two beautiful woods near Hexham. The first, Letah Wood, provided a lovely display of wild daffodils *Narcissus pseudonarcissus* and at Howford Banks we found a number of specimens of yellow star of Bethlehem *Gagea lutea* together with many other spring flowers. Later in the month we went to Allen Banks where many common woodland plants were seen. May began with a very wet trip to Ashgill Force near Garrigill when there was as much water coming from the skies as there was down the waterfall! In spite of this we found plenty to interest us, particularly several ferns including green spleenwort *Asplenium viride* and brittle bladder fern *Cystopteris fragilis*. Our next outing was to Gunnerton Crag which gave us carpets of cowslips *Primula veris* and early purple orchids *Orchis mascula*.

June started with an outing to the Durham coast at Easington with many orchids, common rockrose *Helianthemum nummularium* and Dyer's greenweed *Genista tinctoria* making a very pretty display. Hagg Bank Mine near Nenthead was very interesting with many lead-tolerant plants growing on the old spoil heaps. Dirt Pot was most noteworthy for the huge number of tall specimens of common twayblade *Listera ovata*, and a most magnificent stand of stagshorn clubmoss *Lycopodium clavatum*. Thrislington Plantation in County Durham provided many attractive plants including mountain everlasting *Antennaria dioica* and the uncommon perennial flax *Linum perenne*, and the Wannie Line at Scots Gap was notable for displays of melancholy thistle *Cirsium heterophyllum*. The next trip at the beginning of July was also to a disused railway line, the Waskerley Way. Here we found large spikes of frog orchid *Coeloglossum viride* still in full bloom relatively late in the season and many tall plants of moonwort *Botrychium lunaria*. A trip to the Lewis Burn

in Kielder Forest was rewarded by a colourful display of flowers such as common spotted orchid *Dactylorhiza fuchsii* and fragrant orchid *Gymnadenia conopsea* growing somewhat unexpectedly in such a heavily forested area.

This year, in addition to the regular Wednesday outings, the group has been involved with several different projects. We participated in the Society's 175th Anniversary celebrations, joining the ornithologists for a walk in the Wycliffe area of Teesdale where Marmaduke Tunstall lived and assembled many of the Society's earliest collections. The Society's Open Day at Blagdon Hall was very enjoyable and the hard work involved in preparing a display of botanical photographs and books was rewarded by the high degree of interest shown by members and the public who attended. The Group carried out a survey of the flora of Flatts Wood near Barnard Castle where a proposed development is putting the woodland at risk. It is hoped that the evidence we gathered will contribute to the plans being rejected. We were approached early in the year by scientists from the Dove Marine Laboratory at Cullercoats who asked for our help in a seaweed survey of the estuaries of the Tyne, Wear and Tweed. Some of our members have been visiting these sites and assisting with the collection and identification of the seaweeds found there and this work will continue into the late summer and autumn.

Entomology

On 19 June Gordon Port ran 'Get to know the Insects' at the Close House Field Station. This regular event, run in collaboration with the School of Biology at Newcastle University and the Royal Entomological Society, was timed this year to fall within the first National Insect Week. The uncertain weather kept the numbers of participants down to six, but we were able to go out collecting between the showers and spent the time in the laboratory looking at ways of identifying the insects collected. Although the number participating was small it did allow for some detailed work. There are plans to time the event next year to coincide with National Insect Week 2005.

Teas before indoor meetings

During the autumn and winter Stella Chambers has organised the coffees and teas before the evening lectures. Although she has received some assistance from other volunteers she has done most of the work herself. At the end of the season of lectures she has decided not to continue next year; Council would like to take this opportunity to thank her for devoting her Friday evenings to making members welcome in the Museum.

HANCOCK MUSEUM

With the arrival of a new Dinosaur exhibition from the Natural History Museum in London, this has been a more successful year for the Museum, with 104,531 visitors, almost 30,000 more than the previous year. Undoubtedly the star of the year has been T-rex, a $\frac{3}{4}$ scale servo-robotic model that was so realistic, visitors had to look twice!

Dinosaurs aside, the Museum also hosted a lively programme of other exhibitions and events. Some highlights included a series of new hands-on science workshops exploring minibeasts and skeletons, and a portable planetarium show, which ran for a week as part of the Newcastle Science Festival. In addition the Museum hosted events as part of the 250th anniversary celebrations of the birth of Thomas Bewick, the famous Newcastle engraver and artist.

Our smaller capital developments have continued. The summer period saw the completion and opening of the eagerly anticipated Den facility for young visitors. This gallery uses hands-on investigative techniques and games to encourage young children to explore the

natural world. In addition to the digitisation work taking place through the IMAGINE project, steady progress has been made on collections management. Perhaps the most notable projects have included the transfer of the ex-University of Newcastle Geology Department fossil collections to the Museum, and the completion of a new fossil store to house collections removed from the balcony areas as part of the Fossil Zone project.

Major Exhibitions

The Upright Ape (5 April-7 September 2003) This exhibition, toured by the Yorkshire Museum, explored the evolution of human beings from their earliest known ancestors, six million years ago. The exhibition included replicas, a computer animated video, and fossils of ice age mammals, including mammoths. It was supported by Yorkshire Museum, National Museums of Scotland, National Museums and Galleries of Wales, Donald Baden-Powell Quaternary Research Centre, Oxford Brooks University, and Arts Council England.

Dinosaurs (18 October 2003-9 May 2004) This exhibition, on hire from the Natural History Museum in London, consisted predominantly of animatronic models of a variety of well-known species of dinosaur including *Stegosaurus*, *Triceratops*, *Apatosaurus* and of course *Tyrannosaurus rex*. The latter was a new generation of animatronic model and was undoubtedly the best ever shown at the Museum. The exhibition also looked at the family side of dinosaur life, concentrating on eggs and babies and how dinosaurs may have cared for, and protected, their young. The exhibition was opened by Dr Dave Martill from Portsmouth University who also presents Channel 4's Big Monster Dig series. Dr Martill helped us achieve some national press coverage when the *Times* and *Telegraph* published articles about him and the fossil amphibian skull named after him (*Kyrinion martilli*), which is part of the Hancock collection. The exhibition was supported by the Natural History Museum (London), the National Museums and Galleries of Wales and sponsored by Marshall Branson and the Domnick Hunter Group.

Sea Monsters : The Exhibition (17 July-31 October 2004) Sea Monsters: the Exhibition explores the science and technology that made the BBC Sea Monsters series possible. It features models and maquettes used for filming the series, fossils and replicas, TV footage and large scale models of modern sea creatures including a Giant Squid and a Great White Shark. Supported by National Museum of Wales, Peterborough Museum, BBC Worldwide, B&Q, Gloucester Docks Reptile Zoo.

Other Exhibitions

The Many Faces of Thomas Bewick (26 July-5 October 2003)

An exhibition of portraits and other images of Thomas Bewick, curated by June Holmes, celebrated the 250th anniversary of the birth of Bewick. It was grant-aided by Heritage Lottery Fund, Arts Council, Sir James Knott Trust and supported by the National Portrait Gallery, the Bewick Society, Newcastle City Library, the Literary and Philosophical Society of Newcastle, Hatton Gallery, University of Northumbria, and Laing Art Gallery.

Christiane Löhrr (6 October-16 November 2003)

A series of plant-based sculptures by German artist Christiane Löhrr, which was the result of a two-week residency at the Museum. The exhibition was curated by the Newcastle-based artists' agency Locus+. Supported by Arts Council England and Locus+.

Drawn Together (22 November-14 December 2003)

A personal record of feelings and reflections about adoption through art, organised by

Barnardos and After Adoption. The exhibition was the result of the efforts of twelve families working with an artist at the Museum.

Northumberland Wildlife Trust Photographic Competition (20 Dec 2003-18 Jan 2004) The Northumberland Wildlife Trust showed an exhibition of photographs from their annual Wildlife and Landscape photography competition in the White Room gallery.

Still by Catherine Elvin (24 January-29 February 2004)

A thought provoking photography exhibition comparing and contrasting the use of taxidermy in conservation-based displays with the trophy hunting trade in the USA. Supported by the Arts Council England.

175th Anniversary of the Formation of the Natural History Society of Northumbria (17 July-5 September 2004).

The second exhibition this year curated by the Society, in this case by Dr David Gardner-Medwin and June Holmes. This exhibition explored some of the archive holdings within the collections and highlighted several important aspects including photographs of the Hancock brothers, and drawings and watercolours by Thomas Bewick, Albany Hancock and George Gibsone.

Exhibition Loan : Nanoq: flat out and bluesome Our polar bear took a short vacation to an arts venue in Bristol (Spike Island) as part of an exhibition (title above) bringing together as many polar bear specimens in the UK as possible.

New displays

Fossil Zone. Much of the work of the geology section this year has been spent on the development of the new Fossil Zone gallery which now occupies the balcony area above the Earth Galleries to the rear of the Museum. The gallery is intended to showcase approximately 1000 fossils from the collections and gives us the opportunity to display more fossil material than at any time since the original 1880s displays were removed in the 1950s. This project has also allowed us to move approximately 20,000 fossils from the old balcony store into a new purpose built store in the east wing.

Bewick – Wildlife Artist. After many years of service the old Bewick display outside the lecture theatre has now been dismantled and a new Bewick gallery has been completed on the balcony area opposite the Fossil Zone. Many of the original specimens in the collections that were actually drawn by Bewick are on display, including one of our oldest specimens, the wombat, donated to the Lit and Phil Museum by the Governor of New South Wales in 1798.

Education Activities – Schools

The Ancient Egypt and Ancient Greek Living History event ran for fourteen weeks during the autumn and spring terms attracting approximately 7000 children. The Upright Ape exhibition was supported by a special event during which children met a 'caveman' and heard stories about his life. In March 2004, a portable planetarium was installed in the White Room for one week, and this attracted a considerable number of school groups. This was funded through the Newcastle Science Festival.

New workshops for schools were produced to support the curriculum. Themes include skeletons, rocks and fossils, and minibeasts. This increase in education provision at the Museum is a result of the work of Naomi Hewitt, the new part-time Assistant Learning Officer funded through the North East Regional Museums Hub.

A literacy programme to support the Dinosaurs exhibition took place during late March

and throughout April. Staff also conducted a number of behind the scenes tours including a tour for Newcastle Church High Science Club and Newcastle Older and Active Deaf Club. In May a programme for Gifted and Talented children took place in conjunction with the Laing Art Gallery and Ethnography material was used to provide inspiration for a mask-making workshop.

Janice Peacock has been appointed as the new Den Explainer and she has developed and delivered a new workshop programme for the Den. Local secondary schools have been working on a creative partnership project within the Museum and students have been using museum specimens to develop drawing and art skills. Also a wide range of informal family orientated learning activities took place over the year. In total there were thirty-three individual sessions.

Adult Education and Training

Staff taught a variety of subjects on the University of Newcastle's Museum Studies course, including aspects of collections management and Living History, and also ran a five-week programme on 'An Introduction to Museology' for third year Zoology Masterclass students. Supervision and tutorial sessions were provided for one Museum Studies student undertaking a placement at the Museum. The Museum's ethnographic collections were also the subject of a teaching seminar delivered to twenty students from the Durham University anthropology course. PGCE students from the University of Newcastle visited the Museum to learn about teaching science for Key Stages 1-3. The curator gave a paper at the Open University Geological Society Symposium in July at Durham University and the Senior Curator also taught on the MA in Museum and Artefact Studies at the University of Durham. Two of our staff achieved further qualifications this year. Les Jessop was awarded a PhD from the University of Newcastle for his thesis on the ethnographic collections at the Museum, and Sylvia Humphrey gained her MSc in Museum Studies from the University of Leicester.

Newcastle Science Festival (13 March-21 March 2004) The Museum took part in the second year of events organised as part of the Newcastle Science Festival. In addition to the Dinosaur exhibition there was a rock and gem roadshow and planetarium shows in the White Room for schools.

Outreach Staff at the Museum have continued to deliver a natural sciences outreach programme to libraries in North Tyneside, including handling and craft activities based on the subject of 'Monsters from the Sea', 'Snakes and Insects' and 'Dinosaurs'. Staff have also delivered 'fossil roadshows' at Woodhorn Colliery Museum in Northumberland and a number of external lectures and field trips.

Collections Management

Volunteer staff have continued to make progress on various aspects of collections management including the bird, mammal, insect and osteology collections. Most staff efforts over the last year have been concentrated on the palaeontology collections in order to prepare records for inclusion in the new gallery databases which will form part of the Fossil Zone display. Work has also included the building of a new store at the end of the Abel's Ark gallery and the re-storage of over 20,000 fossils from the old balcony cupboards where the Fossil Zone has been installed. Over 1000 fossils have also been photographed for this display. Work has, however, also continued on the ethnography collections and the re-organisation of the spirit collections.

As part of the New Opportunities Fund (NOF) IMAGINE project, work has continued on the digitisation of the collections in order to include examples which will be accessible

through the World Wide Web.

An application made to the Designation Challenge Fund (DCF - administered by the Museums, Libraries and Archives Council) was successful and TWM was awarded a grant of just over £96,000 to re-store the geology collection at Sunderland Museum and to employ a geologist to work on the documentation and conservation of the collections at the Hancock Museum for twenty months. After the completion of his work on the Fossil Zone, Eric Johnson was transferred to the DCF geology project, and Sylvia Humphrey, our current Assistant Keeper of Geology, has been seconded to the project. We are currently in the process of replacing Sylvia with a temporary Assistant Keeper for the duration of the project which is scheduled to be complete by the end of March 2006.

The ex-University of Newcastle Geology Department fossil collections, left in the basement of the Claremont store next to the sports hall, have been removed and transferred to the Museum. This was essential given that work currently being undertaken by the University involved the demolition of the Claremont store. The collection was in poor condition and has suffered some deterioration; however much of it can be saved and already some extremely important material is coming to light, particularly some William Hutton plant fossils, Thomas Atthey slides and other vertebrate material with 'Hancock Museum' labels attached.

Research

Research use of the collections has continued and there have been a number of loans to academic institutions around the world as well as visits by researchers. Some examples of research projects are: taxonomic work on the Angas land snail collection, isotopic analysis of the capercaillie to determine if it is indeed a true representative of the British race and taxonomic work on the Carboniferous lungfish collections; studies of our red squirrel collections to try to determine whether the Northumberland squirrel population is a true British sub-species or part of, or interbred with, the sub-species introduced on the European Continent in the 1920s and 30s; stable isotope analysis of the Turdidae family of birds to determine breeding sites; work on the primate collections, and the 18th century ethnography collections; DNA studies on our golden eagle collections in order to determine genetic variability of the species in Scotland (past and present); and investigations into our records of birds from Cleveland as part of work on the Historic Birds of Cleveland.

Staff have undertaken research in the following areas. Les Jessop has completed his PhD thesis on the ethnographic collections and indeed published his recent catalogue of the 18th century ethnography collections in the Society's *Transactions*. Sylvia Humphrey completed her MSc thesis on the history of the mineral collections. Steve McLean is currently preparing a joint paper with Sue Turner on the Murray Threipland fossils fish collections and is also researching the history of the Gideon Mantell fossil collection in the Museum.

Disability Discrimination Act

The final phase of the DDA comes in to force in October this year. Audits are currently under way at the Hancock to ensure that we comply with this legislation and/or have appropriate action plans and alternative means of access arranged. This concerns not just physical access to the building but also intellectual access to information within the displays. We are fortunate to have the assistance of the new TWM Regional Hub Access Officer.

Awards

We were delighted to receive two commendations in the 2004 Interpret Britain Awards of the Association for Heritage Interpretation. The awards, for the new Den for young children, recognized the innovative nature of this new facility and how we had worked with a range of people, including nursery groups, to plan and develop the gallery. The awards were presented by Lloyd Grossman in London.

In addition we were also shortlisted in the 2004 'Awards for Excellence' for the innovative nature of our marketing campaign for the Dinosaurs exhibition.

Staffing

In December 2003, our Senior Manager, Iain Watson, was seconded to the University of Newcastle in order to project manage the re-submission of the Great North Museum bid. Steve McLean took over as acting Senior Manager in his absence. Subsequent to the re-submission, Iain was appointed Assistant Director for Tyne and Wear Museums and took up his post in July 2004.

Naomi Hewitt was appointed as North East Regional Hub Assistant Learning Officer in August 2003. She currently spends three days a week at the Hancock, and two at Sunderland Museum. Melissa Viguier was appointed as Den Facilitator in October 2003; however she left in February 2004. She was succeeded by Janice Peacock in April 2004. Linda Morris returned to the Museum as Exhibitions Officer on short-term contract. Linda was appointed in order to provide some assistance to the Curator during this period of staff shortage. Her main responsibilities have been the new Bewick and Fossil Zone displays, as well as helping with the exhibitions programme.

Eric Johnson has continued to work on the Fossil Zone project and was transferred to the Designation Challenge Fund (DCF) Geology project in July 2004. Similarly Dan Gordon continued, for part of the year, to work on the New Opportunities Fund digitisation (IMAGINE) project for the Hancock.

There has been less change in the complement of Front of House staff. The only new addition has been Cheryl Atkinson, who took up her post in July 2004.

The current permanent staffing complement is:

Senior Manager: Vacant

Steve McLean (Acting Senior Manager, Curator, Principal Keeper)

Fiona Fenwick (Administrative Assistant)*

Les Jessop (Keeper of Biology - based at Sunderland Museum)*

Naomi Hewitt (Assistant Learning Officer)*

Sylvia Humphrey (Assistant Keeper, Geology)

Eric Morton (Assistant Keeper, Biology)

Nicola McNicholas (Biology Assistant)

Gillian Mason (Learning Officer)

Sheryl Muxworthy (Press and Marketing Officer)*

John Pratt (Team Leader)

Deborah Hunter (Team Leader)

Mark Cutts (Attendant)

Anthony Goodfellow (Attendant)*

Alan Lister (Attendant)*
Cheryl Atkinson (Attendant)*
(*indicates part-time)

Short-term Contract Staff

Eric Johnson: DCF Project
Linda Morris: Exhibitions Officer
Janice Peacock: Den Facilitator
Dan Gordon: IMAGINE project

Volunteers

Once again the Museum has benefited from the tremendous work undertaken by a considerable number of volunteers and work placement students who have given up their time to contribute in a variety of important ways. Our calculations have shown us that volunteers contribute the equivalent of a full-time member of staff to the Museum, and we simply could not do without their help. Our sincere thanks for their continued and invaluable support. They are:

Trevor Bridges	Mineralogy curation
Melanie Burgess	Education support (placement)
Ron Cook	Botany/oology curation
Paddy Cottam	Osteology curation
Jess Fermie	Palaeontology curation
Michael Frankis	Northumberland bird records
June Holmes	Archive collections
Naomi Howes	Education support (placement)
Susan McLean	Education support
Michael Mann	Insect events/animal care
Roger Stobbart	Entomology curation/bird curation
Katie Timmins	Education support
June Waites	Education support
Rose Woodfine	Education support (placement)

Selected Acquisitions

Collection of 150 mineral specimens from the North Pennine orefield from various individuals representing the Northern Branch of the Russell Society.

Halite (rock salt) from Wieliczka Mine near Kraków, Poland – gift (D Gardner-Medwin).

Skull of a young Chillingham ox – gift (Brian Ingham – Barnard Castle).

Mummified Frog – gift (Mr J T Ford – South Shields)

Water Rail – gift (J Douglas – Morpeth)

Eider Duck – gift (Mrs Anderson – Gosforth)

Swallow – gift (John Law – Hexham)

IMAGE AND MEMBERSHIP GROUP

Following on from the excellent work done previously with regard to membership and publicity, the group was asked to consider updating the Society's constitution, or rules as they are still called. Although occasional clauses have been changed over recent years, it is a considerable time since a reappraisal of the constitution as a whole has been undertaken. Meanwhile, charity law has changed and become more demanding, and obligations and responsibilities need to be spelt out more clearly in an ever more complex world.

Following several meetings and a considerable amount of redrafting, the result was put to the General Purposes Committee for comment during the summer. After two extensive sessions, the resultant draft is now with the Charity Commission for comment prior to being put to the Council at its October meeting. It is hoped that an agreed version will be put to members for their approval at the annual meeting this year.

RINGING GROUP

The three main ringing programmes run by the ringing group were again continued this year. Constant-effort ringing at Gosforth Park Nature Reserve started in late April, and by the end of July the group had ringed 438 new birds. This is down slightly on last year's total (515), but bad weather meant that one weekend was missed. In the annual report for 2003, changes in the numbers of new blue tits, great tits, chiffchaffs, willow warblers, reed warblers and sedge warblers ringed were highlighted. In this group of species there have again been interesting changes. Compared to last year (in brackets), numbers of reed warblers have held their own at 38 (39), whereas sedge warbler numbers have been low at 44 (125). Again, with the tits, blue tit numbers have continued to slide to 48 (75) while great tit numbers have remained similar at 40 (39). Chiffchaffs have also remained similar in number at 29 (33), whereas the number of willow warblers has slipped back to 27 (38). The signs are for this year that willow warbler productivity has been low, very few juveniles having been caught, while there have been good numbers of juvenile chiffchaffs. As with previous years, all data were computerised and submitted to the BTO as a contribution to the national database. The Group's own ringing database now has over 41,000 entries, representing the numbers of birds ringed and retrapped mainly at Gosforth Park, Low Newton-by-the-Sea, the Farnes and Coquet Island.

This constant-effort season has also been notable for the ranges of species captured in Gosforth Park; seven swifts, two kingfishers and a grasshopper warbler being particular highlights. However, without a doubt the 'star bird' was the female bluethroat that obligingly jumped into a constant effort net in May (and this was the first we knew of its presence). Although bluethroats occur occasionally on the coast during spring and autumn, it is unusual to find one this far inland.

Ringing migrants on the coast at Low Newton-by-the-Sea in autumn allows our trainees to experience a greater range of species and in different catching situations. In autumn 2003, the group ringed 426 new birds, an increase of twelve on the previous year. Warblers were noticeable for their absence, and there was very little passage during the ringing sessions. The group would normally expect to ring small numbers of a wide range of warbler species, but in autumn 2003 only managed thirteen each of chiffchaffs and sedge warblers. There were, however, good numbers of wagtails and pipits, reed buntings (the most numerous species, fifty-seven were ringed), finches, dunnocks and tits. The group was surprised to catch four dunlins: these flew into nets set on the beach in early morning (but in broad daylight: waders have good eyesight so it is unusual to catch them like this dur-

ing the day). Although Low Newton is not operated with the same rigour as a constant-effort site like Gosforth Park, nets are generally used in the same sites from year to year and this does give us a picture of what birds use the various habitats in autumn. Another bonus is the opportunity for birding in a beautiful part of the coastline, once ringing has finished for the day, and this autumn some members of the team were lucky enough to find a drake surf scoter in the company of eider just off the Emblestones.

With respect to seabird ringing on Coquet Island and the Farne Islands, the 2004 season has been busy, but the overall number of birds ringed was somewhat lower than last year. The team achieved totals of (last year in brackets): 556 (912) Sandwich terns, *ca* 650 (706) arctic terns, 83 (73) common terns, 165 (207) kittiwakes, 49 (102) eiders, 95 (245) shags, 11 (23) fulmars and 221 (189) black-headed gulls. The numbers of Sandwich terns ringed was low because bad weather prevented access to the islands at the appropriate times; this bad weather was also a factor leading to an unusually high mortality of terns, in particular arctic and common terns. Mortality of arctic tern chicks on Coquet Island (from ringing data) this year was 53% overall, whereas it is usually around 20%. The numbers of shags and kittiwakes ringed was low due to a combination of mortality and low productivity: most kittiwakes normally have a brood of two, but this year most nests had a single chick; a similar brood reduction was evident with shags. At least with the terns, the high mortality was likely to be due to a combination of weather and inadequate food supply; it certainly seemed that the adults were, on the whole, bringing back relatively small sandeels. In the 2003 and 2004 breeding seasons, the ringing team also ringed adult arctic terns on the Farnes. The biometric data for these birds are interesting, and show that the adult arctic terns had a lower body mass in 2004 than in 2003, and that this was particularly true of birds later in the season (Figure 1). Continuing to collect data of this type for adults of terns and other species will be very valuable for future analyses of the factors affecting seabird breeding success. Although this poor breeding season has coincided with a disastrous one for seabirds on the Orkneys and Shetland Islands, the Society's historical records show that poor breeding success due to weather and/or lack of food is not a recent phenomenon. However, we badly need to understand the factors that affect sandeels and their availability in the marine ecosystem of the Farnes and Coquet Islands, if we are to have any chance of maintaining these important seabird colonies for future generations.

The Council is very grateful to all those who support the ringing studies in various ways. Brian Graham, Harbourmaster at Seahouses, is very tolerant of the team's late night returns, and forgiving when they forget to let him know they are coming! The work on the Farnes and Coquet Islands would not be possible without the support of the National Trust (John Walton) and the RSPB (Paul Morrison and Mike Innerdale); in particular we would like to thank David Steele (Steely) and Sarah Lowe, Head Wardens on the Farnes and Coquet Island, respectively, for their help and encouragement, and the wardening staff for their help and cups of tea. Viv Booth, in her last year of PhD research, has put a tremendous amount of effort into ringing the arctic terns for us on Coquet Island as they hatched. Without someone on site during the hatching period, it would be difficult to obtain accurate data on the differential mortality of first and second-hatched arctic tern chicks. As always, the ringing team has worked very hard throughout the year and the Council is very grateful for the ringers' efforts.

Coastal Research

The poor breeding success of terns and other seabirds this year emphasises the importance of continuing research into the sandeels around the Farne Islands and the factors that influ-

ence their availability as food. This year, the work of the Farne Islands Marine Research Group (FIMRG), a collaboration between the Society, Newcastle University and the National Trust, with research assistants on Inner Farne and Brownsman, continued to collect foraging location data and information on the food and feeding frequency of arctic tern chicks. Eliza Leat (the daughter of David Leat, one of the Society's ringing trainers) was based on Inner Farne, and Phil McQuillan filled the Brownsman slot. Phil was actually doing two jobs, collecting data for the FIMRG project and carrying out a project on the effects of disturbance on tern breeding to help inform management of the Farnes seabird colonies. With three-years' data collected, the Group is now in a position to do a comprehensive analysis of foraging distribution in relation to tidal and seabed characteristics, and how this changes from year to year. Data on chick feeding frequencies and prey size are also being used to investigate the effects on growth and mortality. The Council and FIMRG are grateful to the Farne Islands wardens for their hospitality towards our research assistants and enthusiastic support of the project, the Sir James Knott Trust and Northumbrian Water for financial support, and Ali Simpson, Skipper of the *RV Bernicia*, for his help and support with the sandeel surveys.

Mean mass of adult arctic terns on the Farne Islands
in 2003 and 2004

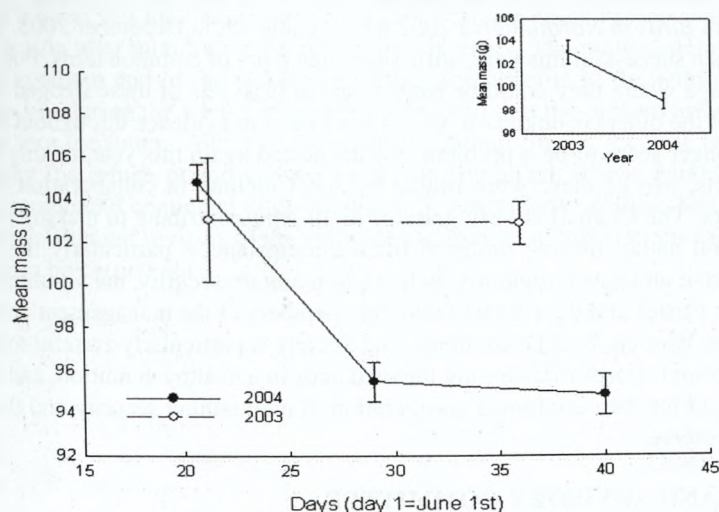


Figure 1: Mean corrected body mass (g) of adult arctic terns on the Farne Islands in 2003 and 2004. Body mass has been corrected for variation in body size using total head length as a measure of body size in an analysis of covariance. Error bars are \pm one standard error (SE) of the mean; sample sizes for each point in the main graph were 29-41 except for 21 June in 2003 for which the sample size was 5 and this smaller sample is the reason for the wider SE at this point. The small inset graph shows the overall mean size-corrected body mass for adult arctic terns in 2003 and 2004. The main graph shows the mean body mass in relation to seasonal progression, using the 1 June as day 1. These data show that, at the beginning of the season, in 2004 the masses of adult arctic terns were similar to those in 2003, whereas later (in 2004 this was after a period of particularly severe weather) adult terns were, on average, about 8g lighter in 2004 than in 2003.

GOSFORTH PARK NATURE RESERVE

Keeping the willow carr in the reserve at bay is a continuous process. Last winter, the Society received a grant in excess of £5,000 from English Nature towards reserve maintenance and this was used to employ outside contractors to attack the willow carr in specified areas. Volunteers also contributed by trimming and coppicing the willow carr in less accessible and more sensitive areas on the edge of and within reed beds. Vandalism in the reserve has been a continuing problem; hides have been damaged on several occasions. However, the damage to the laminated glass windows of the ringing hut that occurred last year has been repaired thanks to the efforts and joinery skills of Geoff Lawrence, a member of the ringing team. He has replaced the laminated glass windows with tougher plastic ones which we hope will be more resistant to attack. The ease of illegal entry into the reserve has not helped its security, and its fences are in need of repair and replacement. During the winter, Warden Paul Drummond had his long awaited operation and was back to full health in the new year. Paul has now installed a barbed wire fence along part of the southern edge of the reserve, which we hope will act as a deterrent to dog-walkers and vandals. This fence will be extended to fill in further holes in the boundary hedges.

Overall the lake and reed beds in the reserve are doing well. The constant-effort ringing indicates that the reed warbler population is being maintained, and an article summarising the movements and survival of the Gosforth Park reed warblers in the last five years was published in *Birds in Northumbria 2002* which came out in December 2003. The tern platform has been successful this year, attracting three pairs of common terns. Four chicks survived to an age where they could be ringed, and at least one of these fledged successfully; the fate of the others is unknown. Otters have been in evidence throughout the year, and mink no longer seem to be a problem. Swans nested again this year, raising a brood of seven cygnets; two of these were ringed by Jon Coleman in collaboration with the Society's ringers. The Council is very grateful to all who contribute to making Gosforth Park a successful nature reserve under difficult circumstances, particularly the Society members who visit and patrol regularly, helping to maintain security, the volunteer members of working parties and the ringing team, the members of the management committee and of course the Warden, Paul Drummond. The Society is particularly grateful to English Nature for the grant towards maintaining the reed beds in a healthy condition, and to High Gosforth Park Ltd for their continued co-operation in maintaining security and their help in running the reserve.

COQUET ISLAND ADVISORY COMMITTEE

The Committee advises the RSPB on management issues concerning the island and bird populations. During this year the chairmanship of the Committee moved from the Society to the RSPB and there were two meetings, one in January held at the Hancock and the other at Amble followed by a site visit. The tern numbers were in general up on last year with the May/June counts showing increases of arctic terns to 828 (765) and common terns to 1085 (923). However, Sandwich terns declined again to 1037 (1238). Roseate terns continued to increase with a record number of 73 (72) pairs. Their breeding season once again was protracted with only fifty-eight pairs in June and young still around in early August. The weather and an apparent shortage of sandeels greatly reduced the success rate of all the birds on the island. This included the roseate terns with seventy-three hatching but only sixty-three (82) fledging. Towards the end of the season the parents also started feeding their young with pipefish, which are so long and stiff that they choke the

young. This is the first time that this feeding behaviour has been witnessed by members of the committee or the warden, Dr Paul Morrison.

LINDISFARNE NATIONAL NATURE RESERVE

Lindisfarne Advisory Committee

The Advisory Panel has representatives from most of the community groups that have an active interest in the National Nature Reserve, which includes Budle Bay and Holy Island, or in the rural economy of the north-east of Northumberland. Their role is to make certain that English Nature is aware of their opinions and that local development plans can be discussed and the implications for the nature reserve can be taken into account. Typical issues are the plans to increase tourist use of Holy Island by development of the harbour area for leisure craft and work to be carried out on the causeway. Issues concerning sporting activities that could have an impact on the area are discussed and recommendations are forwarded to the local authorities.

Lindisfarne Wildfowl Panel

The Lindisfarne Wildfowl panel met on two occasions during the year. The Panel's main role is to advise English Nature on the relationship between wildfowling and the other uses of the National Nature reserve. The usual administrative matters were discussed but the main interest was the final report of the Lindisfarne Refuge Project which ended in the 2002/3 season after monitoring the refuge for six years. The main conclusions were that, with the southern end of the slake as a refuge, the benefits to the wildfowl and waders using the site during the winter were significant, and that the present arrangement should continue into the future. Although the intensive monitoring of the past years both before and during the refuge period can no longer be continued, it was agreed that the panel should recommend continued close monitoring, particularly of the effect on wigeon and brent geese. Regular reviews of the status of the important populations of wintering birds should also be carried out.

I D Moorhouse
Chairman of Council

OBITUARIES

R W T Thorp, B A (Oxon)

Reginald William Tudor Thorp, who died on 5 August 2003 at the very beginning of the twelve months covered by this Annual Report, had been a member of the Society since 1948 and a Vice President since 1968. To those of us privileged to have known him he was 'Reggie', and to many he will always be associated with the Farne Islands. He was born on 29 June 1915 in London, where his father worked after his parents had moved south from Northumberland. Then, in a series of coincidences, Worcester figured prominently in his life. He was sent to school there and it was there that he first met Alison, a young girl who would become his wife. He then went on to Worcester College, Oxford, to read law and in 1945 he married Alison in Worcester Cathedral.

Following University he returned north and was articled to the family solicitors' practice in Alnwick where the partners were his uncles, Tom and Collingwood Thorp. When Collingwood Thorp died, Reggie took over and remained the principal for nearly fifty years.

When Reggie was elected a Vice President of the Society in 1968, he had already served two terms on Council. As the Annual Report stated at the time, this further strengthened the close relationship which existed between the Society and the Farne Island Local Committee of the National Trust, for he was already Honorary Secretary (and Treasurer) to that committee and he continued as such for another thirty-two years.

As a Vice President of our Society for nearly thirty-five years he was a regular attender, by bus, of Council meetings. If necessary he would then slip out of the meeting early to catch his return bus to his Alnwick office but not before an apology for having to leave early and a slight bow to the chairman.

During the course of my twenty-five years on Council and seventeen years on the Farne Island Committee with Reggie, I developed a great respect for the man and his judgement. We did not always agree. He was, for instance, vehemently opposed to the resumption of bird-ringing on the Farne Islands following a suspension after the death of Grace Hickling, the accredited ringer, in 1986 but ringing was resumed by the Society in 1996.

It is impossible to exclude the Farne Islands from any description of Reggie's life because the Thorp family was associated with the islands long before he was born. The Venerable Charles Thorp, who was Archdeacon of Durham from 1831 to 1862, personally purchased the inner group of islands from the Dean and Chapter of Durham in 1861 while Lord Armstrong, Patron of this Society, owned the outer group.

The Archdeacon was the first person since St Cuthbert to give some protection to the birds on the Farnes when he paid for breeding season watchers to live on the islands until the young birds were on the wing. He restored the roofless St Cuthbert's Chapel on Inner Farne between 1844 and 1848 and installed the 1665 screen that we now see and which he brought from Durham Cathedral. The Archdeacon died in 1862 and the inner group of islands eventually passed to his grandson, the Reverend C Thorp, who decided to sell.

On 18 January 1923 a meeting of interested organisations was held at the Hancock Museum to consider the purchase of the islands. Lord Armstrong chaired the meeting and indicated that he was prepared to sell the outer group. A public appeal was launched by Viscount Grey of Fallodon and the islands were purchased for £2,000 and handed over to the National Trust in August 1925.

Reggie had, therefore, always been associated with the Farne Islands. In 1919 his uncle Collingwood F Thorp was elected Secretary of the Farne Island Association and Reggie assisted him in the 1940s until he succeeded his uncle and continued as the Honorary Secretary through until the year 2000, by which time the committee was known as the Farne Island Committee of the National Trust.

Then, early in 2000, in one of those unbelievable acts of folly to which national institutions often succumb, the National Trust applied an age-barrier rule from its Constitution preventing people over seventy-five from sitting on committees, and Reggie was ousted from the Committee at the age of eighty-five. He graciously accepted a retirement gift from the National Trust at a ceremony on 20 July 2000, but he was hurt. He had been working for the committee since 1937 and it was so unnecessary to treat an able, dedicated and long-serving voluntary worker with such strong family affiliations to the islands in that way.

At this time he was still the principal of his solicitors' practice at Narrowgate House, Alnwick, but soon health problems developed and he to step aside. Had he been allowed to continue with the Farne Island Committee he would then have happily given up that work as well, but it would have been his decision.

In the Queen's Birthday Honours List of 1988, Reggie was awarded the MBE for his services to the Farne Islands. I attended the Farne Island committee meeting on 24 June 1988 when the chairman, Lord Richard Percy, and the whole committee warmly congratulated him on this well-earned recognition of his work for the islands. However Reggie, as Honorary Secretary to the committee, modestly and true to form neglected to refer to this in the subsequent minutes and so there is no reference whatsoever of this award in the records of the islands' affairs, and I now rectify that omission in our own Society's history.

This modesty persisted two years later when Peter Hawkey retired at the end of 1990 after twenty years as Head Warden on the Farne Islands and was awarded the MBE. In a letter to Reggie I said, 'It is time that your own MBE appeared on the National Trust letter-heads'. Reggie replied, 'I don't quite like the idea of mine appearing on note paper. I think this would be overdoing things a bit'.

Forced eventually to give up his practice and his Farne Island work at the age of eighty-five, he may have been down but he was not out. Now confined to a wheelchair, and only three days after a cataract operation, he was determined to travel to the Hancock Museum on 31 January 2003 to hear a talk that I was giving about his long-time Farne colleague and friend, Grace Hickling. In appalling snowy road conditions he insisted that his son Robert drove him to Newcastle from north of Alnwick.

Six months later Reggie died in hospital and the Society lost a good friend and diligent Vice President.

He was a quiet, slow speaker with an amusing wit and turn of phrase but above all he was a courteous, gentle and charming gentleman.

Derek Shannon

Calvert Noble-Rollin

Calvert Noble-Rollin, who died on 9 April 2004 at the age of ninety-eight, had been a member of the Natural History Society since 1953 and had a lifelong passion for trying to understand birds and their behaviour. This began as a small child at Greystones, in Glanton, when the family moved there in 1910 and continued with astonishing single mindedness throughout his life. He also wished to share his interest with others and began in 1930 by setting up the Research and Educational Centre at Glanton. It was at this time he began to correspond with amateur naturalists around the world, organising dawn chorus studies. In 1935 he took his ex-lifeboat *Watchers' Link* to Nova Scotia to spend a year travelling around the coast, bird watching and recording his observations on daily bird behaviour. As the arctic winter set in his boat became stuck in the ice and he lived off potatoes and some fish that one of the locals dropped outside the boat. The following paragraph from his unpublished book seems to sum up his unending interest in everything that occurs in the natural world and his total lack of problems about heat or cold. When getting out of an aeroplane in the Sahara Desert the air hostess remarked that he still had his rain coat on (and probably his tweed jacket underneath).

THE BED ON THE ICE

Here and there round the edge of the harbour were cracks in the ice. The harbour was just one big chunk of frozen sea and the cracks were caused by the mass pulling away from the sides. Down these cracks could be seen some cold green water. I tried to wash a pan in this salty concoction but the first swish round turned it all into a mushy soup of crystals. When the soup was poured onto a rock it turned to ice on the spot.

By the middle of February the Nova Scotian winter had everything in such an iron cold grip that it fulfilled the Petit de Gratians' direct prophesies. Oxen and horses pulled their loads across the wide harbour at any point: Isle Madame and Petit de Grat ceased to be separate islands. 'Warm' houses became cool houses and I could not produce any warmth at all in *Watchers' Link*. In fact, I came to the conclusion that it was no warmer in the cabin than it was outside. One night to test this idea I loaded up the sledge with the bedclothes from the boat and made up a bed out on the frozen harbour. Here I retired for the night. It was lovely watching the whole uninterrupted sky of bright stars glistening in the cold air; later in the night the moon came up. Several Petit de Gratians came close to peek at the icy couch. I slept soundly and awakened just as the dawn light began to creep in from the east. One or two people were up early and came across the ice to collect what they thought would be a corpse. The crows were very inquisitive too, at this bundle out on the harbour ice, flying round and sweeping low, trying to get the hang of it. I rose, dressed and went for a sharp walk. On returning I found a crowd of people on the frozen harbour examining the place where I had slept. Apparently nobody had ever bedded out on the harbour ice before, they had thought it would be impossible. In result it turned out to be just as comfortable, or uncomfortable, out there as it was in *Watchers' Link* and there was no noticeable difference in the temperature. This the inhabitants found hard to believe. The episode caused a sensation. Two people made a four mile journey across the snows of Isle Madame just to look at the spot where the bed had been. At Samson's Cove, which I visited in the afternoon, they said they had been talking of nothing else. Eventually the news reached

the Halifax press where the incident was reported in detail.

In the extremes of cold I was finding it very difficult to keep the boat clean. With the floor permanently frozen, any moisture, anything damp or water spilled, turned to ice and became part of the floor. A boiled over kettle on the stove sent a trickle of water and ashes down the cabin floor which became a ridge of icy stone in the latter part of its journey. A knocked over bucket of water became a minor skating rink at the door. The moisture ran down the upper part of the walls when I thawed the boat out in the daytime, and further accumulated along the edges of the mattresses, already long frozen to the wall. The edges of the blankets now began to freeze against the wall. In a way this was an advantage as it prevented the covers from slipping off in the night, but it also produced rending, tearing noises in the darkness when I turned over and ripped them from the wall. The wall now began to accumulate feathery fringes of frozen blanket edge along the bed level. The local people were surprised how well I stood the cold. They had their noses and ears frozen. I never suffered from these disabilities and my hands, unlike theirs, were never chapped, frostbitten or had chilblains. They attributed the difference mainly to this being my first Canadian winter. Probably the extremes of cold which I lived in, day and night, conditions much more rigorous than they were enduring, helped to harden me.

Having survived a night outside myself, it seemed an idea to go out in a subsequent morning and see how the birds greeted the icy dawn. I left *Watchers' Link* at 6.30am and went down in the semi-darkness to the shed where the House Sparrows roosted, but there was complete silence. At 6.53 a Redpoll began flying round repeatedly calling. It was the first bird to herald the coming day. Two minutes later the sky became appreciably lighter. There was a slight breeze from the North-west and the air was intensely cold. At 6.56 a Raven called, announcing that he too was awake. Ten minutes later the Crows joined in and began streaming past. The first rooster did not crow until 7.12, losing his place as the official opener of the chorus. Seven minutes later House Sparrows began to murmur and the first gull, probably a Herring Gull, flew over silently at 7.39. It was not much of a beginning to a February morning but then there is little encouragement in a dawn of ice and snow.

From Chapter 10 of Calvert's book *Watchers' Link* (the story of his year alone on a boat in Canada in the 1930s).

After surviving the winter on *Watchers' Link*, Calvert sailed the now severely leaking vessel to Halifax harbour where he beached it before it sank. In 1937 Lillian Edgar travelled out from England, and they were married in Churchill. Throughout their long marriage she supported and encouraged Calvert in his ornithological studies and looked after Glanton on the many occasions when Calvert was travelling to various parts of the world.

During the 1950s he became involved with the Society through the use of the research facilities at the Farne Islands Study Centre. At this time the Society organised the parties staying in the tower on Inner Farne. He booked a number of weeks over the years and took groups out there to study the daily behaviour of the seabirds. Two of these enthusiastic students were Hugh and Stella Chambers, who went out in 1957 with Calvert to stay in the tower and who are now better known to our members as our librarians. The research they did into the daily behaviour of the seabirds was published in the *Transactions*. During this time he was in correspondence with Grace Hickling concerning the running of the tower and this and other original material and diaries will eventually be donated to the Society

for the archives via his son David. He also went out during the winter and stayed on the islands. He communicated with the mainland by homing pigeon, which carried rather brief messages to Glanton. On one occasion he was stranded by storms and had run out of food except for a number of tins of green peas. The boatman, Billy Shiel's father, was so concerned that he was about to call out the lifeboat when at dawn the wind dropped and they got him off.

Calvert Noble-Rollin was well known to a many members of the Society though his work for the Extra-Mural Department of Newcastle University, teaching ornithology from 1952 to the 1980s. During this time large numbers of people came to his classes with perhaps only a mild interest, and were inspired by his enthusiasm for his subject and his ability to make the most mundane looking bird sound exciting and interesting, from the flock behaviour of tits to the 'horizontal fluff' of the song thrush. After retiring from lecturing at the university, he continued up until the age of eighty-eight to give regular lectures to a small group of his long-standing students who came from as far afield as Cumberland and the Newcastle to listen to his talks. He also continued well into his eighties to lead occasional field meetings. After the death of his wife Lillian he continued to live at Greystones until he was ninety-one, maintaining a very spartan way of life and still cutting all his own firewood for the solitary open fire in the house.

A truly amazing individual, he will be fondly remembered by all his friends and students.

June Holmes

FINANCIAL STATEMENTS
31 JULY 2004

**THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
TRUSTEES' REPORT FOR THE YEAR ENDED 31 JULY 2004
CHARITY NUMBER 526770**

Review of Developments and Activities

The detailed report of the Society's activities during the year appears on pages 3 to 40 of the Annual Report.

Accounts Presentation

The format of the accounts complies with the requirements of Statement of Recommended Practice No. 2 (Revised) – Accounting and Reporting by Charities (SORP 2000). SORP 2000 requires investments to be valued at market value rather than cost (Note 1).

Statement of Trustees' Responsibilities

Law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial period which give a true and fair view of the charity's financial activities during the period and of its financial position at the end of the period and adequately distinguish any material trust or other restricted fund of the charity. In preparing financial statements giving a true and fair view, the trustees should follow best practice and:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether the policies are in accordance with applicable accounting standards and statements of recommended practice on accounting by charities subject to any departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation.

The trustees are responsible for keeping accounting records which disclose, with reasonable accuracy at any time, the financial position of the charity, and which enable them to ensure that the financial statements comply with Accounting Standards and Statements of Recommended Practice and the regulations made under s44 of the Charities Act 1993. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

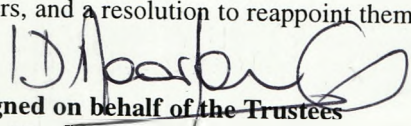
Investments

All investment transactions during the year under review have been carried out in accordance with the trustees' powers.

	2004	2003
Financial Review		
Net Incoming Resources	£10720	£10684

Independent Examiners

Tait Walker have expressed their willingness to continue in office as independent examiners, and a resolution to reappoint them will be proposed at the Annual Meeting.


Signed on behalf of the Trustees

IAN D MOORHOUSE
Chairman and Trustee

8 October 2004

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 JULY 2004

			2004	2003
	Notes	Restricted £	Unrestricted £	Total £
Incoming resources				
Members' subscriptions			23,648	21,611
Grants and donations		26,497	14,487	16,625
Activities for generating funds:				
Investment income			24,009	25,594
Interest receivable			3,456	3,573
University of Newcastle upon Tyne			8,517	8,529
Proceeds from the sale of <i>Transactions</i>			2,379	1,922
Miscellaneous income			1,974	629
Total incoming resources		<u>26,497</u>	<u>78,470</u>	<u>104,967</u>
Resources expended				
Charitable expenditure	2	18,851	63,105	56,536
Management and administration	3		12,291	11,263
Total resources expended		<u>18,851</u>	<u>75,396</u>	<u>94,247</u>
Net incoming resources for the year		7,646	3,074	10,684
Other recognised gains and losses				
Realised		-	1,050	11,476
Unrealised		-	3,340	(14,188)
Total investment gains/(losses)		<u>-</u>	<u>4,390</u>	<u>(2,712)</u>
NET MOVEMENT IN FUNDS		7,646	7,464	7,972
Funds brought forward		5,746	583,725	581,499
FUNDS CARRIED FORWARD 31 JULY 2004		<u>13,392</u>	<u>591,189</u>	<u>604,581</u>

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

BALANCE SHEET AS AT 31 JULY 2004

	Notes	2004 £	2003 £
FIXED ASSETS			
Tangible assets for use by the Society	6	7,599	8,100
Investments	7	487,937	484,903
		<u>495,536</u>	<u>493,003</u>
CURRENT ASSETS			
Stock		391	-
Debtors	8	12,036	9,634
Cash at bank and in hand		106,047	93,931
		<u>118,474</u>	<u>103,565</u>
CREDITORS: Amounts falling due within one year	9	9,429	7,097
NET CURRENT ASSETS		<u>109,045</u>	<u>96,468</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		604,581	589,471
NET ASSETS		<u>604,581</u>	<u>589,471</u>
FUNDS			
General Fund		177,939	173,252
Expendable Endowments:			
TB Short Memorial Fund		226,858	220,654
Grace Hickling Memorial Fund		168,684	173,212
		<u>573,481</u>	<u>567,118</u>
Life Members Fund		1,728	1,926
Designated Capital Funds	10	15,980	14,681
Restricted Funds	11	13,392	5,746
TOTAL FUNDS		<u>604,581</u>	<u>589,471</u>

Approved by Council on 8 October 2004

and signed on its behalf by:

IAN D MOORHOUSE - Chairman and Trustee

DOUGLAS JOHNSON - Honorary Treasurer and Trustee

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 JULY 2004

1. Accounting Policies

1.1 Basis of Accounting

The accounts have been prepared under the Historical Cost Convention as modified for the revaluation of Fixed Asset Investments, in accordance with the Statement of Recommended Practice: Accounting and Reporting by Charities (SORP 2000) and applicable Accounting Standards.

1.2 Realised and Unrealised Gains and Losses on Investments are recognised in the Statement of Financial Activities in the period in which they arose.

1.3 Investments are stated at market value at 31 July 2004.

1.4 Tangible Fixed Assets

Tangible fixed assets are stated at cost less depreciation which is provided in equal annual instalments over the estimated useful lives of the assets.

No value is attributed to the Hancock Museum at the date of its completion in 1884. The building is leased to the University of Newcastle upon Tyne which is normally responsible for all repairs and improvements.

The cost of Lake Lodge, less donations and grants received, of £3,899 is depreciated at 2% per annum. The cost of installing mains electricity at Lake Lodge, less donations received, of £5,300 has been fully depreciated.

The cost of the hides, equipment and office furniture is depreciation at 10% per annum and computers and office equipment at 20% per annum.

1.5 Statement of Financial Activities

Donations are recognised when received unless the receipt is certain, when they are recognised as accrued income.

Expenditure is accounted for on an accrued basis. Any excess income over expenditure for the year is arrived at after making appropriations to special funds for the purpose of setting aside temporary surpluses of income to meet future expenditure.

1.6 Deferred Income

Deferred income represents amounts received for future periods and is released to incoming resources in the period for which it has been received.

1.7 Fund Accounting

The General Fund is unrestricted, and is expendable at the discretion of the trustees in the furtherance of the objects of the charity. The T B Short and Grace Hickling Memorial Funds were created from legacies and are invested in accordance with the Trustee Investment Acts and are subject only to expenditure for special projects. The Life Members Fund consists of amounts received in payment of life subscriptions and they are released to income over a period of 20 years in equal annual instalments.

2. Charitable Expenditure	Notes	2004 £	2003 £
Unrestricted			
Salaries, pension contributions and national insurance	4	29,063	28,711
Printing and stationery		3,443	2,132
Postage and telephone		2,784	2,615
Insurance		3,411	2,788
General expenses		707	633
Lecture and field meeting expenses		1,358	871
Transactions		3,698	6,445
Library and society subscriptions		2,321	2,470
Gosforth Park Nature Reserve			
Net of: transfer from Restoration Fund		8,026	1,862
Coastal research		2,100	2,351
Depreciation		2,197	1,857
175th Anniversary		532	-
Repairs and renewals		-	16
Purchase of copy of Peter Brown's <i>New Illustrations...</i> (1774)		3,465	-
		<u>63,105</u>	<u>52,751</u>
Restricted			
Farnes research		4,070	2,495
Archives		14,781	1,081
Vehicle		-	209
		<u>18,851</u>	<u>3,785</u>
		<u>81,956</u>	<u>56,536</u>
3. Administration Expenses		2004	2003
		£	£
Salaries, pension contributions and national insurance	4	7,489	7,708
Printing and stationery		181	112
Postage and telephone		147	138
Insurance		379	310
General expenses		1,403	407
Accountancy and bookkeeping fees		1,933	1,865
Independent review		759	723
		<u>12,291</u>	<u>11,263</u>
4. Information regarding Employees and Trustees			
Average number of employees during the year		<u>4</u>	<u>2</u>
Total emoluments		<u>£36,552</u>	<u>£36,419</u>

No trustee, or person related or connected by business to them, has received any remuneration from the charity during the year.

During the year, payments were made to four (2003 - four) trustees in respect of reimbursement of expenses incurred on the Charity's behalf totalling £433 (2003 - £291).

5. Coastal Research

Coastal Research comprises boat and vehicle costs together with ringing expenses for Fame Islands and Coquet Island research.

6. Tangible Fixed Assets for use by the Society

	2004 £	2003 £
Hancock Museum	Not valued	
Lake Lodge Cost	3,899	3,899
Electrical Installation	5,300	5,300
	<u>9,199</u>	<u>9,199</u>
Less Depreciation to date	7,406	7,328
Net book value	<u>1,793</u>	<u>1,871</u>
Hides, equipment, office furniture and computers		
Cost	38,315	38,315
Additions	1,697	-
	<u>40,012</u>	<u>38,315</u>
Less Depreciation to date	34,206	32,086
Net book value	<u>5,806</u>	<u>6,229</u>
Total net book value	<u>7,599</u>	<u>8,100</u>

There were no capital commitments at 31 July 2004.

7. Investments

	2004 £	2003 £
Market value at beginning of year	484,903	514,279
Additions	173,826	63,997
Disposal proceeds	(175,182)	(90,661)
Net investment gains/(losses)	4,390	(2,712)
Market value at end of year	<u>487,937</u>	<u>484,903</u>

The investment portfolio includes the following holdings which represent more than 5% of the market value of the portfolio:

Close Finsbury UK Gilt Fund	10.45%
COIF Charities Investment Fund - Income Units	11.89%
M & G Property Fund	8.28%

Investments at market value comprised:

Listed on a recognised stock exchange	429,916	428,231
Unlisted - Charities Official Investment Fund	58,021	56,672
	<u>487,937</u>	<u>484,903</u>
Historical cost at end of year	<u>403,508</u>	<u>400,657</u>

8. Debtors	2004	2003
	£	£
Trade debtors	874	431
Prepayments and accrued income	11,162	9,203
	<u>12,036</u>	<u>9,634</u>

9. Creditors	2004	2003
	£	£
Deferred income	2,312	2,372
Accruals	7,117	4,725
	<u>9,429</u>	<u>7,097</u>

10. Designated Funds

Gosforth Park Nature Reserve Restoration Fund	2004	2003
	£	£
General restoration	4,480	5,812
Sir James and Lady Steel donation for lake rejuvenation	8,500	8,500
	<u>12,980</u>	<u>14,312</u>

	2003	New Designations	Utilised	2004
	£	£	£	£
Gosforth Park Nature Reserve	14,312	6,694	(8,026)	12,980
Ringing Group	369	313	(682)	-
Bewick <i>Transactions</i> fund	-	3,000	-	3,000
	<u>14,681</u>	<u>10,007</u>	<u>(8,708)</u>	<u>15,980</u>

11. Restricted Reserves

	2003	New Designations	Utilised	2004
	£	£	£	£
Archives	241	24,997	(14,781)	10,457
Farnes Sandeels Research	5,505	-	(4,070)	1,435
175th Anniversary Lecture	-	1,500	-	1,500
	<u>5,746</u>	<u>26,497</u>	<u>(18,851)</u>	<u>13,392</u>

During the year, further grants were received in respect of Archives of £22,850 from the Heritage Lottery Fund, £791 from North East Museums, Library and Archives Council and £765 from Newcastle City Council. Donated stationery and book repair worth £591 were also received.

Northumbria Water have awarded a grant of £1,500 towards the costs of the 175th Anniversary lecture.

BULMAN HOUSE
REGENT CENTRE
GOSFORTH
NEWCASTLE UPON TYNE
NE3 3LS

INDEPENDENT EXAMINERS REPORT TO THE TRUSTEES
OF THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

I report on the financial statements of the charity for the year ended 31st July 2004,
which are set out on pages 43 to 48.

RESPECTIVE RESPONSIBILITIES OF TRUSTEES AND EXAMINER

As the charity's trustees, you are responsible for the preparation of the accounts; you consider that the audit requirement of Section 43(2) of the Charities Act 1993 (the Act) does not apply. It is my responsibility to state, on the basis of procedures specified in the General Directions given by the Charity Commissioners under Section 43 (7)(b) of the Act, whether particular matters have come to my attention.

BASIS OF INDEPENDENT EXAMINER'S REPORT

My examination was carried out in accordance with the General Directions given by the Charity Commissioners. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from you as trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

INDEPENDENT EXAMINER'S STATEMENT

In connection with my examination, no matter has come to my attention:

- (1) which gives me reasonable cause to believe that in any material respect the requirements:
to keep accounting records in accordance with Section 41 of the Act; and
to prepare accounts which accord with the accounting records and to comply with the accounting requirements of the Act
have not been met; or
- (2) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.



D. R. Arthur

Independent Examiner
Chartered Accountant

TAIT WALKER
Chartered Accountants

15 October 2004

BIRDS ON THE FARNE ISLANDS IN 2004

compiled by

DAVID STEEL¹

National Trust Head Warden

ringing report by

CHRIS REDFERN²

cetacean report by

DAVID PARNABY³

edited by

MARGARET PATTERSON⁴

¹ Inner Farne, Farne Islands, Seahouses, Northumberland NE68 7SR

²Medical Molecular Biology Group, Department of Medicine, Univeristy of Newcastle NE2 4HH

³14 Woodville Crescent, Sunderland, Co Durham SR4 8RE

⁴The Natural History Society of Northumbria, Hancock Museum, Newcastle upon Tyne NE2 4PT

INTRODUCTION

The wardens sailed out to the islands on 25 March and both the inner and outer groups were manned until 3 December. The year brought further increases in the majority of the breeding seabird populations, with several species again increasing in number, with an estimated population of 98,500 nesting pairs. The terns led by example with tremendous increases in common (75%) and arctic tern (15%) with a very slight decrease in Sandwich tern numbers. Other encouraging increases were noted in ringed plover (38%), black-headed gull (38%), cormorant (5%) and oystercatcher (3%) while the auk families continued to increase with guillemot (3%) and razorbill (1%). While the kittiwake population remained stable, less welcoming were the increases of large gulls with the biggest movers being herring gull (29%). The cold spring may have resulted in less shag nesting attempts as numbers declined by 16% while a drop of 36% of nesting eiders was more difficult to explain. The most serious decline resulted in a drop of 33% of breeding fulmar, and was possibly linked to a drastic food shortage in the North Sea during the late winter months. For the second consecutive year, roseate terns failed to breed again despite the presence of summering birds.

In complete contrast to the previous year, the breeding season proved to be a disaster as the month of June brought the worst possible weather for all nesting seabirds. Prolonged gale force winds, combined with heavy rainfall and low temperatures, contributed to a poor nesting season. Added to that, rough seas hampered adult birds from foraging and with young at a very vulnerable age, mortality was high. The following few weeks also saw the added problem of food shortages, dropping survival rates even further. Despite the catastrophe, seabirds are long-lived so an occasional bad year should not cause any long-term harm to their populations.

Passage birds were represented by 159 species with an overall total of 180 (outer group 165,

inner group 171), the first time since 1995 that the inner group has recorded more species than the outer. The year boasted three new species for the islands with Montagu's harrier, ring-billed gull and ring-necked parakeet being added to the islands' list, raising the overall total to 293. The year was excellent for passage migrants, with some impressive 'falls' including arguably the best ever August 'fall' and some impressive passage of northern migrants in late autumn. Rarities included second records of kingfisher and Radde's warbler, greenish warbler occurred twice bringing their island total to three records, the third black-headed bunting appeared, fourth woodlark, seventh marsh warbler and eleventh Sabine's gull. It was also a record year for several species including storm petrel (50), grey phalarope (5), wryneck (8), waxwing (30), barred warbler (7), firecrest (4), bullfinch (15) and an incredible little auk passage (10,265 in one day). As well as the record breakers, other scarcities included Balearic shearwater (2), garganey, buzzard, quail, spotted redshank (2), long-tailed skua (2), Iceland gull, Mediterranean gull, great spotted woodpecker, bluethroat, icterine warbler (3), Pallas's warbler (2), yellow-browed warbler (2), wood warbler, long-tailed tit (5), great tit, treecreeper (3), red-backed shrike (2) and common rosefinch (5), all contributed to an excellent season.

Thanks go to the 2004 wardening team of Alex Ash, Lee Barber, David Clare, Neil Dawson, Chris Dodd, David Parnaby, David Steel and Rob Wheeldon, and to various boatmen and visitors, for supplying the records which make up this report.

The following is a day-by-day summary of the highlights of 2004. 'First record' means the first record for the year and species in bold are of particular interest; for more details refer to the species accounts. 'First Farnes record' means the first time this species has occurred on the Farnes.

March

- 25 Stonechat, snow bunting (8)
- 26 Red-breasted merganser (first record), peregrine (first record), wheatear (first record), redwing (first record), rook (first record), snow bunting (8)
- 27 Kestrel (first record), lapwing (first record), song thrush (first record), snow bunting (6)
- 28 Red-throated diver (first record), greylag goose (2, first record), fieldfare (first record), jackdaw (first record), snow bunting (4)
- 29 Long-tailed duck (3), collared dove, dunnoek, snow bunting (4)
- 30 Sandwich tern (first record), dunnoek, stonechat
- 31 Woodcock (first record), sand martin (first record), stonechat, blackcap (first record), chiffchaff (first record), reed bunting (first record)

April

- 1 Whimbrel (3, first record), short-eared owl, black redstart (2), mistle thrush (2), stonechat
- 2 Great northern diver (first record), mallard (first eggs), merlin, golden plover (2, first record), snipe (first record), woodcock, great skua (first record), black redstart (2), stonechat, **great tit**,
- 3 Black redstart (2), stonechat, **great tit**, snow bunting

- 4 **Yellow-legged gull**, kestrel, dunnoek, black redstart (2), stonechat, **great tit**
- 5 Dunnoek, black redstart (2), stonechat, willow warbler (first record), **great tit**
- 6 Black redstart (2), stonechat, **great tit**
- 7 Manx shearwater (first record), stonechat, black redstart (2)
- 8 Black redstart (2)
- 9 Black redstart
- 10 Cormorant (first eggs), shag (first eggs), velvet scoter (4), black redstart
- 11 Common gull (339)
- 12 Goosander, common gull (154), swallow (first record), meadow pipit (119)
- 13 Mute swan (2), 'white' wagtail
- 14 **Whooper swan** (25), pink-footed goose (12), brambling (first record)
- 15 Common gull (134), **Iceland gull**
- 16 Great northern diver, red-breasted merganser, arctic tern (first of the year)
- 17 Shoveler (first record), redstart (first record)
- 18 Redstart
- 19 Great skua, sparrowhawk, redstart
- 20 Redstart
- 21 Puffin (first eggs)
- 22 Eider (first eggs), short-eared owl, wheatear (22, spring peak)
- 23 Common tern (first record), rock pipit (first eggs)
- 24 Pintail (2), guillemot (first eggs), yellow wagtail (first record), 'white' wagtail, ring ouzel (first record)
- 25 Canada goose, shelduck (12), goldeneye (last spring record) sparrowhawk, black-headed gull (first egg), purple sandpiper (307), 'white' wagtail, lesser whitethroat (first record), whitethroat (first record), rook (last record)
- 26 Common sandpiper (first record), little tern (first record), house martin (first record), lesser whitethroat (first record)
- 27 Gannet (1,577), barnacle goose (52), arctic skua (first record), **wryneck**, tree pipit (first record), ring ouzel, grasshopper warbler (3, first record)
- 28 Manx shearwater, barnacle goose (87), pintail (2), tufted duck (8), scaup (19), arctic skua, great skua, ring ouzel, grasshopper warbler
- 29 **Great spotted woodpecker**, ring ouzel (2)
- 30 Great northern diver, red-breasted merganser, common sandpiper, arctic skua, great skua, ring ouzel (3), redwing (last spring record), pied flycatcher (4), brambling (last spring record)

May

- 1 **Garganey**, **wryneck**, 'white' wagtail, ring ouzel (2, last spring record), grasshopper warbler, willow warbler (22, spring peak), pied flycatcher (2)
- 2 Pied wagtail (first eggs), grasshopper warbler (last spring record), pied flycatcher (2), reed bunting (last spring record)
- 3 Pied flycatcher (last spring record)
- 4 Sedge warbler (first record)

- 5 Great northern diver (last spring record), tufted duck (6), razorbill (first eggs), collared dove, whinchat (first record)
- 7 Collared dove, **red-backed shrike**
- 8 Cormorant (first young), Canada goose (38), barnacle goose (32), red-breasted merganser, rock pipit (first young), stonechat, **red-backed shrike**
- 9 Barnacle goose (53, last spring record), oystercatcher (first eggs), grey plover (first record), great black-backed gull (first eggs), **black guillemot, bluethroat**, redstart (last spring record), stonechat, fieldfare (last spring record), song thrush (last spring record), blackcap (last spring record), **red-backed shrike** (2)
- 10 Goosander, Sandwich tern (first eggs), little tern (59, peak count), stonechat, **red-backed shrike**
- 11 Goosander, shag (first young), **red-backed shrike**
- 12 **Red-backed shrike**
- 13 'White' wagtail
- 15 Roseate tern (first record), arctic tern (first eggs)
- 17 Garden warbler (first record)
- 18 Fulmar (first eggs), little gull (first record)
- 19 Common tern (first eggs), garden warbler (last spring record)
- 23 Eider (first young), great black-backed gull (first young), kittiwake (first eggs), 'white' wagtail
- 24 Black-headed gull (first young)
- 25 Guillemot (first young)
- 27 'Greenland' wheatear
- 28 Reed warbler (first record)
- 29 Pied wagtail (first young), reed warbler, whitethroat (last spring record)
- 30 Meadow pipit (last spring record)
- 31 Ruff (first record) wheatear (last spring record), reed warbler, spotted flycatcher (first record)

June

- 1 Swift (first record), whinchat (last spring record), lesser whitethroat (last spring record), **common rosefinch**
- 3 Oystercatcher (first young)
- 4 Merlin
- 5 Chiffchaff (last spring record)
- 6 Canada goose (60), sandwich tern (first young)
- 7 Canada goose (159), razorbill (first young), sedge warbler (last spring record)
- 8 Canada goose (38), collared dove
- 9 Red-breasted merganser, bar-tailed godwit (121)
- 10 Red-breasted merganser (2)
- 11 Whimbrel (11)
- 17 Bar-tailed godwit (120)
- 22 **Black tern**, guillemot (first 'jumping'), kittiwake (first young).
- 23 Whimbrel (6), tree pipit, willow warbler

- 24 Willow warbler
- 25 Manx shearwater (152), **storm petrel** (2), roseate tern (5, peak count)
- 27 Shag (first fledgling), **black tern**
- 28 Willow warbler
- 30 Tufted duck (3), greenshank (first record), swift (60)

July

- 2 Fulmar (first young)
- 3 Common scoter (166)
- 4 Greylag goose (3, last record), greenshank, **marsh warbler**
- 6 Sandwich tern (first fledgling), swift (32)
- 7 Common scoter (138)
- 9 Sanderling
- 10 Shelduck (6), tufted duck, greenshank
- 11 Velvet scoter (2), **black tern**
- 12 Shelduck (15)
- 18 Sanderling (5), swift (41)
- 20 Peregrine (first autumn record), black-tailed godwit (first record), kittiwake (first fledgling)
- 21 Dunlin (62), sanderling (2), green sandpiper (first record)
- 23 Pomarine skua
- 24 Yellow wagtail (last record)
- 27 Sanderling
- 28 Sanderling
- 29 Redshank (38)
- 30 **Quail**
- 31 Willow warbler (first autumn record)

August

- 1 Sedge warbler (first autumn record)
- 2 Whitethroat (first autumn record), spotted flycatcher (first autumn record)
- 3 **Water rail**, snipe (16), chiffchaff (first autumn record)
- 5 **Black tern**, green sandpiper (2), wheatear (first autumn record), sedge warbler (7), garden warbler (first autumn record)
- 6 Green sandpiper (2), pied flycatcher (first autumn record)
- 7 Green sandpiper (2)
- 8 Green sandpiper (2), fieldfare (first autumn record)
- 9 Sooty shearwater (first record), **water rail** (2), ruff (9), green sandpiper (2), whinchat (first autumn record), grasshopper warbler (first autumn record), **barred warbler**, lesser whitethroat (first autumn record), pied flycatcher (27)

- 10 Grey heron (6), **water rail**, ruff (10), greenshank (4), **wryneck** (3), tree pipit (first autumn record), meadow pipit (first autumn record), fieldfare (2), grasshopper warbler, reed warbler (10, first autumn record), **icterine warbler** (2), **barred warbler**, garden warbler (18), willow warbler (23), **wood warbler**, pied flycatcher (46)
- 11 **Montagu's harrier** (first Farnes record), **water rail** (2), **wryneck** (2), fieldfare (3), reed warbler (13), **icterine warbler**, **barred warbler**, garden warbler (12), willow warbler (22), **wood warbler**, pied flycatcher (35)
- 12 **Montagu's harrier**, **water rail**, **spotted redshank** (2), green sandpiper (3), **black tern**, roseate tern (last record), **wryneck**, fieldfare (3), whinchat (10), reed warbler (9), **icterine warbler**, **barred warbler** (3), garden warbler (10), willow warbler (20), **wood warbler**, pied flycatcher (22)
- 13 **Water rail**, little stint, green sandpiper (3), **ring-billed gull** (first Farnes record), **wryneck** (2), fieldfare (3), whinchat (10), reed warbler (14), **icterine warbler** (2), **barred warbler** (3), garden warbler (13), willow warbler (30), **wood warbler**, **common rosefinch**, pied flycatcher (24)
- 14 **Water rail**, green sandpiper (3), reed warbler (10), **icterine warbler**, **barred warbler**, **greenish warbler** (second Farnes record), pied flycatcher (10), **common rosefinch**
- 15 Sparrowhawk, merlin, **water rail**, greenshank (4), **wryneck**, wren (first autumn record), **icterine warbler**, **barred warbler**
- 16 Little stint (3), **wryneck**, **barred warbler**
- 17 Little stint, whitethroat (4)
- 18 Mute swan (3), sanderling (2), little stint, swift (38)
- 19 Fulmar (first fledgling), redshank (72), little stint
- 20 Merlin (first autumn record), common sandpiper (14)
- 21 **Storm petrel**, oystercatcher (198)
- 23 Merlin, meadow pipit (114), **black-headed bunting** (third Farnes record)
- 24 **Wryneck**, tree pipit (7), wheatear (12), redstart (first autumn record), grasshopper warbler (3), garden warbler (21)
- 25 Little gull, grasshopper warbler
- 26 Kestrel, merlin, grasshopper warbler
- 27 Merlin, sanderling (6)
- 31 Great northern diver (first autumn record), Manx shearwater (193), sooty shearwater (6), **storm petrel** (12), shelduck (6), tufted duck, velvet scoter (2, first autumn record), golden plover (720), great skua (12), **greenish warbler** (third Farnes record)

September

- 2 Brent goose (10, first record)
- 5 Black-tailed godwit (10), redshank (38), sand martin (last record)
- 6 Great northern diver (first autumn record), Manx shearwater (75), tufted duck, arctic skua (31), great skua (15), **barred warbler**, lesser whitethroat (first autumn record), spotted flycatcher
- 7 Black-tailed godwit (3)

- 8 Great crested grebe, short-eared owl (first autumn record), **kingfisher** (second Farnes record), grey wagtail (first record), spotted flycatcher
- 9 Mute swan (2), **common rosefinch**
- 11 Swift (last record)
- 14 Sedge warbler (last record)
- 15 Red-throated diver (12), **storm petrel**, great skua (16), **Sabine's gull**, 'white' wagtail
- 16 Tufted duck
- 17 **Treecreeper**
- 18 **Treecreeper**
- 19 Collared dove
- 20 Snow bunting (first autumn record)
- 21 Pink-footed goose (first autumn record), whitethroat (last record),
- 22 Barnacle goose (first autumn record)
- 23 Gannet (3,145), whimbrel (last record), arctic skua (27), great skua (16), common tern (last record), dunnoek
- 24 Red-throated diver (20), **black-throated diver** (first record), sooty shearwater (71), Manx shearwater (176), **storm petrel** (33), pintail (4, first autumn record), tufted duck (4), goldeneye (first autumn record), pomarine skua, arctic skua (20), dunnoek
- 25 Red-throated diver (37), great crested grebe, wigeon (249)
- 26 Little gull (49), little auk (first record)
- 27 Pink-footed goose (291), **water rail**, **grey phalarope**, house martin (last record)
- 28 Pink-footed goose (605), pochard (8), little gull (73), meadow pipit (125), brambling (first autumn record),
- 29 Pink-footed goose (373), oystercatcher (192), redwing (first autumn record), willow warbler (last record), reed bunting (first autumn record)
- 30 Scaup (2), woodcock (first autumn record), sanderling (2), grasshopper warbler (last record), **barred warbler** (2), **yellow-browed warbler**, **Radde's warbler** (second Farnes record), brambling (70), **common rosefinch** (2)

October

- 1 Great crested grebe, wigeon (586), teal (105), pintail (3), **woodlark** (fourth Farnes record), whinchat (last record), ring ouzel (2, first autumn record), **yellow-browed warbler**, pied flycatcher (last record)
- 2 Black guillemot (first autumn record), tree pipit (last record)
- 3 **Woodlark**, blackcap (first autumn record), spotted flycatcher (last record)
- 4 Sandwich tern (last record), collared dove, **treecreeper**
- 5 Black-tailed godwit (last record), **woodlark**, twite (2)
- 6 Great northern diver (6), jack snipe (first record), **woodlark**
- 7 Barnacle goose (173), **woodlark**, stonechat
- 8 Red-necked grebe (first record), **storm petrel**, pomarine skua (3), **ring-necked parakeet** (first Farnes record), **woodlark**
- 9 Shoveler, velvet scoter (16), **long-tailed skua**, pomarine skua (5), arctic skua (13), great skua (22), little gull (61) **ring-necked parakeet**, stonechat

- 10 Scaup, long-tailed duck (first autumn record), velvet scoter (19), **water rail**, jack snipe
- 11 Pintail (4), jack snipe **long-tailed skua**, pomarine skua, Pallas's warbler, brambling (72)
- 12 Kestrel (last record), jack snipe, ruff (last record), common sandpiper (last record), greenshank (last record), **stock dove**, ring ouzel (2), 'Siberian' chiffchaff, **firecrest**, yellowhammer (first record)
- 13 **Water rail**, oystercatcher (208), jack snipe, ring ouzel (2), 'Siberian' chiffchaff, **firecrest** (3), twite (23), Lapland bunting
- 14 Slavonian grebe (first record), 'Siberian' chiffchaff, **firecrest** (2), twite (12),
- 15 Long-eared owl, twite, Lapland bunting
- 16 Jack snipe (2), little gull (51), long-eared owl, ring ouzel, lesser whitethroat (last record), '**Northern' bullfinch** (2)
- 17 Jack snipe, arctic tern (last record), long-eared owl, twite (17), '**Northern' bullfinch** (2)
- 18 Red-breasted merganser (18), peregrine (3), mistle thrush, linnet (52, peak count), '**Northern' bullfinch**
- 19 **Waxwing** (2), fieldfare (321), redwing (2,047), brambling (39)
- 20 Swallow (last record), **waxwing** (2), dunnoek, redstart (last record), stonechat, wheatear (last record), ring ouzel (2), fieldfare (748), redwing (2,182), mistle thrush (4), **Pallas's warbler**, blackcap (22), chiffchaff (25), **treecreeper**, starling (300), brambling (105), '**Northern' bullfinch** (5), Lapland bunting
- 21 **Stock dove**, long-eared owl, dunnoek (3), stonechat, ring ouzel, redwing (427), starling (200), brambling (99), '**Northern' bullfinch** (3), Lapland bunting
- 22 '**Northern' bullfinch** (3)
- 23 **Black-throated diver**, jack snipe, '**Northern' bullfinch**
- 24 '**Dark-bellied' brent goose**, **water rail**, **waxwing** (3), stonechat, fieldfare (271), garden warbler (last record), '**Northern' bullfinch**
- 25 **Waxwing** (11), fieldfare (364)
- 27 Jack snipe (2), **waxwing** (7), fieldfare (1,127), redwing (956), **yellow-browed warbler**, '**Northern' bullfinch**, yellowhammer
- 28 Pintail, shoveler (2), tufted duck (5), woodcock (40), jack snipe, sanderling, long-eared owl, short-eared owl (5, autumn peak), **waxwing** (2), blackbird (1,748), fieldfare (2,485), song thrush (300), redwing (5,000), reed warbler (2), **firecrest**, jackdaw (last record), starling (250)
- 29 **Black-throated diver**, shoveler (2), woodcock (12), blackbird (501), reed warbler, 'Northern' willow warbler
- 30 Woodcock (7), reed warbler (last record), '**Northern' bullfinch**
- 31 Great crested grebe, teal (103), velvet scoter (10), **Mediterranean gull**, '**Northern' bullfinch** (4)

November

- 1 Common scoter (184), grey wagtail (last record), **long-tailed tit**
- 2 '**Northern' bullfinch** (2), yellowhammer
- 3 **Whooper swan** (2), **water rail**, meadow pipit (last record), **long-tailed tit** (4)

- 4 Barnacle goose (last record), chiffchaff (last record), **long-tailed tit**, brambling (last record), reed bunting (last record)
- 5 **Long-tailed tit**
- 6 **Waxwing, long-tailed tit**
- 7 Slavonian grebe (last record), **waxwing**
- 9 **Balearic shearwater** (2), pintail (3) **waxwing**, blackcap (last record), Lapland bunting(2)
- 10 **Grey phalarope**, great skua (last record)
- 12 Oystercatcher (221)
- 13 **Black-throated diver**
- 14 Sooty shearwater (last record), brent goose (last record), scaup (6), goldeneye (22), **grey phalarope**, little auk (7,475)
- 17 Pintail, little auk (7,724)
- 18 Pintail, goosander (last record), little auk (10,265)
- 19 Manx shearwater (last record), grey plover (last record)
- 20 **'Dark-bellied' brent goose** (3)
- 23 **Grey phalarope** (2), short-eared owl (last record)
- 26 Pink-footed goose (last record), **buzzard**, fieldfare (last record)
- 29 Song thrush (last record)
- 30 Great northern diver (last record), mallard (184), shoveler (last record)

December

- 1 Red-necked grebe (last record), golden plover (last record) woodcock (last record)

Details of all the birds are given in the following list: this follows the order and scientific nomenclature of Voous (1977), except for the shearwaters and gannet which adopt the new changes recommended by BOU Records Committee (1991) Where appropriate, the figures for 2003 breeding birds are included for comparison, in brackets.

The status of each species/sub species is classified using the following categories based upon Harvey and Steel (2004)

abundant	>1,000 occurrences per annum
common	101-1,000 occurrences per annum
well represented	11-100 occurrences per annum
uncommon	no more than 10 occurrences per annum but more than 10 in total
rare	6-10 occurrences
extremely rare	no more than 5 occurrences in total

SYSTEMATIC LIST

Red-throated Diver *Gavia stellata*

A common winter and passage visitor.

Well represented with records from seventy-nine dates between 28 March and 1 December, with a general bias of records through Inner Sound. Spring passage was recorded between 26 March and 30 May, with 1-4 noted on seventeen dates including three summer plumage birds north through Inner Sound on 25 May. Four were reported in mid-summer, all single north through Inner Sound on 4, 10, 11 and 13 July. Return autumn passage was logged on fifty-eight dates between 25 August and 1 December, involving one to eight birds. However heavy passage occurred in September with twelve south past the south end of Brownsman on 15, twenty north on 24 (seventeen Inner Sound, three Staple Sound) and thirty-seven north on 25 September (thirty-five through Inner Sound, two through Staple Sound). In late autumn birds were frequently seen on the sea, especially in Inner Sound but occasionally in the Kettle off Inner Farne, with singles present on five dates. An unusual record involved an adult and juvenile, which was heard calling, together on the sea to the north of Knoxes Reef for two days on 13-14 September.

Table 1 Total number of days and individual Red-throated Divers past the Farne Islands, 2004.

	No. of dates recorded	Total north	Total south	No. of months recorded
Inner Sound	52	140	41	8
Staple Sound	32	33	31	6

Black-throated Diver *G. arctica*

A well represented winter and passage visitor.

Following last season's poor showing (just two records) this year showed a marginal improvement with four records. The first was one north through Inner Sound on 24 September followed by a single south close to Knoxes Reef through Staple Sound on 23 October, an individual south through Inner Sound on 29 October which then landed on the sea, and finally a single north close to Brownsman south end on 13 November.

Great Northern Diver *G. immer*

A well represented winter and passage visitor.

A modest showing of this large powerful diver, with five spring and eighteen autumn records. There were sightings of individuals south through Staple Sound on 2 and 16 April, with one north through the Kettle on the latter date. As spring progressed there were two sightings of partial summer plumage adults, with singles north through Staple Sound on 30 April and over Brownsman cottage on 5 May. Following this there was a complete absence of records until early September, when 1-2 autumn returnees were recorded on four dates, all involving birds flying south on 6, 11, 29 and 30 September. October and November produced further records of 1-2 on twelve dates, all involving fly-by records. The largest count during this period involved five north and one south through Inner Sound on 6

November. The final record was a stunning almost full summer plumage adult on the sea in Staple Sound on 30 November which was seen to catch a large fish.

Great Crested Grebe *Podiceps cristatus*

An uncommon visitor.

The season produced four records, the best showing of this uncommon visitor in three years. All four involved individuals in Inner Sound: singles flew north on 8 and 25 September, one was on the sea on 1 October and the final record was of an individual south on 31 October.

Red-necked Grebe *P. grisegena*

A well represented winter and passage visitor.

An average year with eight sightings between 8 October-1 December. The first bird of the year flew north through Staple Sound on 8 October followed by another near the west face of Staple Island on 14 October. November produced the bulk of records with singles on the sea near Gun Rock on 18, and off Brownsman in Staple Sound on three days between 23 and 25 November. The same month also produced singles on passage through Staple Sound on 14 and Inner Sound on 18 and 20 November; the latter landing on the sea near the lighthouse cliff. The final record of the year involved a bird seen close to Inner Farne lighthouse cliff on the morning of 1 December before it relocated to the Kettle, where it was present for the rest of the day.

Slavonian Grebe *P. auritis*

An uncommon winter and passage visitor.

An improvement on recent years, with two records including a long staying bird. An individual took up residence in the Kettle off Inner Farne intermittently between 14-26 October allowing good views of this normally scarce species around the islands. The only other record concerned two together on the sea off the north end of Inner Farne, near Megstone on 7 November.

Fulmar *Fulmarus glacialis*

A common breeder, abundant on passage.

Birds were settled at breeding sites when the wardens arrived in late March, with displaying birds noted from 26 March and the first copulation observed from 9 April. As usual, birds departed the islands for their 'honeymoon' between 9-14 May before returning to nesting areas. The first eggs were discovered on Inner Farne on 18 May and North Wamses on 20 May, with the first hatchlings noted from 2 July. The breeding population took a dramatic decline dropping by 33% resulting in the lowest breeding total since 1986. This may have been attributed to the well documented 'wreck' of thousands of fulmars along the North Norfolk coastline during January and February. The cause of so many deaths has been linked with a lack of a winter's food source and no doubt Farne Island birds were involved. A total of 165 (246) pairs nested as follows: Inner Farne 20 (22), West Wideopens 8 (12), East Wideopens 15 (27), Knoxes Reef 21 (22) Staple Island 14 (36), Brownsman 52 (55), North Wamses 18 (29), South Wamses 14 (37), Big Harcar 3 (3), Longstone End 0 (3). The two island groups experienced mixed fortunes, as an overall productivity rate of 0.5 on the outer group was similar to recent years. However only twenty-nine young fledged from sixty-six nests on the inner group (overall productivity of 0.43), the poorest return on record

and a direct result of bad weather and predation taking their toll. The first fledglings appeared over the islands on 19 August and thereafter birds started to disperse breeding grounds until the species became scarce from early September. Following a lengthy absence, the first returning bird appeared on 29 October with a single north through Inner Sound, followed by small numbers around the islands in November, before the majority of the population returned to the area in December.

There were no records of 'blue' phase birds although for the second consecutive year (not reported in the 2003 annual report), an 'intermediate' bird frequented Inner Farne in spring. The bird appeared to be paired with a 'normal' plumaged bird and was seen displaying, before disappearing with all the breeding birds on the 'honeymoon' period in early May. It was also seen on Brownsman on 21 April and was last recorded from Inner Farne on 27 May.

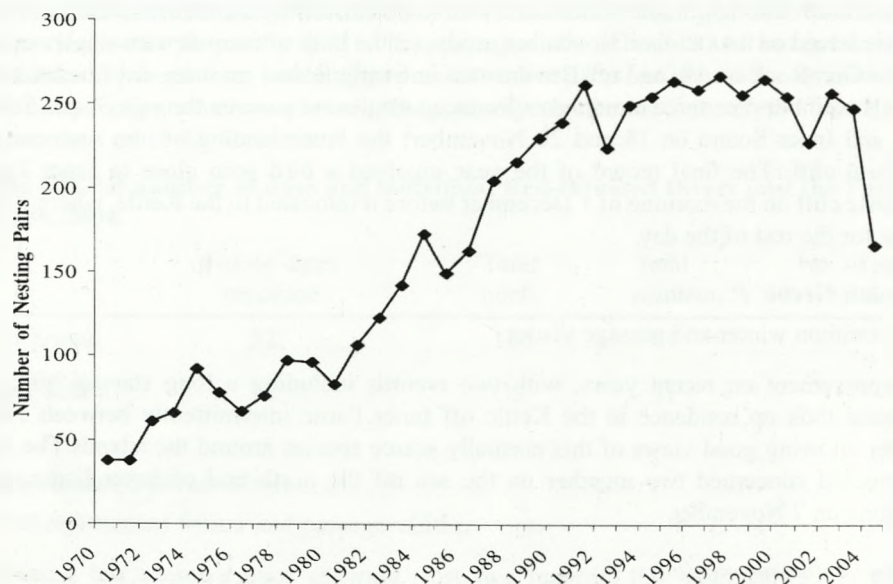


Figure 1 Breeding population of Fulmars on the Farne Islands, 1970-2004

Sooty Shearwater *Puffinus griseus*

A well represented to common passage visitor.

Another quiet season, the second consecutive year that a single day did not produce a count of one hundred or more. However most east coast headlands reported only small numbers suggesting a general lack of birds in the southern North Sea. Following the first sighting of a bird circling the Kettle on 9 August, passage birds were recorded on a further nineteen dates (five in August, eleven in September, two in October and one in November) until last seen on 14 November. Passage generally involved 1-7 north, with the majority of records through Staple Sound; the exception was the season's peak count of seventy-one north during an all day seawatch off the south end of Inner Farne on 24 September. The last record involved two late individuals north off the south end of Brownsman on 14 November.

Manx Shearwater *P. puffinus*

A common passage visitor.

The species was well reported throughout the year, with records from seventy dates from 7 April-19 November. Overall passage totals from the three main seawatching areas included eighty-seven north and seven south through Inner Sound, 280 north and twenty-two south through Staple Sound and 546 north and three south past the south end of the islands. Spring produced a light scattering of records with singles north through Staple Sound on 7 April and south on 28 April, while May provided records of 1-8 on nine dates, peaking with twenty-two north on 26 May. As usual good numbers passed the islands during the summer months with sightings of 1-32 on fifty-nine dates. Peak counts for the year included 152 north on 25 June (101 past the south end of Brownsman, fifty-one through Staple Sound), 193 north on 31 August (191 past the south end of Inner Farne, two through Inner Sound), seventy-five north on 6 September (forty-five past the south end of Brownsman, thirty through Staple Sound) and 176 north on 24 September (forty-five past the south end of Brownsman, 134 through Staple Sound). The final records involved lone singles north through Staple Sound on 12 and 19 November.

Table 2 Total number of dates Manx Shearwater recorded from three observation points on Farne Islands, 2004.

	A	M	J	J	A	S	O	N	Total
Staple Sound	2	5	11	13	6	15	6	2	60 days
Brownsman south end	-	3	4	5	3	5	1	-	21 days
Inner Sound	--	2	2	5	1	4	4	--	18 days

Balearic Shearwater *P. mauretanicus*

An uncommon passage visitor.

The species is becoming an almost annual occurrence with the last blank year as far back as 1992 although this season only produced two records, the quietest year since 2000. On 9 October two birds were discovered: the first moved north through Staple Sound at 14:30, and forty-five minutes later another accompanied two Manx shearwaters north off the south end of Brownsman.

Storm Petrel *Hydrobates pelagicus*

An uncommon passage visitor. Some evidence of possible breeding 1998-99 (Walton and Maher, 1999; Walton, 2000).

This was *the* year for this species, with records of a staggering total of at least fifty different birds sighted off the islands during the season. The phenomenal year began with singles north through Staple Sound and past Brownsman south end on 25 June, with another through Staple Sound on 21 August. Further records followed strong north-westerly winds on 31 August, with a total of eleven counted flying north off Brownsman south end between 19:15 and 20:00 hours while another was off the Scarcars until dusk. If this was monumental, then records from September were mind-blowing as the good run continued with one north through Staple Sound on 15 September. The morning of 24 September

produced six north through Staple Sound of this normally difficult to see nocturnal visitor and a single through Inner Sound. However the day was not complete as that evening brought further records, with fifteen north past the south end of Brownsman and eleven through Staple Sound. This influx brought the day's total to thirty-three, revealing not only unprecedented numbers for the Farnes but also for the county during diurnal hours. The final record involved one lingering for one hour in Staple Sound on 8 October, bringing to an end an amazing series of sightings, breaking all previous known records.

Gannet *Morus bassanus*

An abundant passage and non-breeding summer visitor.

Recorded almost daily throughout the season, as birds travelled north to breeding grounds in East Lothian and south to East Yorkshire. April, August and September produced the year's heaviest passage with counts including 782 north in thirty minutes on 10 April, 1,577 north in one hour on 28 April, 939 north in one hour on 20 August and 3,145 north in two hours on 23 September. In the summer months large feeding frenzies, some involving 500 birds, would gather, plunge diving around the islands and often betraying the presence of nearby feeding cetaceans. Unusual records involved single adult birds sitting on Megstone on 18 August and East Wideopens on 8 September. Numbers were much reduced in November and the species was completely absent from the area by early December.

Cormorant *Phalacrocorax carbo*

A common breeding resident.

The year brought a surprising shift, as a handful of birds bred successfully away from the two main traditional island colonies. A total of 187 (179) pairs nested as follows: East Wideopens 112 (101), North Wamses 72 (78) and Big Harcar 3 (0). It was only the fourth ever nesting attempt on Big Harcar following previous attempts in 1960, 1968 and 1981 while nearby Little Harcar was successful as recently as 1992 and 1997. Disturbance was a factor to previous colonisation of these islands, but with increased control and reduced disturbance a third colony may possibly develop. The North Wamses colony again declined to an all time low from its heyday of 300 nesting pairs in the mid-1970s, although the East Wideopens colony continued to thrive, peaking at its highest level in seven years. The first eggs were discovered on 10 April with young seen from 8 May in both major colonies, while young started fledging from 21 June. The poor weather of mid-June affected all nesting birds, with some well-developed chicks perishing, but many did survive to fledgling stage, including at least two from Big Harcar. Thereafter birds dispersed, and only small numbers remained around the islands during autumn.

Shag *P. aristotelis*

An abundant breeding resident.

This was a season to forget for the breeding population but as usual, the wardens arrived on the islands in late March to be greeted by birds actively nest building and pair bonding. The first eggs were discovered on Staple Island on 10 April and Inner Farne on 12 April with the first chicks hatching on 11 May. Staple Island produced the first fledgling on 27 June although the majority of young fledged in early July. The breeding season was poor as a combination of adverse weather, low temperatures and predation brought about the demise of many young. In mid-June heavy rain hit nesting birds particularly hard as streams of

water flooded into nesting areas favoured by the species and the sight of large dead young in nests was not uncommon. However the species can defer breeding when conditions are unsuitable and the poor winter and cold start to spring may have helped reduce the impact, as the number of breeding pairs was lower than expected with 1,410 (1,678) pairs nesting as follows: Megstone 45 (34), Inner Farne 354 (463), West Wideopens 69 (117), East Wideopens 96 (162), Skeney Scar 76 (80), Staple Island 347 (369), Brownsman 140 (138), North Wamses 45 (30), South Wamses 51 (66), Roddam and Green 19 (19), Big Harcar 120 (130), Longstone End 48 (70). Following the poor weather, it was no surprise that productivity was very low, with 271 monitored nests producing only seventy-four fledged young (outer group 0.17 – the islands' lowest ever productivity, inner group 0.41). Large numbers remained around the islands during autumn and winter, favouring Megstone as the main roosting site, and Darvic-ringed birds from the Isle of May were again evident.

Grey Heron *Ardea cinerea*

A well represented visitor. Bred in 1894 (Paynter, 1894).

The species was recorded throughout the year from 1 April-2 December, with reports received from the inner group on fifty-eight dates and on the outer group on thirty-seven dates. The majority of sightings involved 1-2 wandering individuals, favouring undisturbed rock pool areas of Knoxes Reef and Longstone main rock. Occasionally larger parties were seen, with three over the inner group on 18 October and four east over Brownsman on 30 September. The exception was a group of six west over the outer and then inner group of islands on 10 August, heading towards the mainland.

Mute Swan *Cygnus olor*

An uncommon visitor.

Overall a quiet year with three reports which included a pair of adults drifting north on the sea through Inner Sound on the morning of 13 April, three reported by boatmen on the sea between Longstone and Northern Hares on 18 August and two south through Inner Sound on 9 September.

Whooper Swan *C. cygnus*

Uncommon winter and passage visitor.

A flock of twenty-five north over Inner Farne on 14 April was the first spring record from the islands in six years and had been seen further down the coast at Low Newton earlier that day. The sighting was part of a larger movement down the east coast of Northumberland during mid April. Autumn produced one record of two north through Staple Sound on 3 November.

Pink-footed Goose *Anser brachyrhynchus*

A well represented passage and winter visitor.

A single spring sighting of twelve north over Inner Farne on 14 April was the first spring record since 2000. As usual, reports peaked in late September into early October, as birds passed the islands on their way to wintering grounds in southern England. The first autumn returnee was on 21 September when one was on the flats area of Brownsman all afternoon during a westerly gale, followed by seventy-five north on 24 September. Favourable

migration weather between 27-29 September produced the year's biggest movements as day counts of 291 on 27 (in two skeins), 605 on 28 (in seven skeins) and 373 on 29 September (in four skeins) were recorded past the islands. October produced records on eight dates involving skeins of 20-95, with larger flocks including 280 on 7, 138 on 23 and 334 on 31 October. Records continued into November with reports of 1-85 on six dates until forty-two north-west through Inner Sound on 26 November was the final record.

Greylag Goose *A. anser*

An uncommon passage and winter visitor.

A typical year with records on eight dates between 28 March and 4 July; surprisingly the autumn producing no confirmed sightings. Records included two east over Brownsman on 28 March, while April produced the bulk of the sightings: nine north through Inner Sound on 6 April landed briefly on the sea, three flew north through the Kettle on 21 April and twelve moved north through Staple Sound on 22 April. As always with this species, individuals were seen landing on island 'tops', with a single on Staple Island all day on 1 and 27 April. What proved to be the final reports of the season concerned one south through Inner Sound on 30 May and three north over Brownsman on 4 July.

Canada Goose *Branta canadensis*

An uncommon passage visitor.

In late spring, a small percentage of the British population head north to moulting grounds in the Beaully Firth, northern Scotland, and the majority of records from the Farnes involve sightings of birds on this northerly movement. It was a good year for records with the first discovered flying north through Inner Sound on the morning of 25 April, before taking up residence for the day on Knocklin Ends and later on the West Wideopens. The only May report concerned thirty-eight north through Inner Sound in mid-morning on 8 May. Early June produced a spate of records through Inner Sound, with sixty north on 6, 159 north on 7 (including nine which landed on the sea near Megstone) and thirty-eight north in two skeins on 8 June, all presumably heading for the northern moulting grounds.

Barnacle Goose *B. leucopsis*

A well represented passage and winter visitor.

Spring records are unusual through the islands, normally involving only a handful of birds, but this year was exceptional with records from four dates in late April and early May. The first indication of spring passage was a skein of fifty-two north over Brownsman, which circled South Wamses before continuing north on 27 April. The following day, eighty-four moved north through Inner Sound with a further three flying north-west over the inner group, one of which appeared to have been on Inner Farne. Further spring reports included thirty-two landing on the West Wideopens on 8 May with five north over Brownsman the same day. The final spring showing involved fifty-three roosting on Knoxes Reef for most of the day of 9 May, before departing east out over the outer group and eventually heading north over Longstone main rock. Autumn was marked by sightings of 1-38 on eleven dates between 22 September and 4 November with the largest autumn movement of nine skeins totalling 173 west over the islands on 7 October. Interesting records of birds landing on islands included seven on Brownsman on 23 September (with singles on 22 September and 29 October), two on Inner Farne on 23 September and twenty-nine which landed briefly on

West Wideopens on 29 September before continuing on their southward journey.

Brent Goose 'Light-bellied' *B. bernicla hrota*

A well represented passage and winter visitor.

Passage birds were logged in the autumn returning to wintering grounds on nearby Lindisfarne to the north of the islands. The majority of all sightings involved skeins north through Inner Sound, with the first being ten north on 2 September. Thereafter, the month of September produced the bulk of records with 1-30 north on eleven dates, with two records in October including the season's peak count of sixty-one north through Inner Sound on 9 October. The only November reports involved singles north over the Kettle on 13 and 14 November.

Following a gap of thirteen years until last year, there were two further records of 'Dark-bellied' **Brent Geese** *B. b. bernicla* from the islands. It can be presumed that as the British wintering population increases especially in Northumberland, the number of records from the islands will also increase. This year brought two records including a juvenile sighted over the Zodiac boat before landing on Longstone main rock on 24 October followed by three north through the Kettle on the morning of 20 November.

Shelduck *Tadorna tadorna*

A well represented visitor and occasional breeder (Steel, 2004; Walton, 1995).

Following last season's confirmed breeding success, the pair returned to the islands for another attempt. The pair originally started prospecting on the islands in the spring of 2002 and although unsuccessful in their first year, went on to rear eight young last season. This year the same pair (female recognised by the distinctive facial pattern) returned to the islands and were evident on both island groups throughout April. They were seen prospecting various holes on Inner Farne and by late April it appeared that a suitable nesting locality had been discovered. Thereafter the female became elusive, suggesting incubating activities, while the male was seen frequenting both Brownsman and Knoxes Reef. As mid-May approached, the female was occasionally seen departing the suspected nest site, but due to the fragile soil cap and general location to other nesting seabirds it was decided not to make an attempt to check. Sadly the breeding attempt, for whatever reason, failed in late May and the pair were last seen together on 31 May leaving the islands. Passage birds were well represented throughout the season with records from fifteen dates between 3 April and 26 November. Peak counts included ten north and three south on 25 April, fifteen south on 12 July and six north on both 10 July and 31 August.

Wigeon *Anas penelope*

A common passage and winter visitor.

Spring passage was light with records including four over the Bridges on 2 April, ten south over Brownsman on 30 April, a male in the Kettle on 11 May and four (one male, three female) east over Inner Farne on 24 June. Thereafter autumn passage commenced with 1-190 recorded on forty-three dates between 10 August and 2 December, with records evenly split between Staple and Inner Sound. Autumn saw some heavy northerly passage with 249 through Inner Sound on 25 September and the highest count of the year when 586 passed the islands on 1 October (396 through Inner Sound and 190 through Staple Sound). As usual

a small number were seen around the islands in late autumn favouring Knoxes Reef and occasionally on Brownsman or the Churn Pool on Inner Farne.

Teal *A. crecca*

A common passage and winter visitor.

Spring saw small numbers of 1-10 scattered around the islands, favouring areas with open standing water, especially the ponds of Inner Farne, Brownsman and Staple Island. A late spring male was around Inner Farne on 20 and 30 May while unseasonal mid-summer records involved a male on Brownsman Pond on 3 June and two north through Inner Sound on 19 June. Autumn passage produced 1-85 on seventy-three dates from 1 August-2 December, with 55% of all birds recorded through Staple Sound compared to 45% through Inner Sound. Surprisingly, numbers were low, with modest yearly peak counts of 105 north on 1 October (sixty-eight through Inner Sound, thirty-seven through Staple Sound) and 103 south through Staple Sound on 31 October. As usual, wintering flocks started to increase from mid-September on Knoxes Reef, peaking at 200 on 1 November with smaller numbers commuting between Brownsman and Staple Island, peaking at thirty on 13 November.

Mallard *A. platyrhynchos*

A common winter and passage visitor.

Present around the islands all year, with daily records of small numbers with an autumn build-up on Knoxes Reef. Nesting attempts were made on several islands, with the first eggs discovered on the early date of 2 April on Knoxes Reef and on Brownsman on 26 April. The season was as interesting as ever, as nests and young suffered from predation or desertion although there was some success with a small number of fledged young seen around the islands. A total of twelve pairs (13) nested as follows: Inner Farne 3 (4), West Wideopens 2 (2), East Wideopens 1 (0), Knoxes Reef 1 (1), Staple Island 1 (1), Brownsman 2 (2), North Wamses 1 (1), South Wamses 0 (2), Big Harcar 1 (0). As usual, numbers built up on Knoxes Reef, where birds were present daily throughout the autumn. Counts increased from early September with fifteen on 23 September, which increased to forty-one on 7 October and continued to rise to fifty on 19 November and 150 on 27 November, peaking at 184 on 30 November. Small numbers were frequently seen on the outer group during the autumn although no significant counts were made.

Pintail *A. acuta*

An uncommon passage and winter visitor.

A scattering of passage birds was recorded, with two spring records in late April involving a pair north through the Kettle on 24 and another pair north through Staple Sound on 28 April. The first autumn passage birds were logged on 24 September, with four north (three north through Inner Sound, one north through Staple Sound), followed by October records of three north through the Kettle on 1, four north over Knoxes Reef on 11 and a female north through Inner Sound on 28 October. Further autumn records concerned two north through Inner Sound on 9 November with a single landing on the sea off the West Wideopens before eventually flying north on the same day. The final two records involved singles north on 17 and 18 November.

Garganey *A. querquedula*

An uncommon passage visitor.

Wardens and visitors alike had the unusual sight of watching a striking adult male accompanying puffins in the Kettle on 1 May. The bird appeared in mid-afternoon and eventually came ashore along 'Ladies Path' on Inner Farne and roosted with eiders until early evening, allowing all the wardens to appreciate this splendid visitor. This represents the fifteenth Farnes record (involving nineteen birds) following the first on 21 May 1979, and the earliest-ever spring bird, with the majority of records falling between 6-21 May.

Shoveler *A. clypeata*

A well represented passage and winter visitor.

A typical year with a handful of records, involving one spring report of an adult male flushed off Brownsman Pond on 17 April, before it disappeared into mist. Returning autumn passage birds were seen from early October with singles north through Inner and Staple Sounds on 9, two west over Inner Farne on 28 and two south through Inner Sound on 29 October. The final record concerned a female on the sea with a mixed duck flock off the Bridges near West Wideopens on 30 November.

Pochard *Aythya ferina*

An uncommon passage visitor.

Despite annual records of passage birds, the species is only ever seen in very small numbers and this year was no different. The morning of 24 September saw a general larger movement of wildfowl past the islands, which resulted in two small flocks recorded, with five north through Inner Sound and three north through Staple Sound.

Tufted Duck *A. fuligula*

A well represented visitor.

A respectable year with reports of birds over a total of seven months. Spring passage involved three records when a total of seven flew north through Staple Sound during the morning of 28 April, six flew north over Brownsman on 5 May, and three males moved south over Brownsman North Rocks on 30 June. Further records involved a male west through Staple Sound on 10 July, which appeared to land on the sea near the Wideopens, and another male flew south through Staple Sound on 31 August. September produced singles on 6 and 16 with four north on 24 September and the final record concerned five north through Inner Sound on 28 October.

Scaup *A. marila*

An uncommon passage and winter visitor.

An excellent year with a spring count eclipsing all previous counts. On the morning of 28 April, a total of twenty-four were logged flying north through Staple Sound, the majority were paired and this represents the best ever showing from the islands, eclipsing the previous highest day total of twenty-one in 1991. The autumn produced three records, with two female/types north through Inner Sound on 30 September, another north past Inner Farne south end on 10 October and a party of six (including two males) north through Staple Sound on 14 November.

Eider *Somateria mollissima*

An abundant breeding resident.

Nesting birds escaped the worst of the weather due to their early nesting habits although in complete contrast to the previous season, the number of breeding females dropped by 36% to their lowest total since 1967. Prospecting birds were first seen on Brownsman on 30 March and Inner Farne on 8 April and the first eggs were discovered on 22 April on the central meadow of Inner Farne. Many followed thereafter with the first young seen on 23 May on Inner Farne and 24 May on Brownsman. Although predation was very evident, a good number of non-breeding females remained around the islands, all willing to help escort ducklings to the sea and so adding more security against opportunistic large gulls. A total of 661 (1,036) ducks nested as follows: Inner Farne 418 (705), West Wideopens 9 (27), East Wideopens 9 (10), Knoxes Reef 4 (7), Staple Island 17 (23), Brownsman 188 (240), North Wamses 2 (6), South Wamses 9 (8), Big Harcar 2 (6), Northern Hares 1 (1), Longstone main rock 1 (1), Longstone End 1 (2). The overall productivity was good as 267 monitored nests produced 919 young, an average of 3.44, a further improvement on recent years. As birds dispersed after the breeding season for moulting grounds only small numbers lingered around the islands, followed by a steady increase in autumn, with regular counts of rafts of 1,000 strong in Inner Sound. As late November and early December approached, displaying birds were seen and heard around the islands.

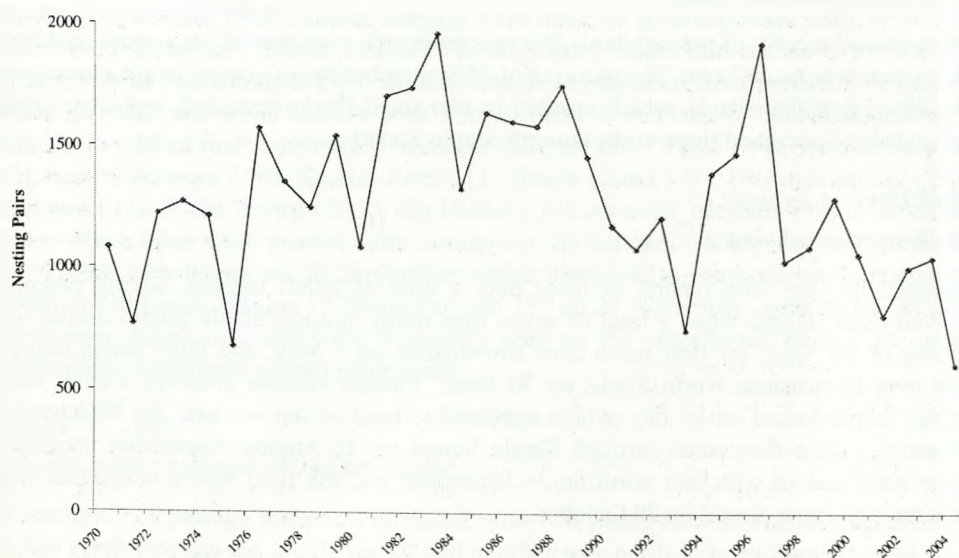


Figure 2 Breeding population of Eiders on the Farne Islands, 2004.

Long-tailed Duck *Clangula hyemalis*

A well represented passage and winter visitor.

This classic seaduck was reported in typical good numbers during the autumn with the islands producing a single spring record. A group of three (two males, one female) flew north through Inner Sound on the morning of 29 March, landing briefly on the sea. Autumn

passage commenced in October with two north through Staple Sound on 10 and 29 October. Autumn brought no noticeable northerly passage although 1-6 were recorded passing on eleven dates during November. From 12 November a small party settled on the sea behind the Bridges near the Wideopens and were resident until the end of the year. The group initially comprised two female/immature birds but increased to six (including two immaculate males) by 21 November and looked settled around the islands for the winter.

Common Scoter *Melanitta nigra*

A common passage and winter visitor.

Well recorded throughout the year, with records from every month between 26 March and 2 December with reports from ninety-three dates evenly split between Staple and Inner Sounds. Passage was heaviest in July and September with records on sixteen and fifteen days respectively, with peak counts of 166 north on 3 July, 138 north on 7 July, and 184 north on 1 November, all through Staple Sound. A wintering flock took up residence in Inner Sound throughout November and early December, fluctuating between 100-200.

Velvet Scoter *M. fusca*

A well represented passage and winter visitor.

An excellent year with single spring and summer records and good numbers reported on twenty autumn dates. A group of four flew north through Staple Sound on 10 April, the first spring record in seven years, with another unseasonal record involving two males flying north through Inner Sound before looping into Staple Sound on 11 July. Autumn passage commenced early with two males north through Inner Sound on 31 August and then between 6 September and 20 November. Usual sightings concerned one-seven although good numbers were recorded in early October with sixteen north on 8 (fifteen through Inner Sound, one through Staple Sound), nineteen north in a single flock through Inner Sound on 9 and ten north through Staple Sound on 31 October. Birds were discovered wintering in Inner Sound, mingling with the large numbers of common scoter, with peak counts of eleven on 7 and twelve on 10 November. The final record concerned two female/immature birds roosting in the Kettle on 20 November.

Goldeneye *Bucephala clangula*

A common passage and winter visitor.

A light scattering of spring records with the bulk of reports involving birds on autumn passage. In recent years, a small number have wintered around the Wideopens/Bridges area and the last few wintering birds were still evident in March and early April with four on the sea off the Bridges on 3 April and a single still present the following day. Late spring passage birds were recorded through Inner Sound with two north on 21 and a male north on 25 April. The first returning bird was noted on 24 September with a single north through Inner Sound. Thereafter 1-12 were recorded on twenty-eight dates with 65% of passage logged through Staple Sound, compared with 35% through Inner Sound. The peak count of the season involved twenty-two north through Staple Sound on 14 November. A small wintering flock started increasing from late October behind the Wideopens and were present until the year-end, with regular counts of between seven and eleven.

Red-breasted Merganser *Mergus serrator*

A well represented passage and winter visitor.

A superb season with records spanning nine months, one of the best showings of the species from the islands. Spring passage commenced with a male north through Inner Sound on 26 March, followed by a male north through Staple Sound on 16 April. Thereafter a female flew north through Inner Sound on 30 April and another male north on 8 May. A male entering eclipse plumage was on St Cuthbert's Cove beach on Inner Farne on 9 June and the following day, a pair was in the Kettle. July produced 1-3 on six dates with the autumn producing 1-5 on fifteen dates between 29 August and 10 November, the majority of records through Inner Sound. Autumn peak counts included six north on 25 September and thirteen (including a single flock of ten) north on 18 October, with both peak counts involving passage through Inner Sound.

Goosander *M. merganser*

An uncommon passage visitor.

A reasonable year with reports of 1-2 on eight dates throughout the season. The spring produced two records, with a female observed flying up Brownsman Gut on 12 April and a male seen circling the Scarcars on 10 May, presumably the same bird discovered in the Kettle the following day. Autumn passage was light, with a female-type north through Inner Sound with two red-breasted mergansers on 27 September and a spate of records in late October included two north through Staple Sound on 27, a female-type north through the Kettle on 28 and two west over Brownsman on 30 October. The final record concerned a single north through Inner Sound on 18 November.

Montagu's Harrier *Circus pygargus*

An extremely rare visitor – first record.

An amazing purple patch for the islands in mid-August produced one of the birds of the year. A juvenile was flushed from central meadow on Inner Farne early on the morning of 11 August and due to thick fog, was grounded on the island all day. During its stay the bird had to content itself with tall vegetation as roost sites and was observed attempting to hunt small passerines on the island top. Despite the fog, the wardens obtained good views allowing confirmation of this first-ever Farne Islands record. Following an overnight stay, clearer conditions enabled the bird to depart early on 12 August. At 09:20 that morning, the bird flew around Inner Farne before making a pass over the West Wideopens eventually heading west over a fog-free Inner Sound towards the mainland. In a county context, the species is a rare passage visitor with only three coastal records since 1968, the last on nearby Holy Island in 1997.

Sparrowhawk *Accipiter nisus*

An uncommon visitor.

A good year with spring records predominately coming from the outer group, with the reverse in autumn as the inner group claimed the bulk of records. Spring reports concerned mainly females over the outer group, with one west over Brownsman on 30 March, on several outer group islands on 19 April and another was observed taking a passerine off Brownsman on 25 April. Further records of females were noted on Brownsman on 2 May while a single west over Staple Island on 6 May was seen over the inner group of islands as

its continued west towards the mainland. Two mid-summer records concerned a male mobbed by terns over Brownsman on 28 July and a female circled Inner Farne on 15 August. Sightings were still sporadic in early autumn, with singles over Brownsman on 9 and 27 September and it was not until mid-October that sightings became more frequent. On Inner Farne, birds were seen hunting on 14, 17 and 24 October, with further records on 2, 7, 9, 18 and 29 November. The only multiple record involved two hunting on the inner group on 14 November.

Buzzard *Buteo buteo*

A rare visitor.

The final 'new' species of the year to be added to the Farnes year list involved the sighting of a bird flying west through Inner Sound on 26 November. It was discovered as wardens enjoyed the company of a friendly bottle-nosed dolphin *Tursiops truncatus* in Inner Sound which wanted its nose scratched. This represents the eighth record (twelve birds), following singles in 1952, 1963, 1976, 1982, 1983, 2001 and five over in one day on 22 September 2000.

Kestrel *Falco tinnunculus*

A well represented passage visitor. May have bred in 1916 and 1943 (March, 1916; Thorp, 1943).

Three spring records, all of females, were typical of this passage visitor to the islands. The first two sightings, both on Inner Farne, may have involved the same bird as a female west over Inner Farne on 27 March was followed by another female on the dock bank area of Inner Farne on 4 April. The only other spring record concerned a female flushed off the north rocks area of Brownsman on 5 May, before flying west. The autumn was generally quiet, with singles on eight days following the first autumn bird discovered hunting over Inner Farne on 26 August. Thereafter singles were recorded on 8, 9, 12, 19 and 30 September and 3 and 7 October with the last record involving one over Brownsman on 12 October.

Merlin *F. columbarius*

A well represented passage and winter visitor.

Another quiet spring, with only one confirmed record of a single over Brownsman cottage on 2 April. However an unusual mid-summer record involved a female heading west over the inner group, having been seen earlier over the dock bank area of Inner Farne on 4 June. As birds from upland breeding grounds winter along coastal areas, records increased during the latter half of the year with returning birds noted on August dates from 20 August. Records continued to increase in September with reports from nine dates including a bird over Megstone on 4 September. October and November saw almost daily records from both island groups as at least two immatures took up residence, preying on tired migrants on several islands. Other than sightings of immatures or females, adult males were seen on Inner Farne on 9 and 27 October. Birds were seen with various 'kills' including redshank, rock pipit, redwing, starling, and bullfinch amongst others.

Peregrine *F. peregrinus*

A well represented passage and winter visitor. May have bred in 1925 (Watt, 1951a).

An impressive showing from an impressive raptor. Early spring indicated the presence of two birds, an adult male and female patrolling the islands, which were occasionally seen together. The birds were reported on eleven dates from 26 March-19 April and were seen roosting on Longstone lighthouse in late March. There were then no sightings until a hunting male appeared on 20 July and became a daily feature until last seen on 8 August, by which time he had been joined by an immature male from 31 July. Both birds were very active over the islands and were seen to take fledged arctic tern young amongst other prey. Another barren spell then proceeded until 7 September and thereafter the species became 'common' on the islands, with daily records from October-December when the wardens departed the islands. The autumn months appeared to indicate at least five different birds were utilising the islands with many multiple sightings including three together over Inner Farne on 18 October. The birds were opportunistic hunters, preying on what was abundant at that particular time of year and prey varied from puffin and arctic tern, to redshank, woodcock and little auk, although many favoured the large population of feral pigeons. Although too large to kill, a female was witnessed knocking a shag into the water off Inner Farne on 1 October.

Quail *Coturnix coturnix*

An uncommon passage visitor.

For the eighth consecutive year the islands boasted one of these charismatic visitors, but the Brownsman dominance continued. A female was noted flying onto Brownsman on the morning of 30 July but unfortunately was flushed once and headed north towards the Wamseys not to be seen again. This represents the latest ever Farnes record, possibly as a result of an early returning migrant after a failed breeding season.

Water Rail *Rallus aquaticus*

An uncommon passage visitor.

An amazing year involving some long staying resident birds, representing one of the best years on record. An individual was heard calling near the pond on Inner Farne on 3 August and was intermittently seen or heard around the island, mostly favouring the pond area, until at least 27 September. During this period second birds was seen on the dock bank on 9 and near the pond on 11 August. The final record on Inner Farne was a bird on 10 October showing well on the boardwalk, probing soil dug out by rabbits near the quarry viewpoint. The outer group eventually got into the act in mid-October, with one flushed from behind the Brownsman cottage on 13 October with another hiding in the gas cages between cylinders on 24 October. The last record involved the discovery of a fresh raptor kill on Longstone main rock on 3 November.

Oystercatcher *Haematopus ostralegus*

An common winter and passage visitor, well represented breeder.

Present throughout the year, with a good number of pairs nesting although, unusually for this species, many suffered at the hands of large gulls. The first eggs were discovered on Inner Farne on 9 May and on Brownsman on 10 May and the first young soon followed in

early June, with young on Inner Farne on 3 June. From early July young were seen at the fledgling stage and the breeding season was over for another year. A good number nested with 37 (36) pairs as follows: Inner Farne 6 (6), West Wideopens 3 (4), East Wideopens 2 (2), Knoxes Reef 4 (4), Staple Island 5 (6), Brownsman 12 (9), North Wamses 1 (1), South Wamses 2 (2), Big Harcar 2 (1), Longstone main rock 0 (1). Despite the good numbers nesting and the robust nature of the species, overall productivity on both island groups was disappointing, with poor weather and predation responsible for most failings. On the outer group seventeen nests produced eleven fledged young (productivity of 0.65) compared with the inner group of nine nests producing only three fledged young (at 0.33 productivity). Good numbers were present around the islands throughout the year peaking in the autumn, with large roost flocks reported from the inner group including 198 on 21 August, 192 on 29 September, 208 on 13 October and 221 on 12 November. Smaller numbers were present on the outer group during this period with a peak of fifty-seven on Brownsman on 18 October.

Ringed Plover *Charadrius hiaticula*

A common passage visitor, uncommon and declining as a breeding species.

The species has a toehold on the islands and is renowned for suffering the most from predation, human activity and tides. A total of eleven (8) pairs nested as follows: Inner Farne 4 (4), Staple Island 1 (1), Brownsman 6 (3), representing the largest breeding total since 1997. It was an excellent breeding season on the outer group with a marked improvement on recent years as birds chose better nest sites either well hidden in tussocks on shingle or more importantly, above the tide line. Three nests on Brownsman were caged at the egg stage to give extra protection from large gulls and two of these nests fledged three young. There was just one pair on Staple Island, which had two nesting attempts and, despite almost flooding, went on to fledge one young. However, in complete contrast the season was almost a disaster on the inner group, with six monitored nests producing only a single fledged young. A total of three nests reached chick stage, but small young were soon lost to marauding gulls whilst a nest in St Cuthbert's Cove was lost to a high tide. Overall productivity on the outer group resulted in a total of twenty-eight eggs laid, with five chicks fledged with an overall productivity of 0.71. In comparison, six nests on the inner group produced twenty-four eggs with only one chick fledging, with overall productivity at 0.16. An unusual record during the breeding season involved ten north through the Kettle on 4 June. A post-breeding flock started increasing on the inner group from early August, with eleven on 1, increasing to fifteen on 5 with twenty-one on 9 August. Birds were present throughout with further increases in September with the season's peak of fifty-nine on 5 September and fifty-five on 30 September. Although not always present, the flock reappeared occasionally on Inner Farne during October and November, with monthly peak counts of thirty-six on 17 October and forty-three on 12 November. The autumn period also saw small numbers reported on the outer group, peaking with fifteen on 30 September and twelve on 18 October.

Golden Plover *Pluvialis apricaria*

A well represented passage visitor.

During the spring, a light scattering of records included a small number seen on island 'tops' with two partial summer plumage birds on Brownsman on 2, one lingering until the following evening. Another, possibly one of the latter, was on the central meadow of Inner

Farne on 3 and a complete summer plumage bird was on the dock bank of Inner Farne on 19 April. The only other spring records involved five on Knoxes Reef on 13 April and five north through Staple Sound on 28 April. The annual post-breeding flock built up during the late summer, with the first returning birds discovered on 13 July. Thereafter-regular counts of between 200 and 400 were made throughout August, utilising islands on both the inner and outer groups, especially Staple Island but also to a lesser degree on Knoxes Reef and Longstone main rock. It was evident that numbers were down on recent years, with no four-figure counts as numbers peaked at 720 on 31 August. The first two weeks of September indicated 500 present, with smaller numbers thereafter, although another peak in early October resulted in counts of 670 on 1 and 800 on 5 October. Thereafter the species became scarce with the final record 1 December of thirty-one flying from the outer group, north-west over the inner group on.

Grey Plover *P. squatarola*

A well represented passage visitor.

The inner group dominated records with a distinct lack of birds recorded from the outer group's stronghold around the Longstone area. On the inner group 1-4 were recorded on three spring and ten autumn dates, compared with just two records from the outer group. Spring records included three on Knoxes Reef on 16 May and 4 June with four present on 9 June while a single was on Longstone on 9 May. Return autumn passage began with single adult summer plumage birds north through Inner Sound on 13, 25 and 31 August with another on 27 September. A single winter plumage bird then resided on Knoxes Reef or West Wideopens from 29 September-1 October. Further records included singles on 13 and 28 October, three north over Knoxes Reef on 12 November and the last sighting of the year was a single north through Staple Sound on 19 November.

Lapwing *Vanellus vanellus*

A well represented passage visitor. Sporadic breeder in past; last attempt in 1962 (Hawkey, 1991).

A good year, with a reasonable scattering of records. The first bird was discovered flying west over Big Harcar on 27 March followed by three west and one roosting on Staple Island on 30 March. The spring then went on to produce 1-2 on four April dates over both island groups and 1-2 over Inner Farne on 24-25 June. The first autumn passage bird was recorded on the early date of 21 July, when a moulting adult flew west over Brownsman being heavily mobbed by terns. Thereafter 1-20 were recorded over the islands on twenty dates between 6 August and 29 November with peak counts of forty-seven north through Inner Sound on 24 October and seventy-four on 29 November over the Kettle with some landing on Knoxes reef.

Knot *Calidris canutus*

A well represented passage visitor.

As has been the trend in recent years, good numbers summered on the islands with passage birds noted moving through the area. From mid-May, small numbers of 1-14 were recorded passing north through the islands with a peak of fifteen north past Staple Island on 27 May. A small number continued to pass north in June although a settled flock became established,

and once again a summering flock was evident, favouring the inner group of islands. Early June saw the flock size increase as numbers picked up from 10-20 in the first two weeks, to forty strong by 20 June. Thereafter 40-67 were present daily (including small numbers of red summer plumage birds) throughout July and into early August when sixty-five were present on 1 August. However numbers started dwindling and by mid-August fewer than ten remained. Thereafter 1-21 were recorded on southerly passage through the islands on twenty-three dates until last reported on 13 November. The only large counts during the autumn period involved sixty-six on 28 September and seventy-one on 5 October, all on Inner Farne.

Sanderling *C. alba*

An uncommon passage visitor.

Following on from last season's excellent year (ten records), another good showing produced reports on eight dates. July produced the bulk of the records, all involving full summer plumage birds, with a single on St Cuthbert's Cove, Inner Farne on 9, five on the Longstone main rock/Northern Hares complex on 18, two on West Wideopens on 21 and a single on Brownsman on 27-28 July. Further reports included two west over Inner Farne on 18 August, six south through Inner Sound on 27 August, two with ringed plovers on Inner Farne on 30 September and a final record of one west over Inner Farne on 28 October.

Little Stint *C. minuta*

An uncommon passage visitor.

Following an influx of birds down the east coast in mid-August, the Farnes produced two records on both the inner and outer group. A juvenile was discovered feeding on rock pools on the north-east corner of Inner Farne on 13 August and what was presumably the same bird was then present in the same area daily from 16-19 August. The only other record involved two flying around Longstone on 16 August, before landing nearby.

Purple Sandpiper *C. maritima*

A common passage and winter visitor.

Well documented throughout the year, with spring records between 26 March and 29 May and only June producing none. It became evident that numbers were lower than usual on the outer group in the spring, with a peak of only 104 on 25 April. However, in complete contrast the greater numbers were on the inner group in the opening half of the year, with counts exceeding a hundred on several dates and peaking at 203 on 25 April. As usual July saw the first big influx of passage birds, with eight on 1, increasing daily to sixty-one on 11, with a peak of 193 on 15 July. Unlike the spring, the outer group boasted good numbers throughout late summer and autumn, with smaller numbers on the inner group. Counts indicated that from 150-200 wintered on the islands.

Dunlin *C. alpina*

A common passage and winter visitor.

The small wintering population was still evident when the wardens arrived in late March and passage birds in April-May bolstered this. The inner group produced 1-13 on twenty-five dates during this period, mainly on Knoxes Reef, which also produced the spring peak count

of twenty-one on 27 March. Smaller numbers were evident on the outer group in spring, with 1-3 on twenty-four dates, peaking with eight on 2 and 29 May. Summering birds were noted with 1-6 throughout June although forty-two flew north through Inner Sound on 19 June. The species was recorded daily from early July-early October as birds moved south on passage, with the first juveniles passing through on 4 July on Brownsman and 24 July on West Wideopens. During this period, numbers fluctuated between 1-28 between the island groups with an impressive sixty-two on West Wideopens on 21 July. Numbers dwindled as autumn progressed with records of 1-13 on eight October and four November dates, with the last large flock of twenty-eight on Knoxes Reef on 29 November.

Ruff *Philomachus pugnax*

A well represented passage visitor.

A female discovered feeding in vegetation around the north side of the Pele Tower on Inner Farne on 31 May represented the only spring record. Good numbers were reported in August with 1-2 recorded on five dates between 5-24 August with five noted on 10 and four on 12 August. An impressive flock of eight flew north over Brownsman (with two on the island) on 9 August which equalled the largest ever flock seen on the islands on 14 August 1971. Further sightings involved singles south past Brownsman on 21 September, west over Inner Farne on 27 September and two circling Inner Farne on 12 October.

Jack Snipe *Lymnocryptes minimus*

A well represented passage visitor.

There were no spring records and all autumn reports concerned passage birds on ten October dates. The first sighting of the year was a single flying in off the sea over the Wideopens and Inner Farne on 6 October with further singles on Inner Farne favouring either the pond or pools at the end of the dock bank on 11, 16, 17 and 23 October. On the outer group, the pond on Brownsman was favoured with singles on 10, 12, 13, 16 and 28 October with the only multiply record of the season involving two flushed on 27 October.

Snipe *Gallinago gallinago*

A well represented passage visitor.

There were just five spring records, all in April, involving singles flushed from Inner Farne on 2 and Brownsman on 3, 24 and 28 and another on Staple Island on 27 April. A single flushed from Brownsman on 1 August was the first autumn sighting and thereafter 1-4 were recorded on fifty-two dates, until the last record of a single on 30 November. Large counts included the season's peak count of sixteen on 3 August off Brownsman, with six on 10 August and 6 September, and flocks of five on 5 and 30 September between the two island groups.

Woodcock *Scolopax rusticola*

A well represented passage visitor.

There were two spring reports: the fresh corpse of a bird discovered on Brownsman north rocks on 31 March had evidently been killed by a peregrine, while one circled Brownsman cottage on 2 April. There was a good showing during the autumn as birds were recorded on nineteen dates on the inner group compared with twenty-one on the outer group. The first

autumn record involved a bird flushed from the vegetable garden of Inner Farne on 30 September.

Favourable winds from mid-October brought continental migrants moving to Britain for the winter, with small numbers of 1-5 on nine dates between 11 and 27 October. The big 'fall' of the autumn occurred on 28 October with at least forty recorded, including twenty-four on the inner group and sixteen on the outer group. The following few days saw continued presence with day totals of twelve on 29 and seven on 30 October. A second smaller influx occurred on 2 November with eight between the island groups and thereafter 1-3 were recorded on ten November dates. Interestingly a bird flushed west towards the mainland from Inner Farne on 7 November was watched for several miles until it dropped down in woodland near Preston Towers, beyond Seahouses. The final record, just like the first, involved the fresh corpse of a presumed peregrine kill on East Wideopens on 1 December.

Black-tailed Godwit *Limosa limosa*

An uncommon passage visitor.

A reasonable year with four records: the first was a bird discovered in unusual circumstances, as a summer plumage bird roosted on the flats area of Brownsman on 20 July but was only identified later from photographs. More positive identifications were made with the other records, as ten flew west through the Kettle on 5 September, three west over Staple Island on 7 September and one landed on Knoxes Reef with the large curlew flock on 5 October.

Bar-tailed Godwit *L. lapponica*

A well represented passage visitor.

As usual the majority of records occurred on Knoxes Reef with birds recorded throughout the year in every month, including a summering flock for the second consecutive year. Throughout late May, June and July a flock was recorded almost daily, favouring Knoxes Reef, fluctuating between twenty and seventy although larger counts included 121 on 9 June and 120 on 17 June. The flock contained smaller numbers of summer plumage adults and were responsible for the bulk of records from the outer group, where the season produced twelve records from 25 May-8 September. The flock started to disperse throughout August with seventy-three on 10, reducing to ten by 29 August. Thereafter smaller numbers frequented Knoxes Reef, indicating more local movements, with regular counts of between 1-14 on twenty-five dates between 2 September and 30 November. Larger counts during the autumn included thirty-four on 8 September and twenty-seven north through the Kettle on 12 November.

Whimbrel *Numenius phaeopus*

A well represented passage visitor.

The spring season began early on 1 April when a party of three landed on the south-east rocks of Inner Farne before flying off west, representing the second earliest Farnes record, following one on 28 March 1993. Thereafter 1-3 were recorded on eight dates between 22 April and 27 May, favouring Knoxes Reef and Longstone. Peak counts during this period involved small flocks over the inner group with four north on 10 May and five north on 11 May. June produced three reports of three north through Inner Sound on 19, and singles on

Knoxes Reef on 21 and Brownsman on 22 June. From early July reports of 1-5 were almost daily until early September with larger counts including eleven north through Inner Sound on 11 July and six south through Inner Sound on 23 July. A bird was resident on Brownsman from 1-22 September with the final record involving one sleeping and feeding by the Inner Farne lighthouse viewing platform on 23 September.

Curlew *N. arquata*

A common passage and winter visitor.

Well reported throughout the year especially on the favoured island of Knoxes Reef on the inner group where up to 300 were seen daily from 10 July-2 August and again in early November. Smaller numbers were reported on several other islands with the Longstone/Northern Hares complex proving popular for very small numbers on the outer group.

Table 3 Monthly peak counts of Curlew on the Farne Islands, 2004.

	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Inner group	130	100	14	80	300	142	210	180	300
Outer group	5	42	-	1	26	-	5	25	21

Spotted Redshank *Tringa erythropus*

An uncommon passage visitor.

The only record of the year involved two moulting adults observed circling Brownsman with three ruff on the afternoon of 12 August. The birds landed briefly in the nearby Gut before flying off west, calling in the process, towards the mainland.

Redshank *T. totanus*

A common passage and winter visitor. Bred in eight years 1924-46 (Goddard, 1925-1948; Hawkey, 1991; Wilson, 2000-2005).

It was an excellent year, good numbers being reported throughout the season with the monthly peak counts shown in table four. Both island witnessed northerly passage, possibly birds heading to nearby Lindisfarne or Budle Bay. Peak passage counts included thirty-eight north on 29 July, seventy-two west on 19 August and thirty-eight north on 5 September.

Table 4 Monthly peak counts of Redshank on the Farne Islands, 2004.

	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Inner group	3	12	-	4	48	12	38	27	10
Outer group	3	13	4	7	36	72	25	25	8

Greenshank *T. nebularia*

A well represented passage visitor.

A good showing on passage, with singles briefly on Brownsman Pond on 30 June, one calling over Staple Island on 4 July and another on Big Harcar on 10 July. August produced the bulk of records with 1-2 recorded on fourteen dates with groups of three on four dates. Although both island groups produced records, the outer group recorded the majority with

Brownsman Pond attracting most, including the season's peak counts of four on 10 and 15 August. Further reports included singles on 7-8, 26 and 30 September with the final record being a single on Brownsman on 12 October.

Green Sandpiper *T. ochropus*

An uncommon passage visitor.

Following a disappointing year in 2003, probably due to the lack of standing water, this season produced a good number of records. On the outer group two appeared on Brownsman Pond on 21 July, actively feeding until dusk. Thereafter 1-2 frequented Brownsman, favouring the pond area on twenty dates between 27 July and 23 August. On the inner group, two frequented the Inner Farne pond with some excursions to Knoxes Reef and West Wideopens between 5 and 9 August, with a single lingering from 10-13 August. What was considered to be a different bird was seen daily from 18-24 August on pools at the end of the dock bank on Inner Farne.

Common Sandpiper *Actitis hypoleucos*

A well represented passage visitor.

Spring passage was light, with the first bird of the year arriving on the typical date of 26 April, with a single on St Cuthbert's Cove beach on Inner Farne. Further singles followed on the inner group on 30 April and 1 and 9 May. The only spring record from the outer group concerned one which was briefly on Brownsman on 2 May. The first autumn bird appeared earlier than expected, with a single seen on the wooden jetty on Inner Farne on 28 June. Following a single on Brownsman on 4 July, there were reports of 1-6 on thirty-four dates from 7 July-5 September with larger counts of eleven on 10 August (eight on Brownsman, three on Inner Farne) and fifteen on 20 August (fourteen on Brownsman, one on Inner Farne). Late records of single passage birds were reported on Brownsman on 30 September and 12 October, the latest Farnes record for six years.

Turnstone *Arenaria interpres*

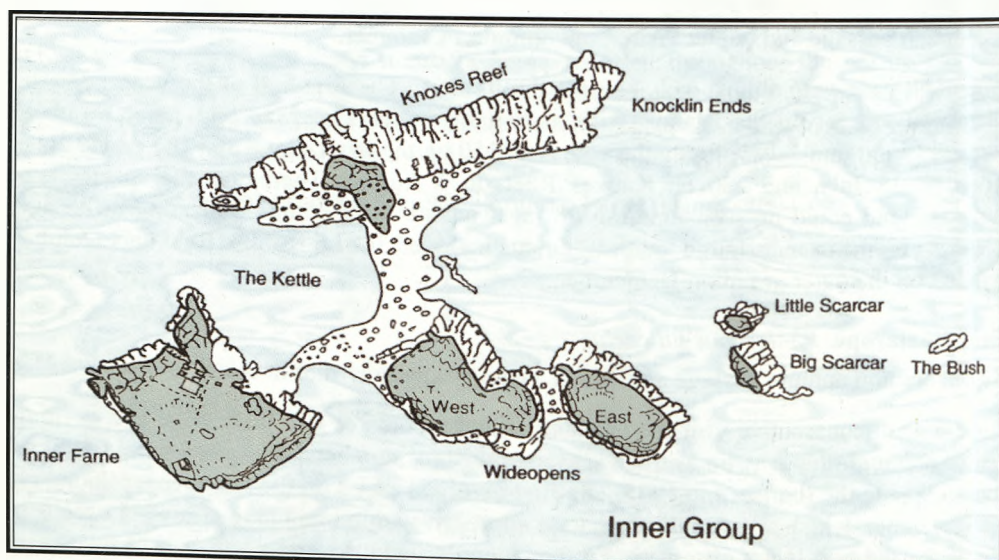
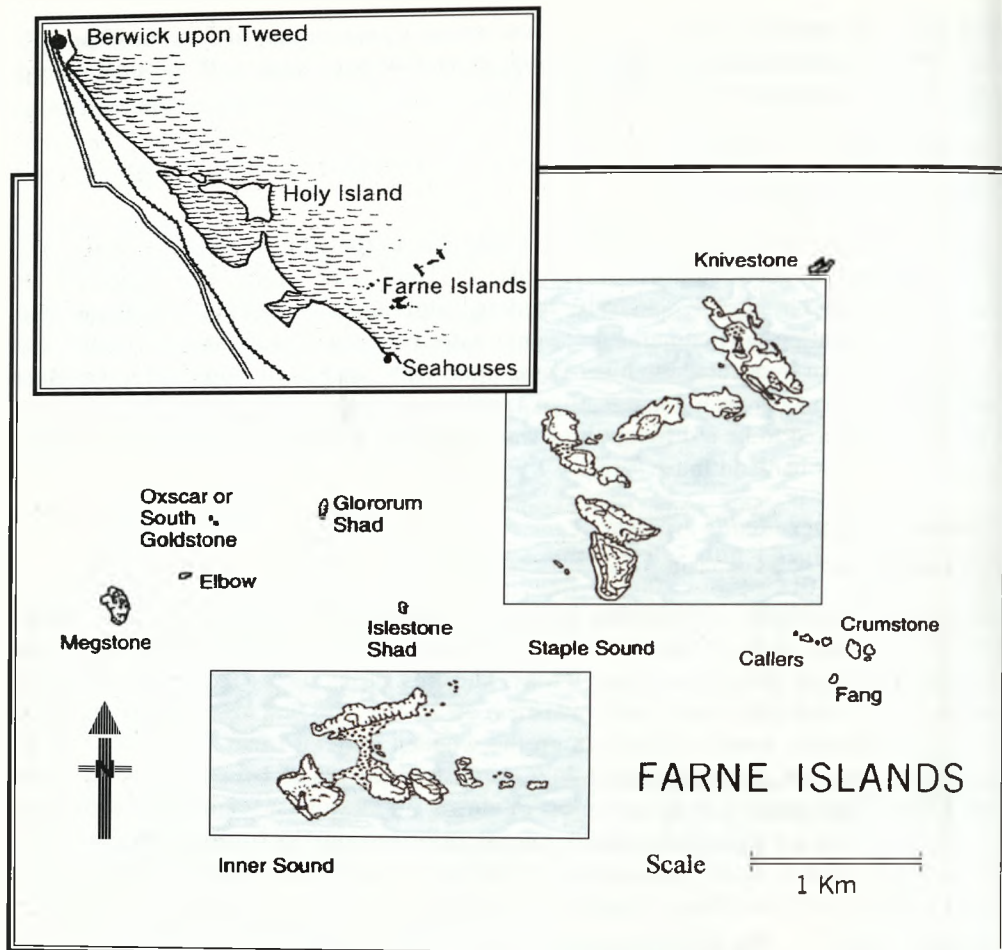
A common passage and winter visitor, uncommon in summer.

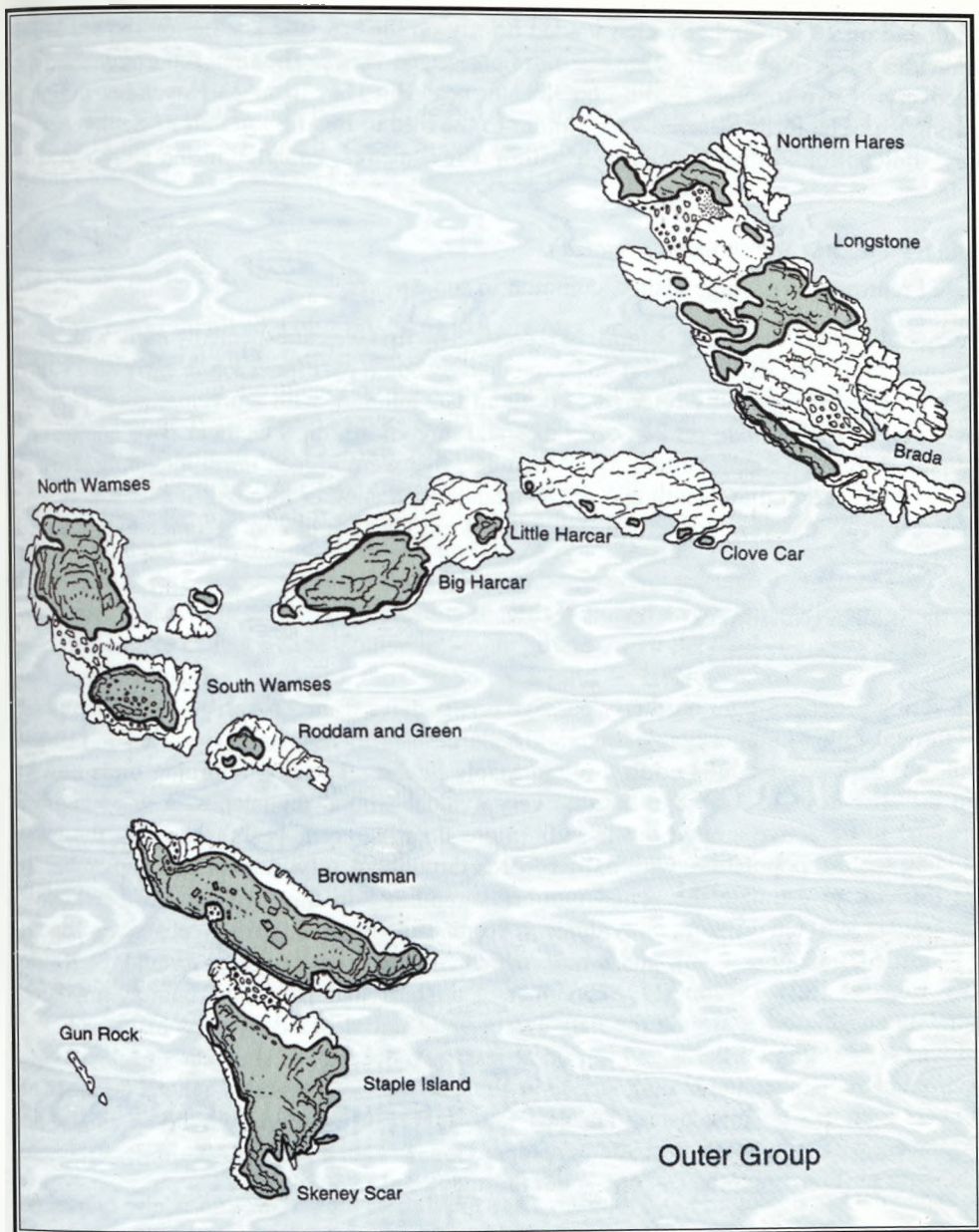
Present all year, with almost daily records throughout. The first half of the year indicated up to 250 present on the islands, with a drop in numbers in May and June. Numbers increased from mid-July with regular counts of 150 on the inner group and 185 on the outer group on 18 July, and 220 on Knoxes Reef on 1 August. Thereafter the species was numerous and could be seen foraging on most islands with counts indicating up to 400 wintering on the islands. Large 'one-off' counts included 300 on Knoxes Reef on 1 October and 263 on the outer group on 18 October.

Grey Phalarope *Phalaropus fulicarius*

An uncommon autumn passage and winter visitor, extremely rare in spring.

For the sixth consecutive year the islands boasted records of this distinctive and exciting visitor although this was no average season, as record numbers were seen with a total of five, eclipsing the four seen in 1995. The first involved a bird on the sea in Inner Sound on 27 September, which allowed the Zodiac to approach within one metre, allowing excellent views for the two lucky observers. Further records included one north past Brownsman





south end on 10 November which landed briefly on the sea, and another on the sea in the same area on 14 November, allowing more prolonged views. The final report involved the discovery of two together feeding on flotsam near Big Harcar on 23 November during a sealing trip. The birds behaved very similar to the bird in Inner Sound on 27 September, as they allowed the Zodiac to approach within a few metres, completing the record year in style.

Pomarine Skua *Stercorarius pomarinus*

A well represented passage visitor, common in some years.

A generally quiet year with a handful of records. The first was unexpectedly early with a full breeding adult (full tail streamers) observed drifting south past Inner Farne early on 23 July. Thereafter reports typically referred to birds in late autumn, with a juvenile north past the south end of Brownsman on 24 September and three north on 8 October (two adults, one immature) through Staple Sound. On 9 October, five were logged north including a group of four adults around the south end of the islands with another through Staple Sound. The final record of the year concerned one adult north past south end of Inner Farne on 10 October.

Arctic Skua *S. parasiticus*

A common passage visitor.

The spring produced light northerly passage on six dates from 27 April-19 May involving 1-2 through either Inner or Staple Sounds. The largest spring movement occurred on 11 May with four dark-phase adults north through Staple Sound. The first returning birds moved into the area from 15 June and became very evident around the islands. A good number appeared to be active around the islands (more than in recent years), harrying the local breeding seabird population, with daily records throughout July, August and September. It was difficult to estimate the actual number summering in the area, but regular counts suggested at least ten different individuals. It became apparent that certain 'characters' could be identified, including a dark-phase bird, which could be seen lingering around the Kettle daily from at least 18 June-11 September. This bird had particular hunting methods including chasing birds around the Pele Tower and Central Meadow areas of Inner Farne and was seen sitting on the island top on at least two occasions. The year's peak passage occurred in September and is summarised in Table 5, and October saw a general decrease in numbers with 1-3 on nine dates. The last few sightings of the year involved singles in November, with one south past the Wideopens on 1, one lingering off the Inner Farne lighthouse cliff on 7 and the last one south through Staple Sound on 17.

Table 5 Peak passage of Arctic Skuas past the Farne Islands, 2004.

	Inner Sound	Staple Sound	Day Total
6 September	16S	9N, 6S	9N, 22S
23 September	-	1N, 26S	1N, 26S
24 September	3N	10N, 7S	13N, 7S
9 October	3N	10N	13N

Long-tailed Skua *S. longicaudus*

An uncommon passage visitor, well represented to common in 'invasion' years.

A very lean season with only two records and even those were late in arriving. On 9 October a juvenile flew north through Staple Sound and another juvenile flew north through the Kettle close to Inner Farne on the afternoon of 11 October.

Great Skua *S. skua*

A common passage visitor.

The first report involved a bird on 2 April sitting on Gun Rock off Staple Island and being mobbed by several gulls. It then moved over to the South Wamses where it remained until dusk, despite having the attention of several hundred gulls. The spring produced sightings of 1-2 on northerly passage on seven dates between 19 April and 22 May with three north through Staple Sound on 12 May. Another interesting record concerned an individual lingering for two days from 30 April-1 May and seen with a kittiwake 'kill' off lighthouse Cliff on Inner Farne (which it eventually lost to a fulmar). June produced singles on seven dates with three north through Staple Sound on 25 June. Despite 1-9 passage birds recorded on fifty-four dates between 5 July and 10 November, heavier passage was rather slim, with peak counts shown in table six. Interesting records included a very tame bird approached to within a couple of feet by the Zodiac in Staple Sound on 30 September and the last record of the year concerned one south through Staple Sound on 10 November.

Table 6 Peak passage counts of Great Skua off the Farne Islands, 2004.

	Inner Sound	Staple Sound	Day Total
31 August	3N	9N	12N
6 September	3N 1S	11N	14N 1S
15 September	2N	6N, 8S	8N 8S
23 September	1N	5N, 10S	6N 10S
9 October	1N	21N	22N

Mediterranean Gull *Larus melanocephalus*

An uncommon passage and winter visitor.

A second-winter bird was discovered flying north through Inner Sound on 31 October as two wardens headed into Seahouses on the Zodiac. The bird 'checked out' the boat, passing close overhead, and once the wardens had enjoyed good views it headed slowly north. There are twenty-one previous records from thirteen years, including records from nine of the last ten years. The vast majority of autumn reports have involved sightings from 10 October-4 November.

Little Gull *L. minutus*

Normally a well represented passage and winter visitor.

The summer months provided the first sightings of the year with a first-summer bird in the

tern roost on Inner Farne on 18 May. In June, first-summers were present in the tern roost on Inner Farne with two on 18 June, with one returning the following day; they may have been the same birds seen on Brownsman during the same period. The only August report involved first-winter in a feeding frenzy in Staple Sound on 25 August. The bulk of the season's records came in the autumn with reports of 1-9 birds of mixed ages on nineteen dates between 24 September and 7 November. Larger movements past the islands are highlighted in table seven, with the final record of the season involving nine south through Staple Sound on 7 November.

Table 7 Movement of Little Gulls off the Farne Islands, 2004.

	Inner Sound	Staple Sound	Day Total
26 September	-	49N	49N
28 September	-	73N	73N
9 October	27N	25N, 9S	52N 9S
16 October	-	51S	51S

Sabine's Gull *L. sabini*

A rare passage visitor.

On the morning of 15 September a juvenile flew back and forth through Staple Sound eventually landing on the sea before it drifted out of sight. This represents the eleventh record for the islands following a juvenile seen in August 2003.

Black-headed Gull *L. ridibundus*

A well represented breeding species and common visitor.

When the wardens arrived in late March they were greeted by very vocal birds displaying over the islands, with the first copulation noted by 30 March. During April good numbers roosted with the terns on Knoxes Reef, peaking at 331 on 14 April. The first eggs were discovered on Inner Farne on 25 April and 301 (218) pairs nested as follows: Inner Farne 292 (216), Brownsman 9 (2). The population showed further increases and was only five short of the all-time highest breeding count set in 1980. The first chicks were found on 24 May and despite heavy predation on occasions, a healthy number of young fledged from Inner Farne, with three successful nests on Brownsman. Numbers were generally low around the islands in autumn with occasional counts of *ca* 200.

Ring-billed Gull *L. delawarensis*

An extremely rare visitor – first record.

Two keen gull enthusiasts amongst the wardening team were shocked to discover a bird moulting from first-summer into second-winter plumage flying slowly north through the Kettle off Inner Farne on afternoon of 13 August. The bird moved slowly north, close in, allowing close scrutiny which confirmed it as the first-ever record of this North American visitor to the islands. In a county context this represents only the ninth record and the species was only first recorded in Britain in 1973.

Common Gull *L. canus*

A common visitor. Bred in four years 1910-14 (Booth, 1911, 1913; Miller, 1911-1913), probably in 1916 (March, 1916) and attempted breeding in 1974 (Hawkey and Hickling, 1974).

As usual small numbers were present around the islands when the wardens arrived in late March, with birds favouring the roost site of Knoxes Reef on the inner group. Peak counts during this early period included twenty-four on 28 March and thirty-seven on 4 April. Thereafter good numbers were recorded on north-easterly passage as flocks passed overhead moving to northern breeding grounds. Daily movement was logged in mid-April with particularly heavy passage including 339 on 11 April, 154 on 12 April and 134 on 15 April. Other April counts ranged from eighteen to sixty-six. The species became scarce during the summer with records of first-summer birds on 29 May, 1, 6 and 23 June. From mid-July small numbers returned to the islands with the first juveniles recorded from 29 July and thereafter numbers increased until *ca*50 were resident around the islands during the autumn months.

Lesser Black-backed Gull *L. fuscus*

A common breeding species and passage visitor.

Good numbers were present on breeding islands when the wardens arrived in late March and 429 (427) pairs nested as follows: Inner Farne 11 (19), West Wideopens 115 (115), East Wideopens 44 (36), Knoxes Reef 21 (18), Staple Island 46 (31), Brownsman 10 (8), North Wamses 46 (36), South Wamses 55 (88), Big Harcar 81 (76). The first eggs were discovered on the West Wideopens on 30 April and the population showed very little change to that of the previous season. After the breeding season, numbers declined throughout September and October and the species was again absent during the winter months.

Herring Gull *L. argentatus*

A common breeding species, abundant in winter.

As usual, good numbers were present around the islands throughout the year and were the main culprit of egg and chick predation of other nesting seabirds. The first eggs were discovered on 30 April and the population showed a slight increase with 536 (414) nesting pairs: West Wideopens 68 (19), East Wideopens 83 (48), Knoxes Reef 24 (23) Skeney Scar 19 (13), Staple Island 22 (17), Brownsman 6 (4), North Wamses 107 (101), South Wamses 38 (66), Roddam and Green 17 (11), Big Harcar 68 (72), Longstone main rock 1 (6), Longstone End 27 (10), Northern Hares 56 (24). Large numbers roosted on the islands during the autumn, favouring the Wideopens and Wamses as roosting areas which included small numbers of the northern race *argentatus*. The sub-species known as **Yellow-legged Gull** *L. cachinnans michahellis* has yet to be formerly accepted from the islands despite claims in recent years. However an adult bird was discovered on Knoxes Reef on 4 April and was seen by wardens with experience of this difficult gull complex, which should guarantee the first accepted record from the island.

Iceland Gull *L. glaucoides*

An uncommon winter and passage visitor.

An immature bird was seen going to roost off the back of Knoxes Reef shortly before dusk

on 15 April, the fourth consecutive year the islands have produced records. Amazingly, from those four records, the species has been seen on this very date in three of those years.

Great Black-backed Gull *L. marinus*

An uncommon breeder, common winter and passage visitor.

Present throughout the year with larger numbers recorded in the autumn. The population showed a slight increase with 7 (6) nesting pairs: West Wideopens 2 (1), East Wideopens 3 (2), Staple Island 0 (1), Brownsman 1 (1), North Wamses 1 (0), South Wamses 0 (1). The first eggs were discovered on 9 May, although evidently they had been laid much earlier as the first young hatched on 20 May. Following the first fledgling recorded on 2 July, large numbers moved into the area favouring the outer group of islands. Numbers increased steadily from early July, with immature birds arriving first followed by an influx of adults later in the season. Numbers around the outer group remained in the region of 600-800 until the wardens departed in early December.

Kittiwake *Rissa tridactyla*

An abundant breeder and passage visitor, well represented in winter.

Good numbers were evident around the islands when the wardens arrived in late March and as usual, nest building was generally late in comparison with all other nesting seabirds on the islands; the first eggs were discovered on 23 May. A total of 5,151 (5,192) pairs nested: Megstone 7 (9), Inner Farne 1,597 (1,512), West Wideopens 262 (262), East Wideopens 340 (318), Skeney Scar 220 (209), Staple Island 1,325 (1,382), Brownsman 1,136 (1,236), North Wamses 80 (88), South Wamses 84 (58), Roddam and Green 23 (32), Big Harcar 77 (86). The first young hatched on 22 June, just as the first serious mid-summer storms lashed the islands. Despite the majority of birds still sitting on eggs when the worst of the weather struck in mid-June, the species was heavily affected from the resulting aftermath. On Staple Island, nests were observed being washed off cliff faces by heavy seas and, like shags, torrents of rain water streamed into nesting areas, decimating colonies. The following few weeks then saw food shortages and the season ended up being a disaster. Statistics do not lie and the startling number of only 55 fledged young from 551 monitored nests demonstrates the catastrophic failings of the species for the season. Despite the shocking impact of the storms, the first young fledged from the islands on 20 July. Thereafter, post-breeding flocks gathered on several islands, before dispersing for the winter with small numbers lingering around the islands.

Sandwich Tern *Sterna sandvicensis*

An abundant breeding summer and passage visitor.

As expected the first returning birds of the year appeared over the islands in late March with a single on 30 March and two present the following day. The roost on Knoxes Reef increased throughout April, as shown in table eight, peaking on 26 April with 1050. Despite this, numbers of birds were much lower than expected, as the cool northerly airflows of April appeared to hamper the return of the expected huge numbers and the same problem was noted from other



nationwide sites.

It was not until mid-May that numbers appeared to pour into the area, boosting the roost and swelling the breeding population. The entire breeding population was again concentrated on Inner Farne, with a slight decrease from the previous season as 1,853 (1,999) pairs nested. However the main colony moved again, as in recent years it has been divided over Inner Farne, but all nesting birds decided to nest together on the top meadow, the first time since 2001. The first eggs were discovered on 10 May with the first young hatching on 6 June. As with all the breeding seabirds, the storms of mid-June took their toll and it was estimated that in a forty-eight hour period over 1000 young had perished. Despite this, birds did reached fledgling stage with the first noted on 6 July and thereafter *ca* 200 gathered on St Cuthbert's Cove beach. As the summer progressed, numbers dwindled with a late flurry of

Table 8 Roost counts of Sandwich Tern throughout April on Knoxes Reef, 2004.

April	3	4	6	9	10	13	17	20	23	26
Roost	18	23	49	147	293	300	405	532	981	1050

twenty on 27 September, declining rapidly with five south on 2 October and the final record of the year, a single past Inner Farne on 4 October.

Roseate Tern *S. dougallii*

A well represented summer and passage visitor, uncommon breeding species.

For a second consecutive year the species failed to breed on the islands despite the encouragement of summering birds. The first returning bird appeared on 15 May, putting in appearances on both Brownsman and Inner Farne that day. Thereafter numbers increased with up to four present around the islands in late May. June saw a noticeable surge of records, involving a mix of ringed and unringed individuals with the bulk of records from the former breeding grounds of Inner Farne. Throughout the month, 1-2 were seen daily with four noted on several occasions. Encouraging signs raised hopes of potential breeding as birds were seen displaying, landing and even nest scraping on at least one occasion. It appeared everything was right for a breeding attempt and on 4 July, a pair was seen copulating. Despite all the signs, there was sadly no breeding attempt and another season had passed with disappointment. Peak counts for the year involved five together on Inner Farne from 25-27 June. On the outer group, smaller numbers were seen throughout this period, including birds landing on Brownsman amongst the breeding arctic terns. 1-3 daily were seen daily in July and thereafter numbers declined with a single on Inner Farne on 4 August and two on Brownsman on 9 August. The final record concerned two (adult and the only juvenile sighting of the year) on Brownsman on 12 August.

Common Tern *S. hirundo*

A common breeding summer and passage visitor.

The first birds of the year were six that appeared on 23 April in the large tern roost on the inner group. Numbers increased steadily with twelve on 26 April, forty on 6 May and 150+ by 12 May. The breeding population was again confined to Inner Farne despite nest scraping birds on Brownsman. The population made a significant increase of 75%, as 133 (76) pairs nested on Inner Farne. The first eggs were discovered on 19 May and young hatched by mid-June. The species, like most breeding seabirds, was badly affected by the adverse weather

conditions in June although a small number of young still went on to fledge. By late August numbers were declining around the islands and the final records of the year concerned a single lingering in the Kettle on 12 September and two north through Staple Sound on 23 September.

Arctic Tern *S. paradisaea*

An abundant breeding summer and passage visitor.

An excellent year for breeding numbers but the summer brought a heavy price when gale force winds battered the islands for a three day period in mid-June. The first returning birds were discovered at the traditional roost site on Knoxes Reef, with three noted on the evening of 16 April. Thereafter numbers increased with eleven on 22 April, increasing to eighty-seven on 23 and 189 on 26 April. By early May numbers reached 1000 by 3 May, *ca* 3000 by 5, peaking at *ca* 4000 on the evening of 9 May. Good numbers were seen displaying over the islands during this period, and the first eggs were discovered on Inner Farne on 15 May and Brownsman on 17 May. The population showed a further increase, especially on Brownsman with 1,986 (1,727) nesting pairs: Inner Farne 1,234 (1,326), Brownsman 732 (393), Staple Island 20 (8). However, despite the good numbers of breeding pairs, the breeding season was a disaster, as poor weather hit the islands in mid-June, affecting all breeding seabirds. The combination of poor weather, low temperatures and rough seas hampered foraging trips by adults and with young at a very vulnerable age, mortality was high. The following few weeks then saw further problems as food became scarce due to a lack of sand-eels, with adults resorting to bringing oversized sprats and pipefish to small young with the result that many young succumbed to starvation. It became evident from this stage that the season would produce very few fledged young. The annual problem of gull predation was again evident combined with a total of eight chicks lost to visitors. It was estimated that 60% of all arctic tern young had perished by the end of June. On Brownsman, it was estimated that less than one hundred chicks had fledged from the 732 nesting pairs, with a similar story on Inner Farne. As usual, a good number of first-summer birds frequented the islands during the summer with records between 26 May-1 July, peaking with thirty-one on Inner Farne on 29 June. Following the breeding season, with such little breeding success, adult birds rapidly moved south away from the islands, with no noticeable large roost counts in August. Late stragglers lingered into October with up to forty-five off the inner group on 4 October and numbers declined until an immature west over Inner Farne on 17 October was the final record of the year.

Little Tern *S. albifrons*

A well represented passage visitor.

The first bird of the year was discovered on 26 April on Lady's Path on Inner Farne amongst the large tern roost. As usual, birds appeared during May late in the evenings at the traditional roost on St Cuthbert's Cove beach on Inner Farne with Table 8 showing the increase and decrease of the roost. More unusual was the presence of a pair seen during the day on several occasions, sometimes displaying and even nest-scraping on the beach. The

Table 9 Little Tern evening roost counts on Inner Farne in late May, 2004.

May	3	5	6	9	10	11	12	15	23	27	31
St Cuthbert's Cove	2	48	50	54	59	49	34	20	4	2	1

final roost sighting concerned two on the beach on the evening of 15 June. The last reports of the year concerned sightings in July, all involving birds fishing in Inner Sound with singles on 6 and 13 and two noted on 11, 21 and 26 July.

Black Tern *Chlidonias niger*

An uncommon passage visitor.

A reasonable showing with a summer plumage adult seen in the large tern roost on the east rocks of Inner Farne on 21 and 27 June and again on 11 July and was presumed to be the same bird on each occasion. A juvenile was seen dip-feeding behind the Bridges off Inner Farne with arctic terns on 5 August and another juvenile was seen in a feeding frenzy in Staple Sound on 12 August before appearing in the tern roost on Brownsman later that evening.

Guillemot *Uria aalge*

An abundant breeding resident and passage visitor.

Despite thousands at the colonies when the wardens arrived on 26 March, there was a complete absence around the islands between 31 March and 5 April. However birds started returning slowly and it was not until 16 April that they appeared on the cliff ledges. Soon after the first eggs were discovered on Staple Island on 24 April and it was apparent that good numbers were nesting. For the first time Staple Island broke the 20,000 individual mark as the population increased yet again with 43,694 (42,338) individuals counted: Megstone 238 (260), Inner Farne 5,209 (5,119), West Wideopens 2,230 (2,072), East Wideopens 3,248 (3,074), Skeney Scar 2,944 (2,770), Staple Island 20,019 (19,686), Brownsman 7,706 (6,896), North Wamses 1,180 (1,462), South Wamses 490 (490), Roddam and Green 190 (180), Big Harcar 240 (327), Longstone End 0 (2). The first hatchling was discovered on 25 May and the first 'jumpling' was seen on 21 June. However only three days after the first initial 'jumpling' was seen, adverse weather struck the islands and many thousands of young perished. Those which did survive the weather had to contend with a food shortage and young were seen jumping during daylight hours, even those too small to fledge. The extent of the damage was very evident as by 10 July very few birds remained and large areas of cliff were bare. Despite this the last few surviving chicks remained with the last noted on Inner Farne on 25 July. The species was then absent until 25 August when small numbers started returning to winter around the islands and were present until the wardens departed in early December.

Razorbill *Alca torda*

A common breeding resident and passage visitor.

The unsettled weather of spring delayed the return of birds to cliff ledges and as with its commoner relative the guillemot, birds did not settle until 16 April. The first eggs were discovered on Staple Island on 5 May and West Wideopens on 9 May, with the first young reported from 7 June. The population again increased and has almost doubled in just a decade, as breeding numbers have increased from 132 pairs in 1993 to the present total of 225 pairs. A total of 225 (222) pairs nested as follows: Inner Farne 94 (81), West Wideopens 47 (43), East Wideopens 21 (22), Skeney Scar 7 (9), Staple Island 29 (30), Brownsman 6 (8), North Wamses 4 (7), South Wamses 9 (10), Big Harcar 8 (12). Although affected by the adverse weather, it appeared the favoured nest sites of sheltered ledges and gullies helped

protect young from the worst of the weather. Productivity was better on both island groups than it had been for a number of seasons, with seventeen monitored nests on the inner group resulting in eleven fledged young (0.64) and thirteen monitored nests on the outer group producing ten fledged young (0.77). The majority of young had departed by mid-July although late fledglings included young on Staple Island until 25 July and Inner Farne until 2 August. Small numbers remained around the islands throughout the autumn and winter.

Black Guillemot *Cephus grylle*

A well represented winter and passage visitor. Bred in the 17th and possibly 18th centuries (Kerr, 2001).

Following last season's quiet winter, good numbers were reported in late autumn and early winter. Rarely seen in spring, a full summer-plumage adult was on the sea north-west of the Northern Hares on 9 May, although due to thick fog, was only enjoyed by two boatmen of *Glad Tidings*. This represents the first spring record since April 1998. The autumn produced regular records from 2 October with birds present around several islands, favouring Inner and Staple Sounds. Evidence suggested that at least four were wintering around the islands, with a peak count of five north through Staple Sound on 14 November. Although the wardens departed the islands in early December, further records of 1-2 were received from local fishermen throughout December.

Little Auk *Alle alle*

A well represented winter and passage visitor. Large numbers can occur after northerly gales.

A year not to forget as the islands witnessed record numbers during late autumn, not only breaking the all-time Northumberland record, but also coming within a whisker of breaking the all-time North Sea record. The first sighting of the year concerned a single around the outer group on 27-28 September followed by 1-2 through Inner and Staple Sounds on four dates from 24-31 October. However nothing could have prepared the wardens for the mass numbers which passed the islands in November. The first inkling of movement occurred on 10 November with thirteen north followed by eighteen north on 13 November. The winds strengthened from the north over the following week and huge numbers tracked down the eastern side of the North Sea on 13-14 and 17-18 November. Two huge counts during this period were eclipsed by the staggering 10,265 which were logged north past the islands on 18 November. The total falls just short of the all-time North Sea record of 10,947 logged past Flamborough Head (EastYorks) on 11 January 1995 and beats the previous Northumberland record of 8,186 set by the Farnes in November 2001. Thereafter large numbers were seen around the islands daily, with many falling prey to large gulls or hunting

Table 10 Major Little Auk counts north past the Farne Island, 2004.

	14 November	17 November	18 November
Staple Sound	3,818	1,342	1,862
Inner Sound	-	426	5,789
South End Brownsman	3,657	5,956	2,614
Day Total	7,475	7,724	10,265

peregrines. By early December, most had departed with a final record of one in the Kettle on 16 December.

Puffin *Fratercula arctica*

An abundant breeding summer and passage visitor.

As with all the Auks, birds were late in settling on the islands with the first noted on the island tops from 14 April. Thereafter frantic activity was noted with birds pair bonding and scraping out old burrows and the first eggs soon followed on Inner Farne on 21 April and Brownsman on 26 April. Following last season's mammoth census of the entire population, there was no count this year with breeding figures related to last year's count when a total of (55,674) pairs nested: Inner Farne (13,069), West Wideopens (8,704), East Wideopens (1,676), Staple Island (15,583), Brownsman (14,438), North Wamses (977), South Wamses (1,059), Big Harcar (168). The first young were discovered by late May and young were seen departing from late June. Nesting birds on the inner group appeared to escape the brunt of the weather as forty-one young fledged from fifty monitored nests. However, in complete contrast, the outer group was directly hit with estimates of up to 70% of all burrows on both Staple Island and Brownsman affected. This resulted in a poor return on monitored nests, as only twelve young fledged from fifty nests. After the breeding season the first real departure of birds occurred on 25 July and most were gone by early August. Late adults carrying food back to nest sites were seen over Inner Farne on 18 and 20 August. Small numbers were seen throughout the autumn and early winter with typical counts including twenty-six off Inner Farne on 13 October and ten around the inner group on 10 November.

Feral Pigeon *Columba livia*

A common breeding resident.

As usual good numbers were present throughout the year, with larger numbers concentrated on Inner Farne during the autumn. The majority of birds commute between the mainland and the islands on a daily basis, with a small number breeding.

Stock Dove *C. oenas*

Uncommon visitor, becoming increasingly rarer. Bred in seven years 1928-1979 (Hawkey, 1991).

This former breeder is now a rare visitor to the islands with only ten records in the previous twenty years, the last in 2001. The year produced two reports, both in the autumn, as one flew west over Inner Sound towards Bamburgh on 12 October and another was present on Staple Island on afternoon of 21 October before eventually flying towards Brownsman and out of sight.

Woodpigeon *C. palumbus*

An uncommon passage visitor.

A good showing especially on spring passage, with two lingering birds on Brownsman. The spring produced 1-2 west over the islands on thirteen dates between 1 April and 24 May (seven on the inner group, six on the outer group) with lingering individuals on Brownsman from 1-5 April and 23-28 April. More unusual were four midsummer records from Brownsman with singles on 18, 23 and 29 June and again on 30 July. The autumn produced

fewer records, with singles over Inner Farne on 1 and Brownsman on 15 September. The heaviest passage of the year was reported on 28 October, when a total of five flew west over the islands and another lingered on Inner Farne until the following day.

Collared Dove *Streptopelia decaocto*

An uncommon passage visitor.

An excellent year with a total of six records, three from each island group, the best showing since 1994. A bird discovered on Inner Farne lighthouse roof on 29 March possibly lost its life to a hunting peregrine, while another was flushed from the same island on 5 May before landing on the nearby West Wideopens. The first sighting for Brownsman occurred on 7 May, when a single was flushed from near the pond, and the final spring report concerned an adult on Inner Farne on the morning of 8 June. The autumn produced two sightings on the outer group, with singles on Staple Island on 19 September and another past the Brownsman cottage on 4 October.

Ring-necked Parakeet *Psittacula krameri*

An extremely rare visitor – first record for the Farnes.

The south-east of England now boasts a thriving feral population of this introduced species but a record on the Farnes was still very surprising. On 8 October, a warden was taking a telephone call near the chapel on Inner Farne and was alerted to a bird calling over the island which he identified as a male ring-necked parakeet. It circled the dock bank before heading east and was tracked flying over Staple Sound before settling on Brownsman to feed on a peanut feeder. Despite the attentions of a resident peregrine, the bird survived and was still present until the following morning. Due to the feral populations it is now accepted as a 'British' species and therefore added to the islands' list. There are only three previous 'accepted' records for the county, the most recent from Bamburgh in May 1997.

Long-eared Owl *Asio otus*

An uncommon passage visitor.

This superb passage visitor was recorded on three occasions, all in late October. An obliging individual lingered on Brownsman from 15-17 October and on occasions could be seen perched on the compost bin, giving the resident wardens the opportunity to get some stunning views. A second bird was noted briefly on Longstone End on 21 October and another spent all day on Inner Farne on 28 October, originally on the north rocks before moving to various localities on the island, including the visitor centre benches.

Short-eared Owl *A. flammeus*

An uncommon passage visitor.

An excellent year, with reports on more dates than any previous year and complete with a record-equalling day count of five. Following the trend of recent seasons, the spring produced two records: one flushed off Brownsman on 1 April was noted flying over Inner Farne before eventually heading to the mainland, and the other record concerned 'circumstantial evidence' of a bird's presence, as a redshank kill on the dock bank on Inner Farne on 22 April contained several feathers from this *Asio* species. As usual, the autumn produced the bulk of reports and with duplicated records taken into account, the species was

noted on eighteen dates on the islands from 8 September-23 November, peaking with five on 28 October. Following an individual which flew from Staple Island over Inner Farne and west towards the mainland on 8 September, the inner group recorded singles on nine dates until the last record on 30 October. The outer group produced singles on seven dates until the last was seen over Longstone and then South Wamses on 23 November. Autumn high counts concerned two on Staple Island on 29 October and two west over South Wamses on 2 November. The season's peak count involved five on 28 October; four on the outer group and a different bird the same day on Inner Farne.

Swift *Apus apus*

A well represented summer and passage visitor.

Well represented with reports from 1 June-11 September involving records on twenty-four dates on the inner group compared with only thirteen on the outer group. As usual the first bird of the year was discovered in early June, when a single flew west over Skeney Scar on 1 June and following this there were regular sightings of one-thirteen over the islands during the summer months. The exception to this were some impressive movements (by Farne standards), with sixty north on 30 June (the highest count since 1985), thirty-two north on 6 July, forty-one west on 18 July and thirty-eight east on 18 August. The final record concerned two west over Inner Farne on the late date of 11 September.

Kingfisher *Alcedo atthis*

An extremely rare visitor.

Without doubt one of the surprising highlights of the year was the discovery of a bird on the morning of 8 September, as it was heard and then seen flying north close to the Inner Farne lighthouse cliff. It then switched direction, tracking back south, calling in the process before eventually being lost to view as it headed towards the Wideopens. Just to add to the occasion, an adult and calf Minke whale *Acutorostrata balaenoptera* could also be viewed swimming north through the Sound at the same time as the bird was seen flying by. Despite mobilizing the other wardens, there was no further sign of it. This represents the second record for the islands, following a female on Longstone on 4 April 1999.

Wryneck *Jynx torquilla*

An uncommon passage visitor.

An amazing year for this charismatic visitor with no fewer than eight different birds recorded, representing the joint best-ever showing on the islands and equalling the eight recorded in 1974. The staggering year began with two spring individuals, as a bird was seen briefly on Inner Farne on 27 April followed by a more obliging bird on Staple Island on 1 May, which was fully appreciated by all the warden staff. The amazing mid-August 'fall' produced no fewer than six records, with Inner Farne claiming the majority of sightings. On 10 August two appeared on Inner Farne, often showing very well around the vegetable garden area, with one lingering to the following day. Inner Farne then hosted another individual on 15-16 August favouring the cemetery bank, and the final record of the inner group was again on Inner Farne on 24 August by the lighthouse compound. During this period the outer group had two birds, with a lingering individual on Brownsman from 10-13 August and another on Staple Island on 13 August, to complete a remarkable year.

Great Spotted Woodpecker *Dendrocopos major*

An uncommon passage visitor.

The major influx of 2001 changed the species status from a rarity to an uncommon passage visitor. Despite this, very few wardens have seen the species on the islands and only a lucky two saw the sole record of the year: a bird flying west through Inner Sound on 29 April during a spell of strong north-easterly winds, indicating possible northern origins.



Woodlark *Lullula arborea*

An extremely rare visitor.

One of the highlights of the autumn was discovered on Longstone End on 1 October when a bird was flushed from a small patch of vegetation on the island. Thankfully it returned to the area and caused celebration amongst all the warden staff. Due to poor weather conditions there was no attempt to relocate the bird the following day, but it was not long before it reappeared. On 3 October it was heard calling as it was flushed from the lighthouse area of Inner Farne before settling to feed on the cemetery bank. The bird showed very well and despite disappearing the following day, again in poor weather conditions, it was then seen daily from 5-8 October. It favoured an area of grass to the east of the lighthouse viewing area on Inner Farne and was very approachable on occasions. This represents only the fourth Farnes record, with previous short stayers in April 1980, October 2000 and October 2001.

Skylark *Alauda arvensis*

A common passage visitor. May have bred in 1865 and 1883 (Brown, 1866; Harvie-Brown *et al*, 1884).

Spring passage was light with records of 1-2 on twenty dates from 26 March-9 May peaking with four over Brownsman on 12 April. Unusual mid-summer records included a single over Inner Farne which landed on the West Wideopens on 21 June and another landing on Inner Farne on 31 July. Thereafter autumn passage commenced from 15 September with regular reports throughout the autumn until the wardens departed in early December. Records usually referred to small numbers on or over the islands but late October saw an increase in passage with daily counts of between ten and fifteen, peaking with thirty-eight west over Brownsman on 20 October and twenty on the inner group on 29 October and 1 November. As records decreased as late autumn approached, it was evident that two birds were wintering on the inner group, as they were seen daily from 15 November-2 December when the wardens departed for the mainland.

Sand Martin *Riparia riparia*

A well represented summer and passage visitor.

Generally a quiet year with records on only twelve dates, the majority from the inner group. The first bird of the year was early, as an individual hawked for insects over Inner Farne on 31 March before heading north, only the second-ever March record of the species (the only previous record was on 30 March 1993). Thereafter 1-2 were noted passing north through

the islands on eight dates between 20 April and 31 May, peaking with four over Inner Farne on 22 April. Return autumn passage was very light, with four through Inner Sound on 13 July, one lingering in fog on Inner Farne on 10 August and the final record of four east over Brownsman on 5 September.

Swallow *H.rustica*

A common summer and passage visitor. Bred in 1857, 1984 (Hawkey, 1991) and 1990-1997 (Walton and Richardson, 1991, Walton, 1992-1997, Walton and Maher, 1998).

Well reported throughout the summer with records on eighty-three dates between 12 April and 20 October. The first record concerned two north over Inner Farne on 12 April and smaller numbers recorded on spring h on 13 May, twenty-four north on 14 May and twenty-six north on 15 May. Occasionally birds are discovered in buildings and one had to be removed from the Brownsman cottage dormitory twice on 4 May while on 7 June another hawked inside both the Information Centre and chapel on Inner Farne. Autumn passage was logged throughout August and September, with noteworthy movements including fifty on 17 August and twenty-three on 26 September. As usual, the final records of the year involved singles in October, with birds over North Wamses on 15 October and Brownsman on 20 October.

House Martin *Delichon urbica*

A well represented summer and passage visitor. Six pairs attempted to breed in 1950 (Watt, 1950).

A typical light showing during the year with records on eighteen days between 26 April and 27 September. The first bird of the year circled the lighthouse on Inner Farne on 26 April before moving north, with another hawking around Brownsman cottage on 30 April. Light spring passage continued between 1 May and 21 June with 1-2 recorded on four May dates and five June dates. Although autumn passage was concentrated on only seven September days, the month produced the season's peak count with twenty-two west over Inner Farne on 16 September. Other September records included nine west on 5 September and 1-2 on

Table 11 Total Number of dates Swallows recorded on the Farne Islands, 2004.

Months	A	M	J	J	A	S	O
Number of Dates Recorded	15	25	9	2	16	14	2

five other dates.

Tree Pipit *Anthus trivialis*

A common passage visitor.

The outer group boasted the bulk of records with one particular long staying bird during the spring. On Brownsman one appeared on 27 April and remained for twelve days until last recorded on 8 May. Other Brownsman spring records concerned singles on 28 April and 11 May. Elsewhere singles were on Staple Island from 30 April-2 May and again on 9 May, while Inner Farne hosted singles on 30 April and 2 May with three confiding individuals lingering on 1 May. Following a spell of strong south-easterly winds, a late spring passage bird was noted on Brownsman on 23 June. Autumn passage commenced with 1-2 recorded on six dates between 10 August and 30 September peaking with seven on the islands on 24

August (five on Brownsman, two on Inner Farne). The final record was a lingering individual on Brownsman on 1-2 October.

Meadow Pipit *A. pratensis*

A common passage visitor. Bred in eleven years 1946-1973 (Hawkey, 1991; Wilson, ms).

Arguably the most well reported passage migrant to the islands with almost daily records throughout the spring and autumn migration periods. During favourable conditions, it is not unknown for several hundred to pass the islands, either flying over in small parties or ditching on the island tops to feed amongst the islands' vegetation. Spring passage produced regular reports of from 1-41 moving north with peak counts of fifty-three on 1 April and 119 on 12 April. The last spring record was a single on Brownsman on 30 May. After an absence of two months, autumn passage recommenced from 10 August, with daily records into early October. The autumn produced generally larger counts than the spring with regular reports of from 20-50 passing through the islands, peaking at 125 west over Brownsman on 28 September. The month of October saw a general decline in records with the final confirmed sighting involving three on Inner Farne on 3 November.

Rock Pipit *A. spinoletta*

A common resident, well represented as a breeding species.

As the wardens arrived on the islands in late March they were greeted by singing birds actively establishing territories, and nest building was observed by mid-April. The first clutches of eggs were discovered by 23 April and chicks were heard from 8 May. A total of 26 (28) pairs nested as follows; Inner Farne 7 (5), West Wideopens 2 (2), East Wideopens 1 (2), Staple Island 5 (5), Brownsman 8 (9), North Wamses 1 (1), South Wamses 1 (1), Longstone main rock 1 (1), Big Harcar 0 (1). The first fledglings were seen around the island from late May and pairs raising second broods were reported on several islands. A pair again nested successfully on Longstone Main, utilising the gas bottles provided for the lighthouse as a suitable nesting site, from which chicks fledged on 4 July, and an unusual record concerned adults feeding young with sandeels on Inner Farne in late May. Small parties remained on the islands after the breeding season, with autumn migrants swelling numbers later in the year. Such increases were recorded in November with counts on Inner Farne of twenty-eight on 20 and thirty on 25 November peaking at thirty-five on 1 December. During this period, the highest count on Brownsman was nineteen on 20 November.

Yellow Wagtail *Motacilla flava flavissima*

A well represented passage visitor.

The species is in decline in terms of the total number of records annually on the Farnes, and following the trend of the previous season the year only produced five records. On the outer group a calling male flew over Brownsman on 24 April followed by further spring males on Brownsman on 2 May (relocated to Staple Island later that day) and another on Brownsman on 6 May. The inner group did not fare any better, with a female around the pond on Inner Farne on 29 May and a male which flew west calling the same day. The only autumn record involved one south through Inner Sound on 24 July.

Grey Wagtail *M. cinerea*

An uncommon passage visitor. May have bred in the 1890s (Miller, 1911-14).

For the first time in five years, there were no spring passage records. The first sighting of the year on 8 September involved a single near the quarry on Inner Farne which eventually flew west, followed by one at Brownsman pond on 15 September. October produced the bulk of the season's records with a total of four west over Brownsman on 20 and singles recorded on or over the islands on 9, 21 and 24 October. Interestingly a bird was discovered dead at the Longstone lighthouse on 26 October and the final record of the year involved a single west over Inner Farne on 1 November.

Pied Wagtail *M. alba*

A well represented summer and passage visitor and uncommon breeding species.

Small numbers were recorded moving through the islands on passage when the wardens arrived in late March, with a peak of five north (not involving breeding birds) over the inner group on 1 April. The year produced a slight increase in the breeding population and the first ever documented breeding record for North Wamses. Nest building was observed by mid-April with the first eggs discovered on 2 May and the first young on 29 May. A total of 6 (5) pairs nested as follows: Inner Farne 2 (2), Brownsman 2 (2), Staple Island 1 (1), North Wamses 1 (0). Reports suggested a seventh pair successfully reared young within the compounds of the Longstone lighthouse, although news of the success was not received until well after the breeding season and therefore could not be confirmed. Following a successfully fledged second brood on Brownsman, birds dispersed from the islands with a peak of fourteen on Inner Farne on 8 August. The species became very scarce in autumn with the only two confirmed records involving singles on Inner Farne on 6 and 9 November.

It was an above average year for records of **White Wagtail** *Motacilla alba alba* with all reports from Brownsman. Individual males were recorded on 24-25 April and 1, 13 and 23 May followed by a report of an autumn passage bird on the vegetable garden wall on 15 September.

Waxwing *Bombycilla garrulus*

An uncommon winter and passage visitor.

An outstanding year for a stunning bird. The east coast of Britain experienced a huge invasion early enough in the year for the wardens to still be present on the islands, resulting in a record year. A total of thirty different birds were logged over a total of nine dates. The first inkling of an invasion occurred on 19 October, when two singles were picked up flying west over Inner Farne (the second bird was also seen from Brownsman) and thereafter the invasion began. All the records involved birds heading west, with a group of ten over Brownsman on 25 October representing the largest flock recorded during the invasion. Most birds usually flew over calling but occasionally some landed, including a male on Inner Farne on 20 October, which lingered for several hours until dusk, giving great views from the artificial tree. Without doubt one of the superb highlights of the year.

Table 12 Records of Waxwing invasion on the Farne Islands, 2004.

	19 Oct	20 Oct	24 Oct	25 Oct	27 Oct	28 Oct	6 Nov	7 Nov	9 Nov
Inner Farne	2	1	3	-	1	-	1	1	1
Brownsman	1	1	3	11	7	2	1	1	1
Day Total	2	2	3	11	7	2	1	1	1

Wren *Troglodytes troglodytes*

A common visitor and passage migrant. May have bred in the 1880s (Bolam, 1912).

Over-wintering resident birds were still evident on the two island groups when the wardens arrived in late March. Up to three were seen daily on Inner Farne until 9 April with 1-2 remaining until last recorded on 28 April. On Brownsman 1-2 were present on Brownsman and Staple Island until last recorded on 27 April, although a single on Staple Island on 14 May may have been a late migrant. The first autumn bird returned to the outer group on 15-16 August and two to four became regular from 26 September until the wardens departed in early December. The exception was a high count of six on 28 October. On the inner group, the first autumn returnees appeared on 25 September and good numbers were resident in October with six-seven regularly counted, peaking at eight on 21 October. Numbers declined thereafter although two to four were still present into early December.

Dunnoek *Prunella modularis*

A common passage visitor. May have bred in the 1890s (Pybus, 1903).

This once common passage visitor is now becoming more scarce, with another dismal year of records following on from last season's worst ever total. Three spring records involved singles in the vegetable garden on Inner Farne on 29 March and Brownsman on 30 March and 4-5 April. The autumn produced singles on Brownsman on 23-24 September and 20-21 October, while 21 October also produced two other singles on Staple Island and West Wideopens.

Robin *Erithacus rubecula*

A common passage visitor. Bred in 1951 (Watt, 1951).

Over-wintering residents were still present on the islands when the wardens arrived in late March with both island groups boasting small numbers. On Inner Farne a small influx occurred in late March with four on 29, increasing to eight on 30 March with 3-6 present from 1-5 April. Thereafter smaller numbers of 1-2 were present daily until last seen on 11 May. On the outer group the only peak count occurred on 12 April with four present, while 1-2 were recorded until last seen on 1 May. On Inner Farne the first autumn birds appeared from 16 August with 1-2 on four August dates. Up to five were resident throughout September and early October although numbers were boosted from mid-October by continental migrants. Peak counts included twelve on 16, increasing to fourteen on 21 and peaking at twenty on 28 October. Numbers decreased rapidly, with daily records of 2-3 throughout November. On the outer group resident birds did not appear until early October with a similar increase of migrants late in the month, peaking at eighteen on 28, twelve on 29 and ten on 30 October. Unlike the larger Inner Farne, there was no indication of wintering resident birds as the last report concerned a single on Brownsman on 7 November.

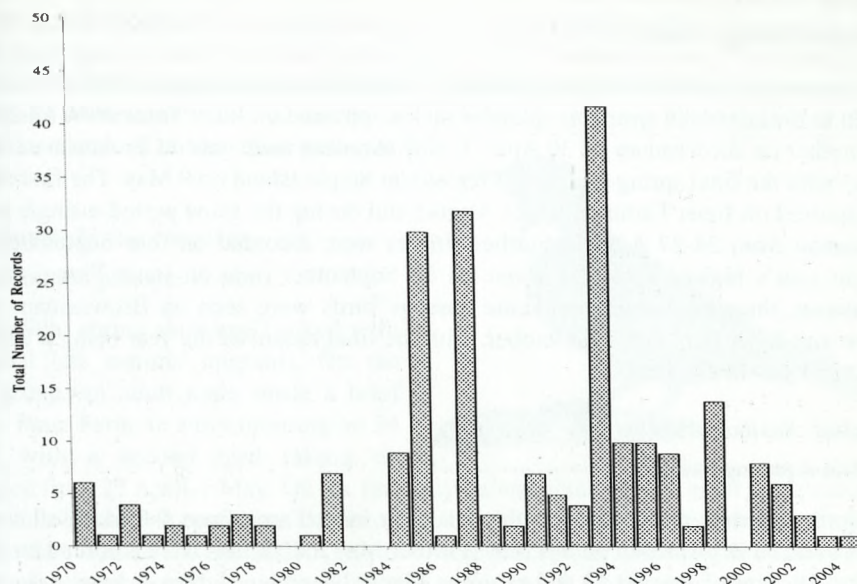


Figure 3 Bluethroat records on the Farne Islands, 1970-2004

Bluethroat *Luscinia siveica*

An uncommon passage visitor, well represented in some years.

As has been the trend in recent years, only a single bird was noted on the islands, with a stunning male on Longstone End on the afternoon of 9 May, which was much admired by the wardens. Another season passes without a traditional large spring 'fall' and are such events now becoming distant memories?

Black Redstart *Phoenicurus ochruros*

A well represented passage visitor.

A good showing on passage on both island groups. The spring produced two long stayers, with a female on Inner Farne from 1-8 April which was caught in the Pele Tower on one occasion. On Brownsman a first year male took up residence from 1-10 April and was heard singing near the cottage on his last day. A good number moved through the islands on autumn passage between 20-31 October with a distinct peak on 28 October following a spell of easterly winds. On Inner Farne an adult male was seen by the lighthouse on 20 October, followed by a lingering female/immature from 21-23 October. Further female/immature types were noted during a larger influx which occurred on 28 October, with four present on the island that day with 1-2 remaining until 31 October. It was a similar story on Brownsman with two on 20 and another on 23 October. The easterly winds on 28 October brought two to the island, with one lingering on 29-30 and a final flurry of three noted on 31 October.

Redstart *P. phoenicurus*

A common passage visitor.

A below average year with no large numbers recorded in the autumn. A dash of colour was brought to the islands in spring as splendid males appeared on Inner Farne from 17-20 April with another on Brownsman on 30 April-1 May. Another male was on Brownsman from 8-12 May with the final spring report of a female on Staple Island on 9 May. The first autumn bird appeared on Inner Farne on 24-25 August and during the same period a single was on Brownsman from 24-27 August. Further singles were recorded on four September dates with the year's highest count of seven on 30 September (one on Inner Farne, three on Brownsman, three on Longstone). Late passage birds were seen on Brownsman on 1-4 October and Inner Farne on 2-4 October, with the final record of the year being a late male on Brownsman on 20 October.

Whinchat *Saxicola rubetra*

A common passage visitor.

Light spring passage commenced with a male on Inner Farne from 5-6 May followed by another male on Brownsman on 8-9 May. Further May individuals were recorded on Staple Island on 19, Inner Farne on 23 and again on Staple Island on 31 May-1 June. August saw the first autumn passage birds with the bulk of the season's records. On Brownsman 1-5 were recorded on fourteen dates between 9-27 August, peaking at six on 14 August. A similar number were on Inner Farne during the same period, with 1-4 recorded on ten dates between 10 and 25 August, peaking at five on 13 August. Only small numbers were reported thereafter, with 1-2 on four September dates, a lingering bird on Brownsman from 9-14 September and the final record of a single on Longstone End on 1 October.

Stonechat *S. torquata*

An uncommon passage visitor. Bred in 1946 (Goddard, 1946).

A good year, with reports suggesting at least seven different individuals on the islands during spring and autumn passage. The first bird of the year was a male on Brownsman on the day wardens arrived on the islands on 25 March. A female then appeared on Inner Farne all day on 30 March and may have been the same bird which took up residence on Brownsman from 31 March-7 April. The final spring sighting involved a female on Inner Farne from 8-10 May. All autumn passage birds were recorded in October with single males on Inner Farne on 7 and 20-21 October and singles on Brownsman on 9 and 24 October.

Wheatear *Oenanthe oenanthe*

A common passage visitor. Bred in six years 1931-59 (Goddard, 1925-1948).

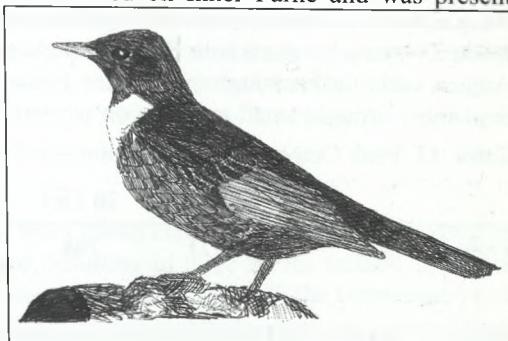
An excellent showing on passage with the first bird of the year, a female on Brownsman on 26 March, followed by up to six between the island groups by the end of March. April produced daily records of 1-14 as passage increased, with a peak count of twenty-two on 22 April (ten on Inner Farne, twelve on Brownsman). Northerly passage continued throughout May with 1-11 noted throughout, peaking at twelve on 1 May. An interesting record concerned a singing male on Inner Farne which took up residence and was often seen defending a 'territory' near the lighthouse area and was present from late April until last seen on 31 May. Autumn passage was well documented with 1-9 recorded on sixty-one days

between 5 August and 20 October. The first appeared on Inner Farne on 5 August and peaks occurred in early September with nineteen on 6 September (eight on the inner group, eleven on the outer group) with fourteen lingering until the following day. The final record concerned a resident female/immature on Inner Farne daily from 8-20 October. A female 'Greenland Wheatear' *O. o. oenanthe* was identified on Inner Farne and was present around the island on 27 May. Last recorded in 2000.

Ring Ouzel *Turdus torquatus*

An uncommon passage visitor.

An excellent spring showing, backed with the usual late autumn migrants. On the inner group, an adult male made a brief visit to Inner Farne in early morning on 24 April, with a second bird taking up residence from 27 April-1 May. On his final day he was joined by an adult female and both departed in favourable conditions that evening. On the outer group a female was discovered near the Brownsman cottage on 29 April; two were present the following day and both were seen to depart west to the mainland. On the morning of 1 May, a newly arrived female appeared on Brownsman and may have been the same bird recorded on Inner Farne later that day. There was a typical showing in October as late passage birds moved south, with singles on Inner Farne on 1 and 20 October and Brownsman on 1, 16 and 20-21 October. The only multiple records during this period concerned two immatures on Inner Farne on 12 October, with a different two present the following day on the same island.



Blackbird *T. merula*

An abundant passage visitor. Bred in three years 1893-1914, 1934, 1962 then annually 1964-74 (Miller, 1911-1914 ; Hawkey, 1991).

Well reported on passage with large numbers recorded in the autumn. A small number were present on the islands when the wardens arrived in late March with three on Inner Farne and two on Brownsman (possibly having wintered on the islands). Within days numbers had increased as passage birds moved through the islands, peaking at seven on the inner group and five on the outer group on 29 March. On the inner group, numbers peaked again in early April with seven on 2 April decreasing to five the following day and 1-3 recorded until the last was seen on 22 April. On the outer group 1-3 were seen throughout April with lingering birds last seen on Brownsman on 10 May. Return autumn passage birds were logged from 29 September with numbers increasing throughout October as continental migrants moved to Britain for the winter. Favourable weather patterns brought huge numbers over the islands in late October with a peak count of 1,748 west on 28 October. The previous week had seen daily counts of *ca* 200 over the islands with 501 west on 27 October. Birds continued to migrate west over the islands in early November with 20-80 recorded daily but numbers dropped away from mid-month. As early December approached it appeared that small numbers were again wintering on the islands, with two on Inner Farne and a single on Brownsman.

Fieldfare *T. pilari*

A common passage visitor.

Light northerly passage was logged over the Farnes in spring as north-bound migrants appeared on the islands from 28 March until last seen on 9 May. During this period 1-10 were reported on twenty-two dates, peaking at thirteen on 2 April. Surprisingly the species made a very early return with Brownsman hosting up to three birds daily between 8 and 14 August with further singles on Inner Farne on 18 and Brownsman on 23-25 August. September brought small numbers on westerly passage through the islands with 1-5 on six

Table 13 Peak October Fieldfare counts on Farne Island, 2004.

	19 Oct	20 Oct	24 Oct	25 Oct	27 Oct	28 Oct
Farne Islands	321	748	271	364	1,127	2,485

dates. As usual the bulk of records occurred in October with westerly passage particularly heavy during the latter half of the month. Table 13 shows the major counts recorded over the islands. In contrast November produced a trickle of records with 1-33 noted on sixteen dates until last seen on 26 November.

Song Thrush *T. philomelos*

A common passage visitor.

The spring brought a light scattering of 1-6 on eighteen dates between 27 March and 9 May, peaking in early April with a total of eleven on 2 April (four on the inner group, seven on the outer group). Autumn birds appeared on 30 September following the first major easterly wind of the autumn which brought about a hundred to the islands. Thereafter good numbers were reported throughout with 1-49 passing daily through the islands in October, peaking with *ca* 300 west over Inner Farne on 28 October. Smaller numbers of 1-3 lingered throughout November with the last individual noted on 29 November.

Redwing *T. iliacus*

An abundant passage visitor.

Spring passage was light through the islands with 1-2 seen or heard on nine dates between 26 March and 30 April. Some records referred to birds heard calling at night as they migrated over the Farnes. The first returning bird of the autumn was flushed from the West

Table 14 Peak October Redwing counts on Farne Island, 2004.

	19 Oct	20 Oct	21 Oct	27 Oct	28 Oct
Farne Islands	2,047	2,182	427	956	5,000

Widewings on 29 September with a noticeable arrival of 319 west over the islands the following day as easterly winds helped birds migrate. As with fieldfares, October produced some major influxes late in the month with the season's peak of *ca* 5,000 passing west over the islands on 28 October. Smaller numbers of 1-20 were recorded throughout November until last seen on 30 November.

Mistle Thrush *T. viscivorus*

An uncommon passage visitor.

A reasonable showing with two discovered flying low over Inner Farne on the morning of 1 April, while the autumn produced three reports in mid-October. On 18 October, a single was seen briefly on Brownsman followed by a total of four over Brownsman during the mass thrush passage of 20 October. Later that day, possibly one of the birds recorded earlier on Brownsman was seen around the central meadow and lighthouse area of Inner Farne.

Grasshopper Warbler *Locustella naevia*

A well represented passage visitor.

The outer group dominated sightings but the inner group claimed their first records in over two years. On 27 April a small 'fall' occurred, resulting in three on the islands as singles were seen on Inner Farne, Brownsman and Longstone main rock, with the Brownsman bird lingering until the following day. The only other spring sightings were singles on Staple Island on 1 May and Brownsman on 2 May. Autumn passage was marked by small numbers in August, all on Brownsman, as a single was present on 9-10, three on 24 with one lingering until 26 August. The final record of the year was a single on 30 September which showed well on the south-east rocks of Inner Farne.

Sedge Warbler *Acrocephalus schoenobaenus*

A well represented passage visitor.

A reasonable spring showing with 1-2 birds recorded on eight dates between 4 May and 7 June. The first appeared on 4 May around the pond on Inner Farne with a spring peak of three on Brownsman on 17 May. Interestingly, for the second consecutive year a singing male was heard on Brownsman on 19 May, and the final spring record was an individual on Brownsman on 7 June. As usual August hosted the majority of autumn birds after the first arrived on Brownsman on 1 August. Thereafter good numbers were reported with 1-2 on eleven dates between 2 and 24 August, peaking at three on 13 August. The last records were singles on Staple Island on 6 and on West Wideopens on 14 September.

Marsh Warbler *A. palustris*

A rare visitor.

An interesting unstreaked *Acrocephalus* warbler was discovered on Brownsman as the wardens prepared to watch the final of Euro 2004 on the evening of 4 July. The final was quickly cast aside as patience was required to obtain good views of this rare skulking visitor. Eventually after a four hour stake-out all the relevant features were noted, confirming the bird as the seventh record for the islands following two in 1993 and 1998 with singles in 1997 and 2000.

Reed Warbler *A. scirpaceus*

A well represented passage visitor.

Still very much a scarcity on spring passage, the islands produced two late May records, with singles on Brownsman on 28-29 May and another on 31 May. The last spring record on the inner group was on 5 June 1999. However the autumn period made up for the lack of

spring records with the mid-August 'fall' conditions producing some impressive numbers. On the morning of 10 August ten were logged, followed by thirteen on 11, nine on 12, and fourteen on 13. The majority were on the outer group with up to ten daily during this period with the inner group claiming up to four. Thereafter numbers started to decrease, dropping eventually to two on 25 August bringing the impressive run to an end. Interestingly there were two very late records with singles on Brownsman on 28 October and Inner Farne on 28-30 October, both of which showed well to confirm identification.

Icterine Warbler *Hippolais icterina*

Uncommon passage visitor.

Following a spell of south-easterly winds and fog in early August the islands boasted three birds, the best showing since 1999. On the afternoon of 10 August, two birds appeared on Inner Farne and both lingered until the following morning, when one was caught roosting outside the toilets before being released unharmed. Both birds showed well during the day, feeding around the vegetable garden and although one disappeared overnight, the other remained until 15 August. On the outer group one was found on Staple Island on 13 August and was seen later that day on Brownsman. This was part of an influx of birds to the north-east coast during this period which brought at least four to nearby Holy Island.

Barred Warbler *Sylvia nisoria*

An uncommon passage visitor.

An unprecedented year, with a total of seven different birds appearing on the islands, representing a record haul. The species has become more common in recent years with the outer group dominating records, especially during the mid-August 'fall' where no fewer than three were together on Brownsman on 13 August. The amazing series of records, all involving first-winter birds, began with the appearance of a single on Brownsman which lingered from 9-16 August with further singles on 12-13 August and another (a tail-less bird) on 13 August. The only inner group record of the year concerned a flighty bird on Inner Farne on the afternoon of 12 August. Continuing the good run, more birds appeared on Brownsman in September with one on 6 and two on 30 September, completing an outstanding year for the species.

Lesser Whitethroat *S. curruca*

A common passage visitor.

A good showing on spring passage from 26 April-1 June. The first bird appeared on 26 April with a single on Brownsman and another on Inner Farne, the latter remaining until the following day. A noticeable increase occurred on 30 April on the outer group with three on Staple Island and a single on Brownsman. However the main spring peak occurred on 1 May, with a total of nine recorded – five on Inner Farne, two on Brownsman and singles on Staple Island and Longstone main rock. Thereafter 1-3 were present on eight dates until the final spring individual on Inner Farne on 1 June. There was no such influx during the autumn with singles recorded on ten dates between 6 September and 16 October with the final record being one on the central meadow on Inner Farne on 16 October.

Whitethroat *S. communis*

A common passage visitor.

Well reported during spring passage with 1-2 on fourteen days between the first on 25 April on Brownsman and the last on the same island on 29 May. The only noticeable spring peak occurred on the outer group on 30 April with two on Staple Island and another on nearby Brownsman. The first autumn bird appeared on Brownsman on 2-5 August with another on Inner Farne on 2 August. Thereafter 1-2 were recorded on fifteen August dates and five September dates until the last record of a single on Inner Farne on 21 September.

Table 15 Peak August counts of Garden Warbler on Farne Island, 2004.

	9 Aug	10 Aug	11 Aug	12 Aug	13 Aug	14 Aug	15 Aug	24 Aug	25 Aug
Inner group	3	6	2	4	5	1	1	5	1
Outer group	3	12	10	6	8	4	2	16	6
Day Total	6	18	12	10	13	5	3	21	7

Garden Warbler *S. borin*

A common passage visitor.

A very poor spring showing was fully compensated by an impressive number in August. The only spring records concerned singles on Brownsman on 17-18 May with another on West Wideopens on 19 May. However the 'fall' conditions in mid-August brought some impressive numbers to the islands with records from thirteen dates between 5 and 27 August with peak counts summarised in Table 15. Following the major influx, singles were on Brownsman on 5-7 September, a skulking individual was on Inner Farne on 10 October and further late singles were on Brownsman on 16 and 24 October.

Blackcap *S. atricapilla*

A common passage visitor.

A surprising early start to the season was a male discovered on Brownsman from 31 March-1 April, representing the joint earliest-ever record on the islands (following a male on 31 March 1994). Another male then appeared on Inner Farne on 2 April, favouring the vegetable garden area. Thereafter spring passage was light with singles on twelve dates until the last report of a female on Inner Farne on 9 May, while the only multiple record was a pair on Brownsman on 7 May. The first autumn bird was a female/immature on Inner Farne on 3 October and birds were present almost daily from 12-31 October. During this period good numbers were reported with eleven on 17 October peaking at twenty-two on 20 October (ten on the inner group, twelve on the outer group) and fifteen on 28 October. Late passage birds were recorded in early November with the final record being a single female/immature on Brownsman on 9 November.

Greenish Warbler *Phylloscopus trochiloides*

An extremely rare visitor.

Without doubt one of the major highlights of the year, with the appearance of two different

individuals during an exceptional influx into Britain which brought thirty-five records nationwide. During the impressive 'fall' conditions of mid-August, a bird was discovered feeding around the artificial tree area of Brownsman on 14 August. It remained around the cottage area all afternoon, but unfortunately had departed by the following day. Amazingly a second bird appeared on the islands, as one was on Inner Farne on 31 August, and even more surprisingly was the only migrant on the inner group that day. It spent the majority of its time on the central and top meadow and was heard to call during its stay but, as with the first, the bird departed overnight. These represent the second and third Farnes records, following the first on Brownsman on 22 August 1991.

Pallas's Warbler *P. proregulus*

A rare visitor.

This Siberian sprite appeared for the second consecutive year, with two records, part of 200 reported nationwide. Following a spell of easterly winds a confiding bird appeared on Brownsman on 11 October and remained around the cottage area throughout the day. Following another impressive influx in Northumberland which brought at least thirteen to the county during October, a second bird was discovered late in the afternoon of 20 October near the lighthouse on Inner Farne. These represent the twelfth and thirteenth Farnes records.

Yellow-browed Warbler *P. inornatus*

An uncommon passage visitor. Fourteen in 1999 was exceptional.

A quiet year produced only two records, both from the outer group of islands. The first was discovered on the unlikely setting of Longstone lighthouse on 30 September and was content picking insects from around the buildings and was still present the following day. The only other record concerned a bird appearing on Brownsman late in the evening of 27 October which unfortunately departed overnight.

Radde's Warbler *P. schwarzi*

An extremely rare visitor.

A fine year for rare warblers was complete with the appearance of this Siberian rarity. Following a disappointing September migration through the islands, the winds switched direction to the east and on 30 September Inner Farne produced one of these robust individuals. The bird was discovered at midday on the cemetery bank, eventually favouring the central meadow of the island, and was present until dusk. This represents only the second-ever Farnes record, following one on Brownsman in 1999 and was the first of only seven to be reported in Britain during 2004.

Wood Warbler *P. sibilatrix*

An uncommon passage visitor.

During the large 'fall' of migrants on the islands in mid-August, a confiding individual appeared on Brownsman and was often seen hunting insects from the observatory roof. The bird lingered for four days between 10 and 13 August and the species was last recorded on the islands in 2002.

Chiffchaff *P. collybita*

A common passage visitor.

As ever the species was well represented during spring and autumn migration with the first bird of the year appearing typically in late March. Four were recorded on 31 March, with three on Inner Farne and a single on Brownsman, followed by records on thirty-two spring dates until a late individual was noted on Inner Farne on 5 June. Spring peaks included seven on 2 April, eight from 30 April-1 May and singing birds heard on both Brownsman and Inner Farne during that period. The autumn was marked by the first returnee to Brownsman on 3 August, followed by reports of 1-2 on eight August and September dates. The heaviest autumn passage occurred in October with almost daily records of 1-10 and peaking at twenty-five on 20 October (fifteen on the inner group, ten on the outer group). Late autumn stragglers were recorded into November with four on 1 followed by singles until last seen on 4 November. A bird showing the characteristics of 'Siberian' Chiffchaff *P. c. tristis* was discovered and well photographed on Brownsman on 12-14 October.

Willow Warbler *P. trochilus*

A common passage visitor.

An excellent showing on spring passage with records from thirty-one dates during the months of April-May. The first bird of the year appeared on Brownsman on 5-6 April, followed by light northerly passage during the rest of April. Conditions at the end of April/early May saw bigger numbers grounded on the islands, with fourteen present on 30 April, a peak of twenty-two on 1 May (seven on the inner group, fifteen on the outer group) with ten still present the following day. The final May record concerned a single on Inner Farne on 17 May. Interesting records during the peak movement included a bird on Brownsman on 30 April which landed on the head warden's head for five seconds and

Table 16 Peak Willow Warbler counts on the Farne Island, 2004

	10 Aug	11 Aug	12 Aug	13 Aug	14 Aug	15 Aug	24 Aug
Inner group	10	10	10	18	4	4	8
Outer group	13	12	10	12	8	6	5
Day Total	23	22	20	30	12	10	13

singing birds which were heard on Inner Farne on five April dates. Unseasonable late June records included singles on Brownsman on 23-24 June and Inner Farne on 28 June. Autumn commenced from 31 July with the appearance of a juvenile on Brownsman followed by records on forty dates until the last was reported on 29 September. During mid-August the islands experienced large numbers with Table 16 highlighting the peak passage. A very interesting bird showing the characteristics of 'Northern' Willow Warbler *P. t. acredula* appeared on Inner Farne on 29 October and showed well in low vegetation by the north rocks. This fascinating bird showed no traces of green or yellow, indicating a more northern origin.

Goldcrest *Regulus regulus*

A common passage visitor.

Well reported on passage with records on twenty-six spring and fifty-three autumn dates.

Late March saw a small influx on the inner group with a roving party of ten noted on 30 March and six still present the following day. April saw twenty-two on 1 (eleven on both the inner and outer groups) with fifteen still present the following day. Thereafter 1-8 were recorded until the last record of a single on Brownsman on 2 May. Autumn migrants started appearing on the islands in late August, with 1-2 on Inner Farne on 22 and 30-31 August. The species was recorded almost daily throughout September and October with small numbers of 1-11 throughout September into early October. Following a spell of south-easterly winds in mid-October, a large influx occurred bringing some impressive numbers to the islands. On the inner group numbers increased from twenty on 11 to thirty-two on 13 with counts of 20-25 on a further five dates until the end of the month. A similar picture developed on the outer group, with a peak of forty-three on 12, thirty on 13 and twenty-four on 28 October. Following the major influx, numbers rapidly decreased and the last few stragglers were recorded on Brownsman with singles on 2-5 November.

Firecrest *R. ignicapillus*

An uncommon passage visitor.

An excellent year, with all records confined to autumn passage birds. A stunning male with a good numbers of crests appeared on Brownsman on 12 October, and as wardens checked the island the following day they were surprised to discover three together, including the male from the previous day. The birds remained all day, with two lingering until the morning of 14 October. Following this, a female/immature was discovered on Inner Farne on 28 October and remained throughout the day.

Spotted Flycatcher *Muscicapa striata*

A well represented passage visitor.

An improvement on last year's dismal year (only two records) although once again, all records involved birds on the outer group, the last inner group bird being noted in September 2002. Five individuals were recorded with singles on Brownsman on 31 May, Longstone main rock on 2 August, Brownsman again on 6 and 8 September and a late individual on Staple Island on 3 October.

Pied Flycatcher *Ficedula hypoleuca*

An uncommon passage visitor.

The spring was brightened up by a small scattering of birds featuring mainly adult males. On the inner group two adult males appeared on 30 April with one lingering until it was last recorded on 2 May. On the outer group a first-summer male appeared briefly on Brownsman

Table 17 Peak August counts of Pied Flycatcher on Farne Island, 2004.

	9 Aug	10 Aug	11 Aug	12 Aug	13 Aug	14 Aug
inner group	17	22	15	10	11	4
outer group	10	24	20	12	13	8
Day Total	27	46	35	22	24	12

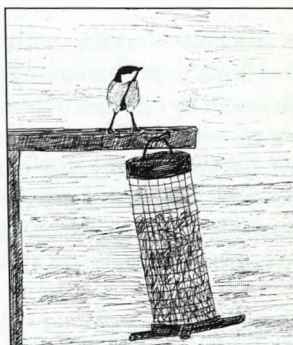
on 30 April, with an adult male which lingered until 3 May discovered on nearby Staple

Island. The first autumn returnee appeared on Brownsman on 6 August and the 'fall' conditions of mid-August brought some exceptional counts. During this period good numbers were reported from several coastal headlands along the north-east coast and the islands boasted a peak of forty-six, representing the second ever largest count for the Farnes, although some way short of the seventy-five recorded on 8 September 1995. Table 17 shows a summary of records from the mid-August influx. Thereafter 1-2 were reported on eight September dates, peaking with seven on 6 September. The final record was a late individual on Staple Island on 1 October.

Long-tailed Tit *Aegithalos caudatus*

An uncommon visitor.

A good showing of this erratic visitor with three records totalling five birds. The first was not seen, but was heard calling as it flew west over Brownsman on 1 November. Other areas of the Northumberland coast reported coastal movements of the species and two days later more appeared on the islands. On the morning of 3 November three were seen together, stopping briefly on Brownsman before departing in a south-westerly direction. Later that day another arrived on the island and was suspected to be a different bird from the party of three seen earlier that day. The bird lingered around Brownsman and remained until 6 November, although it lost all its tail feathers during an unsuccessful merlin attack and was seen to leave by mid-morning. The species has been recorded in eight previous years and was last recorded in 2000.



Great Tit *Parus major*

An uncommon visitor.

A female was discovered on Inner Farne in the late afternoon of 2 April and remained around the island until 6 April. It could often be seen feeding on the peanut-feeder or foraging around the buildings and represents the first record since 1999.

Treecreeper *Certhia familiaris*

An uncommon visitor.

An incredible year produced a total of three records, all on Inner Farne. The first appeared on 17-18 September with an elusive bird discovered favouring the vegetable garden area. It was attracted to the artificial tree in the garden by the mixture of crushed peanuts and fat and also the number of bluebottles which were feeding on rotting apples. The bird was also caught in the visitor centre on its first day and released unharmed. A second bird then arrived on the same island on 4 October, eventually showing well as it fed along the walls of the toilet block, Pele tower, chapel and dock bank area of the island. At one point it departed east, flying high over Knoxes Reef before returning to the island for the rest of the day. To complete the hat-trick of records, a third bird was discovered during a large 'thrush fall' on 20 October, feeding on rocks at the top of the lighthouse cliff. The bird showed well and unlike the previous two records was believed to be of northern origin due to its pure white underparts and prominent pale supercilium. There are sixteen previous records, all but two from Inner Farne, with the last noted in November 1997.

Red-backed Shrike *Lanius collurio*

An uncommon passage visitor.

Favourable winds combined with fog patches in mid-May brought a good scattering of this species down the east coast and the islands hosted two of these stunning visitors. On the afternoon of 7 May, a male was watched as it flew low in from the north before landing on Brownsman near the cottage. The bird lingered for a further two days favouring the vegetable garden from which it would hunt. While it was still present on the outer group a second male appeared on Inner Farne in the morning of 9 May, lingering for four days until last seen on 12 May. During its stay it was seen to regurgitate a pellet which suggested that it was feeding mainly on beetles whilst on the islands. Last recorded in 2002.

Jackdaw *Corvus monedula*

A well represented visitor. Former breeder, last in 1966 (Hawkey, 1991).

A moderate showing, with the majority of sightings in spring. Early in the year it appeared that birds were commuting from the mainland, with one west over Brownsman on 28 March followed by one east over the inner group the following day. April produced records on nine dates, with peak counts of six east over the outer group on 20 and five on the inner group on 1 April. During this period, a pair was seen on the Wideopens on several occasions, possibly hinting at a prospecting pair. A further three records were received from May, with three on 6, two on 17 and two on 31 May. The only autumn record concerned a single west over Brownsman on 28 October.

Rook *C. frugilegus*

A well represented visitor.

A very poor showing with all records confined to early spring with birds reported on eight dates between 26 March and 25 April. The inner group produced sightings of 1-2 on 26 and 30 March and 5 and 8 April. The peak count was a disappointing three over Inner Farne on 13 April. Records from the outer group were also disappointing with singles over on 19 and 22 April and two east on 25 April. There were no autumn records.

Carrion Crow *C. corone*

A well represented visitor and rare breeding species.

As usual the most well reported Corvid, with records in every month between March and December. Small numbers commuted daily between the mainland and the islands from March-early May, including a bird on 16 April carrying nest material near the lighthouse on Inner Farne. The summer months produced reports of 1-2 on six dates before returning to a daily presence from mid-September until the end of the season. Peak counts for the year included twenty east on 23 April and twelve east on 31 October.

Starling *Sturnus vulgaris*

A common visitor, extremely rare breeder.

Well reported throughout the season with daily records from when the wardens arrived on the islands until 9 May. Numbers during this period fluctuated from 1-22, peaking at thirty on 2 April. There was an absence of four weeks before birds started commuting between the

mainland and the islands from early June, with the first fledged juveniles appearing from 9 June. Thereafter small numbers were reported throughout the summer and autumn, with continental migrants boasting local numbers. October witnessed the peak movement of the year with 300 west on 20, 200 on 21 and 250 present on 28 October.

Chaffinch *Fringilla coelebs*

A common passage visitor.

A very poor year, one of the worst on record, with reports from seven spring and seven autumn dates. A female was seen in the cemetery on Inner Farne on 28 March followed by a male which lingered from 1-5 April. During its stay on 3 April, a light influx to the islands brought a further three to Inner Farne and a female to Brownsman. The only other spring records involved a female on Inner Farne on 14 April and another commuting between Brownsman and Staple Island between 7-11 May. The autumn was equally disappointing, with 1-3 recorded on seven dates between 3 and 29 October.

Brambling *F. montifringilla*

A common passage visitor.

Spring passage was again noted from mid-April as north-bound birds passed through the islands. On the inner group a single was present on 18, with two males utilising the bird-table on 21-22 with another north on 30 April. On the outer group, three appeared on Brownsman on 14 followed by 1-2 on six dates, including a male on 27-28, with the last record of a single on 30 April. Autumn returnees started passing through the islands from 29 September with a single west over Inner Farne. The following day saw an influx of seventy with thirty on Inner Farne and forty west over the islands. October brought almost daily records of 1-31 with noticeable movements mid-month. Peak counts included seventy-two west on 11, thirty-nine on 19, the season's peak count of 105 on 20 (fifty on the inner group, fifty-five on the outer group) and ninety-nine on 21 October. The last few records occurred in early November with 1-3 recorded on the islands until last seen on 4 November.

Greenfinch *Carduelis chloris*

A well represented passage visitor.

A pair was present on Inner Farne throughout March, with the male heard singing on 27 March (the last day they were recorded) while a female was noted on the bird-table on 12 April. On the outer group, singles were recorded on six dates from 26 March-11 April with the last record involving two east over Brownsman on 25 April. The autumn months brought small numbers of 1-5 to the islands on eight dates during October, while numbers built up on the inner group throughout November. A party of three was resident on the islands throughout November commuting between Inner Farne and the Wideopens and occasionally this party was swelled by other visiting birds. Peak counts during the month included eight on 19 and 21 November with five noted on several days.

Goldfinch *C. carduelis*

A well represented passage visitor.

A quiet season with reports from the inner group on nineteen dates and the outer group on nine dates. Spring passage was light with 1-5 recorded between 26 March and 27 May,

peaking at eight on 1 May over Inner Farne. The first autumn record concerned two on Inner Farne on 28 September with one lingering until the following day. The only other autumn records involved singles on Inner Farne on 3-4 October and another west over Brownsman on 18 October.

Siskin *C. spinus*

A common passage visitor.

Generally a very quiet year with the majority of sightings occurring in spring. A very confiding female lingered on Inner Farne from 26-28 March, with two west over the same island on 9 April. The only spring record from the outer group was one heard calling over Brownsman on 25 April and the final report was of a male resident on Inner Farne on 1-2 May. More unusual was the autumn migration period which produced only one record of this normally common migrant, with three west over Brownsman on 30 September.

Linnet *C. cannabina*

A common passage and winter visitor. May have bred in the 1890s ((Miller, 1911-1914).

The species was very evident around the islands in spring, with almost daily records from 26 March-16 May. Small numbers of 1-10 utilised the islands daily with peak passage including seventeen on 23, eighteen on 24, thirty-three on 25 April, and forty on 1 May. The first autumn returnee appeared over Inner Farne on 3 September and 1-37 were regular throughout the autumn until the wardens departed in early December. Peak autumn counts included fifty-two on Brownsman on 18 October and forty on Inner Farne on 1 November with the same island having the season's largest flock of sixty on 9 November.

Twite *C. flavirostris*

A well represented passage visitor.

All records were confined to autumn passage during October, with the outer group dominating the records. On Brownsman two appeared on 5, with flocks of twenty-three on 13, twelve on 14, a single west on 15 and thirteen on 17 October. The inner group had only two records: two were briefly in the vegetable garden on Inner Farne on 5 and three flew west over the lighthouse on 14 October.

Lesser Redpoll *C. cabaret*

An uncommon passage visitor.

As with siskin, there was a lack of records with the islands only producing reports on ten days. Light spring passage involved lingering individuals with a confiding female on Brownsman from 1-4 April and another on Inner Farne on 3-4 April. The only other spring records concerned singles over Inner Farne on 15 April and Brownsman on 1 May. Autumn passage was very light, with singles on the outer group on 12 and 28 October, and 1-2 on Inner Farne between 27 and 31 October.

Common Rosefinch *Carpodacus erythrinus*

An uncommon passage visitor.

An excellent season which produced five records, the best showing on the islands since the record year of 2000. The only spring record concerned an adult female on Brownsman on 1

June, which relocated to nearby Staple Island later that day. The autumn saw a total of four different birds appear on the islands, including a first-winter which lingered around the vegetable garden on Inner Farne from 13-14 August. On Brownsman a first-winter/female appeared briefly on 9 September followed by two arriving on the afternoon of 30 September. Both birds were harried by resident rock pipits but one lingered until the following day and was seen departing west with a group of linnets.

Bullfinch *Pyrrhula pyrrhula*

An uncommon passage visitor.

An outstanding year, the best on record, with no fewer than fifteen different birds reported during an unprecedented autumn influx. The Northern Isles and east coast of Britain experienced a record invasion of Northern birds *P. p. pyrrhula* and the size, structure and distinctive call (sounding like toy trumpets) of the birds on the Farnes suggested that they all belonged to this race. The invasion started with the appearance of an adult male on the West Wideopens on the afternoon of 16 October which remained until 18 and was seen commuting between the West Wideopens and Inner Farne on several occasions during its three day stay. The same arrival day (16 October) brought a male to the outer group when one flew over Brownsman near dusk and was relocated on Staple Island the following day. The invasion gathered pace with three (one male, two female/immatures) on Inner Farne from 20-22 October with one of the female/immatures lingering for a further two days and last seen on 24 October. During this spell a pair was also on Brownsman on 20 October. Further records of female/immatures on the islands included a single briefly on Brownsman on 27 and Inner Farne on 30 October. The following day on 31 October a group of four (two pairs) were present on Inner Farne for the majority of the day. The final records concerned an individual female/immature on South Wamses (taken by a merlin) on 2 November and another noted on Inner Farne later that day. An incredible series of records in a remarkable year which doubled the total number of records from the islands, as only a total of fifteen birds from nine previous years had been recorded, the last two occurring in 1994 and 2001.

Lapland Bunting *Calcarius lapponicus*

An uncommon passage visitor.

A disappointing below-average year with only a handful of records. During October singles were seen on or over Brownsman on 13 and 15 with another lingering on the island on 20-21 October. The only other record concerned two which circled Inner Farne on the morning of 9 November before heading west.

Snow Bunting *Plectrophenax nivalis*

A well represented passage visitor.

A good showing in spring, the first spring records in three years. On Brownsman the wardens were greeted by a flock of eight (including one adult male) when they arrived on 25 March, with eight present on 26, declining to six on 27 and dropping to four on 28-29 March. On the inner group a female-type was resident on Inner Farne from 26-29 March and may have been the same bird which showed briefly on 3 April. Autumn passage commenced on 20-24 September when a male took up temporary residence on Brownsman. Following this record small numbers of 1-2 passed through the islands on eleven dates in October with 1-6 on twelve November dates. Peak counts, mainly involving birds flying west over the

islands, included seven over Inner Farne on 9 November and eight over Brownsman on 11 November. The big numbers of the previous winter never materialised although small numbers were still being recorded with the final records involving four north on 1 and one west on 2 December.

Yellowhammer *Emberiza citrinella*

An uncommon passage visitor.

A quiet year, with only three autumn records, all involving first-winter birds. On Inner Farne a single appeared briefly around the vegetable garden on 12 October and another was flushed from the courtyard and later seen on the island top before departing west with a brambling on 27 October. The only other record concerned a bird on South Wamses on 2 November which lingered for only ten minutes before moving on.

Reed Bunting *E. schoeniclus*

A well represented passage visitor.

Spring passage was light through the islands, with records from the inner group on six dates and from the outer group on eight dates. All sightings involved singles between 31 March and 2 May with the only multiple sightings concerning four on the outer group on 30 April and two on Staple Island on 9 May. Autumn passage was logged from 29 September-4 November with the majority of sightings on the outer group. On the inner group all reports concerned 1-2 on Inner Farne on five dates from 2-28 October, peaking at three on 21 October. On the outer group small numbers of 1-4 were recorded on twenty-five dates between 29 September and 4 November with six on 30 September and five on 21 and 29 October.

Black-headed Bunting *Emberiza melanocephala*

An extremely rare visitor.

A real contender for 'Bird of the Year', not just for its rarity status (*ca* 165 accepted British records), but also the identification challenge this bird posed. Following a spell of south-easterly winds and rain in late August, a bird was discovered on the afternoon of 23 August near the pond on Inner Farne. It was originally seen briefly before it showed well on the artificial tree in the vegetable garden on the island, confirming it as a first-winter of this rare south-eastern European species. It was very reluctant to leave cover and favoured the small elders in the garden and on one occasion was seen to catch a red admiral. The bird remained on the island all afternoon and was still present at dusk, but despite poor overnight weather and the provision of grain there was no sign of it the following day. This represents the third record on the Farnes following accepted adult males on Brownsman on 23-28 July 1971 and 10-20 July 1999.

Exotica

Snow Goose *Anser caerulescens*

Singles 1969, annually 1975-77, 1987, then six in 1995, and a single in 2003 (omitted from report).

A flock of eight (four white and four blue phase birds) landed in the Kettle off Inner Farne for a short period on 16 May, before heading off in a north-east direction through Staple

Sound. The flock appeared to include some first-winter plumaged birds. Presumably the same eight were responsible for sightings north past Whitburn (Durham) and St Mary's lighthouse (Northumberland) earlier that day. The party appeared to have made it as far north as Lothian, as one appeared at Leith and Musselburgh on 17 May, the same day seven were reported flying south past Filey (NorthYorks). More intriguing was the appearance of eleven at Friesland in the Netherlands on 29 May (five white and six blue phase birds) which were being suggested as possible wild birds.

Recent Rarity Decisions

All scarce and rare bird sightings from the Farne Islands are scrutinised by the Northumberland Records Committee, and in the case of British rarities records are forwarded to the British Birds Rarities Committee for ratification.

2001

Northumberland records committee All published records accepted.

BBRC records accepted White-billed diver 17, 25-26 November, red-footed falcon 21-22 September, buff-breasted sandpiper 8 July, olive-backed pipit 28-29 September and 14-15 October and two-barred crossbill 8-10 July.

BBRC records not accepted Black-headed wagtail on Brownsman on 16 June and Sardinian warbler on Inner Farne on 20 August.

2002

Northumberland records committee All published records accepted.

BBRC records accepted Fea's petrel 23 September, white-rumped sandpiper 4-18 September, red-rumped swallow 9 September, thrush nightingale 8 May and yellow-breasted bunting 3-5 September.

2003

Northumberland records committee Not accepted: juvenile long-tailed skua off Inner Farne on 26 August and little bunting on Inner Farne on 12-13 October. All other published records accepted.

BBRC records accepted Records accepted included white-winged black tern 27 June, citrine wagtail 2 October, dusky warbler 7-8 November and yellow-breasted bunting 1 September.

BBRC records pending Bonaparte's gull off Inner Farne 9 November is pending for more information.

A number of claims of the sub-species yellow-legged gull have been made over recent years (2000-2003) and all have not been accepted by the Northumberland records committee. However it is hoped no such problems will arise from the well-watched adult from Inner Farne on 2004.

RINGING REPORT FOR 2004

Seabirds in the North Sea hit the headlines in 2004, with a disastrous breeding season reported for Shetlands, Orkney and down to Bempton Cliffs in Yorkshire. Farnes seabirds

also had a poor breeding season, probably due to the combined effects of reduced food supply and bad weather, but fortunately did not suffer the almost complete failure in the Shetlands and Orkneys. This poor breeding season highlights the risk to our seabird populations from the combined effects of over-fishing and climate change. Increasing temperatures within the North sea have been blamed for a shift of plankton northwards to cooler waters (Beaugrand *et al.* 2003), and this will reduce the stocks of sandeel and other fish that rely on these plankton. Fishing for sandeels on an industrial scale is unlikely to be helpful. However, treating the North-sea as one large ecosystem may be an oversimplification, and the extent to which the coastal waters of the north-east are subject to the same influences as further north is unclear. It is also important to stress that high mortality on the Farnes, at least of tern chicks, due to bad weather and food shortages is not just a recent phenomenon. Notes in the Natural History Society's archives for the period 1947-1985 record high levels of casualties amongst Sandwich and arctic terns due to bad weather in 1959, 1962, 1966, 1973 and 1977, and in 1965 a high mortality of small chicks was blamed on a shortage of food, with the adults seen feeding nestlings with unusually large fish.

In view of changes that are occurring in the North sea, it is important that we identify the factors which sustain the Farnes seabird colonies. Adequate food is clearly a key element; monitoring sandeel populations and understanding the link between sandeel abundance in seabed habitats and their availability as food to seabirds around the Farnes are central aims of the Farne Islands Marine Research Group (FIMRG), a collaborative venture between the National Trust, The University of Newcastle and the Natural History Society of Northumbria. Ringing seabirds makes an important contribution to this by allowing us to measure nestling and adult mortality or survival rates, the body condition of nestlings and adults during the breeding season, and to monitor provisioning rates of the nestlings.

Ringing Totals

Weather undoubtedly had an important part to play in reducing breeding success for a number of species this year: periods of high rainfall occurred from mid-June to early July, with a particularly damp spot between 22nd-24th June (Figure. 4). This also hindered access for the Ringing Team, reducing the totals of some species ringed (Table 18), particularly Sandwich terns, as a result. Nevertheless, the numbers of Sandwich terns ringed (all of them nestlings) was up slightly compared to the previous year, but this was still well below our

Table 18: Ringing totals for 2004 compared to 2003

Species	Ringed in 2004	Ringed in 2003
Arctic Tern	221 (+31 retraps)	285 (+25 retraps)
Sandwich Tern	405	360
Kittiwake	157 (+2 retraps)	204
Shag	95 (+32 retraps)	196 (+52 retraps)
Eider	49 (+80 retraps)	29 (+73 retraps)
Puffin	7	8 (+ 1 retrap)
Totals	934 (+145 retraps)	1082 (+151 retraps)

target of 1000 per year to maintain an adequate sample for monitoring. The numbers of arctic terns ringed was down compared to last year, and this was due mainly to a reduction in the number of nestlings ringed (151, compared to 203 for the previous year), although we also ringed 12 fewer adults. Most of the arctic tern nestlings were ringed as part of the 'growth-index' study (Figure 5, and see below), but we took advantage of the fact that one of our research assistants on the FIMRG project had a ringing permit to collect a more-extensive set of growth data to complement our regular single measurements. Of the arctic tern nestlings ringed, 34% were found dead during the season; this level of mortality was not as high as the 53% we recorded for Coquet Island during the same period.

The capture and ringing of adult arctic terns is proving to be of considerable value. As part of the process, we take a range of biometric data, including total head length (a measure of body size), wing length, tail-fork length (to aid sexing) and body mass. The size-corrected data for body mass in 2003 and 2004 suggest that food availability (whether caused by weather affecting foraging success, a shortage of sandeels, or a combination of both factors) in 2004 had a marked effect on adult body mass (Figure. 6). Just before the period of heavy rain and high winds between 22nd and 24th June, mean size-corrected body masses for adult arctic terns in 2004 were similar to data for 2003 (Figure. 6). However, at the end of June and mid-July 2004, mean size-corrected body masses were well below those estimated for a similar period in 2003, indicating a substantial period of stress for the adult birds working to supply their nestlings. It will be of considerable value to continue to collect these data for arctic terns in subsequent years, and to extend the principle of sampling size-corrected masses of adult birds to other indicator species, such as kittiwakes, puffins and shags.

The number of kittiwakes ringed was down on 2003, and the total of 157 ringed represents 144 nestlings and 13 adults. In 2004, brood sizes were reduced compared to previous years and many nests contained just one nestling. This was also the case for shags, for which the

Figure 4 Daily rainfall, minimum temperature and mean wind speed recorded at Boulmer from the beginning of June to early July 2004. Data: Meteorological Office, Bracknell, UK.

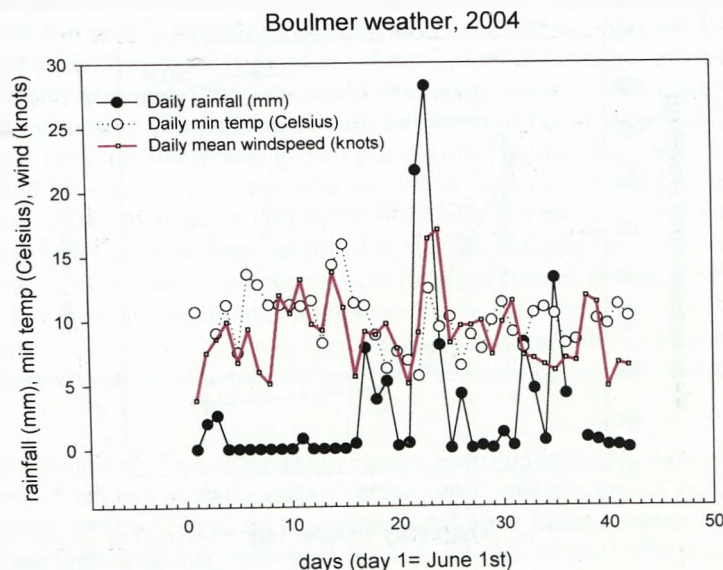


Figure 5 'Growth index' for arctic tern nestlings on Inner Farne and Brownsman from 1997 to 2004 inclusive. The index is $\log_{10}(\text{body mass})$ corrected for total head length (a measure of age) for nestlings of 9 days old or greater. In 1999, there was an almost complete failure of breeding as most arctic tern nestlings died, apparently as a result of food shortage; therefore, the dashed lines indicating a downwards trend for the growth index is speculative.

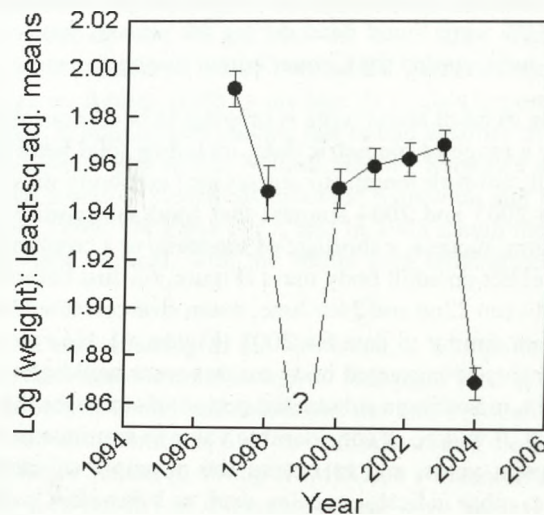
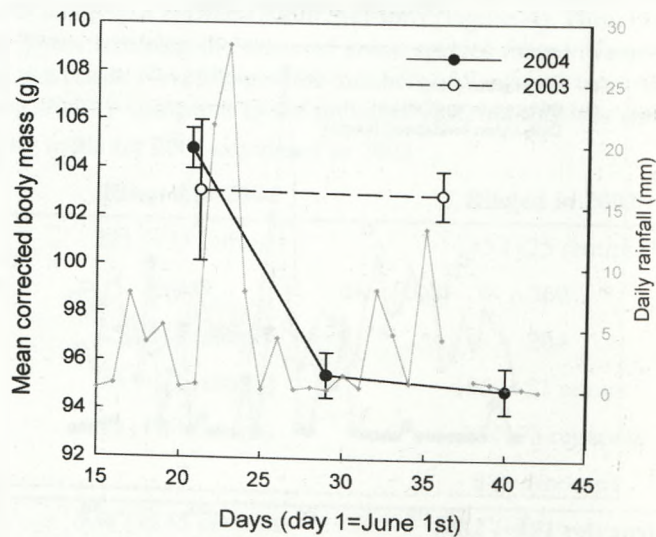


Figure 6. Mean body mass (g) of adult arctic terns on the Farne Islands in 2003 and 2004, sampled at different points in the breeding seasons and corrected for variation in body size using total head length in an Analysis of Covariance. Error bars are one standard error (SE) of the mean; sample sizes for each point were 29-41 except for 21st June in 2003 for which the sample size was 5 and this smaller sample is the reason for the wider SE at this point. Daily rainfall (mm, right ordinate) at Boulmer during the same period is shown by the grey trace.



number ringed was down by more than 50% on last year. In contrast, more eiders were done on Inner Farne in 2004; since this species nests earlier in the year and feeds predominantly on mussels, they are not likely to be directly affected by the availability of sandeels compared to other seabirds.

Recoveries

Recoveries were received for 4 species since the last report: shag, eider, arctic tern and Sandwich tern. Sandwich terns provided the bulk of these with 22; shags were a little way behind at 15, and there were four for eiders and three for arctic terns. Eider recoveries followed the usual pattern with all four recoveries of females (usually the only sex ringed since these are caught on the nest and the males do not incubate) recovered dead in the immediate area (Bamburgh-Seahouses) between February and June 2004. These were birds ringed in 1984, 1985, 1998 and 2000. Of the three Farnes-ringed arctic terns recovered in 2004, two were also local: one ringed as a nestling on Brownsman in 1982 was found dead at Bamburgh in July 2004, and an Inner Farne nestling from 1977 was found dead on Lindisfarne in June 2004, only a few weeks before its 27th birthday. The current longevity record for a British-ringed arctic tern is currently just a month and a half short of 30 years, so this is a nice record. The other arctic tern recovery reported during 2004 was also from Inner Farne, but ringed as a nestling in 1982; this bird was controlled (caught by other ringers and released) on the Isle of May in July 2003. This bird may be an example of natal dispersal: a bird that has bred at a colony different to its natal one. The arctic tern breeding population on the Isle of May increased during the 1980s, and Farnes birds may well be the source of this increase.

The Sandwich tern recoveries can be divided into three categories: recoveries within the UK, Europe, and Africa. There were six recoveries within the UK reported during 2004; only one of these was local and that was an Inner Farne bird ringed as a nestling in 1996 and found dead in Druridge Bay in August 2004. Of two birds recovered in the Grampian region, Scotland, one was found dead in June 2004 within the Sands of Forvie National Nature Reserve, a well-known Sandwich tern breeding colony of around 500 pairs (Mitchell *et al.* 2004). This bird, originally ringed as a nestling on Inner Farne in 2000, may have dispersed to breed there rather than return to its natal colony. The other Grampian recovery, ringed as a nestling on Brownsman in 1986, was found dead some 15 km further south in September 2004 but may also have been associated with the Sands of Forvie colony. A nestling from Brownsman in 1981 was found dead in the Firth of Forth (Lothian Region) in July 2004, and this bird could have been associated with the 300 or so breeding pairs in north-east Fife (Mitchell *et al.* 2004). Also in July (but in 2003- some reports take a while to come through), an Inner Farne bird from 1998 was controlled by the Tees Ringing Group at Seal Sands. The remaining UK recovery was a sight record from Brownsea Island, Dorset, in May 2004 (ring number read in the field, eg. through a telescope) of a Sandwich tern ringed as a nestling on Brownsman in 1984; this bird was also seen there in May 1998, so may have settled to breed in the small colony of some 200 pairs on Brownsea Island, a Dorset Wildlife Trust reserve.

Recoveries of Sandwich terns in mainland Europe were dominated by sight records in May 2004 of seven birds at a breeding colony on the island of Hirsholm, off Jutland, Denmark. These involved nestlings ringed on Brownsman and Inner Farne between 1980 and 1998. Three of these birds were also seen there in May and June of 2003. Elsewhere in Europe,



Figure. 7. Sandwich tern (background) and black-headed gull colony on the Island of Hirsholm, Jutland, Denmark. Sandwich tern XS16684, shown here at Hirsholm sitting on a rock, was originally ringed as a chick on Inner Farne on 19th June 1980. This bird was seen on Hirsholm on several occasions between 22nd May and 22nd June 2003, and again on 15th and 23rd May 2004. Photographs and ring observations by Kjeld Tommy Pedersen.

one from Brownsman in 1985 was controlled at Zeebrugge, West-Vlaanderen, Belgium in May 2004 (this bird was also controlled there in April 2003). The harbour at Zeebrugge boasts a colony of more than 3,000 pairs of Sandwich terns nesting on a man-made peninsula. Further south, a Sandwich tern nestling from Brownsman, ringed in 1986, was found dead, apparently taken by a raptor, in Finistere, France, in August 2004. This bird was presumably on its way south for the winter. The recoveries of Farnes-ringed Sandwich terns in or adjacent to other colonies fringing the North Sea (Sands of Forvie, Hirsholm, Zeebrugge) indicate the extent of dispersal and potential interchange of birds between colonies. Unfortunately, it is very difficult to obtain numerical estimates of the degree of dispersal and how this varies with time since observations at colonies, including the Farnes, are ad hoc rather than organised in a sustained way. Much more could be achieved by the regular trapping and ringing of adult birds at these colonies, organised at a European scale.

With the exception of one from Inner Farne in 2000 found sick and then released in Casablanca in March 2004, African recoveries of Sandwich terns were concentrated in West Africa, 7-14 degrees north of the equator in Senegal (two birds, both controlled by the Brussels Ringing Scheme in January-February 2004), Guinea-Bissau (one in June 2004), Guinea (two birds, both found alive and apparently released, in February and June 2004) and Sierra Leone (one controlled at sea in January 2004). These were within the usual wintering range (Noble-Rollin and Redfern, 2002) and all were ringed as nestlings on Inner Farne or Brownsman between 1978 and 2003. However, one unusual aspect is that two have been reported previously: a Sandwich tern ringed as a nestling on Inner Farne in 1980 was seen at the Hirsholm, Denmark, colony in June 2003 before being controlled by Brussels ringers in Senegal, February 2004; another old bird, ringed on the Farnes in 1978, was seen at the

Dutch colony of Griend in May 1997 and then found 'alive, healthy, fate unknown' at Kamsar, Guinea, in February 2004. The youngest bird amongst this batch of African recoveries was ringed as a nestling on Inner Farne in 2003 and reported from Kamsar, Guinea, in similar circumstances to the Griend bird in June 2004. This summer recovery in Africa is usual for young Sandwich terns since the northward return migration does not generally occur until the birds are in their third calendar year (Noble-Rollin and Redfern, 2002). It is noteworthy that of the seven African recoveries, all but one were either controlled or reported as alive, although the fate of several birds is not known. In previous years, many recoveries were due to birds being trapped and killed for sport or food by children. The killing of substantial numbers of terns in this way could reduce recruitment into North-Sea breeding populations. Education programmes to reduce trapping have been implemented, with some success (Mitchell *et al.*, 2004), but continued monitoring through ringing is needed to measure the future success of these initiatives. Since the Farne Islands are, with Coquet Island, one of the five largest colonies of Sandwich terns in Britain and Ireland (Mitchell *et al.*, 2004), increasing or at least maintaining the ringing effort as an important conservation tool must be a high priority.

The pattern of shag recoveries followed that of previous years with dispersal north and south along the east coast of Britain, but a greater number of recoveries (9) coming from the north with only two from the south. The latter were both of nestlings ringed on Staple Island, one from 2003 was picked up dead (oiled) in Seaford, Sussex, and a sight record in Ramsgate, Kent, was of a nestling from 1999. The northerly recoveries consisted of 6 in Highland and Grampian (ranging from just north of the Dornoch Firth, Highland, east along the Moray firth and south to Aberdeen) and three in the Firth of Forth (2 in Fife and 1 in Lothian Region). These Scottish recoveries involved a range of ages: five were ringed as nestlings on Staple Island in 2003, one from 2004, and three were ringed as breeding adults in 2000 and 2002 (two birds). With the exception of a sight record from Peterhead, Grampian Region, in October 2004 (nestling ringed on Staple Island in 2003), these were all birds recovered dead between February and April 2004 with no further information on the cause of death. Even though shag recoveries predominate in the north, we cannot infer a preferential northerly dispersal unless we can show that mortality rates are not particularly higher compared to the south. In addition to the north-south dispersal of shags along the east coast in winter, one bird made it across to the other side: a nestling ringed on Staple Island in 2003 was recovered dead in Zeeland, the Netherlands, in December the same year. Three local recoveries were also reported: these were birds ringed as nestlings in 1981 and 2000, and an adult ringed in 2002.

Projects

This was the third year in which the FIMRG team had research assistants resident on Inner Farne and Brownsman, respectively, for June and July. The research assistants were Eliza Leat and Phil McQuillan, and they recorded the positions of foraging terns, puffins and shags at sea, and monitored the provisioning of arctic tern nestlings by the adults. Eliza on Inner Farne had a ringing permit and was also able to ring arctic tern nestlings as they hatched and follow the growth of a sample of nestlings more closely. Data resulting from the FIMRG project since 2002 has now been analysed and the first paper on the relationship between foraging locations, tidal cycle and benthic habitat for terns and shags has been submitted for publication to an ecological journal. The analysis of rangefinder/ compass data on foraging locations for arctic terns and shags has shown that foraging by both species

was associated with specific benthic habitats. Although previous studies reported in the literature have assumed a preference for foraging over homogenous sandbanks, around the Farnes shags and terns predominantly foraged over heterogeneous benthic habitat, and in particular they foraged closer to the borders of different marine habitats than expected, suggesting that hydrographic characteristics (tidal flows for example) may be important factors determining food availability. Shags and terns also foraged closer to the breeding colony at high tide.

As part of the project, Richard Bevan of the FIMRG team obtained more data in 2004 on the foraging behaviour (dive depth and duration, and distance to foraging sites) of individual shags and puffins using small, lightweight 'time-depth recorders' (TDRs) or radiotransmitters temporarily fixed to the birds. These studies are important in showing how the behaviour of individual birds fits in with the overall picture obtained from the rangefinder studies. Sandeel sampling was also carried out in 2004 by Judy and Bob Foster-Smith using the University Research Vessel *Bernicia*.

Unlike the previous two years of the project, seabirds breeding on the Farnes in 2004 were clearly under stress from weather and lack of food. The presence of Eliza and Phil meant that we were able to obtain data on fish size and provisioning rates of the nestlings. Data on provisioning rates are still being analysed, but with respect to fish size, the sandeels that were seen brought back to the nestlings were only slightly smaller than in previous years. Nevertheless, the nestlings were clearly under stress as shown by the 'growth index' (size-corrected body mass) for 2004 compared to previous years (Fig. 5). Obtaining this growth index for arctic tern nestlings has been one of the main monitoring projects since 1997 on the Farnes. Given the extent to which a range of breeding seabirds may be affected by environmental change in the North-sea, there is a strong case for extending this monitoring approach to other species, particularly kittiwakes and puffins, and complementing measurements on nestlings with measurements on adult birds.

The ringing of eider females (gently lifted from the nest, and then replaced after checking or adding a ring) and adult shags is aimed at using retrap data to estimate survival rates and whether these change over time. A preliminary and unrefined analysis of the data for eiders suggests an average annual survival rate of 82% (95% confidence interval 76-86%) between 1997 and 2003. Maintaining these projects for the long term will add to our understanding of change and stability of seabird colonies in the north-east.

ACKNOWLEDGEMENTS

The Natural History Society of Northumbria and FIMRG are extremely grateful to John Walton and his wardening team, and the Farne Islands Local Management Committee, Chaired by Charles Baker-Cresswell, for the support and encouragement of the ringing and scientific projects carried out on the Farnes. David 'Steely' Steel and his National Trust staff on the islands have generously extended their hospitality towards us and our two field assistants in 2004, Eliza Leat and Phil McQuillan. Mugs of hot tea are a welcome end to the messy and noisy business of ringing kittiwakes on the Cottage Cliffs. Eliza and Phil have made important contributions to the accumulating data on the foraging patterns of Farnes seabirds, and we are grateful to them for their hard work. 'Sea Spray', the boat provided by Northumbrian Water to facilitate the Ringing Team's access to the Islands, continues to be vital to our work, and we are, once again, indebted to them and the Sir James Knott Trust

for their financial support of the FIMRG seabird foraging project. We are also grateful to Brian Graham, Harbourmaster at Seahouses, for his help and support. The costs of rings and other essential equipment has been met by the Natural History Society of Northumbria, and by personal contributions from the team, whom we thank for their hard work and continued enthusiasm.

CETACEAN REPORT 2004

Harbour Porpoise *Phocoena phocoena*

The most regularly reported cetacean around the Farne Islands with sightings on forty-eight dates between 24 March and 18 November. Sightings peaked in April then again in late summer-early autumn, with June and October producing only one sighting each. The number of sightings may have been affected by the weather, as these small, unobtrusive cetaceans can be very difficult to pick out in rough conditions. Observers wishing to see this species should pay particular attention to the area half way between Inner Farne and

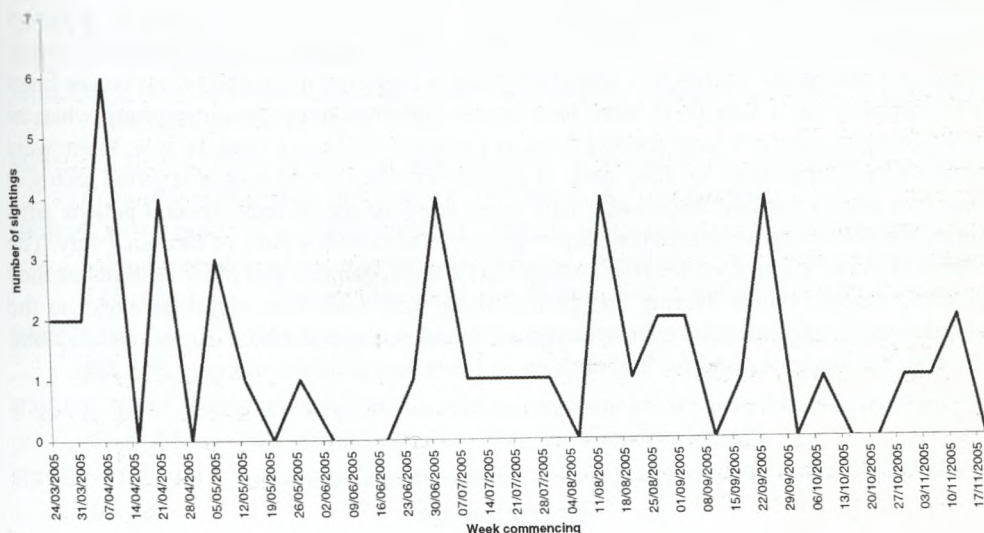


Figure 7 Number of sightings per week of Harbour Porpoise.

Seahouses where the majority of this year's sightings occurred. All sightings during the first part of the season were of one to three individuals until a school of at least thirty was found in mid-August. This group, which contained several juveniles, lingered off the south of Inner Farne for several days feeding with large numbers of shags. Groups of three to ten were then seen sporadically throughout September, with sightings after that very limited until up to six reappeared in Inner Sound in mid-November.

Bottle-nosed Dolphin *Tursiops truncatus*

An excellent year for this species with possibly as many as eight individuals seen. The first

sighting was of two seen briefly in a large feeding frenzy of birds north of Big Harcar on 15 July. The next occurred in Inner Sound as it passed through on 25 July. Three more were seen early in the morning on 25 August when they moved south through Staple Sound together and, also from the outer group, a single was seen south-east of Longstone on 4 September. The final individual appeared in Inner Sound on 26 November. This proved to be one of the wildlife highlights of the year for the islands as it spent two hours bow-riding the wardens' Zodiacs and allowing very close approach. This individual was also seen on 3 December when it followed the boat taking the wardens off the islands into Seahouses harbour and was then seen until the year's end as it followed boats in Inner Sound.

White-beaked Dolphin *Lagenorhynchus albirostris*

The species is a regular late-summer visitor into the northern North Sea and one sighting this year fitted into this pattern. On 19 August a pod of five animals moved north close into the cliffs of Inner Farne. With several visitor boats in close attendance, the group turned and headed off to the south, passing close by the island again and allowing all the visitors and wardens present on Inner Farne to get good views.

Minke Whale *Acutorostrata balaenoptera*

The commonest whale in the North Sea, this small baleen species was seen on several occasions around the islands this year. Following a single photographed from visitor boats off Crumstone on 4 July there were two further sightings from the outer group when an individual was seen in a large feeding frenzy of seabirds on both 15 and 16 July. There were no further sightings until the first week of September when a visitor boat reported seeing at least two whales feeding three and a half miles south of the islands. Several pelagic trips during the following week provided sightings in this area with a peak of four on 4 July. The whales could often be seen feeding amongst grey seals, gannets and other seabirds as they followed herring shoals. During this period, there were also three sightings closer to the islands with singles seen from Brownsman on 6 and near the Bush on 10 and an adult and calf watched lunge-feeding for half an hour in Inner Sound on the morning of 8 July.

REFERENCES

- BEAUGRAND, G, BRANDER, K M LINDLEY, J A, SOUSSI S and REID P C (2003). Plankton effect on cod recruitment in the North Sea. *Nature* 426: 661-4.
- BOLAM, G (1912). *The Birds of Northumberland and the eastern borders*. Alnwick: H H Blair.
- BOOTH, H P (1911). The nesting of the Common Gull on the Farne Islands. *Naturalist* 652: 179.
- BOOTH, H P (1913). The nesting of the Common Gull on the Farne Islands. *Naturalist* 667: 237.
- BOU RECORDS COMMITTEE (1991). Fifteenth report. *Ibis* 133, 438-441.
- BROWN, W (1866). A short account of a visit to the Farne Islands during the breeding season of 1865. *Zoologist*, 2nd edition series 1: 483.

- GODDARD, T R (1925-48). Field notes Ms.
- GODDARD, T R (1946). *The Farne Islands Ornithological Report for 1946*. Prepared for the Farne Islands Committee of the National Trust.
- HARVIE-BROWN, J A, CORDEAUX, J, BARRINGTON, R M and MORE, A G (1884). *Report on the migration of birds in spring and autumn of 1883*. London: West, Newman and Co.
- HARVEY, R and STEEL, D (2004). List adapted from standard *status definitions* used by Northumberland and Tyneside Bird Club annual bird reports.
- HAWKEY, P and HICKLING, G (1974). *Birds on the Farne Islands in 1974*. Farne Islands Local Committee.
- HAWKEY, P and HICKLING, G (1973). *Birds on the Farne Islands in 1973*. Farne Islands Local Committee.
- HAWKEY, P (1991). The Birds of the Farne Islands. *Trans. nat. Hist. Soc. Northumbria*. **55**: 155-192.
- KERR, I (2001). *Northumbrian Birds: Their History and Status up to the 21st Century*. The Northumberland and Tyneside Bird Club.
- MARCH, H (1916). Ms. letter to E Miller. Natural History Society of Northumbria archives (NEWHW: 1996. H314.4).
- MILLER, E (1911-1914). Field notes Ms. Natural History Society of Northumbria archives (NEWHM: 1996. H313)
- MITCHELL, P I, NEWTON, S F, RATCLIFFE N and DUNN, T E (2004). *Seabird Populations of Britain and Ireland*. London, T. & A.D. Poyser.
- NOBLE-ROLLIN, D C and REDFERN C (2002). Sandwich Tern. *The Migration Atlas: movements of the birds of Britain and Ireland*. Wernham, C V, Toms, M P, Marchant, J H, Clark, J A, Siriwardena, G M and Baillie, S R. London, T. & A.D. Poyser.
- PAYNTER, J de C (1894). Report on the breeding of the Heron on the Farne Islands. *Field* **83**: 536.
- PYBUS, W M (1903). Presidential Address to members of the Tyneside Naturalist's Field Club, 2 May 1902. *Trans. nat. Hist. Soc. Northumbria* **14**: 176
- STEEL, D (2004). Birds on the Farne Islands in 2003. *Trans. nat. Hist. Soc. Northumbria*. **64**: 43.
- THORP, C F (1943). The Farne Islands Association Report 1943.
- WALTON, J (1993). Birds on the Farne Islands in 1992. *Trans. nat. Hist. Soc. Northumbria*.
- WALTON, J (1994). Birds on the Farne Islands in 1993. *Trans. nat. Hist. Soc. Northumbria*. **57**: 115-133.
- WALTON, J (1995). Birds on the Farne Islands in 1994. *Trans. nat. Hist. Soc. Northumbria* **56**: 205-224.
- WALTON, J (1996). Birds on the Farne Islands in 1995. *Trans. nat. Hist. Soc. Northumbria*. **56**: 393-414.
- WALTON, J (1997). Birds on the Farne Islands in 1996. *Trans. nat. Hist. Soc. Northumbria*. **57**: 93.
- WALTON, J (1998). Birds on the Farne Islands in 1997. *Trans. nat. Hist. Soc. Northumbria*. **58**: 323-345.

- WALTON, J (2000). Birds on the Farne Islands in 1999. *Trans. nat. Hist. Soc. Northumbria*. **60**: 39-58.
- WALTON, J and MAHER, M (1999). Birds on the Farne Islands in 1998. *Trans. nat. Hist. Soc. Northumbria*. **59**: 37-58.
- WALTON, J and RICHARDSON, D (1991). *Birds on the Farne Islands in 1991*. Natural History Society of Northumbria.
- WATT, G (1950). *The Farne Islands Ornithological Report for 1950*. Prepared for the Farne Islands Committee of the National Trust.
- WATT, G (1951). *The Farne Islands Ornithological Report for 1951*. Prepared for the Farne Islands Local Committee of the National Trust.
- WATT, G (1951a). *The Farne Islands: their history and wildlife*. London Country Life
- WILSON, A E (2000-2005). A history of the Bird Numbers on the Farne Islands. (Ms and computer database).
- VOOUS, K H (1977). List of recent Holarctic species *Ibis* **119** 223-406.

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**Sonnet on the memory of Thomas Bewick,
suggested by seeing his name so honourably mentioned
at the recent dinner of the Natural History Society.**

I think I see thee now, with beaming eyes,
Unfolding nature's wonders to the sight
Of listening youth, or bending with delight
O'er works, whose excellence could charm the wise.
Oh! sure thy simple heart was one to prize
The fame, forth blazoned by the new born light,
When from the darkness of art's dreary night
Thou badst thy morning of revival rise—
Yet, hadst thou seen the joy thy talents bring
To young and guileless minds, the love they call,—
The tenderness for each created thing,
And reverence for the mighty cause of all—
These would have formed a meed more dear to thee,
And 'tis for these, I bless thy memory.

Anonymous (1838)

The Newcastle Journal, Saturday 6th October 1838.



THOMAS BEWICK AND THE NATURAL HISTORY SOCIETY: A PREFACE

This issue of the *Transactions* is devoted to Thomas Bewick. June Holmes' definitive paper greatly extends the account she gave of the portraits of Bewick in her 2003 exhibition at the Hancock Museum, mounted to celebrate the 250th anniversary of his birth. The other paper was written in 2004 for the bicentenary of the completion of his masterwork, the *History of British Birds*. We rarely concentrate so heavily on biography so it seems right to summarise in a preface Bewick's importance to the Society.

He had been an honoured member of our parent body, The Literary and Philosophical Society, from which many of our early members were later drawn. Innumerable others must have had their interest in nature stimulated by his books. In 1822 the 'Lit and Phil' became the owner of the museum collected many years earlier by Marmaduke Tunstall of Wycliffe in Yorkshire. Bewick had visited Wycliffe in 1791, soon after Tunstall's death, to draw specimens for his *History of British Birds*. That museum later passed to our Society and more than thirty of the specimens figured by Bewick remain in our collections.

Bewick died at the age of 75 on 8 November 1828, nine months before our foundation as 'The Natural History Society of Northumberland, Durham and Newcastle upon Tyne' on 19 August 1829. Yet his spirit pervaded the new society as if he had been its founder, so many were the naturalists who formed it that had been inspired by his example. Of the first vice-presidents, at least Sir John Trevelyan and his son W C Trevelyan, Sir Matthew Ridley, P J Selby, G T Fox, and H T Liddell had known Bewick well; as had the committee members James Losh, the Revd William Turner, John Adamson, G C Atkinson, Emerson Charnley, and George Wailes. Some of Bewick's closest friends were members, among them Joseph Crawhall, Thomas Doubleday, Henry Hewitson, John Hodgson and his printer and publisher, Edward Walker. Others had been customers of Bewick's firm.

George Clayton Atkinson, in a manuscript memoir (now in the Society's archives) spelled out in delightful detail the influence Bewick had on him in the years 1824–1828, when he was in his late teens. The version later published in our *Transactions* as 'Sketch of the Life and Works of the late Thomas Bewick' was less intimate but added invaluable information from other friends of Bewick, including the brushmaker taxidermist Richard Wingate. Bewick's published letters to John Dovaston of Shropshire in the same years show him again as both mentor and lifelong student – 'nothing' he wrote, is 'deserving of being called knowledge but a knowledge of nature'. In 1877 Sir W C Trevelyan, still after 48 years a vice-president of the Society, published in our *Transactions* some of the letters exchanged more than half a century earlier between Bewick and himself, his father and his grandfather, an example of the wide connections and influence Bewick had in all walks of life and particularly among the great landowners of his own county.

Atkinson was the only one to be named of four 'young ardent naturalists' who used to visit Bewick in the last years of his life (*Bewick to Dovaston*, 1968; p 114). John Hancock, born like Atkinson in 1808, was almost certainly another of the four and their brothers Richard Atkinson and Albany Hancock may have been the others. All but Richard soon afterwards played important roles in the new society. Atkinson's 'Sketch of the Life ..' was read to the Society on 15 June 1830 in the first year of its existence. It is a remarkable achievement by a man of 22, and the choice of Atkinson by his seniors must reflect their awareness of his very special and close friendship with the ageing naturalist.

In January and February 1829 two unfamiliar wild swans were shot in Northumberland, one at Prestwick Carr, and the other near Haydon Bridge. The second of these was infor-

mally described as a new species, but not named, by Richard Wingate on 20 October 1829 at the first scientific meeting of the Society. The subsequent formal description and naming are correctly attributed to the Londoner, William Yarrell (1830, *Trans. Linn. Soc.*), but it is almost certain that the idea of the name Bewick's Swan *Cygnus bewickii* originated in Newcastle. Yarrell had known and admired Bewick and would have needed little persuasion. The route of the 'leak' of the proposed name may have been young George Atkinson himself – by then an enthusiastic 'Curator of Ornithology' of the Society – or it may have been by way of the active (largely entomological) correspondence of George Wailes, a Newcastle solicitor, with the Revd Leonard Jenyns of Cambridgeshire who was at the time in constant touch with Yarrell. On 13 January 1830, Wailes wrote to Jenyns 'We have had severe weather for the past month (many Swans have been seen & some specimens of *Cygnus Bewickii* Selby's M.S.S. have been shot but I regret to say they have been metamorphosed into Swans' down Muffs!)'. Six days later on 19 January, Yarrell described five swans in a paper to the Linnean Society and proposed to call the species *Cygnus bewickii*. Too late by a month to secure the formal attribution for Newcastle, on 16 February P J Selby read to our Society his paper 'Observations on the new species of swan, discovered by Mr Richard Wingate, of Newcastle upon Tyne' and in the published version (Selby, 1830) he wrote 'it has happily been suggested, that it should receive the specific appellation of *Bewickii*, as a mark of respect, no more than due, to the memory of our late celebrated naturalist and engraver, Mr Thomas Bewick ...'. Crucially, Yarrell published before Wingate or Selby (our Society has not always been notable for prompt publication). Yarrell's priority was not begrudged and in 1833 he was elected an honorary member of the Society. Sadly, Wingate, who probably could not afford to pay the subscription but contributed many well-mounted specimens to the museum and for years had exchanged bird lore with Bewick, never became a member.

The association of the Society with Bewick received solid support in the 1880s with the donation by Isabella Bewick (Thomas's last surviving daughter) of a collection of 45 volumes from his library and her subsequent bequest of the family's portraits of her father, several documents, and a very important collection of his watercolours, pencil drawings and engravings. These, with some later additions from other sources, remain our most important single archival collection and a rich source for research.

In its early days the Society held formal annual dinners. In August 1838 there was a particularly grand one, two days after the close of the first Newcastle meeting of the British Association for the Advancement of Science. Professor William Buckland of Oxford was a distinguished guest and concluded his speech and raised 'loud applause' from his audience by congratulating Newcastle on having been home to such an outstanding naturalist as Thomas Bewick. Six weeks later there appeared in the local papers an anonymous 'Sonnet on the memory of Thomas Bewick, suggested by seeing his name so honourably mentioned at the recent dinner of the Natural History Society' (reprinted here on page 132). Nowadays formal dinners and the public expression of sentiment in poetry are less common, but those who study the papers that follow will recognise the references to beaming eyes, and to Bewick's influence on listening youth, and may think themselves wise to be charmed by his many contributions to natural history.

D G-M

Sources: the Society's *Transactions* and *Annual Reports*; *Bewick to Dovaston* (1968) and *Bewick's Memoir* (1975) – see references on pages 252-254; Wallace, I (2005) *Leonard Jenyns: Darwin's lifelong friend* (Bath Royal Literary and Scientific Institution) and personal communication; *The Newcastle Journal* (1838).

THE MANY FACES OF BEWICK

AN ILLUSTRATED CATALOGUE OF THE PORTRAITURE OF THOMAS BEWICK, HIS FAMILY AND APPRENTICES

June Holmes

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This article is based on the exhibition curated by the author in July-October 2003 as the contribution of the Natural History Society of Northumbria to the celebrations of the 250th anniversary of the birth of Thomas Bewick.

INTRODUCTION

There are over ninety known paintings, engravings and other images of Thomas Bewick (1753-1828). Twenty-three of them were drawn, painted or sculpted from life, and many other derivatives of these were produced in his lifetime, for Bewick's fame spread quickly with the advent of his books *A General History of Quadrupeds* and *History of British Birds* in the 1790s. Others appeared later, for book illustrations or to satisfy the growing numbers of avid devotees, the Bewick collectors. A few were made as public monuments.

The Natural History Society of Northumbria is fortunate to have more varied and numerous Bewick portraits than are to be found in any other collection, and most of the other important original portraits are in other collections in and around Newcastle upon Tyne. These formed the nucleus of an exhibition curated by the author at the Hancock Museum in July to October 2003 as the Society's contribution to the celebration of the 250th anniversary of Bewick's birth. That exhibition brought together a larger assemblage of the existing portraiture of Bewick than had ever been attempted before, including six of the then eight (now ten) known extant oil paintings. But in addition the catalogue attempts to bring together images and accounts of as many Bewick portraits as possible, including those not represented in the exhibition or shown only as photographic reproductions.

The portrait by T S Good (23, below), made when Bewick was seventy, seems to have been the only one actually commissioned by the family, for which they paid 25 guineas.¹ All the others, apart from the few given as gifts to the family, appear to have been painted or engraved by or for his admirers. During his lifetime, the artistic frenzy culminated in his receiving a high accolade from the Newcastle *literati* for his 'uncommon Genius and extraordinary Talents', the commissioning of a marble bust by E H Baily (22).

A letter from Bewick to Thomas Ranson, written on 12 December 1815, reveals a great deal about Bewick's attitude to the portraits taken at around that time. While not actually commissioning an engraving, he seems to have been negotiating for engravings to be made by three different men from three different painted portraits, apparently hoping to choose one to bind into his books, the *Quadrupeds* and *British Birds* (a plan which never came to fruition). Bewick had seen posted in Newcastle the recently issued prospectuses for Ranson's engraving of Nicholson's portrait in oils (respectively 9c and 9); and he was

¹ Letter from Thomas Bewick (T B) to Good 16 May 1827; ms private coll., transcribed and supplied by Iain Bain.

evidently alarmed to see how large the image would be:

... if the plate is done the size named – the Print cannot suit to bind up in any of my publications – therefore I am quite at a loss to know how this is and also what Longman's² people can do with it, if it is too large for the Books ... [he feared that Ranson would therefore not be adequately paid for his work] ... Mr. Nicholson painted another likeness of me of a smaller size, in Water Colours, while we were at Chillingham, but for what purpose I know not [11] ... While Mr. Summerfeld was in Newcastle some years ago[,] upon seeing my likeness, done by Murphy [6], he obtained a promise from me that I would lend it to him for the purpose of his making an Engraving from it for my Books – from that time until I think about last Christmas – I never heard a word about Mr. Summerfield & supposed from the ill state of health he was in, that it was likely he might be dead – he however put me in mind of my promise & I sent him the picture, but with some reluctance as I was not easy and in the apprehension that it might hurt the sale of yours ... [Bewick was worried that he might never see his Murphy miniature again and asked Ranson to visit Summerfield and enquire what he is doing and when he might expect its return] ... my much esteemed young Friend Mr. Nicholson for I found not long after he so kindly painted the grand Portrait, (as I think it) [9] – some gentlemen in Newcastle, my warm friends, did not like it some of them indeed went so far as to call it an ourageous likeness [sic] – but before I knew this I was particularly requested, & consented to sit again, to Mr. Ramsay here – & I supposed at the time that it was meant as a private portrait [13] & I dare say at the time it was meant for that only – it has however given such a high satisfaction that these friends now talk of having it excellently engraved – I have mentioned to some of them how you were situated &c and strenuously recommended to them that you should do it – at this they hesitate – and wish to see your execution of the plate you have in hand, before they determine upon anything – Mr Ramsay recommends it being done in the stippled manner [see 13c] & shows several portraits done from his paintings, in that way, & they certainly are done very correctly like the Painting – I think he says they are done by Turner – I think Mr. Ramsay's Portraits one & all are the best that ever were done – he gives the Character as well as the likeness so correctly, that they look like the person alive – they ought indeed not to be called likenesses, but Fac similes. Mr. Ramsay is also a very agreeable, kind, good man, as well as a first rate painter.³

By 1815 it is clear that several major portraits had been painted, and that the public was already pressing for these to be made available as engravings. Several more painted portraits followed in 1823, perhaps encouraged or instigated by Bewick when he was approaching his seventieth birthday, 'his father and grandfather had both died about the age of 70, and he had a kind of presentiment that the same period would be fatal to him also' (Atkinson, 1831, p.153).

Bewick scholars have questioned the symbolism of some of the portraits speculating on whether Bewick carefully arranged his image to show his position and status in society.

² Longman's was the principal London publisher of Bewick's books.

³ Letter T B to T F Ranson 12 Dec 1815; ms Pease 178, p.71v, *vide* Iain Bain.

Careful study of all the images and the documented evidence suggest that the artists manipulated the man rather than *vice versa*. The profoundly symbolic *Lost Child* by Ramsay (19a) was painted in 1823 at the height of his fame. The painting by Nicholson which Bewick refers to as his 'grand portrait' (9) shows him sitting, pencil in hand with his books at an open window; only later was it engraved to show St Nicholas' Cathedral in the background to give him a sense of place.

Although Bewick would have been deeply satisfied with the attention afforded to him as a result of his books, the words of the Morpeth writer and professor of logic and metaphysics, Robert Blakey (1795-1878), who had met Bewick in the latter years of his life, ring true: 'Bewick was not what may be called a vain man of his great fame and acquirements, for pride he had none' (Hawkins, 2003 p.70).

The fact that he would not allow the sculptor Baily to represent him in 'Romanesque' drapery – a toga – for his marble bust but insisted that he portrayed him dressed in his normal clothes, coat, waistcoat, neckcloth and ruffled shirt, is typical of the unpretentious nature of the man (Robinson, 1887 p.155).

Which of these *Many Faces* bears the closest resemblance to Thomas Bewick? Each reveals a different side to his personality, from the National Portrait Gallery's rather pensive late portrait by Ramsay (20), to the convivial Bewick, attributed to Ramsay, held by the Literary and Philosophical Society (17). Bewick and his family favoured Ramsay's earliest portrait (13) as a true likeness:

*Ramsays portrait which he presented to my dear Mother and which now graces our drawing room, – is the best likeness we have of my Father – except the Bust by Baily R...A.. & perhaps the small painting by Good which I consider a coarse likeness.*⁴

Bewick's son Robert admired the watercolour portrait by Nicholson, painted for Emerson Charnley (11). They all agreed that the Baily bust, taken from a life mask, was a good likeness but lacked the warmth of a portrait. Indeed, the marble eyes do stare blankly, whereas it was said of Bewick that 'his dark eyes beamed with the fire of genius'.⁵

Later the family became increasingly disheartened by successive copies, each lacking some of the quality and likeness of the originals. Some of them they called *spurious abominations*.⁶

Thomas Bewick was celebrated in his lifetime, and the great fascination with his life and work continued unabated throughout the lives of his family and long after their deaths. When Isabella died in 1883, the last to survive of Bewick's four children, the family possessions were dispersed. A large collection of watercolour and pencil drawings was pre-

⁴ Ms comment by Jane Bewick in the family copy of Charnley's edition of *Select Fables*, p xxxi (Newcastle City Library; Pease 15).

⁵ Anonymous 'Brief Memoir' quoted by Dibdin (1838, p. 333n) and by Bain (1975, p.xxv) from Pease 178, vol.1, p.110.

⁶ Jane Bewick's annotations in the family copy of Charnley's *Select Fables* (1820) Pease 15, p.xxv, quoting what she calls 'Southey's lament on the subject of his different portraits' –

'I recognise all these unlikenesses,
Spurious abominations though they be,
Each filiated on some original;

(Robert Southey's 'Epistle to Allan Cunningham' first published 1829).

sented by her executors to the Natural History Society of Northumberland, Durham and Newcastle upon Tyne; this included almost all the Bewick family portraits. Isabella Bewick had earlier deposited another large collection of drawings at the British Museum in 1882. After her death, some of the personal belongings went to the Ward family, relatives of Thomas Bewick's great nephew Robert Ward, and the rest were auctioned. The only family portrait of Bewick that did not come to the Society but was sold in the auction, held in February 1884, was Lot 332, a fine proof of the 1882 engraving by 'Theodore' [i.e. Leopold] Flameng (11b).

Some of the portraits of Bewick have been listed before, by Mackenzie in 1827 who mentioned seven originals and four secondary engravings; by J.G. Bell in 1851 who recorded nine; and by Robinson in 1887, who copied Bell and added three more, while mentioning others in passing. David Croal Thomson (1882) and Julia Boyd (1886) also described the existing paintings without giving a numbered list. Boyd and Robinson tend to be strongly derivative, though each has some new information to add. The fullest modern list is that of Walker (1985) who mentions most of the principal images, in the course of giving details of the National Portrait Gallery's Ramsay (20). Nevertheless Walker's account does contain some confusing inaccuracies.⁷

A few portraits mentioned in the 19th century are now lost or no longer certainly identifiable. James Ramsay's oil study of 1823 (19) was stolen in the 1970s. In 1832 William Cobbett visited the home of the Newcastle lawyer, Armorer Donkin, who had been one of Bewick's close friends and a legal adviser: 'At Mr Donkin's I saw a portrait of Bewick which is said to be a great likeness, and which, though imagination goes a great way in such a case, really bespeaks that simplicity, accompanied with that genius, which distinguishes the man'.⁸ This is not now identifiable. A portrait (8) described by Mackenzie in 1827 as 'of Mr. Bewick, when in the prime of life, by the late Robert Dodds, engineer' is now unknown,⁹ as are those by George Haugh (4) and Thomas Busby (12), a portrait by William Bell that was owned by William Bewick in 1864 (7) and possibly another by Ramsay that William Bewick described (17a). At the same time, a portrait attributed to James Ramsay, now the property of the Literary and Philosophical Society in Newcastle (17), one recently discovered in the Laing Art Gallery (18) and another copied from Ramsay (13d) all lack clear provenances and any of them might be one or other of these 'lost' paintings.

Several portraits have come to light in the last four years and it seems very probable that others exist, mainly in private collections. This catalogue can therefore be seen only as a provisional listing of every known portrait to date.

⁷ His Ramsay portraits numbered 1 and 4 are certainly the same, number 13 in the present catalogue; the oil he attributed to Sir Charles Bell was painted by William Bell (7); and a watercolour by Miss E.D. Crawhall is recorded only as a ceramic (11d). He also mentions in addition to Plimer (3), Murphy (6), Nicholson (9a) and Nicholson (11), which he wrongly calls a copy of the Nicholson oil (9), "A different watercolour is known HL seated to L in grey suit head to R." without offering any location or source. This last is in fact Nicholson (11).

⁸ William Cobbett *Rural Rides*; letter headed Sunderland 4 October 1832. Cobbett was presented by Donkin (bap.1779-1851) with 'an elegant copy' of Bewick's 'fables', and by Mr William Armstrong (father of Lord Armstrong who was later a President of the Natural History Society) with a print of Bewick's last engraving 'Waiting for Death'.

⁹ Mackenzie, 1827, p.585n.; Hall, 1982, p.59.

Word portraits

*... his personal appearance was rustic; he was tall and powerfully formed ... His manners were somewhat rustic too, but he was shrewd, and disdained to ape the gentleman. His countenance was open and expressive, with a capacious forehead, strongly indicating intellect; his dark eyes beamed with the fire of genius.*¹⁰

We may enrich our understanding of the portraits by looking at the descriptions of Bewick's features and idiosyncrasies given by his friends which afford us a further glimpse into his character. The American artist and naturalist John James Audubon who visited him in 1827 commented

He was a tall stout man, with a large head, and with eyes placed farther apart than those of any man that I have ever seen: ¹¹ – a perfect old Englishman, full of life, although seventy-four years of age, active and prompt in his labours ... Now and then he would take off his cap, and draw up his grey worsted stockings to his nether clothes; but whenever our conversation became animated, the replaced cap was left sticking as if by magic to the hind part of his head, the neglected hose resumed their downward tendency, his fine eyes sparkled, and he delivered his sentiments with a freedom and vivacity which afforded me great pleasure. (Audubon 1835, pp. 300-301).

He was sitting by the fire in a large elbow-chair, smoking. He received us most kindly, and in a very few minutes we felt as old friends. He appeared a very large athletic man, then in his seventy-first year, with thick, bushy black hair, retaining his sight so completely as to read aloud rapidly the smallest type of a newspaper. He was dressed in very plain brown clothes, but of good quality, with large flaps to his waistcoat, grey woollen stockings, and large buckles. In his underlip he had a prodigious large quid of tobacco. (John Dovaston, on first meeting Bewick in the 1820s; Dovaston, 1829-30).

He usually kept a quid of tobacco in his under lip, as represented by BAILEY in the bust, and when he became energetic transferred it pro tempore to the table before him, and resumed it when his fervour was abated. (Atkinson, 1831).

The quid features in all his late portraits as well as the bust. The fifteen-year-old Hannah Gurney had found it less than attractive when she visited Bewick at the workshop in 1802:

*he is a large, fat, dark man pitted with the small pox, very ordinary, & what does not serve to embellish his person, chewed tobacco. He was very civil & shewed us a great number of his vignettes which entertained us very much.*¹²

Robert Blakey, late in Bewick's life, commented:

He was then an interesting-looking old man, of portly size, and of a good –humoured and social temperament. [Hawkins, 2003 p.70].

The young George Clayton Atkinson (1808-1877), who claimed to have 'for the last few years of his life [from 1825], enjoyed a closer intimacy with him than any other person, not attached to him by relationship', wrote a vivid description of the elderly Bewick:

¹⁰ Bain 1975, p.xxv, quoting an anonymous memoir in Pease 178, vol.1, p.110.

¹¹This can certainly be discerned in the portrait by Ramsay (13).

¹² Tattersfield (1999, p.132), quoting from the Journal of Hannah Burney (August-October 1802), Backhouse Paper 275, pp.40-41, at Durham University Library. Hannah was the daughter of Joseph Gurney, a senior partner in the Gurney Bank, Norwich.

His language was extremely forcible, and the words he made use of, those calculated in the plainest and most familiar manner to convey his meaning; I regret that partly on this account, which rendered his expressions, at times, rather coarse, and partly from the difficulty of conveying the character of his dialect, depending in great measure on variety of intonation, I must abstain from introducing here what might otherwise have been amusing.... his pronunciation ... was decidedly broad, though without the burr ... characteristic of most Northumbrians. ... though interspersed with expressive words of an original description, his grammar was perfectly correct, and his words very well chosen – these he uttered with a kind of serious earnestness, quite his own, and sometimes expressed his ideas ... with a tone so energetic and solemn, as to impart a degree of grandeur to his conversation, particularly when it turned on the beauties of nature, or the wonderful and benevolent provision of its great Author ...

The similarity of his character with that of ROBERT BURNS, always forcibly struck me: the same strength of understanding, keenness of observation, and simple originality of thought and expression ... humanity and tenderness of disposition, quick perception of the ridiculous, with eminent power of portraying it ... their common understanding, and consequent admiration and regard for nature.

... he was a stout fine looking old man, five feet ten or eleven inches in height, very well made, with nothing remarkable in his costume, except a brown silk cap, which he usually wore when sitting at work.

When animated in conversation, and he was seldom otherwise, his eye was peculiarly fine, and imparted a vivacity to his countenance very difficult to describe or forget: there was more of intelligent benevolence and candour in it than I ever saw in another, but it was mixed with an earnest gravity almost bordering on severity, when speaking in disapproval, and with the brightest animation, when discussing the beauties and wonder of nature. ... (Atkinson, 1831).

THE CATALOGUE

The catalogue is divided into four main categories: (A) Bewick's own vignettes that include figures believed to represent himself; (B) the portraits of him from life and their derivatives; (C) posthumous and spurious portraits; (D) portraits of members of his family and (E) the few known portraits of his apprentices.

The portraits exhibited in 2003 are marked with an asterisk. The catalogue follows more strictly the broadly chronological arrangement of the exhibition, listing derivative portraits after their originals, wherever possible in primary and secondary chronological order. Entries enclosed in square brackets are those whose whereabouts are unknown or to which the author was unable to gain access.

Each original portrait in the catalogue is numbered and the copies derived from it follow identified by letters of the alphabet. The name of the artist stands at the top of the heading (except in section A) and is followed by a brief definition of the item, with its size and date. On the next line is the source of the item displayed at the exhibiton (where appropriate) and below that references to the portrait in the literature or to the whereabouts of the items not shown. The following references require explanation:

Bell numbers 1-9 refer to the list in J G Bell's *Descriptive and critical catalogue* (1851).

Robinson numbers 1-12 and note refer to the list in Robinson (1887) pages 270-273.

Pease numbers refer to items in the Pease Collection in Newcastle City Library as catalogued by Anderton and Gibson (1904).

A BEWICK IN HIS OWN VIGNETTES

1 Bewick often drew from his own experiences to enliven the vignettes and the backgrounds to the main illustrations in his books, and he included self-portraits in a number of them. A few such portraits have been positively identified from manuscript notes left by his daughter Jane;¹³ others are based on anecdote or speculation. Without ostentation, they show how the artist regarded himself – as a boy making a snowman or scaling the city walls, as a young traveller drinking from his hat and as an older man playing for his supper as a blind fiddler.

*1a Wood engraving, vignette, 'The Snowman at Cherryburn'

First published in *History of British Birds* Volume 1, 1797 (page 78).



The boy on the stool modelling the snowman with a trowel was said by Jane Bewick to be her father.¹⁴ Dobson (1884, p.125) quotes her as saying that one of the other boys was Thomas's brother John.

*1b Wood engraving, vignette, 'Boys and Ships'

First published in *History of British Birds* Volume 2, 1804 (title page).



Bewick is believed to be the onlooker on the right with the distinctive hairline, but there is no documented reference to this. The skyline of Newcastle in the background removes us from the scene of his boyhood although as Bewick himself recounts he amused himself

¹³ In Jane Bewick's notes recorded by Iain Bain in his *Thomas Bewick Vignettes* (1979b) pp.16-23, in correspondence (see Dobson, 1884, pp. 124-127) and in discussion with Robinson (1887).

¹⁴ Bain (1979b, p.17), and reported by Robinson (1887) pp. 181-2. Two companions were named as William Johnson and Joe Liddell of Eltringham.

by playing with toy boats as a child 'making Dams & swimming Boats in a small Bourne' (*Memoir*, p.4).

***1c Wood engraving, vignette, 'The Perilous Climb'**

First published in *History of British Birds*, Volume 2, 1804 (page 109).



The tower is a rough approximation to a turret on the city walls of Newcastle visible from Bewick's home at the Forth. The idea that Bewick portrayed himself as the adventurous youngster climbing the tower looking for Jackdaw's nests, is probably a later invention by his family: Dobson (1884, p.48-9) quotes it as hearsay via Jane Bewick, and Newcastle was in any case not where Bewick spent his childhood. Like many of Bewick's vignettes, the image is probably a combination of reminiscence, observation and imagination.

1d Wood engraving, vignette, 'The poor lad is sore beset with Madam's dogs'

First published in *History of British Birds*, Volume 1, 1826 (page 382).



The similarity between the boy in the engraving 'Boys and Ships' and the lad in this vignette has led to the speculation that this is another self-portrait of Bewick as a child. Bain (1979b, p.18) quotes the title above from Jane Bewick's notes. Jane added that 'the goats head is the crest of the Bewicks'. This may imply that the lad is young Thomas as an apprentice, walking to Cherryburn; and that he had such an experience as he passed Close House, home of the aristocratic Bewicke family. Tattersfield (1999, p.64-5) goes further and identifies the lady with the parasol as Lady Bewicke (c.1732-1779) *née* Mary Hewish and suggests that this is an ironic comment upon the disparity of their position in society despite the similarity of their surnames.

1e **Wood engraving, vignette, 'Joe Liddell tracing a hare'**

First published in *History of British Birds*, Volume 1, 1797 (page 147).



In this evocative rural winter scene we see Bewick's boyhood friend Joseph Liddell, with his dog, tracking a hare through the snow-clad fields. Bewick places himself in the engraving in the far distance behind a hedge, pointing out the fleeing hare to his companion.¹⁵

*1f **Wood engraving, vignette, 'A country man drinking at a spring'**

First published in *History of British Birds* Volume 1, 1797 (pages xxx and 177).



The vignette of this traveller drinking water from the flaps of his hat was associated by William Chatto with Bewick's walking tour of Cumberland (and Scotland) in the summer of 1776.¹⁶ Dobson (1884, p.125) stated that Jane Bewick confirmed in a letter to Edward Ford that the traveller was Bewick, though this was not mentioned in her notes on the vignettes.¹⁷

*1g **Wood engraving, The Pintado**

First published in *History of British Birds* Volume 1, 1797 (page 293).

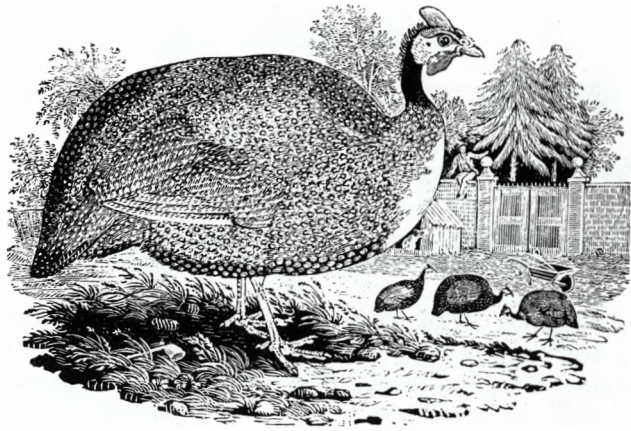
Bewick is the figure sitting on the wall in the distance, watching the Pintados (Guinea Fowl) while a dog barks at him from its kennel below his feet. Robinson (1887, p.177) tells the story of this engraving, which he had heard from Bewick's daughters. The birds

¹⁵ Bain, 1981 Vol. 2, p.161 and Robinson, 1887, p.182.

¹⁶ W A Chatto in Jackson (1839) p.565.

¹⁷ Jane Bewick's notes on the vignettes as recorded by Bain (1979b, p.16). A similar scene appears in a vignette in "The Blossoms of Morality" (1796, p.32 and in later editions). Here the drinker is younger, and has a dog with him. The engraver is uncertain, but was probably John Bewick.

belonged to John Hodgson 'the hospitable owner of Elswick Hall', a short walk from the Bewicks' cottage on the Forth. Finding the gate locked, Bewick climbed the wall to make his sketch.



1h Wood engraving, vignette, 'Two blind fiddlers'

First published in *A General History of Quadrupeds*, 1790 (page 456).



Bewick's figures, two blind fiddlers, led by a child, are said to be parodies of himself and his partner, Ralph Beilby. Joseph Crawhall wrote in his *Sundry memoranda relating to Thomas Bewick* 'Jane Bewick told me that the old fiddler with the boy . . . the one better dressed was Beilby, the gentleman engraver – the other was meant for her Father Thomas Bewick'.¹⁸

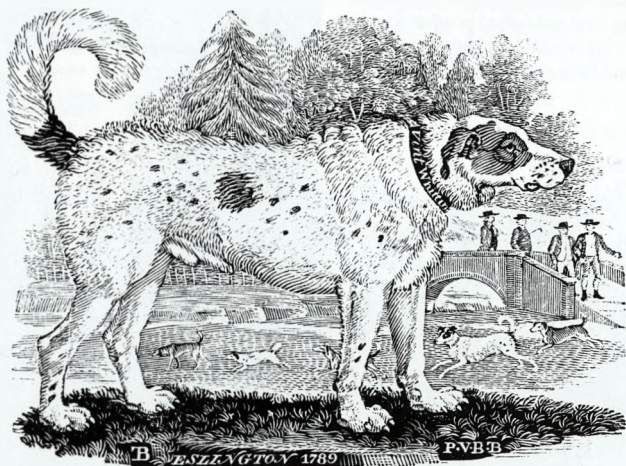
1i Wood engraving, vignette, The Newfoundland Dog

First published in *A General History of Quadrupeds*, 1790 (page 306).

The sketch was made at Eslington, Northumberland, in the spring of 1789 while Bewick was visiting John Bell, steward and agent to Sir Henry Liddell. He was returning with his

¹⁸ Joseph Crawhall ms (1821-1896) McGill University Libraries, Montreal, Canada. Jane Bewick's notes (Bain, 1979b, p. 22) makes no mention of this identification, merely pointing the moral of the blind fiddlers trusting an illiterate child who cannot read the sign warning of steel traps.

friend William Preston, the printer, from their visit to Chillingham where Bewick had sketched the wild bull for his well known engraving.¹⁹ The inscription 'Vint



Whitting[ham]' on the dog's collar may be for John Vint of Whittingham, a neighbour of Bell's who became a printer in Alnwick and later in Newcastle.²⁰ Bewick recorded the occasion by placing himself and his friends on the bridge with the legend 'TB Eslington 1789 P-V-B-B [Preston, Vint, Bell and Bewick].²¹

1j **Wood engraving, vignette, 'The monogrammed coach'**

First published in *A General History of Quadrupeds*, 1790 (page 295).



The initials TB on the coach door identify the owner, who looks out, equipped with tricorne hat and cane. The illustration exemplifies the problem in distinguishing Bewick's 'self portraits' in situations that he had experienced from those of his day-dreams. He certainly never owned a coach and pair!

¹⁹ William Preston was foreman at Solomon Hodgson's printing office and Mrs Hodgson used him as intermediary in her squabble with TB; he was also, as the *Memoir* tells us, secretary and treasurer of Swarley's Club (*ex inf.* Iain Bain).

²⁰ John Vint, born in Whittingham in 1770, was printer in Alnwick in 1799-1800 and with Kenneth Anderson in Newcastle in 1800-02 or longer. The dog may have been his father's (also John Vint, of High Thrunton in the parish of Whittingham).

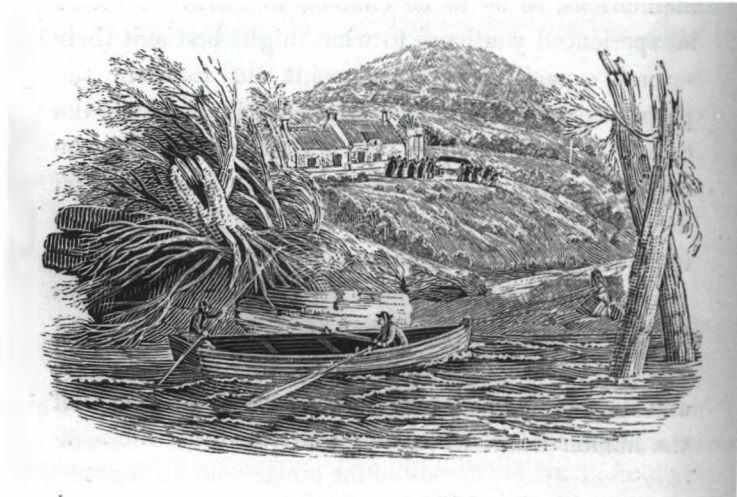
²¹ The second B is identified as Bewick's by having an inconspicuous T embedded in it – his usual monogram. Bewick describes the occasion in his *Memoir* (p.110) and details are added by Bain's (1975) editorial note, p.240.

***1k Pencil study and proof impression of the wood engraving, vignette, 'The Ferry waiting for the Coffin, 1828'**

Newcastle City Library: Pease Collection 288.

Engraving first published posthumously in Bewick's *Memoir*, 1862, p.286 (illustrated below).

The items are mounted together and framed. Inscribed 'Original Drawing of Last Vignette by TB' and 'Cherryburn Funeral Procession' in pencil on the back of the primary mount.



Jane Bewick wrote in the preface to her father's *Memoir*:

*A view of Cherryburn, with Mickley Bank in the distance, and a funeral procession descending the sloping pasture towards the boat, waiting to convey it across the Tyne to the last resting-place of the family at Ovingham – appears, from the date attached, to be the last vignette ever executed by Thomas Bewick.*²²

In her manuscript notes she added that the funeral was his own.²³ Bewick had captured moments of his day to day life in the vignettes, often letting his imagination enrich them, so it seems appropriate that he should have recorded his own demise.

B PORTRAITS FROM LIFE AND THEIR DERIVATIVES

***2 George Gray**

Thomas Bewick: oil on canvas, 570 x 459 mm; c.1780

Laing Art Gallery, Newcastle: Tyne & Wear Museums

TWCMS: C10614 (purchased 1959). Robinson (un-numbered, p.273).

Bewick was about twenty-seven when this portrait was painted. Three years earlier he had formed a partnership with Ralph Beilby, his former master, and in 1781 he acquired a home of his own when he took the tenancy of his cottage on the Forth. Having made a vow not to marry until his parents died, he was thirty-three when he eventually married Isabella Elliot of Ovingham at St John's Church, Newcastle in 1786. Thomas enjoyed 'a lifetime of uninterrupted happiness with his dear "Bell" ... the best of wives & very best of Mothers'. She died in 1826, two years before her husband and sadly no portrait of her has ever been found.

²² Page viii note, in the 1862 edition of the *Memoir* (Newcastle: Robert Ward).

²³ Bain, 1979b, p.23.



No contemporary mention of this portrait has been found, even in Bewick's lengthy discussion of Gray in his *Memoir*. The earliest so far discovered is by Howitt (1842), who visited Cherryburn with Bewick's daughters and wrote that the Bewicks were "glad to talk of their celebrated kinsman" and had "a portrait of him in his youth hanging in their parlour" which must certainly have been this one. According to Robinson (1887), the portrait was given to Thomas's mother as a gift and after the death of both parents in 1785, it remained at Cherryburn in the possession of his brother William and later his nephew Ralph. It was still there in 1884 (Dobson), when it belonged to Miss Bewick, grandniece of Thomas Bewick, and in 1887 (Robinson, 1887, p.273). It was exhibited on loan from John

Bewick in 1903 and from Ralph J. Bewick in 1928 for anniversary exhibitions (Academy of Arts, 1903, number 243; Laing, 1928, number 177) and descended in the family until purchased from Mrs C L Bewick by the Laing Art Gallery in 1959. It was shown in the 1978 exhibition at the Laing and Yale Center for British Art, New Haven, Connecticut.

In July 2005, Dr Iain Bain (*personal communication*) expressed doubts as to whether this portrait was in fact of Thomas Bewick, on the grounds that early documentation is lacking and the features differ in some details from those in the later better documented likenesses, particularly the Ramsay (13). His misgivings 'stemmed first and foremost from instinct, rather than from any analysis of detail ... sensing the presence of a different personality, which then [led] to looking at detail'. He suggested that the traditional attribution might be based on a misidentification by the family after the death in 1833 of Thomas's brother, William Bewick, and that the sitter might have been another relative, possibly even their brother John (see 34). While this cannot be refuted on firm evidence, comparisons between Gray's portrait and Plimer's (3) do show strong similarities such as the distinctive hairline and particularly his cleft chin, which becomes less apparent in the later portraits as his face becomes fuller. Furthermore, the portrait seems to have been accepted as genuine by Bewick's daughters at the time of Howitt's visit in the early 1840s. A closer analysis and comparison of the early portraits would be an interesting exercise but is beyond the scope of this paper. For the present the author believes that the Gray portrait should retain its important place in the canon of Bewick portraiture.

George Gray (1758-1819)

Memoir, 1975; Welford, 1895; Hall, 2005; ODNB.

Gray was the eldest son of Gilbert Gray, the Newcastle bookbinder, Bewick's old friend and mentor. Being of a comparable age, George and Thomas were well acquainted and he was a frequent visitor to Bewick's house at the Forth, portraying both John (see 34) and Thomas as young men in around 1780. In the late 1770s and 1780s he worked in London as a bookbinder (Tattersfield, 2001). He travelled in the Americas in 1787 and in Poland

in 1791. After attending the Royal Free Grammar School under Hugh Moises, Gray had been apprenticed to an 'eminent fruit painter' in York, named Jones, and later set up in the same business eventually opening a shop in Dean Street, Newcastle in 1794, as a portrait, fruit, house and sign painter. He exhibited a painting of fruit at the Royal Academy in 1811. Later as an accomplished drawing master he taught at a girls' school in Newcastle. However, George Gray 'dipped into almost every art & science' as Bewick recounts in *Memoir*, and 'he was accounted one of the best of botanists & chemists in this country – he was also a Geologist'. An oil painting and two portrait sketches of Gray are in Newcastle collections,²⁴ and another is in Welford (1895).

***3 Andrew Plimer**

Thomas Bewick: framed miniature watercolour on ivory, oval frame aperture 69 x 56 mm; n.d.

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM: 1997. H37. Robinson 2 (note).

A manuscript inscription on the verso reads *Thomas Bewick by Plymer [sic]*.

The Plimer portrait, of Bewick as a young man, occupied a favoured place in Mrs Bewick's sitting room at West Street and was later 'much prized by the Misses Bewick' (Robinson, 1887 page 270).



Andrew Plimer (1763-1837)

Redgrave, 1878. Benezit, 1976. *ODNB*.

Born in Wellington, Shropshire a clock-maker's son, Plimer practised as a miniature painter in London and exhibited at the Royal Academy from 1786 to 1810 and in 1819. 'His finish was excellent, his portraits powerful, admirably drawn and expressed' (Redgrave), but his best work was done before 1790. As a young man, he became one of the most celebrated English miniaturists of his day, and acquired many influential clients, but later had to travel extensively in Britain looking for work. The circumstances that led to his painting Bewick's portrait have not been ascertained. He died in Brighton.

[4 George Haugh

Sketch of Thomas Bewick: no details available; c1797]

George Haugh wrote in a letter to Bewick

I have done nothing more to the sketch I made of you, nor shou'd I like to touch it again – if I had an opportunity of finishing another from you I

²⁴ Oil portrait by Henry Perlee Parker (Laing Art Gallery TWCMS:C13497) published as an engraving in Robinson (1887, p.122). A pen and ink sketch by R T Edgar, 1817 (Pease 172 vol. 1 p.64) and a comic pencilled sketch of Gray in America by R Johnson (Laing Art Gallery TWCMS:2000.3496.40).

*shou'd copy it and make any Improvemt which I might be able, but I always keep the first sketch as exhibiting the effect of first impressions, and have upon many occasions found them very useful. . . I have inclosed it that your Friends may judge whether it can be useful – but I trust you will be careful of it for me, and not let it be injured – for I shou'd not be willing on any acct to part with it.*²⁵

Neither the sketch nor a finished portrait has yet been discovered.

George Haugh (1755-1827)

Davidson, 1985.

George Haugh was an accomplished painter who specialised in portraits and landscapes, regularly exhibiting at the Royal Academy and the British Institution. His wife Ann Haugh opened a school for young ladies at Hall Cross Hill, Doncaster, in 1797, where her pupils would benefit from the lessons provided by her husband, who was employed as the drawing master. The connection between Bewick and Haugh has not been established although the tone of the letter suggests that they were probably no more than acquaintances.

***5 Miss Kirkley**

Thomas Bewick: watercolour on paper, 91 x 69 mm; before 1798

Natural History Society of Northumbria; Isabella Bewick Bequest.

NEWHM:1997.H38. Robinson 2 (note).

A manuscript ink inscription on the mount states 'Portrait of Thomas Bewick. Miss Kirkley del.' A manuscript pencil inscription on the verso states 'Mrs Bewick mounting with new frame' and a number '5063'.

*... the Portrait of me, you mention as having in your Possession was drawn by the Misses Kirkleys – two young Ladies from London, who follow'd the profession of Miniature painting – they remained a short time in this Town, & being acquainted wth Mr John Andrews Kidd he prevailed upon me to sit to them for a likeness – from which he made the Engraving in hopes of deriving some profit from the sale of the prints – but in this he was deceived for it was so unlike that nobody who knew me wou'd buy it.*²⁶

In this portrait we see Bewick in his early forties, happily married by now with four children: the thin young man of the c.1780 portrait by Grey has flourished and achieved prosperity.



²⁵ Letter from G Haugh to T B no date, watermarked 1797; Private collection, *vide* Iain Bain.

²⁶ Letter from T B to John Chambers 10 March 1815; ms, formerly in the collection of Sir Geoffrey Keynes, *vide* Iain Bain.

One of Bewick's biographers, Montague Weekley (1953), flatly condemns this portrait stating 'Miss Kirkley's small portrait in the Natural History Museum at Newcastle, suggests nothing so much as a superannuated pugilist'.

Miss Kirkley (fl. 1790s)

Graves 1901. Benezit, 1976.

The *Misses Kirkleys*, as Bewick called them, were the London miniaturists Miss S and Miss Caroline Kirkley, who respectively exhibited at the Royal Academy in 1793-97 and in 1796-97 (Graves, 1901). How they became acquainted with John Kidd, is unknown. Nor is it known which sister (or was it really both?) painted the portrait. Attempts to discover more about their lives have not succeeded.

*5a John Andrews Kidd²⁷

Impression from a copperplate engraving after the original painting by Miss Kirkley, 92 x 70 mm; 1798 [Letterpress as title 1, below]

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM:1997.H109. Impressions Pease 173, Vol. R. Bell 1. Robinson 1.

Impressions were issued with the following titles:



1. *Mr. Thos. Bewick, celebrated Engraver on Wood. Published as the Act directs, Jany. 4, 1798, by G. G. and J. Robinson, Paternoster Row, and J. A. Kidd, Newcastle upon Tyne.*

2. *Thomas Bewick [facsimile signature] Restorer of the Art of Engraving on Wood. Born 1753; – Died 1828.*

3. *Mr. Thos. Bewick, the celebrated Engraver on Wood. Published as the Act directs, Jany. 4, 1798, by G. G. and J. Robinson, Paternoster Row, and W. Lubbock, Newcastle upon Tyne.*

Bewick in a letter to Summerfield, the engraver, said 'Mr Kidd's [engraving] was so very unlike, that it was almost universally condemned by my London Friends,

& of course fell into neglect. An eminent bookbinder here, who bought Kidd's Plate, has, however, sold a great number of them'.²⁸ Summerfield in reply commented 'Kidds portrait is not worth notice – it looks like a Tobacco paper'.²⁹ The 'eminent bookbinder', was William Lubbock, who rented space in the workshop, owed Bewick money and was frequently referred to as a scoundrel. 'Lubbock the Bookbinder', said Bewick, 'was made of Tenter hooks – Hogs Lard and Baccy-chews'.³⁰

In 1810 Lubbock ordered 300 copies of the portrait to be printed, many of which were inserted into copies of Bewick's *Birds*, which Lubbock had bound himself (Tattersfield, 1999, p.312).

²⁷ A number of authors, including Robinson (1887, p. 270) and Boyd (1886, p.73) give Kidd's initials as T A. The error may have arisen from their reading the Latinised caption of this engraving, where the serifs at the upper end of the I of '*IA Kidd Sculp*' are so large as to make it resemble a T.

²⁸ Letter headed 'Newcastle 3rd January 1814' [probably an error for 1815], quoted by D C Thomson (1882) from *The Graphic Illustrator* of 1834.

²⁹ Letter J Summerfield to T B 16 Jan 1815; private coll., *vide* Iain Bain.

³⁰ Hunt, 1975, pp.61-2. Tattersfield, 1999, pp.169-70.

After Bewick's death, the engraving was printed in the *Gentleman's Magazine* for January 1829.³¹ Bell (1851) used impressions in his *Catalogue*, at which time the plate was in the possession of 'Mr. Nicholls'.

See **13a** for mention of an inferior miniature version.

John Andrews Kidd (c.1774-1811)

Hall, 2005; Tattersfield, 1999.

Kidd successfully practised as a freelance engraver in Newcastle, engraving many plates for locally published prints and books. Bewick had a long-standing friendship with Kidd. 'Between August 1797 and February 1798 and again from November 1810 to February 1811 Bewick employed – possibly in the latter period out of charity – his old friend the Newcastle copper engraver John Andrews Kidd, who had been a close neighbour in St. Nicholas' Churchyard.' Kidd died a few months later, at about the age of 37. At first the working relationship had been mutual, as Kidd passed on wood engraving orders to Bewick (Tattersfield, 1999 p.11).

Bewick wrote of him, 'Mr Kidd was not without merit as an Engraver – he etched Landscape very well & with a great deal of Freedom – but alas! his career was too short – he finished himself soon – Brandy & Laudanum do their work with certainty – he died in our Infirmary nearly 4 years ago.'³²

5b Henry Hoppner Meyer

Thomas Bewick: pencil sketch on paper, 102 x 107 mm; n.d.

Private collection in Newcastle upon Tyne.

The pencil sketch signed 'Henry Hoppner Meyer' is a mirror image of **5** or more probably **5a** and therefore presumably intended as a template for an engraving. No such engraving is known. Possibly Meyer came to hear of the condemnation of Kidd's engraving, and decided to copy the Ramsay portrait or Burnet's engraving (**13** or **13a**) instead (see **13b**).



Thomson (1882) wrote 'Dr Joly, Dublin, has two pencil portraits of Bewick, one by Ranson, the other by Meyer': the latter may have been this one.

For an account of Meyer, see **13b** below.

***6 Denis Brownell Murphy**

Thomas Bewick: framed miniature watercolour on ivory, frame aperture 81 x 67 mm; 1802

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM: 1997. H36; Robinson 2 (note).

³¹ Anon. 'Memoir of Mr. Thomas Bewick (With a Portrait)'. *Gentleman's Magazine* pp.17-20 and 132-135; Jan. 1829. Engraving on p.20.

³² Letter from T B to John Chambers 10 March 1815; ms, formerly in the collection of Sir Geoffrey Keynes, transcribed and supplied by Iain Bain.



Inscribed in Thomas Bewick's hand on the wooden back of the frame is:

This Portrait of / Thos Bewick / Engraver / Newcastle / was painted by Murphy / in the year 1802 / [illeg. words] present / to Mrs Bewick [underline]/Bewick / [illeg.] at Cherryburn / [illeg. ?11th] 1753

Five years after the first volume of *British Birds* was published, Bewick in his forty-ninth year had already become a local celebrity. This portrait, however, does not seem to have been painted for any other reason than as a gift of friendship, the finished miniature being presented to Mrs Bewick, who valued it highly and later displayed it in a place of prominence in her sitting-room at West Street, Gateshead.

In a letter to his old school friend Christopher Gregson, Bewick introduced Murphy to him as 'a man of worth, and a first-rate artist in the miniature line'.³³ Referring to the portrait, he wrote 'when you see it, you will no doubt conclude that T.B. is turning bonnyer and bonnyer in his old days'. Bewick carried the scars of smallpox, his beauty spots as he called them.³⁴ Murphy and all subsequent artists appear to have flattered him by ignoring this fact.

Denis Brownell Murphy (c.1763-1842)

Redgrave, 1878. *ODNB*. Hall (1979).

Born in Dublin, he practised as a painter of portrait miniatures in watercolour and on ivory and enamel. He exhibited in Dublin in 1765 and 1768, but was working in Whitehaven in 1798, and moved to Newcastle in 1802, where he evidently became acquainted with Bewick and painted his portrait. There is some speculation that they met through the debating clubs they attended. Jane Bewick wrote 'he had three sweet little girls when in Ncastle one was named Camilla – another Anna they were at school with us at Mrs Smiths where the Literary Societies [*sic*] Building now stands, & were the little pets of the school'.³⁵ He later practised in Edinburgh and London exhibiting his work at the Royal Academy in 1800-1827. Murphy's miniatures were well respected, though Redgrave called them 'not of a high class'; he became fashionable, was appointed miniature painter in ordinary to Princess Charlotte, and counted William Wordsworth among his many famous subjects.

***6a John Summerfield³⁶**

Thomas Bewick: proof impression of the copperplate engraving originally taken from the miniature by Murphy, engraved surface 82 x 71 mm, plate

³³ Letter T B to Christopher Gregson 18 April 1803; quoted by (Jackson, 1839, pp.561 and 562).

³⁴ See the note about these in relation to the Baily bust (22). No record of when Bewick suffered from smallpox has been found.

³⁵ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*vide* Iain Bain).

³⁶ As with James Kidd, (footnote 27, above), Boyd (1886) gives Summerfield's initial as T. and perhaps for the same reason. Bell (1851) and (copying him) Robinson (1887) correctly give it as J.

231 x 152 mm; 1816; (Issue 2, below)

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM:1997.H110. Both issues are in Pease 173 R. Bell 2. Robinson 2.

Issues (Bell, 1851; Robinson, 1887, p.270):

1. *Mr Thomas Bewick, Restorer of the Art of Engraving on Wood. From an original Miniature by Murphy in the possession of Mr Bewick with whose permission this Plate is Engraved & Publish'd by J. Summerfield. Novr 1, 1815.*

2. *Mr Thos Bewick, Restorer of the Art of Engraving on Wood. From an original Miniature by Murphy, in the possession of Mr Bewick with whose permission this Plate is Engraved by J. Summerfield. Published Feby 1, 1816 by T. McLean, Sackville Street, Piccadilly.*



On 8 December 1814, Summerfield wrote to Bewick from London, reminding him that four years earlier, while convalescing in Newcastle from an illness contracted while travelling, he had 'made a hasty Sketch of your likeness with a view to engraving it, and you then promised that whenever I was ready to undertake it you would send me the Miniature in your possession to assist me —'.³⁷ The miniature, by Murphy, was a prized possession of his wife Isabella, and Bewick must have been in some trepidation about the inadequacy of the 'hasty Sketch' for him to have persuaded his wife to part with it.

Nevertheless, the Bewicks loaned the watercolour to Summerfield on 3 January '1814' [presumably an error for 1815], accompanying it with a letter from Thomas:

*... Mr Busby ... will pick up his parcel which is to contain this & the portrait of me, by Mr. Murphy, this evening. I fear the portrait of me, which he has in hand, will not be finished to send with the other. ... [as for] Mr. Murphy's ... considering the length of time it has been done (12 or 13 years), he thinks it very like. I hope you will do it to please yourself, & that you will reap sufficient profit by it in the sale as a frontispiece to my Books. ...*³⁸

Summerfield then rather audaciously asked to borrow the Busby portrait as well, if 'there is ... any striking Characteristic luckily caught' — he liked the Murphy 'but if anything can be added in so essential a requisite as likeness I think you will agree with me ...'.³⁹ There is no evidence that the Busby portrait was sent.

Almost a year later, after Summerfield had tried in April to borrow £5 from Bewick to get the job done quickly,⁴⁰ Bewick's anxiety about the long delay in the preparation of this

³⁷ Letter ms in a private coll.; *fide* Iain Bain.

³⁸ Letter quoted by D C Thomson (1882, p.222) from *The Graphic Illustrator*, of 1834.

³⁹ Letter J Summerfield to T B 16 January 1815; private coll., *fide* Iain Bain.

⁴⁰ Letter J Summerfield to T B 11 April 1815; ms private coll., *fide* Iain Bain.

engraving was expressed in his letter to Ranson of December 1815, quoted near the beginning of this article. Summerfield wrote in 1816 that the engraving was now finished, but that he had had to sell the block to a bookseller, McLean of Sackville Street, to recoup some money; McLean would be supplying proofs, and he would return the miniature with them, shortly.⁴¹ The size of the eventual engraving would have been suitable for a frontispiece to Bewick's books; one reason why it was never used for this, its original purpose, may have been that McLean now controlled it; another is made clear in a much later note by Jane Bewick:

*Summerfield – served his time with Bartolozzi – was in the Army – and I am afraid came to Benwell to hide from his Creditors – he was a handsome Man & very gentlemanly – he borrowed Murphy's miniature from my Mother & engraved a small print from it – it was a feeble performance.*⁴²

Julia Boyd also calls it 'not a very satisfactory performance' (Boyd, 1886, p. 73). See 13a for mention of an inferior miniature version.

John Summerfield (d.1817)

Redgrave, 1878.

Artist and engraver. He was the favourite pupil of Bartolozzi, and his engraving *Rubens and his wife*, published in 1801, won him the gold medal of the Society of Arts, and was considered to be among the best from the English School. His engraving of Bewick is the only portrait of him in the British Museum catalogue (O'Donoghue, 1908-24). Bewick gave an account in 1818 of Summerfield's visit to Newcastle in 1809 'He appeared, on the whole, to me to be a *man* on whom Nature had been very liberal of her bounties, and that he threw her favors in her face. I had a very great regard for him ...'. Apparently he arrived in Newcastle with his militia regiment, which broke up after quarrels among the officers. Summerfield then tried unsuccessfully to borrow from friends, living incognito 'somewhere about Benwell', visiting Bewick at his house on the Forth on Sundays and going

home by a roundabout route to avoid being followed. He lost his health and his 'handsome and manly looks' by 'his dissipated course of life' from which Bewick failed to persuade him to turn or to 'begin in earnest with his engraving'. 'I had much reason to know that he was of a good-natured and pleasing disposition. ... I was much grieved at parting with him.'⁴³ Jane Bewick later wrote 'I have heard he ... died in poverty.'⁴⁴



*6b Artist unknown

Thomas Bewick: oil on canvas, 490 x 590 mm; n.d. (?20th century)

Portrait on permanent loan to the National Trust, on display at Cherryburn, Northumberland.

Photograph 281 x 340 mm kindly provided for the exhibition by Mr Tim Sealy.

⁴¹ Letter J Summerfield to T B 30 Jan. 1816; ms private coll., *fide* Iain Bain.

⁴² Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*fide* Iain Bain).

⁴³ Letter from T B to Mr William Carey of Piccadilly, 4 April 1818, transcribed in Robinson (1887) pp. 136-7.

⁴⁴ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*fide* Iain Bain).

The artist and date of this portrait are unknown but it is very similar to the miniature water-colour painted by Murphy in 1802. It appears to be of recent date, but nevertheless may still prove to be one of the missing portraits.

[7] **William Bell**
Thomas Bewick: lost portrait 'in the style of Rembrandt', no details; n.d. (before c.1806) |

In the possession of William Bewick in 1864.⁴⁵

Two letters from its owner tell all that is known of this portrait:

The portrait of T. Bewick that I possess was painted by Bell, in the style of Rembrandt, with the hat on, the light falling on one cheek and the side of the nose; and this, with the white neckcloth and frill, is the only light in the picture. It is artistical, but not a domestic picture by any means, and no one would like a family likeness to be so treated. But it is well painted, and I am often asked if it is a Rembrandt. (William Bewick to T H Cromeck, 16 April 1864.)

It appears that Thomas Bewick, from great liability to cold in the head, kept his hat on whenever he could, and Miss Bewick tells me that they made him a velvet cap, which he wore when at home. The portrait I have of him, painted by William Bell, has his hat on.⁴⁶ (William Bewick to T H Cromeck, 25 March 1865.)

No subsequent record of this portrait has been traced. The letter of 16 April 1864 opens with a paragraph about William Bewick's early training in anatomy with Sir Charles Bell (the surgeon-anatomist and artist). The mention later in the letter of the portrait of Bewick by 'Bell' has led some to a false attribution of this portrait – easily corrected by the second letter quoted.

William Bell (1734/5–c.1806)

Graves, 1901. Horsley, 1971. Hall, 2005; *ODNB*.

Painter of portraits, landscapes and scenes of ancient history. He was born and worked for much of his life in Newcastle, but with a period of training in London from 1768 (at the Royal Academy Schools from 1769) and successful exhibition of his work in London in 1775–76. He was awarded a gold medal by the R.A. in 1771. During this period he had attracted Lord Delaval as his patron and some of his work is exhibited at Seaton Delaval Hall. Back in Newcastle he painted faithful portraits and taught at his own school of drawing, both more praiseworthy than financially successful, though he received a pension from Lord Delaval. Bewick wrote of him 'I was also long acquainted with W^m Bell, Portrait painter &c he was, as a painter, accounted eminent in that profession, and was awarded a gold Medal, from the Society of Arts for the best Historical painting of the year – He died in Newcastle Infirmary in the year 1800 Ae^t 60' (*Memoir*, pp.113–4). Bewick's memory for dates, where they conflict with firm evidence, should be treated with caution, but the date of Bell's death is uncertain. His fortunes declined after about 1790 when he was 'above White-cross' (Newgate Street) in Newcastle as a 'portrait painter and teacher of drawing' (Whitehead's

⁴⁵ In two letters from William Bewick to T H Cromeck published in Landseer (1871).

⁴⁶ Robinson (1887) p. 166 noted that Bewick invariably wore a brown silk cap as he had been scalded as a child and had a bald patch on the crown of his head as a consequence.

1790 Directory). Twelve years earlier (Whitehead, 1778) he was in High Bridge Newcastle, near Joseph Bell, painter, to whom he may have been related.

[7a Joseph Bell

Thomas Bewick: unfinished portrait; no details known; n.d. (before 1806)]

Atkinson (1831) wrote of the 'wondrous versatility' of Bewick's [facial] expression and that 'in his younger days a painter of the name of Bell tried sedulously for more than three weeks to paint a likeness of him, and was compelled at last to give it up, with the declaration that it was impossible to paint him.'

Jane Bewick identified the frustrated painter as Joseph Bell

painter & decorator – He painted portraits occasionally – & was a talented but somewhat dissipated man. – His son & Daughter turned badly out – He painted a portrait of my Father – he could not please himself with it & threw down the brush with an oath saying "nobody can paint you" – John Bell his son painted a portrait of my Brother when a boy – playing on the Northd pipes, the likeness very good. – Very dissipated – died in his prime.⁴⁷

Her identification of Joseph, though probably correct, should be regarded as not quite certain. It is at least possible that it was William Bell and that he later composed his painting (7) from the sketches taken during these three frustrating weeks. Otherwise, if the unfinished painting survived, it has not subsequently been identified.

Joseph Bell (1746-1806)

Hall, 2005.

There were others ... with whom I lived in habits of intimacy, and some of these may be dated a long way back – ... Joseph Bell, Painter, he also displayed considerable abilities as a painter, poet, & a Man of talents in other respects – but with keeping much company he became also much dissipated – he died 26 April 1806 Aet. 60 & was buried in St Andrews – I was also long acquainted with Wm Bell ... (Bewick's Memoir p. 113).

According to the Newcastle directories, Joseph Bell was a 'painter in general and dealer in colours', in Bigg Market in 1778 and at High-bridge at least from 1790 to 1801. Robinson (1887) described Joseph's house as 'decorated with great taste'. For his son, John Bell, see 36.

[8 'Robert Dodds' [? Ralph or Robert Dodd]

Thomas Bewick: lost portrait: medium and size unknown; pre 1827, ?1780-1810]

Described by Mackenzie in 1827 as 'A portrait of Mr. Bewick, when in the prime of life, by the late Robert Dodds, engineer, is now in the possession of his son, R B Dodds, of Newcastle, civil engineer'⁴⁸ No later record has been found. Hall (2005) mentioned the Mackenzie record and suggested that the son might have been Barrodail Robert Dodd. Walker (1985) questioned whether the oil portrait at the Literary and Philosophical Society, attributed to Ramsay, might in fact be the missing painting by 'Dodds', but this

⁴⁷ Jane Bewick's notes on her father's correspondents; Laing Art Gallery (*vide* Iain Bain).

⁴⁸ Mackenzie, 1827, p.585n; Hall, 1982, p.59.

appears to be pure speculation. One strong possibility is that Mackenzie's naming is wrong and that the portrait was painted by Ralph Dodd (1756?-1822), engineer, with whom Beilby and Bewick 'were busily engaged about the year 1796 in engraving the plan of the projected Canal from Newcastle to Carlisle for Ra. Dodd the Engineer – ...' (*Memoir*, p.104), or possibly by Ralph's brother Robert Dodd. Ralph 'studied at the Royal Academy for about five years, and in the 1780s, like his brother Robert Dodd, attempted to make a living from painting' (*ODNB*, 2004). The *ODNB* also claims B R Dodd as Ralph's son rather than Robert's. It seems likely that the lost Bewick portrait was painted by one of the brothers: without direct evidence it is impossible to determine which, but on balance Ralph seems the likelier.

Ralph Dodd (c.1756-1822)

ODNB; Younger, 1925.

Engineer, bridge builder and marine artist. He was probably born on Tyneside, son of Alexander Dodd, but spent most of his career in London (at least from 1779) and on engineering projects elsewhere in England, including plans for the abortive Newcastle to Carlisle canal. Most of his confirmed paintings are of marine subjects mainly in the 1770s and 80s. A collection of portraits 1783-1789 by 'R. Dodd' were regarded by Younger (1925) as likely to be by Ralph, on the grounds that his work was more varied than his brother's. Died in Cheltenham after a boiler accident in Gloucester. His son, George, became an engineer. Probably he was also the father of B R Dodd.

Robert Dodd (1748-1815)

ODNB; Younger, 1925.

Marine artist. Not known as an engineer. Believed to be the brother of Ralph. Birth place and exact date unknown. He was living in London by 1772 and exhibiting from 1780. Not known to have painted portraits. His marine paintings were detailed and important as documents of naval history. There is no record of his working in the North. He might theoretically have painted Bewick in London in 1776, but the description of Bewick as 'in the prime of life' suggests a later date. He married in 1772, but no record of any children is mentioned in the published biographies.

9 William Nicholson

Thomas Bewick: oil on canvas, 1272 x 1016 mm; 1812 or 1813

On display at the Laing Art Gallery, Newcastle: Tyne & Wear Museums.

TWCMS: C6962. Purchased 1951.

*Photograph supplied for the exhibition courtesy of Tyne & Wear Museums.

Bewick is portrayed three-quarter length, seated with a pencil in his hand, a dog below his chair and a view of trees through the window beyond. By his left hand is a print of the Chillingham bull. According to Robert Robinson (1887, p.271), Emerson Charnley, the bookseller, provided his 'fine dog Don' for the painting.

The date of this painting is uncertain. Its attribution to 1812 seems to rest upon the evidence of the catalogue to the exhibition of Newcastle Institution for the General Promotion of Fine Arts, Blackett Street, in 1833.⁴⁹ There seems to be no other documen-

⁴⁹ Usherwood, 1984, who quotes the 1833 catalogue 'Portrait of the Late Thomas Bewick, the celebrated Engraver on wood painted 1812'. The *Newcastle Courant* 7 Sept. 1833 accordingly reported that the painting had been in the artist's possession since 1812. The identity of the painting exhibited as 9, not 9a or 11 is confirmed by the commentary in the *Tyne Mercury*, 20 Aug 1833, which mentions the dog.

tation to date it before 1813. However, Bewick was seriously ill from April to about



October 1812 and by his own statement 'pined to a Skeleton' (*Memoir*, p.131). Indeed, he remained rather lean in July 1814 when Nicholson painted a second portrait (11). It therefore seems likely that this image of a robust and almost portly figure was completed by April, 1812. Yet, on 29 January 1816 Bewick wrote to Robert Pollard 'I have almost forgot to tell you that Mr Nicholson painted a portrait of me before he left Newcastle [in 1814] & when it was done, he issued proposals for a print from it to be done by his friend Mr Ranson ...'.⁵⁰

Those proposals had appeared in an advertisement in the *Tyne Mercury* on 28 September 1813:

*Proposals for publishing by
Subscription,*

A Print of Mr THOMAS BEWICK, celebrated Engraver on Wood, to be engraved in the Line Manner by Thomas Ranson, from a Painting by Wm Nicholson. Size of Plate 16 inches by 13. Proof impressions, one guinea and a half; plain, one guinea.

A very general desire having been frequently expressed for a Portrait of Mr Bewick, has induced W. Nicholson to submit the present proposal.

Subscriptions received by the different Booksellers in Newcastle upon Tyne; Messrs Boydell, Cheapside, London; and by Wm Nicholson, Hill's Court, Pilgrim-street, where the painting may be seen.

That this advertisement was issued 'when it was done', seems to suggest that the portrait was more recent than April 1812 and its true date must be considered uncertain. Ranson's engraving of it (9b and 9c) was not published for nearly another three years (when it was significantly smaller than 16 by 13 inches) and indeed the following letter suggests why the initial proposed subscription may have failed. In a letter to Ranson in 1815 Bewick wrote:

*... my much esteemed young Friend Mr. Nicholson, for I found not long after he so kindly painted the grand Portrait, (as I think it) - some Gentlemen in Newcastle, my warm friends, did not like it, some of them indeed went so far as to call it an outrageous likeness - ...*⁵¹

Robert Pollard, who knew Bewick well, saw the painting (and Ramsay's, 13) at the Royal Academy on 7 May 1816, where he said it was hung too high, and wrote to Bewick: 'Mr.

⁵⁰ Letter T B to R Pollard 29 Jan 1816; ms in Laing Art Gallery coll., *vide* Iain Bain.

⁵¹ *Sic*. The spelling error probably reveals the glottal stop Bewick would have used. Letter T B to T F Ranson 12 Dec 1815; ms Pease 178, p.71v, *vide* Iain Bain.

N^s performance as a Picture (I mean the masterly & artist like management & distribution of light & shade) is far superior to Mr R^s – tho on the whole the latter's Face is more like than Mr N^s ...'.⁵² Pollard's satisfaction may have been influenced by Nicholson's use of the accessories such as the dog, the elaborate chair and the window behind as compared to the simplicity of the Ramsay portrait.

It was exhibited at the Edinburgh Exhibition Society in 1814, the Royal Academy in 1816, and the Newcastle Institution for the General Promotion of Fine Arts, Blackett Street, in 1833, where the portrait was at last purchased from the artist, by the Hon. H T Liddell. It descended to the Earl of Ravensworth, Ravensworth Castle, and was loaned by him to the North East Coast Exhibition where it was exhibited as number 847 in the Palace of Arts, in May-October 1929. In 1951 it was acquired for the Laing Art Gallery (Usherwood, 1984, p.96) and it was shown in the 1978 exhibition at the Laing and Yale Center for British Art, New Haven, Connecticut.

William Nicholson (1781-1844)

Redgrave, 1878. Hall, 2005; *ODNB*.

Portrait, genre and landscape painter in oil and watercolour; miniature painter and etcher, Nicholson was born in Ovingham, son of the schoolmaster, James Nicholson, who soon after was appointed master at the Royal Free Grammar School in Newcastle. William may have been educated there. He studied in Newcastle at the studio of Boniface Muss, an Italian drawing master. His early interest was in miniature portraits, later he painted on a larger scale. He exhibited a group portrait of the servants of C J Brandling (of Gosforth House)⁵³ at the Royal Academy in 1808 and later exhibited at the Society of Artists in Water-Colours and again at the RA from 1813 to 1822. Nicholson worked in Hull, Newcastle⁵⁴ and, from 1814, in Edinburgh where he was a founding member and Secretary (1826-30) of the Royal Scottish Academy. He regularly returned to contribute paintings to exhibitions in Newcastle in 1827-1841, and was well liked by Bewick who had said in a letter to Miss Bailey 'I am always pleased with the thouts [*sic*] of meeting Mr Nicholson anywhere'.⁵⁵



***9a William Nicholson (attributed)
Thomas Bewick: miniature
watercolour painting, 125 x 95 mm,
oval mount aperture
131 x 98 mm; c.1815**

Newcastle City Library: Pease Collection.
Pease 318. Robinson (1887),
p.273, un-numbered.

⁵² Letter R Pollard to T B, 8 May 1816; V&A coll., *fide* Iain Bain.

⁵³ Some of whom were no doubt responsible for the upkeep of the grounds, including what later became the Natural History Society's nature reserve in Gosforth Park.

⁵⁴ 'Nicholson' (no first name), Portrait and Landscape Painter, was at Dean Street in 1811 (Newcastle 1811 Directory) and Wm Nicholson, was at Hill's Court, Pilgrim-street, in 1813 (see Tyne Mercury notice, above).

⁵⁵ Letter T B to Miss Bailey 6 Dec 1814, transcribed in Boyd (1886, p.63-4). Miss Bailey was the daughter of John Bailey of Chillingham; the letter also mentions that Nicholson was at Chillingham at the time, painting a portrait of her father.

Originally belonging to John Trotter Brockett, later to Robert Robinson and eventually John William Pease, this miniature was bequeathed to the City of Newcastle in 1901. It is not listed in the catalogue of the 1823 Brockett book sale (Pease 210), which did include some engraved portraits of Bewick.

It is framed in an elaborate gilt frame, which in turn is enclosed in a glass-fronted rose-wood box 390 x 340 mm. On the mount is the inscription 'Miniature / portrait of Thomas Bewick, / by / William Nicholson, / (From John Trotter Brockett)', indicating that it was reframed, probably by Pease. The watercolour technique is assured and the likeness very close to that in the oil portrait (9).

Bewick's posture, clothing and expression are virtually identical to those in the oil painting (9). The figure is half-length and the dog, pencil and hands are omitted, but the books by Bewick's left elbow are included and above them a pale triangle representing the window curtain seen in 9 and 9b, but erased in 9c. The window now looks out on the spire of St. Nicholas church, Newcastle. This watercolour is clearly derived from Nicholson's own oil portrait (or very much less likely vice versa), and it is accordingly catalogued here as part of the complex of portraits in this group. If it is a slavish copy its attribution to Nicholson must be regarded as tentative in spite of its quality and early ownership by Bewick's friend and admirer, Trotter Brockett. It is possible that Brockett commissioned it instead of buying the original (which remained in the hands of the artist for about 20 years).

The Pease Collection Catalogue (Anderton and Gibson, 1904) cites this as the original from which the Ranson engraving was taken. In fact the Ranson engravings, (9b and c) contain features which could only have been taken from the oil portrait (9) and the other more limited version (9d), which is more similar to this miniature, omits the curtain, includes an additional book and on close inspection appears unequivocally to have been a part selected from the engraving 9c.



9b Thomas Fryer Ranson

Aquafortis etching of Bewick, three-quarter length, from the original oil painting by

W Nicholson in the Laing Collection, engraved surface 205 x 155 mm, plate 276 x 178 mm ; n.d., c.1813-16

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM: 1997.H108; Pease 178, p.9.

Derived from 9, with the dog and pencil, but introducing a view of Newcastle, including the castle keep as well as the church. A line etching, inscribed 'Nicholson Pinxt. Ranson Aquaf^t'. A careful comparison shows that this very sketchy impression appears to be an incomplete and lightly etched early state of the engraving 9c, and not a separate preparatory etching.

Nicholson had written to Bewick from Edinburgh on 2 July 1815: 'I do not know if I shall have the pleasure of meeting you at Chillingham . . . I sent off your picture to Mr Ranson

who I make no doubt will exert himself to do you justice ...'.⁵⁶ Evidently, Ranson had not finished the work (and may not have begun it) in 1813 when Nicholson first proposed that he should engrave the portrait (see 9 above).

Thomas Fryer Ranson (1784-1828)

Redgrave, 1878; and *DNB* (in both his middle name is incorrectly given); *ODNB*; Robinson 1887 (p.271); Hall, 2005.

Engraver and draughtsman. Born in Sunderland, he was apprenticed as an engraver to John Andrews Kidd in Newcastle, and set up on his own as an engraver in Newgate Street⁵⁷ before moving to London in about 1812. He was awarded the Silver Medal of the Society of Arts in 1814 and its Gold Medal in both 1821 and 1822. Ranson was a friend of William Nicholson, who encouraged him to make engravings from his portraits of Bewick. Redgrave, Robinson (1887, p 271) and Hall recount Ranson's innocent involvement in a controversy about a bank-note forgery.

9c Thomas Fryer Ranson

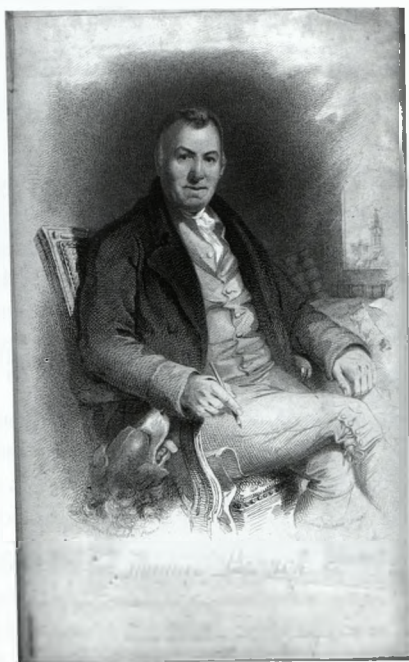
**Thomas Bewick: impression from a copperplate engraving, engraved surface
c. 220 x 165 mm, plate 278 x 178 mm; 1816**

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM: 1996.H53 and 1997.H39. Pease 178. Bell 3. Robinson 3.

Title: *Thomas Bewick, the Celebrated Engraver on Wood. London, Published by T. Ranson, Judd Place West New Road & Messrs Boydell, Cheapside, Jan^r. 1816. William Nicholson Pinx^t. Thomas Ranson Sculp^t.*

Taken from the portrait in oils by William Nicholson (9), the engraving was published in January 1816. According to Anderton and Gibson (1904),⁵⁸ it appeared again later as the frontispiece to Bewick's *Fables of Aesop* in 1818, although this has not been confirmed by the examination of several copies, and no frontispiece is mentioned by Roscoe (1953) even as a variant; indeed the engraving would have been too large for any but the imperial paper copies. It does seem originally to have been intended for a frontispiece of one of Bewick's existing publications, for all of which it was too large, although when Bewick wrote to Ranson about it in 1815 he said he was already 'extremely busy at work upon our intended new Publication of the fables of "Aesop & others"',⁵⁹ so the idea of using it instead for a larger format *Fables* may have occurred to him at this time.

Two other Ranson engravings (9b and 9d) appear to be earlier and later states of this one rather than separate works.



⁵⁶ Letter W Nicholson to T B 2 July 1815; ms Cherryburn coll., *fide* Iain Bain.

⁵⁷ Newcastle Directory 1811.

⁵⁸ See Anderton and Gibson's entry for Pease 318.

⁵⁹ Letter T B to Ranson 12 December 1815; Pease 178, p.71v, *fide* Iain Bain.

Robinson (1887, p 271) wrote, without stating his source, that it was 'deemed the best portrait of Bewick which had then been executed', which seems at odds both with the reception of Nicholson's original oil portrait and with Jane Bewick's opinion, which Robinson usually respected.

Bewick's own opinion was expressed in his letter to Robert Pollard on 29 January 1816: 'The plate is done & Mr R has sent me two proofs from it – It is I think well engraved but it is a bad likeness'.⁶⁰

Dovaston, who knew Bewick well, bought a copy of the print in Edinburgh in 1825 and his annotation records his spending 10s 6d. on it.⁶¹ He must have seen a sufficient likeness in it to justify paying such a sum.

Thomson (1882) wrote of it 'In 1816 Thomas Ranson, a pupil of Kidd, executed a fine plate in line of a portrait by Nicholson, Bewick's pupil'. He was wrong about Nicholson being Bewick's pupil (perhaps confusing William with Isaac Nicholson) and he had been denied access to their collection by Bewick's daughters, so his judgement about the likeness is not to be trusted, though he was doubtless a good judge of the engraver's skill.

Emerson Charnley had smaller versions of this and other portraits engraved on wood for his *Select Fables* (1820) (see 13a). Of the one derived from Ranson, Jane Bewick wrote 'This is a dreadful caricature – we destroyed every one of them that we could lay our hands on. JB'.⁶²

***9d Thomas Fryer Ranson**

Thomas Bewick: line engraving, engraved surface 118 x 100 mm, plate c. 225 x 166 mm;⁶³ n.d. c.1816

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM: 1997.H107; Pease 178, p.10.

Title: *Thomas Bewick. Engraved by T. Ranson from a Picture Painted by W. Nicholson.*

A half-length seated portrait, possibly derived from 9a but far more probably selected



from 9c by Ranson. The dog, view and background (except for some books) are omitted. The engraving details match 9c very closely but with some additions; for example the waistcoat has been darkened. It thus seems to be a cut-down third state of the same engraving as 9b and 9c.

Once forming part of the Bewick family's personal collection of portraits the Natural History Society's copy bears a manuscript inscription in ink by Jane Bewick – 'Caricature'.⁶⁴

Robinson (1887, p.271) stated that the engraving (9c) fell 'into the hands of a local bookseller, [who] had it cut

⁶⁰ Letter T B to Pollard 29 Jan 1816; ms Laing Art Gallery coll., *vide* Iain Bain.

⁶¹ Personal communication, Iain Bain.

⁶² In her hand on the family's copy of *Select Fables* (1820, p.xxvii). Pease 15.

⁶³ The measurement of the engraved surface excludes the engraved surround.

⁶⁴ 'Caricature' is also written by Jane Bewick on the copy in Pease 178.

down to an octavo size, and used it as a frontispiece to several of Bewick's works'. It is unlikely that this comment refers to the present engraving: Emerson Charnley was probably the bookseller in question, and he used a smaller re-engraved version of the whole engraving 9c in his *Select Fables* (1820), not as a frontispiece but as one of a series of similarly reduced portraits in his introductory matter (pp.xxv-xxxi).

9e **Artist unknown**

Thomas Bewick: ink on paper drawing after Nicholson, oval image 140 x 109 mm, paper size 286 x 254 mm; 1818

Laing Art Gallery, TWCMS: F13211.

The oval drawing is mounted with a sample of Bewick's signature excised from another source with the unexplained notation 'N177'. Written on the verso of the mount in pencil is the script 'by Wm Nicholson. Original Drawing. 1818.' This was evidently added at a later date and without a provenance for this portrait it would be very difficult to say whether William Nicholson is actually the artist.



9f **W H Lizars**

Thomas Bewick: line engraving after Nicholson, image 114 x 98 mm, paper size 215 x 135 mm; c. 1820

In *Illustrations of Phrenology* by George Steuart Mackenzie (1820).

Robinson Library, University of Newcastle upon Tyne: Edwin Clarke coll. ⁶⁵

The engraving is Plate X in the book, 'drawn and engraved by W.H. Lizars'. The identification as Thomas Bewick is in the text (pp.247-8). 'The portrait is taken from an excellent picture by Nicholson; the best work, perhaps, of that rising artist'.

The illustration provides the basis for a phrenological analysis, which includes the statement 'The most remarkable feature is the indication of the organ of Form, which is so large as to be almost a deformity.' While this is true of the illustration in the book, which shows a bulge at the root of the nose, it is not so of the earlier engravings nor of the Nicholson portrait itself, a notable example of the opportunities for self deception that the

⁶⁵ An extract without the portrait is in Pease 178, vol.1 p.56.

doctrine of phrenology provided. (According to Mackenzie (1820), the organ of form is located between the eyes. Its size, 'is indicated by the distance between the eyes', and the faculty it subserves, 'gives the power of recollecting forms that have been once observed'. It was considered necessary for natural historians and artists that it should be well developed. Other phrenological 'organs' that in Bewick were 'well marked' or 'full' were those of 'constructiveness', 'ideality', 'wit' and 'imitation'.) The Bewick family had a copy of this book in their library probably because of the reference to Bewick (Gardner-Medwin, 2003 p.69).

William Home Lizars (1788-1859)

Redgrave, 1878. *ODNB*.

Lizars was a member of the Edinburgh family of engravers and publishers. He painted portraits, some of which he exhibited at the Royal Academy in 1812, engraved a number of works by other artists and 'perfected a method of etching which performed all the functions of wood-engraving in connection with the illustration of books' (*ODNB*). He was a founder member of the Royal Scottish Academy in 1826. With his brother Daniel he was responsible for the engraving of J J Audubon's *Birds of America*. In 1823 Bewick visited Edinburgh where 'I also paid my respects to the Sons & successors of the late Mr D. Lizars, all these in my estimation were doing credit to their instructors as engravers – and ... had attained ... to that degree of excellence which did honour to Edinburgh, now ... rendered brilliant by the Gems both of Arts & sciences with which it is adorned' (*Memoir*, p. 183).

***9g W H Lizars**

Thomas Bewick: stipple engraving on steel, engraved surface c. 72 x 72 mm; 1833

Bell 9. Robinson 9.

Produced to illustrate the memoir of Bewick by the Revd William Turner in William Jardine's *The Naturalist's Library*, Volume VI, 1836.⁶⁶

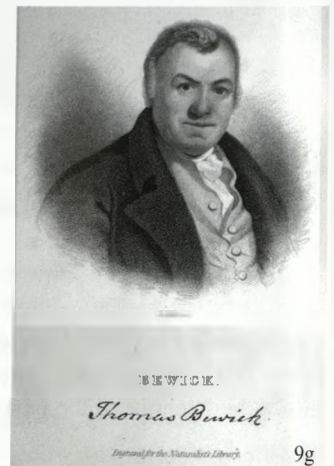
Half-length seated portrait, derived from the Nicholson oil (9), but more likely copied from 9d. Lizars' meeting with Bewick ten years earlier had evidently altered his perception of his subject's face; while the eyes are widely separated, the deformed root of the nose, so evident in 9f, has vanished.

9h Artist unknown

Thomas Bewick: electrotype engraving, engraved surface 80 x 64 mm; 1833

Illustration in Sykes' *Local Records* (1833) page 227.⁶⁷

Clearly a copy of 9c, the three-quarter length portrait includes the dog, pencil, Chillingham bull engraving



⁶⁵ An extract without the portrait is in Pease 178, vol.1 p.56.

⁶⁶ It is in Vol. VI not Vol. V as Robinson states. The volume is *The natural history of parrots*, by P J Selby.

⁶⁷ John Sykes. *Local records; or historical register of remarkable events, which have occurred in Northumberland and Duham, Newcastle upon Tyne, and Berwick upon Tweed, ...* New Edition, Volume II; Newcastle: J Sykes, 1833.

and the view of the castle keep and St Nicholas church. It illustrates the short memoir of Bewick given under the date of his death (8 November 1828). See **14** for the equivalent illustration in Richardson's *Local historian's table book*.



9i T Heaviside

Thomas Bewick: engraving on wood, image 167 x 120 mm; 1847

Published in *Howitt's Journal*, 1847 ⁶⁸

Bell 8. Robinson 8. Pease 178, p.53.

Reversed image derived from **9** or **9c**, with dog and pencil, but without the view of Newcastle. Signed on the block 'T. HEAVISIDE FEC.' Title: *Thomas Bewick, the Reviver of Wood Engraving*. The image appeared again in *Reynold's Miscellany* (1852, vol. 8 – fide Nigel Tattersfield).

Thomas Heaviside (1813-1896).

O'Donoghue, 1908-24. Hall, 2005. Engen, 1985. *ODNB*.

Sons of a builder of Stockton-on-Tees, he and two brothers were all wood engravers.

Thomas engraved a number of copied portraits (including one of Robert Owen) and contributed to the *Illustrated London News* 1848-51.⁶⁹

[9j Artist unknown

Thomas Bewick: watercolour sketch; n.d.]

Pease 176, p. 3.

'Taken from Ranson's engraving after Nicholson' (Anderton and Gibson, 1904). The album containing this painting is currently missing from the Pease collection. The painting has not been examined.

⁶⁸ *Howitt's Journal* No. 38, vol ii, 18 September, 1847, p177. The portrait precedes an article by William Howitt 'Thomas Bewick, the reviver of wood engraving' on pp.178-180. Copy pasted in the album Pease 178, p. 53. The date of this article is often wrongly given as 1846.

⁶⁹ In 1902, his own youngest son, Oliver (1850-1925), postulated the existence of the conducting layer in the atmosphere, responsible for the propagation of radio waves, now known as the 'Heaviside layer'.

9k Reynolds Stone

Thomas Bewick: wood engraving, 64 x 50 mm; c.1953

For the title page of *Wood engravings of Thomas Bewick: reproduced in collotype, selected, with a biographical introduction*, by Reynolds Stone, London: Hart Davis, 1953.

Head and shoulders in an oval frame. Entitled 'From the portrait by William Nicholson, R.S.A., in the Laing Art Gallery, Newcastle, engraved on wood by Reynolds Stone'. Only the curtains remain of the background in earlier versions.

Alan Reynolds Stone (1909-1979)

Peppin & Mickelthwait, 1983. *ODNB*.

Literally born and bred at Eton College. After Magdalen College, Cambridge, he worked at the Cambridge University Press and then in 1934 became an independent wood engraver and letter-cutter in stone, working as Reynolds Stone. He taught at the Royal College of Art in the 1950s. Stone designed banknotes and stamps, carved memorials (including those to Sir Winston Churchill and T S Elliot) and above all illustrated books with wood engravings in the Bewick tradition.

**WOOD ENGRAVINGS OF
THOMAS BEWICK**

REPRODUCED IN COLLOTYPE

Selected, with a Biographical Introduction, by
REYNOLDS STONE



*From the portrait by William Nicholson, R.S.A.,
in the Laing Art Gallery, Newcastle, engraved
on wood by Reynolds Stone*

RUPERT HART-DAVIS
SOHO SQUARE LONDON
1953

[10 Thomas Fryer Ranson

Thomas Bewick: pencil portrait, no details available]

In the possession of Dr Joly of Dublin in 1882.⁷⁰ Subsequent whereabouts unknown.

***11 William Nicholson**

**Thomas Bewick: watercolour and pencil drawing, oval aperture in mount
345 x 295 mm; 1814**

Natural History Society of Northumbria: presented by Thomas Emerson Crawhall in 1889.

NEWHM: 1997.H35; Robinson 11 (note).

Pencil and watercolour on heavy wove paper, embossed 'Bristol Paper' in bottom right corner.

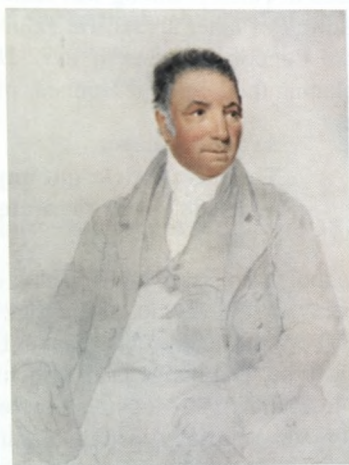
Painted by Nicholson for Emerson Charnley. The portrait was taken while Bewick was visiting his friend John Bailey, land agent to Lord Tankerville, at his home in Chillingham, Northumberland, in July 1814. He referred to it as 'another likeness' thus making it clear that this was not the oil (9) already discussed (and at the same time providing a latest date for that portrait). A painting of Bailey in the same style and painted on the same visit has not been traced.⁷¹

'Mr. Charnley possesses another good likeness done by Nicholson, when Bewick was at Chillingham; it is merely a drawing in water colour, but is very like' (Atkinson, 1831).

'R.E. Bewick was accustomed to bring friends to see it, he considered the likeness so faithful' (Bell, 1851; Robinson, 1887, p. 273).

⁷⁰ Mentioned by Thomson, 1882, p.224. Not found in the albums containing ex-Joly material in the Pease collection (Pease 173) or in the catalogue of the Joly sale (Pease 214).

⁷¹ Letter T B to T F Ranson 12 Dec 1815; Pease 178, p.71v. Letter T B to Jane Bewick headed Chillingham 14 July 1814; ms Huntington Library, San Marino, California, *vide* Iain Bain.



11a Artist Unknown

Thomas Bewick: watercolour drawing after the watercolour portrait by W Nicholson; c.1814?

In the collection of David Croal Thomson in 1930.

Illustrated in Thomson's *The Water-Colour Drawings of Thomas Bewick* (1930) on p.69, with the title 'Water Colour Study for a Portrait of Bewick. From an unpublished contemporary Drawing in the Author's possession.' It was presumably painted while the original (11) was in the possession of either Charnley or Crawhall.

11b Leopold Flameng

Thomas Bewick: remarque proof of an etching after the watercolour portrait by W Nicholson, oval engraved surface 351 x 302 mm, plate 500 x 392 mm; 1882

Natural History Society of Northumbria:
Presented by Thomas Emerson Crawhall in 1889.

NEWHM: 1997.H106. Robinson 11. Other copies in Pease 316 and 317.



The remarque is an impression of Bewick's prizewinning engraving of *The Huntsman and the Hound*. The proof is signed in pencil by Flameng and bears the engraved inscription 'London Published July 1, 1882, by The Fine Art Society (Lim^d), 148 New Bond Street.'⁷²

⁷² Robinson (1887, p. 273) gives the date of the etching as 1880.

Isabella Bewick's own copy of this print was sold on 6 February 1884 to J Price for £2 (Lot 332 in Robinson, c1884).

Leopold Joseph Flameng (1831-1911)

Graves, 1901; Benezit, 1976.

Based in Paris, Flameng was famed as a skilled engraver, particularly of reproductions of the work of other artists. He exhibited eight etchings at the Royal Academy and seven at other London galleries in 1872-1892. He was awarded a number of medals in France, including the Légion d'Honneur in 1870.

11c Artist unknown

Thomas Bewick: gilt impression from bookbinder's finishing tool, 32 x 27 mm; 1887 after the watercolour by Nicholson (11) or Flameng's etching (11b)

The tool was used in the finishing of the spine of the half-morocco binding of the Memorial Edition of Bewick's *Memoir* (Dobson, 1887) printed, and probably bound, by R Ward & Sons, Newcastle upon Tyne. The image is an effective copy, given the simplicity of the technique. The blocking brass or finishing tool was one of several made especially for this binding which were also used on the brown cloth binding of the standard edition. Their present whereabouts are unknown.



11d Miss E D Crawhall

Thomas Bewick: Wood Engraver: oval ceramic plaque with image in pencil and watercolour, 172 x 223 mm; c.1883

Laing Art Gallery, Newcastle: Tyne & Wear Museums.
TWCMS: G2811. Gift 1950.



The image is clearly derived from the Nicholson portrait of 1814 (11). On the back of the plaque is the label of 'Howell & James's Art Pottery Exhibition' for 1883 on which Miss E D Crawhall is named as the exhibitor, in the 'Amateur' category. She was most likely a relative of Thomas Emerson Crawhall, in whose possession the original was until 1889 when he donated it to the Natural History Society. The plaque was donated to the Laing Art Gallery in 1950 by Mr Ernest Thompson of Carlisle.

Walker (1985) refers to a watercolour portrait of Bewick by E D Crawhall at the Laing Art Gallery. This evidently is the present item as there is no other by this artist in the gallery's records.

See also 16 below, which may derive from this group of portraits.

[11e] **William Nicholson**

Thomas Bewick: portrait in watercolour; no details, n.d.]

In the possession of Miss V Atkinson in 1928 (Laing, 1928, number 183).

Nothing further is known about this painting, which was recorded in the catalogue of the 1928 Laing Art Gallery exhibition as on loan from Miss V Atkinson. On the evidence available it cannot be assumed that it was not a copy of one of the known Nicholson portraits, **9**, **9a** or **11** (it may even be identical to **11a**) but a separate original work is possible. In either case its present whereabouts are unknown.

[12] **Thomas Lord Busby**

Thomas Bewick: portrait (probably a miniature), medium unknown; 1815]

Whereabouts unknown.

This portrait, by 'Mr Busby', was mentioned as in progress on 3 January '1814' [ie 1815] by Thomas Bewick in a letter, quoted at **6a** above, to John Summerfield (who immediately tried to borrow it). Its later history is not known. The artist was the London painter, Thomas Lord Busby. He was still in Newcastle in March 1815;⁷³ apparently making drawings and engravings for the illustrations for Sir Cuthbert Sharp's *History of Hartlepool* (published in Durham in 1816).⁷⁴ Robert Elliot Bewick and Isaac Nicholson also made engravings for the book. Sharp seems to have been impatient with Busby's slowness, and was reduced to getting some of the work done by 'amateurs', including himself (a Busby drawing of a coble, for example, was engraved by Sharp). Bewick, writing from Newcastle, referred to him on 10 March 1815 as 'Mr Busby, Engraver now here as a Miniature Painter'. Jane Bewick in her letter of 15 July to her father, about letters that had arrived in his absence, hinted at further problems:

*Busby's letter was a great deal about nothing, it contained four or five Postscripts of Compliments to people who do not care if he was at Jericho; not one word in answer to that part of yours about the evil reports prevailing against him; this needs no comment.*⁷⁵

Perhaps Busby's Bewick portrait remained unfinished.

Thomas Lord Busby (1782 - after 1837)

Graves, 1901. O'Donoghue, 1908-24. Benezit, 1976, Tattersfield 1999

London engraver and portrait painter. He exhibited 15 portraits, including miniatures, at the Royal Academy and two at the Society of British Artists between 1804 and 1837. He did complete a few engravings for Sharp's *Hartlepool*. Eleven of his paintings and fourteen engravings are recorded in O'Donoghue's British Museum portrait catalogue.

⁷³ See letter T B to John Chambers 10 March 1815 (ms formerly in the collection of Sir Geoffrey Keynes); *vide* Iain Bain.

⁷⁴ 'The principal plates are executed by Mr Busby, who is now employed in further illustrating, by a series of etchings, the manners and costume of the fishermen of Hartlepool' (Sharp, 1816). Several plates are signed 'T L Busby'.

⁷⁵ Letter Jane Bewick to T B 15 July 1815; private coll.; *vide* Iain Bain.

*13

James Ramsay

Thomas Bewick: oil on canvas, framed, 725 x 607 mm; 1815 ⁷⁶

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM: 1997.H32.

Half-length portrait. Two volumes of *The History of British Birds* rest on an unseen table beside him.



This portrait embodies the personality of Thomas Bewick, his strength of character; intelligence and humour shine through the eyes, bringing the whole face to life. Here he sits, aged sixty-one, in his prime, with a successful engraving business and the attainment of great personal renown from his published works.

After a visit with friends to Ramsay's studio Jane Bewick wrote to her father on 15 July 1815 (see footnote 75): 'Mrs Fryar, Miss Broughton & Miss J. Pinkney ... [when] they espied your Portrait ... they quickly pronounced it to be "you exactly - "'.

Bewick too was happy with the portrait and the engravings taken from it ('the only one

⁷⁶ The date of the production of this portrait was previously believed to have been 1816; new evidence (the letter referred to in footnote 75) puts the date earlier, certainly before July 1815.

worth any notice is the one done from Ramsay's painting')⁷⁷; and it was *à propos* this portrait that he wrote:

*I think Mr Ramsay's Portraits one & all are the best that ever were done - he gives the Character as well as the likeness so correctly, that they look like the person alive - they ought indeed not to be called likenesses, but Fac Similes.*⁷⁸

The following year Robert Pollard, an old and close friend, saw this portrait and Nicholson's (9) at the Royal Academy and wrote 'yesterday I went to the Exhibition ... but it [the Ramsay] being placed too high up I could not at all satisfactorily contemplate the features'. He found the Nicholson also hung too high, but 'as a picture ... far superior to Mr Rs - tho on the whole the latter's Face is more like than Mr N's ...' (footnote 52).

It was presented to Mrs Bewick by Ramsay in 1820⁷⁹ and hung in a place of honour in the family's sitting room (Robinson, 1887 p.210). It now hangs in the council room of the Natural History Society. It was exhibited on loan at the 1928 Bewick anniversary exhibition (Laing, 1928, number 179).

Ramsay intended to get it engraved while he was based in Newcastle, as is shown by the following advertisement:

To be published by Subscription

A print of Mr. Thomas Bewick, the celebrated Engraver on Wood, from a picture painted by Mr Ramsay. Subscribers' Names received by the principal Booksellers in Newcastle, also at Mr Ramsay's, No. 8 Mosley-street.

*To be engraved in the Line Manner. Price of Proof Impressions, 15s. Plain ditto, 7s.6d.*⁸⁰

In the Beinecke Library, University of Yale (James Marshall and Marie-Louise Osborn collection 12465), is a receipt, signed by James Ramsay, acknowledging the sale of a portrait of Thomas Bewick to Thomas Bell, dated 1820 and 'Accompanied by a list of four portraits painted by Ramsay'.⁸¹ It seems likely that the portrait was a copy of the Burnet engraving (13a) and that the list is a later one referring to items 19, 19a and 20 below, or else a list of portraits of other subjects.

James Ramsay (1786-1854)

Redgrave, 1878. Hall, 2005; *ODNB*.

Portrait painter in oils. He was born in Sheffield but his professional base was chiefly in London until 1847, when he settled in Newcastle. Nevertheless, he appears from the evi-

⁷⁷ Letter T B to J F M Dovaston 18 November 1823; Shropshire Record Office; quoted by Bain (1975, p. xxiv, note).

⁷⁸ Letter T B to T F Ranson, 12 December 1815; Pease Collection 178, p.71v.

⁷⁹ Letter from James Ramsay, dated 1 January 1820: 'J. Ramsay begs to present Mrs. Bewick with the portrait of her husband, and his esteemed friend, wishing them and the family many happy years, in which Mrs Ramsay sincerely unites.' A copy of the letter was attached to the Burlison copy of the portrait (13d) when it was exhibited in 1903, and the original letter may then have been in the possession of the Ward family. Its present whereabouts are unknown.

⁸⁰ Newscutting, undated, unattributed. Thomas Bell collection (p.59), Gateshead Public Library.

⁸¹ *Fide* Iain Bain. Attempts to obtain further information from the Beinecke Library have been unsuccessful.

dence above to have spent an earlier period in Newcastle when he had a studio or shop in Mosley Street, Newcastle, in or before 1817, and was still there in 1820.⁸² He had launched his career, with the help of Bewick's friend Robert Pollard, by exhibiting a self portrait at the Royal Academy in 1803, and over the next 51 years exhibited there 144 works. His initial connection with the North East appears to have been made with his first portrait of Thomas Bewick, exhibited at the Royal Academy in 1816. In 1819 he exhibited there a view of Tynemouth Priory. He continued his association with Bewick, painting at least three more portraits, including the oil held by the National Portrait Gallery, a lost portrait and *The Lost Child*, all painted in 1823 (19, 19a and 20). Ramsay's other subjects included James Northcote, RA, Charles, 2nd Earl Grey (1824) and William Armstrong (1854). He died at 40 Blackett Street, Newcastle, on 23 June 1854.

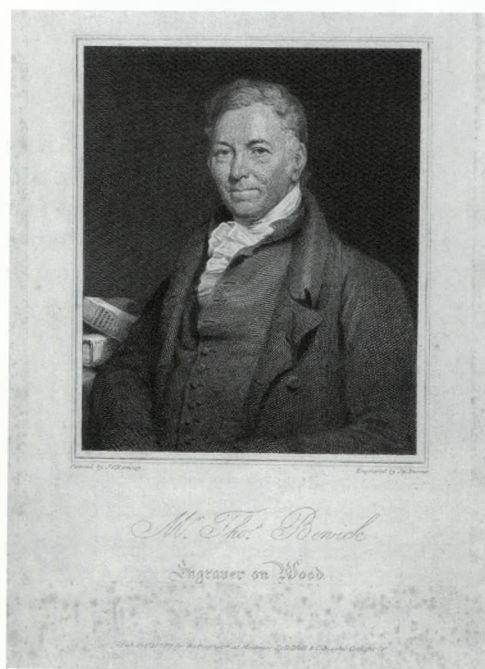
In the 1815 letter to Thomas Ranson, Bewick comments 'Mr Ramsay is also a very agreeable, kind, good man, as well as a first rate painter' (Footnote 78).

***13a John Burnet**

Thomas Bewick: engraved portrait on copper, engraved surface 134 x 109 mm, plate 305 x 228 mm; 1817

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM:1997.H115.3. Bell 4. Robinson 4.

Title: *Mr. Tho^s. Bewick. Engraver on Wood. Painted by Ja^s. Ramsay Engraved by Jn^o. Burnet, Pub. Oct^r. 25 1817, for the Proprietor at Molteno's Pall Mall & Colnaghi's, Cockspur St^l. Price 21 shillings.*



A faithful copy of the Ramsay original. The two volumes of *British Birds* are shown, (they are omitted in 13b).

In a letter to Pollard in January 1816, after discussing Nicholson's portrait (9) and the plans to engrave it, Bewick had added 'At the request of a Friend here, I have sat again to Mr Ramsay, who has done the Portrait complete & I understand from him, that this friend of mine & other friends intend to have it also engraved ...'.⁸³

When completed, the engraving formed part of the Bewick family's personal collection of portraits, and was one of the few to be granted family approval. 'Bewick considered it by far the best likeness of himself.'⁸⁴ Bell (1851) used it as the frontispiece to his *Catalogue*.

Atkinson's (1831) comment, based on his close acquaintance after 1825, is interesting:

⁸² In the second edition of Pigot's Directory (for 1821-2 & 1823), published in 1820, James Ramsay appears as a teacher of drawing, at Mosley Street. No other directories are available for Newcastle between 1811 and 1824, when Ramsay was not recorded in the town.

⁸³ Letter from T B to Robert Pollard 29 January 1816; ms Laing Art Gallery coll., *vide* Iain Bain.

⁸⁴ Robinson (1887), p.271 and see also footnote 77.

I do not think that any of the prints published of Bewick, are good likenesses, though I am told Burnett's engraving from Ramsay's painting, was so at the time it was taken; it always struck me that there was a round stout vulgarity about them, which he had not, and I can scarcely imagine them to have been good likenesses of his highly intellectual countenance.

The original impressions of this 'beautiful portrait' were already considered to be 'extra rare' in 1887 by Robinson and consequently many inferior copies of this popular engraving exist. For example in Pease 178 at p.12 there is an electrotpe copy 101 x 85 mm and at p.10 a miniature version 69 x 55 mm (with cognate versions of **6a** (53 x 43 mm) at p.6, and of **5a** (56 x 44 mm) at p.7). These were probably commissioned by Emerson Charnley and appear in his *Select Fables* (1820) at pages xxv-xxxi. A similar inferior copy of **9c** also appears in the book, at p.xxvii. The artists are unknown and the images do not merit separate entries in this catalogue.

John Burnet (1784-1868)

Redgrave, 1878. *ODNB*.

Painter, engraver and author. Born in Musselburgh, near Edinburgh he was apprenticed to the landscape engraver Robert Scott, the father of William Bell Scott, while simultaneously studying painting at the Trustees' Academy under John Graham (along with David Wilkie). In 1806 he followed Wilkie to London and produced many finely engraved plates, mainly for book illustrations. He exhibited at the Royal Academy, at the British Institution and at the Royal Society of British Artists. Burnet earned a reputation as a knowledgeable author on the fine arts, especially painting, and his book *A Practical Treatise on Painting* (1827) ran to many editions. The Bewick family owned at least two of his works (Bewick Sale, 1884).

***13b Henry Hoppner Meyer**

Thomas Bewick: impression from the copperplate stipple engraving, image 125 x 106 mm, engraved surface 133 x 106 mm, plate 289 x 190 mm; (n.d. possibly mid 1840s)

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM: 1997.H114.1. Impression without letterpress in Pease 173, vol. R. Hugo 3879, 3880, 5355.

Title: *Thomas Bewick: Engraver on Wood. Ja.^S Ramsay Pinx.^I. Henry Hoppner Meyer sculp.^I Edwin Pearson Excudit, Bewick House, 77 Red Lion Street, High Holborn & Bewick Repository, 64, St. Martins Lane, W.C.*

The exhibited print was one of the Bewick family's personal collection of portraits, and bears a manuscript inscription in ink 'very Good likeness Isa Bewick Gateshead. March 4th 1882'.⁸⁵ Indeed, as early as 1866 Thomas Hugo (1866, 3879) commented that this engraving was 'said by the family of the artist to be a most excellent likeness and a complete success'. He probably learned this from Edwin Pearson who was the owner of the copperplate and who seems to have commissioned the engraving from Meyer. Pearson, the London publisher and Bewick collector, published Meyer's print in 1865⁸⁶ and used it

⁸⁵ The word very has been changed from the original 'yery', giving some support to the annotation having been written in the last full year of her life by the aged Isabella.

⁸⁶ Hugo, 1866, 3880. All of the copies in Hugo's collection were given to him by Pearson.



Thomas Bewick
Engraver on Wood

as the frontispiece for the catalogue of his collection in 1868.⁸⁷ When the plate was used again to print the frontispieces to D C Thomson's *Life & Works* (1882) and Julia Boyd's *Gleanings* (1886), it remained in the family, the property of the Revd Mr E Pearson. It was sold as part of the Pearson collection at Sothebys in 1895, and Mr Edwin Pearson himself wrote the catalogue, which gives it a certain authority:⁸⁸

Lot 371. Bewick (Thomas) Portrait, engraved by Henry Hoppner Meyer, after Ramsay's painting (in the late Miss Jane Bewick's possession), for Edwin Pearson, with impression, the original copper plate, which has been steeled, in fine state.

[Note] Miss J. Bewick rectified in pencil on the artists' proofs (during engraving) several errors in the painting, and on receiving three proofs on vellum, satin, etc. wrote

to Edwin Pearson expressing her own and sister's gratification at the results achieved, and stated, "It is an admirable likeness (of her late father) and a complete success." ... H. Meyer (one of the last of the Bartolozzi School) considered it one of his best works.

The assertion that Jane Bewick improved upon Ramsay's likeness of her father, and that Meyer captured these improvements in his engraving are of great interest, but should not perhaps be taken at face value. The family's approval of the Ramsay original is also well documented. As a copy of the painting, Burnet's version is the more faithful, and it has generally been accepted as the better likeness of the man.

Ramsay had suggested to Bewick in 1815 that his portrait of Bewick should be 'done in the stippled manner' and may indeed have recommended Meyer, who had already engraved at least one of his portraits in stipple; though the name that Bewick recollected

⁸⁷ Anon, 1868. On Isabella Bewick's copy of this, illustrated in Bain (1979a, p. 110), she again wrote 'a good likeness Isa - 1881' - the volume was sold at the auction of her property in 1884 to E B Mounsey, for £2 (see Pease 206).

⁸⁸ *Catalogue of an extraordinary assemblage of many thousands of engraved wood-blocks forming the most extensive collection ever brought together of the original engravings on box-wood by Thomas and John Bewick ... formerly in the Hugo, Jupp, Pearson, and other collections. Together with the original blocks, stereotype plates, and publishing rights of Bewick's Select Fables. (Longmans' Edition, 1878.) Which will be sold by auction ... by Messrs. Sotheby, Wilkinson & Hodge, 1895. 'The present catalogue has been compiled by Mr. Edwin Pearson.'*

when he wrote to Ranson about this was Turner.⁸⁹ In the event, at that stage Burnet was chosen and made his very successful line engraving. Whether in later choosing Meyer to engrave a stippled version Pearson was influenced by Ramsay's suggestion is unknown.

Other impressions, printed with letterpress, have no publisher named below the title *Thomas Bewick: Engraver on Wood*; or, have below the title *Edwin Pearson Excudit* in place of the wording given in the heading above, either alone or with the address details as above (examples in Pease 178). There are copies without letterpress in the collections of the Natural History Society and the Newcastle City Library, in an early state in which the lower part of the figure is incomplete.⁹⁰

The date of Meyer's engraving remains obscure. No record of it has been found before the prints published in 1865 by Edwin Pearson, as mentioned in 1866 by Hugo,⁹¹ who states that the artist 'died soon after the completion of the work'. If confirmed, this would place the engraving in the mid 1840s. The twenty-year gap before its publication is unexplained. The other puzzling feature about this engraving is that it is the only one of at least 250 portraits engraved by Meyer which bears his full name – all the others are signed only 'Henry Meyer'.⁹² This anomaly may perhaps be attributable to Pearson, who liked to extract every ounce of prestige from his publications and perhaps savoured the name of Hoppner.

Hugo (1868, 5356 & 5357) records two 'photographic reduced copies' of the Meyer engraving, one of them 'From Mr E. Pearson'. A probably 19th century sepia photograph of the Meyer engraving, reduced to a trim size of 90 x 57mm, is in a private collection, pasted into a copy of Bewick's *The History of British Birds*, Vol. 1, 1826 with an ownership signature of 1847 (*ex inf* Iain Bain). (See 19d for another early photograph of a Bewick portrait.)

Henry Hoppner Meyer (c1782-1847)

DNB; Benezit, 1976.

Meyer, a portrait painter and engraver, was the nephew of John Hoppner, RA. He studied under Francesco Bartolozzi (1727-1815), a founder member of the Royal Academy who attracted a large school of pupils. His first published engraving was in about 1805 and he exhibited at the Royal Academy in 1824-33; in all he engraved considerably more than 250 portraits after English artists. He was a founder member of the Society of British Artists, and its president in 1828-29. Henry Meyer died on 28 May 1847 in St Pancras.⁹³

13c Artist unknown

Thomas Bewick: lithographic portrait after Ramsay and Meyer, image in stone 125 x 106 mm, stone 170 x 110 x 20mm; n.d.

Private collection. Formerly in the possession of Septimus Ward.

The broken stone bears an accurate copy of Meyer's engraving (without reversal). No print from the stone has been traced: it may never have been used. It may have come into the

⁸⁹ Letter T B to T F Ranson 12 Dec 1815; Pease 178, p 71v, *vide* Iain Bain. 'Turner' was probably Charles E Turner (1773-1857) who like Meyer was a pupil of Bartolozzi and successfully engraved copies of the paintings of other artists in the stippled manner. He was a particularly prolific engraver of portraits (O'Donoghue, 1908-24).

⁹⁰ NEWHM: 1997.H144.3; Pease 173, vol. R, p.1.

⁹¹ Hugo (1868: 5355). Hugo's second copy (5355) on vellum was given to him by E Pearson.

⁹² Information extracted from O'Donoghue (1908-24).

⁹³ Death certificate.



13c



13d

possession of Septimus Ward from the Ward family printing business in Newcastle, but this is not certain.

13d Artist unknown, probably Clement Burlison

Thomas Bewick: oil on canvas after Ramsay in a carved gilt frame; 740 x 620 mm; n.d., pre-1884, probably c.1860s

The National Trust: Cherryburn, Northumberland.

Purchased by the Trust at Anderson and Garland, auctioneers, of Newcastle, on 14 December 2004.

Formerly in the private collection of the late Mr Dennis Burton (d.2004) of Felton, Northumberland.

At the 1903 Bewick anniversary exhibition (Academy of Arts, 1903), a 'Copy of a Portrait of Thomas Bewick by Clement Burlison, after the original oil painting, by James Ramsay, now in the Natural History Museum, Newcastle upon Tyne' was exhibited, on loan from The Ward Collection. It seems very probable that it was this portrait.

However, all that is certain is that the painting is a copy of **13**, with almost identical aspect and posture, clothing details, colouring, and background (including the books), although in some details the appearance of the face is changed, looking younger and more rounded than in the original. Indeed, examination under ultraviolet light shows the line of the sitter's right cheek to have been altered at some point, contributing to this difference. There is no label or signature to give a clue to the artist and the canvas back is obscured by a modern lining. On the stretcher is the label of John Hay and Son, Carvers and Gilders, Dealers in Works of Art, 30 Grainger Street, Newcastle upon Tyne. Under this name of 'John Hay and Son', the firm appeared in the Newcastle directories between 1869 and 1884, providing a latest date for the copying of about 1884 (when the original portrait had already passed from the possession of the Bewick family to the Natural History Society). It remains just possible that the copy (if by an as yet undiscovered artist) was made before

the original was presented to Mrs Bewick. It seems more likely to have been painted, by Burlison, during the resurgence of interest in Bewick after the publication of his *Memoir* in 1862. Its later provenance before coming into the possession of Mr Burton in the late 20th century is not certainly known. The unlikely possibility cannot be excluded that the Cherryburn portrait is either the one in the possession of Armorer Donkin, as described by William Cobbett, or that painted by 'Robert Dodds' (see Introduction).

Clement Burlison (1815-1899)

Hall (2005).

Burlison was born near Middleton in Teesdale, the son of the Clerk of Works to the architect Ignatius Bonomi. After an apprenticeship in heraldic painting with a coachbuilder, he concentrated on portrait painting, with a penchant for copying portraits, including some at the National Gallery during a visit to London and others in major European galleries. After 1847 he settled in Durham and exhibited works at the Royal Academy (1846-63) and British Institution, as well as in Newcastle. Several of his works were bequeathed to the Corporation of Durham and they are exhibited in the Burlinson Gallery at the Old Town Hall, Durham City.

13e Unknown Artist (doubtfully attributed to James Ramsay) Thomas Bewick Esq.: pencil and watercolour sketch on paper, 221 x 282 mm; n.d (1816 or later)

Laing Art Gallery, Newcastle: Tyne & Wear Museums.
TWCMS: H12665. Purchased 1919.

Formerly in the collection of Matthew Mackey, purchased by the Laing Gallery from his executor in 1919.

The paper is watermarked 1816. This rules out the possibility of this being a preliminary sketch for the 1815 Ramsay portrait.

A full length portrait, set apparently in the Bewick workshop office, with pencil annotations. The upper part of the figure of Bewick is based on the Ramsay portrait of 1815, the lower part of the body crudely drawn, and the whole figure (but not the background) painted in watercolour. The face bears a stronger resemblance to the Burnet engraving (13a) than to the Ramsay oil itself. This appears to be an elaborated composite copy of the oil portrait and the engraving, perhaps done by an artist who was aware of the Bewick family's approval of the likeness in the Burnet and Meyer engravings.



A number of interesting items are in the background: a framed 'Chillingham Wild Bull' above the fireplace; his dog 'Cheviot' with its head strangely hidden behind Bewick's legs

while it paws his calf; the walking stick which Bewick inherited from his brother John, leaning by the hearth; his hat hanging on a peg; a half empty bottle on the mantelpiece.

The pencilled title reads 'Thos. Bewick Esq. As he stood at the fire (for a Wonder) with his Hat off while several Ladies and Gentlⁿ were come too [*sic*] look at his Work'. Two other annotations are 'Cheviot' (written above the dog's shoulder) and high on the left by a window 'Window looking thro' to R. E. Bewick's office'. One other inscription, possibly the artist's name, has been heavily scored out and only the last word is legible – '... delineated'.

[13f] Artist unknown

Thomas Bewick: watercolour sketch; n.d.]

'Taken from Burnet's engraving after Ramsay'

Pease 176, p4.

The album containing this painting is currently missing from the Pease collection. The painting has not been examined.

14 John Jackson

Thomas Bewick: engraving on wood, 101 x 83 mm; c.1818-20

Published in the *Local Historian's Table Book*, Volume 3, by M A Richardson in 1843 (page 400) and in Bell's *Catalogue* (1851), page 8.

Bell 6. Robinson 6.



The notice of Bewick's death in the *Table Book* ends with the statement 'The accompanying portrait is a very early specimen of Mr. John Jackson's engraving, we believe between the years 1818 and 1820'. Bell (1851), copied by Robinson (1887, p. 272), thought it was probably drawn and engraved while Jackson was a pupil with Bewick.

Nevertheless, the pose and costume (though reversed in Jackson's engraving) are almost identical to those in Ramsay's 1815 portrait (13) and in Burnet's engraving of it (13a). It is difficult to escape the conclusion that Jackson's work, though perhaps indeed engraved early in his career, was based on the work of another artist. The

block was in the possession of George Bouchier Richardson (the son of M A Richardson) when Bell used it in 1851.

John Jackson (1801-1848)

Redgrave, 1878; Hall, 2005; Engen, 1985; *ODNB*; Angus, 1993; Bain, 1981.

Wood engraver and draughtsman. Jackson was born at Ovingham and for two short periods (1819 and 1823-24) was apprenticed to Bewick. He had to leave because of inability to pay the apprenticeship premium on the first occasion but returned after the bankruptcy of his new masters, Armstrong & Walker of Newcastle. Following a disagreement with Bewick, he left for London without completing his apprenticeship, to work with William Harvey. He had considerable success in book illustration, notably for Northcote's *Fables*. Jackson paid generous tribute to his former master in his *Treatise on wood engraving* (1839), but Bewick made no mention of Jackson in his *Memoir*.

14a Artist unknown ('W B')

Thomas Bewick: two small etchings, probably after Jackson, but possibly reversed after Burnet (13a); n.d. (probably late 19th C)

i with etched initials 'W B', image 41 x 38mm, plate 88 x 62mm, on laid paper with part of a watermark '18-'

ii unsigned, image 40 x 45 mm, plate 91 x 77 mm, on wove paper

Collection of Nigel Tattersfield (both i and ii). Another copy of (i) is in a private collection.

The two in the Tattersfield collection are similar but distinct, the first a better likeness to the Jackson original, though neither is good. There is no background. They are probably by the same amateur hand. No likely candidate for the initials W B has been identified. The other copy of (i) is also on laid paper with part of a watermark but no vestige of a date.



15 John Jackson

Thomas Bewick: engraving on wood, engraved surface 110 x 86 mm; c.1838

For *A Treatise on Wood Engraving, Historical and Practical. With upwards of three hundred illustrations engraved on wood, by John Jackson*. London: Charles Knight & Co., 1839.⁹⁴

Robinson 6 (note).

J G Bell wrote of this engraving 'Mr Jackson engraved on wood from recollection' (Bell 1851, p. 8 note). Subsequently Robinson (1887, p. 272), among others, repeated this claim. A letter of 1840 from William Chatto to John Bell (bookseller on the Quayside, Newcastle) gives the story of the block in some detail and suggests that Jackson, while apprenticed to Armstrong and Walker, Dean Street, Newcastle, engraved an image drawn on the wood block by a fellow apprentice named Wilson, who based it on the recently published Burnet engraving (13a).⁹⁵ The pose and costume are compatible with this suggestion, but the Jackson engraving is three-quarter length while Burnet's is half-length with less background detail. There are clear parallels too between Bewick's posture in Jackson's engraving and in the Nicholson oil painting (9) of about 1813.



Printed on a page of its own in the 1839 edition, but to a lower standard and on the same page as the text in the second edition (1861, p. 510) of the *Treatise on Wood Engraving*. The engraving was reproduced by permission of Mr Colin Campbell in 1990 as *Thomas Bewick holding a copy of the 'Quadrupeds'* (in *Cherryburn Times* Vol.1 No.9, p.1).

Jackson in the text on Bewick for the *Treatise* gives another interesting first hand account

⁹⁴ Most of the text was written by W A Chatto, although his name does not appear on the title page until the second edition (1861).

⁹⁵ Letter W Chatto to J Bell 23 May 1840; ms Pease 178, p.82.

of his physical features 'Though hard-featured and much marked with the small-pox, the expression of Bewick's countenance was manly and open, his dark eyes sparkled with intelligence' (Jackson, 1839 p.602).

- *16 Charlton Nesbit and William Nicholson**
Thomas Bewick: engraving on wood by Nesbit from a drawing by
Nicholson, engraved surface c. 105 x 100 mm; n.d., c.1820

Newcastle City Library: Pease Collection.

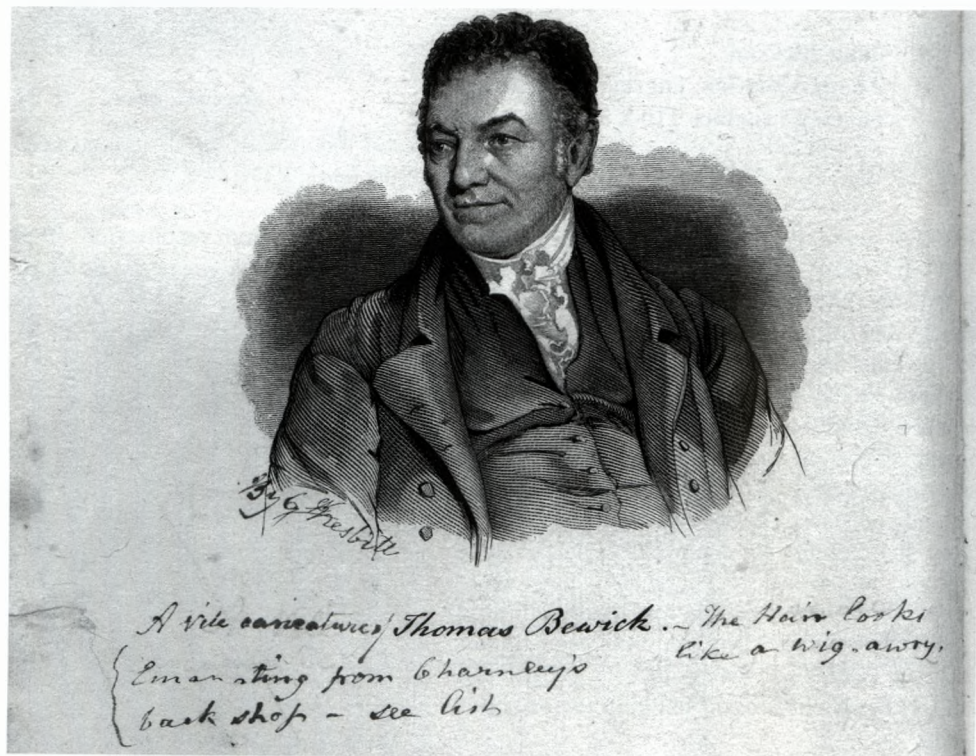
Pease 15 (and several proof engravings). Robinson 5.

Frontispiece to *Select Fables* (1820) published by Emerson Charnley, Newcastle. The copy exhibited was the Bewick family's copy, with Jane Bewick's annotations (Pease 15).

- *16a The engraved woodblock of the above**

The National Trust: Cherryburn, Northumberland.

CHBM X233.



Engraved for the frontispiece to Emerson Charnley's edition of the *Select Fables*, published in 1820. Nesbit's initials CN in flourished script are almost concealed by the annotation 'By C Nesbitt'. William Nicholson, the artist, had drawn the portrait on the wood block in pencil ready for Nesbit to engrave (Hall, 2005, p.241). Dobson (1899, p.169) states that Nesbit's engraving was based on a Nicholson portrait of Bewick taken at Chillingham (11 above). Indeed, there is a resemblance between numbers 11 and 16, rather ironically since the Bewick family greatly admired the first and greatly disliked the second.

Presumably Bewick was referring to this portrait when he wrote to his friend John Dovaston in 1823 'The likeness of me in Mr Charnley's Edition of the old Fables, I con-

sider not worth a Pin the only one worth any notice is the one done from Ramsay's painting'.⁹⁶

His daughter Jane's even more scathing comment is written below the portrait in the family's copy of the book – 'A vile caricature of Thomas Bewick emanating from Charnley's back shop ... The hair looks like a wig awry'.⁹⁷

Charlton Nesbit (1775-1838)

Redgrave, 1878. *DNB*. Hall, 2005. Angus, 1993.

Wood engraver and illustrator. He was born at Swalwell, near Gateshead and worked as an apprentice for Beilby and Bewick from 1789–1797, eventually moving to London where he established a reputation as a fine reproductive engraver. From 1815 to 1830 he returned to Swalwell, although now semi-retired due to an inheritance, where he cut Bewick's portrait for the Newcastle bookseller and publisher Emerson Charnley. Nesbit eventually died in Brompton, after returning to the capital and settling there. As a "wood-engraver pure and simple", Austin Dobson (*DNB*) regarded him as the best of Bewick's pupils.

- *17 Attributed to James Ramsay**
Thomas Bewick: oil on canvas, 740 x 608 mm; n.d.
The Literary and Philosophical Society of Newcastle upon Tyne



⁹⁶ Letter T B to J F M. Dovaston 18 November 1823; Shropshire Record Office; quoted by Bain 1975, p. xxiv, note. Bewick is referring to Burnett's engraving 13a.

⁹⁷ *Select Fables* (1820) – Pease 15.

Here we see Bewick as his friend John Dovaston knew him 'The fine old fellow, this jolly old Cock o' the North'⁹⁸ or, as another biographer noted, the 'cheerful fireside crony',⁹⁹ the whole face conveying his genial temperament. He almost seems to be smiling although Robinson noted that 'Bewick seldom smiled.' (Robinson, 1887 p.166)

The walking stick prominent in this portrait had belonged to his brother John, a 'black-thorn, full of knobs, with a silver hoop.'¹⁰⁰ Bewick treasured the stick after John's death and carried it everywhere with him, always placing it carefully in a special corner of his workshop when not in use. The stick appears in a number of portraits see **13e**, **18** and **19a** and its derivatives.

Surprisingly little is known of the date and provenance of this portrait. Thomson (1882) records it as at the Lit. and Phil. by that date. It was exhibited on loan (and attributed to Ramsay) at the 1903 anniversary exhibition (Academy of Arts, 1903, number 241). Walker (1985) by implication questioned its attribution and suggested, apparently without evidence, that it might be the lost portrait by Robert Dodds (see **8** above). Another possibility is that it was the portrait of Bewick that belonged to Armorer Donkin in 1832, when it was admired by Cobbett (a suggestion that also occurred to Tattersfield).¹⁰¹ Some flimsy support for this is given by the fact that Ramsay was the artist chosen to paint a portrait of Donkin (later engraved by C Turner).¹⁰²

[17a James Ramsay

Thomas Bewick: 'size of life', details unknown, n.d.]

Described by William Bewick, 1864.¹⁰³ Identity not established but probably the same as **17** or **20**.

There has been a sale of book treasures, some drawings and paintings, and a portrait of Thomas Bewick, painted by Ramsay. I am sorry that I could not attend the sale. William Bewick to T H Cromek, 16 April 1864.

The portrait of Thomas Bewick that I mentioned to you was for sale at a gentleman's house near Durham, and has been bought by the Rector of this parish [Darlington]. It is a fine portrait, size of life, painted by James Ramsay for a friend of Bewick, of the name of Scruton, of Durham.¹⁰⁴ Had I been able to go to the sale, the picture would no doubt have been mine. William Bewick to T H Cromek, 28 April 1864.

At this time the earliest of the known Ramsay portraits (**13**) was in the possession of Thomas Bewick's daughters, Jane and Isabella. The full length (**19**) was described as 'small' rather than 'size of life'. The two larger Ramsays (**17** and **20**) are the probable candidates for the portrait described by William Bewick: the whereabouts in 1864 of both of

⁹⁸ Williams, 1968, Appendix, p. 130.

⁹⁹ Bain, 1975, p.xxiv.

¹⁰⁰ After Bewick's death Jane Bewick gave the stick to William Bewick the painter saying that he 'never had any other stick.' (Dobson, 1884 pp.24-5). It is now in the collection of Dr Iain Bain. The silver hoop is engraved 'John Bewick Died 5th Dec^r 1795'.

¹⁰¹ Tattersfield (1999) p.296.

¹⁰² O'Donoghue (1908-24), volume 2, p.70.

¹⁰³ In two letters to T H Cromek published in Landseer (1871).

¹⁰⁴ Richard Scruton (1755-1825) 'an eminent solicitor in Durham' (*Newcastle Chronicle*, 8 January 1825) was a close contemporary of Bewick (see Tattersfield, 1999).

these are unknown. The possibility that there was a lifesize fifth Ramsay portrait of Thomas Bewick seems less likely, though the Laing portrait, **18**, cannot be ruled out. The incumbent of Darlington from 1860 to 1873 (when he died) was the Revd John Garencieres Pearson.¹⁰⁵ The later fate of the portrait has not been traced. If it was the later Ramsay (**20**), Pearson must have parted with it before his death, since the National Portrait Gallery bought that in 1871. The likeliest candidate is therefore the Lit and Phil Ramsay, (**17**).

William Bewick (no relation) was a successful artist, born in Darlington, who became a pupil of Benjamin Haydon in London. His address at the time of the correspondence (Haughton House, near Darlington) and his description of his own collection of art treasures, including paintings by Cuyp and Rembrandt, hint at his wealth. He knew the family of Thomas Bewick well: he had a copy of *The History of British Birds* 'bought from the hand of Thomas Bewick' and had visited the family in Gateshead on a number of occasions since 1818. See portraits **7**, **19d** and **23**.

18 Artist unknown

Thomas Bewick: portrait, oil on canvas, 761 x 635 mm; n.d. (c. mid 1820s)

Laing Art Gallery, Newcastle: Tyne & Wear Museums.
TWCMS:G3379. Gift 1942.



This little known portrait was exhibited in the Palace of Arts at the North East Coast Exhibition in Newcastle in May–October 1929, recorded in the catalogue as number 840 'Thomas Bewick. Artist unknown. Lent by Mrs Jane Simpson'.

A head and shoulders portrait, the trunk turned slightly to the subject's left and the gaze directed at the artist. The pose is much like that in Ramsay's 1815 portrait (**13**) but the head is held further back. The left eye is whitened, although the iris can be faintly seen, probably as a result of inexperienced cleaning at some time after the 1929 exhibition. The walking stick, which had belonged to his brother John, is again prominent, as in **17**.

The portrait is unframed. There is a label on stretcher 'PALACE OF ART North East Coast Exhibition Newcastle-upon-Tyne 1929'. The canvas is unlined, with a patch repair on the back in the region of the chin and throat; it has some manufacturer's stamps. The condition of the paint is poor in places; with bitumen melt artefact and some areas of thinning.

¹⁰⁵ Pritchett (1924).

Although not a copy of any other known portrait (notably, his customary sideburns are missing) this painting resembles the portraits of Ramsay in many respects. It may possibly be one of the 'missing paintings' by Dodds (8), or, less likely, Ramsay (17a). From the apparent age of the subject it can be assigned a probable date between the 1815 and 1827 portraits (Ramsay 13 and Good 23), most likely in the mid 1820s.

[19] **James Ramsay**

Thomas Bewick: Lost oil on panel (or ? watercolour) study; 1823]

Formerly in the John C Joicey Museum, Newcastle (accession number 32/38/0).
Robinson 10 (note).

According to Austin Dobson (1884), Julia Boyd (1886) and Robert Robinson (1887), James Ramsay had made 'a small full-length watercolour study' (Boyd) or 'a highly finished full length painting on panel' (Robinson) of Bewick in 1823. All reported that this was in the possession of R S Newall, of Ferndene, Gateshead (Dobson, 1884, p.169; Boyd, 1886, pages 73-74 and footnote; Robinson, 1887, p. 272).

A fuller description by Walker (1985) in his list of Bewick portraits is 'Oil on wood panel formerly in the Laing Art Gallery. WL. Standing on a country road by the Tyne'. There appears to be no current record of the past or present existence of this painting at the Laing Art Gallery (*fide* curator of fine art, Ms S Richardson).

The portrait is said to have been stolen from the Joicey Museum, Newcastle, in the late 1970s or early 1980s (*fide* Iain Bain). The large collection donated in 1918 by J C Joicey to the City of Newcastle had been housed at the Laing Art Gallery until the 1960s, and little was added to it until after part of the collection was moved to the Joicey Museum (formerly the Holy Jesus Hospital). When the Joicey was closed in the late 1990s, the collection was divided into fine art and social history components and transferred to the Laing and the Discovery Museum, Newcastle. The available records of the Joicey Museum are now held in the Discovery Museum. The Ramsay portrait was not part of the original bequest as listed and checked in 1952, but it was recorded as in the Museum's collection in or before 1971. In an informal list of 'Oil paintings and other works' in the Joicey Museum (undated but later annotated in July 1971), is an entry for '32/38/0 Oil portrait of Bewick by J. Ramsay'.¹⁰⁶ The number may indicate that it was acquired in 1932. No photographic documentation or further record of its existence or its theft remains accessible in the records of the museum and no later trace of it has been found.

The painting had apparently been in the possession of Ramsay until it was sold for £25 5s to William Jackson of Hardriding House, possibly after Ramsay's death in 1854. It was resold at auction for £49 7s on 26 July 1864 where 'Much keen competition was excited for the possession of this charming and most characteristic full-length portrait of our eminent wood engraver . . . It has been finely engraved by Bacon the same size as the original'.¹⁰⁷

A newspaper cutting in the *Gateshead Observer* for 4 September 1852 reporting on the engraving of the portrait by Bacon (19c) recounts the reaction of the public to Ramsay's full-length portrayal of Bewick in the original oil painting.

The portrait of Bewick. We say the portrait of Bewick; for, beyond all question, Mr. Ramsay's gem transcends all other representations of our

¹⁰⁶ Typescript lists in the historical collection at the Discovery Museum, Newcastle upon Tyne.

¹⁰⁷ Newspaper cutting (n.d.) in a catalogue of the sale of oil and watercolour paintings of W Jackson, 1864. John & Thomas Bell Collection (not catalogued), Robinson Library, Newcastle upon Tyne.

*great artist, the reviver of wood-engraving. It will be well remembered in Gateshead, having formed part of the exhibition at the opening of the Mechanic's Institute in West Street; and the admirers of Bewick will rejoice that Mr Turner has had the portrait engraved.*¹⁰⁸

The following two oils and the engravings by Frederick Bacon and C O Murray were evidently derived from it.

19a James Ramsay

***The Lost Child:* oil on canvas, 711 x 914 mm; 1823**

Newcastle City Library: Pease Collection.

*Framed photograph used in the exhibition, courtesy of Newcastle City Library and Information Services.

It was Ramsay who created the now well known full length figure of Bewick with his top hat and cane, probably the most iconic of all the portraits. Although in no way comparable with Ramsay's other masterly likenesses, the position of the figure at the forefront of the painting conveys a strong message to the viewer about Bewick's prominent status in Newcastle society.

In this scene, below the towering steeple of St. Nicholas' Church, a mother has lost her child and the town bellman is alerting the neighbourhood. Ramsay places himself with his wife (holding a parasol) beside Bewick on the left-hand side. On the right stand William Turner (1761-1859) and Robert Doubleday (1753-1823), two prominent citizens. Unnoticed in the distance a crowd approaches with the child who has been found.

The painting and Ramsay's portrait (20) were both exhibited in Newcastle in 1823 and *The Lost Child* was severely criticised for

the artist's foreshortening of the church steeple. Bewick's friend Robert Pollard, who saw both the 1823 paintings in London, commented 'Your figure is like but I think & thought your features not so – in both too Old'.¹⁰⁹ Bewick was actually seventy in 1823.

After being 'long in the possession of Robert Leadbitter, Esq., of Ryton-on-Tyne', it was in the hands of J W Pease by 1886 (Boyd, 1886). Having acquired it with the Pease



¹⁰⁸ John & Thomas Bell Collection (not catalogued), Robinson Library, Newcastle upon Tyne.

¹⁰⁹ Letter from R Pollard to T B, 9 June 1823, *vide* Iain Bain.

Bequest (1901), the Corporation loaned it for the 1903, 1928 and 1978 Bewick anniversary exhibitions (Academy of Arts, 1903, number 247; Laing, 1928, number 180; the 1978 exhibition at the Laing and Yale Center for British Art, New Haven, Connecticut).

***19b Attributed to James Ramsay**

Lammas Day Fair: oil on canvas, 901 x 700 mm; n.d.

Laing Art Gallery, Newcastle: Tyne & Wear Museums.

TWCMS:1994.656. Purchased 1975.

This portrait of Bewick was purchased by the Trustees of the Joicey Bequest for the Laing Art Gallery in about 1975. Its attribution to Ramsay is uncertain.



The painting is similar in style and content to *The Lost Child* painted in 1823 by Ramsay. The weather is sunnier, the central foreground figures have changed, but the backdrop, the onlookers and even the crowd approaching in the distance are virtually unchanged.

The Lammas Day Fair was held in Newcastle on 12 August, when cattle and horses were herded into the town from all over the North to be traded at Cow Hill on the Town Moor. It was a medieval fair and once heralded the start of the harvesting season. Local merchants would set up stalls selling their wares to the visitors.

'In August 1753 I was born' states Bewick in his *Memoir* but gives no day. Some biographers believed that he was born on 10 or 11 August, but the 12th was the date which he celebrated.¹¹⁰ His birthday is the most likely explanation for the allusion to the Lammas Day Fair.

¹¹⁰ J F M Dovaston's abridged 'Some account of the life, genius, and personal habits of the late Thomas Bewick, the celebrated Artist and Engraver on Wood.' (*The Magazine of Natural History* 1829-30) in Williams, 1968 p.132 says clearly that T B celebrated his birthday on 12 August.

***19c Frederick Bacon**

Thomas Bewick: proof copy, without letterpress, of the engraving on steel, engraved surface 202 x 155 mm, plate 408 x 308 mm; 1852

Published by Robert Turner, Newcastle. The initials JND are incised within the embossed stamp of the Printsellers' Association. Engraved with Thomas Bewick's signature.

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM:1997.H111. Robinson 10. Pease 321.

The title of published print was 'Thomas Bewick', with the following attributions 'James Ramsay pinxt. Pub. by R. Turner, Newcastle, Paul & Dominic Colnaghi & Co. London. F. Bacon Sculpt.'

Engraved after the lost full-length oil study of Bewick by James Ramsay (1823). Bewick is seen here again represented in the famous Lost Child pose but, as in the original, he is positioned standing on the banks of the river Tyne with Newcastle in the background. Bacon would have been commissioned to produce the plate, which was later reproduced as a frontispiece by Austin Dobson (1884 and 1899).



A brochure inviting subscriptions for the engraving was printed for Robert Turner, Fine Arts Repository, in 1852. The size of the plate was given as 16 inches by 12 inches and the prices were: artist's proofs, £2.2.0; proofs before letters, £1.11.6; proofs, £1.1.0; prints 10s. 6d. After a description of the posture of Bewick in the oil portrait,

was the comment: 'Mr. Bewick thus stood to the Artist, at the time when he had a presentiment that his earthly career would close, namely, at he age of 70, at which age his father and grandfather had died; ...'.¹¹¹

The Society's copy, forming part of the Bewick family's personal collection of portraits, bears testy manuscript comments in ink by Jane Bewick, 'This Likeness is a total failure. The figure is too short. T.B. was very nearly six feet in height. The eyes & nose very much too large'. It bears both daughters' signatures of condemnation 'Jane Bewick' and 'Isabella Bewick'.

Thomas Hugo (1866), who was in no position to judge for himself, wrote that this was 'considered by many the best likeness ever produced', and used it as the frontispiece to his folio edition of *The Bewick Collector*, 1870. He had evidently not consulted the opinions of the Misses Bewick. It was also used as the frontispiece to the 'Edition de Luxe' of Pearson's 1879 edition of *Select Fables* (Pease 22).

¹¹¹ Brochure in the Thomas Bell collection (p.60), Gateshead Public Library. Atkinson, 1831, p.154, also mentions Bewick's presentiment of death at the age of 70.

Frederick Bacon (1803-1887)

Graves, 1901. Benezit, 1976.

Born in London, he was a pupil of Fuseli. Later he became assistant to Edward Francis Finden of London; both worked as line engravers and were highly regarded craftsmen in this field. Bacon exhibited an engraving at the Royal Academy, and two at the Society of British Artists between 1830 and 1855. He worked mainly as a book illustrator. He produced no new work after 1869, emigrated to America, and died in California in 1887.

[19d Artist unknown]

Thomas Bewick: photograph of a portrait, full length; details unknown]

Purchased by William Bewick in or before 1865; present whereabouts unknown.
Landseer, 1871.

When I was looking at a full-length photograph exhibited in the street at Newcastle, two workmen were looking at it at the same time. I asked one of them who it was intended for? They both looked at me contemptuously, not to know the great Newcastle Bewick; and one of them answered loudly 'Bewick'. I said, 'Is it Thomas Bewick, the celebrated engraver?' The man called out, 'Aye', in the Newcastle dialect. ... I told the Misses Bewick this, and they enjoyed the joke vastly. ... Of course I bought the photograph.
Letter, William Bewick to T H Cromek, March 25 1865.

The only known full-length portraits of Thomas Bewick at the time were Ramsay's (19), or one of its derivatives and Good's (23), presumably this photograph must have been taken from one of these. The anecdote is of interest in drawing attention to the familiarity of the citizens of Newcastle with the appearance of Bewick more than three decades after his death. (See 13b for mention of another early photograph of a Bewick portrait.)

19e Artist unknown

Thomas Bewick: electrotype engraving, 73 x 132 mm; 1881

The Graphic 4 June 1881.¹¹²

It is unpleasant to remark that, in a special number of the Graphic ... there is a woodcut portrait of Thomas Bewick, professedly taken from Ramsay's full-length portrait of the artist. In it the engraver has striven, most unworthily, to render Bewick's appearance as contemptible as possible. This at the time gave great pain to Miss [Isabella] Bewick, that lady being then in her ninety-second year. (Robinson, 1887, p. 214).

The image, a woodcut reproduced by electrotype, but not in fact 'professing' to any parentage, is a simplified image derived from 19c above. It does not really appear to caricature Bewick. It was an early example of a large number of modified versions, derived ultimately from Ramsay, which have become the most widely used image of Bewick. Ironically, another example (cut down from 19c) appears on the dustcover of the 1972 facsimile of Robinson's book, published in Newcastle by Frank Graham. A large 20th century pencil sketch version (705 x 450 mm), by Elizabeth Holder, is held by the National Trust at Cherryburn.

¹¹² The unattributed and unsigned image entitled only 'Thomas Bewick. Born 1753; Died 1828', appeared in an article by Aaron Watson on 'Newcastle-on-Tyne [sic]. The George Stephenson centenary - Newcastle illustrated'. Other illustrations in the article bore the name of J R Brown or his initials or the initials H W B R.

***19f C O Murray**

Thomas Bewick and others: etching on Japanese paper, image 196 x 146, plate 222 x 163 mm; 1886

Newcastle City Library: Pease Collection.

Framed print, Pease 322, signed. Another copy at the National Trust, Cherryburn CHB.D.85.

This etching, taken from the oil painting of *The Lost Child*, was commissioned by Julia Boyd for the frontispiece to the large paper edition of her *Bewick Gleanings* (Boyd, 1886, p. 75). The etched inscription is 'C.O. Murray Aq after J. Ramsay'. The Cherryburn and Pease copies are first proofs, without letterpress, signed 'Chas O Murray' in pencil.

Reproducing only the figures on the left side of the original painting, the etching includes portraits of Bewick, James Ramsay and his wife; Neddy Kirsopp, the bell-man; Andrew Craig, joiner; and Mrs Golightly, the mother of the lost child.



Charles Oliver Murray (1841-1924)

Graves, 1901; Benezit, 1976. Engen, 1985.

Born near Hawick and educated in Scotland, his career started as an illustrator for magazines. Later in London he illustrated books and made etchings after celebrated artists. Said to be 'among the first, if not the first, etcher of the day' by Boyd (1886, p.75), he exhibited 30 etchings at the Royal Academy and 25 at other London galleries between 1872 and 1893. He was a member of the Royal Society of Painters, Etchers and Engravers.

***19g Artist unknown (possibly Gerrard Robinson or Thomas Hall Tweedy)¹¹³
Thomas Bewick: wooden statuette, 450 mm in height including the plinth;
n.d. c.1865-85**

The National Trust: Cherryburn, Northumberland.
CHB 8C.1



This wonderfully executed miniature figure of Bewick in his now famous stance, from Ramsay's painting of *The Lost Child*, was acquired by the National Trust within recent years. There has been much speculation as to the name of the carver, miniatures of this kind appearing from time to time in antique auctions, but as yet its provenance has not been established. It is thought that the wood used may be cherrywood because of its rich dark reddish-brown colour.

In 1903, a 'Portrait of Thomas Bewick carved in wood. Artist unknown. Lent by Charles Winter, Esq.' was exhibited at the anniversary exhibition (Academy of Arts, 1903, number 251). It may have been this statuette or the next (19h).

¹¹³ Robinson and Tweedy were wood carvers of considerable merit (Hall, 2005) and both have been suggested as contenders for the production of the statuettes 19g and 19h.

**19h Artist unknown (possibly Gerrard Robinson or Thomas Hall Tweedy)
Thomas Bewick: boxwood statuette, 519 mm in height including the plinth, image height c. 465mm; n.d. c.1865-85**

Discovery Museum, Newcastle: Tyne & Wear Museums.

Formerly in the collection of the John C Joicey Museum. Registration number E1188 and in the 'Permanent Collections' of the Laing Art Gallery in 1928.



Similar to number **19g**, but of a paler fine-grained wood, with its plinth octagonal in section instead of circular.

Although the Laing Art Gallery no longer has any record of this statuette (*fide* the Fine Art Curator, 2004), it was exhibited there at the 1928 Bewick anniversary exhibition (Laing, 1928, number 176) as 'Statuette carved in boxwood. Laing Art Gallery & Museum Permanent Collections'. It was on display at the J C Joicey Museum in Newcastle in 1992-4, and was recorded in the list of objects in the Museum's collection in 1971.¹¹⁴ Its earlier provenance is unknown, but an early accession number, '22-39', suggests that it may have been acquired by the Laing in 1922.

Thomas Hall Tweedy (1816-1892) and Gerrard Robinson (1834-1891)

Hall, 2005.

Tweedy was an expert wood-carver whose work was exhibited and sold at his fashionable shop in Grainger Street, Newcastle, particularly in the period 1840-1860. He trained a number of skilled apprentices and the workshop's output cannot always be attributed to an individual. His carved furniture was sold in London and Paris and the Fourth Duke of Northumberland commissioned pieces from the workshop.

Gerrard Robinson was one of Tweedy's most successful apprentices. He was born in Newcastle, the son of a blacksmith, and trained at the Government School of Design with William Bell Scott before being apprenticed to Tweedy in 1848. Over the next decade he established a reputation as the foremost carver of wooden furniture in the country. For a while he worked in London, but his limited business skills and a decline in the market left him to end his days in poverty. Some of his finest pieces are now in the care of Tyne & Wear Museums in the Shipley and Laing Art Galleries.

***20 James Ramsay**

Thomas Bewick: oil on canvas, 758 x 630 mm; 1823

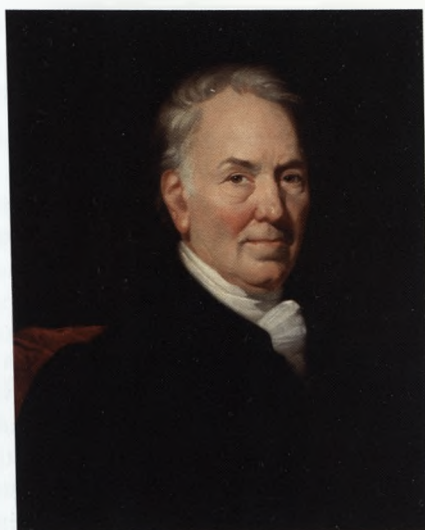
The National Portrait Gallery, London (NPG 319).

The painting is 'Inscribed and dated in flowing script on the back of the relined canvas: "Mr Tho^s Bewick / painted by Js Ramsay. / 1823"' (Walker, 1985). Otherwise there might have been some doubt about the date of this painting, in which Bewick looks thinner and older than in *The Lost Child*, painted in the same year or in the Baily bust of 1826.

This portrait was exhibited in 1823 in Newcastle, where the *Newcastle Chronicle* (6 Sept) called it 'very beautiful', and at the Royal Academy where Robert Pollard protested that

¹¹⁴ Records of the Joicey Museum at the Discovery Museum, Newcastle, examined December 2004.

Bewick looked 'too old'.¹¹⁵ It was purchased by the Trustees of the National Gallery in 1871 at Christies (Dobson, 1884, p.169; Walker, 1985). Its whereabouts in the interim are uncertain. It could be the portrait mentioned by Cobbett (foot-note 8) or 17a. It was shown in the 1978 exhibition at the Laing and Yale Center for British Art, New Haven, Connecticut.



Painted in his seventieth year, Bewick sits pensive, as if reflecting on his past. He had started to write his *Memoir* in 1822, after much persuasion from his daughter Jane, stating on the first page 'I have after much hesitation and delay, made up my mind to give you some account of my life, as it may at a future day amuse you & your Brother & Sisters', little knowing that after its publication in 1862 it was to become a classic autobiography.

***21 Joseph Crawhall**

'On 'Change': watercolour and pencil, 444 x 564 mm; n.d. c.1826

The Literary and Philosophical Society of Newcastle upon Tyne.

Some Newcastle Worthies, a group of merchants and others, standing outside the old Exchange building, on the Newcastle Quayside.



On the extreme left is Sir Thomas Burdon, next him Mr Job Bolam, Mr Ralph Naters, Mr Thomas Logan, Mr Thomas Cookson, Mr Nathaniel Clayton (Town Clerk and father of Mr John Clayton) leaning on his stick, and Alderman Forster, with hands in pockets, in the centre. A little behind him stands Alderman Cramlington, then Alderman Clayton and Mr Bewick in black; whilst Mr Crozier and Mr Surtees flank, on either side, Mr Cram,

¹¹⁵ Letter to T B from Pollard, 9 June 1823; V&A coll., *fide* Iain Bain.

who is making the liberal display of pocket-handkerchief common to snuff-takers. The famous Recorder, Mr Hopper Williamson, is the prominent figure on the right. (R S Watson, 1897; legend to plate opp. p.10.)

From this account, Bewick appears to be the middle one of three men in the background under the centre of the right-hand arch. Although Watson states that this figure is Bewick, Bewick's is not one of the few names given on the legend on the current mount of the watercolour, and it is a rather poor likeness.

Joseph Crawhall (1793-1853)

Hall, 2005.

Bewick said of his close friend Joseph Crawhall that he 'was particularly an Amateur of the Arts & excelled as a painter, for which nature has furnished him with the requisite innate powers – but in this he was taken off by his business of a Rope maker' (*Memoir*, 1975, p. 180). He was born in Newcastle and remained there as a businessman and politician, serving as Mayor in 1849-50. His son Joseph (1821-96) and grandson Joseph (1861-1913 – one of the 'Glasgow Boys') were also gifted artists.

22 Edward Hodges Baily ¹¹⁶

Thomas Bewick: marble bust on a turned, waisted socle, h. 672 mm, w. 513 mm; 1826

Socle inscribed *Thomas Bewick, Engraver on Wood. OB. 1828, ÆT. 75.*

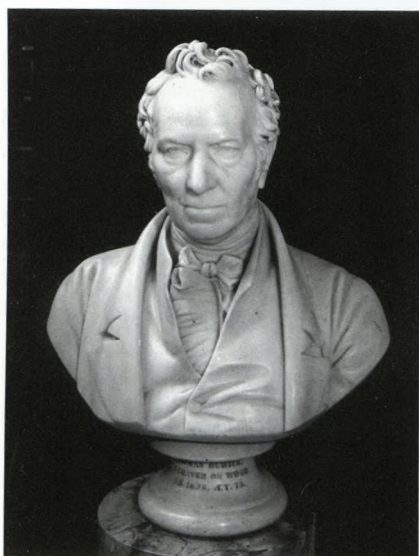
The Literary and Philosophical Society of Newcastle upon Tyne.

Inscribed *E. H. Baily, R.A. Sculpt. London 1825* on the back of the support.

***22a Plaster copy of the original marble**

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM:1997.H113.



Photograph of the original marble bust
by E H Baily.

The marble bust stands in the library of the Literary and Philosophical Society and the plaster copy is exhibited in the Hancock Museum. Four other plaster copies are in London, at the British Museum (MLA 1855,8-113 (OA 10523), and in Newcastle and Gateshead, at the Laing Art Gallery, the City Library's Pease Collection (Pease 315) and the Shipley Art Gallery, Gateshead (T&WM 1993.10101); the last is in poor condition. The original was loaned by the Lit and Phil for the 1903 and 1928 Bewick anniversary exhibitions (Academy of Arts, 1903, number 169; Laing 1928, number 175).

A committee was formed on 6 June 1825 at a meeting of 18 gentlemen 'to organize a subscription for a bust of Bewick'. Members of the Society were invited to subscribe not more than

¹¹⁶ Baily is generally accepted as the correct spelling. Many writers, at the time of the creation of the bust and later, used the spelling Bailey, and this is reproduced here in direct quotations.

one guinea towards the cost, in a brochure containing an initial list of 60 names.¹¹⁷

The bust was made from a plaster life mask. Quoting from an article by Thomas Doubleday in the *British Quarterly Review*, Bell (1851) wrote:

... the artist was taken in his coat and waistcoat, not forgetting his neck-cloth and ruffled shirt; nor can we say that the likeness was thereby injured, whatever may be the case with the classicality. The whole affair was characteristic of the man; for not content with the coat and waistcoat, as Cromwell would not be painted without his warts, so Bewick was for compelling Bailey to put in some of what he termed his 'beauty spots', alluding to some scars which the small-pox had left upon his face.

Jane Bewick told Robinson (1887, p.155) that Bewick 'did not at all like' the procedure by which the cast was taken at his home 'reclining on a couch with small pieces of quill in his nostrils, as usual, to enable him to breathe'.

On 12 April 1826, Thomas Crawhall wrote to Mr J Trotter Brockett (and presumably in the same terms to the other members of the committee that commissioned the bust):

*Dear Sir, Mr Baily having forwarded to my care a Cast from the Bust of Mr Bewick for each of the Gentlemen of that Committee without annexing Names to them; and some being slightly injured I therefore request the favour of your attendance at my House on Friday Evening next at 8 oclock to determine by ballot their distribution ...*¹¹⁸

No definite record has been found of how many members of the committee there were. Edwin Pearson owned a plaster copy of the bust, sold in 1868 (lot 192), when the catalogue (Anon, 1868) said it was one of 'about twelve' made, 'many of them damaged'. The plaster bust in the British Museum has the number 22 incised on the back (Dawson, 1999 p. 44) but, as there are no visible numbers on the busts held by the Natural History Society and the Laing Art Gallery, this must have been added later, after its production. This copy of the bust had been purchased in 1855 from a Mr Crisp and is the only one known to have been painted dark brown to imitate bronze and to disguise the effects of smoke pollution (the other copies are white).

Bewick's biographer George Clayton Atkinson (1831) wrote 'Baileys bust ... is certainly the best representation of him, giving the very spirit and expression of his face, and descending to the peculiarities of the veins on the temple, the quid in the lip, and the tufts of hair in the ears'.

Dibdin (1838, p.337) reported similar enthusiasm for the bust from other members of the Lit and Phil. 'Mr. Adamson observed to me that it was the man *ad vivum*. Mr. Charnley was quite sure that he was about to *speak*.'

¹¹⁷ Newcastle City Library; Pease Collection. Some correspondence involving Armorer Donkin, John Trotter Brockett, the Revd William Turner and Thomas Crawhall is collected in the album Pease 172 pp. 27 *et seq.* Copies of the brochure are in Pease 172 and 178. The number of men at the meeting of 6 June is mentioned in the diary of James Losh, who chaired the committee (see Tattersfield, 1999, p.167), but the number of committee members (and hence of plaster casts) has not been discovered. The Losh diary states that the subscription was limited to £1-8-0, but this is at odds with the published appeal.

¹¹⁸ Letter in the Newcastle City Library, Pease 172, p.31.

Edward Hodges Baily (1788-1867)

Redgrave, 1878; *ODNB*.

The son of a carver of ship's figureheads in Bristol, and later for seven years a pupil of John Flaxman, he was trained at the Royal Academy schools (silver medal 1809) and elected ARA in 1817 and RA in 1821. After a very successful period as a designer and modeller for a firm of goldsmiths, he became the most distinguished London sculptor of his day, who was commissioned by *A few friends, admiring the Talents and esteeming the Character of Mr Thomas Bewick* to produce a marble bust to be placed in the Library of the Literary and Philosophical Society. He also produced the statues for Grey's Monument in Newcastle and for Nelson's monument in Trafalgar Square in London and busts of Lord Byron (1826), Michael Faraday, Sir John Herschel and Richard Owen.

22b Robert Elliot Bewick

Thomas Bewick: portrait sketch, pen and ink over pencil, image 130 x 100 mm, paper size 168 x 165 mm; n.d. post 1826

British Museum, Department of Prints and Drawings (1882-3.11.1650).

Binyon, 1898, volume 1, p.107 no. 38.



The sketch is inscribed by his sister, Isabella Bewick, 'Portrait of Thomas Bewick (R. E. Bewick del.)'. It was presented by her to the British Museum in March 1882, in a large collection of drawings by John, Robert and Thomas Bewick.

The figure appears to have been taken from the Baily bust and, disappointingly, not from life. The attitude (though tilted on the paper), and details of facial lines, hair and costume are all suggestive, and, tellingly, the line where the lapel is cut off in the drawing exactly matches that on the bust.

The scrap of paper on which it is drawn was apparently used as an aid to filing

by Jane Bewick whose note 'Early Cuts School Books' is in the top left corner.

Robert Elliot Bewick (1788-1849)

Robinson, 1887, pp. 239-243. Bain 1981, pp. 84-5.

Son of Thomas Bewick, apprenticed to his father in 1804, and his partner from 1812. A fine draughtsman and copper engraver, and not unsuccessful as a wood engraver, though overshadowed by Thomas. His interest in architecture and perspective drawing disappointed his father and he lacked the assertiveness to develop his own career. Bewick in a letter to Jane noted 'how much better would it be for him & how much more more agreeable [*sic*] to me if he wou'd leave it off & take to drawing – he ought never to have the pencil out of his hand.'¹¹⁹

¹¹⁹ Ms letter from T B to Jane Bewick 28 June 1814: Natural History Society of Northumbria Archives NEWHM:1997.H45.3.

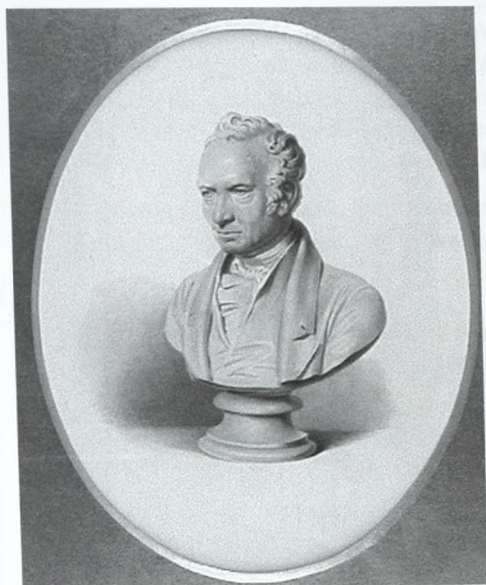
Their joint enterprise of publishing a *History of British Fishes*, for which Robert engraved many fine blocks, was abandoned after Thomas's death. Robert continued to run the firm of Thomas Bewick and Son until the mid-1840s, under the undeclared supervision of his sister Jane, and in this period published two editions of his father's *British Birds*. His considerable talent was neither fulfilled nor fully recognised. Robert's drawings and an important collection of music for the Northumbrian smallpipes are his finest memorials.

22c Edward Train

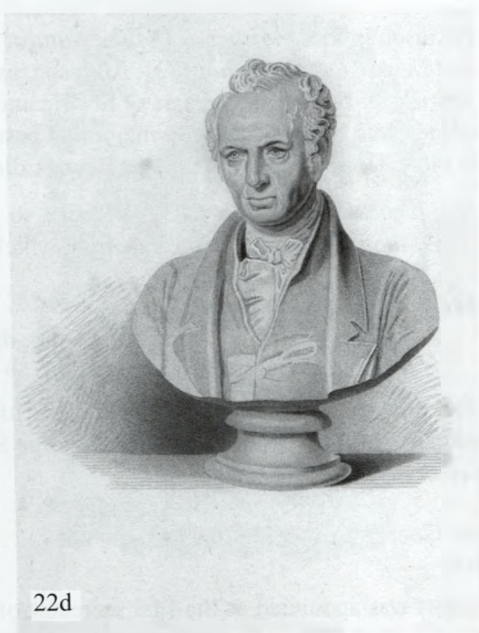
Thomas Bewick: pencil drawing of the Baily bust, in a gilt oval mount and frame, image 174 x 134 mm, mount aperture 112 x 97 mm; n.d. c. 1826-30

Newcastle City Library: Bewick Collection, 385.

The present mount and frame bear no inscription to assist in identification.



22c



22d

The Bewick collection accession book records this as 'Train's drawing of Bewick's bust'. It was purchased from Steedman,¹²⁰ Newcastle, and entered in the book without a date, but evidently between Nov. 1914 and Feb. 1915. The bust is set turning slightly more to the viewer's left than in Train's engraving (22d) and the drawing is a highly finished one, bearing a much more perfect likeness to the bust than does the engraving. Bewick's eyes in particular are far better represented. Bearing in mind the widespread contemporary approval of the likeness of the bust itself, this drawing must be assumed to be one of the best of all the two-dimensional likenesses of Bewick.

Edward Train (1801-1866)

Hall, 2005.

Landscape, portrait and figure painter in oil, engraver. Train was born in Gateshead and apprenticed to Edward Scriven in London, at an early age. On the completion of his

¹²⁰ The firm of R D Steedman, Grey Street, Newcastle, has now no details of the sales of that period.

apprenticeship he returned to Newcastle. He was commissioned to produce the engraving by Atkinson, whom he afterwards accompanied on an expedition to the Hebrides and St Kilda, in 1831. Though best known for his landscapes of the Scottish Highlands, Train was a sensitive portrait painter. The Natural History Society has his delicate pencil sketch of John Hancock as a young man.

22d Edward Train

Thomas Bewick: proof copy, with no letterpress of a copperplate stipple engraving, engraved surface 115 x 115 mm; c.1830

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM:1997.H112. Bell 7. Robinson 7.

The engraving was drawn and engraved by Train from the bust by E H Baily and used to illustrate 'Sketches of the Life and Works of the late Thomas Bewick', by George Clayton Atkinson in the *Transactions of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne*, 1831. Atkinson, as a very young man, had been acquainted with Bewick for the last three years of his life and remained a friend of the family. He was one of men who helped to create a major link between Thomas Bewick and the Natural History Society, founded in the year after Bewick died.

D C Thomson (1882, p. 223), referring to an annotated copy of this engraving, wrote 'Baily thought it "not like the cast from which it was taken, nor like the great original"'.¹²¹

22e Sir George Scharf

Bust of Bewick: pencil drawing, dated 17 February 1881

National Portrait Gallery, London (Ref. TSB XXVII, p.51).

This drawing, not illustrated here, of the British Museum's plaster cast of the bust is located in one of the notebooks in the Sir George Scharf collection held in the National Portrait Gallery.

Sir George Scharf (1820-1895)

DNB.

Scharf was appointed as the first secretary of the National Portrait Gallery at its foundation in 1857 later to be given the title of Director in 1882. An accomplished artist in his own right it was his practice to make careful drawings and notes of the paintings that took his interest. His collection of notebooks, which he bequeathed to the National Portrait Gallery, contain drawings of the busts housed in the British Museum including the one of Thomas Bewick.

22f Unknown artist

Bust of Bewick: steel engraving, 122 x 77 mm; n.d. c.1882

The Century Magazine, 1882.

The engraving (not illustrated here) was first published in the *The Century Magazine*, 1882¹²² and later in Austin Dobson's *Thomas Bewick and his pupils* (1884 and 1899).

¹²¹ A copy of the print with Baily's handwritten comment is in the Hornby Art Library, Liverpool (*vide* Iain Bain).

¹²² Austin Dobson. 'Thomas Bewick', *The Century Magazine* XXIV No.5: 643-666; September 1882 (copy in Pease 178 pp.31-43). The engraving is on p. 644.

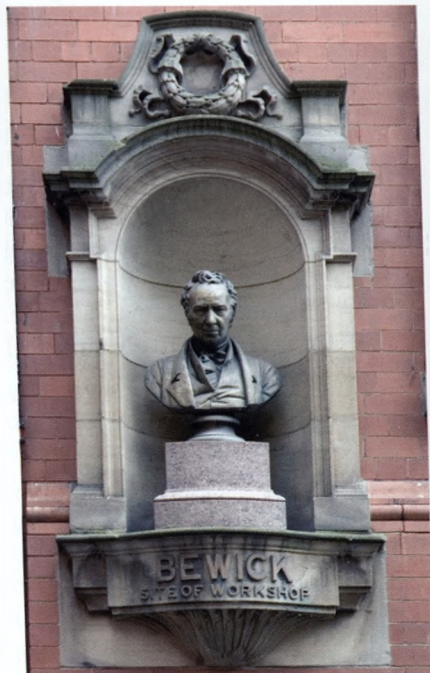
22g Unknown artist

Bronze bust of Bewick, after Baily, 600 x 400mm; 1902-5

Milburn House, Newcastle upon Tyne.

The bust stands on a pink marble pedestal, set into a niche, marking the site of Bewick's workshop at the southeast corner of St Nicholas' Church-yard.

Oliver, Leeson and Wood, the architects of Milburn House, commissioned the bust between 1902 and 1905 at the behest of the wealthy shipowner J D Milburn. Its design was based on the marble bust by Baily (Usherwood et al, 2000).



22g



22h

22h Joan Hassall

Thomas Bewick: engraving on wood, 92 x 57 mm; 1953

The engraving was first published on the title page of *Thomas Bewick* by Montague Weekley (Geoffrey Cumberlege, Oxford University Press, 1953).

The Baily bust presides over Bewick's engraving tools, an engraver's glass sphere, and his fishing net and creel.

Joan Hassall (1906-1988)

McLean, 1960. Peppin & Mickelthwait, 1983.

Widely admired as one of the foremost British wood-engravers of the twentieth century, Hassall was born and worked all her life in London, the daughter of the poster artist and book illustrator, John Hassall. Between 1936 and 1974 she illustrated a large number of books in a style consciously influenced by Thomas Bewick. In the year of her engraved Bewick portrait, she was chosen to design the invitation card to the coronation of Her Majesty Queen Elizabeth II. She was also a gifted musician.

- *22i Peter Quinn**
Wandering past the Site of the Bewick's Workshop: Watercolour on Paper,
 1225 x 1000 mm; 2003
 Private Collection.



A large painting evoking the atmosphere of the quiet corner of St Nicholas' Churchyard where the workshop stood, with the distant bronze bust (22g above) putting Bewick in the centre of the composition.

Dr Peter Quinn studied at the Glasgow School of Art and has exhibited his watercolours in London, Glasgow, Newcastle and Malta. He currently lives in Newcastle and enjoys painting the local buildings, which make up our rich architectural heritage. He is also an active member of the Bewick Society.

- *23 Thomas Sword Good**
Thomas Bewick: portrait in oil on panel, 380 x 290 mm; 1827

Natural History Society of Northumbria: Isabella Bewick Bequest.

Inscription on the back of the panel 'Thomas Bewick Æt^l. 74. Thomas S Good pinxit April 1827'.

Signed and dated 'T.S. Good pinxit 1827'.

NEWHM:1997.H33. Robinson 12

This was the last portrait for which Bewick sat, in the year before he died. Despite the inscription, he was actually aged seventy-three. It is clear from a letter quoted below that it was commissioned and purchased by the family. Here we see Bewick holding a pair of spectacles in his hand, relaxed, as if in his own home, although in fact Good used his own furniture for the background and 'accompaniments' (Bowes, 1989). There are some books, a pencil and a specimen of a Pied Wagtail on the table by his left hand and his top hat lies on the floor below. Behind is a hanging bookcase.

On 13 April 1827, the American artist naturalist J J Audubon visited the Bewick family in Gateshead and wrote 'I met there a Mr. Goud, and saw from his pencil a perfect portrait of Thomas Bewick, a miniature, full length, in oil, highly finished, well drawn and composed.'¹²³

A month later, Bewick wrote to Good 'I think very well of the accompaniments or background, as there is nothing in them that has a gaudy appearance' but, because his daugh-

¹²³ Audubon, J J in Audubon M R and Coues E (1898) p.232.

ters were ill 'how or when, I shall be able to manage to sit to you again I know not – as this is at all times irksome to me'. He went on to say that he would leave the payment of 25 guineas for the painting with his son.¹²⁴ The question of whether the painting was finished at this point (as Audubon thought and Bewick seems to have hoped) is discussed in the catalogue *In a strong light: the art of Thomas Sword Good* (Bowes, 1989).

Another artist, William Bewick, admired the painting. 'The Misses Bewick have a small, highly-finished picture by Good, of Bewick. It is a very interesting portrait, with his peculiar light and shade, - the lights crossing, - that is, a bright light on one side of the face, and another light, inferior, on the other side.'¹²⁵



Atkinson (1831), who knew Bewick well at this time wrote 'he had ... an excellent full length small likeness taken by Good, a short time previous to his death, which though done when he was not in good health, and therefore representing him too thin, still gives an excellent idea of the old man: all animation and intelligence is there, ...'.

It is interesting to compare Robert Robinson's account of the painting with Jane Bewick's acerbic remarks, the latter surprising in the light of the portrait's favoured place in her home. Robinson clearly had a special affection for the portrait unhindered by any personal acquaintance with the sitter.

On the white marble mantelpiece there was a mirror, to the left of which, near the couch on which the ladies usually sat, hung Good's fine portrait of Bewick, representing the old gentleman in a sitting posture, ... dressed in a black coat and vest, kerseymere breeches, and blue worsted stockings, home-made – an admirable example of the artist's skill in giving a pleasing radiance to the side face. His intellectual and finely-formed forehead is well brought out; the eyes are full of animation and intelligence, whilst a ruddy and genial glow suffuses the whole countenance. Robinson.¹²⁶

My Fathers likeness is a very coarse one, the nose is too round at the end, & the eyes seem to me to be not both alike – the mouth is too large, & nipped in on the right hand corner (as you face it) & the colour of the

¹²⁴ Letter T B to T S Good 16 May 1827. Private collection, *fide* Iain Bain.

¹²⁵ Letter William Bewick to T H Cromek, 5 May 1864 (Landseer, 1871).

¹²⁶ Robinson (1887) p.208.

complexion is too red; the hands and the figure are correct – the feet are larger, My Fr had a small foot, & perfect shaped leg & except a little stoop – was a perfect figure. Jane Bewick.¹²⁷

Robinson (1887, p. 273) says that the Good painting was 'much coveted by Dibdin to adorn his "Northern Tour"'. Thomas Dibdin did indeed visit the Bewick home on his tour in 1836 and met Robert and two of the Bewick daughters. With one, probably Jane he 'entered into a long and interesting conversation. The portrait of her father (of which engravings are everywhere, in almost every form and size) by Good, was hanging over the fire-place; full of character; but, as it seemed to me, of too severe individuality' (Dibdin, 1838). (In his enthusiasm he failed to make it clear whether the engravings were of or by Bewick.) There is no indication of his wish to have the portrait engraved. Jane's reservations about the likeness might well have made her refuse such a suggestion and both she (in telling the story to Robinson) and Dibdin may have selectively reported the conversation.

A portrait by T S Good, originally thought to be of Thomas Bewick and exhibited as such at the 1928 exhibition, on loan from The National Portrait Gallery (Laing, 1928, number 182; NPG 971), is now accepted to be of an unknown subject, not Bewick.

Thomas Sword Good (1789-1872)

Redgrave, 1878. Graves, 1901. Hall, 2005. Bowes, 1982. Usherwood, 1984. *ODNB*.

A noted local portrait, genre and landscape painter in oil and watercolour, Good was born in Berwick upon Tweed and began his career as a house painter. After exhibiting three paintings at the Edinburgh Exhibition Society in 1815, he showed his work at the Royal Academy in 1820 and after some success moved to London to work as a professional artist, but returned to Berwick within a few years. He developed a style of side lighting and the use of shadow, which was much admired. Good continued to exhibit, particularly at the Royal Academy and British Institution until 1834; most of his works were portraits. After about this time he ceased to paint. He married in 1839. Very little is known about the relationship between Bewick and Good, they corresponded and were evidently on friendly terms but not with so close as the friendship Bewick appears to have had with Ramsay and Nicholson.

Jane Bewick said of Good 'a painter of some eminence he got out of his depths by painting in Wilkies style; as soon as these would not *sell* he threw by the brush & married a Woman with money – and now enjoys the fruits of his industry'.¹²⁸

[23a] Unknown artist

Thomas Bewick: portrait in oils, after Good; n.d. pre-1882]

Present owner and whereabouts unknown.

Thomson recorded a portrait in oil in the possession of 'a Bewick admirer, residing in London' purchased as a likeness of Bewick after Good. The artist and provenance were unknown at the time (Thomson, 1882, p. 224 note). Before 1882 the original would have had to be copied either while still in Good's possession or with the cooperation of the Bewick family in whose home it remained until Isabella Bewick's death in 1883.

¹²⁷ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*fide* Iain Bain).

¹²⁸ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*fide* Iain Bain).

[23b George Walton

Thomas Bewick: portrait, after T S Good; n.d.]

Exhibited at the 1928 Bewick anniversary exhibition, on loan from the Ward Collection (Laing, 1928, number 244).

Present owner and whereabouts unknown.

This 'Portrait of T. Bewick, copied by Geo. Walton, from the original painting by T. S. Good in the Natural History Museum, Barras Bridge' may well be identical with **23a** and/or **23c**. Otherwise it is known only from the 1928 Laing catalogue.

George Walton (1855-1891)

Hall (2005)

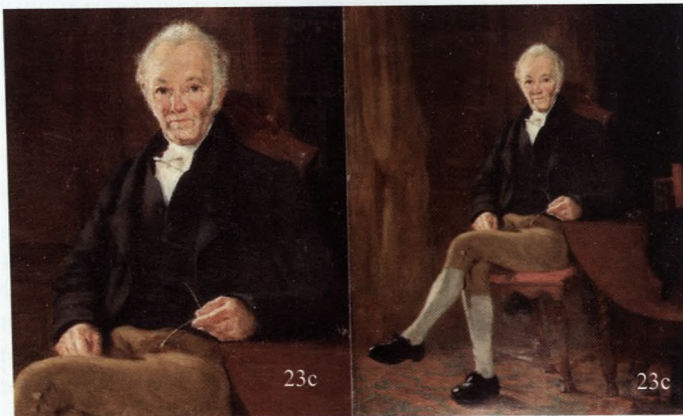
Born near Haltwhistle, Walton trained in Newcastle, London and Paris as a painter and concentrated mainly on portraits. He exhibited at the Royal Scottish Academy, the Royal Academy, Suffolk Street and the Bewick Club (Newcastle) between 1881 and 1888. He died in his thirties, in Cumbria.

[23c Unknown artist

Thomas Bewick: portrait in oils, after Good; n.d.]

This 19th century copy, possibly the same as **23a**, is reported to be presently in a private collection in California. It is a freer and less accurate copy than Guthrie's (**23d**).

The photographs of it reproduced here are in the possession of Iain Bain.



23d Sir James Guthrie

Thomas Bewick: oil on canvas, after Good, 409 x 303 mm; 1884

Laing Art Gallery, Newcastle: Tyne & Wear Museums.
TWCMS:C10036.

Inscribed on the back is 'Thomas Bewick – // Aet :74 // After Thomas S. Goode // April 1827. // James Guthrie. // JANY. 1884.' An old accession number on the canvas, 73-63, suggests that the Laing acquired it in 1973.

A faithful and excellent copy of Good's portrait of Bewick, differing only in giving the subject a slightly higher line of gaze. Guthrie must have visited the Natural History Society's rooms to copy the painting very soon after it was received as part of the Isabella Bewick bequest.

Sir James Guthrie (1859-1930)

ODNB. Graves, 1901. Benezit, 1976.

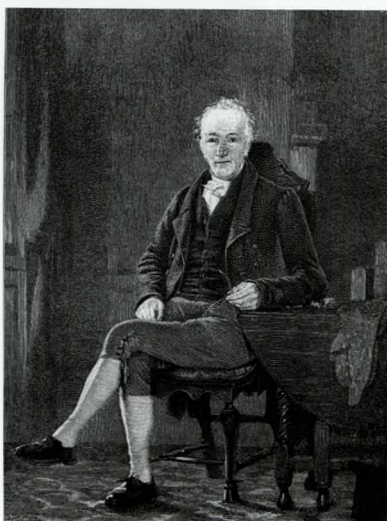
One of the artists associated with the 'Glasgow School', Guthrie was largely self-trained. His early paintings were mostly landscapes, which he first exhibited at the Royal Academy in 1882 and 1883. Later his principal work was as a portrait painter. His portrait of Bewick seems from the date to have been painted while he was living at Cockburnspath during the formative years of the Glasgow School movement. Elected to the Royal Scottish Academy as an Associate in 1888, and member in 1892, he served as its President from 1902-19.

23e Richard Taylor

Thomas Bewick: electroplate reproduction of a wood engraving 189 x 137 mm; c.1887

Engraved for the frontispiece of Robert Robinson's *Thomas Bewick: his Life and Times*. Robinson 12. Pease 172, vol. 1, p.84 etc.

Robinson (1887) recorded that Good's portrait had been presented to the museum of the Natural History Society by the executors of Isabella Bewick [in 1884] 'which, by special



resolution of the Committee ... is now engraved for the first time as a frontispiece to this volume'. The Society granted Robinson permission to make a photographic plate of the portrait for his book on the condition that the negative remained the property of the Society.¹²⁹

Taylor, Richard (fl 1870-1901)

Benezit, 1976. Engen, 1985.

A London wood-engraver. With Edward Taylor he formed a firm of draughtsmen and engravers in London, producing many portraits etc for the *Illustrated London News* 1872-92 and for the *English Illustrated Magazine*. Paul Naumann (see 31a) worked for the firm.

C POSTHUMOUS, SPURIOUS AND IMAGINARY PORTRAITS

24 Artist Unknown

**Tobacconist's advertisement: wood engraving, 65 x 91 mm; n.d.
Possible caricature of Swarley's Club, including Thomas Bewick**

NEWNL:2003.22.17.1 Pease 173, vol.R, p.17: Hugo, 1868, item 5015. Hugo, 1870, item 1672.

Attributed in Hugo (1870) to 'Marshall's Office'. John Marshall, was a printer, bookseller and circulating librarian, of Gateshead and Newcastle (Cloth Market). His stock, including 300 Bewick woodcuts, was sold in 1831 (Hunt, 1975). While the image is clearly an advertisement, it has not been assigned to a particular tobacconist, and was probably never

¹²⁹ Committee minutes; NEWHM:1996.H304.5 p.100 April 1885. The plate negative of the portrait remains in the Society's collection, NEWHM:1997.H116.

used.¹³⁰ The two outer figures were claimed as 'Thomas Bewick' and 'Mr Swarley' in a pencilled annotation, in an unknown hand, on a copy in the Pease Collection (Pease 173, vol.R, p.17.) The annotation adds, 'said to be engraved by T. Bewick, he used to meet a select few at "House of Commons" Newcastle;' and evidently predates Hugo (1868), who quotes it. The claim to be a portrait, let alone a self-portrait, is highly questionable. Bewick was elected to membership of Swarley's Club in 1790; it met in the *Black Boy* in Groat Market, for rational conversation and fourpence worth of beer (*Memoir*, pp.102-3). Numerous other clubs and smoking rooms existed in the town during this period; and Bewick preferred to chew rather than smoke tobacco.



25 Artist unknown
'Thomas Bewick'; watercolour on paper; 295 x 199 mm; n.d.

Possibly erroneously identified as Bewick.
 Hornby Art Gallery, Liverpool.

The Bewick material in the Liverpool Hornby Art Library (1906 Catalogue pp.44-50) has a note to say that the collection came for the most part from Hugo, but this item has not been identified in Hugo (1866 or 1868). The watercolour portrait appears in a folio album containing portraits, prints, autograph letters and documents and is listed as 'by unknown artist'.¹³¹



The full length figure stands facing left, his face in full profile. The features are unlike Bewick's. The costume and walking stick are similar to his, as seen in Ramsay's 1823 portrait (19a). This is by no means a copy of the Ramsay: if it is an imitation, the likeness is a poor one.

26 J Richardson
Portrait of Mr Bewick, Wood Engraver: pencil and watercolour on paper, paper size 254 x 216 mm, image height 213mm; n.d. c.1825-28

Possibly erroneously identified as Bewick.
 Laing Art Gallery, Newcastle: Tyne & Wear Museums.
 TWCMS: H18274. Gift 1943.

A full-length portrait on heavy wove paper (unmounted). No watermark. Inscribed in ink on the back 'Portrait of Mr. Bewick//Wood Engraver//By J. Richardson', and with an early accession number, '43-34'.

The subject stands, facing left, his top hat in his right hand. He appears more elderly than in any other portrait, except perhaps Good's, and his features are not easily recognisable as Bewick's.

Nothing is known of the artist, nor of whether the portrait is taken from life or is imaginary. The identification as Thomas Bewick must be regarded as uncertain.



¹³⁰ Nigel Tattersfield suggests that it was intended to be fenestrated for a dealer's typographical insert, but never used. He doubts that it is the work of the Bewick workshop (personal communication).
¹³¹ *Ex inf.* Iain Bain.

27 **William Bell Scott**

Thomas Bewick: Oil on canvas, medallion 420mm diameter within a 55 mm border; c.1861-2

The National Trust: Wallington Hall

The portrait is one of a series representing famous Northumbrians in John Dobson's great central hall at Wallington. They are set in medallions in the canvas-covered spandrels of the ground floor arcade. Bewick's portrait is aligned with those of Sir Walter Blackett, Lord Collingwood, Lords Stowell and Eldon, and Earl Grey and others. It is on the north wall, surrounded by apple boughs with, appropriately, Great Spotted Woodpeckers on either side. In the border are his name and the years of his birth and death. The likeness is poor but was probably copied from Bacon's engraving (19c), modified by removing the hat and improvising the hair.



Scott was commissioned by Lady Pauline Trevelyan to produce eight large canvases for the blind arches of the north and south walls, depicting scenes from Northumbrian history, and the small portraits of local celebrities, who included Bewick. He had been seventeen when Bewick died but was acquainted with his son Robert.

William Bell Scott, HRSA (1811-1890)

Hall, 2005; *ODNB*.

Historical, landscape, portrait and figure painter in oil and watercolour; illustrator and engraver. He was a strong supporter of the pre-Raphaelite movement and in particular a close friend of Rossetti. Originally from Edinburgh, Scott achieved success, exhibiting at both the Royal Academy and the Royal Scottish Academy eventually leading to his appointment as the first director of the School of Design in Newcastle from 1843-1863. During this period, his tuition has been cited as one of the major influences on the



development of artistic talent in the North East. Some of his best work was done at Wallington, under the patronage of the Trevelyans, though his relationship with their adviser, John Ruskin, was more strained.

28 **Artist Unknown**

'Bewick': lithograph, image 157 x 136 mm; n.d., post 1820, pre-1893

Possibly an erroneous identification as Bewick.

Proof print in Pease 173, vol. R, p.10.

No letterpress. Pencil inscriptions 'Bewick' and 'Proof before all letters'. Pasted in the scrapbook album together with a large collection of impressions of various engraved portraits of Thomas Bewick. No published print has been identified.

Not recognisably a portrait of Thomas (or Robert) Bewick. It is either a very poor likeness (though a skilful drawing) or more likely a case of mistaken identity. Half-length seated portrait of a man, apparently in middle age, the face not based on any known Bewick portrait but in a pose and costume similar to 13. Both Dr Iain Bain and Nigel Tattersfield believe that this may be a portrait of the printer William Bulmer as there are similarities with a portrait of Bulmer by Lee in T C Hansard's *Typographia*, 1825. The album was formed by Thomas Hugo (d.1877) but some material, probably not including this item, was added by its subsequent owner, Dr Joly (d.1893).

29 Artist unknown

Heads of Local Worthies: Relief sculptures in sandstone, each c.900 x 500 mm; 1890s

Prudhoe Chare off Northumberland Street, Newcastle



The three solemn, sandstone heads in the centre of the relief have been identified as Lord Collingwood, Robert Stephenson and Thomas Bewick (on the right).

The sculptures originally adorned the arcade of windows above the main entrance to the old Newcastle Central Library in New Bridge Street, erected in 1878-81 and demolished in the early 1970s. They were rescued and re-sited c.1976 near the Prudhoe Chare entrance to Eldon Square shopping centre (Usherwood *et al*, 2000).

Although neither the stone head nor the statue (32, below) is a good likeness of Bewick, the fact that he has been immortalised in this way demonstrates his importance as a cultural icon for the North East.

30 Sir J E Millais, RA

Thomas Bewick: Ink wash drawing; 1891

Photographed (image 165 x 118 mm) as the frontispiece to *Game Birds and Shooting Sketches* by J G Millais, London: Henry Sotheran, 1892.

Bewick is shown, sitting holding a portfolio of his work, with a stuffed peregrine and the skins of various game birds on a table beside him and on the floor. Behind him are a screen decorated with a crane, pheasant etc., and a large fish in a display case. The portrait bears no discernible likeness to the subject or relation to any other portrait of him and is pure artistic invention on the part of Millais.

The original was in the possession of the artist's son (J G Millais) in 1905; its current whereabouts are unknown.¹³²

Sir John Everett Millais, RA (1829-1896)

DNB.

A child prodigy, born in Jersey. His drawings done at age seven were later exhibited at the Royal Academy; at the age of ten he won a silver medal from the Society of Arts, and at 17 the gold medal of the Royal Academy of which he later became President. He was a prolific painter of portraits, historical and genre subjects and landscapes and a founder of the Pre-Raphaelite movement. With Ruskin he visited Emma Trevelyan at Wallington in the 1850s, where he may have discovered the work of Bewick. Later he illustrated many books and such periodicals as *Punch* and *The Illustrated London News*, and more than a hundred of his paintings were engraved on steel. Knighted in 1885.



***31 John Eyre**

The Master Engraver: pencil and watercolour, 459 x 739 mm; 1896

Laing Art Gallery, Newcastle: Tyne & Wear Museums.

TWCMS:G2551 Presented to the Laing in 1982 by Mr Langwell



Exhibited at the Royal Society of British Artists in 1896 it was later engraved by P Naumann for the *Illustrated London News*.

¹³² J G Millais *The life and letters of Sir John Everett Millais*. 2 volumes. London: Methuen (1899), where the drawing is listed with the miscellaneous drawings by the artist.

In a letter to J G Potts, Newcastle, in 1914, Eyre wrote 'The picture was the outcome of a visit I paid to Newcastle-on-Tyne where I was shown the room in St. Nicholas Churchyard where Bewick worked. I made a sketch at the time and the picture is the result. ... It is still in my possession'.¹³³ Although the subject of the painting is colourful and pleasant to the eye the likeness of Bewick is extremely poor and the furnishings and apprentices imaginary.

An art critic at the time referred to it as 'one of the most attractive pictures in the present Exhibition of [the Royal Society of] British Artists' and went on to say about Bewick:

*We see him in this picture with the few implements his art needed expounding by precept and example its requirements to his apprentices, of whom Luke Clennell and Charlton Nesbit were the best qualified to hand on the teachings of the master engraver.*¹³⁴

John Eyre (fl. 1877-1914)

Graves, 1901.

John Eyre was based in London; he exhibited a total of 27 works, mainly of domestic or genre subjects, at the Royal Academy, Royal Society of British Artists and Royal Institute of Painters in Water-Colours in 1877-1893.

31a P Naumann

Thomas Bewick: wood engraving, 145 X 233 mm; c.1896

For the *Illustrated London News*.

Pease 375.

A faithfully engraved copy of Eyre's painting, not illustrated here.

Naumann, Paul Herman (b.1851. fl. 1888-1897)

Engen, 1985.

Born in Leipzig. He engraved copies of portraits and photographs for the *Illustrated London News* and other magazines 1888-95, and worked with the firm of R Taylor and Co. in London 1896-7.

32 Artist unknown

**Thomas Bewick: stone statue, c.1.2 x 0.6 m;
c.1912**

45 Northumberland Street, façade.

The stone figure of Bewick stands in its niche alongside three other famous figures from Newcastle's past, Harry Hotspur, Roger Thornton and Sir John Marley. It is no likeness. The figures were commissioned by Boots Cash Chemists for the façade of their building which was opened in c.1912. The sculptor is not known; the architect was M V Treleven.¹³⁵



¹³³ Letter dated 18 April 1914 in Pease 179, p.167. There is also correspondence with Basil Anderton, Newcastle Public Librarian, in the same year (Pease 371, pp. 163-5).

¹³⁴ Newspaper cutting annotated "'London News" Dec. 12th 1896' in Pease 179, p. 167.

¹³⁵ Usherwood *et al.* (2000).

33 Ronald Embleton

Thomas Bewick at Swarley's Club: watercolour painting, c.445 x 640 mm; c.1973

The Blakie Boy public house Groat Market, Newcastle.



The original painting hangs in the function room of *The Blackie Boy* public house, (known in Bewick's time as the *Black Boy*). It was commissioned by Frank Graham for the dust cover to his facsimile copy of Julia Boyd's *Bewick Gleanings*, published in 1973 and illustrated here.

Bewick is portrayed with some of his friends at the weekly meeting of Richard Swarley's conversation and debating Club held in the Black

Boy Inn, where 'it was expected every member should behave with decorum & like a Gentleman'.

From left to right the figures are George Gray (fruit painter), Thomas Bewick, the Revd James Murray (Church of Scotland Minister), Thomas Spence (radical school teacher), William Charnley (Newcastle bookseller) and Richard Swarley, the landlord.

Ronald Sydney Embleton (1930-1988)

Website of the Book Palace: www.bookpalace.com (July 2003).

Born in London and trained in Essex, Embleton worked as a freelance commercial artist and under the signature 'Ron' became well known as a comic strip cartoonist and illustrator of paperback book covers. Later he joined forces with the Newcastle publisher Frank Graham for whom he produced some 140 book illustrations for popular historical guides, republications of local classics etc, including a widely known image of the Roman netty at Housesteads. His Swarley's Club illustration is in this tradition of imaginative historical reconstructions.

D THOMAS BEWICK'S FAMILY

*34 George Gray

John Bewick (1760-1795): crayon on paper, 381 x 317 mm; n.d., c.1780

Natural History Society of Northumbria: Isabella Bewick Bequest.
NEWHM:1996.H21.

*His Ingenuity as an Artist was excelled only by his conduct as a man.*¹³⁶

This portrait is the only known image of John Bewick, brother, fellow wood engraver and first apprentice to Thomas Bewick. It was probably drawn in Newcastle during John's apprenticeship to the firm of Beilby and Bewick between 1777 and 1782. George Gray was a close friend of both brothers and afterwards kept an eye on John's successful career but deteriorating health, when John moved to London in 1786. John was very different in

¹³⁶ Memorial to John Bewick engraved by Thomas Bewick, St Mary's Churchyard, Ovingham.

nature, stature and outlook to his brother. His young niece, Jane, 'thought her uncle the funniest fellow she ever saw' – 'He was of sallow complexion, and rather under middle size. ... Ordinarily he wore a green or blue coat with bright buttons, light-coloured vest and breeches, a beaver of the latest London fashion, a neat powdered wig, a shirt with three cambric frills, silk stockings, and silver buckles' (Robinson, 1887, p.236-7). He was refined in manner, sociable and witty with artistic talents, which extended to playing both the flute and the clarinet. Thomas referred to him as a 'clever springy youth' who had an 'affable temper' and undertook 'every kind of work in hand so pleasantly . . . that it could not miss giving satisfaction.'¹³⁷ As an engraver of illustrations for books, especially for children, he rivalled his brother's skill in their twenties and thirties but died tragically early, of

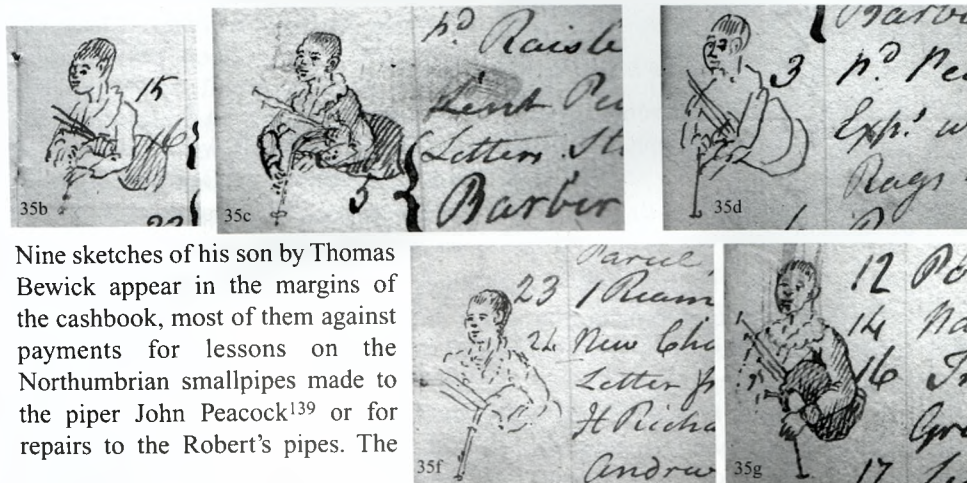


pulmonary tuberculosis, at the age of 35.¹³⁸ The portrait remained in the possession of Thomas and his children until it was bequeathed to the Natural History Society by Isabella Bewick in 1883. The Society loaned it for the 1928 exhibition (Laing, 1928, number 178) and for the 1978 exhibitions at the Laing Art Gallery and the Yale Center for British Art, New Haven, Connecticut.

For an account of George Gray, see above at item 2.

35 Thomas Bewick
Robert Elliot Bewick (1788-1849): thumbnail sketches in ink in the Bewick workshop cashbook; 1798-1804

Tyne & Wear Archives 1269/5.



Nine sketches of his son by Thomas Bewick appear in the margins of the cashbook, most of them against payments for lessons on the Northumbrian smallpipes made to the piper John Peacock¹³⁹ or for repairs to the Robert's pipes. The

¹³⁷ *Memoir* pp. 79-80.

¹³⁸ The portrait is reproduced as the frontispiece to the biography of John Bewick by Tattersfield (2001), who gives the most comprehensive account of his life and work.

¹³⁹ Bewick urged Peacock to teach his skills to youngsters like his son Robert. Peacock compiled *A Favorite [sic] Collection of Tunes with Variations Adapted for the Northumbrian Small Pipes*. W Wright, Newcastle n.d. c.1804 (Bain, 1982).

dates are 2 and 15 June 1798 (35a and 35b), 4 Feb. 1799 (35c), 3 June 1799 (35d), 4 April 1800 (35e), 24 July 1800 (35f), 14 Jan. 1801 (35g), 2 Jan. 1802 (35h) and 26 May 1804 (35i). The last of these illustrates the note 'My boy bound this day' indicating the start of Robert's apprenticeship to his father, one month after his sixteenth birthday.

***36 John Bell**

Robert Elliot Bewick (1788-1849): oil on canvas, 716 x 588 mm; c.1802

Natural History Society of Northumbria: Isabella Bewick Bequest.

NEWHM:1997.H34

Portrait of Robert as a boy, playing the Northumbrian smallpipes. Unsigned.

This portrait formed part of the Bewick family collection and hung in the parlour of



Bewick's house in West Street, Gateshead. It formed part of the Isabella Bewick bequest to the Society, and was loaned to the Laing Art Gallery for the 1928 anniversary exhibition (Laing, 1928, number 181) and the 1978 exhibitions at the Laing and at Yale.

Thomas Bewick was very proud of his son's musical abilities and had his *Little Rob* painted, playing the Northumbrian small pipes, at the age of fourteen by which time he was already a skilful performer. He had been tutored by John Peacock, himself a piper and the town musician. Robert, Bewick's only son, born on 26 April 1788, appears to have suffered ill-health as a child, which had led to a restricted childhood watched over by his loving but overbearing family.¹⁴⁰

John Bell (c.1785-1815)

Hall (2005); Tattersfield (1999, pp.60 & 283). Jane Bewick mss.¹⁴¹

Bell, portrait painter, house painter and interior decorator, was born on Tyneside, the son of Bewick's close friend Joseph Bell the painter (1746-1806). The Bewick children were his playmates and he was only seventeen when he painted Robert. Jane Bewick said of him

John Bell ... painted a portrait of my Brother when a boy – playing on the Northd. pipes, the likeness very good.

This painting is one of the few examples of his work to have survived. He tried to build up his father's decorating and painting business (including portraiture and selling colours) after Joseph's disastrous fire in Feb 1806 and his death shortly afterwards in March, but eventually failed. In Sept 1812 John Bell decorated Bewick's new house at Back Lane, Gateshead, at a cost of £2-7-8 (Tattersfield, 1999, p.283, derived from the workshop day books). He became bankrupt in November 1812 and had to sell at auction his 'extensive and valuable collection of Books Prints etc'. He returned to business in May 1813 but died in 1815.

¹⁴⁰ Bain (1981) vol. I p.84.

¹⁴¹ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*vide* Iain Bain).

[37] **Stephen Humble**

Lost portrait of Robert Elliot Bewick; no details available; 1816]

Recorded in REB's Account Book (Victoria & Albert Museum).¹⁴²

The entry on 13 April 1816, 'Mr Steph^h Humble for My Portrait 15-0', in the account book is the only known evidence for the existence of this portrait.

Stephen Humble (1793-1853)

Hall, 2005. Tattersfield, 1999.

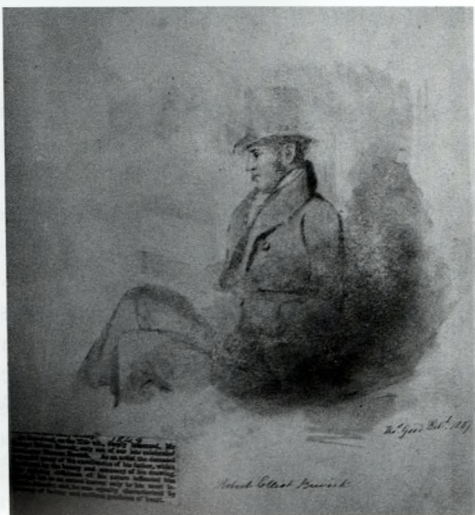
Son of Edward Humble, the Newcastle printer and bookseller, and grandson of Joseph Barber, engraver and bookseller. He was apprenticed for three years to Robert Pollard, in London, but served only two, and for a short time practised as a 'miniature painter and engraver' in Newcastle before drifting into a series of other jobs. He exhibited at the two first exhibitions of the Northumberland Institution in 1822 and 1823 and later had some success as a painter in Alnwick, Edinburgh and Darlington.

38 Thomas Sword Good (1789-1872)

Robert Elliot Bewick (1788-1849): pencil, ink and wash on paper, 230mm x 165 mm; 1837

Newcastle City Library: Bewick Collection 458.

This portrait of Robert, at the age of about forty-nine, depicts him sitting in profile on a bench, presumably outside. He looks very fashionable in his top hat and greatcoat; apparently he was a great follower of fashion regularly spending money on new clothes.¹⁴³ The portrait is inscribed 'Robert Elliot Bewick' and signed 'Tho.^s Good Del.^t 1837.' It had been pasted into a scrapbook compiled by William Mackey, a Bewick collector. The book, entitled *Memoir of Thomas Bewick. Illustrated by W. Mackey*, contains the memoir of Thomas Bewick by the Revd. William Turner from William Jardine's *The Naturalist's Library*, Volume VI, 1836, illustrated with wood engravings and other ephemera. Where Mackey obtained the original sketch of Robert is not known but he made the volume and portrait available for display at the Methodist New Connexion Conference at Newcastle in 1886.¹⁴⁴ The City Library purchased the scrapbook from Mackey's executors in September 1919.



William Bell Scott described Robert, at the age of about fifty-five, as a 'heavy, slouching, able-bodied countryman' with an 'absent, bewildered expression of face' and 'penthouse

¹⁴² Tattersfield (1999, pp. 146 and 306) who quotes Victoria and Albert Museum mss 86.JJ.17.

¹⁴³ R E Bewick's ms account book; in a private collection, *vide* Iain Bain.

¹⁴⁴ Item 95 in the *Programme of Conversazione and Bewick Exhibition to be held in the Assembly Rooms, Westgate, Newcastle on Monday, June 21st 1886. A. Reid Newcastle*; copy in the library of the Literary and Philosophical Society, Newcastle.

eyebrows.' Scott said 'To this man I felt drawn in a singular degree, mainly by the almost reverent simplicity and diffidence of his manner which evidently prevented him adequately and freely expressing himself.' They had first met in the company of Albany Hancock, brother of John Hancock, both of whom were close friends of the Bewick family. Scott was later invited to take tea at a friend's house with Robert who 'appeared, carrying the union-pipes under his arm, accompanied by two old-fashioned maiden sisters.' Robert had been asked to perform for the guests but his diffidence in company was so great that he played the pipes on the landing outside the drawing-room door. Soon gaining confidence Robert 're-entered the room, and walked about excitedly playing scotch airs with variations in the loveliest manner on the most delicate of native instruments.' (Scott, 1892 Vol. 1 pp.194-5).

Audubon, during his visit to Newcastle, recalled in his journal his first meeting with Robert 'He is a curious-looking man; his head and shoulders are both broad, but his keen, penetrating eyes proved that Nature had stamped him for some use in this world.' Later as they walked from his lodgings to Bewick's home in Gateshead Robert's reserved manner is also noted 'My companion did not talk much; he is more an acting man than a talker, and I did not dislike him for that.' (Audubon & Coues, 1898).

Robert Bewick died, unmarried, on 27 July 1849 aged 61 and was buried at Ovingham.

For an account of Thomas Sword Good, see above at item 23.

39 Josiah Gilbert

Jane Bewick (1787–1881): photograph of a portrait, in pastel, size unknown; it bears a signature reading 'J. Gilbert 1852'

Private collection



Early (19th century?) photograph, on very thin photo paper of a sepia cast, in a scrapbook in a private collection. The original pastel drawing was exhibited at the 1903 Bewick anniversary exhibition, on loan from the Ward Collection (Academy of Arts, 1903, number 262) but its present whereabouts are unknown. Robinson, describing the Bewicks' house in Gateshead (1887 p.210), notes that there was a 'fine large portrait in crayons of the late Miss Jane Bewick, drawn by J. Gilbert in 1852' on the wall 'to the right of the door' of the sitting-room. The photograph was published in Bain (1979a, p.14) where it was mistakenly attributed to Sir John Gilbert – an artist also known to the Bewick family.

'I would guess the original to be a pastel with white highlight on a drab paper' (Iain Bain, *personal communication*).

Jane sits at a table, as if interrupted while reading, her direct gaze very like that of her brother's (36) captured by Bell half a century earlier. She was pleased with the likeness:¹⁴⁵

¹⁴⁵ Jane Bewick's ms notes on her father's correspondents; Laing Art Gallery (*vide* Iain Bain).

Mr Josiah Gilbert likewise a descendant [of Isaac Taylor] painted my portrait in 1852 – a beautiful picture it is – .

The eldest of Bewick's daughters, born on 29 April 1787, Jane was his close companion and helpmate or as he called her his 'man of business' (Bain, 2003 p.28). She displayed a strong personality and fiercely guarded her father's reputation until her death on the 7 April 1881 at the age of 93. It was her decision to send a collection of Bewick's finest drawings to the British Museum in 1881, even after considerable petitioning for their retention by numerous distinguished members of the Newcastle community. Jane and her sister Isabella always contended that their father was not as well respected in his home town as his talent warranted (Holmes, 1999).

Miss Bewick was ladylike in manner, and in her best days stately, resembling her father in personal appearance. A well-informed mind, united to a most retentive memory, rendered her conversation most enjoyable (Robinson, 1887).

Audubon in his journal described meeting the three Bewick sisters in 1827, 'all tall, and two of them with extremely fine figures'. He likened Jane to Hannah Rathbone of Liverpool 'so much that I frequently felt as if Miss Hannah, with her black eyes and slender figure, were beside me'.¹⁴⁶

Josiah Gilbert (1814-1892)

Graves, 1901. Benezit, 1976. Mallalieu, 1986.

Born in Rotherham, Yorkshire, son of the Revd Joseph Gilbert and Ann née Taylor 'of the family of Taylor of Ongar', granddaughter of Bewick's London mentor Isaac Taylor'.¹⁴⁷ He followed a career as a portrait painter in London and died there. Between 1837 and 1865 he exhibited 37 portraits at the Royal Academy and 16 others at the British Institution and the Society of British artists. There are two portraits by Gilbert in the Laing Art Gallery, of Mr and Mrs Nathaniel Grace (H18576 and H18575), both pastel on paper and both executed in 1852, the same year as Jane's portrait.

***40 Artist unknown**

Jane Bewick (1787–1881): photograph 93 x 56 mm, original mount 101 x 64 mm; n.d., c.1850s–1860s

Newcastle City Library: Bewick Collection 694

Framed and the old mount laid down on a new one (c.1990s). Inscribed 'Jane Bewick' in ink in an elderly hand, probably Isabella Bewick's (*vide* Bain), on the front of the old mount, and 'Miss Bewick Gateshead' on the back. No indication of date or photographer is visible. Jane appears to be in her 40s or 50s, and her costume (a poke bonnet and dark travelling cape over a voluminous patterned skirt) would be compatible with the 1850s or 1860s.

William Bewick said he had photographs of Jane and Isabella Bewick, in his letter to T H Cromeck of February 9 1864 (Landseer, 1871). This one (40), and 42 would be consistent with this date.

¹⁴⁶ Audubon and Coues (1898, p.234).

¹⁴⁷ Iain Bain, personal communication, 2003; for Ann Taylor and the family see 'Jane Taylor' (ODNB).



***41** Artist unknown
Jane Bewick (1787-1881):
photograph, 140 x 103 mm on
a mount 165 x 107 mm;
c.1870-1880

Natural History Society of Northumbria
 NEWHM:1997.H53. Ex Ward Collection
 purchased in 1963.

Jane is seated, reading, with a pile of books beside her. Her costume suggests a date in the 1870s. The mount is inscribed 'Jane Bewick', in her hand or her sister's, and 'Gateshead' in another hand.

41a Artist unknown
Jane Bewick (1787-1881):
photograph, 114 x 98mm;
c.1870-1880
 Private collection.



The photographer's mark is faintly embossed along the left-hand edge of the portrait: 'K. Rives No 731'. The significance of this is undiscovered although it may be the negative number of a travelling photographer, marked thus should further prints be needed.

A similar photograph to 41, and clearly taken on the same occasion. The paper that Jane is reading, Her expression and the arrangement of her shawl are different, but all else is almost identical.

Pasted, together with 43, without annotation into No 7 of the ten Grangerised copies of the *Memoir* put together by Jane Bewick in 1867-75.¹⁴⁸

42 **Mr Piper (photographer)**

Isabella Bewick (1790-1883); photograph, 89 x 58 mm; n.d., c.1850-60s

From the Hancock family photograph album (late 19th century)

Natural History Society of Northumbria: NEWHM:1996.H58.



Inscribed on the front 'Isabelle [*sic*] Bewick Gateshead' and on the back 'Isabella Bewick Gateshead Taken by Mr Piper' all in a shaky, presumably elderly hand. Mr Piper has not been identified.¹⁴⁹

The costume and apparent age of the subject are consistent with a date of c.1850s or early 1860s. See the note about William Bewick's photographs of both sisters at 40.

Isabella, born on the 14 January 1790, was Bewick's second daughter and latest surviving child. Overshadowed by her more forceful sister Jane, there is very little published information on Isabella other than the few sentences to be gleaned from Robinson (Robinson, 1887). Croal Thompson (1930) recalls visiting her in 1881 to discuss his intention of writing a 'Life of Bewick'. He recounts that 'the dear old lady doubted my capacity to carry out the scheme' and she did little to help him with his project; 'Isabella Bewick was a very precise old lady, what the local people call "pernickety"'. She died, on the 8 June 1883, at West Street, Gateshead and was buried with her family at Ovingham.

¹⁴⁸ Private collection. In the T&WA Bewick workshop ledger 1269/84, p. 150; 'Acct of Sales of Illustrated Memoir', No 7 is marked 'On hand' and, in pencil, 'offered to Robinson'; presumably referring to Robert Robinson.

¹⁴⁹ No clear candidate is identifiable from the Newcastle, Gateshead or Sunderland directories of 1850-1882.

43 Artist unknown

Isabella Bewick (1787-1881): photograph, 114 x 83 mm; c.1870-1880

Private collection.

A sepia photograph with the same background as numbers **41** and **41a**, presumably taken on the same occasion. Pasted without annotation into No 7 of the ten Grangerised copies of the *Memoir* put together by Jane Bewick, together with **41a**.



***44 Gray and Bulman, Photographers**

Isabella Bewick (1790-1883): photograph 154 x 102 mm on a mount 165 x 107 mm; n.d., c.1881

Natural History Society of Northumbria

NEWHM:1997.H52. Ex Ward Collection purchased 1963. There is a second copy in the Hancock family photograph album (late 19th century) NEWHM:1996.H58.

Robert Robinson noted that after her sister's death in 1881 Isabella took to wearing mourning with only a small gold brooch containing a lock of her mother's hair for adornment, just as she appears in this photograph. She was greatly distressed by Jane's death as they had never been separated; they 'lived in sisterly love and affection, "being ever from their cradle bred together."' (Robinson, 1887, pp.206 & 213). She is photographed holding her silver-topped cane (not her father's).

The firm of Gray and Bulman, Photographers, occupied one of the apartments at 23 West Street, Gateshead in the 1881-1882 directory, very close to the Bewick's house at number 19 West Street.¹⁵⁰

¹⁵⁰ They were preceded in 1879-80 by the photographic firm of C Downey, and followed in 1883-84 by Gray Bros.

E PORTRAITS OF WORKSHOP APPRENTICES

45 Artist unknown

John Laws: framed miniature watercolour; n.d. c.1780s

Private Collection. Not illustrated.

This portrait of Laws, one of Bewick's favourite apprentices, depicts him as a young man, probably in his early twenties, dressed in a blue coat with a coloured waistcoat and ruffled shirt. The image is unfortunately not available for this work.

46 Artist unknown

John Laws: framed watercolour on paper, painted surface 101 x 92 mm, mount aperture 152 x 111 mm; n.d. late 18th or early 19th century

Private Collection. On loan to the National Trust: Cherryburn, Northumberland. A monochrome copy was published in Angus (1990).



The image is of a well dressed young man with long hair, not at all suggestive of a working farmer. It may have been painted at the request of the family before Laws sailed to America. Judging from a light-stain on the paper the frame is not original, and it bears no early inscription. The portrait remains the property of Laws' descendants.

Our first apprentice, was John Laws, who was brought up as a silver engraver & I think he never touched upon the Wood – his turn was directed to the ornamental & chiefly in the branch, of what is called bright engraving & at this kind of work he excelled, & is perhaps the best at this day – with it he also follows the business of a Farmer at "Heddon Laws", the place of his nativity. We greatly respected him for his honesty, sobriety, civil deportment & attention (Bewick's Memoir p.195).

John Laws (1765-1844)

Hall, 2005. Angus, 1990.

After John Bewick, Laws was the next apprentice engaged by the partnership of Beilby and Bewick, in March 1782. He gained his freedom in 1789 but stayed with the firm for a year as journeyman until the busy period leading up to the publication of the *Quadrupeds* was over. He had been born on the farm at Breckney Hill (now Heddon Laws), Heddon-on-the-Wall, and soon after gaining his freedom he set up his own silver engraving business for a period before travelling to America in 1801-2, possibly intending to farm there. When he returned it was to farm at his birthplace for the rest of his life. He continued to practise his principal skill, engraving on silver, at first for his livelihood and then apparently as a well-paid hobby until a few weeks before his death. He was a keen naturalist (some of his eggs and nests are in the Natural History Society's collection) and a skilled wood carver in oak. A great great grandson was Alan Angus (1920-2002), Laws' biographer and the first honorary treasurer of the Bewick Society.

47 **Luke Clennell (1781-1840)**

Self portrait (half-length): pencil drawing on paper, image 145 x 83 mm; n.d., c.1800

Laing Art Gallery, Newcastle: Tyne & Wear Museums.
TWCMS: F9075. Gift 1932.

Inscribed in ink 'Luke Clennel drawn by himself' in an unknown hand, and on the verso 'Presented to the Laing Gallery, Newcastle upon Tyne by R. Milbanke Hudson, J. P. Sunderland 15th January 1932'.

Another of my pupils of distinguished ability, both as a draughtsman and Wood Engraver, was Luke Clennell whose melencholly [sic] history, will be well remembered by the Artists of London & else where... (Bewick's Memoir p.200).



Luke Clennell (1781-1840)

Jackson and Chatto (1864). Redgrave, 1878. *ODNB*.
Graves, 1901. Hall, 2005. Angus, 1993.

Wood-engraver, watercolourist and portrait painter. Born at Ulgham, near Morpeth, Northumberland, Clennell's talent was recognised from an early age. He was apprenticed to Thomas Bewick in 1797-1804 and proved to be one of the most talented of Bewick's pupils, contributing significantly to several works including the *Water Birds* volume (1804) of the *History of British Birds*. He moved to London in 1804, where he illustrated several books and later won the Gold Medal of the Society of Arts for an engraving after Benjamin West. For the next ten years he established a reputation as a fine watercolourist. 'Clennell had great talent as a landscape painter, readiness of composition – spirited, truthful, and powerful – his rustic groups admirable, full of character and nature' (Redgrave, 1878). From 1810-18 he exhibited extensively in London at the Royal Academy, the British Institution, the Royal Watercolour Society and the exhibitions of the Associated Artists. In 1813-1817 he began undertaking large canvasses in oils but from 1817 till his death he suffered from a fluctuating mental illness; he returned to Northumberland the early 1820s, being able to exhibit paintings locally with decreasing frequency until 1836, and ending his life in an asylum. He died on 9 February 1840 and was buried in St Andrew's churchyard, Newcastle, but his grave is unknown. A memorial plaque was placed in the choir of the church in 1844.



48 Luke Clennell (1781-1840)

Self portrait: in 'The Allied Sovereigns' Banquet at Guildhall, June 18, 1814'; oil on canvas, 1270 x 1905 mm (portrait head c.80 x 50mm); 1814-17

Guildhall Art Gallery, London.

The painting was commissioned by the Earl of Bridgewater in 1814. Its history and the story of its recent reattribution to Clennell are told by Knight (1993) who also

illustrated the whole painting in colour with a close-up of the Clennell self portrait in black and white. In the glittering banquet scene, Clennell stands with others, on the left, in an aisle between the tables of seated guests.

The portrait has a special poignancy as it portrays Clennell at the peak of his career immediately before his mental breakdown. It was in April 1817 after nearly three years of unfinished work trying to gather together the portraits he needed to complete the painting (and to satisfy the sitters with their place in the composition) that Clennell showed the first sign of the illness that continued for the rest of his life.

49 **Artist unknown**

William Harvey (1796-1866): electrotype engraving, image 131 x 135 mm; c.1866

The Illustrated London News 48: 97 (27 January 1866).

The next of my pupils, & one of the first in excellence was William Harvey, who both as an engraver & designer, stands preeminent at this day.
(Bewick's *Memoir* p.200.)

The electrotype of the engraving was used in his obituary in *The Illustrated London News*, where it has the monogram MJ or JM.¹⁵¹

William Harvey (1796-1866)

Dalziel, 1901, *ODNB*. Hall, 2005, Angus, 1993.

Wood engraver and draughtsman. Born at Newcastle on 13 July 1796, he was apprenticed to Thomas Bewick at the age of 13 and became his favourite pupil. He worked with William Temple on the engravings for Bewick's *Fables of Aesop* leaving the workshop in 1817 to work in London. He studied under Benjamin R Haydon, for whom he engraved his most ambitious work, a large wood block of the 'Assassination of Dentatus', in 1821. On the death of John Thurston he became the principal designer for the wood engraving trade in London and worked for, among many others, the Dalziel family. He died on 13 January 1866 and was buried in Richmond, Surrey, but he was also remembered in his home town of Newcastle with a stone tablet near the north door of St Nicholas' Cathedral.

There is an earlier portrait of Harvey, as part of a group of students in Haydon's studio, illustrated in *Annals of Fine Arts* for MDCCCXVIII, (1819), pp.58-67. This etching by John Bailey, Bewick's friend from Chillingham, is not illustrated here but will be reproduced in a forthcoming work by Nigel Tattersfield *The Complete Illustrative Work of Thomas Bewick*, volume 1.



¹⁵¹ A copy without the monogram is in the Northumberland Record Office (Society of Antiquaries Archive SANT/BEQ/4/6/1A). It was also later reproduced on a reduced scale in *The Brothers Dalziel. A record of fifty years' work with many of the most distinguished artists of the period. 1840-1890*. London: Methuen & Co, 1901.

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The importance of Bewick's correspondence in this endeavour to catalogue the various portraits of Bewick cannot be overestimated and I am very grateful to Dr Iain Bain, who with his prodigious knowledge on the subject of Bewick, selected and allowed access to the relevant letters in his vast collection of transcripts as well as providing images for the catalogue.

Grateful thanks are also due to Dr David Gardner-Medwin who has with great enthusiasm helped to steer and guide both the original exhibition and this catalogue; without his unfailing willingness to assist in the investigation of every possible avenue of information and his careful editing, this catalogue would never have reached its final conclusion.

The museums, libraries, archives, art galleries and private individuals who provided portraits for the exhibition and for those discovered since 2003 have kindly allowed us to reproduce them for this publication and have provided the necessary information. Thanks are due to Nigel Tattersfield; Sarah Richardson and Lesley Richardson of the Laing Art Gallery; Miss Zelda Baveystock, Gary Woods and Miss Elissa Haskins-Vaughan, Discovery Museum; Andrew Heard, Shipley Art Gallery (all Tyne & Wear Museums); Hugh Dixon and Stewart Thirkell, The National Trust (Cherryburn); Dilys Harding and Anna Flowers, The Local Studies Department (Pease Collection) and Tynebridge Publishing, Newcastle City Library; Kay Easson, The Literary and Philosophical Society of Newcastle upon Tyne; The National Portrait Gallery; The Robinson Library Special Collections, University of Newcastle; University of Durham Library; the British Museum, Department of Prints and Drawings; John Anderson, Anderson and Garland; Liz Rees and Alan Hayward, Tyne & Wear Archives; Northumberland Record Office; Colin Campbell and the family of Alan Angus.

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ILLUSTRATION CREDITS

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REFERENCES

- ACADEMY OF ARTS (1903). *Thomas Bewick. 150th Anniversary commemoration exhibition of works & relics. Promoted by The Pen & Palette Club. Academy of Arts, Newcastle upon Tyne, Sept 12th – Oct 8th, 1903. Newcastle upon Tyne: Ward & Sons.*
- ANDERTON, B and GIBSON, W H (1904). *Catalogue of the Bewick Collection (Pease Bequest). Newcastle upon Tyne: Newcastle Public Libraries Committee.*
- ANGUS, ALAN (1990). John Laws of Breckney Hill – a Bewick apprentice. *Cherryburn Times* Vol. 1 No. 8: 4-6. Thomas Bewick Birthplace Trust, Gateshead.
- ANGUS, ALAN (1993). Thomas Bewick's Apprentices. *History of the Book Trade in the North* PH62 – November 1993.
- ANON (1868). *Catalogue of an exceedingly choice and varied collection of books and wood engravings by, or relating to Thomas & John Bewick and their pupils collected by Mr. Edwin Pearson. London: J. Davy & Son.*
- ATKINSON, GEORGE CLAYTON (1831). Sketch of the life and works of the late Thomas Bewick. *Transactions of the Natural History Society, of Northumberland, Durham, and Newcastle upon Tyne.* 1: 132-159.
- AUDUBON, J J (1835). Reminiscences of Thomas Bewick. In: *Ornithological Biography, or an Account of the Habits of the Birds of the United States of America. Volume III.* Edinburgh: A & C Black et al.; pages 300-304.
- AUDUBON, MARIA R and COUES, ELLIOTT (1898). *Audubon and his journals.* 2 volumes. London: John C Nimmo.
- BAIN, IAIN (editor), (1975). *A Memoir of Thomas Bewick written by himself.* London: Oxford University Press.
- BAIN, IAIN, (1979a). *The workshop of Thomas Bewick: a pictorial survey,* Newcastle: Tyne & Wear County Council Museums.
- BAIN, IAIN, (1979b). *Thomas Bewick Vignettes.* London: Scolar Press.
- BAIN, IAIN, (1981). *The Watercolours and Drawings of Thomas Bewick & his Workshop Apprentices,* 2 vols. London: The Gordon Fraser Gallery Ltd.
- BAIN, IAIN, (1982). Thomas and Robert Bewick and their Connections with Northumbrian Piping, *Northumbrian Pipers' Magazine* No.3.
- BAIN, IAIN, (2003). Thomas Bewick's Correspondence. In: *Bewick Studies.* Newcastle upon Tyne, London and New Castle, Delaware: The Bewick Society, The British Library and Oak Knoll Press.
- [BELL, J G] (1851). *Descriptive and Critical Catalogue of Works illustrated by Thomas and John Bewick, wood engravers of Newcastle upon Tyne.* London: John Gray Bell.
- BÉNÉZIT, E (1976). *Dictionnaire critique et documentaire des peintres, sculpteurs, dessinateurs et graveurs ...* . Paris: Libraire Gründ.
- [BEWICK SALE] (1884). *Catalogue of a scarce and curious collection of books and engravings, formerly belonging to Thomas Bewick, the eminent wood engraver, ... to be sold by auction, ... by Messrs. Davison and Son, within the Academy of Arts, Blackett Street, Newcastle-upon-Tyne.*
- BEWICK TO DOVASTON. See Williams (1968).
- BINYON, LAURENCE (1898). *Catalogue of drawings by British artists and artists of foreign origin working in Great Britain, preserved in the Department of Prints and Drawings in the British Museum.* London: British Museum.

- BOWES, E (1982). "Our celebrated painter": new information concerning T.S. Good. *History of the Berwickshire Naturalists' Club*, XLII Part 2: 69-84.
- BOWES, P E (1989). *In a strong light: the art of Thomas Sword Good*. Catalogue of an exhibition at Berwick upon Tweed Museum and Art Gallery.
- BOYD, JULIA (1886). *Bewick Gleanings...* Newcastle upon Tyne: Andrew Reid.
- CHARNLEY, E (1820). *Select Fables, with cuts, designed and engraved by Thomas and John Bewick, and others, previous to the year 1784; together with a memoir; and a descriptive catalogue of the works of Messrs. Bewick*. Newcastle: S. Hodgson.
- COBBETT, WILLIAM (1930) *Rural rides ... in the northern and midland counties of England ...* Edited by G D H Cole and Margaret Cole. 3 volumes. London: Peter Davies.
- DALZIEL, G & E (1901) *The Brothers Dalziel. A record of fifty years' work with many of the most distinguished artists of the period. 1840-1890*. London.
- DAVIDSON, CAROLINE (1985) *The World of Mary Ellen Best*. London.
- DAWSON, A (1999) *Portrait Sculpture. A catalogue of the British Museum collection c.1675-1975*. London: British Museum Press.
- DIBDIN, T F (1838). *A bibliographical antiquarian and picturesque tour in the northern counties of England and in Scotland*. 2 volumes. London: James Bohn etc.
- DNB (1897). *Dictionary of National Biography*. Ed. Sidney Lee. London: Smith Elder & Co.
- DOBSON, A (editor) (1887). *A Memoir of Thomas Bewick written by Himself. Memorial Edition of Thomas Bewick's Works. Vol. V*. Newcastle upon Tyne: Printed by R. Ward & Sons for Bernard Quaritch, London.
- DOBSON, AUSTIN (1884). *Thomas Bewick and his Pupils*. London: Chatto and Windus.
- DOBSON, AUSTIN (1897). See *Dictionary of National Biography (DNB)*.
- DOBSON, AUSTIN (1899). *Thomas Bewick and his Pupils*. 2nd edition. London: Chatto and Windus.
- DOVASTON, J F M (1829-30). Some Account of the Life, Genius, and Personal Habits of the late Thomas Bewick, the celebrated Artist and Engraver on Wood. *The Magazine of Natural History*, conducted by J C Loudon, Vol. II, September 1829 pp.313-319, Vol. III, January 1830 pp.1-9, and March 1830 pp.97-105. Excerpts are also published in the Appendix to Williams (1968) p.129.
- ENGEL, R K (1985). *Dictionary of Victorian wood engravers*. Cambridge: Chadwyck-Healey.
- GARDNER-MEDWIN, D (2003). The library of Thomas Bewick. In: *Bewick Studies*. Edited by D Gardner-Medwin. Newcastle upon Tyne, London and New Castle, Delaware: The Bewick Society, The British Library and Oak Knoll Press.
- GRAVES, ALGERNON (1901). *A dictionary of artists who have exhibited works in the principal London exhibitions from 1760-1893*. Facsimile of the 3rd edition. Bath: Kingsmead Reprints (1969).
- HALL, MARSHALL (1979). *The artists of Cumbria*. Newcastle: Marshall Hall Associates.
- HALL, MARSHALL (2005). *The artists of Northumbria*. 3rd edition. Bristol: Art Dictionaries.
- HAWKINS, R (2003). *The Life of Robert Blakey (1795-1878)*. Morpeth: Morpathia Press.
- HOLMES, J (1999). A new Bewick manuscript: Memorial to the Misses Bewick. *Cherryburn Times* Vol. 3 No. 8: 3-8. The Bewick Society, Newcastle.

- HORSLEY, P M (1971). *Eighteenth-Century Newcastle*. Newcastle upon Tyne: Oriel Press.
- HOWITT, WILLIAM (1842). *Visits to remarkable places*; Second Series. London: Longman, Brown, Green, and Longmans.
- HOWITT, WILLIAM (editor) (1847). *Howitt's Journal of Literature and Popular Progress*. No. 38, ii, 18 September.
- HUGO, T (1866 and 1868). *The Bewick Collector*. Two volumes. London: Lovell Reeve & Co.
- HUGO, T (1870). *Bewick's woodcuts: impressions of upwards of two thousand ...*. London: L Reeve & Co.
- HUNT, C J (1975). *The book trade in Northumberland and Durham to 1860*. Newcastle: Thorne's Students' Bookshop Ltd for the History of the Book Trade in the North.
- JACKSON, J (1839). *A Treatise on Wood Engraving, Historical and Practical. With upwards of three hundred illustrations engraved on wood, by John Jackson*. London: Charles Knight & Co.
- KNIGHT, V (1993). Luke Clennell at the Guildhall: the Allied Sovereigns' Banquet. *Apollo* 138: 234-41.
- LAING (1928). *Laing Art Gallery and Museum. The Bewick centenary. Catalogue of the special loan exhibition of drawings, engravings, etc. by Thomas Bewick 1753-1828*. Newcastle upon Tyne: City Council.
- LANDSEER, THOMAS (editor), (1871). *Life and letters of William Bewick (artist)*. London: Hurst and Blackett. Facsimile reprint Wakefield: EP Publishing Ltd, 1978.
- MACKENZIE, E (1827). *A descriptive and historical account of the Town and County of Newcastle upon Tyne, including the Borough of Gateshead*. 2 volumes. Newcastle: Mackenzie and Dent.
- MACKENZIE, G S (1820). *Illustrations of phrenology, with engravings*. Edinburgh: Archibald Constable & Co.
- MALLALIEU, H L (1986). *The dictionary of British watercolour artists up to 1920*. 2nd edition. Woodbridge: Antique Collectors Club.
- McLEAN, RUARI, editor (1960). *The wood engravings of Joan Hassall*. London: Oxford University Press.
- MEMOIR. See Bain (1975).
- ODNB (2004). *Oxford Dictionary of National Biography*. Ed. H G C Matthew and B Harrison. Oxford University Press.
- O'DONOGHUE, FREEMAN (1908-24). *Catalogue of the engraved British portraits preserved in the Department of Prints and Drawings in the British Museum*. 6 volumes. London: The British Museum.
- PEASE COLLECTION. See Anderton and Gibson (1904).
- PEPPIN, B, MICKLETHWAIT, L (1983). *Dictionary of British book illustrators: the Twentieth Century*. London: John Murray.
- PRITCHETT, H D (1924). *History of the Parish Church of St Cuthbert Darlington*. Darlington: Wm. Dresser & Sons.
- REDGRAVE, S (1878). *A dictionary of artists of the English School ... with notices of their lives and work*. Revised edition. London: George Bell and Sons.
- RICHARDSON, M A (1841-1844). *The Local Historian's Table Book of Remarkable Occurrences ...*. 4 Volumes. Newcastle: M.A. Richardson.

- ROBINSON, R (editor) (n.d., c1884). *Bewick Memento: Catalogue with Purchasers' Names and Prices Realised*. London: Field & Tuer.
- ROBINSON, R (1887). *Thomas Bewick: his Life and Times*. Newcastle: R Robinson.
- ROSCOE, S (1953). *Thomas Bewick: a bibliography raisonné ...* London: Oxford University Press.
- SCOTT, W B (1892) *Autobiographical notes of the life of William Bell Scott HRSA., LLD and Notices of his Artistic and Poetic Circle of Friends 1830-1882*. W Minto [What is this??] London: James R. Osgood, McIlvaine & Co.
- SHARP, C (1816). *A history of Hartlepool*. Durham: George Andrews and others.
- SYKES, J (1833). *Local records; or historical register of remarkable events, which have occurred in Northumberland and Duham, Newcastle upon Tyne, and Berwick upon Tweed, ...* New Edition, Volume II; Newcastle: J. Sykes.
- TATTERSFIELD, N (1999). *Bookplates by Beilby and Bewick*. London: The British Library.
- TATTERSFIELD, N (2001). *John Bewick: engraver on wood, 1760-1795*. London: The British Library; and New Castle, Delaware: Oak Knoll Press.
- THOMSON, DAVID CROAL (1882). *The Life and Works of Thomas Bewick*. London: 'The Art Journal' Office.
- THOMSON, DAVID CROAL (1930). *The Water-Colour Drawings of Thomas Bewick*. London: Barbizon House.
- USHERWOOD, PAUL (1984). *Art for Newcastle: Thomas Miles Richardson and the Newcastle Exhibitions 1822-1843*, exhibition catalogue, Laing Art Gallery. Newcastle: Tyne & Wear County Council Museums.
- USHERWOOD, P, BEACH, J, MORRIS, C (2000). *Public sculpture of North-East England*, Liverpool: Liverpool University Press.
- WALKER, R (1985). *Regency portraits*. 2 volumes. London: National Portrait Gallery.
- WATSON, R S (1897) *The history of the Literary and Philosophical Society of Newcastle-upon-Tyne (1793-1896)*. London: Walter Scott, Ltd.
- WEEKLEY, M (1953) *Thomas Bewick*. Geoffrey Cumberlege, Oxford University Press.
- WELFORD, R (1895). *Men of mark 'twixt Tyne and Tweed*. London: Walter Scott Ltd.
- WHITEHEAD'S *Newcastle directory for 1778 ...* Newcastle: Tho. Angus. And *Whitehead's Newcastle and Gateshead directory for 1790 ...* Newcastle: D Akenhead.
- WILLIAMS, G (editor) (1968). *Bewick to Dovaston Letters 1824-1828*. London: Nattali & Maurice.
- YOUNGER, G W (1925). Robert and Ralph Dodd, marine painters, and others of the name. *The Connoisseur* 71: 73-80 and 87-94.



THE BICENTENARY OF THOMAS BEWICK'S *HISTORY OF BRITISH BIRDS*¹

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Thomas Bewick's most popular and enduring work, his *History of British Birds*, is two hundred years old. The second volume *Containing the History and Description of Water Birds*, was 'Finished at Press on the 2^d & 5th July 1804'.² The first, *Land Birds*, had appeared in 1797.

The main purpose of this article is to review the preparation and production of the *History*,³ particularly the *Water Birds* volume, and to record and set in context certain information about its publication which is to be found in three notebooks from the Beilby and Bewick workshop that have been largely overlooked in earlier studies of Bewick.⁴ But first the occasion calls for a word of bicentennial praise.

A celebratory preamble

On the 3rd of July 2004 a party of members of the Bewick Society celebrated the bicentenary by visiting the Farne Islands – it seemed a fitting commemoration to go bird-watching, the activity that Bewick did so much to make popular, and to watch myriads of water birds on their Northumberland breeding grounds – hundreds of Shags, thousands of terns and tens of thousands of Puffins and Guillemots. We may regret that Bewick never visited these spectacular islands himself, but they do figure in the *Water Birds*, where he wrote of the Sandwich Tern:

*A pair of these birds, male and female, were shot on the Fern Islands, on the coast of Northumberland, in July, 1802, from the former of which this figure was taken. [Footnote] These birds, as well as specimens of nearly the whole of the different kinds which breed on the Fern Isles, were, after great trouble and risk, shot there, expressly for the use of this work, by Major Shore and Lieutenant Henry Forster Gibson, of the 4th Dragoons...*⁵

Two books, Bewick's *British Birds* and Gilbert White's *Natural History of Selborne* (1789), are often regarded as the principal stimuli for the development of the traditional British passion for natural history. There is truth in this exaggerated cliché. While

¹ A short version of this paper appeared in *Cherryburn Times: the Newsletter of the Bewick Society*, Volume 4, Number 6, pp 6-8 (June 2004).

² Tyne & Wear Archives (T&WA) 1269/136. The later date was perhaps that of the completion of the printing of the 'Advertisement' (really a preface), dated 3rd July.

³ Fuller accounts of various aspects are in Bewick's *Memoir* (Bain, 1975), Roscoe (1953) and Bain (1981), from which I have drawn selectively. The indefinite article was added to the title - '*A History* ...' in the 1805 and later editions.

⁴ The collection of workbooks, ledgers etc is in the Tyne & Wear Archives, Newcastle upon Tyne. The three notebooks contain publication details of some early editions of the *Quadrupeds and Birds* (T&WA 1269/136), lists of subscribers, mainly to the first edition of *Land Birds*, (1269/135) and Bewick's notes made at Wycliffe in 1791 (1269/54).

⁵ *Water Birds* (1804) p. 204. The Bewick Society's hosts on the Farnes were the National Trust and Mr John Walton, the chief warden, who quoted this passage and pointed out that Bewick acknowledged only two other species as illustrated with Farnes specimens: the Kittiwake and (in the 1821 edition) the Roseate Tern.

Bewick's was by no means the earliest of the fine British bird books, it was the first to be produced for the popular market that was founded both upon well chosen information from earlier authorities and upon the experience of a great artist-naturalist. It cannot be claimed that the book made a significant direct contribution to the *science* of ornithology, but it did stimulate wide interest in birds and inspired many of those who later advanced the science. Bewick's incomparable skill as a wood-engraver was of course crucial to the book's success, and for two reasons: it made it possible to print exquisitely detailed figures and text together on one page far more simply and cheaply than before, and it created a stock of illustrations that were not only accurate in the details of form and plumage but were also, wherever possible, brought to life by personal observation of wild birds. Now, ordinary people could not only recognise in the book birds they had seen in the field, but could find and recognise for the first time in the field birds they had seen in the book. Naturalists will know the importance of the difference. Moreover, the book could be theirs. No longer was it necessary to seek out expensive hand-coloured quartos and folios in the libraries of the rich. And if a further attraction were needed, the tail-pieces provided fascination and humour to beguile the recalcitrant teenager or jaded adult. The *History of British Birds* was a revelation, a book of the Enlightenment, and an inspiration to go out and discover more about the natural world. It went through five further editions (strictly, seven of *Land Birds*) in Bewick's lifetime and two more after his death, and has twice been reissued since.⁶ Before long, as he had foreseen, it was followed by a series of up-to-date replacements, of varying quality. Some were more scientific or more complete; many were more colourful as printing advanced. None captured the affection of people so completely as the original. Bird-watchers with their modern field guides, whether they realise it or not, still follow in Bewick's footsteps. The reaction of the collectors may be summed up in the somewhat affected words of the *omnium wool-gatherum* traveller, Thomas Frognall Dibdin, who visited the Bewick family in 1835:

... his *Birds* are his masterpiece. There can be no doubt of it. It is the feather of the original transferred to paper. What Mr. Waterton does with the dead animal itself, Bewick does with the copied animal. The exquisite and sometimes almost tremulous softness of the plumage of the original, is witnessed in his exquisite copies. You almost see the bird shake his plumage.⁷

Bewick as an author

What was the purpose of the *History of British Birds*? In December 1805, in his preface to the second edition of *Water Birds* (the first had no preface), Bewick wrote:

⁶ Roscoe (1953). Extra editions of *Land Birds* appeared in 1798 and between 1814 and 1816, though the dates of both on the title pages were misleading – '1797' and '1804' respectively. Editions of both volumes appeared in 1805, 1809, 1816, 1821 1826, 1832 and 1847. The reissues mentioned were the 1887 Memorial Edition (a reprint of the 1847 edition) and Frank Graham's facsimile of the 1826 edition, published in 1971-2. Reproductions of the illustrations have of course been innumerable. Extra title pages were printed by Sarah Hodgson for Emerson Charnley in 1822, for five volumes of Bewick's works comprising Charnley's *Select Fables*, *Quadrupeds*, *Land Birds*, *Water Birds* and *The Fables of Aesop*. These were added to copies of various editions of the works which were then reissued by Charnley (see Roscoe, 1953 Appendix 2). Copies with these pages do not comprise a new edition; they are uncommon, but there are sets in the Pease collection and the National Trust's Cherryburn collection.

⁷ Dibdin, T F (1838). *A bibliographical antiquarian and picturesque tour in the northern counties of England and in Scotland*. 2 volumes. London: James Bohn etc.; p.334n.

To the rising generation these efforts to instruct and please are principally directed, and are set forth with an ardent wish, that they may be found to deserve the notice of youth, and contribute to amuse and inform them. May the reader, impressed with sentiments of humanity, on viewing the portraits, spare and protect the originals: and when these books shall become obsolete, or be lost in the revolution of time, may some other more able naturalist arise equally inclined to produce better to supply their place.

Evidently Bewick regarded this as a new kind of book. His wood engravings were bird portraits, a true guide to recognition; and it was directly in his tradition of producing books for the young – improving, enlightened, educational, and moral ('protect and spare the originals').⁸ The passage also epitomises Bewick's style as an author. Far from being rustic and uneducated as some might have imagined, it is direct, balanced, with some good 18th century flourishes, though occasionally there is some slight infelicity of phrasing – *equally inclined to produce better* is a little awkward. In subsequent years Bewick gained confidence as an author. His *Memoir* of the 1820s is wonderfully spontaneous and natural. But in 1803 he was probably nervous. At the age of fifty, though an experienced and lively letter-writer, he had been forced into formal authorship for the first time. Ralph Beilby, his former master and business partner, had drafted their *A General History of Quadrupeds* (1790) and the *Land Birds* (1797).

*As soon as Mr Beilby left me, I was obliged from necessity – not choice, to commence Author – As soon as each Bird was finished on the Wood, I set about describing it from my Specimen – and at the same time consulted every Authority I could meet with to know what had been said, & this together with what I knew from my own knowledge, were then compared, and in this way, I finished, as truly as I could, the second Volume of the History of British Birds – I also examined the first Volume with a view to correct its errors, and also to add many new figures & descriptions of them to it.*⁹

Bewick had earlier provided material and edited drafts for *Land Birds*, but had been spared the horrors of the blank page. It is worth reading the *Water Birds* to see how he fared. Bain has pointed out that Bewick may have omitted to mention that Beilby provided some material for Volume 2; certainly Bewick wrote to him on 9 December 1799 'In these long winter Evgs & while I am a kind of Cripple I am employing myself in writing the descriptions of the Water Birds' and asking for those that Beilby had already sketched out from specimens sent by 'our friends', which might not be available a second time.¹⁰ It is not certain that Beilby obliged. Bewick did admit *To the Rev. H. Cotes, vicar of Bedlington, the editor acknowledges his obligations for his literary corrections*, but he robustly and convincingly denied a later insinuation that Cotes was the author.¹¹ Indeed, though Cotes sent Bewick a number of birds during the preparation of the *Water Birds*,¹² he was no ornithol-

⁸ Thomas Bewick, like his brother John, had illustrated many children's books, Thomas's mostly published by Thomas Saint. The most important was his *Select Fables*, Newcastle: T Saint, editions 1776 and 1784. When, at the age of 65, he produced his own version of *The Fables of Aesop* (1818) some of the spontaneity and sparkle of the earlier illustrations had gone.

⁹ Bewick's *Memoir* (Bain, 1975, p.125).

¹⁰ Bain (1975) p.242.

¹¹ For more detail on this controversy see Roscoe (1953, pp 71-73) and Bewick's 1826 comment to Dovaston (Williams, 1968, p.80). Tattersfield (1999) gives a more sympathetic view of Cotes.

¹² From March 1800 to July 1803; Cash Book, T&WA 1269/5.

ogist (nor hygienist either, apparently):

1st February 1802

Dear Sir,

Not having an opportunity before [one wonders how long he had waited] I send you The Widgeon I spake of & hope it will not be too far gone for you to make some use of it either for The Table or for your pencil.

I hope this will find your Cold better, I am, dear Sir, Yrs etc, Henry Cotes

Above the word 'Widgeon', Bewick has written the correction 'Scaup duck'.¹³

A manuscript version of the Introduction to the 1804 *Water Birds* in Bewick's hand survives, with, on the verso pages, another version in the hand of the Revd Henry Cotes's.¹⁴ The latter is essentially identical to the printed version; the former more florid and unpolished. The implication is that we have Bewick's draft as seen by Cotes together with Cotes's 'literary corrections'. As a somewhat extreme example of Bewick's style, his final breathless passage may be given, for comparison with Cotes' version; but it would be wrong to suggest that all of Bewick's prose required this amount of skilful rewriting, or, indeed, that Cotes was necessarily involved in any other part of the book:

To those whose attentions direct them bejond the common gropings of mankind, & to extend their views over this world of wonders it will be found that nature ever provident that no part of her extensive empire shou'd be unoccupied, has peopled it every where with creatures of many kinds & filled every corner of it with animation – to pursue her into the more hidden recesses through all her minute ramifications appears an endless task, but yet so far as these ~~have been searched~~ are explored, every step taken in the research is marked with pleasantness – and the reflecting mind, habituated to move in its proper sphere breaks through the trammels which bind, alike the little blind temporary struttings of pride, & the darkened filmy boundaries of ignorance – with clearer views soars towards perfection & filled with adoration at that dispensation which with infinite wisdom & power orders the unerring course of all things.

To those, who, contemplating this world of wonders, extend their views beyond the common gropings of mankind, it will appear, that Nature, ever provident that no part of her empire should be unoccupied, has peopled it with creatures of various kinds, and filled every corner of it with animation. To follow her into all her recesses would be an endless task; but so far as these have been explored, every step is marked with pleasantness: and while the reflecting mind, habituated to move in its proper sphere, breaks through the trammels of pride, and removes the films of ignorance, it soars with clearer views towards perfection, and adores that Infinite Wisdom which appointed and governs the unerring course of all things.

¹³ Letter in the workshop correspondence, T&WA DT.BEW/1/78. Bewick identified the duck at once, for the Cash Book entry for 2 February 1802, when the packet was received, reads 'Scaup Duck from Mr Cotes 4d' (T&WA 1269/5).

¹⁴ Newcastle City Library; Bewick Collection 505. The handwriting on the verso pages matches exactly that in the contemporary Parish Registers of Bedlington where Cotes was the incumbent (Northumberland Record Office).

Who made the illustrations?

Paradoxically, Bewick seems to have been more fully responsible for the text of the *Water Birds* than he was for the illustrations. The title pages of both volumes name no author and state only *The Figures Engraved on Wood by T. Bewick*. Exactly how much his apprentices contributed to the engravings has been debated ever since. When young George Atkinson asked Bewick himself this question, towards the end of his life, he seemed forgetful and, with the prompting of his daughter Jane, said only that he had been 'assisted' with three of the birds, 'The Whimbrel, Tufted Duck, and Lesser Tern'. They could remember no others, but Jane said 'certainly there were not half a dozen in all'. There was no mention of who gave the assistance (Atkinson, 1831).



Figure 1. The Tufted Duck (engraved by Henry Hole) and the Pintail (by Thomas Bewick), both from the *Water Birds*.

In 1791, when the planning of the *History of British Birds* began, Robert Johnson (1771-1796) was half-way through his apprenticeship, Charlton Nesbit (1775-1838) was in his second year and Henry Barnes had just begun. Between then and the publication of the *Land Birds*, Henry Hole and two scoundrels, John Anderson and Charles Hickson joined the workshop.¹⁵ During the preparation of the *Water Birds*, Henry Hole was in his prime and three able apprentices arrived almost together in 1797-1798 and reached their senior year in 1804-1805: Luke Clennell, Mark Lambert, and Edward Willis. Four of these young men, Johnson, Nesbit, Hole and Clennell, have been credited with contributing to the book.¹⁶

There seems to be no conclusive evidence that Edward Willis was involved, but it was he who many years later told William Chatto and John Jackson his, perhaps unreliable, recollections of the contributions of his contemporaries, Clennell and Hole.¹⁷ In 1839, Jackson and Chatto published a list attributing the design or engraving of six tail-pieces in

¹⁵ Angus (1993). Both Anderson and Hickson caused a good deal of trouble before absconding without completing their apprenticeships.

¹⁶ John Johnson, cousin of Robert, was by then out of his apprenticeship, but may have continued to work at the workshop (Angus, 1993). He died at about the age of 22, presumably in about 1790-91, just as the work on *Land Birds* was about to begin. Nevertheless, Jackson (1839) and a letter in the Pease Collection (Pease 178, p.71) both ascribe to him the engraving of Robert's design for the vignette on page 220 of the 1804 *Water Birds*.

¹⁷ See Bain, 1981 (Vol 1, pp 69-70) for a full discussion of this issue.

Land Birds and forty in *Water Birds* to various apprentices, not including Willis (Jackson, 1839; Jackson and Chatto, 1861, p. 497-8).¹⁸ They said, for example, that 27 tail-pieces in the *Water Birds* were engraved by Clennell and four by Hole. Iain Bain (1979 and 1981) mistrusted Willis's memory and amended the list of attributions made by Jackson and Chatto. In 1979 he attributed the engraving of 25 of the 89 vignettes in the 1797 *Land Birds* to Bewick and one (the nest at the head of the Preface) to Nesbit; while, of 136 vignettes in the 1804 *Water Birds*, he attributed 21 to Bewick, 31 to Clennell and 3 to Hole. Furthermore, both Jackson (1839) and Bain (1981) drew attention to the importance of Robert Johnson's superb miniature watercolours as prototypes for the engravings, sometimes alongside Bewick's own drawings (it is not always clear which came first). The London Library has a manuscript, stated to be in the hand of W A Chatto, headed 'List of subjects engraved by Bewick's pupils as indicated by Edward Willis, Charlton Nesbit, William Harvey and John Jackson, in the Edition of his Birds of 1821'.¹⁹ It gives the page number for each engraving in the first edition as well as that of 1821 and in a few instances 1832. This list is much longer than any other and differs in some attributions from Chatto's published list. Indeed, it seems to attribute contributions to the engraving of some vignettes to Edward Willis.²⁰ Of the birds themselves, this list attributes only the Whimbrel and Red-breasted Merganser, Tufted Duck and Crested Corvora to Hole, the Lesser Imber, Brent Goose, and Corvora to Clennell, and the drawing of the Eared



Figure 2. (a) The Brent Goose (engraved by Clennell). (b) The Fork-tailed Petrel: engraver unknown, (Clennell and Hole may have contributed). Both from *Water Birds*.

[Slavonian] Grebe (1821) to William Harvey (but its background to Bewick and engraving to William Temple). A fourth source, unfortunately anonymous and undated, is another manuscript list of those birds and vignettes in the first editions of the two volumes (and the 1821 *Supplements*) which were designed or engraved by apprentices. It is pasted into an album of items collected by Pease.²¹ This list matches the attributions in Jackson

¹⁸ Chatto is not properly credited with writing the extensive historical section in 'Jackson's' book, until the second edition.

¹⁹ In a mixed collection of manuscript and printed Bewick memoranda collected by W A Chatto and presented to the London Library by A T A Dobson in 1953.

²⁰ For example Willis is stated to have engraved the lettering in the vignettes on Vol I page 86 and Vol II page xxii of the 1821 edition.

²¹ This list (in Pease 178, page 71) is headed 'Notes from Mr. Yarrells Copy of Bewick's birds 1st edition' and, for the vignettes, conforms very closely to Jackson's & Chatto's (with two differences relating to pages 201 and 380 of *Water Birds*), but in addition it covers the *Supplement* volumes of

(1839). Finally, a letter of 10 March 1851 from William Garret to Thomas Hugo (Pease 178, p.81) says of Hole 'The best cuts he engraved for Bewick's Birds were the Whimbrel, Tufted Duck, Lesser Tern, Velvet Duck, Red-breasted Merganser & Crested Cormorant'.²²

Having looked at the examples mentioned one cannot help suspecting that these apprentices may also have been involved in other images not discussed in the literature, including a few more of the birds themselves. Bewick's dislike of engraving water (Jackson and Chatto, 1861, pp 492-3) or, perhaps more accurately, *waves* must have provided a major problem when seabirds such as the Storm Petrel had to be engraved. Clennell's manner with waves can be recognised in several of the illustrations of such birds. Perhaps, too, Hole's manner with pebbles is evident in the engraving of the dead [Leach's] Fork-tailed Petrel washed up on the beach (Figure 2). These, however, are speculations.

To summarise the conclusions from the available evidence, Henry Hole seems likely to have engraved the Whimbrel, Lesser Tern (Little Tern), Tufted Duck, Velvet Duck (Velvet Scoter), Red-breasted Merganser and 'Crested Corvorant' (breeding adult Cormorant), while Luke Clennell is credited with the Lesser Imber (a winter-plumage diver, possibly Black-throated), Brent Goose and the (non breeding) 'Corvorant'. Robert Johnson's water-colour designs were engraved, mostly by Bewick, for a number of the vignettes in both volumes. Charlton Nesbit (once in in Volume 1) and Clennell (in Volume 2) designed others, while Nesbit, possibly John Johnson,²³ Hole and especially Clennell all engraved vignettes. It is evident, however, that Bewick himself designed and engraved the vast majority of the illustrations (and all the birds) in Volume 1 and the majority also in Volume 2. As previous commentators have emphasised, whoever was involved and whatever the detailed procedures may have been, Bewick himself will have demanded high standards of his pupils and overseen and approved all the work, perhaps even reworking some of the apprentices' blocks, so the full attributions can never be accurately settled and Bewick himself is rightly given the credit for the book as a whole.

In his *Memoir*, Bewick described how he worked on the cuts for the *Quadrupeds*. No doubt those for *British Birds* were engraved in similar circumstances; indeed Bewick wrote that he worked 'many a late hour upon the Cuts' for the *Land Birds*.

*The greater part of these Wood cuts were drawn & engraved at nights, after the days work of the shop was over. In these Evenings I frequently had the company of my friend & companion the Revd Richard Oliphant who took great pleasure in seeing me work, while, at the same time he read to me, the Sermons he composed for the next Sunday, where he at that time might happen to officiate – I was also attended, from a similar curiosity, by my friend, the Revd Thomas Hornby, Lecturer of St Johns...*²⁴

1821 (with two engravings by William Temple) and also attributes the Lesser Tern, Velvet Duck, and Crested Corvorant to Hole and the Corvorant to Clennell. There is no indication of who supplied the list to Yarrell or who copied it for Pease.

²² Garret worked with Emerson Charnley and afterwards set up his own bookselling business in Newcastle, taking a special interest in Bewick's works. The letter is part of an extensive correspondence between Garret and Hugo, in Pease 178.

²³ Nesbit and (doubtfully) John Johnson each engraved only one vignette, respectively the nest above the *Land Birds* Preface and that on page 220 of the 1804 *Water Birds* (but for the latter see footnote 16).

²⁴ Bain (1975) pp.107 and 122.

Overall, it must be said that, while the descriptive ornithology in the *Water Birds* is at least equal to that of *Land Birds* and in many respects better, the illustrations are not always quite of the same standard. Some, for example those of the Heron and Bittern and many of the fresh water ducks are superb. Many of the seabirds and waders are less assured. No doubt Bewick was less familiar with these latter species in the field than he was with most of the land birds. His visits to Tynemouth were generally in summer, not during the migra-



Figure 3. Bewick's wood engraving of the Bittern (from *Water Birds*).

tion or wintering seasons when most seabirds are found along the coast; and watching the detailed habits, postures and movements of seabirds would not have been easy in the era before binoculars. Apart from Bewick's mild artistic hydrophobia, there were other reasons for him to delegate some of the illustrations for *Water Birds*: the competence of Clennell and Hole; his own preoccupation with the text and with organising the production; and the large number of other books illustrated by the workshop during this period (about 56 between 1797 and 1804, according to Hugo (1866), far more than in all the previous 30 years). Without the support of his former publishing partners, Ralph Beilby (with whom he had quarrelled

irretrievably) and Solomon Hodgson (who had died in 1800), organising the production was itself no small matter.

The preparation of the book

The inspiration for the *History of British Birds* was old: Thomas Bewick 'from the freshest vernal years of my infancy, was enraptured with nature'²⁵ We do not know when he and Beilby first seriously discussed it but two letters in the Pease Collection throw some light on how the process began. As early as 21 March 1786, while writing to the antiquarian William Hutchinson about the engraving of Neville's Cross for Hutchinson's *History of Durham*, Bewick added:

... the 2 curious old Books are not of any immediate use to me, as it will be some time before I can work thro' the *Quadrupeds* – they may be of service if I was begun with the *Birds*, but that will entirely depend upon the Encouragement in the Sales that the first meets with – Mr Beilby means to call upon you ...²⁶

Things had advanced a little further when his brother, John Bewick, wrote to Thomas in December 1790; not only was the 'History of Birds' being discussed, but within the family there was a move to persuade him to part company with Ralph Beilby before Bewick embarked on the book:

²⁵ Preface to the 1826 edition of *Land Birds*, p.iv.

²⁶ Letter from T B to William Hutchinson in the Pease Collection (Pease 172, Vol. 1, page 1).

Dear Brother, Your last letter came just in time to prevent me writing to you in a very Ill Humor, it being much longer than your usual time of writing, & I being told by M.^r Dilly & others, that you were Busy with the History of Birds, or frequently ask^s questions respecting it, & I knowing nothing of the matter, vext me not a little but I am glad to find it is not the case, as I hope if ever it be done, t'will be on your own account.

A great deal might be said respecting a dissolution of Partnership both pro. & con. ... I am pretty certain not a friend you have that sincerely [sic] wishes well to you, & Family, but will strongly recommend it, ... that branch of Business which I hope 'tis your wish ever to persue [sic] both for your Honor & advantage; (ie. publishing your own works,) it is but just that every man should reap the benefits of his own ingenious industry; ...²⁷

It is generally accepted that the first active step came in July 1791, in the year after the publication of *A General History of Quadrupeds*, when Bewick went to Wycliffe²⁸ to do some preliminary drawings. In the 'Advertisement' to the 1804 *Waterbirds*, he wrote:

When the History of British Birds was first undertaken, the splendid Museum of the late Marmaduke Tunstall, of Wycliffe, Esq. was obligingly thrown open by his nephew, Francis Sheldon, Esq.²⁹ with the kindest offer of the use of its abundant stores. During a residence of nearly two months at that little earthly paradise ... drawings were taken from the stuffed specimens of most of the British species, and many of these were afterwards traced and engraven upon the blocks of wood; ...

But he went on to say that, afterwards, many recently killed or living specimens were provided for *British Birds* 'by Patrons of the work' and that these superseded the Wycliffe drawings as 'a more near approach to perfect nature'.

Certainly we know that thirty-four specimens now surviving in the Hancock Museum, from the 800 or more birds originally in Tunstall's collection, can be recognised as the very ones that Bewick engraved for the book (Jessop, 1999).³⁰ Likewise the Beilby & Bewick

²⁷ Letter from John Bewick to Thomas Bewick dated 4th Dec. 1790; Newcastle City Library, Pease Collection (Pease 172, pp 3-4).

²⁸ The seat of the recently deceased Marmaduke Tunstall. While in Wycliffe he stayed at the cottage of John Goundry who did work as a joiner and taxidermist for Tunstall. Goundry's cottage still exists; it is identified next the river by the corner of the churchyard on an estate map of 1789, made by John Bailey and now in the library of Burton Constable Hall (Jessop, 2004, p.24). Bewick in his *Memoir* also mentioned his friendship with Goundry's father, George, the miller, and the Revd Thomas Zouch, both of whom spoke warmly of their recent landlord, Tunstall.

²⁹ According to Fox (1827) it was the elder brother, Edward Sheldon, who first inherited his uncle's property and would have been Bewick's host for the visit. He died shortly afterwards without issue and Francis then inherited the property. They were the sons of Cicely, the sister of William Constable of Burton Constable, Marmaduke Tunstall's half brother. William had briefly inherited Wycliffe but died in the spring of 1791 leaving his property successively to Edward and Francis. Both Sheldon brothers changed their surname to Constable to comply with their uncle's will. Bewick may not have realised or remembered that the current owner as he wrote had not been his host in 1791.

³⁰ Bewick wrote to Beilby that the museum was 'stock'd with above 800 birds' (Dobson, 1887, p.76). The museum later came into the possession of George Allan of Darlington. By the time the Allan collection was catalogued (Fox, 1827) the number was 'almost 600 specimens in 379 cases'

cash books³¹ confirm that parcels of birds, some more welcome than others, poured in from 1792 onwards from Somerset, Cambridge, London, Norfolk, all over Northumberland, and other places. Two of the earliest, in 1792, were '28 June – Carriage of a Nightingale from Yarmouth – 6d.' and '24 September – Sea Gull from Tynemouth – 2d.'. In May 1795 a Ring-tail and two Hen Harriers³² were sent within a fortnight of each other by Mr [George] Silvertop of Ministeracres. Other interesting birds were '28 Jan 1799 – Black & White Dobchick from the Revd C. Rudston, Sand Hutton near York – 1s.10d.', '13 April 1799 – Bittern from Watson, Shields – 3d.', '18 October 1800 – Scallop toed sandpiper [Grey Phalarope] from Col. Dalton – 5s.2d.', and '29 May 1802 – Piggy Curlew! – 2d'.³³ The cash book entry for the 'Dobchick' (a winter plumage grebe, almost certainly a Slavonian Grebe), was embellished with a 7mm long thumb-nail sketch of the

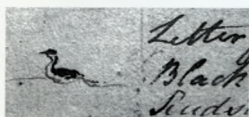


Figure 4. See text.

swimming bird (Figure 4), in a far more realistic posture than that in the eventual wood engraving (Figure 9), which, as we shall see below, was copied from Edwards (1747, p.96). As mail charges had to be paid by the recipient, the arrival in April 1797 of a Reed Sparrow and a couple of Chaffinches from Somerset at a cost of 4s.4d. (too late for inclusion in the book, even if specimens of such common birds had been required) earned an exasperated exclamation mark against the record of the payment. Reed Sparrows (i.e. Reed Buntings) were not uncommon in Northumberland, in fact the workshop had kept one in a cage ('25 Jan 1794 – Bird seed for the Reed Sparrow 1 d.').³⁴ 'Two white sparrows' from Cambridge in

(Jessop, 2004). Two birds, painted but not engraved by Bewick, are also in the Hancock Museum and since Jessop's publication, which listed 35 specimens altogether, what is probably the Tunstall specimen of the Spoonbill has been identified there (L Jessop, *personal communication*).

³¹ T&WA 1269/1-10.

³² Recorded thus: Bewick recognised only in later editions the then disputed fact that the Ring-tail is the female of the Hen Harrier. In the *Land Birds* of 1797 he concluded from the evidence he had read that they were 'beyond all doubt ... two distinct species'.

³³ The abbreviation seems to indicate a Pigmy Curlew. This name was not included in *Water Birds* by Bewick until 1821 (when he described under this title and illustrated a specimen of a Curlew Sandpiper *Calidris ferruginea*, shot in Sunderland, which he had received in 1814, and which survives in the Hancock Museum NEWHM 1995.H2092). Bewick placed the species then and in all subsequent editions with the curlews, although he correctly stated on the recent authority of Montagu that it was a sandpiper. What it was that Bewick received in 1802 is not known, but it may have been the same species. (The smallest of the world's true curlews, the Eskimo Curlew, *Numenius borealis* and Little Curlew *N. minutus*, have not been recorded in Britain.) He would have encountered the name and description of the 'Pigmy Curlew' in the works of Latham and in Walcott's *Synopsis*, both of which he had seen at Wycliffe. Montagu did not classify the bird as a sandpiper until 1813, when his *Supplement* was published (a book which Bewick owned – see *Bewick Studies*, p.60). In 1802 only a single British record of the bird was known (from Kent) although it is now known to occur regularly as a scarce passage migrant. At any rate, the specimen he received in 1802 did not figure in the 1804 *Water Birds*, nor was it mentioned in retrospect when Bewick's account of the 'Pigmy Curlew' (Curlew Sandpiper) was eventually given, in the *Supplement* to the 1821 edition of *British Birds*. If the 1802 bird was indeed a Curlew Sandpiper, Bewick (or the sender) appears to have successfully identified it from Latham or Walcott, but Bewick omitted it from his book for reasons now unknown.

³⁴ Cash book T&WA 1269/3. Bird seed purchases continued at an unusual rate until May. Could the Reed Sparrow have been freed once it had been drawn in its best spring plumage? The illustration ('The Black-headed Bunting') in *Land Birds* (1797) is certainly of a fine specimen, and the description mentions its uneasy behaviour in captivity.

January 1797, and '3 Birds stinking sent per Mr Losh – 3s. 10p.' in June 1798, were probably no more welcome.



Figure 5. Bewick's engraving of the 'Reed sparrow' (Reed Bunting) from *Land Birds*.

Importantly, Bewick's descriptions of the rarer birds generally state the source of the specimens used for the engravings: 'From an ill-stuffed specimen in the Wycliffe Museum', 'from a pair shot on Ripplegate fen in Lincolnshire, on the 14th of May, 1799, by Major Charles Dilke, of the Warwickshire Cavalry' and so on.³⁵ Bewick had the instincts, though not the training, of a scientist.

As we have seen, Bewick wrote in the 1804 *Water Birds* that at Wycliffe *drawings were taken from the stuffed specimens of most of the British species, and many of these were afterwards traced and engraven upon the blocks of wood; ...* The significance of his work at Wycliffe sounds a little different in a letter written at the time. On 24th July 1791,³⁶ when he had been there nearly a week, Bewick wrote to Beilby about the remarkable library. Of all the things he found there, he felt that Tunstall's own notebooks of observations and his annotated copy of Pennant's *British Zoology*³⁷ would have been the most useful to them in preparing their book:

I ... was kept busy for two or three days, 'till my Box arrived, in looking thro' part of the very rare and curious Books on natural Hist^y with which this valuable Library is ... amply furnished ... – You wou'd be amazed at M Tunstals industry – to skim over only his own remarks wou'd take a much longer time than I can possibly spare – he has not only put down every thing that came under his own observation on the habits & propensities of Animals &c. with numberless anecdotes – but he has also quoted every thing that he thou't curious from other Authors – ... What a treasure woud his remarks be of to us – we wou'd nead but little besides, to enable us to give a new Hist^y of Birds if we culd get the loan of them – I shall do everything in my power to get them – ... I have look'd thro' Edwards, Buffon, Albin, Pennant, Lewen, Catesby, Brown & many others the grandest Editions – all colour'd – and I find that Edwards & Buffon are the only Books – that will be worth any thing to us – I mean for the figures, which are generally extreemly well done, & indeed I think better to copy than the stuffd Birds here, I can only pay attention to the Beak & plumage – they are so distorted and unnaturaley stuck up that, as faithfull representations of them as I can do, appear stiff as a poker [sketch of a bird; see Figure

³⁵ These specimens were respectively the Little Bittern and the 'Red-legged Sandpiper' (a mystery bird which survived into the 1847 edition, though suspected by 1826 to be a Ruff in transitional plumage).

³⁶ The letter was printed but incorrectly dated 24 August in Dobson (1887).

³⁷ Evidently the quarto edition of 1775-6 (with 98 bird plates), from the evidence of Bewick's note about the annotated copy in the notebook T&WA 1269/54. However there is also a note there about a folio copy, so Tunstall may also have owned the first (folio) edition (1761-6) published in London by the Cymmrodorion Society, containing 121 bird plates.

8] – (as the Museum is to be sold I wou'd not like to have it said that we said any thing slighting of it).³⁸

Nothing slighting was said, and as we shall see, history itself may thereby have been distorted.

Generally speaking Bewick seems to have preferred always to draw the living animal. An example in *Water Birds* is the Lesser Guillemot, in fact a Guillemot in winter plumage, which Bewick captured when it was trapped by the tide at Tynemouth. While he drew it, it was 'not the least alarmed at the peeping curiosity of the children who surrounded it'; he then released it back to 'its beloved element'. Next best was a fresh specimen for the plumage, or a well stuffed one. Copying from books or the drawings of others was a last resort, but the only one available for some species, and the letter above makes it clear that even this was better than full reliance on poorly stuffed birds. For his Eagle Owl, Bewick resisted using the splendid illustrations he had seen at Wycliffe – those of Frisch and Edwards – and made no engraving for the early editions of *Land Birds*. In the end he used a living bird in a show for the 'jizz' ('outline' he called it) and an 'ill stuffed specimen' for the plumage – scientifically admirable, but in this instance copying Frisch or Edwards might have provided a better result. There is no doubt that it was from watching living creatures in the wild (or in captivity in the case of the Corn Crake, the Siskin and probably the Reed Bunting) that Bewick's very best images were created.

Incidentally, we think of him as being familiar with all the local wildlife of his day, but at the age of 32 he wrote to Fenwick Bewick of Stocksfield to say that in drawing an Otter he had depended on a stuffed skin of Fenwick's, because he had never seen one alive.³⁹

What Bewick did not do in the *History of British Birds* was to record his sources for those birds where his drawings were made in the library, rather than the museum; and, as we shall see, there were several.

Before discussing the evidence for this, a description must be given of a little notebook in the Tyne & Wear Archives. Catalogued only as 'Engraving work notebook, Birds, n.d.', it is in fact Bewick's own record of what he found at Wycliffe.⁴⁰ We can be sure of this, not only because his pencilled list of the books that impressed him there matches those he later mentioned in print, but because at the end of the book is a brief pencilled memorandum of the visit, now barely visible in parts, some of it being wholly illegible.

.....in my journey to Wycliffe
[?] Tobacco 1/6
[??] Yarm Chaise 2/6
Supper at the Green Dragon etc } 5/6
[?] at Durham the Abbey 1s

³⁸ T B to Ralph Beilby 24 Aug [July] 1791; letter in the National Trust's Cherryburn collection (Schiller 255). Despite his comments about the specimens, there is a hint that, after the publication of *Land Birds*, Bewick may have considered re-examining the museum. In a letter to George Allan (by then the owner of the museum at his house, Blackwell Grange at Darlington), T B wrote on 5 December 1797 thanking him for the loan of some books and telling him that 'Mr Beilby & I will be no longer connected in Business together, than until the last day of this month', adding that the following Spring he might accept 'your kind invitation & make the Grange my home' (Newcastle City Library, Pease 172, p.6-7).

³⁹ Letter 6 Jan 1786; printed in the *Memoir*, 1887 edition, p.367.

⁴⁰ T&WA 1269/54.

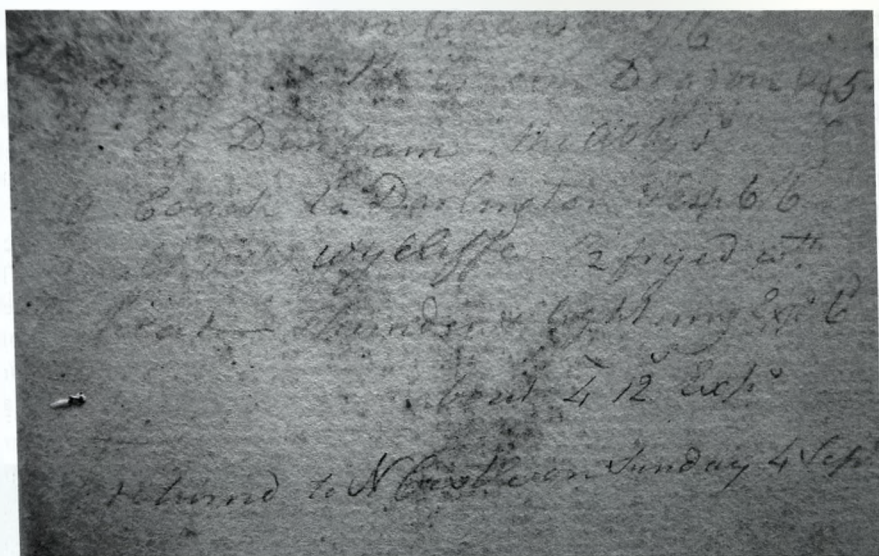


Figure 6. Bewick's faint pencilled note of his itinerary for the Wycliffe visit, from his notebook (T&WA 1269/54).

18 Coach to Darlington & Exp. 6/6
 Walked to Wycliffe – fi fried wth
 heat – Thunder & lightning Exp^s 6d
 about £4 12^s Exp^s
 returned to NCastle on Sunday 4 Sept

The wording and meaning of this note are confirmed and clarified in a letter Bewick wrote from Wycliffe to his wife, on Friday 22nd July, having left Newcastle on the previous Saturday and arrived on Monday 18th.

... I did not get me Box 'till Wednesday night; you may be sure I was as dirty as the ground before it arrived – Mr. Marshall thro his kindness contrived to cheat me out of the Coach on Sunday morning by which means I spent that day with him at Durham – and set off on Monday via the Mercury Coach to Darlington – Mr Allan being from home, I set off on Foot and arrived at this place in the same Evening, fi fried with heat Thunder and lightening ... ⁴¹

The largest section of the notebook is occupied by an eight-page list of British birds copied from Pennant's *British Zoology*, headed:

Pennant's <i>British Zoology</i> Folio		
Water Birds ———	98	} 212
Land Birds ———	114	

⁴¹ Letter in the collection of the Literary and Philosophical Society of Newcastle upon Tyne. 'Mr Allan' was no doubt George Allan of Blackwell Grange, Darlington, who later bought the Tunstall Museum.

After the list was written, numerous names were added or changed. This is not the place to analyse this list in detail, but it is evident that it became the basis for the choice and naming of the species that were to be included in the *History of British Birds*, though several further changes were made in the names and in the sequence of the families of birds. Tunstall's *Ornithologia Britannica* (1771) may have been the source for some that are absent from Pennant, such as the Little Bustard, Pine Grosbeak, Spoonbill, Stork and Little Stint. There are some surprising omissions and inclusions in *Land Birds*. For instance the Peregrine was not added until the 1814-16 edition (edition 21 in Roscoe, 1953); it is not in Bewick's list, yet it is included in both Pennant and Tunstall. The Middle-spotted Woodpecker was included and surprisingly remained until the 1832 edition, although unillustrated and correctly stated to be unconfirmed as a British bird. Though absent from Pennant, it is in Tunstall's list as the 'Less spotted Wood-pecker *Picus medius*'). Some other groups of birds were poorly understood at the time and Beilby and

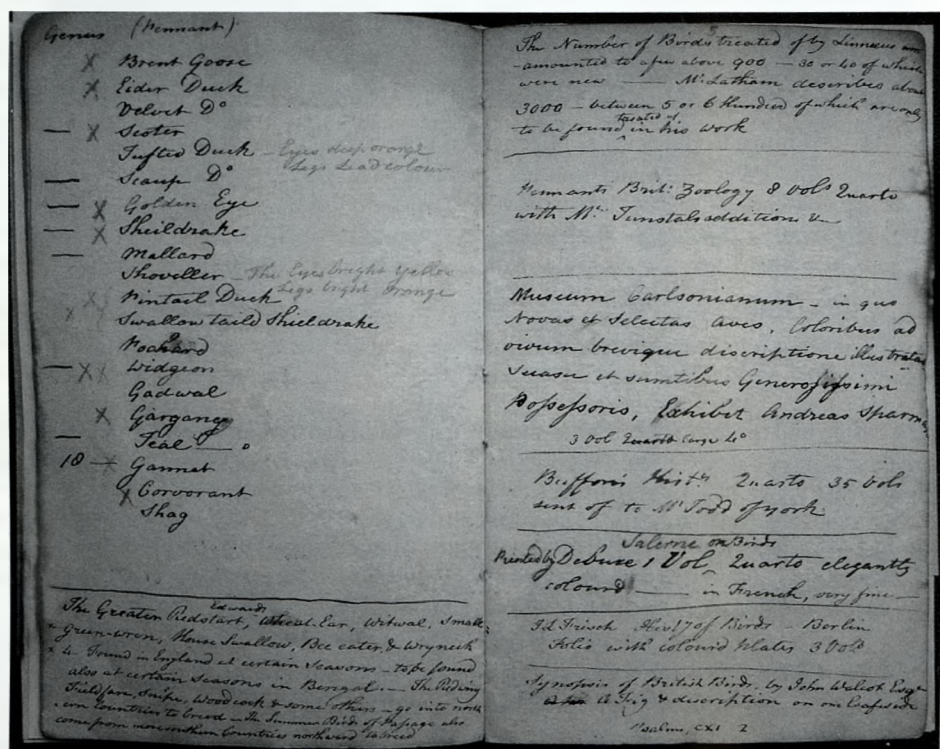


Figure 7. A page from Bewick's Wycliffe notebook (T&WA 1269/54). The end of his list from Pennant's *British Zoology*, and some of Bewick's miscellaneous notes are shown.

Bewick clearly had particular trouble with the warblers, the waders and the gulls, which were gradually and only partially brought to order in later editions. They deliberately classified the Kingfisher and the Dipper with the water birds, trusting habitat here rather than anatomy for their taxonomy, and perhaps for the same reason they separated the plovers from the other waders and described them in the *Land Birds* volume. In both of these decisions they departed from Pennant's arrangement (and indeed from those of most other authorities of the day). Bewick persisted with them to the end of his life: the arrangement

is still there, with only minor changes (and these not always improvements), in the 1832 edition. It was only when John Hancock took a hand in the editing of the 1847 edition that the classification of the birds came to conform to the accepted taxonomy of the day.

To return to the Wycliffe notebook; it is worth quoting in full the other comments it contains (Figure 7):

*Edwards Hist^y of Birds with [illegible word] Gleanings contain 365
~~Copperplates~~ Large Quarto Copperplates – with several Figs on each all
colour'd and Draugh^[d] [from] nature – and amount in the whole to six hun-
dred articles – some of the smaller ones not described or named in the descrip-
tions, 'tho they are 'strictly drawn & colour'd from nature' – Mr Edwards says
he was upwards of twenty years in collecting.*

The list from Pennant, discussed above, is written at this point in the notebook, after which come the following notes on Edwards and other authors (Figure 7).

Edwards

*The Greater Redstart, Wheat-Ear, Whitwal, small
x green-wren,⁴² House Swallow, Bee Eater, & Wryneck
x 4 Found in England at certain Seasons – To be found
also at certain Seasons in Bengal – The Redwing,
Fieldfare, Snipe, Woodcock & some others – go into north
-ern Countries to breed. The Summer Birds of Passage also
come from more southern countries northward to breed.*

It is easy to forget that at this date the whole question of bird migration *versus* hibernation was still debated. Beilby and Bewick came down firmly in favour of migration, and here we see an early gathering of one source of evidence, or at least opinion, which they built into a convincing case in Beilby's introduction to the *Land Birds*. Edwards, indeed, provides well reasoned support for the migration theory as early as 1743, when the controversy was far from settled.⁴³ Towards the end of the notebook come several short notes:

*The Number of Birds treated of by Linnaeus amounted to a few above 900 – 30
or 40 of which were new – Mr Latham describes about 3000 – between 5 or 6
Hundred of which are only to be found treated of in his work.*

Pennant's Brit: Zoology 8 Vols Quarto with Mr Tunstal's additions &c.⁴⁴

⁴² Edwards (1743, p.xiii) identifies the Greater Redstart as *Merula Saxatilis* Aldrovandi, the witwall as *Icterus* Plinii, and the Small Green Wren as *Regulus non cristatus*. With the use of Ray (1678) the modern English names are identifiable as Rock Thrush, Golden Oriole and a warbler, possibly Chiffchaff. All the birds in Edwards' initial list are summer migrants to Europe and are found at other seasons in the Indian subcontinent, most of them in Bengal, though the Wheatear, Rock Thrush and Bee-eater are nowadays unlikely to be seen further east than modern Pakistan, and then only as passage migrants.

⁴³ In his *Natural History of Birds*, Part I (1743), pp.xii-xiv, which is the origin of Bewick's note, and in Part II (1747), pp.15-119.

⁴⁴ This note is particularly important. Bewick describes the Tunstall additions in his letter to Beilby of 24 July 1791 (quoted above). The annotations, now removed from the volumes of Pennant, are in the Blacker-Wood Library at McGill University, Montreal. The University kindly supplied photocopies, at the request of Dr L Jessop, which are now in the Natural History Society's library in the Hancock Museum, bound in four volumes.

Museum Carlsonianum – in quo Novas et Selectas Aves, Coloribus ad vivum brevique discriptione illustratas suasu et sumtibus Generosissimi Possessoris, Exhibet Andreas Sparrman 3 vol Quarto Large 4^o

Buffon's Hist^r Quarto 35 Vols sent off[f] to Mr Todd of York

Salerne on Birds Printed by Debure 1 Vol., Quarto elegantly coloured – in French, very fine –

J.L. Frisch Hist^r of Birds – Berlin Folio with colour'd plates 3 Vols.

Synopsis of British Birds, by John Walcot Esq^r. A Fig & description on one leafside.

Psalm CXI 2.⁴⁵

Brisson Ornithologie 6 vols. Quarto with good plates.

D. Jac. Chr. Schaefferi

Jacones, Insectorum, Ratisbonensium – elegantly coloured

The Shoulder knot Grouse (Museum a Wycliffe) Phil. Tr: Vol 62 page 393.

The Tail of Edwd's Redbreasted long tailed Finch is too long – it shou'd only be a little more than 3 times the length of its Body.

These notes are valuable as evidence of Bewick's first impressions about the literature of ornithology to which he was to give so much attention for the next thirteen years or more. They also give some evidence to support the concept that he began by examining and drawing a great many foreign birds, which were in the end to find no place in *British Birds*. Evidently, at that stage, he and Beilby planned a 'General Ornithology' along the same lines as their *A General History of Quadrupeds*. The awed comment about Mr Latham recording 3000 species of bird, compared with the mere 900 in Linnaeus, may represent the first inkling that the book they were to produce could not cover the birds of the world and should restrict itself to British species. However, while at Wycliffe, Bewick did make a great many watercolour sketches of foreign birds, some of which survive in the collections of the Natural History Society of Northumbria and the British Museum. A tiny proportion of these were later engraved for the rather incongruous and eclectic little section on Foreign Birds which appeared in the 1805 and subsequent editions of *British Birds*. Mrs June Holmes is to be credited with the discovery that many of these watercolours were copied, as the 1791 letter to Beilby (quoted above) hinted they should be, not from museum specimens but from the books in Tunstall's library, most especially from the works of George Edwards (Davis and Holmes, 1993). Her work concentrated on the foreign species; but some of the surviving Bewick watercolours of uncommon British species that were included in *British Birds*, such as the female Little Bittern, the Long-tailed Duck, the Red-necked Phalarope and the Long-tailed Skua, also bear a striking resemblance to Edwards' coloured etchings (Figures 8 and 12).⁴⁶ Bewick's final wood engravings of these birds were less similar (and those of the phalarope and the skua, totally different). But in

⁴⁵ 'The works of the Lord are great, sought out of all them that have pleasure therein' – printed on Walcott's title page.

⁴⁶ The Edwards plates are numbers 275 'The Little Brown Bittern', 280 'The Long-tailed Duck from Newfoundland', 46 'The Coot-footed Tringa' and 148 'The Arctick Bird'.

the female & spread
 poker
 like to have


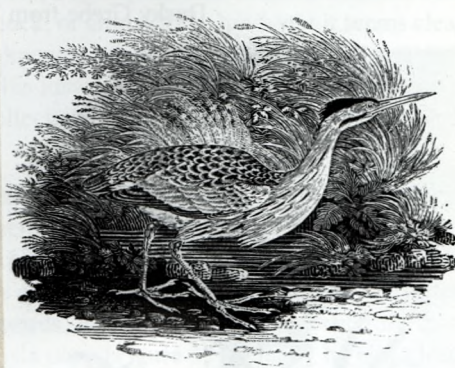



Figure 8. The female Little Bittern: Edwards's 'Little Brown Bittern' from *Gleanings of Natural History* (top) Bewick's water colour, and his wood engraving from *Water Birds* (below). The thumbnail sketch from Bewick's letter to Beilby of July 1791 (see above, pages 235-6) may be some indication of the Wycliffe specimen, 'stuck up ... stiff as a poker' which Bewick seems to have modified by reference to Edwards.

the case of the 'Dusky' (ie Slavonian) Grebe (Figure 9), Fulmar, Red-breasted Merganser and (less certainly) Pied Flycatcher (Figure 10) even the engravings themselves are clearly derived from the Edwards illustrations.⁴⁷ Bewick specifically states that his engraving of the female Little Bittern was based on an 'ill stuffed' specimen at Wycliffe, but the

⁴⁷ The Edwards plates are number 96, 'Black and White Dobchick', number 89, the 'Great Black Petrel', number 95, the 'Red breasted Goosander' and number 30, the 'Cold Finch' in *The Natural History of Birds* (1743-58).

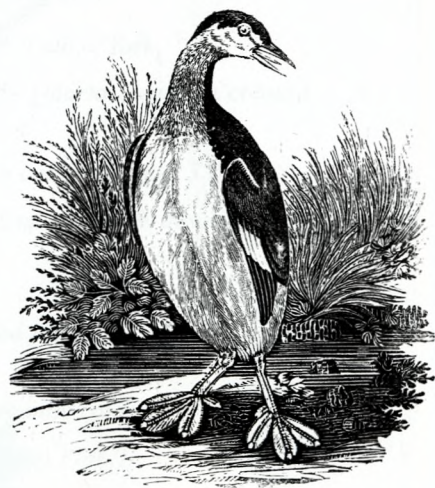


Figure 9. The Black and White Dobchick (probably the Slavonian Grebe) from Edwards' *Natural History of Birds*, Plate 96 (left); and Bewick's engraving of the Dusky Grebe from his *Water Birds* (right).



Figure 10. Pied Flycatcher or 'Cold Finch': Edwards's etching of the Cold Finch from *Natural History of Birds*, Plate 30 (left) and Bewick's water colour and his wood engraving from *Land Birds* (below).



Edwards etching may also have influenced the posture a little, for the better, since Bewick's engraving is not unduly distorted or unnatural (Figure 8).

Most of the illustrated books that Bewick lists in his notebook, he later acknowledged for their usefulness in the introductions to the two volumes of *British Birds*, or mentioned appreciatively in the *Memoir*. They are discussed in *Bewick Studies*.⁴⁸ Three that Bewick did not mention elsewhere are Sparrman's *Museum Carlsonianum* (a then recently published (1786-89) major Swedish ornithology by a pupil of Linnaeus), Walcott's *Synopsis of British Birds* (1789), and Jacob Christian Schaeffer's *Icones Insectorum*. Schaeffer's book is not easy to explain. He published two large illustrated bird books at Ratisbon in 1779 and 1789; why Bewick mentioned instead these illustrations of insects is not clear. The Walcott book is interesting because Bewick commented on its having figures and text on the same page ('one leafside'), the plan he himself and many of the most accessible bird books of the next two centuries were, of course, to follow. Walcott's illustrations, however, were copperplates with the text printed below in a separate process, using only one side of the paper; Bewick's use of wood engravings made it possible to print the illustration and the text in the same operation, and to use both sides of the paper.

The note on the 'Shoulder knot Grouse' that Bewick found in the museum at Wycliffe, shows his early use of the literature of science. The paper he cites, in the *Philosophical Transactions of the Royal Society* (1772), is a major one by JR Forster on the birds of Hudson's Bay (the term referred to the huge territory in northern and central Canada controlled by the Hudson's Bay Company rather than the shores of the Bay itself). Forster distinguished the Shoulder Knot Grouse, as illustrated by Buffon and Brisson, from the bird illustrated by Edwards as 'The Ruffed Heath-cock, or Grous'.⁴⁹ In hindsight it seems clear that both descriptions referred to the bird now known as the Ruffed Grouse *Bonasa umbellus*. Presumably Bewick was trying to clarify his ideas about the bird before illustrating it but no such illustration is to be found in the collections of the British Museum or Hancock Museum.

The comment on the tail of Edwards' 'Redbreasted Long taild Finch' is instructive. It can only mean that Bewick had seen a stuffed specimen in the museum and compared it with Edwards' etching. The bird (Edwards' specimen was from Angola) is evidently the Paradise Whydah *Vidua paradisaea*, a species of which Bewick did indeed paint a watercolour⁵⁰ in which the tail, in contrast to Edwards' etching, has the proportion the note describes, though in other respects Bewick's is a copy (Figure 11). Clearly he was glean- ing the best information he could from all reliable sources. A rather similar note by Bewick on his watercolour sketch of the Long-tailed Duck (Figure 12), 'middle Toe too long – Beak too long', adds a further hint that, like the finch, this bird was copied from, or at least strongly influenced by Edwards, and the drawing later compared with a museum specimen from which the corrections were taken.

The Whimbrel *Numenius phaeopus* provides an additional interesting puzzle. The engraving by Hole in *Water Birds* lacks the species' characteristic head markings, which are, however, described in the text. This is not Hole's oversight, since Bewick's watercolour transfer drawing, now in the British Museum, has been faithfully copied. Bewick has been

⁴⁸ D Gardner-Medwin, 'The library of Thomas Bewick' in *Bewick Studies* (2003); pp 59-62.

⁴⁹ Edwards, *Gleanings* Part 1, pp 79-84.

⁵⁰ In the collection of the Natural History Society of Northumbria.



Figure 11. The Red-breasted Long-tailed Finch: Edwards's etching from *Natural History of Birds*, Plate 86 (left), and Bewick's watercolour (Natural History Society of Northumbria) (above).

presumed to have drawn it from a specimen at Wycliffe, now lost (Bain 1981, vol. 2, p.73). However, George Edwards' 'Whimbrel'⁵¹ also has no head markings (in his figure or his description) and in all respects (except the position of the head and the length of the bill) and especially in its posture, is very similar to Bewick's, who probably copied it, or at least was influenced by it. Edwards' bird was etched in August 1758 and obtained near 'Worley Clough' in Yorkshire, possibly Wortley near Penistone in the West Riding, not a typical site for a Whimbrel. Tempting though it is to suggest it, neither Edwards' nor Bewick's figure can be convincingly re-identified as the now rare and endangered Slender-billed Curlew *N. tenuirostris* Viellot, a bird somewhat similar to the Whimbrel but without head stripes; the tail markings in both illustrations are more compatible with Curlew or Whimbrel. The bill measurement of Edwards' bird (63mm) is too short for an adult Curlew, Whimbrel or even Slender-billed Curlew. No exact date is known for the bird's collection, but on measurements alone a juvenile bird seems likely. The head markings are always prominent in juvenile Whimbrels and therefore the most probable conclusion is that Edwards' bird was simply a juvenile Curlew *N. arquata*, collected in the Yorkshire Dales. Bewick had the bad luck to take this misidentified bird as his model and the engraving by Henry Hole was never replaced. The text, from the first edition onwards, however, contained a correct description of the Whimbrel's diagnostic head markings.

The books by Brisson, Buffon, Frisch and Salerne, mentioned in the notebook, were the very copies, from the Tunstall library, that Bewick later tried to buy from John Todd, bookseller of York, though he succeeded only in obtaining Brisson's *Ornithologie*.⁵² It is interesting to find that this purchase was one of the earliest of all the expenses incurred in

⁵¹ *Gleanings of Natural History*, Part II (1760), p.204.

⁵² Discussed in *Bewick Studies* p.59.



Figure 12. The Long-tailed Duck. Edwards's etching from *Gleanings of Natural History* (left); Bewick's watercolour (Natural History Society of Northumbria) (right). (Bewick also copied, more certainly and exactly, the Spur-winged Plover in the background.)

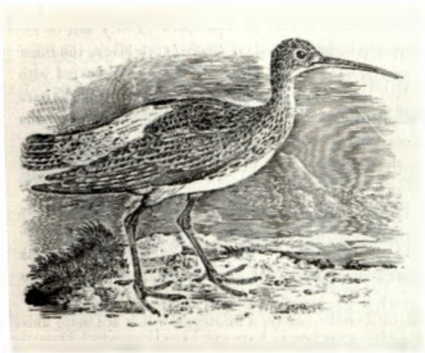


Figure 13. The Whimbrel: wood engraving by Henry Hole (from *Water Birds*) (above, left), watercolour by Thomas Bewick (above, right) and 'The Whimbrel'; etched on copper and hand coloured by George Edwards, from *Gleanings of Natural History*, Plate 357) (left). Note the detail of the head and bill below, which are stated to be life-sized and thus provide the measurement mentioned in the text.

the production of *British Birds*: the expense account,⁵³ begins:

Hist'y of Birds Exps

1792	Apr 4	Wm Charnley Whites Voyages	£1-11-6
	May	Pennants Arctic Zoology 2vols 4to	16s.6d.
	June 23 rd	Carr of Brisson works from York	2s.8d.
	28	Brisson's Ornithy	£9-9-0
		Carr. of bird from Yarmouth	6d.
		Sea Gull from Tynemouth	2d.
	July 26	F[reigh]t of Buffon by Sea	3s.0d.
		Exps at Shields	7d.
		Carr. of Birds	3d.
		Do Do	2d.

The freighted Buffon must have been the great *Planches Enluminées*, borrowed from Mr Michael Brian, a dealer in pictures in London,⁵⁴ because no payment for the book itself is recorded and a full five years later, in August 1797, a payment is made for the more modest 'Buffon's Histry of Birds – £3-15-0' and 'Latham's Synopsis – £9-3-6', both of which books remained in Bewick's library for the rest of his life. Disappointingly, the White and the Brisson were rather promptly sold, perhaps on the insistence of Beilby, in February 1797, even before *Land Birds* was published.⁵⁵ Incidentally, it is noteworthy that in April 1792, when the above expense account began, the title used for it was not yet restricted to 'Hist'y of *British Birds*'; nor can we be sure when the decision to limit the scope of the work in this way was made. The first two books on the list, White's and Pennant's, were essentially authorities on the birds of Australia and North America respectively.

The production of the book

Eventually the book was ready for the press. For the *Land Birds* in 1797, there had been the established publishing team of Ralph Beilby, Thomas Bewick and Solomon Hodgson to oversee the process. They had already printed three editions of the *Quadrupeds* together, and things seem to have gone smoothly, until at the last minute the thorny issue of the authorship precipitated the long delayed breakup of the partnership of Beilby and Bewick. It was not until seven editions later, in 1826, that any author's name appeared on a title page of *The History of British Birds*, and then, of course, it was Bewick's alone.

The production of *Water Birds* was more difficult. In his Advertisement (in effect the Preface), Bewick apologised almost crossly for the delay of seven years in its production. By now, Solomon Hodgson was dead (in his 30s), his widow was not on speaking terms, and the Beilby and Bewick partnership had long since been dissolved. Bewick had done all the writing as well as the lion's share of the engraving.

The printing alone had taken almost a year – 'First edition of the Second Volume of Water Birds – put to Press on the 13 July 1803. D^o. Finished at press the 2^d & 5th July 1804.'⁵⁶

Bewick seems to have intended the book to be printed by Matthew Brown 'At the Sign of the Bible' in Flesh Market (now the Cloth Market), in Newcastle. Brown had published

⁵³ T&WA 1269/135.

⁵⁴ *Memoir* (1975 edition) p.116.

⁵⁵ All information from the notebook T&WA 1269/135.

⁵⁶ T&WA 1269/135, p.4.

the 1790 *Cook's Voyages* with copperplates by Beilby and Bewick. But, not long after the loss of his stock in a disastrous fire, Matthew had died in April 1803⁵⁷ and it became obvious that his widow, who took over the firm, was not going to be able to cope, though she seems to have tried. Bewick's first recorded expense for the production of *Water Birds* was early in 1803 'Pd Mrs Brown for the carriage of Sample Sheets – 3s.8d'. So, in June 1803, at which time the paper for the book had already been delivered and put into storage, Bewick approached Edward Walker in Pilgrim Street. Walker had already printed Reay's *Sportsman's Friend* with fine woodcuts and a copperplate by Bewick in about 1801. After delays and difficulties, extending over a year, Walker succeeded in printing the woodcuts to Bewick's satisfaction and thereafter he printed virtually all of Bewick's most important work. It appears from an entry in January 1804 – 'Mr Brown for Types Cases &c – £22.10.1fi' – that the cases of type that Walker used were bought by Bewick from Brown's executors.⁵⁸

Some details of the men involved in printing both volumes were given by William Garret (who had known them) in a letter to Thomas Hugo on 10 March 1851:⁵⁹

The Land Birds was printed at the Office of Solomon Hodgson by my old friend John Simpson, Bewick's favourite pressman. The Water Birds at the Office of Edward Walker, by George Barlow, who was brought down from London to print Bewick's Works – and outshine Simpson, which he never could or do [sic], but was much beholding to Simpson for his knowledge of over-laying the tympan with an extra blanket, so as to reach the lowered parts of the blocks – which Bewick intends for distance. I think if I had the proofs before me I could convince you that the type impressions on some of the cuts are surely the [illegible word], for the blocks. Afterwards Bewick got a great notion that light or rather grey impressions were the best, – but I saw through the old man, the key to the matter was, he was always afraid of too great a pressure injuring the blocks and to a certain extent it is true – for the Blackbird has had six bills.

Walker died in 1831, three years after Bewick. It was his successor as owner of the publishing house, John Blackwell, who printed the final and finest edition of *British Birds*, in 1847. That printing house, and the *Newcastle Courant*, had successively belonged to Thomas Saint, Hall and Elliot, Edward Walker and John Blackwell. All of them did work for Thomas or Robert Bewick. Only in the dozen, admittedly important, years from 1788 to 1800 had Solomon Hodgson broken the pattern. One can imagine the young apprentice Bewick dashing down the steps from the workshop in St Nicholas Churchyard, holding his breath as he raced across the Low Bridge over the stinking Lort Burn, seeing how far up the other side towards Pilgrim Street he could go before he allowed himself to breathe in again, and then up the narrow curving lower end of Pilgrim Street, beside where Swan House is now, to hand over his precious woodblocks to Thomas Saint. Something of the same feeling, tempered with irritation at the delays, must have recurred as the 50-year-old Bewick walked the same route to see the *Water Birds* take shape in the same printshop. Today the windy, sterile corner of the Swan House traffic circle, just opposite Alderman Fenwick's house, is where we must imagine the printing of all those treasured works – Hutton's *Mensuration*, *Select Fables*, *Fables by the late Mr Gay*, *Tommy Trip* and a score

⁵⁷ Hunt (1975).

⁵⁸ T&WA 1269/135, p.4. The entry is bracketted with a part payment to Walker for printing (£60).

⁵⁹ The letter is in the Pease collection (Pease 178, page 81).

of other children's ephemera by Saint; then *The Northumberland Garland; or, Newcastle Nightingale: a Matchless Collection of Famous Songs* (in 1793) with a cut on the title page by Bewick (by Hall and Elliot) and finally the 1804 *Water Birds* and every other early 19th century edition of Bewick's *Birds* and *Quadrupeds*.

One of the interesting findings in the notebook T&WA 1269/135 is a series of notes on the number of copies printed of the early editions of *British Birds*. In many cases this information had been unknown to Roscoe (1953), and subsequent authors. It is best summarised in a table.

NUMBER OF COPIES PRINTED AND PRICES OF THE EARLY EDITIONS

	<i>Land Birds</i> 1797 First edition	<i>Land Birds</i> 1798 ('1797') Second	<i>Water Birds</i> 1804 First	Sets 1805 Third/Second
Imperial	24 (21s)	207(21s)	232 (24s)	250 (24s)
Super royal		87 (18s)*		
Thick royal (new royal)	(18s)	448 (15s)	642 (18s)	750 (18s)
Thin royal (old royal)	850 (13s)	134 (13s)	900 (15s)	
Demy	1000 (10/6)	768(10/6)	1750 (12s)	500 (12s)
	1874	1644	3524	1500

Information derived from T&WA 1269/135.

Figures in **bold** were unknown to Roscoe (1953).

* The printed price of the 1798 super royal *Land Birds* was 15s, altered in ms to 18s (Roscoe).

The *demy* copies, issued in 1805, were dated 1804; the demy *Land Birds* was of this new edition, the demy *Water Birds* seems to have been a reprint of the 1804 edition (Roscoe).

Lists of Subscribers

It was common practice in the 18th and early 19th centuries for publishers to raise funds for a publication by sending out brochures to attract subscribers, a list of whom would then be published in the book. It has been possible to trace Bewick's ownership of several books by finding his name in such lists.⁶⁰ No list of subscribers occurs in the *History of British Birds*. One of the more exciting findings in the notebooks, apparently not previously mentioned in the Bewick literature, is the existence there of lists of a large number of subscribers to early editions of the *Birds*, with a few for the *Quadrupeds*.

One notebook is wholly devoted to semi-alphabetical lists of subscribers, mainly to the 1797 and 1798 *Land Birds*, with a few to the 1804 *Water Birds* and an edition, probably the fourth, of *Quadrupeds*.⁶¹ Another, amongst much other information, has a new longer

⁶⁰ See the Provisional Catalogue of Bewick's Library on the website www.bewicksociety.org.

⁶¹ T&WA 1269/136. (The second edition of the *Land Birds*, issued in 1798, nevertheless retained the date 1797 on the title page.)

list for the 1804 *Water Birds*, called a subscription list, but with dates of delivery and cash received, and occasional later orders to 1807, so this has some features of an order book.⁶² There are about 335 names in the list for the 1797 and 38 for the 1798 *Land Birds*, though the separation of the two is not always clear. The 34 subscribers for the *Water Birds* volume in this notebook seem to be repeated in the other, where there are in total 495 names. These numbers cannot be directly compared with the numbers of copies printed – many subscribers died before their volumes appeared; other orders were cancelled or deleted for unexplained reasons. Some private individuals ordered more than one copy, and the many booksellers on the lists ordered anything from 1 to 560 copies (the latter being the order by Robinsons, in London for the 1798 edition – 60 imperial, 200 fine royal and 300 demy). The arithmetic deserves a more careful study; but this Robinson order emphasises the appetite for fine large-paper copies, which the publishers had perhaps not anticipated. Bewick's declaration that the book was intended for 'the rising generation' is not reflected in the sales, which tended to include an increasing proportion of the expensive copies over the first few printings (as shown in the table above). Not surprisingly, the very people who had been able to afford grand works of natural history before, now recognised the quality of Bewick's work and snapped up this less expensive but very appealing book, in the grandest available form.

Distribution of copies to subscribers began at once: Sir John Trevelyan, Sir William Blackett and Sir Thomas Blackett were sent their copies on 4th July, 1804 (two days after printing of the final pages began), and others from the 7th of July onwards.

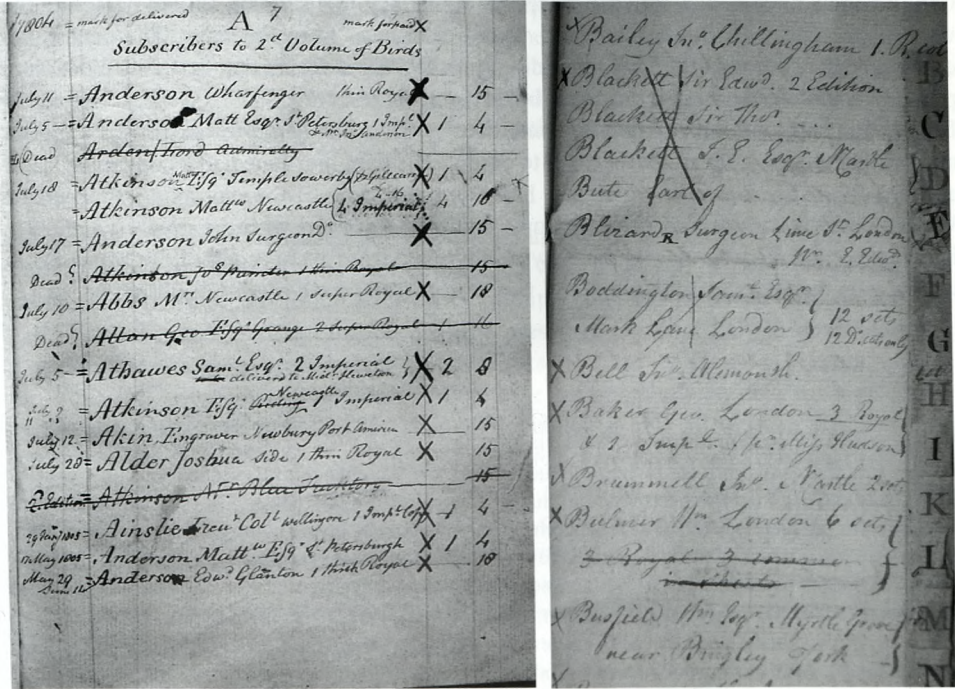


Figure 14. Pages from the Beilby and Bewick and Bewick workshops' records of subscribers to *Water Birds* (1804), on the left, and *Land Birds* (1797), on the right. The latter shows John Bailey's order for a coloured copy ('1 R[oyal] col').

⁶² T&WA 1269/135.

It is not easy to work out the timing of subscriptions for the first edition of *Land Birds*, but there may be as many as 43 orders for imperial paper copies (of which six are deleted) compared with the 24 copies printed – presumably some of these orders came too late, and would have had to wait for the printing of the much larger number of imperials in 1798. Perhaps, too, this hints at the reason for the date 1797 remaining on the title page of the 1798 printing.

Another intriguing feature in the subscription list (in 1797 only) is the appearance of about 27 orders for coloured copies, some of them deleted, one cannot tell when. John Bailey of Chillingham wanted a coloured copy on royal paper. Sir Matthew White Ridley wanted a coloured copy, so did his relatives Nicholas Ridley in London and the Revd Henry Ridley. John Bell of Newcastle wanted six; Edward Hawthorn of London six sets royal, three of them coloured. Sir Peter Warburton of Ashley, Knutsford, and his neighbour Captain Parker of Astle near Knutsford both wanted coloured copies. Lord Grey wanted one set coloured and two plain, and so forth. It is very doubtful whether any of these orders were filled. Coloured copies of the first edition seem now to be exceedingly rare, if indeed any exist: Mr David Steedman, of Newcastle, who has had a special interest in dealing in Bewick material for more than four decades, has never seen one. Sir Matthew White Ridley of Blagdon, notwithstanding his order, was charged the standard price for his copy, with no extra charge for colouring, and the copy of the first edition now at Blagdon is not coloured.⁶³ No mention of colouring is made in the records of the printing, binding, pricing and sales in notebook 1269/135. It may cautiously be concluded that the original intention to colour some copies failed, perhaps from the lack of a suitably skilled person in the workshop, other than Bewick himself, who would have been too busy. The occasional coloured copies of other editions, including the 1798 *Land Birds*, that certainly exist were probably painted by their owners or by private contract unconnected with Bewick.⁶⁴ Bewick himself, of course, coloured some extracts from the *Quadrupeds* for his children and printed others in sepia ink for them to colour. His daughter Jane had a copy of the first editions of *British Birds* in which she had coloured some of the engravings.⁶⁵ Richard Wingate had 'a curious and valuable copy, coloured [by him] with the greatest accuracy from the identical specimens which Bewick engraved from';⁶⁶ his copy of the *Water Birds* was later in the Pearson collection (and was sold in 1868 for a mere 12 shillings).⁶⁷ A set

⁶³ I am grateful to Viscount Ridley for this information.

⁶⁴ I am grateful to two private owners of such copies for the chance to examine them (cf Carlisle, 2006). It is evident from the occurrence of many identical errors in colouring in both copies that the colourist was the same person, or at least from the same firm. The errors in the colouring of the Roller are particularly instructive as they seem to follow the description of the plumage in the text but misinterpret it in the same manner in both copies – clear proof that Bewick himself was not involved since his own correct watercolour of the Wycliffe specimen survives in the Hancock collection.

⁶⁵ See the Provisional Catalogue at www.bewicksociety.org (items 379, 379a, 382 and 395). Jane Bewick's copy, with some woodcuts coloured by her, was sold to Swinburne at the sale of the Jupp collection for £2-2-0 in 1878. Its whereabouts are now unknown.

⁶⁶ Manuscript memoir of Bewick by G C Atkinson (Natural History Society of Northumbria archives; NEWHM: 2006.3.1).

⁶⁷ *Catalogue of an exceedingly choice and varied collection of books and wood engravings by, or relating to Thomas & John Bewick and their pupils collected by Mr. Edwin Pearson* (London: J. Davy & Son, 1868), lot 101. The Pease collection copy (Pease 217) gives the prices paid.

of the 1798 *Land Birds* and 1804 *Water Birds*, in which both volumes were coloured by Ralph Beilby, is in the Cambridge University Library. An inserted letter, dated 25 July 1826, from Beilby's widow, states that the copies had been coloured by 'the Author' (ie Beilby) for presentation to the Revd John Smith, Vicar of St Nicholas, Newcastle.⁶⁸

The subscribers themselves deserve a fuller analysis than is possible here. They can be broadly categorised as friends and acquaintances; prominent citizens of Newcastle and the neighbourhood; wealthy landowners, mostly local but widely scattered in England and occasionally in Scotland (the Riddleys and Trevelyans are particularly prominent, but most of the well known local names appear); a group of fellows of Trinity College, Cambridge; collectors in London and elsewhere; booksellers, mainly in London, Edinburgh, Liverpool, Manchester and Birmingham; and a number of artists and engravers. There is the expected overlap of the names in the lists for the two volumes. Despite the breakup of his partnership with Bewick, Ralph Beilby subscribed for at least three copies of the *Water Birds* before 1807, and his brothers, William in Fife and Thomas in Birmingham, also bought copies of both volumes. The Revd M Davies, Senior Fellow at Trinity College, who had sent Bewick a number of birds during the preparation of the book, subscribed for fourteen copies. Several others who had supported the project in its early stages also subscribed, including Thomas Pennant, George Silvertop and Francis Constable, and it is pleasing to see that Michael Brian, who had loaned his *Planches Enluminées* of Buffon to Bewick for 12 years, was sent one imperial and one demy copy of the *Water Birds*, gratis. Few subscribers seem to have lived abroad. Robert E Griffiths and Joshua Gilpin of Philadelphia and 'His Ex^y T Walpole Esqr' in Munich subscribed to *Land Birds*, and a 15s. copy of *Water Birds* was sent off to [James] 'Akin, Engraver Newbury Port America' on 12 July 1804. But some of the ordinary citizens of Newcastle were perhaps the most telling – for *Land Birds* the names under W, for instance, include Thomas Wilson, coach painter, Mr W Wilson, plumber, Mr Wilson, tobacconist (1 Impl) and Mr Walker, printer (1 15s. royal) – evidently Edward Walker was interested in the book long before he learned that he was to be chosen to print the second volume.

Conclusion

This discussion has concentrated on the earliest editions of the *History of British Birds*. It is after all the completion of the first edition that was celebrated in 2004. It has a special appeal, as first editions so often do. Bewick admitted that the second (1805) edition was better printed – no doubt as Edward Walker's pressmen got into their stride in the management of Bewick's extremely subtle woodblocks. The best of the later printers, including those still using the same blocks today, have sometimes been able to improve the images still further. Largely that is a matter of technology, the all-wooden presses of the 18th century were hard to manage. Ink too has improved over the years. Like the piano concertos of Beethoven, being composed at much the same time, Bewick's engravings can be reproduced and enjoyed today with a strength and clarity unknown to their creator. Yet the sound of Beethoven played on a contemporary Broadwood and the visual enjoyment of a fine copy of a Bewick first edition are experiences we would not willingly miss. Moreover, the enjoyment of the artistry of Bewick's *Birds* is enhanced by reading Bewick's prose and seeing the book in the context of its history.

⁶⁸ Cambridge UL, Keynes V.2.26. There is also an inserted cutting from a bookseller's catalogue (Thomas Thorp, January 1962, item 250) offering for sale another set of the *History of British Birds* 'first edition' (but the 1798 *Land Birds* cannot be excluded here) and the 1800 *Quadrupeds*, all coloured by Beilby. The colouring in the Keynes copy differs in many respects from that described in footnote 64, and was clearly not done by the same hand.

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REFERENCES

- ANDERTON, B, GIBSON, W H (1904). *Catalogue of the Bewick Collection (Pease Bequest)*. Newcastle upon Tyne: Newcastle Public Libraries Committee.
- ANGUS, A (1993). *Thomas Bewick's Apprentices*. History of the Book Trade in the North: PH 62. Wylam, Northumberland: Printed [by Peter Isaac] at the Allenholme Press.
- ATKINSON, G C (1831). Sketch of the Life and Works of the late Thomas Bewick. In *Transactions of the Natural History Society, of Northumberland, Durham, and Newcastle upon Tyne*, 1: 132-159.
- BAIN, IAIN (editor) (1975). *A Memoir of Thomas Bewick written by himself*. London: Oxford University Press.
- BAIN, IAIN (1979). *Thomas Bewick Vignettes*. London: Scholar Press.
- BAIN, IAIN (1981). *The Watercolours and Drawings of Thomas Bewick and his workshop apprentices*. 2 volumes. London & Bedford: Gordon Fraser.
- BEWICK STUDIES: *Essays in Celebration of the 250th Anniversary of the Birth of Thomas Bewick 1753-1828* (2003). Edited by D. Gardner-Medwin. Newcastle: The Bewick Society; London: The British Library; and New Castle, Delaware: Oak Knoll Press.
- BEWICK, THOMAS (1797-1804). *History of British Birds. The figures engraved on wood by T. Bewick. Vol. I. Containing the History and Description of Land Birds*. Newcastle: Printed by Sol. Hodgson, for Beilby & Bewick: Sold by them and G.G. & J. Robinson, London, 1797. *Vol. II. Containing the History and Description of Water Birds*. Newcastle: Printed by Edward Walker, for T. Bewick: Sold by him, and Longman and Rees, London, 1804.
- Bewick's *Memoir*, see Bain (1975) or, for the *Memorial Edition*, Dobson (1887). *Bewick to Dovaston*. See Williams (1968).
- CARLISLE, G (2006). 'Bewick's *Land Birds*: hand coloured copies'. *Cherryburn Times*, 4 (9): 5-8.

- DAVIS, P, HOLMES, J (1993). 'Thomas Bewick (1753-1828), engraver and ornithologist'. *Archives of Natural History*, **20**: 167-184.
- DOBSON, A (editor) (1887). *A Memoir of Thomas Bewick written by Himself. Memorial Edition of Thomas Bewick's Works. Vol. V*. Newcastle upon Tyne: Printed by R Ward & Sons for Bernard Quaritch, London.
- DOBSON, AUSTIN (1899). *Thomas Bewick and his Pupils*. 2nd edition. London: Chatto and Windus.
- DOVASTON, J F M (1829-30). *Some Account of the Life, Genius, and Personal Habits of the late Thomas Bewick*. Printed in the Appendix to Williams (1968) p.129.
- EDWARDS, G (1743-64). *A Natural History of Uncommon Birds ... In Seven Parts*. London: Royal College of Physicians. Comprising:
A Natural History of Birds, Part I (1743), Part II (1747), Part III (1750), Part IV (1751).
Gleanings of Natural History, Part I (1758), Part II (1760), Part III (1764).
- FOX, G T (1827). *Synopsis of the Newcastle Museum, late the Allan, formerly the Tunstall, or Wycliffe Museum: ...*. Newcastle: Printed by T & J Hodgson for E Charnley and W Wood.
- HUGO, T (1866). *The Bewick Collector*. London: Lovell & Reeve & Co.
- HUNT, C J (1975). *The book trade in Northumberland and Durham to 1860*. Newcastle: Thorne's Students' Bookshop Ltd for the History of the Book Trade in the North.
- JACKSON, J (1839). *A Treatise on Wood Engraving, Historical and Practical. With upwards of three hundred illustrations engraved on wood, by John Jackson*. London: Charles Knight & Co.
- JACKSON, J, CHATTO, W A (1861). *A Treatise on Wood Engraving*. Second edition. London: HG Bohn.
- JESSOP, L (1999). 'Bird specimens figured by Thomas Bewick surviving in the Hancock Museum, Newcastle upon Tyne'. *Transactions of the Natural History Society of Northumbria*, **59**: 65-82.
- JESSOP, L (2004). *The uses and limitations of the forensic method in assessing Marmaduke Tunstall's collections and Hawaiian wicker heads*. PhD Thesis, University of Newcastle upon Tyne.
- Memoir*. See Bain (1975). *Memorial Edition of*, see Dobson (1887).
- MONTAGU, G (1802). *Ornithological Dictionary; or, Alphabetical Synopsis of British Birds*. 2 Volumes. London: J White.
- MONTAGU, G (1813). *Supplement to the Ornithological Dictionary*. London: S Bagster.
- PEASE COLLECTION. See Anderton and Gibson (1904).
- PENNANT, T (1766). *The British Zoology*. London: Cymmrodorian Society.
- RAY, J (1678). *The Ornithology of Francis Willughby ... In three Books. Wherein All the Birds hitherto known, Being reduced into a Method suitable [sic] to their Nature are accurately described. ...*. London: the Royal Society.

- ROBINSON, R (editor) (nd, c1884). *Bewick Memento: Catalogue with Purchasers' Names and Prices Realised*. London: Field & Tuer.
- ROSCOE, S (1953). *Thomas Bewick: A Bibliography Raisonné ...*. London: Oxford University Press.
- TATTERSFIELD, N (1999). *Bookplates by Beilby and Bewick*. London: The British Library.
- [TUNSTALL, M] (1771). *Ornithologia Britannica: ...*. London: for the author by J Dixwell.
- WHITE, G (1789). *The natural history and antiquities of Selborne ...*. London: B White.
- WILLIAMS, G (editor) (1968). *Bewick to Dovaston Letters 1824-1828*. London: Nattali & Maurice.



