



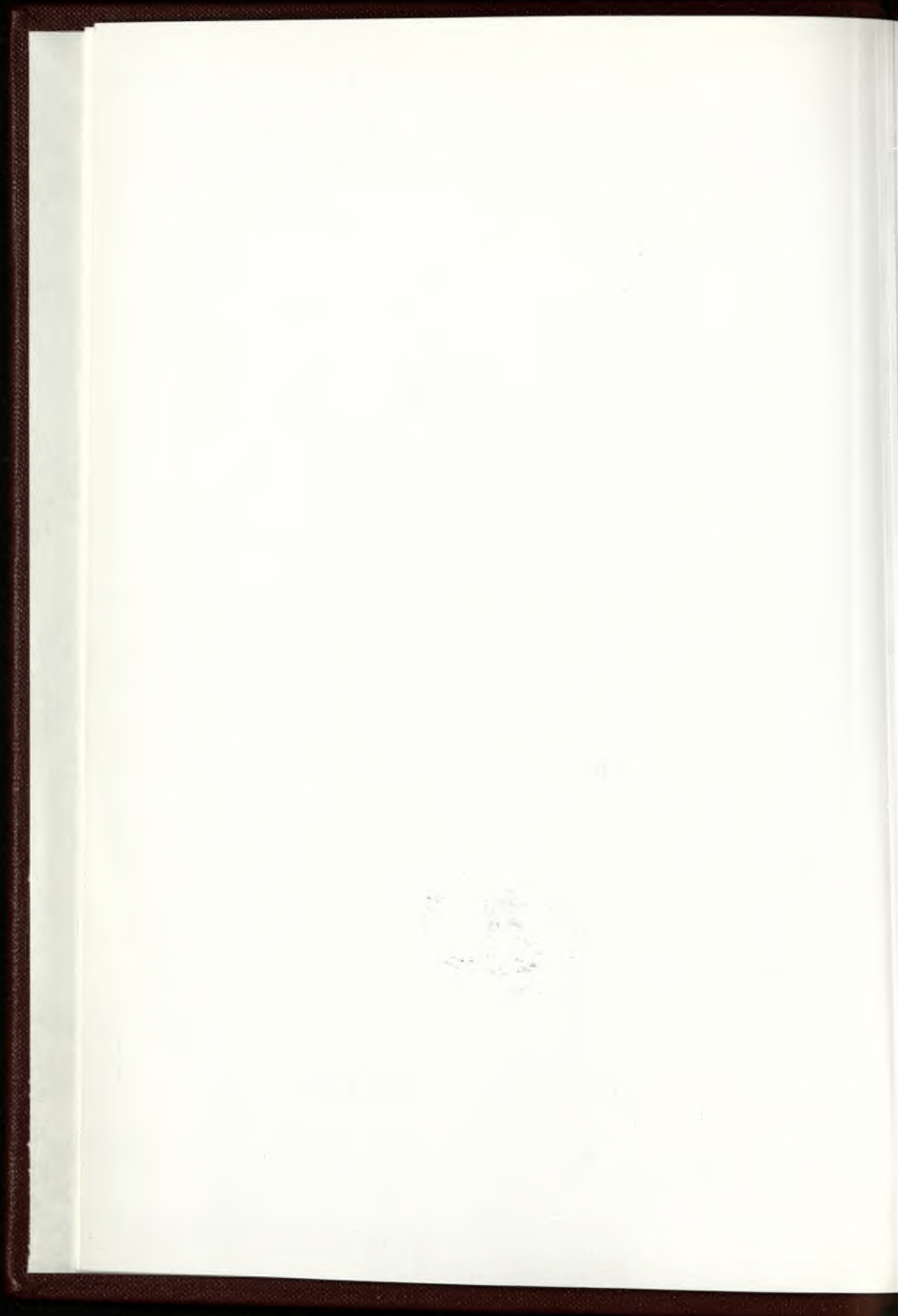
THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA



ANNUAL REPORT 2008

November 2008

Volume 69 Part 1



TRANSACTIONS
OF THE
NATURAL HISTORY SOCIETY
OF
NORTHUMBRIA

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S WILL

Volume 69

Part 1



THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
THE HANCOCK MUSEUM
NEWCASTLE UPON TYNE NE2 4PT

2008

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Dolphin - photograph by John Carnell
Redwing - photograph by Chris Redfern
Red Squirrel and Reedbed scene - photographs by Florence Davis
Small mammal trapping - photograph by Naomi Hewitt
Fish release - photograph by David Noble-Rollin
Frog - photograph courtesy of northeastwildlife.co.uk

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**ANNUAL REPORT
OF THE
COUNCIL
FOR THE
YEAR ENDED 31 JULY 2008**

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

Reference and Administrative Information

PRESIDENT Not appointed

COUNCIL

Vice Presidents

H H Chambers	Mrs M A Patterson
Mrs S I Chambers	Dr B J Selman
Dr J M Jones	A M Tynan
Dr A G Lunn	R Wilkin
I D Moorhouse	

Chairman of Council Professor P S Davis

Honorary Treasurer D Johnson

Elected by members

2005 - J Angel, M Turner

2006 - no members elected

2007 - Professor J Edwardson, A J Hewitt and J Steele

Nominated by sections H H Chambers (Library), V Carnell (Mammals),
J Holmes¹ (Archives), Dr C P F Redfern (Ornithology and Gosforth Park),
D Scadeng² (Geology), Dr B J Selman (Publications) and J Simkin (Botany)

University of Newcastle Representatives Professor P S Davis, A Newman and
Professor A J Richards

BANK Lloyds TSB Bank plc, 102 Grey Street, Newcastle upon Tyne

FINANCIAL ADVISERS Brewin Dolphin Securities Ltd, 39 Pilgrim Street,
Newcastle upon Tyne

INDEPENDENT EXAMINERS Tait Walker, Bulman House, Regent Centre,
Gosforth, Newcastle upon Tyne

GENERAL PURPOSES COMMITTEE

Mrs S Chambers, Professor P S Davis, A J Hewitt, D Johnson, Dr A G Lunn,
I D Moorhouse, Dr B J Selman; in attendance, D C Noble-Rollin and S Will

SOCIETY REPRESENTATIVES

Coquet Island Advisory Management Committee

Dr C P F Redfern and D C Noble-Rollin

Coquet Island Research Sub-committee Dr C P F Redfern and D C Noble-Rollin

Lindisfarne National Nature Reserve Advisory Committee

D G Bell and D C Noble-Rollin

Wildfowl Panel D C Noble-Rollin

Biodiversity Steering Group for Newcastle and North Tyneside D C Noble-Rollin

Museum Management Sub-committee D C Noble-Rollin and Dr B J Selman

STAFF D C Noble-Rollin (Secretary) and S Will (Office Manager)

GOSFORTH PARK NATURE RESERVE P Drummond (Warden)

THE HANCOCK MUSEUM Dr Sarah Glyn (Acting Manager)

¹ In attendance ² Resigned

ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING 31 JULY 2008

Objectives and Activities

The Natural History Society of Northumbria is a registered charity and is governed by the rules of the Charity Commission. The objects of the Society, as set out in the constitution which was adopted by the membership at the Annual Meeting held on 3 December 2004, are 'the encouragement by every means of the study of natural history in all its branches and the conservation of the natural environment in the north-east of England, including its geology, flora and fauna'. To further these objectives the constitution requires that the Society shall:

- a) 'endeavour to ensure that the building and grounds of its property, the Hancock Museum and all its collections are maintained and, where appropriate, the collections are extended and made accessible to the general public' – to this end the Society has been working very closely with Newcastle University on a major refurbishment of the Museum costing some £25,000,000 which will provide improved display and storage facilities for the collections. The Museum is currently closed whilst this work, due to be complete by early 2009, is in progress. In the meantime, where possible, arrangements have been made for the collections to be viewed and consulted;
- b) 'maintain and expand the Society's library' – library facilities will be improved by the present project and there is an ongoing programme of book purchases. A small library remains available to members during the closure. The HLF Archive Project, now completed, has also highlighted the extensive range of material available to members and the general public;
- c) 'publish the *Transactions* of the Society and other scientific papers' – two volumes of the *Transactions* have been published during the year;
- d) 'organise lectures, discussions and field meetings' – a full programme of field and indoor meetings has been arranged and where appropriate specific details are given in this report;
- e) 'co-operate with other scientific bodies and organisations with similar objects' – the Society works with a wide range of organisations including Wildlife Trusts, RSPB, Natural England, local Councils, especially their ecological and planning departments, and other Museums. Details are included within this report;
- f) 'establish specialist sections within the Society' – such sections have long been established and are all active;
- g) 'maintain Gosforth Park nature reserve for so long as it holds the lease, and any other reserves the Council may consider appropriate' – the Gosforth Park reserve has been maintained during the year and negotiations are in progress for a more satisfactory lease arrangement to enable grants for improvements to be sought.

The voluntary input of our members is vital to the continued furtherance of our objectives. In total this year the Society has had eighty-four active volunteers who have worked in a wide range of tasks such as leading field meetings, giving lectures, running the sections, office and committee work, delivering publications, maintenance work in the reserve and surveying the flora and fauna of the reserve.

INTRODUCTION

It has been another exciting and demanding year for the Society, with the major emphasis being the Great North Museum Project and the implications of this development on the Society's assets and activities. The Council has been actively involved in the project and has begun to consider how the Society might further capitalise on the museum re-launch through active promotion and marketing. The need to boost membership is of particular importance here. The Library Committee has also been deeply involved in discussions with the librarians of the Society of Antiquaries of Newcastle upon Tyne and Newcastle University's John Cowen Library, relating to the arrangement and cataloguing of the books in the new building. Consideration is also being given to the move of the archive collections from store.

The Society, as always, has had a year of stimulating field and indoor meetings, and published the Bulletin and the *Transactions* to a high standard. The Bulletin has been re-designed, the use of colour and additional photographs making it a more pleasureable read. The Society continues to owe a real debt to its dedicated staff, its honorary editor and the team of volunteers who ensure the membership is fully informed through its publications. Although being displaced to Claremont Terrace, the volunteer force in general has continued to give huge support to the Society.

Despite the fact that the Society has yet to achieve a longer lease on Gosforth Park nature reserve, discussions with the new owners have been encouraging. Work on the reserve continues, especially on monitoring Red Squirrel *Sciurus vulgaris* populations and active management of this important wetland site. Elsewhere the Society has been active in research, with the ringing group continuing its studies on the birds of Coquet Island and the Farne Islands, and at Low Newton.

Overall it has been another interesting and successful year for the Society, and detailed descriptions of many of its activities are provided below.

Structure, Governance and Management

The general management and conduct of the affairs of the Society, its property, the investment and expenditure of its funds and the enforcement of its constitution are the responsibility of an executive body called the Council. The Council comprises the following who are elected at the annual meeting: up to ten vice-presidents and an honorary treasurer, who stands for one year but may be re-elected; a representative proposed by each section and such additional members proposed by the members, who are elected for three years, and up to three members nominated by Newcastle University. All members of the Council are trustees of the Society. The President of the Society, who is elected by the members, is entitled to attend all meetings of the Society but is not a trustee.

The governing document is the constitution and the charity is constituted as an unincorporated association. Whilst the Council oversees the general management of the Society, more detailed management is provided by the General Purposes Committee (GPC). This is chaired by the chairman of the Society and consists of the honorary treasurer and trustees appointed by Council.

Other sub-committees are as follows: Investment sub-committee, which is appointed by Council and has no fewer than three members, with delegated powers to manage jointly the Society's investment portfolio; section sub-committees, who can elect their own chairman and a representative for Council; and the management of the Hancock Museum

which is vested in a management sub-committee of Newcastle University which includes up to three representatives appointed by Council from those of its members who are not on the staff of the University, together with an equal number of University representatives and a chairman provided by the University.

The senior member of staff is the Secretary who is responsible for the smooth running of the Society and has such delegated powers as the Council shall decide.

MEMBERSHIP

The total membership on 31 July 2008 (with 2007 figures in brackets) was 811 (824). This was made up of 6 (7) honorary members, 42 (42) life members, 478 (485) members who receive *Transactions*, 257 (262) members who do not receive *Transactions*, 25 (23) associate members and 5 (7) complimentary members. (Please note that the reason for the total not adding up to 811 is that the Society has two life members who are also honorary.) There were twenty-five previous members who pay, by standing orders, various sums that were once the subscription rate: these are now considered as donors not members, and the Society was notified of the death of donor Miss B A Usher, elected in 1981. For the second year in a row the membership has declined: 2007 saw a drop of 7% and 2008 a drop of 2%. Although less severe, it is still worrying. We hope that with the re-opening of the Museum in 2009 the trend can be reversed.

During the year the Society was also informed of the deaths of three members: Kenneth A Day (1966), John Laverick (1966) and William Stanley Longdin (1988). The years in brackets are the dates of their election and there is an obituary for Kenneth Day later in this report.

ANNUAL MEETING

The Annual Meeting was held on the 7 December and thirty-two members were present. The Chairman Professor Peter Davis began by asking the members to stand for a minute's silence in memory of our late President James Alder. He said that he, like most of the membership, had been saddened by the death of such a delightful man. The family had requested that donations from the funeral should go to the Society and the GPC felt that it would be fitting for the money to go towards an illustrated history of the Society, a project close to the heart of James.

He outlined some of the important events in the year and thanked many of the volunteers for their contributions to the Society. He mentioned the fact that we still had not achieved a long lease on the nature reserve at Gosforth Park due to a change of ownership just before the new lease was due to be signed. He then proposed the adoption of the report which was seconded and agreed.

The Honorary Treasurer Mr Douglas Johnson then outlined the finances saying that we had shown a surplus due to the donation of restricted funds and that the Society is still making a small loss on unrestricted activities. This had been offset by gains in investments and philanthropic giving, particularly to the Dickinson Trust. He also mentioned Bob Wilkin's generous gift of his fees for his work on the television programme 'The Nature of Britain' – the money to be used for re-stocking Gosforth Park lake with fish – and the £42,000 raised by our members for the Northumbria Gallery. He then proposed the adoption of the accounts and it was seconded and agreed.

The officers of the Society were then unanimously re-elected and there were three members of the Society proposed for re-election to Council, Professor Jim Edwardson, Jonathan Hewitt and John Steele; all three were unanimously re-elected.

The business of the meeting was followed by a presentation of the work of the EYE (Exploring Your Environment) Project by Naomi Hewitt. She outlined the work that they were doing to promote recording of species data through public involvement; also their work with local specialist groups holding data to persuade them to add their information to the EYE Project database (hopefully the precursor to a regional species and habitats databank). She also discussed the use of an interactive website that would allow data input by both the public and experts. After the presentation there were a lot of questions particularly concerning the quality of the data collected. Naomi was able to confirm that safeguards were in place to make sure that the records were verified properly and pointed out that the Society members had a major role to play in this type of verification.

GREAT NORTH MUSEUM PROJECT

On 5 October 2007 an update on the Great North Museum Project was hosted by Professor Eric Cross, Dean of Culture, University of Newcastle, Jon Williams from Casson Mann, and Steve McLean, Project Manager. Held in the Curtis Auditorium, it was an open invitation to members of the Society and the Society of Antiquaries. The presentations described progress with the building works and highlighted some of the ideas for new displays in the galleries. Feedback from the audience was very positive.

Developments at the museum have continued at a rapid pace throughout the year, ably supervised by Steve McLean and the project team, who have met regularly with representatives of the Society to discuss progress. Consideration has been given not only to issues relating to the Hancock building and the Society's accommodation (offices, library and archives), but also to the work at the Newcastle Discovery Museum on the purpose-built store for the Society's collections. Visits have been made by the Society's representatives to both sites to review progress. The regular meetings have been especially useful when considering many of the details of the project, including the transfer of land for the new lay-by, negotiations relating to adjoining land, the design of the gardens and the planting scheme, staffing, future governance structures and discussions about the content and themes in the galleries. In this regard many of the Society's experts have devoted time to reading labels and texts for the new displays to ensure accuracy of content, especially with regard to the *Natural Northumbria* gallery.

One item of special concern to the Society during the course of the last year was the re-branding of the Museum, with the Society anxious that the name 'Hancock' be retained. Several meetings, formal and informal, were held with Agenda (the company responsible for the re-branding) and the Project Team, in order to reach a satisfactory conclusion on wording and presentation styles. The title for the new museum has yet to be finally announced, but 'Great North Museum: Hancock' appears to be the best possible compromise. The brand includes new logos for the Hancock and the Hatton Gallery (Great North Museum: Hatton), and has encouraged the Society's Council to consider a similar re-branding exercise to complement the new image that will be promoted for its museum.

These varied and challenging discussions have been carried out in an atmosphere of mutual respect between the Society and the GNM Project Team, and there is little doubt that the improvements in the museum, and the Society's accommodation, will be dramatic once the new building opens in 2009.

COUNCIL AND GENERAL PURPOSES COMMITTEE

The Council met on five occasions. This included an extraordinary meeting in April to listen to a presentation on the branding ideas from the consultants Agenda Design for the Great North Museum Project, noted above. The Council and GPC have spent a great deal of their time dealing with the Great North Museum Project and making decisions on the various stages that have to be signed off in the process of a large project like this. Members of the GPC have been holding almost monthly update meetings with the University and the project team, and have made a number of visits to the site to see progress. More details of this are under the Great North Museum Project section of this report.

Other matters that have occupied the Society Council have been the change in staff arrangements. The Secretary indicated that he would like to begin working part-time as a prelude to retirement and it was agreed that, in April, Stuart Will, the Office Manager, would take on some of the duties of the Secretary and work full-time and that David Noble-Rollin would work only three days a week. This arrangement will continue until the Society is once more back into the Museum and fully functional with the library and evening lecture programme. How well it will work will probably not become apparent until the next financial year.

Towards the end of the year Council began to look forward to the return to the Museum with its new exhibitions and potential for increasing the profile of the Society within the 'Great North Museum: Hancock' branding. At the July meeting it was agreed that the Society should appoint a Marketing and Development Manager to develop a strategy to utilize the enhanced opportunities that will be created by the opening of the new museum in 2009. This idea has been carried forward into the new financial year.

PUBLICATIONS

Two publications have been issued this year, representing three parts of the *Transactions*, the 'Annual Report' (Volume 68 Part 1) and 'Birds on the Farne Islands in 2007' (Volume 68 Parts 2 and 3), part three being a historical account of the gulls of the Farne Islands. Our printers Pattinson and Sons who have undertaken the printing of all of the Society's work for many years, decided to retire and sell their business. The last publication that they did was the previous Annual Report, and Council would like to thank them for helping the Society staff always to meet their deadline even when the copy was late and time was short. The Society took Pattinson's advice and have gone to AZTEC Colourprint and this has proved very satisfactory, 'Birds on the Farne Islands in 2007' being their first production.

THE OFFICE

Staff

David Noble-Rollin Although during the year David changed from full time to part-time work his main job has not changed. He oversees the activities of the Society, organises the programmes of field meetings and lectures and attends meetings as the Society representative. During the Museum project he has to make sure that the relevant documents get to the trustees who are dealing with particular aspects of the development and to make sure that the appropriate experts are available to help with the preparation of the exhibitions that will appear in the new museum. This is becoming particularly intense with the scripts for each exhibit needing to be checked for accuracy of content.

Stuart Will Stuart is our office manager and is responsible for the smooth running of the office, keeping the membership database up to date and under the direction of the honorary treasurer managing the Society's financial affairs. In April, Stuart became full time and took on some of the work of the Secretary particularly the preparation of the *Transactions*. At present he is working on a back issue that has been repeatedly delayed by lack of time. He is also a very keen bird ringer and works with the Society ringing group most weekends.

Office Volunteers Apart from the staff, the Society is indebted to the volunteers who help in the office. Margaret Patterson, who is a trustee, comes in every Wednesday and helps with the preparation of minutes of meetings and letters and is an assistant editor of the *Transactions*. Anne Wilson, other than general office duties, helps to enter the financial information on to computer spread sheets and Rita Wolland comes in each week to continue her work entering data of the historic ringing which took place on the Farnes. This will eventually be handed over to the British Trust for Ornithology (BTO) and means that this large data set will be available for analysis. Also Joan Holding continues to illustrate our publications and to redraw maps and illustrations for the *Transactions* to help to maintain our high standard of production. Margaret Evans, as well as sorting out the binding of journals and the library exchanges with other institutions throughout the world, is always on hand to help with the packing of envelopes when bulletins *etc.* are ready to be distributed to the members; and is usually ably assisted by her husband Martin.

VOLUNTEERS

At present the Society has eighty-four active volunteers who undertake a wide range of activities and make it possible for the Society to carry out its commitments. Most of these are mentioned elsewhere in the report and many combine a number of roles to support the Society. However it is appropriate to thank our forty deliverers who go out in all weathers to make sure our members receive their publications and to thank the many officers of the Society who put in untold hours making sure that our charity is properly run and managed. Also, the lecture programme and the field meetings rely on the voluntary help both of our expert members and the many lecturers who travel from all over the country to keep members informed about the latest research and developments in natural history. Without this help it would be impossible to undertake such a varied and complex programme.

MUSEUM MANAGEMENT COMMITTEE

This committee is a Newcastle University sub-committee, with members representing the Society, Newcastle University and Tyne & Wear Museums service. It is chaired by Professor Eric Cross. The Society representatives are listed on page 4 and the committee met only once on 7 December. This is an indication of the changing position with the Museum; in the past it normally met three or four times a year, but during the Great North Museum Project the monthly progress meetings between the three parties have overshadowed the work of the Museum Management Committee. Part of the project's aims will be to create a new management committee that will reflect the new partnerships within the Museum. The issues raised at the meeting in December are all covered by the Great North Museum Project section of this report.

DICKINSON MEMORIAL TRUST

The Trust received two further major donations from the Dickinson family which greatly enhanced the value of the fund to the Society. In all the capital now stands at £50,000 and the interest will be available to sections and members who require funding for natural history projects.

The Fund had two applications from sections this year and as both together were within the year's budget, the GPC was able to recommend to Council that both were accepted. The first was from the Ringing Group. After many years of using one of the beach huts at Newton as the Group's autumn ringing station, the hut had been upgraded and the ringers needed to find a new home. They applied for enough money to buy a good quality hut from H C Whites of Pegswood to replace an old leaking hut that they had been offered adjacent to their ringing area. This should hopefully be in place before the migration ringing begins in the autumn.

The other application was from the Archives section for audio equipment for June Holmes to start collecting some of the oral histories of members, volunteers and staff. The equipment is that recommended for collecting this type of data and although quite expensive it will give quality recordings suitable for archiving in digital format.

LIBRARY

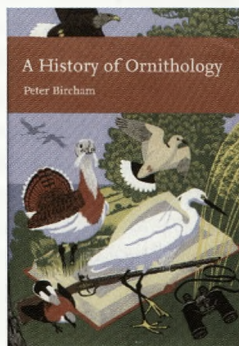
This year has been a relatively quiet one for the library, the lull before the storm, ensconced as we are in our temporary home on the second floor of Claremont Terrace.

The routine service to members, researchers and students has continued but the library was used less than we would have liked.

As usual the direction of the 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), Les Jessop (entomology), David Noble-Rollin (ornithology) and Bill Pickering (botany).

During the financial year forty-one books were purchased covering all aspects of natural history. Of the long running series there was volume 12 of the *Handbook of the Birds of the World*, volumes 14 & 15 of the *Correspondence of Charles Darwin* and volume 5 part 1 of *The Freshwater Fishes of Europe*. There were three books published in the Collins New Naturalist series, *The Isles of Scilly* by Parslow, *A History of Ornithology* by Bircham and *Wye Valley* by Peterken, all up to their usual standard. There were three books published by the Ray Society and *Order out of Chaos* by the Linnean Society. The Scottish Ornithological Club published the *Birds of Scotland* in two volumes and eight other bird books were purchased including *Birds and Wind Farms*, *Risk Assessment and Mitigation*. The geological books purchased were *Coastal Geomorphology* and *Fossil Mammals and Birds of Great Britain*. The Mammal Society published the fourth edition of *Mammals of the British Isles* and a 2005 edition of *Audubon's Mammals* was obtained.

Fifty items were donated to the library this year, the largest collection being eighteen insect and butterfly books from Jenny Guild, some of which are most unusual Japanese publications making a valuable addition to our collection. Other notable items were six



volumes of J Anderson's *Recreations in Agriculture* (1799-1803) which were purchased because they contained Bewick's engraving of the Potato plant and other important Bewick school illustrations, including the Platypus. They were paid for by the Bewick Society and donated to the Library. During the year Stuart Will visited Sweden and the 300 years Linné exhibition and donated the exhibition publication *From a Stubborn root to a notable tree*, with a CD Rom.

The Society must also thank the generosity of David Gardner-Medwin, Les Jessop, Steve Lowe, June Holmes, Norman Moore, Michael Turner and other friends for their donations.

More than 352 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. The Library continued to be serviced by the office staff. Margaret Evans has worked steadily during the year on the paperwork involved in dealing with serial publications and our journal exchange programme with other institutions throughout the world and also arranging the binding of periodicals. Sixteen volumes were sent for binding to become a permanent part of our collection.

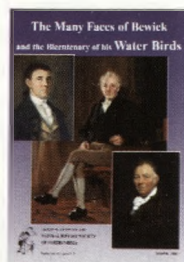
Representatives from the library have taken part in discussions on the working and development of the future arrangements when it moves into the suite of rooms on the third floor of the new building at the back of the Hancock. We will be sharing with the Society of Antiquaries library and the Cowen Library. Combined catalogues, security, shelving and detailed layouts have been discussed.

In addition to Margaret Evans, other volunteers gave reliable assistance during the year, in particular Stella Chambers, Trevor Hardy, Les Jessop, Norman Moore and Bill Pickering. The Society thanks them all for their indispensable work.

ARCHIVES

June Holmes June is the archivist for the Society and at present is working in a voluntary capacity to keep the archives as accessible as possible. She continues to oversee the voluntary work of the members who started their researches into the archives during the very successful HLF Archive project. There has been an increased interest in our archives, from both the public and researchers over the last year although work on the archives has been seriously curtailed by the lack of funding. A major grant application to the Northern Rock Foundation was unfortunately unsuccessful following Northern Rock's problems in November last year.

The Society's publication *The Many Faces of Bewick* by June Holmes (Transactions Volume 65 part 3) was nominated as a contender for the 2007 William MB Berger Prize for Excellence in British art history research, an award organised through the Berger Collection Educational Trust and the British Art Journal. This is the first time that a Society publication has been recommended for such an award and the outcome is eagerly awaited.



A small selection of watercolours of nudibranchs by Albany Hancock was loaned to the National Glass Centre in Sunderland for their exhibition *Art Forms from the Ocean* running from April until August. The Society's collection of glass sea anemones by Leopold and Rudolf Blaschka were also on display making this a most interesting and beautiful exhibition. The loan of the watercolours was curated jointly by June Holmes and Tyne and Wear Museums.

Cherryburn Museum, the birthplace of Bewick, had another successful year exhibiting the loan of the Society's portraits of Thomas Bewick in their *Many Faces of Bewick* exhibition. Our famed Wombat specimen, illustrated by Robert Bewick in Fox's *Synopsis of the Newcastle Museum*, also spent another year delighting audiences at Cherryburn.

It has been a difficult year with the restrictions in access to the archives in storage and the lack of funding but the Archivist and volunteers have risen to the challenge of producing information and assisting researchers wherever possible. A large proportion of the Society's photographs have been digitally recorded and many of its documents transcribed over the years which has enabled us to still give a good service to our members and the public.

With the majority of the archives in storage only a few volunteers have been able to carry on with their cataloguing and research.

Ann Stephenson is continuing her valuable work on the transcripts of John Hancock's manuscript correspondence and the compilation of a digital catalogue; this has proved very useful during John Hancock's bicentenary celebrations in 2008.

John Hancock (1808-1890), ornithologist, taxidermist and artist was the dynamic personality behind the building of the Hancock Museum, officially opened in 1884. He raised the money, influenced the design of the building, supervised the construction and donated his superb collection of bird specimens for the central gallery. Hancock should be remembered as one of the Society's leading lights, a man who contributed enormously to the success and continuation of the Society today. His life, and that of William Turner, is to be celebrated by the Society, jointly with the Society for the History of Natural History, in autumn 2008.

Colin Storey is carrying on with his work on the transcription of John Thomas Bold's entomological journal and has also provided the archives with wonderful DVD's using his skills as a photographer to capture some of the Society's coastal outings on video.

Michael Kerr is still providing his unique skills of accurate copy typing and is currently entering data from Fox's *Synopsis of the Newcastle Museum* into a searchable word document.

The archive database of Society members from 1829-1950 is progressing under the regular attention of Nigel Sprague.

Dr Parameswaran, over the last few years of studying the early correspondence of the Society, has become a skilled paleographer, reading and transcribing the many difficult handwriting styles. The letters have now been computerised and with the original transcripts, this readily accessible format make them most invaluable for future research.

The systematic catalogue of the species illustrated in the drawings of shells by George Gibsone, a long term project started last year by Dr Les Jessop is progressing. Dr Jessop, whose other research interests include ethnography, was awarded a Travelling Fellowship by the Winston Churchill Memorial Trust in September 2007 for a visit to New Zealand to look at the work of other cultural museums.

The archive section is as always grateful for the support and assistance given by our dedicated librarians Hugh and Stella Chambers and for the academic input and enthusiasm for the archives given by David Gardner Medwin.



Recent accessions to the archives

A small collection of manuscript letters by Sir Edward Grey, Viscount Grey of Fallodon purchased with the aid of a grant from the Friends of the National Libraries.

Manuscript diaries by the late James Alder, recording his Dipper research from 1936 to the 1960s, including many other interesting items kindly gifted by his family.

A collection of 123 original watercolour drawings of birds by Charles Murray Adamson, bound into a book entitled *Studies of Birds, ca 1875*.

John Hancock's presentation copy of the first edition of Charles St. John's book *Natural History and Sport in Moray*, 1863, with annotations by Hancock.

ACTIVITIES

The Society Council would like to thank all the speakers and leaders who have so generously given their time and energy to help the Society put on such a varied and exciting programme of activities. Without this voluntary help it would not be possible to undertake such a programme.

Pybus Memorial Lecture

The Pybus Memorial Lecture *The Extraordinary Tale of the Eight Point Eight Million Dollar Book* was given on 29 February 2008. The speaker, Professor Michael J Thomas, Emeritus Professor of Marketing Business at Strathclyde University, enlightened a large audience on the subject of John James Audubon, the American artist, explorer and ornithologist and his exceptional book *The Birds of America*.

Professor Thomas, an ornithologist in his own right, has had a long-term interest in Audubon, whose book published in sections between 1827 and 1838 contains sumptuous life size illustrations of birds. He explained how it had become one of the most expensive books in the history of bird art. Known as the 'Double Elephant folio', the last copy of the book to come to auction at Christie's in March 2000 sold for \$8,802,500 – a world record for any printed book.

Professor Thomas regaled us with stories of the book in question, how it had been previously propping up a snooker table in the games room of John C Bute, the 7th Marquis of Bute, of Mount Stuart on the Isle of Bute, Scotland, until it was recognised as having some monetary potential. The book now resides in the Gulf State of Qatar.

A remarkable story of a remarkable man and his work, illustrated with some amazing images taken from the book itself.

Lecture to celebrate the birth of John Hancock

To celebrate the birth of John Hancock the Society asked Eric Morton (Assistant Keeper of Biology, Tyne and Wear Museums) to talk on 'John Hancock – the taxidermist' on 25 January. Eric looked at some of the very pioneering work done by Hancock, particularly his methods of creating a mounted specimen whilst retaining the skeleton separately. Eric used X-ray photographs of specimens to illustrate this extremely clever process. As with all of Eric's talks his anecdotal stories about the behind the scenes work of a Hancock Museum taxidermist were as interesting as the science!

John Hancock in his studio by H H Emmerson



Ornithology Section

On 2 September David Noble-Rollin led the first field meeting of the year to look for 'Autumn Migration at Cresswell and Druridge Bay'. At the hide overlooking Cresswell Pond there was a charm of Goldfinches *Carduelis carduelis* with a number of young Tree Sparrows *Passer montanus* feeding in a field. In the hide members saw Greenshank *Tringa nebularia* and Knot *Calidris canutus*, some still showing summer plumage. There were also good views of a Jack Snipe *Lymnocyptes minimus*. From the beach members saw Red-throated Divers *Gavia stellata* and young Gannets *Morus bassanus* flying south.

On a beautiful still day on 6 October members met on Holy Island to look for migrants. The sound of Grey Seals *Halichoerus grypus* and Brent Geese *Branta bernicla hrota* could be heard clearly from the car park and the conditions were ideal for an autumn walk. The group had good views of Red-throated Divers and Great Crested Grebes *Podiceps cristatus* and a very close view of a migrating Woodcock *Scolopax rusticola*. During the day there was constant movement of Fieldfares *Turdus pilaris* and Redwings *T. iliacus* heading for the mainland.

The spring programme began with a visit to Holy Island on 10 May. Again the weather was excellent and members were able to get good views of many of the spring migrants. During the visit we were lucky to see a Temminck's Stint *Calidris temminckii*, a Little Egret *Egretta garzetta* and a passing Osprey *Pandion haliaetus*.

On 7 June members went to the Harthope Valley on a beautiful hot and sunny day. Fairly unusual this summer! However the main excitement was the large number of breeding pairs of Ring Ouzels *Turdus torquatus* seen up the Hawsen Burn. In the past we have nearly always seen or heard them on foggy visits but this time we were able to watch pairs all the way up the valley and eventually had to leave them sitting out, singing and alarming. The North Northumberland Bird Club also had an outing in the valley and shared the unrivalled views of these mountain birds.

On 18 June there was an early morning walk at Thornley Woods. The rain stopped as we began the walk and we saw Red Kites *Milvus milvus* and heard and saw quite a few warblers including Blackcap *Sylvia atricapilla* and Garden Warbler *S. borin*. Whitethroats *S. communis* were rather distant but the group had excellent views of Little Grebes *Tachybaptus ruficollis* displaying and fighting.

The Roseate Tern evenings were again very popular with two full boats on two consecutive evenings of 23 and 24 July. Graham Bell and David Noble-Rollin led both evenings. The usual excellent views of both adult and young Roseates *Sterna dougallii* were seen by everyone and they were easily compared with the other tern species present. On the second night Arctic Skuas *Stercorarius parasiticus* were seen chasing terns for food.



The indoor programme began on 9 November with Iain Livingstone talking about 'White Wagtails in Scotland'. Iain is a vet and bird ringer and described the contribution that ringing has made to increasing our understanding of White Wagtail *Motacilla alba alba* migration, the continental race of the Pied Wagtail *M. a. yarrellii*, in the UK. Many birders will have been unprepared for the idea that large numbers of Icelandic White Wagtails are present in autumn and winter roosts. His excellent talk, delivered in a relaxed and easy

style, emphasized the care needed to separate these two races and the contribution that ringing has made, and is still making, to understanding the migration and population status of *alba* wagtails in the UK.

This was followed by Andy Baxter on 23 November talking about 'Preventing birdstrikes with aircraft: saving birds and saving people'. With Newcastle airport on the doorstep of Gosforth Park nature reserve, and close to many other good bird areas in the north-east, there is a clear conflict of interest with the airport authorities keen to keep birds away, while the Society and other wildlife organisations want to increase the number and diversity of birds in the area. Andy has worked on strategies to manage risks from birdstrike incidents and in a fascinating, entertaining and wide-ranging talk put the problems in perspective and described the variety of solutions that have been devised to keep birds away from airports and aircraft. It was certainly sobering to realise the damage that a small bird can do to a multimillion pound aircraft travelling at speed.

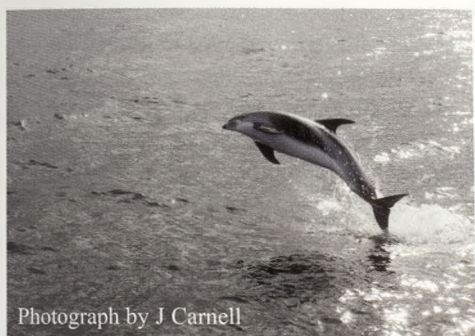
On 11 January Paul Morrison gave an excellent talk on Coquet Island. He outlined how the management of the island was designed to both maintain the biodiversity of species and also to help protect the rarer birds including the Roseate Terns. The use of nesting terraces with boxes to protect the young Roseates from predators and how the birds had adapted to them so quickly was very interesting to members. He described the pressures that the terns were under both for space and from large gull predation and how the policy of keeping the larger gulls to the north end of the island was beginning to work. He also explained that although we could help species to maximise their production of young, the overriding situation with food stocks was more important for how well the birds did each year. This could only be helped by national pressure from organisations like the RSPB to reduce the pressure on the North Sea fish stocks.

Mammal Section

Seven members took part in two Badger *Meles meles* watches held on 7 May (Bob Wilkin) and 23 May (Paul Drummond) during which adults and several cubs were seen. Due to the rapid growth of vegetation on the island and the unease of the badgers on the days selected, viewing them was difficult. On the first evening a Fox *Vulpes vulpes* appeared on the island and was very vocal for fifteen minutes. Roe deer *Capreolus capreolus* were seen on route to the sett. It is hoped that the 2009 watches will start in April before the vegetation becomes rampant.

On 17 August Tina Wiffen led a Mammal Group bat walk in Gosforth Park nature reserve. Fifteen people were present for a short talk on bats, their ecology and status in the North East, followed by a walk around the reserve to see them in action. The weather was good for bats, mild and dry with plenty of insects flying, and the group was entertained by almost constant Pipistrelle activity. Good views of Common Pipistrelle *Pipistrellus pipistrellus* and Noctule *Nyctalus noctula* bats hunting were seen over the open area near to the reed bed. A single Daubenton's *Myotis daubentonii* bat was seen feeding over the lake next to the tern platform. A captive Brown Long-eared *Plecotus auritus* bat was viewed in the hand by the group before the walk began.

Twenty-eight members and families embarked on the annual pelagic cruise from Seahouses on 8 September. A calm sea and good visibility produced good sightings of Grey Seals and one possible Common Seal *Phoca vitulina*, a Minke Whale *Balaenoptera acutorostrata*, and two small pods of Harbour Porpoises *Phocoena phocoena*. To a captivated audience's delight, a pod of about twenty White-beaked Dolphins *Lagenorhynchus albirostris* spent about an hour bow-riding and breaching within a few



Photograph by J Carnell

feet of the boat. Twenty seabird species were identified, including Sooty Shearwater *Puffinus griseus* and Great Shearwater *P. gravis*, first year Puffin *Fratercula arctica*, Razorbill *Alca torda* and Guillemot *Uria aalge*, and one 'Blue' Fulmar *Fulmarus glacialis* – a morph not normally found this far south. Mammals and birds were expertly identified by Graham Bell, Chairman of North Northumberland Bird Club.

A second bat walk, held on 23 September was led by Jonathan Pounder. A presentation was followed by examination of preserved specimens and training in the use of bat detectors. A walk through the woodland to the reedbed and Pyle hide produced good views of Noctules, and Common and Soprano Pipistrelles *P. pygmaetus*.

On 29 September, Veronica Carnell led a small mammal trapping event/training session in long grass and along the reedbed bunds in Gosforth Park nature reserve, following ten days pre-baiting. Twenty Longworth traps yielded thirteen male Bank Voles *Clethrionomys glareolus* (mostly sub-adult, with weights ranging from 13.5-19g), one adult and one juvenile Common Shrew *Sorex araneus* and one Water Shrew *Neomys fodiens*.

The third Red Squirrel Walk of 2007 was held on Tuesday, 2 October. Following an early morning interview broadcast live on BBC Radio Newcastle, Veronica Carnell and Philippa Mitchell (People and Wildlife Officer for the Save Our Squirrels Project), led a group of members of the public and a BBC camera crew on a guided walk round the reserve. Good views of about ten Red Squirrels were obtained, foraging in hazel and beech. No Grey Squirrels *Sciurus carolinensis* were observed. The event was subsequently televised on BBC Look North.

On Saturday 3 November, twelve members joined David Steel at Seahouses bound for the Farnes, to view the Grey Seals and this year's pups. After a short stop at Inner Farne to unload wood for a new boardwalk, we sailed to Staple and Brownsman Islands where, in the company of two wardens, we were fortunate to be able to get quite close to the seals. Several newborn pups were observed and we were able to take advantage of some excellent photo opportunities.

A Red Squirrel Walk through Gosforth Park nature reserve on 28 May gave members of the public, and our own members, excellent sightings of healthy Red Squirrels at the feeding station. The walk was led by Philippa Mitchell and Veronica Carnell. No Grey Squirrels were seen.

This event was repeated on 26 July, when there were no sightings of Red or Grey Squirrels, but an abundance of squirrel feeding signs in the form of freshly stripped Scots Pine *Pinus sylvestris* cones were found.

Members joined Jonathan Pounder on a field event at the heart of industrial Teesmouth to watch Common Seals and their pups hauling out on to the mudflats at low tide. Views from the hide at the Huntsman Tioxide site gave us good sightings of about fifteen Common Seals and three pups (maximum for the year so far: thirty adults and ten pups). Views of various wader and gull species were also obtained, though the Terek Sandpiper *Xenus cinereus* currently visiting the marsh was not seen. Orchid species growing next to the boardwalks on the National Nature Reserve were also seen. Julie Mason from the Teesmouth Field Centre was our host.

The indoor lectures for the mammals section began on 26 October with Geoff Barber, Senior Ecology Officer at INCA (Industry Nature Conservation Association) on Teesside. He gave a fascinating and thought provoking talk on the fortunes of the seals at Teesmouth. He described the fall in population size to nil as the industrial development of the estuary expanded, probably as a result of pollution, and the recent rise in numbers of adults and surviving Common Seal pups (seventy adults and eight pups in summer 2007). He also discussed the research carried out on pollution levels in local fish, relating it to seal fecundity, although the results are as yet inconclusive. The ensuing discussion pondered why reproductive output had levelled off at this relatively low number. The speaker offered the audience the opportunity to volunteer help with the seal monitoring and research programme next summer.

On 28 November, Ian Smailes, past Chairman of the North East branch of the British Deer Society, gave an outstanding talk on the origins of the BDS and its role in deer management across the UK. This was followed by a brief outline of the ecology and distribution of the six deer species currently found in Britain, focussing on our local Roe Deer populations. He was assisted by Norman Ball, the current chairman.

On 18 January 2008, Philippa Mitchell, gave a superb illustrated talk on Khao Yai National Park, Thailand, its richly diverse plant and animal wildlife, and the opportunities and threats it faces as a World Heritage Site. She then gave an interesting account of the Wild Elephant Research Project with which she was involved for nine years, and finished by offering the audience the opportunity to learn more about the area through tourism and charitable web-sites.

On 22 February, David Wembridge from the Mammals Trust UK gave an interesting lecture on the results to date of the national 'Living with Mammals' survey. He showed how the survey is beginning to highlight trends among mammal populations across the country, and illustrated in particular a perceived decline in Hedgehogs *Erinaceus europaeus* nationwide.

Geology Section

Denis Scadeng has been the secretary of the Geology section since 2000 and decided towards the end of the financial year to resign. He has worked very hard to keep a programme of lectures and field meetings running and to promote geology within the Society. In recent years he also became the geology section representative on Council and introduced the speakers at the lectures and field meetings. The Council of the Society would like to thank him for all his work over the last eight years. Those in the Society who are interested in Geology and wish it to continue as a subject area covered by field meeting and lectures will be asked to perhaps form a new committee to keep geology alive in the Society. There will be more information in the Winter Bulletin.

The lecture season started with a talk on the prospects for geothermal energy in the North East of England on 2 November. The original speaker was Paul Younger who, unfortunately, had to withdraw at the last moment but his colleague David Manning came to the rescue. He explained that low-grade thermal resources are to be found in the North Pennine Orefield and in some of the urban faults nearer Newcastle. Modern technology and the development of high efficiency geothermal heat pumps mean that there is potential to exploit these resources to a significant level.

The next lecture was on 8 February which featured the hot topic of climate change. Information about past climatic variations can help to predict future fluctuations. James Baldini described his work on the analysis of calcite deposits (stalagmites) in caves. The

climate signal from these deposits can be obtained with very high resolution but now needs to be correlated between different sites. This technique has the potential to fill in some very important gaps in our understanding of past climatic events.

The final talk in the series was on 7 March by Colm O'Cofaigh who also touched on climate change. Understanding the stability and dynamic behaviour of the West Antarctic Ice Sheet is crucial to predicting the potential impact of the influx of a vast quantity of melting fresh water into the ocean. The talk covered recent research into the behaviour of the Ice Sheet in the Late Quaternary derived from the study of geophysical records from the continental shelf.

There were two field meetings, both led by Andy Lane. On 1 September, Andy took members along the Durham coast to look at the Magnesian Limestone. The group was shown the spectacular exposure by erosion of cannon ball limestone, something which attracts geologists from all over the world to this unique formation. Members were treated to a clear and very understandable account of the formation of these rocks. On 31 May 2008, Andy continued the theme of Mag Limestone and took the section inland to Sunderland. This rock has been quarried in the area for building stone and we visited churches and buildings that made use of this local resource. The group was also treated to a bit of sociology in that, because this material was freely available, it was not held in high regard by the socially conscious emergent middle classes who preferred to front their homes with more expensive and exotic stonework. They only used the local material where it was not visible to the public. Members finished up in a local pub for a welcome pint where Andy was thanked for his hard work and enjoyable excursions over the past few years.

Botany Section

The winter lecture programme began in October, when Nick Mason, in 'Peatland matters', spoke of the 'Peatscapes: North Pennines project', aiming to conserve and enhance the internationally important peatland resource – mainly blanket bog – within the North Pennines Area of Outstanding Natural Beauty (AONB). The project was doing this by raising the level of understanding and appreciation of the resource, promoting best practice in practical management works, supporting and disseminating research into peatland processes and management, and supporting restoration and management work. The key was hydrology. Drainage ditches (grips) cut into the peat, mainly in the last century and still in place in many instances, are lowering the water-table of many important peatland areas. A recent grip-mapping survey commissioned by 'Peatscapes' had shown that there were approximately 9,400km of grips in the AONB. These grips are having detrimental effects on biodiversity, downstream flood risk, water quality and carbon dioxide emissions, and the main objective of the project is to dam as many of them as possible.

In November Mike Porter described 'Uncommon plants of Cumbria'. He has a particular interest in Cumbria's mountain flora, and talked about the less common upland species of the county as well as those of some other Cumbrian habitats, including the lowland mires. He is a co-author of the recently-published BSBI sedge guide.

Early in the New Year, in February, Dr Angus Lunn lectured on 'Rainforests of Oz'. On a recent visit to Australia, he had visited tropical and subtropical rainforests in Queensland, and temperate rainforests in Victoria. He explained that, never very extensive (perhaps with 1% cover of Australia before European settlement), rainforests are now much reduced in area (to about 0.25%). But Australian rainforests are unique in many

respects, and are extremely species-rich, with families penetrating into the tropical rainforests from New Guinea, other families which are endemic, and with many Gondwanaland genera. The temperate rainforests of Victoria include 'fern valleys' with tree ferns and the Southern Beech *Nothofagus cunninghamii*. These fern valleys are towered over by wet sclerophyll forest on somewhat drier sites, dominated by (the Australian) Mountain Ash *Eucalyptus regnans*, claimed to be the tallest angiosperm – even possibly, before losses due to logging, the tallest of all plants in the world.

Finally, in March, Richard Pow, Forestry Commission Regional Development Manager for North East England, spoke on 'Northumberland's ancient woodlands'. In 2003 the Forestry Commission had brought together a range of partner organisations interested in the state and fate of Northumberland's ancient woodlands. The result was a three-year study aimed at a better understanding of the nature and condition of these woods and stimulating better stewardship of them. All ancient woodlands greater than 2ha in size were surveyed – the first time in England this has been done for a county. The results indicate that more than half of the woods are in a poor or a declining state. Richard described the methodology of the survey and the woodlands themselves, and explained the steps being taken to address the problems.

The first field meeting of the year was on a very wet day in September 2007 when Dr Janet Simkin led a small group to Muckle Samuels Crag, in Kielder Forest, and Crammel Linn, on the River Irthing. The Crag, a lichen site, was a disappointment as much of the lichen interest had been lost, although fifteen species of *Cladonia* were found, with some good carpets of liverworts and Stag's-horn Clubmoss *Lycopodium clavatum*. Crammel Linn proved more interesting, with Stone Bramble *Rubus saxatilis*, Yellow Saxifrage *Saxifraga aizoides* and Mountain Melick *Melica nutans*. Unfortunately the river was too high to cross to the Northumberland side.

The first summer field meeting was to Cragside, on a wet day in early June, led by Ian Fletcher, the National Trust's Head Forester at this famous estate. He explained the complex management problems in safeguarding the Grade 1 Listed Landscape, which contained part of the national collection of conifers, and demonstrated common and rare species in the collection. We noted in particular the problems caused by rampant rhododendrons and Shallon *Gaultheria shallon*.

Later in June, led by Professor John Richards, we visited Sunbiggin Tarn. This is a famous botanical locality in the Carboniferous limestone area near Ravenstonedale in eastern Cumbria. Fringing the tarn are a variety of calcareous fen and flush habitats, whose species include Great Fen-sedge *Cladium mariscus*, Birds-eye Primrose *Primula farinosa*, Broad-leaved Cottongrass *Eriophorum latifolium*, Few-flowered Spike-rush *Eleocharis quinqueflora*, Black Bog-rush *Schoenus nigricans* and Early Marsh Orchid *Dactylorhiza incarnata*. We also examined limestone grassland with characteristic species, and the limestone pavement at Little Asby Scar with rarities such as Bird's-foot Sedge *Carex ornithopoda*, and Limestone Buckler-fern *Dryopteris submontana*. By a muddy pool we found Mudwort *Limosella aquatica* (some of us thought it might, from its habitat, better be called clartwort).

Also in June, Keith Cunningham led us to Hawthorn Dene, on the Durham coast. It is an ancient woodland on the Magnesian Limestone and a nature reserve of Durham Wildlife Trust (DWT). We saw, among other species, here and in the quarry, Bee *Ophrys apifera*, Frog *Dactylorhiza viridis* and Fragrant *Gymnadenia conopsea* Orchids, and Yellow-wort *Blackstonia perfoliata*. On the coast, at Hawthorn Hive, was Burnet Rose *Rosa spinosissima*.

Midweek Botany Group

The group has continued to flourish and has held regular botanical outings throughout the year. At the end of August 2007 we visited Bell Crag Flow, an interesting upland bog. In September we were fortunate in having two guided walks; we visited Howick Hall Arboretum in the company of the head woodsman and were shown round Ladycross Quarry by the founder of the nature reserve. We rounded off the 2007 season with a fungal foray to Plessey Woods.

The spring of 2008 started with trips to woodlands at Bellingham, Weardale and Beamish to look at the early flowers growing there. Later in May we went to Upper Teesdale to see Spring Gentian *Gentiana verna* and Bird's-eye Primrose *Primula farinosa*, and to an interesting farm near Powburn where there were good displays of Petty Whin *Genista anglica*, Bog Myrtle *Myrica gale* and Chickweed Wintergreen *Trientalis europaea*. Next came trips to Derwent Gorge, Marsden and Rocket Green where a wide variety of species were recorded. On the outing to Great Bavington and Thockrington we were pleased to find thriving colonies of three uncommon plants; Chives *Allium schoenoprasum*, Hairy Stonecrop *Sedum villosum* and Spignel *Meum athamanticum*. We then visited Gibside and compiled a list of all the species we found to assist the National Trust in their conservation work.

At the beginning of July members had a long day out to the Lake District where we scrambled up Skew Gill to reach a very interesting montane flora. Our next visit was to Durtrees Burn on the edge of the Otterburn Ranges where, to the accompaniment of some very loud artillery fire alarmingly close by, we found a great variety of plants.

Wan Fell in Cumbria and Blueburn Farm in the Simonside Hills were both very enjoyable and the shores of Broomlee Lough north of Hadrian's Wall provided a wide selection of uncommon species, and a small area of limestone pavement with typical lime-loving plants was a surprising find amidst the surrounding acid terrain. The group also visited Ross links south of Holy Island and saw an excellent variety of coastal and dune plants.

A long weekend away in West Cumbria provided a different flora from that of Northumberland and the ride on the narrow gauge railway in Eskdale was a highlight of the season.

The group has now been in existence for over ten years and is going from strength to strength. We decided to celebrate by holding a beach party at Druridge Bay and, in this very wet summer, managed to pick a fine sunny day. A great time was had by all, playing games, flying kites, paddling, swimming, and picnicking!

Members of the group have continued to help with the North Pennines AONB Hay Time project and we have also started to work on a botanical survey of Gosforth Park nature reserve and this will continue next year.

Anyone who has an interest in botany is welcome to join and can contact the group via the Society office.

Entomology

On 12 October Dr Gordon Port (Newcastle University) gave a talk entitled 'Can insects cope with a changing world?'. Gordon has always been interested in insects and he used examples from a range of groups to illustrate how they cope with changing climate and landscape and how as an island we are protected to some extent from 'alien invaders'.

Historically beetles have shown that they can move in response to changing climate and two beetles, common on garden plants, the Rosemary Beetle *Chrysolina americana* and

the Scarlet Lily Beetle *Lilioceris lillii*, have both arrived in Britain in the last seventy years and are steadily moving north. The other side of the argument is that clearly some insects will leave Britain in response to changing climate, hopefully to find a home elsewhere. Landscape change (reduction in habitable areas by removal of hedgerows, pesticide use and the spread of creeping concrete) tends to leave some species under threat of local extinction. This is best illustrated by the decline and successful rescue of the Large Blue Butterfly *Maculinea arion*, but this was only possible with a detailed knowledge of its lifecycle which involved both its host plant, Wild Thyme *Thymus polytrichus* and an ant *Myrmica sabuleti*.

Alien invaders may sometimes be good, but usually we think of them as a bad influence. The Corn Rootworm *Diabrotica virgifera* is arriving each year in Britain, always near airports, but how does it travel? As a pest of Maize *Zea mays* this would be bad if it became established. The Asian Tiger Mosquito *Aedes albopictus* has not arrived yet, but is in many parts of Europe and, as a serious biting nuisance and disease vector would again be bad. The Horse Chestnut Leafminer *Cameraria ohridella* causes unsightly damage on Horse Chestnut *Aesculus hippocastanum* trees and is moving steadily northwards having reached Derby last year. The Harlequin Ladybird *Harmonia axyridis* is again moving northwards and although some people would welcome its ability to devour pests the fact that it also damages native ladybirds and other beneficial insects may be a problem. The recent occurrence of Bluetongue virus in England has long been anticipated and is partly due to biting midges that spread it, being able to survive the winter as adults – easier in a mild winter. However, it is not all bad news; the Tree Bumblebee *Bombus hypnorum* has found its way to Northumberland this year and is a welcome addition to our bumblebee fauna.

On 1 February Dr Roger Key (Natural England) gave a talk entitled 'Will there ever be another David Attenborough? The need for a new generation of young naturalists'. Roger is a Senior Education and Learning officer with Natural England and has a particular interest in getting young people involved in natural history – an objective of great relevance to the Society.

Roger used his own experience to illustrate the problems we face. As a youngster Roger grew up in Scunthorpe. He and his friends were able to play and explore in a wide range of sites; some of them would not be regarded as obvious havens for wildlife, but plants and animals were still there. Roger was exposed to books, magazines and television programmes (Arthur Ransome's *Swallows and Amazons* series; Gerald Durrell's books; programmes like *Zoo Quest*, *Animal Magic*, *On Safari*, *Zoo Time*, *Undersea World*, to name but a few). Primary school, High School, the local museum, the Lincolnshire Naturalists Union and university (Nottingham) all played a part in helping Roger to become thoroughly in tune with the natural world in general, and insects in particular.

Nowadays a youngster would have a very different world to grow up in. Access to the sites is more tightly controlled – those that can be visited often have restrictions on what you can do there. Collecting insects is often discouraged, sometimes by well meaning people. What is the problem with collecting a few insects when so many are killed on car windscreens or by predators? Roger pointed out that the daily food intake of a family of Blue Tits *Cyanistes caeruleus* is 50-70g of insects, leading to inflammatory statements such as 'conserve insects – kill a Blue Tit'! Museums are not so accessible: Natural History Societies have an older age profile and in general youngsters see being interested in natural history as 'uncool'. There are still lots of natural history

programmes, but they tend to focus on the exotic and fantastic rather than things you might encounter when out for a walk. Even university courses are considered boring; 'it's all numbers, models, molecules and genes'; 'they even describe behaviour and biodiversity in numbers'.

Roger had a number of suggestions as to what should be done. Obviously the problems include a lack of resources and trying to get youngsters to learn about nature all the way through their formative years. Roger gave us a lot to think about, but in a world driven by targets he suggests the following single target for the Department for Children, Schools and Families 'by 2010, 95% of all children will be able to persuade their Mum not to flush a Privet Hawk Moth *Sphinx ligustri* caterpillar down the lavvie...'

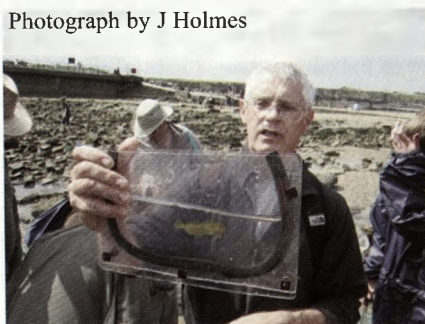
The annual 'Bug Day Out' was held at Newcastle University's field station at Close House, Wylam on 28 June. The weather was good and a wide range of insect material was obtained from light traps that had been run through the previous night. Later in the day we collected other material using nets, beating trays and pooters. As usual much of the day was given over to putting a name to insects or groups that people were not familiar with. The meeting was organized in conjunction with the School of Biology at the University and the Royal Entomological Society as part of National Insect Week. Twenty people (of all ages) were there for all or part of the day. If you missed it this year then watch out for the event in June 2009.

General Field Meetings

On the 5 August John Steele and June Holmes led a party of twenty adults and children on another successful seashore outing. This time we visited the rocks around St Mary's Island, Whitley Bay. It was a warm sunny day and there were numerous family groups rock-pooling around us, who kept joining us to hear what John had to say. We searched the pools armed with nets and buckets finding an abundance of Shore and Hermit crabs *Carcinus maenas* and *Paguridae*, a few Velvet Swimming Crabs *Necora puber* and Squat Lobsters *Galatheidæ*. There were Common Blenny *Lipophrys pholis*, or Shanny as it is sometimes known, and a Sea Scorpion *Cottidæ*.

John had chosen our location carefully in order to search for elusive nudibranch species along the shoreline. On the excavation of a rather large boulder we were rewarded with the largest specimen of *Archidoris pseudoargus*, commonly known as the Sea Lemon, that we have seen to date, happily feeding on a bright yellow Breadcrumb Sponge *Halichondria panicea*. However, at 30mm, it is still small for this species as they can grow to 120mm.

Photograph by J Holmes



Albany Hancock and Joshua Alder, co-authors of *The Monograph of the British Nudibranchiate Mollusca*, would have been proud of us!

The following weekend a small group of new and not so new members met at Lake Lodge on a rather wet morning. The weather improved for a short while and the group made its way around the reserve seeing Red Squirrels and Young's Helleborine *Epipactis youngiana*. Sparrow Hawk *Accipiter nisus* young were vocal and the Mute Swans *Cygnus olor* showed off their amazingly large brood of eleven cygnets at the Pyle hide.

HANCOCK MUSEUM

This has been an extremely busy year for the Great North Museum team. In April 2007, the Hancock building and grounds were handed over to Kier Northern, the main building contractors. Since then the existing Hancock building has been transformed and a new three storey extension built. Work in the existing Grade 2* listed building has included restoration of a number of original features some of which had been damaged or lost from the building over the years. This includes replacement of missing and damaged carved, stone balustrades. Another central part of the building works has been the replacement of the original glass roof. Inside the building new doorways open up the gallery spaces. Building work will be completed later this year in readiness for exhibition fit out and object installation.

The extension provides learning spaces and offices as well as a new library. However, it is the first floor which offers the most exciting opportunities. With 500m² of gallery floor and a ceiling height of 5m this world class exhibition space is designed to take the largest temporary exhibitions available. There is even enough room for big dinosaurs such as *Diplodocus*.

Designs for the new galleries are progressing well and work is under way on sourcing and commissioning models, art works and interactives. Interactive highlights include several new technologies. Visitors will be able to explore the length and breadth of Hadrian's Wall without setting foot outside! A 22m long interactive model will enable visitors to discover the detailed history of this amazing fortification and the associated museums that can be visited today. In the geology gallery visitors can learn about life millions of years ago. Using virtual technology they are invited to become palaeontologists re-assembling pre-historic creatures while sound, touch and animation brings these lost worlds to life. In the Study Zone visitors of all ages will be encouraged to discover more about the museum and its collections. They will see some of the weird and wonderful objects that have been collected over the centuries and can find out why people collect and how these collections are used. There will also be objects to touch and to examine.

On July 1 another important event in the development of the Great North Museum took place in that the organisations of the Museum of Antiquities and the Hatton Gallery were incorporated into the Tyne and Wear Museums organisation. We look forward to working even more closely with our colleagues and volunteers in these organisations and will enjoy the additional expertise and skills that they will bring to the delivery of all our services.

Despite the lack of a building the Museums learning and outreach programmes have continued to be active with a full range of formal and informal events. Highlights are outlined below.

Learning Programmes

The Hancock Learning team continue to deliver a wide ranging programme and are using the opportunity to explore and develop new programmes and partnerships especially working with the University on its Widening Participation agenda. Examples of this are delivering Forensic Archaeology as part of the University's 'Bite Size University Summer School' and developing a 'How Science Works' workshop again to be delivered in conjunction with the University.

However, it is pleasing to report that year on year, the figures for Education have increased from *ca* 4,400 to *ca* 5,200 adults and children engaged.

Family Fun

A series of family fun events covering a wide range of themes have taken place throughout the year. These have included a seashore day (Discovery); snake handling (Stephenson Railway Museum (SRM), Sunderland Museum (SM), South Shields (SS)); and Fossil Hunts (SRM). Learning staff also worked with the TWM Outreach team at the Green Festival in June where participants explored how we can live in more environmentally friendly ways and awareness was created using a Minibeast Hunt activity. Family craft activities were also delivered to promote the Laing's Love Exhibition. Towards the end of the year, giving a flavour of things to come, learning teams from the Hancock and Hatton ran a 'Something for Everyone' activity over 2 days, celebrating world cultures supported by the collections from both the venues.

Outreach

Outreach sessions have continued to be successful and a number of Rocks and Fossils, Skeleton, and Habitat workshops have been delivered to schools in the region.

In February the assistant learning officer worked in partnership with Sunderland Museum and Discovery Museum on a schools environmental project funded by the North East Regional Museums Hub. A variety of workshops were run over 4 days based on sustainability issues such as habitat protection, recycling and energy conservation.

In March Learning and curatorial staff from Hancock Museum were involved with a schools week at Sunderland Museum. These sessions were linked to the 'Whatever the Weather' exhibition and using specimens from the Museum's collection, concentrated on animals adapting to different seasons and climates. The week attracted over 400 pupils.

Learning staff have also delivered workshops at other venues. Catapult sessions were delivered to around 450 Key Stage 2 children as part of Discovery Museum's Science Works in June. Also Minibeast workshops were run at Stephenson Museum, using the habitats along the waggonways.

Loans Boxes

Another mechanism to encourage continued use of the Hancock collections has been the development of loans boxes. Boxes on the themes of rocks and fossils, skeletons and mini-beasts are currently in schools. High demand and interest in this resource has led to the development of more loan boxes based on new themes including life cycles, Egyptians and teeth. It is intended that these loan boxes will be used in schools and museums throughout the region.

Real World Science – Strategic Commissioning Project

This year saw the development of a new workshop on the rock cycle and an outreach interactive lecture 'This World Rocks', as well as refinement and development of the existing 'Evolve!' workshop. During this project year the team delivered to *ca* 1800 secondary science pupils, which means an achievement of 25% above the target. Ian Read, the assistant learning officer responsible for Real World Science (RWS) left the Museum in June and we thank him for his hard work and enthusiasm in delivering this programme, which also included 'A Run Through Time', another interactive lecture. This project year also saw the addition of dedicated Key Stage 5 (A Level) and Key Stage 3 activities to meet increased demand. Teacher training was also included in the programme.

The project has recently taken delivery of video-conference equipment funded through the Department for Culture Media and Sport (DCMS) strategic commissioning money which

supports the RWS partnership. This new technology should enable us to link with our partners and experts across the country, and indeed beyond. It also includes an interactive voting system!

We are already planning a large scale event next year to celebrate the 150th anniversary of the publication of 'Origin of Species' and the bicentenary of the birth of Darwin. As part of this event we hope to link up with all of the RWS Partners across the country.

Over the last few years this DCMS-funded partnership (Natural History Museum, Oxford University Museum of Natural History and Manchester University Museum) has attracted considerable interest from Government. In November the partnership held an opinion formers' conference, hosted by the Hancock Team, considering the role of museums in teaching secondary science. The keynote speaker was the Rt. Hon. Margaret Hodge MBE, MP and Minister of State for Culture. Other high profile speakers were also attracted. This is the only secondary science DCMS-funded partnership in the country and our involvement is a testimony to the importance of the Hancock and its collections.

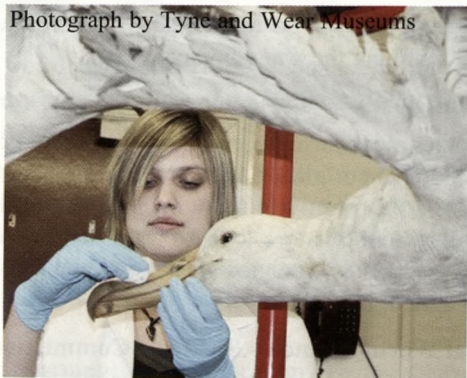
The challenge remains the sustainability of funding for the RWS; other sources of funding are being investigated by the partnership and there is the possibility of the programme being extended to 'Real Earth Science' and even potentially 'Real Material Science'.

Post Graduate Studies

In total the team hosted several four week and nine week placements from the Newcastle University International Centre for Cultural and Heritage Studies. The students took part in a variety of projects; one of the objectives of the placement is that the student sees as much as possible of the work of the Museum and gets an appreciation of how all the team works together, so they spend time with the Curators, Education, Conservation and the EYE Project. After appropriate training they assisted in research and conservation of the collections for the new displays. Among them was Eileen Hoey, whose research about the Wandering Albatross *Diomedea exulans*, originally on display in the bird gallery, led to the discovery that this was in fact an original Hancock specimen. This specimen is due to be re-exhibited in the biology gallery. Keith Robinson and Zoupoulia Petrahi worked on the Tankerville Coral Collections including updating the documentation and repacking the collection for the move to the new store. It is worth noting that most of the students actually spent some additional time with us as volunteers after they had completed their formal terms.

Adult Education and Training

The collections are used extensively for the Newcastle University's own undergraduate and postgraduate teaching as well as by visiting groups from other Higher Education Institutions (HEIs) as part of their own courses. Staff regularly work with students from both Newcastle and other HEIs assisting with dissertation and thesis work. In this year, it has not been possible to support as many courses as usual due to the level of commitment to the GNM project.



Loans

In addition to numerous research loans to academic institutions around the world several loans have been made as part of our plans to maintain the profile of the Museum during closure. These include the loan of the internationally important Albany Hancock watercolours to the National Glass Centre in Sunderland and the loan of some of the amazing objects from the Ethnography collections including the feathered cape (NEWHM c769) to the 'Polynesie, arts et divinites, 1760-1860' exhibition at the Musee du quai Branly, in Paris. Material has also been loaned to NTrust properties including Bewick's birthplace (Cherryburn) and Craggside.

Research

Some internal and external research has taken place on the collections over the last year mainly to support the development of the new displays. External research has not been in evidence as much as usual partly due to the commitment of the curatorial staff to the GNM Project. Also, it is not as easy for researchers to come and see items from the collections as it has been. This will soon be resolved with the new Museum and the new Store, both with dedicated research facilities.

Although a lot of research is in progress, there are not a large number of papers to report.

Papers

Pigott, L J and Jessop, L (2007). 'The governor's wombat: early history of an Australian marsupial'. *Archives of natural history* **34** (2) 207-218.

Hanna, C, Schönberg, L and Beuck, Lydia (2007). 'Where Topsent went wrong: Aka infesta a.k.a. Aka labyrinthica (Demospongiae: Phloeodictyidae) and implications for other Aka spp.' *Journal of the Marine Biological Association of the UK* **87**, 1459-1476.

Green, R E (2008). 'Demographic mechanism of a historical bird population collapse reconstructed using museum specimens'. *Proceedings of The Royal Society Biological Sciences* **275**, 2381-2387

Mackinlay, L, Leslie, F, Hutchison, C and Furlong, R (2008). A time for change? Local Biodiversity Action Plan Review Study. National Trust for Scotland Discussion Paper.

Great North Museum Project

a) Collections Management and Conservation

The majority of the collections have been held in the temporary storage facility which has provided a safe and environmentally controlled area for the collections while the new permanent, purpose built stores and resource centre are designed and constructed. Whilst the majority of the collections are housed in the temporary store some are being cared for at other TWM venues, including: Segedunum, where the majority of the Egyptian collection is on display in the 'Land of the Pharaohs' exhibition; the Laing, where many of the oil paintings and watercolours are being cared for; and Sunderland Museum, where the geology type collection is currently housed. Some objects have also been given temporary homes at Wallington Hall, Cherryburn and the Regional Resource Centre at Beamish.

The collections are managed through a series of databases held centrally at the Hancock Museum offices at 3-4 Claremont Terrace. There is good access to most objects within the store. This means that objects can continue to be used for research, loans and learning workshops when needed. Objects that will form part of the new permanent displays were

transferred to the new GNM conservation labs based in 1-2 Claremont Terrace, where a conservation team is hard at work, assessing and cleaning each individual object prior to exhibition installation. They have now conserved, cleaned and checked more than 1200 objects. Almost 200 new animal mounts have also been prepared for the new displays. These new mounts include an Eagle Owl *Bubo bubo*, Greater Flamingo *Pheonicopterus roseus* and Rhinoceros Iguana *Cyclura cornuta* for the biology gallery and a fabulous Grey Heron *Ardea cinerea* in flight for the *Natural Northumbria* gallery.

The new store is scheduled to be complete by December 2008, at which point the reserve collections from the Hancock Museum and the Museum of Antiquities will be relocated to Discovery Museum. The store and resource centre will not only provide new, modernised storage facilities for the internationally important collections but also two dedicated research rooms which we hope will attract scholars from all over the world. It will also have a classroom. The store will also provide an additional public attraction, designed to be available for supervised tours and for research and learning.

b) Design and Funding

Exhibition designers, Casson Mann, are working with the Hancock team to complete designs for each of the new galleries which are as follows:

Hadrian's Wall	The Roman Empire	Fossils, Crystals and Gems
Ice Age to Iron Age	World Cultures	Planetarium
Ancient Egyptians	Living Planet	The Anglo-Saxons
Ancient Greeks	Natural Northumbria	The Mouse House
Discovery Centre – Explore		

The exhibition design programme is currently the main priority for curatorial staff.

The major specialist projects are now let and under way. These include elements such as Graphic Production, Models, AV/ICT Software and Hardware, Aquaria and the Planetarium. The Graphic Design Services contractor has also been appointed. A series of user consultations took place over the year to help inform the interpretation of the exhibitions, fit-out of other spaces such as the learning suites, and planting schemes and designs for the landscaping. These included consultation with disabled people, community groups, teachers, schoolchildren, family groups, nursery groups, students, academics, and out of region visitors, as well as presentations and discussions with the Society and SANT.

The main contractor (Beck Interiors) is now making exhibition elements off-site in London. Other contractors are making substantial progress, models are being fabricated, the planetarium installation is being planned, interactive hardware, software and physical interactives are being co-ordinated, and the graphics production contractor has been appointed. Aquaria/Vivaria installation plans are well advanced. The curatorial team continues to liaise with model makers to ensure accuracy and quality. Gallery interpretation and graphic design are also progressing quickly. Accuracy of content and academic rigor are achieved through review of draft text by critical friends including several members of the Society, as well as academics, museum professionals, the university and other appropriate individuals.

c) Fundraising and Communication

Fundraising work continues in order to achieve the project target of £26.246m. The additional funds, including potential enhancement funding, are being sought through the University's Development and Alumni Relations fundraising team, working with the GNM Project Office; they have already raised over £1.8m from various trusts, foundations, businesses and individuals. A TWM corporate sponsorship document has been distributed to potential sponsors and two 'hard hat' tours with potential sponsors have already taken place. Plans for a public giving programme are also well advanced and will be launched in October. The public will be asked and encouraged to 'be part of it' and take ownership of the museum's new offer. Jonathan Edwards will front the public giving programme and make a lead donation.

Designs are in progress for a donor acknowledgement scheme as well as the major funders' plaque which will be located in the Museum foyer.

The Brand Launch will take place later in the year to create awareness before the opening in the spring and will be supported by press and media coverage.

d) Construction work

This year the bulk of the building work has been completed. In the existing building all ceilings are now in place, plastering is complete, exhibition electrical services have been installed on the first floor, the internal roofs are complete, and lighting and air ducts have been installed. Decoration is substantially complete pending final coats once mechanical and electrical services are complete. Final finishing of floors is under way. Toilets are now being tiled and equipment installed. Internal doors are in manufacture and will be installed shortly. On the exterior, felting of the roof edge is under way, the Victorian lamps have been removed for refurbishment and landscaping works have commenced. Interestingly, the Company which made the original Victorian Lamps is now restoring them. The existing building should be completed by September.

In the new building, work continues on the physical installations. Most ceiling grids are now in place and the ceilings are being installed; the floor in the special exhibition space is being laid and all the windows in the building are in place, as well as the large 'barn door' for the special exhibition gallery. The exterior of the building is now substantially finished, having been rendered, and the new colour window reveals are being fitted. Exterior landscape works have commenced at the north west corner of the building, and main service connections are being installed. At the moment it is anticipated that Kier will vacate the building in the autumn to allow the fit-out contractor to start.

THE EYE PROJECT (EXPLORING YOUR ENVIRONMENT)

We have now come to the end of the second year of the EYE Project, a joint partnership between Tyne and Wear Museums and Newcastle University. The EYE Project was set up with two broad aims. The first of these is to collate and improve access to environmental information in the North East of England, in order to inform the conservation and enhancement of the region's natural environment. The second of these is to increase public involvement in environmental recording and to help people to learn more about the natural environment of the region. It is funded by the Heritage Lottery Fund, Northumbrian Water, Natural England, Tyne and Wear Museums and the North East Regional Museums Hub, Newcastle University, Northumberland Wildlife Trust (NWT) and the Tyne and Wear Museums Business Partners Fund.

Regional Environmental Data Hub

During the past year the Project team have continued to work with individuals and organisations across the region to discuss the two-way sharing of data. The aim of this is to create a centralised location for regional data to ensure that conservation professionals, voluntary recorders, researchers and planners are able to use the most available data in order to make decisions about the natural environment. A significant amount of the new data is information that would otherwise not be in a useable format. The EYE Project frequently responds to requests for information from both the professional and voluntary environmental sector in order for this information to be used effectively. Data is verified on a case by case basis by a local expert to ensure quality control and all data is validated using the inbuilt validation process in Recorder 6, the main environmental software programme used to manage the data.

The EYE Project was delighted to be offered an additional grant of £20,000 earlier this year from Natural England. This is a section of the national funding stream for the enhancement of local record centres across the country, and will allow the Project to employ an additional member of staff to assist with database management. The Project plans to develop capacity through use of a GIS (Geographic Information System) in order to manage habitat data more effectively.

Volunteer Programme

Volunteers have continued to work on the digitisation of paper data to ensure that the data can be used more effectively through import into Recorder 6. With advice from regional and local biodiversity experts, the Project team has constructed a list of priority species and habitats to make sure that the most important data is digitised first. Eighty-eight volunteers have worked with the EYE Project over the past year and we are extremely grateful for their hard work.

EYE Project 'WikiTOID' website

After a substantial but crucial period of development, the website is now live and people are starting to use it to record species. The website uses wikiTOID technology developed by Newcastle University's Department of Civil Engineering and Geosciences to allow anyone in the region to record their wildlife sightings directly onto a series of digital maps. Improvements to the website are ongoing and the EYE team and the wikiTOID team are working to make a number of changes, including enhancing the maps, adding species photographs, and creating a personal profile page for each user. The website is available at www.eyeproject.org.uk.

Events

The EYE Project events programme continues to be extremely popular, and many more successful events have been held over the past year. Activities have included fungal forays, Red Kite safaris, the EYE Wildlife Fair, 'Waggonway Wildlife', 'Tree-mendous' and 'Birds, Beasts, Boulders and Botany', a partnership event with the Northumberland Coast AONB and the Hancock Natural Sciences team at Craster.

March 2008 saw the launch of the second regional annual survey, *The Northumbrian Water Pond Survey*. This is proving to be very successful and a substantial number of surveys returns have been sent in. The information will be collated and provide valuable information on pond biodiversity – especially how useful garden ponds are to amphibian populations. The survey was launched with a 'Pond Explorers' event held at Cowpen Bewley Woodland Park near Billingham, in partnership with Tees Valley Biodiversity Partnership.

GOSFORTH PARK NATURE RESESRVE

Despite being squeezed on all sides by new developments, encroaching dog walkers and street lights which show no concern for energy conservation in the face of climate change, Gosforth Park nature reserve remains a beautiful wetland and woodland habitat. This is largely due to the efforts of many Society members on a number of fronts: habitat maintenance, Red Squirrel protection, security patrols, nest-box provision and wildlife monitoring. Special mention and thanks are due to Bob Wilkin for generously donating his fees from work on a television programme to restock the lake with Roach *Rutilus rutilus*. The fish were put into the lake in mid January and will help to maintain the number and diversity of birds and other animals using the reserve. The Common Terns *Sterna hirundo*, which now breed regularly on the large open 'nestbox' in the main lake, stood to gain from the increased fish population. However, although the terns returned in good numbers in May this year, with around twenty-five nesting pairs, their breeding attempts ended in complete failure. Many of the chicks were found dead on the platform but whether it was the result of predation, poor weather conditions (or even poor food availability), or a combination of these factors, is unknown. Elsewhere in the reserve, two Barn Owl boxes have been erected and we hope that these will attract a breeding pair to the reserve and racecourse.



Photograph by D Noble-Roblin

For a second winter in succession the reserve has attracted Bittern *Botaurus stellaris*. However, once again they were gone by the spring with no booming having been heard. The Grey Herons have bred very successfully this year; the heronry is in the woods to the east of the lake and a number of juveniles were seen trying to fish during the summer.

Veronica Carnell has continued her work monitoring and feeding the Red Squirrel population in the reserve, and although there were plenty of sightings of Reds in the reserve over the winter, this year has seen a continuing encroachment by Grey Squirrels. The natural advance of the Greys has unfortunately been human assisted; there have been releases of Grey Squirrels into the reserve on at least two occasions by ill-informed and criminally-irresponsible members of the public. This undermines the incredible amount of effort that has gone into trying to protect the Red Squirrels. Probably as a result of these releases, there have been several cases of poxvirus and this is a cause for considerable concern over the viability of the Red Squirrel population in the reserve.

This year, besides the regular ornithological survey (see Ringing Report) and Red Squirrel monitoring, there were also botanical and entomological studies. The midweek botany group led by Janet Angel has started a plant survey, and there have been two independent insect surveys initiated: Paul Drummond and Keith Regan (Northumberland County Recorder) have been moth recording and Martin Luff has been surveying beetles. There are not yet any detailed reports from these studies and all are still ongoing. However, a couple of noteworthy finds on the moth front are *Carpatolechia decorella*, only the fourth record for Northumberland, and Oak Beauty *Biston strataria*, a species previously thought to be restricted to the Tyne valley. To date 200 species of beetles have been identified with at least three being nationally, and several others locally, notable, including one new to north-east England, *Neobisnius subuliformis*, a rove beetle that is found in birds' nests. Two other rove beetles of national importance, *Gyrophana strictula* and *Oligota apicata*,

live on tree fungi, the latter being a predator of other fungus beetles. A longhorn beetle, the Tanbark Borer *Phymatodes testaceus*, was found by Paul Drummond in the garden of Lake Lodge; there has been only one previous record from Northumberland.

Maintenance of the *Phragmites* reedbed habitat has again been possible with the aid of a grant from Natural England. Paul Drummond bid successfully for the contract and cut several areas of reedbed, cleared areas of ageing Willow carr and gave the vegetation covering the islands a very severe haircut. As part of the contract work, Paul cleared a path for the construction of a new drain to take the water of the Whitecroft Burn away from the lake. The digging will take place this autumn and its successful completion will help prevent the Coralroot Orchid *Corallorrhiza trifida* habitat from becoming too wet. Geoff Lawrence once again demonstrated his superior carpentry skills and constructed an impressively-robust new bridge over the open drain from the racecourse with the help of volunteers from the University Conservation Society. The reserve habitat is not the only part of Gosforth Park nature reserve which needs maintaining; the Society owns Lake Lodge and it is pleasing to report that work to replace the old Parkray boiler has finally been completed with the installation of a new woodburning stove. This will help reduce fuel bills in the winter and means that some of the reserve's excess resources can be put to good use.

Although efforts to obtain a longer lease on the reserve have not yet been successful, Society officers have met with management staff of the new owners of the racecourse and we are hopeful that there will be some positive movement on this in the coming year. The Society is grateful to the racecourse owners for their encouragement and support and hope to maintain good working relationships in the future. The Society is extremely grateful to Veronica Carnell for her dedication to the Red Squirrel cause, to Bob Wilkin for his continued leadership of mammal studies in the reserve and the gift of fish, to Geoff Lawrence for his hard work on the bridge and other projects, and to the Warden, Paul Drummond, for his efficient work on the reedbed maintenance contract and keeping the reserve in good shape. The Society is again grateful to the University Conservation Society for help in the reserve and to all the members who visit to observe and study the wildlife and help to maintain security. The Society is grateful to Natural England for funding work to maintain the reed beds in a healthy condition and we hope this will continue for the foreseeable future.

RINGING GROUP

Ringling Team The Society's Ringing Team has three major activities each year: running the Constant-effort bird monitoring project at Gosforth Park nature reserve, ringing seabirds on Coquet Island and the Farne Islands, and manning a coastal autumn migration project at Low Newton-by-the-Sea. In addition, group members run their own projects at different ringing sites in the region. The Barn Owl project run by Philip Hanmer for the past three years deserves special mention. With the help of sponsorship from the Northumberland Coast AONB Partnership, NWT Coquetdale Group, Alnwick NHS, Alnwick Timber, individual farmers and the National Trust, Phil has erected around one hundred nestboxes for Barn Owls *Tyto alba* in north Northumberland and during the period covered by this report has ringed sixty-seven adult and chick Barn Owls and recaptured a further thirteen adults. This project has generated excellent publicity and will help the Barn Owl populations to increase in the North East as well as providing important scientific data on their diet, survival, productivity and dispersal.

The comparatively mundane Constant-effort ringing at Gosforth Park got off to a good start in late April 2008 with the first ringing visit producing a total of forty-four birds. Since that first visit, the team has been out every weekend during what has passed for a summer this year. Despite the poor weather, all scheduled visits were completed and the capture total for all species was only slightly down on the same period last year at 95% of the 2007 season. Since the ringing programme started in 1988, nearly 700 Reed Warblers *Acrocephalus scirpaceus* have been ringed in the reserve but this year the number of adults (new birds and retraps from previous years) was down to thirty-nine compared to fifty-two over the same period in 2007. Numbers do fluctuate from year to year but it will be important for the Society to continue this type of monitoring so that we can identify any negative trend in numbers and take action to improve management of the reserve if it appears likely that decline in numbers is related to changes in habitat quality. Capture totals (newly-ringed and new-for-year birds) for this and the previous report period are shown in Table 1: this covers all ringing activities in Gosforth Park and includes tit species ringed by Dr Tom Smulders in the previous report period as part of his study on food hoarding behaviour.

Table 1 Captures (new birds and new-for-year retraps) at Gosforth Park in the last two 'Annual Reports'.

Species	2006-2007	2007-2008	Species	2006-2007	2007-2008
Mallard		1	Garden Warbler	4	6
Moorhen		1	Blackcap	52	60
Common Tern	30	1	Chiffchaff	69	45
Woodpigeon		1	Willow Warbler	122	49
Tawny Owl		1	Goldcrest		1
Kingfisher		3	Long-tailed Tit	32	55
G S Woodpecker	4	2	Coal Tit	24	1
Swallow	4	4	Blue Tit	99	47
House Martin		2	Great Tit	111	30
Tree Pipit	1		Treecreeper	2	
Wren	47	51	Jay	3	
Duncock	20	17	Magpie	1	
Robin	18	18	Starling	2	
Blackbird	14	12	Chaffinch	1	
Song Thrush	4		Greenfinch	10	8
Grasshopper Warbler		1	Goldfinch	6	21
Sedge Warbler	88	68	Linnet	1	
Reed Warbler	119	84	Bullfinch	4	8
Lesser Whitethroat	2		Reed Bunting	36	34
Whitethroat	8	10			
Total				938	642

Seabird ringing has undergone some changes this year. As an experiment, and partly because of the need for a new boat trailer, the team has not used the Northumbrian Water boat to get out to the islands. Instead, Billy Shiel's *Glad Tidings* boat ferried the team out to Inner Farne on several occasions and the Ringing Team leader stayed over on Brownsman to do the seabirds on the outer island with Kieran Alexander, the Brownsman Head Warden, who holds a restricted ringing permit. Visits to Coquet Island have been with Paul Morrison on the RSPB boat. Overall, the same pattern and level of seabird ringing activity has been maintained as in previous years, with continuing emphasis on capture and biometrics of Arctic Tern *Sterna paradisaea* adults and chicks on the Farnes and Coquet Island and on the biometrics of Puffin and Kittiwake *Rissa tridactyla* adults and chicks. However, with the encouragement of the RSPB, the team has now extended the seabird biometric studies on chicks and adults of Puffins and Kittiwakes to Coquet Island; this will facilitate comparisons of seabird breeding biology between the two island groups. Other seabirds ringed were Eiders *Somateria mollissima* and Shags *Phalacrocorax aristotelis*, ringed as part of 'Retrapping Adults for Survival (RAS)' projects, Black-headed Gull *Larus ridibundus* chicks on the RSPB's Coquet Island monitoring plots, Sandwich Tern *Sterna sandvicensis* chicks and Fulmar chicks (Coquet Island). The seabird breeding season as a whole has been mixed: Arctic Terns have had a hard time, especially on Coquet Island, with poor food availability leaving the chicks about 20g lighter than normal and leading to high mortality. Conversely, Puffin chicks and adults seem to have been in relatively good condition. While the same was true of Kittiwake chicks, most broods seemed to consist of a single chick so the overall productivity will be down. These results emphasize the value in detailed biometric studies carried out as part of the ringing operations. In this year's Annual Report, ringing totals for seabirds are not included as these have not been completely assembled and audited.

Coastal migration ringing at Newton Pool in autumn 2007 yielded similar ringing totals to the previous year (441 compared with 438). There were some changes in the species mix however, with many fewer pipits, wagtails, Starlings *Sturnus vulgaris* and House Sparrows *Passer domesticus*, and more Blackbirds *Turdus merula* (Table 2). The reduction in those species was due to changes in ringing behaviour: the team did not operate nets on the beach in 2007 as a result of the loss of the hut used as a ringing base, which meant that the beach nets could not be closely monitored to guard nets from the public and caught birds from uncontrolled dogs.

These reductions were compensated for by a large increase in the number of Blackbirds ringed, from seventeen in autumn 2006 to 102 in autumn 2007 – these were presumably migrant birds just in from the continent or from further north. The range of warbler species ringed was much smaller

than in the previous autumn, but reflects year to year variation in the coincidence between ringing visits and weather-driven migration movements.

Photograph by C Redfern

Redwing at Low Newton



Table 2 Ringing totals at Low Newton in autumn 2004 and autumn 2005.

Species	2006	2007	Species	2006	2007
Sparrowhawk		1	Blackcap	8	3
Redshank	1		Yellow-browed Warbler	1	
Turnstone	1		Chiffchaff	14	8
G S Woodpecker	2	2	Willow Warbler	2	9
Swallow	1		Goldcrest	6	7
Meadow Pipit	39	1	Long-tailed Tit	28	
Rock Pipit	19		Willow Tit		1
Grey Wagtail	2		Coal Tit	1	
Pied Wagtail	11	1	Blue Tit	30	16
Wren	38	65	Great Tit	7	7
Dunnock	22	31	Rook	1	
Robin	28	37	Starling	10	1
Redstart	1		House Sparrow	18	1
Stonechat	9	5	Chaffinch	8	4
Blackbird	17	102	Brambling		1
Song Thrush	5	12	Greenfinch	4	2
Redwing	9	9	Goldfinch	6	16
Sedge Warbler	4	23	Siskin		2
Reed Warbler	3		Linnet	7	1
Whitethroat	4		Yellowhammer	1	6
Garden Warbler	1		Reed Bunting	69	67
Total			438	441	

The Society is extremely grateful to many people for their help with the ringing studies. Billy and William Shiel have been very supportive and the Society thanks them and their crew for helping the team to get out to the Farne Island and back. The Society is also grateful to Paul Morrison and Zoe Tapping, Coquet Island Wardens, for their hospitality and transport. As always, John Walton and David Steel of the National Trust have been a particular strength, and the work on the Farnes Islands would not be possible without their enthusiastic support and encouragement. Like last year, Laura Morris and Kieran Alexander have helped tremendously by ringing Arctic Tern chicks and other seabirds on Coquet Island and the Farnes. The Society is also grateful to Michael Freeman, Chuck Cuthbert and Kevin Redgrave, National Trust wardens based at Low Newton, for their support and encouragement of the Society's coastal migration project ringing at Newton Pool. The Ringing Team put a tremendous amount of effort into the Society's ringing projects and the Society is very grateful for their hard work – congratulations to Chris Wright, who was awarded his C permit this year; this allows him to ring without direct supervision from more-experienced ringers and is an intermediate stage towards being a fully-fledged and independent ringer/A-permit holder.

Coastal Research

Studies to monitor the foraging locations of terns and other seabirds around the Farnes and Coquet Island in collaboration with Dr Richard Bevan and Dr Judy Foster-Smith from Newcastle University continued this year. Mike Coleman, an MSc student from Newcastle University, and Jamie Robinson, a volunteer graduate, collected rangefinder data on foraging locations and data on nest provisioning by terns, Puffins and Kittiwakes. Mike also continued the project to investigate the consequences of disturbance for Arctic Tern incubation behaviour. This project is beginning to yield important insights into the effects of human disturbance and, together with anecdotal evidence from the Wardens over many years, the data suggest that regulated human 'disturbance' may be beneficial for the birds in keeping predators away and improving productivity as a result. Laura Morris returned for a third season on Coquet Island to carry out an MPhil project, and was able to ring tern chicks to record mortality levels, recording chick feeding frequency and meal sizes, and estimate tern foraging locations using rangefinders and compass binoculars. The Society is very grateful for everybody's efforts on behalf of the Society and the Farne Islands Marine Research Group.

COQUET ISLAND ADVISORY COMMITTEE

The committee met twice during the year, on 26 March and 16 July, and the Society has two representatives, Dr Chris Redfern and David Noble-Rollin. The committee's role is to advise the RSPB on management issues and to help formulate plans to deal with the very complex nature of the seabird colony. Coquet Island has a number of important and endangered species but by far the highest priority is the colony of Roseate Terns. The numbers of Roseates were down for the second year running from 75 in 2007 to 70 pairs this year. This was in line with the other species of terns on Coquet which were all down in numbers, Common Tern to 1,022 (1,228), Arctic Tern 983 (1,247) and Sandwich Tern 841 (1,223). The reason for this general reduction in tern numbers is not very clear; there are a number of possibilities, the most likely being the reduction in available surface-living prey for the birds. In recent years we have seen Sand eels less frequently brought in to feed the young and this unavailability may discourage adults from settling in an area when they first arrive in the spring. We know from ringing recoveries that all the tern species have a number of widely separated colonies that they can go to, from Ireland to the other side of the North Sea. The counts of birds on the Farnes, Long Nanny and Coquet often indicate local shifts in numbers, with one colony gaining and another being reduced in numbers of pairs. This year all our local colonies are down, suggesting a more serious problem.

The wet summer has also brought its problems, with much greater and more dense growth of the vegetation on the island. This affects the survival rates of the young birds who can become wet and cold in the long grass. On a happier note Eider Ducks, Kittiwakes and Puffins have increased their numbers.

LINDISFARNE NATIONAL NATURE RESERVE

Lindisfarne Joint Advisory Committee and the Wildfowl Panel

These two committees meet twice a year to discuss the matters that could affect the nature reserve. They advise Natural England on possible methods of reducing threats to the site and its internationally important wildlife. The Lindisfarne Joint Advisory Committee has at present two Society representatives, Graham Bell and David Noble-Rollin (as Chairman of the Wildfowl Panel). As well as reports on the birds the Advisory Panel looks at any development that may impact on the site. During this year the main discussions were centred on the development of the barn at Beal Farm as a visitor centre and café. This was viewed favourably as an opportunity to publicise the work of the Nature Reserve and its importance to the area. It also has the advantage that it provides facilities when the tide makes it impossible to visit the island. The Centre was opened by the spring of 2008 and the committee held its June meeting in the meeting room. The pressure of visitors to Holy Island and its potential damaging effects is always a major topic. The island's inhabitants and the Northumberland tourist industry are represented on the committee and this helps to give Natural England a balanced approach to the management of the reserve.

The remit of the Wildfowl Panel is to oversee the management of wildfowling in the Nature Reserve. At present the Chair is with the Natural History Society representative. The committee has a very practical approach with representatives of the British Association for Conservation and Shooting and local shooting associations, a representative from the BTO, the Wildfowl warden, the Natural England reserve staff and representatives from their regional office. All members of the panel are fully involved in decision making on the conduct of the sport on the mudflats. They also organise the counts of wildfowl, and the other nationally important species which winter on the reserve, and are at present collecting samples to monitor the health of the waterfowl population for signs of avian flu and send these to Department for Environment, Food and Rural Affairs.

NEWCASTLE AND NORTH TYNESIDE BIODIVERSITY ACTION PLAN'S (BAP) STEERING GROUP

The Society was one of the stake holders in the Biodiversity Action Plan for Newcastle and North Tyneside. Part of the purpose of the BAP was to look at ways of increasing the number of species that inhabit the area and to safeguard those that are already established. Each species and habitat type has a monitoring element to the plan and a target to reach by a certain date. The steering group was formed to review the BAP constantly and to assess the success or failure of the Councils to meet their conservation obligations. The steering group met twice during the year and the Ecology Officer for Newcastle and the BAP Officer for North Tyneside outlined the present situation and the initiatives that they were working on to meet the targets. The Society has a major role to play with the management of the Gosforth Park nature reserve as one of the main wildlife reservoirs of species in the area. One of the Habitat Action Plans was for a large increase in *Phragmites* reed. This target has been achieved by the Society in our reserve with the financial help of Natural England. Also the steering group helped to fund and plan the 'Red and Alive' campaign for the Red Squirrels in the reserve.

OBITUARIES

Dr Kenneth Arthur Day (1935-2008)

Ken Day, who died in June this year, was an eminent psychiatrist, known nationally and internationally for his work on the treatment of the mentally impaired. During his time at Northgate Hospital, Morpeth, he wrote or contributed to numerous books and papers. The Kenneth Day unit at the hospital, for offenders with learning difficulties, was opened in 1996, and named in his honour. He was a Churchill Fellow and was made a Freeman of the City of London for his work. Because of his ability and wide experience, he was a valued member of mental health tribunals almost up to his death. As well as this, he was a considerable sportsman throughout most of his life, playing cricket, tennis and badminton. On retirement he took up cycling and golf.



Ken was also a very longstanding member of the Society, and members attending the ornithological field trips to the Farnes and Bass Rock in the 1970s and 80s will no doubt remember his happy presence and enthusiasm with the camera. Photography was a passion and in 1989 he won the Animal Portrait Category of the Wildlife Photographer of the Year awards, for a photograph of a Farne Islands Puffin with Sand eels. He travelled widely in pursuit of animals and birds to photograph, and in February 2003 gave an excellent talk to Society members on his visits to Kenya and Tanzania, illustrated, as one might expect, with his superb photographs.

In addition to his photographic skills, Ken was an accomplished artist, working in both watercolour and oils. A selection of his work showing Christ on the cross was shown in Holy Saviour's church Tynemouth at Easter this year, no mean achievement for an atheist! More recently he had been working on linoprints, again to his usual high standard, with some of his work being exhibited in London.

Although I first knew Ken from the Society outings it was on a father and son camp (when it never stopped raining) that I got to know him better. It transpired that he, like me, had always wanted to go to Iceland. And so, in the next year, 1980, we did. We took with us Michael Riley who was for a period warden of our Gosforth Park reserve, and who sadly passed away last year. As a trio we spanned the whole range of approaches to photography, Ken a perfectionist, enthusiastic and precise in his work, I keen and eager, and Michael who would take his photographs from the car, sometimes even through the windscreen!

Subsequently I visited the Galapagos with Ken in 1987, where we were both entranced by the beauty and the tameness of the wildlife. As ever, he was a friendly, helpful (especially when there were any medical problems!) and supportive companion.

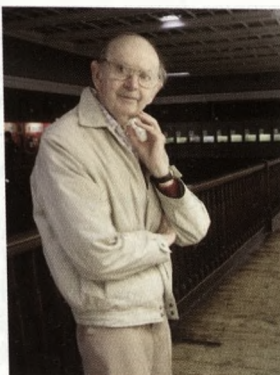
Perhaps, however, apart from his keen and questioning mind, the main attribute I will remember him for was his positive attitude to life. Even when, at the beginning of this year, he was told he had only months to live, he was planning a host of things to do. Only a few days before he died, he cycled from his home in Tynemouth to St Mary's Island and back.

We could all learn, and many did, from Ken's approach to life. He was a most unusual and talented man and his wife Ruth, his family and his many friends will miss him sorely.

Ian Moorhouse

Dr Denys B Smith (1929-2007)

Denys Barker Smith was born on 9th April, 1929, in Wybunbury, Cheshire, the son of James Ramsay Smith, the local village headmaster, and Ida Mary Smith, also a teacher. He attended his father's school from 1934-1940, and from 1940-1947 was a pupil at Nantwich and Acton Grammar School, Cheshire. There he excelled in geography and geology, inspired by his teacher, Mr Gowdridge, who encouraged his interest in maps, landscape and topography. These interests led Denys to study geology at the University of Birmingham, from where he graduated with First Class Honours in 1950. University was followed by National Service (1951-1953), during which, as a captain in the Royal Engineers, he was responsible for compiling mobility maps. He remained on the reserve of Scientific Officers until 1964. In 1953, he joined the Geological Survey of Great Britain, being appointed as Scientific Officer and based in the Newcastle Office. Denys transferred to the Leeds Office of the Geological Survey in 1961, and remained there until 1976.



During his early career, Denys was engaged primarily on the field survey of eastern Co Durham, embracing the industrial areas of lower Tyneside, Wearside and Teeside and the intervening coalfield areas, working mainly on the Permian 'Magnesian Limestone' on the Sunderland and Durham geological map sheets. In 1958, he published 'Some Observations on the Magnesian Limestone reefs of north-eastern Durham' in the *Bulletin of the Geological Survey of Great Britain*, the first of over seventy papers published throughout his scientific career. He was promoted to Principal Geologist in 1962, steadily increasing his national and international reputation as an expert on the Permian rocks of North East England and maintaining a steady flow of papers on the subject. In 1963, he completed the survey of the 'Magnesian Limestone' on the Stockton 1:50K Sheet, and in 1965 the 1:50K Durham Sheet. This work culminated in the publication, with Eddie Francis in 1967, of the classic Memoir *Geology of the Country between Durham and West Hartlepool*, an important contribution that changed our thinking and understanding of the Permian strata. During the same period, he also published in the *Journal of the Geological Society* and in the *Proceedings of the Yorkshire Geological Society*, including in the latter a paper on the Hampole Beds as a significant marker in the Lower Magnesian Limestone.

Denys' expertise on the Permian strata of North East England led, in 1970, to a secondment to the New Mexico Bureau of Mines and Mineral Resources, to study the Permian carbonates of the Guadalupe Mountains in New Mexico and West Texas, and in 1974 to the award of a DSc from the University of Birmingham in recognition of his international reputation on the Permian System. In 1975 he was appointed District Geologist (Senior Principal Scientific Officer) for South Wales and the West Midlands, moving to Uxbridge, Middlesex. Much of his published work during this period was concerned with the stratigraphy, correlation, nomenclature and palaeogeography of the Permian rocks in the UK and Europe, and with the Permian Capitan Escarpment in New Mexico and Texas. The Sunderland 1:50k geological map sheet, substantially the result of Denys' work over the previous twenty years, was published in 1978, and he researched and published on the origin of specific features, including submarine slumping and sliding in the Lower Magnesian Limestone (Raisby Formation), the dissolution collapse brecciation seen in the coastal sections between Sunderland and South Shields (formerly attributed to a tectonic origin), and the Zechstein marine transgression. He wrote the chapter on the Permo-Triassic for the *Geology of Durham County* (a special publication of the Society) and considered the origins and sedimentology of the extensive evaporite

cycles, making use of the data then becoming available from onshore and offshore boreholes drilled during exploration for coal, hydrocarbons and salts. He was responsible for the nomination and protection of countless important geological sites. His passion for conserving the UK's geological heritage led him to become a key contributor to the UK's first regional geological conservation strategy, published by Durham County Council in 1993.

Denys remained scientifically active in retirement. In the 1980s, he contributed to Robson's *Geology of North East England*, published by the Society, and worked on the evolution of the English Zechstein Basin, the Zechstein Reef and Patch Reef facies, the Trow Point Bed (a deposit of Upper Permian marine oncoids, peloids and columnar stromatolites), and on the role of evaporites in hydrocarbon exploration. In 1986 he published, with others, a revised nomenclature for the Upper Permian strata in England as a Geological Society of London Special Publication, and his published work during this period also included an article on the Quaternary geology of the Sunderland District. In the 1990s, the age of the Easington Raised Beach caught his attention, and he contributed to the palaeogeographical atlas of the British Isles, published by the Geological Society of London. With work on alate halites, bromine content of cycle 3 salts in Teeside, pre-Yellow Sands Formation age playa deposits and the deformation of the late Permian Boulby halite, his publications maintained their diversity. Two landmark publications appeared in 1994-1995: the BGS Memoir on the *Geology of the Country around Sunderland*, the result of a lifetime's work on the Permian of the district, and the publication on the Marine Permian of England in the Geological Conservation Review Series, a masterpiece of precision in locality description and explanation that will be used as a principal field guide for decades to come. His contributions continued into the 21st century, with the co-authored Permian chapter of the *Geology of England and Wales* (2nd edition), published in 2006.

Denys was an active member of numerous societies and organisations throughout his career. He played a significant role in the genesis and publication (1974) of the Yorkshire Geological Society's book, *The Geology and Mineral Resources of Yorkshire*, to which he also contributed a chapter summarizing much of his and others' work on the Permian rocks of Yorkshire. He was also a member of the Society, DWT and The Geologists' Association. He was a great supporter of museums and of educating young people in the delights of geology, tutoring many PhD students and young geologists. He was a keen photographer, particularly of landscapes and geology. His own 35mm geological slide collection, which he lodged with the Hancock Museum, is a model of painstaking documentation.

Denys was undoubtedly a perfectionist. Whilst scrupulously professional, ambitious and thorough, he was also self critical. There are few who can spend two hours talking about one core sample, but Denys could have written a treatise on each. His cellar hid geological secrets that only the privileged were permitted to see. In a particularly poignant moment, Denys once took me there and handed me a complete set of his papers, which he had sorted prior to my visit. He said that Charles Taylor Trechmann had once done this for him, and now he was doing it to for me.

Denys died on 11 July 2007, in Knaresborough, Yorkshire, aged seventy-eight years, and was buried at Stonefall Cemetery, Harrogate.

Denys' professional career spanned over half a century. Geology has lost a great figure and prolific contributor to our understanding of this wonderful science, and all that knew him or his work cannot be unaffected by this loss. He will be sadly missed.

Steve McLean

FINANCIAL STATEMENTS

31 JULY 2008

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
REPORT OF THE TRUSTEES FOR THE YEAR ENDED 31 JULY 2008

CHARITY NUMBER 526770

During the year, income exceeded expenditure by £775, compared to last year's surplus of £15,602. This surplus was again occasioned by contributions from the Dickinson family to the Dickinson Memorial Trust of £17,455 (including Gift Aid), bringing the total endowment to £50,019 at the year end. The Fund is now earning a worthwhile annual sum, sufficient to support small, but important, projects. Excluding this and other Restricted income and expenditure, Unrestricted funds suffered a deficit of £16,291, slightly better than the original forecast of £18,000 for the year.

The Society's investments, managed by Brewin Dolphin Securities, produced a net loss of £100,247 (both realised and unrealised) as a result of the turmoil in the financial markets. The overall value of the portfolio stood at £581,299 at the year end.

Reference and Administrative Information

These details are disclosed on page 4 of the Annual Report.

Objectives and Activities

These are detailed on page 5 of the Annual Report.

Structure Governance and Management

This is described in full on page 6 and 7 of the Annual Report.

Achievements and Performance

The detailed report of the Society's activities during the year appears on pages 5 to 37 of the Annual Report.

Risk Management

The trustees have assessed the major risks to which the charity is exposed, in particular those relating to the operations and finances of the charity, and are satisfied that systems are in place to mitigate exposure to the major risks.

Reserves Policy

It is the policy of the Society to maintain unrestricted funds, which are the free reserves of the charity, at a level which equates to approximately six months of unrestricted expenditure. This provides sufficient funds to cover management, administration and support costs and to ensure all ongoing projects can continue.

Investment Policy

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

Financial Review	2008	2007
Net Incoming/(Outgoing) Resources	<u>£775</u>	<u>£15,602</u>

Trustees' Responsibilities in relation to the Financial Statements

The law applicable to charities in England and Wales requires the trustees to prepare accounts 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 accounts 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 accounts; and

prepare the accounts 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 accounts comply with Accounting Standards and Statements of Recommended Practice and the regulations made under Section 44 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.

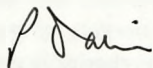
Independent Examiners

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

PETER DAVIS

Chairman and Trustee



9/02/09

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 JULY 2008

					2008	2007
	Notes	Endowment	Restricted	Unrestricted	Total	Total
		£	£	£	£	£
Income and expenditure						
Incoming resources						
Incoming resources from generated funds:						
Voluntary income	2	17,455	60,562	22,731	100,748	110,953
Activities for generating funds	3	-	219	9,678	9,897	11,006
Investment income	4	-	-	28,370	28,370	25,543
Incoming resources from charitable activities:	5	-	-	1,763	1,763	3,588
Other incoming resources		-	-	547	547	3,640
Total incoming resources		17,455	60,781	63,089	141,325	154,730
Resources expended						
Charitable activities	7	-	61,170	72,956	134,126	133,627
Governance costs	8	-	-	6,424	6,424	5,501
Total resources expended		-	61,170	79,380	140,550	139,128
Net incoming/(outgoing) resources before other recognised gains and losses		17,455	(389)	(16,291)	775	15,602
Other recognised gains and losses						
Realised and unrealised (losses) and gains on investments assets		-	-	(100,247)	(100,247)	39,677
NET MOVEMENT IN FUNDS		17,455	(389)	(116,538)	(99,472)	55,279
Transfer between funds			1,126	(1,126)	-	-
Funds brought forward		32,564	2,059	720,243	754,866	699,587
FUNDS CARRIED FORWARD						
31 JULY 2008		50,019	2,796	602,579	655,394	754,866

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
BALANCE SHEET AS AT 31 JULY 2008

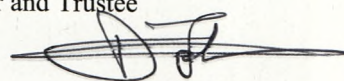
	Notes	2008 £	2007 £
FIXED ASSETS			
Tangible assets for use by the society	11	10,547	11,902
Investments	12	581,299	637,845
		<u>591,846</u>	<u>649,747</u>
CURRENT ASSETS			
Debtors	13	2,673	5,494
Cash at bank and in hand		65,893	104,030
		<u>68,566</u>	<u>109,524</u>
CREDITORS			
Amounts falling due within one year	14	5,018	4,405
NET CURRENT ASSETS		<u>63,548</u>	<u>105,119</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>655,394</u>	<u>754,866</u>
NET ASSETS		<u>655,394</u>	<u>754,866</u>
FUNDS			
General Fund		180,420	296,514
Expendable Endowments:			
T B Short Memorial Fund		230,993	230,993
Grace Hickling Memorial Fund		181,433	181,433
		<u>592,846</u>	<u>708,940</u>
Life Members' Fund		1,362	1,541
Designated Capital Funds	15	8,371	9,762
Total Unrestricted Funds		<u>602,579</u>	<u>720,243</u>
Restricted Income Funds	16	2,796	2,059
Restricted Endowment Fund	17	50,019	32,564
TOTAL FUNDS		<u>655,394</u>	<u>754,866</u>

Approved by Council on 10 October 2008
and signed on its behalf by:

PETER DAVIS – 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 2008

1. Accounting Policies

1.1 Basis of Accounting

The financial statements have been prepared under the historical cost convention, as modified by the inclusion of investments at their market value, and in accordance with the Statement of Recommended Practice: "Accounting and Reporting by Charities" (SORP 2005) issued in March 2005 and applicable accounting standards and the Charities Act 1993.

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 2008.

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 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 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. The charity has a single permanent endowment. The Dickinson Memorial Fund, which was set up from donations by living relatives, provides for the trustees to invest the capital in perpetuity, the income from which is free to be used at the discretion of the trustees.

1.8 Charitable activities

Costs of charitable activities includes grants made and an apportionment of overhead and support costs as shown in note 7.

1.9 Governance Costs

These comprise all costs involving the public accountability of the charity and its compliance with regulation and good practice. These costs include statutory audit and legal fees together with an apportionment of overheads and support costs, as shown in note 8.

2. Voluntary Income

	Endowment	Restricted	Unrestricted	2008 Total	2007 Total
	£	£	£	£	£
Subscriptions	-	-	20,506	20,506	20,865
Life Membership	-	-	-	-	400
Sir James Knott Trust (GNM)	-	50,000	-	50,000	50,000
Council Member (GNM)	-	-	-	-	100
Member (Archives)	-	2,148	-	2,148	-
National Heritage Lottery Fund (Archives)	-	-	-	-	2,285
Bewick Society	-	300	-	300	-
Dickinson Bursary	17,455	-	-	17,455	26,154
Storrow Scott Trust	-	-	1,000	1,000	-
Natural England (GPNR)	-	7,000	-	7,000	5,415
BBC for fish stocks (GPNR)	-	-	-	-	1,970
Northumbria Water for fish stocks (GPNR)	-	-	-	-	30
The Percy Hedley Foundation	-	-	-	-	500
Samares Investors Ltd	-	-	500	500	500
In memory of James Alder	-	-	-	-	1,663
Fishermans Company	-	1,100	-	1,100	-
General public donations	-	14	725	739	1,071
	17,455	60,562	22,731	100,748	110,953

3. Activities for Generating Funds

	Endowment	Restricted	Unrestricted	2008 Total	2007 Total
	£	£	£	£	£
Search fees	-	-	-	-	1,700
Binding proceeds	-	219	-	219	-
Lease payment	-	-	9,678	9,678	9,306
	-	219	9,678	9,897	11,006

4. Investment Income

	2008	2007
All investment income is unrestricted:	£	£
UK equity dividends	14,636	16,514
UK fixed interest	3,896	3,756
UK unit trusts	512	55
Non UK unit trust	1,636	1,246
Non UK fixed interest	2,137	638
Non UK equities	625	992
Bank interest	4,928	2,342
	<u>28,370</u>	<u>25,543</u>

5. Incoming resources from Charitable Activities

	Endowment	Restricted	Unrestricted	2008 Total	2007 Total
	£	£	£	£	£
Publications	-	-	135	135	307
Field Trips	-	-	254	254	345
Transactions	-	-	838	838	1,621
GPNR	-	-	229	229	-
Ringling Group	-	-	232	232	680
Ornithological Research	-	-	75	75	635
	-	-	<u>1,763</u>	<u>1,763</u>	<u>3,588</u>

6. Allocation of support costs and overheads

		Direct Charitable	Governance	2008 Total	2007 Total
		£	£	£	£
Unrestricted	Basis				
Depreciation	Staff time	5,173	290	5,463	2,686
General expenses	Staff time	504	28	532	385
Insurance	Staff time	2,102	118	2,220	2,231
Post and telephone	Staff time	2,584	145	2,729	3,399
Printing and stationery	Staff time	2,902	163	3,065	2,626
		<u>13,265</u>	<u>744</u>	<u>14,009</u>	<u>11,327</u>

7. Charitable Activities

			2008	2007
	Note	Restricted	Unrestricted	Total
		£	£	£
Salaries, pension contributions and national insurance		-	46,334	46,334
Archive costs		2,960	-	2,960
Advertising		-	423	423
Great North Museum project		50,000	100	50,100
Coastal Research		-	2,229	2,229
Gosforth Park Nature Reserve		7,682	1,351	9,033
Dickinson Memorial Fund		-	-	-
Farnes Sand eels research		-	-	-
Library costs		528	2,741	3,269
Transactions		-	4,690	4,690
Other publications		-	560	560
Field expenses		-	341	341
Lectures		-	922	922
Allocated support costs	6	-	13,265	13,265
		<u>61,170</u>	<u>72,956</u>	<u>134,126</u>
				<u>133,627</u>

8. Governance Costs

	2008	2007
Unrestricted	£	£
Salaries, pension contributions and national insurance	2,503	2,465
Printing and stationery	145	142
Postage and telephone	163	184
Insurance	118	120
General expenses	28	21
Depreciation	290	145
Accountancy and bookkeeping fees	2,277	1,574
Independent review	900	850
	<u>6,424</u>	<u>5,501</u>

9. Information regarding Employees and Trustees

	2008	2007
Average number of employees during the year	<u>2</u>	<u>3</u>
Total emoluments	<u>£48,837</u>	<u>£53,581</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 six (2007 – six) trustees in respect of reimbursement of expenses incurred on the charity's behalf totalling £2,007 (2007 – £2,756).

10. Coastal Research

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

11. Tangible Fixed Assets for use by the Society

	2008 £	2007 £
Hancock Museum	Not valued	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	7,718	7,640
Net book value	<u>1,481</u>	<u>1,559</u>
Hides, equipment, office furniture and computers		
Cost	24,048	50,575
Additions	4,108	1,230
Disposals	-	(27,757)
	<u>28,156</u>	<u>24,048</u>
Less Depreciation to date	19,090	13,705
Net book value	<u>9,066</u>	<u>10,343</u>
Total net book value	<u>10,547</u>	<u>11,902</u>

There were no capital commitments at 31 July 2008 (2007: £Nil).

12. Investments

	2008 £	2007 £
Market value at beginning of year	637,845	621,736
Additions	224,057	171,382
Disposal proceeds	(180,356)	(194,950)
Net investment gains	(100,247)	39,677
Market value at end of year	<u>581,299</u>	<u>637,845</u>

The investment portfolio includes the following holdings which represent more than 5% of the market value of the portfolio:

UK Government 4% Stock 5.80%

	2008 £	2007 £
Investments at market value comprised:		
Listed on a recognised stock exchange	<u>581,299</u>	<u>637,845</u>
	<u>581,299</u>	<u>637,845</u>
Historical cost at end of year	<u>577,360</u>	<u>514,805</u>

13. Debtors

	2008	2007
	£	£
Trade debtors	88	605
Prepayments and accrued income	2,585	4,889
	<u>2,673</u>	<u>5,494</u>

14. Creditors

	2008	2007
	£	£
Trade creditors	464	220
Deferred income	2,086	1,835
Accruals	2,468	2,350
	<u>5,018</u>	<u>4,405</u>

15. Designated Funds

Gosforth Park Nature Reserve Restoration Fund

	2008	2007
	£	£
Sir James and Lady Steel donation for lake rejuvenation	6,608	7,701
	<u>6,608</u>	<u>7,701</u>

	2007	New Designations	Utilised	Transfer	2008
	£	£	£	£	£
Gosforth Park Nature Reserve	7,701	279	(1,351)	(21)	6,608
Ornithological Research	154	423	(2,229)	1,652	-
Bewick Transactions fund	-	-	-	-	-
James Alder Memorial fund	1,763	-	-	-	1,763
Dickinson Memorial Fund income	144	1854	-	(1,998)	-
	<u>9,762</u>	<u>2,556</u>	<u>(3,580)</u>	<u>(367)</u>	<u>8,371</u>

16. Restricted Income Funds

	2007	New Designations £	Utilised £	Transfer £	2008 £
Archives	-	2,153	(2,960)	1,105	298
Library	-	528	(528)	-	-
Farnes Sandeels Research	59	1,100	-	-	1,159
Great North Museum Project	-	50,000	(50,000)	-	-
Natural England	-	7,000	(7,021)	21	-
GPNR Fish stocking	2,000	-	(661)	-	1,339
	<u>2,059</u>	<u>60,781</u>	<u>(61,170)</u>	<u>1,126</u>	<u>2,796</u>

During the year, further designations were made following the receipts of £2,153 in respect of Archives from a member including gift aid – £2,148, anonymous donations £5.

Receipts for £50,000 for the Great North Museum Project from Sir James Knott Trust – £50,000.

Money donated by Natural England for specific works at Gosforth Park Nature Reserve.

Donations of £528 towards the library costs were from the Bewick Society – £300, proceeds for binding – £219 and anonymous donations of £9.

Money donated by Fishermans Company was designated to Farnes Sandeels Research.

17. Endowment Funds

	2007 £	New Designations £	Utilised £	Transfer £	2008 £
Dickinson Memorial Fund – – capital	32,564	17,455	-	0	50,019
	<u>32,564</u>	<u>17,455</u>	<u>-</u>	<u>0</u>	<u>50,019</u>

The Permanent Endowment fund, the Dickinson Memorial Fund, was established this year by the trustees to create a permanent visible memorial to a great supporter of the society. It was decided that all past and future gifts from the relatives of Tony Dickinson and the applied gift aid should be added to this fund. The income generated is to be designated to the Dickinson Memorial Income fund and expenditure offset for projects agreed by and at the discretion of the trustees.

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 information of the charity for the year ended 31 July 2008, which are set out on pages 41 to 51.

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



9/2/09

Independent Examiner
Chartered Accountants

TAIT WALKER
Chartered Accountants



BIRDS ON THE FARNE ISLANDS
in 2008



Front Cover: *Shag courtship* by Bas Teunis

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BIRDS ON THE FARNE ISLANDS in 2008



NATURAL HISTORY SOCIETY
OF
NORTHUMBRIA



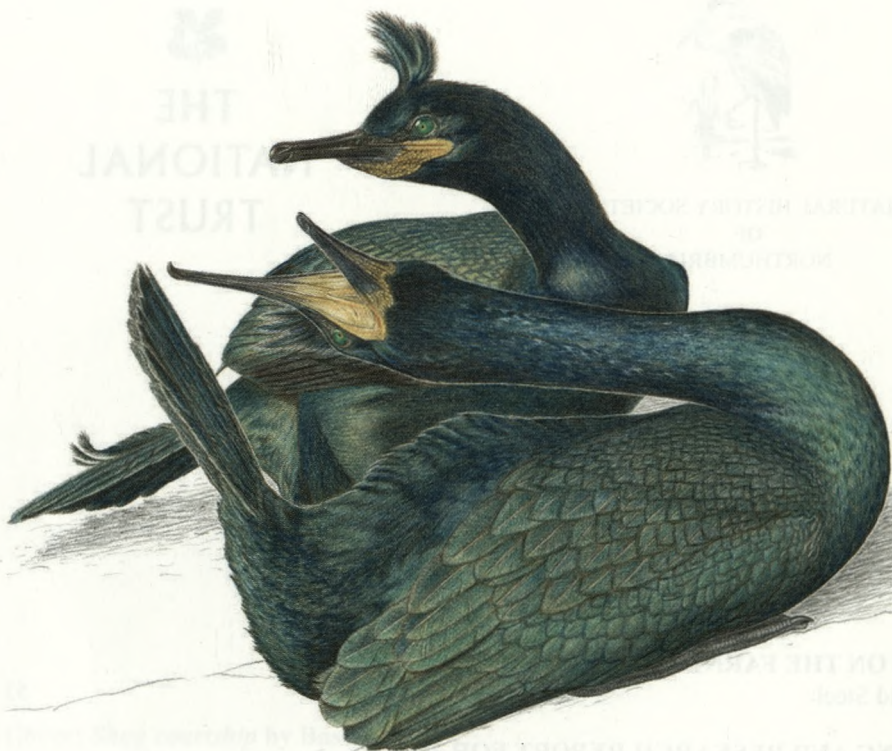
THE
NATIONAL
TRUST

edited by
Margaret Patterson

CONTENTS

BIRDS ON THE FARNE ISLANDS IN 2008 by David Steel	53
RINGING AND RESEARCH REPORT FOR 2008 by Chris Redfern	119
CETACEAN REPORT 2008 by Anthony Hurd	127
MAMMAL REPORT 2008 by David Steel	128
BREEDING BIRDS ON THE FARNE ISLANDS: CORMORANTS, SHEARWATERS AND PETRELS by Anne Wilson and David Noble-Rollin	131

'Birds on the Farne Islands in 2008' is a production by the National Trust and The Natural History Society of Northumbria. The papers are published as a part of the *Transactions* of the Society (**Volume 69 Parts 2 and 3**) and this off-print carries the original page numbers and the correct reference at the beginning of the paper. Part 3 is a historical account of specific breeding birds on the Farne Islands.



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Shag courtship

BIRDS ON THE FARNE ISLANDS IN 2008

compiled by

DAVID STEEL¹

National Trust Head Warden

ringing report by

CHRIS REDFERN²

cetacean report by

ANTHONY HURD³

Grey Seals and other mammals by

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INTRODUCTION

The systematic list follows the order of The British List, the official list of bird species recorded in Great Britain (British Ornithologists Union, 2009). However, in a number of instances the older more familiar English name has been retained particularly when the new name just has the additive 'Northern', 'Common' and 'Eurasian'. In future years the situation will be reviewed and updated as required.

The wardens sailed out on 27 March and manned the islands for a total of 255 days until eventually departing on Saturday 6 December. A total of 177 species was recorded, with twenty-three breeding species making up the estimated 78,140 breeding pairs of seabirds.

SEABIRD OVERVIEW 2008

The seabird breeding season was as eventful as ever, with highs, lows and major concerns amongst the twenty-three breeding species which nested on the islands (Table 1). The most notable and widely reported event of the year was the census of the islands' Puffin population. The full breeding census, the first in five years, produced worrying results, as the population dropped by 33% – mirroring declines in other North Sea colonies. Other members of the Auk family had mixed results as Guillemot breeding numbers declined, although the number of nesting Razorbills continued to increase steadily. Despite the mixed results in breeding numbers all three species of auk had excellent breeding seasons, with productivity remaining high, indicating very few problems with food supply or weather issues, both limiting factors to successful breeding in previous years.

It was another interesting season for the returning Shelduck pair as, despite their presence throughout the spring and summer, breeding was never confirmed. However the opposite was true for the Red-breasted Mergansers which nested for the third consecutive year. This rare British breeder was discovered incubating eight eggs in late June, and by late July confirmation that seven chicks had hatched and departed the nest site was excellent news. It was another good year for nesting Eiders as the population continued to increase with a rise of almost 10% from the previous season. However, despite excellent productivity, this may be masking problems elsewhere, especially chick survival once they depart the islands. As usual, a small number of Mallards nested, including a very late brood successfully fledged from Brownsman in mid-November.

Cormorants had another poor year as the population declined for the fourth consecutive year in the two main nesting colonies. However 2008 saw the first ever successful nesting on Big Harcar where seven pairs fledged eight young. In complete contrast its close relative the Shag had a good year regardless of a very marginal decline in the population – over 1,000 pairs still nested successfully. Productivity monitoring revealed a very good season, matching that at other seabird colonies, with their best results for several years. The Fulmar population showed a welcome increase of 5% and productivity indicated a reasonable season.

Ringed Plovers and Oystercatchers showed slight increases in the breeding population although both experienced various problems during the summer, with predation still a concern. The large breeding gulls showed very little change in numbers and both Lesser-Black-backed and Herring Gulls were the main predators of other nesting seabirds. The main Black-headed Gull colony on the islands showed a notable 34% increase from 2007. However one member of the gull family which is giving cause for concern is the Kittiwake. The species nested earlier than in recent years but the population continues to decline with a drop of over 8%. The season appeared to be going well with a plentiful food supply (with few problems from Snake Pipefish *Entelurus aequoreus*) but weather had a detrimental effect on the fledglings as large chicks were lost from nesting ledges on 20 July.

It was an intriguing season for Sandwich Terns as only one island was occupied, with no attempts on Brownsman for the first time in four years. The colony on Inner Farne was slow to increase and the breeding season brought two 'waves' of nesting birds, in mid-May and mid-June. As a direct result of their non-fussy diet requirements, the species had a successful year, more so than the other two breeding tern species, with plenty of young fledging. Common Terns nested in small numbers again and it appeared to be a disappointing breeding season. Arctic Terns showed very little change from the previous year, as the population maintains itself above 2,200 pairs, although breeding success was lower than recent years due to the problems of food supply and gull predation. There were no nesting attempts by Roseate Terns for the second consecutive year.

On the passerine front, both Rock Pipits and Pied Wagtails experienced reasonable seasons and populations of both showed a slight increase from the previous year. However the major news came in the form of a pair of Wrens on Inner Farne, the first confirmed breeding of the species on the Farnes. The pair successfully raised three young from a nest site within the boundary wall of the vegetable garden. However it was the possibility of potential breeding Black Redstarts which would have really quickened the pulse if the male had survived during the early spring.

Table 1 Farne Islands breeding birds 2008.

Breeding Birds	Population	+/- to 2007	Productivity	First Egg	First Fledgling
Shelduck	0	- 1	-	-	-
Mallard	11	- 2	-	31 Mar	mid-July
Eider	718	+ 63	2.99	27 April	22 May
Red-breasted Merganser	1	level	0.87	June	24 July
Fulmar	229	+ 10	0.49	21 May	4 Sept
Cormorant	145	- 13	-	April	n/a
Shag	1015	- 44	1.45	26 April	7 July
Oystercatcher	39	+ 4	0.42	8 May	2 July
Ringed Plover	9	+ 2	0.28	16 April	n/a
Kittiwake	4275	- 394	0.32	9 May	12 July
Black-headed Gull	369	+ 93	-	29 April	26 June
Lesser B-b Gull	509	+ 29	-	30 April	n/a
Herring Gull	530	- 36	-	1 May	n/a
Great B-b Gull	8	- 1	-	1 May	n/a
Sandwich Tern	1358	- 50	-	9 May	6 July
Common Tern	104	- 13	-	20 May	n/a
Arctic Tern	2239	- 17	0.48	14 May	27 June
Guillemot	43,864*	- 4,786	0.92	24 April	mid-June
Razorbill	326	+ 12	0.80	24 April	13 June
Puffin	36,835	-18,840	0.82	28 April	2 July
Rock Pipit	24	+ 2	-	-	4 June
Pied Wagtail	6	+ 1	-	13 May	5 June
Wren	1	+ 1	-	-	19 June

* Individuals

MIGRATION OVERVIEW 2008

A Farnes season never goes by without the discovery of some rare and exciting migrants and it was another excellent year, although no new species were added to the island list. A total of 177 species were recorded (equalling last seasons total) with the outer group outperforming the inner group 167 to 161 for the total number of species seen. The year's total was bolstered by one of the best spring 'falls' in fifteen years with a good flurry of scarce migrants including Subalpine Warbler and three Marsh Warblers. An August Woodlark was notable and the star of the autumn was undoubtedly the islands' sixth-ever Spotted Crake (Table 2).

As well as the outstanding highlights, it was an excellent year for raptors as unprecedented numbers of Honey Buzzard (4) and Osprey (4) were recorded with other notable sightings including Buzzard (2), Hen Harrier and Marsh Harrier, with Hobby recorded for the sixth occasion. As well as this impressive array, other rare and scarce migrants to the islands included Balearic Shearwater (1), Little Grebe (1), Quail (1), Wood Sandpiper (2), Little Stint (3), Grey Phalarope (2), Glaucous Gull (2), Mediterranean Gull (3), Long-eared Owl (6), Wryneck (5), Cuckoo (2), 'Blue-headed' Wagtail (2), Richard's Pipit (2), Waxwing (31+), Bluethroat (6), Barred Warbler (7), Icterine Warbler (4), Yellow-browed Warbler (10, including the first ever spring record), Wood Warbler (4), Red-breasted Flycatcher (3), Red-backed Shrike (8), Great Grey Shrike (1), Long-tailed Tit (19), Raven (2), Treecreeper (1), Common Rosefinch (4) and Common Redpoll (3).

Despite the good numbers of rarities and scarcities, the 'seawatching' season was disappointing due to the lack of suitable winds and there were no records of Great Crested Grebe, Long-tailed Skua (first blank year since 1997) or Black Tern. More difficult to explain was the complete absence of Yellowhammer records – the first blank year since 1989.

Table 2 Selected migrant dates 2008.

Migrant	First date recorded		Last date recorded		Mean arrival 1970-2007	Earliest recorded arrival date
	2008	2007	2008	2007		
Swift	27 Apr	21 Apr	16 Sept	20 Aug	24 May	16 Apr 1988
Sand Martin	22 Apr	25 Apr	18 Aug	8 Sept	24 Apr	30 Mar 1993
Swallow	18 Apr	9 Apr	1 Oct	1 Oct	21 Apr	31 Mar 1999
House Martin	27 Apr	6 May	14 Sept	23 Sept	6 May	12 Apr 2005
Tree Pipit	21 Apr	21 Apr	22 Sept	7 Aug	24 Apr	2 Apr 1972
Yellow Wagtail	23 Apr	-	15 Sept	-	27 Apr	14 Apr 1995
Redstart	6 May	21 Apr	19 May	5 Nov	24 Apr	4 Apr 1971
Whinchat	9 May	25 Apr	23 Sept	7 Oct	30 Apr	19 Apr 1987
Wheatear	31 Mar	11 Apr	18 Oct	18 Oct	30 Mar	19 Mar 2005
Grasshopper Warbler	21 Apr	3 May	15 Sept	12 May	30 Apr	17 Apr 2000
Sedge Warbler	6 May	12 May	12 Sept	7 Aug	6 May	13 Apr 1992
Reed Warbler	18 Aug	23 Apr	24 Sept	14 Oct	28 May	23 April 2007
Blackcap	12 Apr	22 Apr	12 Nov	20 Nov	22 Apr	31 Mar 1994
Garden Warbler	28 Apr	6 May	21 Sept	7 Oct	11 May	6 Apr 1982
Lesser Whitethroat	21 Apr	29 Apr	7 Oct	5 Oct	6 May	18 Apr 2005
Whitethroat	27 Apr	26 Apr	30 Sept	29 Sept	2 May	17 Apr 1981
Chiffchaff	1 Apr	25 Mar	16 Nov	26 Nov	4 Apr	21 Mar 2005
Willow Warbler	18 Apr	15 Apr	25 Sept	24 Oct	14 Apr	2 Apr 2000
Spotted Flycatcher	8 May	4 June	8 Oct	21 Sept	15 May	4 May 1984
Pied Flycatcher	31 Jul	14 May	24 Sept	9 Oct	7 May	23 Apr 1975

Acknowledgments

Thanks go to the 2008 warding team of Kieren Alexander, Richard Berridge, Simon Capell, Craig Edwards, Anthony Hurd, Matthew Lipton, Ian McNee, Adam Scott and David Steel who provided the bulk of records from the islands during the year.

Thanks also go to several observers for submitting records during the season to help complete this report, including Alex Ash, Steve Bloomfield, Eric Bramley, Mike Coleman, Neil Forbes, Bill Holland, David Parnaby, Susannah Parnaby, Bobby Pearson, Bas Teunis, Chris Redfern, William Shiel, John Walton and Anne Wilson amongst others. The report is also very grateful to Bas Teunis for another impressive front cover illustration and Alex Ash for a number of high quality photographs. Final thanks go to the 'unseen' hard work of John Walton, Stuart Will and David Noble-Rollin for advice and constructive criticism on the report contents and to editor Margaret Patterson.

The status of each species/sub-species is classified using the following categories, which were implemented from 1 December 2006:

Abundant	more than 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 20 in total
Scarce	11-20 occurrences in total
Rare	6-10 occurrences in total
Extremely rare	no more than 5 occurrences in total

SYSTEMATIC LIST

Mute Swan *Cygnus olor*

An uncommon visitor.

This Northumberland breeding resident remains uncommon on the islands with the majority of records referring to local movement through Inner Sound. This main flight path produced records on five dates with one bird north on 3 April, another north on 19 July and the largest group of the year, eight, recorded north on 2 September. Further records through Inner Sound included two south on 28 September and two north on 18 October. The only record away from the favoured area was one south through Staple Sound on 17 September.

Whooper Swan *C. cygnus*

An uncommon winter and passage visitor.

The autumn period is the best time to see this elegant swan as high arctic breeders move down the east coast heading to wintering grounds further south in Britain. As usual, small numbers were recorded in late October with five south through Inner Sound on 27, a total of seven south on 28 and an immature noted in the Kettle off Inner Farne before flying west towards the mainland on 29 October.

Pink-footed Goose *Anser brachyrhynchus*

A well represented passage and winter visitor.

There were no spring records this year (the first occasion since 2003) and there was a noticeable delay in their return back into Britain for the winter, with the majority of traditional localities not reporting movements until mid-September (later than usual). The first wave of birds appeared over the Farnes on 27 September with a total of 250 south-west involving four skeins. However nothing prepared anyone for the mass movement the following day, when 1,846 in forty-one skeins flew south-west over the islands throughout the day, with the heaviest movement logged from 9.00-11.00am. As well as 'fly-overs', occasional birds landed briefly before moving on west. This represented a new Farnes day record count, eclipsing the 1,074 in 2001. Thereafter smaller movements were logged with 179 on 29 September and 1-70 reported on a further seven dates until last seen on 23 November. The largest count during this period involved 379 south-west on 14 October.

Greylag Goose *A. anser*

An uncommon passage and winter visitor.

An improved year following last season's dismal showing of only two records as birds were recorded on nine dates with the majority seen in spring. It is suspected that local feral birds are involved in sightings during the spring period with individuals seen north through Inner Sound on 29 March and west on 7 April, with four north through Inner Sound on 14 April. Spring sightings continued with two through Inner Sound on 5 and 29 May whilst two were flushed off the Scarcars on 3 June. The final spring report concerned eleven north through Inner Sound on 4 June. The only autumn records involved five north over the inner group on 28 October and two which landed and remained on the West Wideopens for several hours on 24 November.

Greater Canada Goose *Branta canadensis*

An uncommon passage visitor.

The annual passage of birds to moulting grounds in the Beaully Firth in northern Scotland produces the majority of Farne records, with peak passage occurring in late May and early June. This year was no different as birds were recorded moving north on seven dates between 29 May and 18 June. Following the first report of fifty-three north in three skeins on 29 May, records involved 23-48 from 2-10 June with a peak of 116 north on 4 June. The final spring passage record was thirty-four north on 18 June. Records away from this peak period are scarce and therefore twenty-two south through Inner Sound on 24 August was more unusual for the recording area.

Barnacle Goose *B. leucopsis*

A well represented passage and winter visitor.

Late spring passage has become a feature of the Farnes in recent years as birds track east to breeding grounds in the far north to Svalbard and beyond. Spring passage was logged for the fifth consecutive year on the islands in mid-May with the first report concerning a skein of thirty-seven which landed on Knoxes Reef on 15 May before relocating later that day to Longstone and being joined by another forty-five. The following day witnessed a total of 131 east in two skeins over both the inner and outer group of islands, whilst seventeen east on 17 May brought an end to the spring reports. Autumn passage was below par with reports

stretching over nine dates between 28 September and 22 October. The first returnees involved twenty-seven west on 28 September with 17-59 logged thereafter with peak passage involving a modest 160 south on 1 October. The final sighting concerned two flushed from East Wideopens which flew east over the outer group before eventually heading north on 22 October.

Brent Goose 'light-bellied' *B. bernicla hrota*

A well represented passage visitor.

Another good year with reports from both the spring and autumn periods. The first of the year involved eight north through Inner Sound on 31 March followed by a single east on 4 April and another seen with Barnacle Geese on 15 May (only the sixth ever May record). The first autumn returnees appeared earlier than normal with seven north over Big Harcar on 29 August and four north on 30 August representing the earliest return since 1996. Thereafter September produced reports of 3-19 on eleven dates with a peak of thirty-nine north through Inner Sound on 13 September. Light passage continued during October with 1-8 on four dates including an individual on Knoxes Reef on 2 and the last record which concerned two north on 31 October.

Shelduck *Tadorna tadorna*

A well represented visitor and occasional breeder (Steel, 2004).

It was another interesting season for the returning pair with mystery and intrigue surrounding the nesting attempt as it was a case of did they or didn't they? The pair first appeared on the islands during the summer of 2002 and breeding was only truly confirmed when the nest site was discovered in 2003. Thereafter the pair has been strongly suspected of breeding, but evidence has been thin on the ground as the birds remained elusive. The pair first appeared on 27 March and thereafter the female was noted searching down numerous burrows on both the inner and outer group throughout April and May. During this period there were sporadic sightings of other birds on the islands including three pairs on 23 April and two pairs on 6 and 31 May. However it was never proven whether a breeding attempt had been made but, if so, they had not been successful. The pair was recorded throughout June but had departed the islands by 26 June. Away from the breeding attempts, passage birds were logged during the spring with ten north on 5 June and another ten which paused briefly in the Kettle before moving north on 15 June. Other mid-summer reports included six north on 22 June, three north on 23 June, eighteen south on 7 July and nine south on 1 August. Autumn passage was noted through Inner Sound with ten north on 12 September and the last record which involved three north on 31 October.

Wigeon *Anas penelope*

A common passage and winter visitor.

Surprisingly there were no spring records from the islands although this was compensated for by heavy passage throughout the autumn period as birds returned to favoured wintering grounds in the region. The first returning autumn birds were seen through Inner Sound with a single north on 3 August followed by sixteen north on 31 August. Records gradually increased as the autumn progressed with reports on eighteen September dates, thirteen October dates and sixteen November dates. Passage generally involved 1-90 with autumn peaks of 363 north on 22 September and 196 north on 8 October with a season's high of 402 north on 31 October. As well as passage birds, small numbers lingered on the islands with birds recorded on Brownsman pond although the favoured Knoxes Reef maintained birds throughout the autumn period with a peak of thirty-nine on 29 November.

Gadwall *A. strepera*

An uncommon visitor.

The species remains scarce on the islands with reports from only four of the previous ten years. However a drake flew north through Inner Sound on the morning of 5 May, representing the first record since November 2005.

Teal *A. crecca*

A common passage and winter visitor.

As usual, a very small number were recorded around the islands during spring with 1-2 on the inner group between 27 and 30 March. The only other spring reports concerned five on Brownsman pond on 8 April, three south through the Kettle on 2 May and a late record of a pair on Brownsman pond on 27 May. Following an absence of over a month, an unseasonable mid-summer record involved a female on Brownsman pond on 3 and 8 July. However it was not long before autumn birds were logged on passage with records of 1-30 on eight August, twenty-two September, fourteen October and nine November dates. Passage was generally quiet with a modest peak count of ninety-one north on 22 September. As the season progressed small numbers started to linger on Knoxes Reef and Staple Island with up to fifty-five on the inner group and thirty on the outer group.

Mallard *A. platyrhynchos*

A common winter and passage visitor and well represented breeder.

Small numbers were evident around the islands during the early spring period and pairs were seen prospecting on several islands. The first eggs were discovered on the early date of 31 March as the female utilised the same nest site as the previous season in the lighthouse compound on Inner Farne. The first chicks started appearing from 23 April and at least seventeen young fledged from five successful nesting attempts across the islands. A total of 11 (13) pairs nested as follows: Inner Farne 4 (5), West Wideopens 1 (3), Knoxes Reef 1 (0), Staple Island 3 (2), Brownsman 2 (2) and Big Harcacr 0 (1). An unusual late breeding record concerned a female on fourteen eggs on Brownsman in late August and all fourteen hatchlings were seen on the nearby pond on 1 September. Against all the odds, and with the disappearance of the adult female, five chicks managed successfully to raise themselves and were seen fledging the island in early November. However the five youngsters remained loyal to the outer group and were still present when the wardens departed in early December. The inner group attracts the largest concentrations during the latter part of the year and Knoxes Reef witnessed a large build-up during the autumn months. Numbers gradually increased with six noted on 11 July, increasing to thirty by early September, with forty-two counted on 12 October before peaking at 156 on 29 November.

Pintail *A. acuta*

An uncommon passage and winter visitor.

Following on from last season's dreadful showing (only one confirmed record), the islands produced two reports of this splendid looking member of the wildfowl family. A pair flew north through the Kettle off Inner Farne on 14 April and a female was on the sea around Longstone Main on 5 May.

Shoveler *A. clypeata*

A well represented passage and winter visitor.

A modest year for this passage visitor as a male discovered on pools on Staple Island on 28 April was the only spring record. Autumn passage was just as light as six flew high over Inner Farne on 11 September and four dropped onto Knoxes Reef with a large group of Mallards on 30 October. The only other report concerned seven north through Staple Sound (flocks of three and four) on 2 November.

Pochard *Aythya ferina*

An uncommon passage visitor.

The islands produce only one or two records of this diving duck annually and this year was no different. A female moved north with Wigeon through Staple Sound on 8 October and was followed later that day by a northern bound drake. The only other report concerned a single north with Common Scoters through Inner Sound on 31 October.

Tufted Duck *A. fuligula*

A well represented visitor.

A quiet season by recent standards with reports on only three dates involving records in April, May and July. The first sighting of the year concerned a pair seen near the bottom jetty of Inner Farne on 15 April (the female was noted sitting on the jetty on occasions) before they eventually departed north. Three drakes were observed flying north together through Staple Sound on 6 May and a pair was in the Kettle late that day. Other records included a drake north over Staple Island on 20 July and another drake moving north through Staple Sound on 25 November.

Scaup *A. marila*

An uncommon passage and winter visitor.

It was a good year for this northern breeder as the islands produced five records during autumn passage, with the first of the year involving a female north through Staple Sound on 7 September. Interestingly three birds (two drakes and a female) moved south through Staple Sound on 5 October and the same combination was seen heading west through Staple Sound on 14 October before eventually tracking north through Inner Sound. Further records included single drakes north through Inner Sound on 1 November and Staple Sound on 3 November.

Eider *Somateria mollissima*

An abundant breeding resident.

It was another encouraging season with the breeding population increasing by sixty-three pairs, the third consecutive year the population has shown an increase (Figure 1). As usual, small numbers were around the islands when the wardens arrived in late March with a noted increase on 7 April. Thereafter the first prospecting pair was recorded on Inner Farne on 12 April and courtship activity increased on a daily basis as spring progressed. The first eggs were discovered on Inner Farne on 27 April and on Brownsman the following day. Eleven islands were colonised with a total of 718 (655) pairs as follows: Inner Farne 446 (419), West Wideopens 21 (20), East Wideopens 6 (3), Knoxes Reef 5 (2), Staple Island 25 (20), Brownsman 198 (174), North Wamses 3 (3), South Wamses 6 (6), Big Harcar 3 (3), Northern Hares 0 (1), Longstone Main 2 (2) and Longstone End 3 (2). As usual, egg

predation by large gulls was noticeable but the season generally went by without any major incidents or problems. The first chicks hatched on Inner Farne on 22 May followed by Brownsman on 27 May and thereafter good numbers of young were seen going to sea, the majority heading west towards the mainland. Numbers declined throughout June as successful family broods moved off the islands with the last breeding female seen leaving on 11 July. It was a good year for monitoring as 338 nests produced 1,011 young resulting in productivity of 2.99, the highest return this decade. As usual small numbers lingered in late summer, including adult moulting males, and numbers gradually increased as the autumn progressed. Displaying birds were recorded again from mid-October, ready to start the cycle all over again, and worryingly a small number were caught up in an unidentified oil slick along the north-east coast in early October.

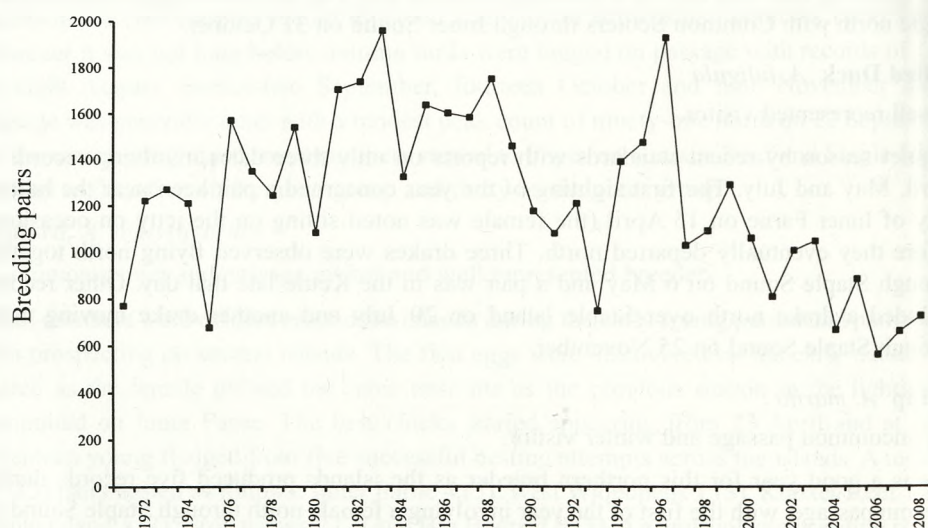


Figure 1 Breeding pairs of Eiders on the Farne Islands from 1971 to 2008.

Long-tailed Duck *Clangula hyemalis*

A well represented passage and winter visitor.

This spectacular sea duck winters in small numbers around the inner group, favouring the area behind the Bridges and the Wideopens. As usual, small numbers were evident when the wardens took up residence in late March with twelve present on 27 March. Thereafter the flock changed in size on a daily basis as birds moved north or arrived from the south, with a peak of twenty-six on 6 April. The flock declined with each day in early April and eleven on 9 April was the last spring report. During this period, as well as the wintering flock, passage was logged with fifteen north through Staple Sound on 7 April. As expected the first autumn returnees were seen in Farnes waters in early October when two landed on the sea behind Knoxes Reef on 3 October. The wintering flock re-established itself around the inner group once again, with four noted on 29 October, increasing to six on 3 November and peaking at twelve on 22 November. Late movement was logged on five November dates with a peak of ten north on 25 November.

Common Scoter *Melanitta nigra*

A common passage and winter visitor.

The species remains one of the most numerous members of the wildfowl family recorded on the Farnes (Table 3). This year birds were recorded on a total of eighty-one dates between late March and early December. The majority of records referred to small numbers moving through either Inner or Staple Sound with a spring peak of eighty on 3 April and 15 May. The summer months produced a reasonable number of sightings, especially through Inner Sound, although not in any large numbers as peak passage concerned thirty-two north on 6 June. As the summer progressed reports increased as birds moved north to moulting grounds off north-east Scotland with a peak of 105 north on 18 July. Thereafter passage intensified during the autumn months with noticeable peaks of 142 north on 30 August, a season's best of 344 north on 31 October, and 201 north on 1 November.

Table 3 Number of dates Common Scoters were recorded from the Farne Islands 2003-2008.

2003	2004	2005	2006	2007	2008
112	92	91	63	86	81

Velvet Scoter *M. fusca*

A well represented passage and winter visitor.

This classic sea duck continued its excellent form from last season (recorded on twenty-three dates in 2007) as the year produced reports on twenty-two dates from late August. The first bird of the year flew north through Inner Sound with its commoner relative on 30 August whilst another individual was noted through Staple Sound on 1 September. Thereafter reports increased with 1-2 seen on four September dates and eleven October dates. During this period passage involved 1-6 with peaks of nine north through Inner Sound on 19 and nineteen north on 31 October. Further records involved 1-3 on four November dates with a peak of eight north on 25 November which included seven through Inner Sound.

Goldeneye *Bucephala clangula*

A common passage and winter visitor.

This handsome northern breeder winters in small numbers around the inner group, mixing with other sea ducks behind West Wideopens, and these were still evident when the wardens arrived in late March. Small numbers were present daily with eight on 27 and 28 March increasing to twelve on 29 March. The flock remained into early April but then declined from six on 3 to four on 7, with the last individual lingering until 12 April. The first autumn returnee arrived late with two females discovered back on the wintering grounds around the inner group on 26 October. Thereafter, this favoured area behind the Bridges and West Wideopens attracted up to six throughout November and early December. It was a quiet autumn for passage with modest peaks of twenty-three north (sixteen through Inner Sound and seven through Staple Sound) on 31 October and seven north on 23 November.

Red-breasted Merganser *Mergus serrator*

A well represented passage and winter visitor and rare breeder (Steel, 2007).

It was another amazing year as the breeding pair returned to the islands and successfully raised young for the third consecutive year. They returned to Farnes waters in early May, circling the Kettle off Inner Farne before landing on 9 May and were recorded sporadically

throughout the rest of the month. Interestingly the male started to moult during this period whilst the female was seen on Inner Farne on two occasions. However behaviour started to get interesting during June as the female was noted on St Cuthbert's cove beach on 6 and the male was seen chasing female Eider ducks away. The female was seen a few days later disappearing into vegetation and over the following few weeks it was evident the bird was sitting. The species is renowned for late breeding and the nest site was discovered containing eight eggs in early July. The big news arrived on 24 July when the female successfully took seven chicks to sea and the success was celebrated amongst the wardens. The nest site was inspected and it was discovered that the final egg was infertile but regardless it had been an outstanding breeding success story. Passage was logged throughout the year especially through Inner Sound with two north on 31 March and two pairs north on 8 April, followed by a male north through Staple Sound on 21 April. The last spring report concerned an impressive thirteen north through Inner Sound on 4 June. Following a two months' absence, a pair flew north through Inner Sound on 19 August with further reports of 1-4 (with the majority through Inner Sound) noted on four September, four October and two November dates. The final record concerned a female north through Staple Sound on 25 November.

Goosander *M. merganser*

An uncommon passage visitor.

Records from the coastal zone around the islands continue to increase annually with regular reports throughout the year. The first record involved eight birds north through Inner Sound on 15 May and was followed by six north through the same area on 4 June. The first autumn passage birds were logged in mid-September with a drake through Inner Sound on 15 September followed by two north on 30 and 31 October.

Quail *Coturnix coturnix*

A scarce passage visitor.

This inconspicuous small game bird appeared on the Farnes for the seventeenth occasion and the first since an individual was noted on 30 July 2004. As is often the case, the bird was discovered by a warden who almost trod on it (whilst carrying out the Puffin census) on 13 May on Brownsman, but as usual it disappeared rather quickly and was not seen again. Since the first Farnes record in June 1964 the outer group has dominated sightings with eleven of the seventeen records to its name.

Red-throated Diver *Gavia stellata*

A common winter and passage visitor.

Well represented with birds logged on seventy-seven dates spanning ten months, which represents an average showing by Farnes standards (recorded between seventy-one and eighty dates annually over the last four years). As expected, when the wardens arrived in late March birds were evident around the islands in small numbers including five on 29 and 31 March with six present on 3 April. As spring progressed, the number of reports dwindled as birds moved north to breeding grounds and passage was logged on several dates with a noticeable peak of twenty north on 7 April. Gradually the species became scarce although summer plumaged individuals were recorded in late May with three north on 26 and singles on 29 and 31 May. More unusual was the appearance of three in Inner Sound on 5 June with two further mid-summer records of singles north through inner sound on 13 and 21 June.

Following two months absence, the first autumn returnee moved south on 14 August although they were not recorded again until early September. Following two summer-plumage adults south over Inner Farne on 1 September, the species became a regular feature around the islands. Generally small numbers were involved although peak southerly passage included fourteen on 12, eleven on 22 September and a season's best of twenty-two north on 25 November. As usual, up to five became resident around the islands for the winter, favouring Inner Sound during November.

Black-throated Diver *G. arctica*

An uncommon passage and winter visitor.

It was another interesting season for this uncommon winter visitor. The first sighting of the year was most unexpected when a stunning summer plumage adult flew north through Inner Sound on 22 May, representing the first island record from that particular month in nine years. As expected, the first autumn returnees started filtering through the islands in September with the month claiming records of singles off the south end of Brownsman on 7, another south over Longstone on 18 and south through Inner Sound on 22 September. Locally, there appeared to be a small influx along the Northumberland coast during late autumn and this was reflected on the islands with 1-2 seen on 5, 17 and 31 October and 1 November with a peak of four on 5 November which included two north and two on the sea in Inner Sound.

Great Northern Diver *G. immer*

A well represented winter and passage visitor.

This hulk of a diver is rarely recorded from the islands during the spring or summer months due to the late arrival of wardens in late March. However an immaculate summer plumage adult was noted north through Inner Sound on 5 June and was considered to be the same individual that had been seen on the sea off Low Newton just a few days earlier. This rare mid-summer report was the first in June from the islands since an individual was noted on 4 June 1993. More in common with the islands, the first autumn returnees started appearing from mid-October and the islands produced reports on twenty-four dates until the wardens departed in early December. The first autumn record concerned one south through Staple Sound on 12 October and was followed by another north through Inner Sound on 19 October. Interestingly a partial summer-plumage individual was located off Brownsman in Staple Sound and remained in the area from 20-31 October. The first noticeable passage of the season occurred in late October when two flew north on 30 followed by six north on 31 October. November continued where October had left off with singles lingering around the islands throughout the month and one utilised the Kettle area off Inner Farne on two dates. A second surge of passage birds occurred late in the month when eleven were noted moving north on 25 November including seven through Staple Sound. The final records involved one south on 29 November and another south on 31 December.

Little Grebe *Tachybaptus ruficollis*

A rare visitor.

This freshwater specialist, still a rare sight on the Farnes, was recorded for the second consecutive season when a bird remained all day in the Kettle off Inner Farne on 2 November. The bird favoured pools on the west side of Knoxes Reef and represents the ninth Farnes record (involving eleven birds) following sightings in 1956, 1965, 1980, 1984, 1985, 1999, 2002 and 2007.

Red-necked Grebe *Podiceps grisegena*

A well represented winter and passage visitor.

Well reported, especially during the autumn months, with small numbers wintering around the islands. A partial summer-plumage bird was noted in the favoured area of the Kettle off Inner Farne on 28 March. It lingered in the area until early April and was seen daily until last recorded on 8 April. The first autumn returnee was discovered on the early date of 5 August as one lifted off the sea in Inner Sound and flew south away from the islands. Thereafter small numbers were reported either moving north past the islands or on the sea fishing, with singles recorded on 15 September, 7, 13, 30 October and 1 November. The final records concerned one behind the Bridges on the inner group on 25 November and another off Brownsman north end on 29 November.

Fulmar *Fulmarus glacialis*

A common breeder, abundant on passage.

The Farnes were originally colonised in 1935 and the breeding population has increased year-on-year although was 'checked' in 2004 following high winter mortality. Since then the breeding population has bounced back and this year witnessed another positive step in the right direction. Small numbers were evident in late March and early April on the islands including the 'intermediate-phase' bird which was first noted on Inner Farne in 2003. Eventually, numbers started increasing from 10 April and all the traditional nesting sites were occupied. As usual, the breeding stock disappeared in early May for their annual 'honeymoon' and the first eggs were discovered the following week on 21 May. A total of 229 (219) pairs nested as follows: Inner Farne 21 (18), West Wideopens 14 (10), East Wideopens 8 (12), Knoxes Reef 21 (21), Staple Island 23 (36), Brownsman 71 (57), North Wamses 29 (28), South Wamses 26 (25), Big Harcar 11 (7) and Longstone End 5 (5). The breeding season was typically protracted with the first young discovered on 9 July and the first fledglings not taking wing until the first week of September. The continued closure of open access to Big Harcar resulted in a further increase in the population with eleven pairs producing five fledged chicks, whilst the season did not go by without a few noticeable events. Following on from last year's reports, at least one chick fell victim to a Peregrine on Brownsman although this was an isolated incident, whilst heavy rain and strong wind in early September resulted in the death of two almost fledged chicks at nest sites on the inner group. Interestingly a pair on Brownsman utilised the small doorless 'pump house' and raised the chick from the confines of this relatively safe and dry building. Monitoring revealed a reasonable season as eighty-four chicks fledged from 169 nests, an overall productivity of 0.50. As usual following the breeding season, the species became almost absent from Farnes waters throughout the autumn, although good numbers had returned in the final week of November.

The year produced a record of a 'blue phase Fulmar' as a bird moved north through Staple Sound on 1 November and was the first record since four seen in 2005.

Sooty Shearwater *Puffinus griseus*

A well represented to common passage visitor.

Recent years have seen some boom times with huge counts made from the Farnes including a new Northumberland record in 2005. However this year the lack of any suitable winds during late summer resulted in poor numbers being recorded from Farnes waters and the southern North Sea in general. The first bird of the year was seen from the south end of

Brownsman with a single north on 17 July. Further records followed with two north on 19 and 20 and four north on 21 July. Despite this encouraging start the islands went on to produce a disappointing 1-13 on thirteen dates between 7 August and 25 October. During this period the peak count of the year involved seventeen north on 7 September. The final record was of three north off the south end of Brownsman on 30 October.

Manx Shearwater *P. puffinus*

A common passage visitor.

This distinctive tube-nose is one of the commonest stiff-winged visitors to the islands although this year lower than usual numbers were recorded with reports received from seventy-three dates during the year (Table 4). Following singles north through Staple Sound on 7 and 15 April, spring passage remained light with 1-4 reported on eight May dates between 13 and 31 May. During this period passage peaked at nine north through Inner Sound on 26 May. Thereafter the typical mid-summer intake was noted around the islands, with small numbers of 1-32 recorded on an almost daily basis throughout June and July. Heavy passage was logged in mid-June as the islands claimed 429 north which included 257 through Staple Sound and 172 off the south end of Brownsman, continuing the following day with 203 north. Thereafter further large movements were logged on 21 July with 132 north including 111 off the south end of Brownsman. As the autumn progressed, the lack of suitable winds resulted in smaller numbers of 1-57 although peak counts included 150 south on 6 and 105 north on 8 September. Numbers dwindled in early October and the final records of the year included two north on 25 and 30, with a single north through Staple Sound on 31 October.

Table 4 Number of monthly records of Manx Shearwaters, Farne Islands 2007-2008.

	Apr	May	June	July	Aug	Sept	Oct	Nov	Total
2008	2	7	19	18	8	16	3	0	73
2007	1	17	18	21	16	20	3	2	98

Balearic Shearwater *P. mauretanicus*

An uncommon passage visitor.

The islands have produced annual records over the past sixteen years as following the breeding season this critically endangered Mediterranean seabird heads north to the Bay of Biscay to moult in late summer and small numbers penetrate the North Sea during this period. The only record involved a single south through Staple Sound on 22 September, which was a welcome bonus during a disappointing 'seawatching' year.

Storm Petrel *Hydrobates pelagicus*

An uncommon passage visitor.

This oceanic specialist has gone from a 'rare' visitor to an expected annual discovery on the Farnes in recent years as a total of 159 have been logged through Farnes waters since 2004, in complete contrast to the eight noted in twenty years between 1970 and 1990. The first bird of the year provided excellent views as it lingered for several hours feeding behind the Wideopens in Staple Sound on 12 June. Later that day twelve were logged north off the south end of Brownsman. The following day witnessed another (or possibly the same)

individual lingering behind the Wideopens in Staple Sound in mid-afternoon and was followed by three north off the south end of Brownsman on 21 July. The last record involved a late bird moving north through Staple Sound on 25 November during a northerly gale.

Gannet *Morus bassanus*

An abundant passage and non-breeding summer visitor.

This very abundant seabird is seen almost daily throughout the season as large numbers head on foraging trips from nearby breeding colonies in East Yorkshire and Lothian. Spring appears to bring peak numbers when adults return to their breeding grounds as 505 north in thirty minutes was eclipsed by 1,352 north in one hour on 7 April. Thereafter large numbers moved off the islands and although there were no documented counts, 'heavy passage' was noted on 14 and 28 April. Birds rarely land on the islands and everyone was amazed by the appearance of an adult on top of the Pele Tower on Inner Farne on 1 June. It remained on the roof top for five minutes whilst every nesting Arctic Tern in the area reacted as if the world's biggest raptor had just landed. Eventually it flew off north having rested in a very unusual locality! Another adult was seen sitting on East Wideopens in the second week of June and later the west face of Inner Farne, whilst one was on Staple Island but sadly was found dead a few days later. Late summer witnessed numerous fledged youngsters around the islands and passage included 553 north in thirty minutes on 5 October. Thereafter numbers dwindled as birds moved south to southern wintering grounds and the species became almost absent from early December.

Cormorant *Phalacrocorax carbo*

A common breeding resident.

This large fish-eater had a mixed season as the breeding population showed signs of further decline for the fourth consecutive year, although there was encouragement with the development of a small satellite colony away from the two main colonies. Regardless of the early spring weather, the species is always one of the first to settle and nest building activity was observed in late March at the two traditional nesting colonies. The first eggs were laid in mid-April but as usual, due to access difficulties and the nature of the species, the two colonies were not directly monitored. A total of 145 (158) pairs nested as follows: East Wideopens 84 (103), North Wamses 54 (55) and Big Harcar 7 (0). Another nesting attempt was made on Big Harcar on the outer group, the eighth occasion since the early 20th century following breeding attempts in 1960, 1968, 1981, 1992, 1997, 2004 and 2006. However this was the first occasion that birds had attempted to nest since the closure of the island to open access in early 2007 and the result was very evident as seven pairs fledged eight young, the first successful breeding on the island on record. The breeding season appeared to be average, with young fledging from the colonies from 23 June and, as usual, birds dispersed away from the breeding areas during the late summer and only small numbers remained to winter around the islands.

Shag *P. aristotelis*

An abundant breeding resident.

It was another good season for this breeding resident as good numbers nested and even better numbers fledged. However it was a noticeably delayed start to the season as the first nest building activity was not documented until the late date of 13 April. Thereafter activity intensified over the following few weeks with large nest structures noted in all the usual cliff

top areas. Due to the lack of winter storms, the amount of dead vegetation available to the birds was more abundant and therefore in some areas, nest structures were noticeably substantial. The first eggs were discovered on Inner Farne on 26 April and on Brownsman on 27 April. A total of 1,015 (1,059) pairs nested as follows: Megstone 27 (27), Inner Farne 303 (316), West Wideopens 62 (57), East Wideopens 127 (132), Skeney Scar 44 (47), Staple Island 145 (154), Brownsman 109 (116), North Wamses 40 (43), South Wamses 64 (59), Roddam and Green 17 (8), Big Harcar 54 (77) and Longstone End 23 (23). The breeding season was generally trouble-free although predation was again very evident in areas with relatively flat cliff tops where birds were easily accessible for the larger gulls, especially Herring Gulls. The main areas targeted were again the quarry area of Inner Farne and the central gully on Staple Island. Despite this, productivity was excellent with 287 monitored nests producing 417 fledged chicks, the best seasonal return for over a decade. Interesting points of note included the expansion of the small recently occupied colony on the 'cottage cliff' on Brownsman, with eleven pairs nesting, an increase of two from last year. Attempts were made again on the wreck of *Children's Friend* on West Wideopens whilst a bird originally from the Isle of May successfully nested on Brownsman. The first young started hatching from 30 May and thereafter large numbers hatched across the colonies in the first week of June. The first fledglings took to the wing from 7 July and as usual the breeding season was protracted with late young successfully fledging in early October from a small number of nests on Inner Farne, Staple Island and Brownsman. The majority of the Farnes population remained around the islands throughout the autumn, favouring Megstone amongst others, to loaf and roost on a daily basis.

Grey Heron *Ardea cinerea*

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

Well reported throughout the season although the species appeared scarce during the spring before becoming 'resident' on the favoured Knoxes Reef and Longstone complex. Records revealed sightings on fifty-seven dates on the inner group compared with thirty-two on the outer group. However the spring period was lean with records of 1-2 on three April dates, three May dates and three June dates. Thereafter birds became more frequent with 1-4 recorded, especially on the undisturbed Longstone complex and Knoxes Reef. Peak counts during the year included six on Longstone on 7 September and this was followed by an impressive fifteen which were recorded west over the islands on 15 September, including ten together through Staple Sound. The day count of fifteen became the second largest Farnes count, falling short of the nineteen recorded on, bizarrely, the same date in 2001.

Honey Buzzard *Pernis apivorus*

A rare visitor.

It was an outstanding year for this spectacular raptor with four records eclipsing all previous island records. An adult (probably female) was flushed off the north end of Brownsman on 6 July at 2.10pm and landed on nearby Staple Island for over two hours. Eventually the bird summoned up the strength to fly west, with large gulls in pursuit as it made its way over the inner group, before eventually moving through Inner Sound, over Bamburgh and away onto the mainland. However this was just the start of things to come, as a national east coast invasion involving up to 500 birds in mid-September brought no fewer than three, all dark-morph juveniles, to the islands. The first battled its way westwards from Staple Island on 14 September and dropped altitude as it approached Inner Farne. Amazingly it decided to land on the cemetery wall, with disbelieving observers only twenty metres away. After a three

minute pause, the bird took flight and eventually flew west directly over Inner Farne. More followed as another flew west in mid-afternoon over the inner group on 16 September whilst the third juvenile of the invasion followed the same flight pattern over Inner Farne just after midday on 17 September. Putting this truly spectacular event into context, these four records doubled the Farnes overall total, as only four previous individuals have been logged with two during the last invasion in September 2000, a juvenile in September 2002 and a male in July 2005. It was an impressive year for an impressive raptor.

Marsh Harrier *Circus aeruginosus*

A scarce visitor.

If medals were awarded for the greatest ever disturbance to a tern colony, then this bird would have been up there with the best. An adult female flew low over Inner Farne at 5.30am on 23 May, erupting every nesting tern on the island, before continuing west towards the mainland. Despite the best efforts of the finder, the early riser was the only observer of the Farnes sixteenth record and the first since a female/immature over the islands on 1 May 2005.

Hen Harrier *C. cyaneus*

A scarce visitor.

The small British population of this spectacular aerial predator is bolstered during the winter months by northern European individuals and these migrants make up the majority of the twelve previous Farnes records. The autumn months have claimed ten of the twelve Farnes records and this year a 'ringtail' was observed battling its way north through Inner Sound on 9 November, being pursued by two large gulls. This thirteenth record is the first since one flew west from Staple Island on 27 September 2005.

Sparrowhawk *Accipiter nisus*

An uncommon visitor.

Although the British population is relatively sedentary, it is augmented by migrants from northern Europe. It is from this source that the majority of Farne records relate and it proved to be a reasonable season for this *Accipiter*, compared with the disappointing three records from the previous year. As expected spring passage was light and two birds (male and female) were seen heading west over the outer and then inner group of islands on 24 April. The only other spring reports concerned singles high east over West Wideopens on 10 May and a female west over Inner Farne on 21 May. Autumn passage commenced with a lingering juvenile on Brownsman on 5-7 September which moved to Inner Farne on the latter date, before trapping itself in one of the lighthouse buildings until it eventually escaped and headed west. The following day an adult graced Brownsman, with other individuals seen on the outer group on 15 and 18 September. Further autumn records concerned singles west on 7 and 14 October with the last sighting of the year involving a female west over Brownsman and eventually the inner group on 30 October.

Buzzard *Buteo buteo*

A scarce visitor.

This large raptor breeds in small numbers in Northumberland although all records of birds over the islands are considered to be migratory birds from the near-continent. A single flew west over the outer group on 13 September before flying through the Kettle on the inner

group and continuing its journey west towards the mainland. It did not come as too much of a surprise in such a good raptor year that the islands claimed another record, when a second bird flew south through Inner Sound on 3 October. These represent the fourteenth and fifteenth Farnes records and the first since April 2005.

Osprey *Pandion haliaetus*

A scarce passage visitor.

As the British population increases, it may be reasonable to predict that the number of sightings on the islands will also increase. The Farnes boast nine previous records of this large elegant raptor following the first on 18 June 1978, with the most recent involving one through Inner Sound on 19 June 2003. However all that was forgotten as four different individuals were logged during the year. An adult was observed drifting north over the inner group on 24 April and a second wanderer followed the same flight path as it headed north being mobbed by large gulls on 18 May. From the previous Farnes records, autumn has only produced three sightings with returnees seen in 1989, 1991 and 1995 and therefore it was a surprise when one was seen heading east, then west over the inner group on 13 September. Eventually the outer group got in on the act when an individual flew west over Big Harcar on 15 September, before heading west over the north end of the inner group of islands and making landfall at Bamburgh. The two autumn birds were part of a larger raptor movement which brought an invasion of Honey Buzzards to the east coast.

Kestrel *Falco tinnunculus*

A well represented passage visitor. May have bred in 1916 and 1943 (March, 1916; Thorp, 1944).

This well known small hovering falcon is partially migratory within its range with birds moving from the near-continent during the autumn when the bulk of Farnes records are reported. As usual, spring passage was light with the only record involving a female which lingered on Brownsman from 12-15 May but was sadly picked up dead on nearby Staple Island on 19 May. The first autumn returnees started moving through the islands from early August with an immature over Inner Farne on 8 August. Thereafter records increased and a juvenile became resident on Inner Farne from 30 August-14 September and was seen successfully hunting migrants. Influxes during this period included up to four (not including the resident juvenile) on 7-15 September and sparring was witnessed between individuals. Following a confiding individual seen on both island groups on 18 September, there followed a five week gap before the next sightings as a male lingered from 21-23 October and another was seen on Inner Farne on 1 November. The final record concerned a young male which became resident on the islands from 7 November-2 December and was seen successfully hunting tired migrant birds throughout its stay, especially on Brownsman.

Merlin *F. columbarius*

A well represented passage and winter visitor.

This impressive winged-wizard breeds in the uplands of Northumberland and winters on the lowlands including the Farne Islands. When the wardens returned in late March it was evident that at least one female was resident as records were almost daily from 27 March-11 April. Thereafter sightings became more sporadic with further reports daily on 19-21 and the last on 24 April. There were no further sightings for the next three months until an immature appeared from 11 August which took a liking to the islands and remained until 20 August. As autumn progressed at least four birds were resident with almost daily sightings

from September to early December when the wardens left the islands. Interesting observations during this period included a 'double hunting team' against a pipit spp. on 5 October (the pipit escaped!), whilst an adult male (a real scarcity on the islands) was seen on several dates in late October and early November. An immature was chased by a Peregrine off Staple Island in late October and although the larger falcon was not attempting to capture it, its smaller cousin did not return in a hurry. Prey items during the year varied and included Turnstone, Pied Wagtail, Redwing, Wheatear, Starling and Brambling.

Hobby *F. subbuteo*

A rare visitor.

One of the outstanding highlights of the year involved the appearance of one of these majestic aerial hawkers during a mini-raptor invasion in mid-September. An adult was seen to land on rocks in Brownsman Gut on 14 September but disappeared round the south end of Staple Island. Thankfully it reappeared on the artificial tree on the south end of Brownsman that afternoon and showed well for twenty minutes. The species still remains a rare sight in the north-east of England and the islands boast five previous records, with individuals in May 1859, May 1998, September 2000, September 2001 and May 2002.

Peregrine *F. peregrinus*

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

This ultimate aerial predator reigned supreme throughout the spring and autumn as several birds took up residence on the islands. There appeared to be at least three different individuals throughout the spring with daily records from late March (when the wardens arrived) until early May on both island groups. As spring progressed, reports dwindled with a single over the inner group on 9, 14 and 23 May; however a male stooping over Inner Farne on 4 June was more unseasonable. As usual, following a two month gap, the first autumn returnee appeared on the islands with an immature west over the inner group on 2 August. August was generally quiet for sightings with reports on only a further four dates, including a juvenile at roost on the south rocks of Inner Farne on 27 August. Thereafter reports became almost daily until the wardens departed in early December, with at least six different birds involved. Sparring between individuals was recorded on several occasions whilst three were seen together over Staple Island on 14 October. Other interesting observations included an adult noted on 14 September successfully hunting pigeons and offering the prey to a fledged juvenile whilst a very large female was mobbed by Rooks over Big Harcar on 12 October. Birds did roost on the islands overnight utilising both Staple Island and the west cliff of Inner Farne, although it was noted that some commuted daily from the nearby mainland. The large feral population of Pigeons on the islands provided a good food source whilst other prey included Woodcock, Oystercatcher, Turnstone, Fieldfare and Starling amongst others.

Water Rail *Rallus aquaticus*

An uncommon passage visitor.

It was another disappointing season with just a sole record, matching that of the previous year. Whilst the wardens were standing by the wall of the vegetable garden on Brownsman on 8 October, they were surprised to see a bird scamper across the vegetable plot within the boundary of the garden. After a thorough investigation, the bird flew low over the wall and dropped instantly by the nearby pond where it ran into thick cover, never to be seen again.

Spotted Crane *Porzana porzana*

A rare visitor.

One of the major highlights of the year was the discovery of a juvenile on Brownsman pond on 7-8 October. This small unobtrusive crane was discovered as it fed around the muddy fringes of the pond during the late afternoon of 7 October. It was evidently not worried about human presence, as it allowed observers to approach within a few feet of it, including the finder who nearly shouted the island down when he discovered it! Amazingly the bird was present the following afternoon when it ran across the shoe of another observer in the same area and it then showed well to all admiring wardens for the rest of the day. Without doubt the bird and the circumstances snatched the prize of 'bird of the year' on the islands amongst all those who witnessed it and represents only the sixth ever Farnes record following individuals in April 1862, July 1962, September 1976, November 1985 and September 1993.



Oystercatcher *Haematopus ostralegus*

A common winter and passage visitor, a well represented breeder.

This pied wader breeds in reasonable numbers on the rocky islands and good numbers remain around the islands all year. Birds were occupying breeding grounds when the wardens returned in late March and copulation was noted from 30 March. The first nest scrapes were discovered on 23 April and the first eggs were seen on 8 May. The population showed a welcome increase as a total of 39 (35) pairs bred as follows: Inner Farne 6 (7), West Wideopens 5 (3), East Wideopens 1 (2), Knoxes Reef 3 (3), Staple Island 6 (4), Brownsman 10 (9), North Wamses 2 (2), South Wamses 1 (1), Big Harcar 2 (1), Northern Hares 0 (1), Longstone 1 (1) and Longstone End 2 (1). There were some subtle, but very welcome increases on the islands, especially on the small satellite colonies of the outer group, and Brownsman maintained itself as the number one site. It was another difficult breeding season, as eight chicks fledged from nineteen monitored nests, and although productivity increased from the previous year, it still remained low compared to the overall mean from the islands. The first chicks started fledging from Inner Farne on 2 July and Brownsman on 13 July. Throughout the season some sizeable counts were made with 118 on 18 May, and 120 on West Wideopens on 7 July. However the post-breeding period produced the largest numbers with 233 counted on the inner group on 4 September being eclipsed by 303 on 3 October, representing the second highest ever Farnes count.

Ringed Plover *Charadrius hiaticula*

A common passage visitor, uncommon as a breeding species.

The islands continue to be home to a small breeding population, although each year various problems restrict breeding success. Displaying birds were noted in late March and early April at the traditional breeding sites with up to five birds involved in one display routine

on Inner Farne on 31 March. The first eggs were discovered on Inner Farne on 16 April, Brownsman on 22 April and Staple Island on 4 May. A total of 9 (7) pairs nested as follows: Inner Farne 3 (3), Staple Island 2 (1), Brownsman 3 (3) and Longstone 1 (0). The habitat of the islands restricts any expansion of the breeding population although a pair did attempt and failed on a small shingle beach on Longstone. As usual, gull predation was the main reason for failure and the harsh brutal reality was noted on Inner Farne where from a brood of four, three were taken within hours of hatching. However the islands did report some success as single chicks fledged from Inner Farne and Brownsman in the first week of July. As usual, a small post-breeding flock appeared on Inner Farne during the late summer, with ten seen on 21 July, increasing to thirty-eight on 3 August and peaking at forty-two on 7 August. Numbers remained reasonably high for the remainder of August, gradually decreasing in early September with thirty-one on 1, twenty on 3 and only sixteen on 14 September. As autumn progressed, the final group count concerned six on 4 October and thereafter just 1-2 were seen sporadically on the islands during November and early December.

Golden Plover *Pluvialis apricaria*

A well represented passage visitor.

It was a below-par season for this northern upland moorland plover as despite the usual post-breeding flock congregating on the Longstone complex in late summer, numbers remained lower than expected. As usual, spring passage remained light with one west over Staple Island on 26 April and thirty-four north through Staple Sound on 20 May. More unusual was a flock of sixteen west over the outer group on 27 June. As expected the annual post-breeding build-up commenced from mid-July when seventy-five east towards Longstone on 19 July heralded their return. Thereafter numbers slowly increased with ninety on 30 July increasing to 250 on 4 August before peaking at a season's best of *ca* 500 in mid-August. Although numbers fluctuated for the rest of August, throughout September and into early October numbers never broke the 500 barrier (counts of 1,000+ were a common feature of recent years). As usual throughout this period smaller numbers were occasionally seen on the inner group of islands, as well as wanderers onto the 'island tops' on a handful of dates. The last record concerned 200 west over the outer group on 12 October heading towards the mainland.

Grey Plover *P. squatarola*

A well represented passage visitor.

In complete contrast to the previous season, it was an excellent year for this globally widespread wader. The previous season had produced only a handful of reports but this year made up for the lack of these records and the islands experienced one of the best years on record. The year started well with the discovery of two birds on Knoxes Reef on 27 March and was followed by one east over Inner Farne on 10 April. Spring passage continued with two on 8 May followed by four on 22 and nine north on 31 May. Good numbers then appeared in mid-summer, as twenty-five were seen on the inner group around Knoxes Reef and West Wideopens, with twenty-two still present on 26 June including a stunning summer plumage adult. During this period small numbers were also present on the Longstone complex with up to nine counted. July and August continued to produce a good number of records with 1-9 noted on twelve dates with a peak of eleven over the Bridges on the inner group on 3 July. Thereafter the number of reports dwindled with 1-2 on three dates between 15 and 27 September and the year finished how it started, with a single on Knoxes Reef on 30 October.

Lapwing *Vanellus vanellus*

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

Despite good numbers wintering on the nearby mainland and in Seahouses harbour, only a handful were reported on spring passage with three east over Inner Sound on 4 April representing the first sightings of the year. Further records included one which was on Inner Farne before flying west on 16 April and one which lingered on the same island on 28 May. A fledged juvenile arrived at the picnic site on Inner Farne on 11 July with further lingering individuals noted on 11 August and 22 September. The outer group finally got in on the act when three were discovered on Brownsman on 13 September and two of these birds lingered on the east side of the island for a further six days and were last seen on the evening of 19 September. Thereafter only a handful were seen with five west on 15 October and 7 November with up to three present on 6-7 November. The season's peak count was a modest twenty-five north through Inner Sound on 1 November.

Knot *Calidris canutus*

A well represented passage visitor.

This high arctic breeder is commonly found around the coasts of Britain and in recent years the Farnes have supported a small summering flock, a trend that continued during the season. Northern bound birds were first noted during mid-May when eleven were counted on 10 followed by seven on 16 and a single on 19 May. The Longstone complex, Knoxes Reef and Ladies Path on Inner Farne are three of the best areas to discover birds on the Farnes. On the inner group birds were recorded on forty-seven dates from 4 June-4 October, with most records referring to up to thirty individuals. Peak counts during this period included eighty on 2 August and 21 September. A similar pattern occurred on the outer group with reports from thirty-four dates from 6 June-18 September with a peak of eighty-one on Longstone on 24 July. Numbers dwindled as October progressed and the last record concerned four west off Knoxes Reef on 13 October.

Sanderling *C. alba*

An uncommon passage visitor.

Another reasonable season for this long distant migrant as the islands produced reports on seven dates, the best showing in three years. The first record of the year involved an unseasonable report of twenty-eight north through Inner Sound on 13 June. Thereafter two summer plumage adults arrived on Knoxes Reef on 11 July with one moulting adult at St Cuthbert's cove beach on 30 July. Late July and early August is peak wader passage through the islands and a flock of sixteen south through Inner Sound on 3 August bolstered numbers. The only outer group record of the year concerned a juvenile on the east rocks of Staple Island on 6 August and may have been the same bird which appeared at high tide on West Wideopens the following day. The final record involved eleven south through Inner Sound on 10 September.

Little Stint *C. minuta*

An uncommon passage visitor.

It was another frustrating year for this splendid Calidrid as the islands produced only two records, although as has been the trend of recent years, the birds did not linger (the last bird

to be seen for more than twenty minutes was back in 2004). A juvenile was flushed from the south end of Brownsman on 31 August with another seen on the north end of the same island on 6 September. The last inner group record occurred in 2005.

Purple Sandpiper *C. maritima*

A common passage and winter visitor.

This classic rocky shore wader is commonly found around the islands throughout the year and has an almost complete all-year-round presence. Although present daily from when the wardens arrived in late March, and throughout April, only small numbers were logged with up to sixty present on most days with a peak of 169 on Longstone on 10 May. The final spring sighting concerned two on Inner Farne on 26 May. However it was not long before the first returnees appeared with one on Brownsman on 1 July. Thereafter numbers increased daily with four on 5, nine on 13, thirty-one on 15 and ninety on 24 July. As usual good numbers returned for the autumn and winter months around the islands with a flock of 200 on Crumstone throughout October and smaller numbers on several other islands including thirty on the inner group. It is estimated that the islands are home for up to 400 during the winter months.

Dunlin *C. alpina*

A common passage and winter visitor.

It was generally a quiet year. This common passage visitor was recorded on spring passage with the first bird appearing on four dates between 17 and 28 April. Numbers increased slightly in May with 1-3 recorded on seventeen dates with a peak of six on 24 May, all involving summer plumaged adults presumably heading north to high arctic breeding grounds. Mid-summer appears to concentrate a small number of non-breeding adults as Brownsman reported 1-3 almost daily on the 'flats' area of the island throughout June. However thereafter birds started infiltrating from the north and gradually numbers increased across the islands during July with three on 9 increasing to seven on 13 and peaking at fourteen on 24, including the first juvenile of the year. More juveniles and adults moved through the Farnes throughout August and September although peak counts were modest with nineteen on 2 September. As the autumn advanced, numbers declined with only 1-2 lingering although a confiding individual on Inner Farne pond on 28-30 October was more unusual.

Ruff *Philomachus pugnax*

A well represented passage visitor.

This striking sexually dimorphic summer visitor has been going through a lean spell on the islands recently and the two previous seasons have produced a total of only four records. This year witnessed a slight improvement with reports on five dates from late summer. The first involved a vocal female which landed on the pond on Inner Farne before heading off west on the evening of 5 August. Further records included three east over the inner group on 12 August, a single towards Knoxes Reef on 7 September and a female on Knoxes Reef on 13 September. The only outer group record was the last report of the year when a male was flushed off the north rocks of Brownsman before heading west on 7 October.

Jack Snipe *Limnocryptes minimus*

A well represented passage visitor.

This distinctive but secretive passage and winter visitor was recorded on spring passage with a bird discovered on the east rocks of Brownsman on 28 April. The first autumn bird was

flushed from the pond on Inner Farne on a typical arrival date of 7 October with another on the same island on 12 October. It was generally a quiet autumn for the species with further singles flushed or seen on the south end of Brownsman on 28 October, Inner Farne on 7 November and the final sighting on the east rocks of Brownsman on 21 November.

Snipe *Gallinago gallinago*

A well represented passage visitor.

This cryptic wader was well reported during both spring and autumn passage. The wardens arrived on the island in late March and lone individuals were seen on Inner Farne on 27 and 30 March, with one on Brownsman on 8 and Inner Farne on 11 April. The last spring report was of a late single flushed from near the vegetable garden on Inner Farne on 6 May. It was a slow start to autumn passage as after a three month absence, two were flushed off Brownsman on 18 August with a single on Inner Farne the following day. Passage started to increase thereafter with 1-5 on forty-seven dates from 26 August-4 December with peak counts of nine across the islands on 13 September and sixteen west over both island groups on 7 October. As autumn faded so did the number of reports with the final record concerning one on Inner Farne on 4 December.

Woodcock *Scolopax rusticola*

A well represented passage visitor.

This woodland breeder moves through the Farnes on passage; however it was a disappointing spring with just a lone record of a single flushed off the north rocks of Brownsman on 31 March. The majority of island sightings involve birds coming in off the sea during the autumn and the first returnee was noted on 28 October with singles on Brownsman and Inner Farne. The islands produced further reports of 1-3 on five dates from 30 October-4 November, with the first major influx occurring over the following few days. Eight were recorded on 5 November with an impressive forty discovered on 6 November including eighteen on Brownsman, fifteen on Staple Island, four on Inner Farne and three on West Wideopens. This influx occurred following a spell of north-easterly winds which the following day produced sixteen scattered across the islands with up to seven still present on 8-9 November. Thereafter only a handful were recorded with individuals on 10, 17 and 19 November and the last record of the year involving one flushed off Brownsman on 20 November.

Black-tailed Godwit *Limosa limosa*

An uncommon passage visitor.

This elegant wader is recorded annually on the islands although only in small numbers as birds move to and from northern breeding grounds. A stunning full-summer plumage adult was discovered probing around the ponds on Inner Farne on the evening of 2 May before it eventually flew west towards the mainland. The second record of the season came during the excitement (and panic) of a Honey Buzzard flying west over the islands on 6 July, when a party of six was seen flying west at the same time. The third and final record concerned three flying east towards Knoxes Reef with Curlews on 29 August.

Bar-tailed Godwit *L. lapponica*

A well represented passage visitor.

Although not hitting the heady heights of recent years, the number of records of this long distant migrant improved compared with last season's disappointing total. When the

wardens arrived on the islands they were greeted by seventeen on Knoxes Reef on 27 March. Spring passage was lean thereafter as three circled the Kettle on 22 May, four flew north over Staple Island on 30 May and nine moved west on 16 June. However records started to increase as wader passage kicked in, when two were noted on Knoxes Reef on 30 July and thereafter 1-9 were seen on fourteen dates around the favoured inner group from 1 August-8 October. Although numbers were low during this period, an impressive forty-one were present on Knoxes Reef on 29 August and twenty-five were roosting on the south-east rocks of Inner Farne on 29 October.

Whimbrel *Numenius phaeopus*

A well represented passage visitor.

This evocative summer visitor had a reasonable year with the first record involving a vocal individual east over the outer group on 23 April followed by two off the south end of Brownsman on 27 April. Thereafter spring passage brought singles on seven dates between 1 and 25 May with two north through Inner Sound on 19 May. After an absence of a month, return passage commenced from 3 July with two east towards Longstone on 3 July. Thereafter the species was well reported with 1-4 noted on thirty-six dates during July and August which included up to three 'resident' individuals on Inner Farne and Brownsman. During this period there were some good numbers reported as twenty descended out of the thick fog over Brownsman on 26 July, fifteen were counted on Knoxes Reef on 1 August (with eight still present the following day) and five were noted on 11 August. Numbers dwindled in September as birds moved south for the winter, with reports of two on 1 followed by singles on four dates from 7-13 September. The final record concerned one east over the outer group on 17 September, a typical departure date for this summer visitor.

Curlew *N. arquata*

A common passage and winter visitor.

This upland breeder is recorded on the islands throughout the year with large numbers concentrating on Knoxes Reef on the inner group (Table 5). Numbers generally peak during late summer when post-breeding birds gather at high tide roost. Elsewhere smaller numbers utilise several other islands throughout the year including Longstone, Brownsman and Staple Island although numbers remain low on these outer group of islands, never peaking above thirty.

Table 5 Monthly Curlew counts on Knoxes Reef, Farne Islands.

Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
80	100	20	31	150	500	200	60	100

Common Sandpiper *Actitis hypoleucos*

A well represented passage visitor.

This summer migrant arrived slightly later than normal when a single was noted on Inner Farne on 4 May, favouring St Cuthbert's cove and the south-east rocks area of the island during its brief stay. May then brought further singles on five dates with two on Brownsman flats on 8 May whilst the last spring passage bird occurred by the churn pool on Inner Farne on 1 June. The first autumn returnees appeared from early July with one on Inner Farne on

5-7 July. Thereafter birds were reported almost daily to mid-September with some noticeable passage and some lingering 'residents'. Records generally involved 1-2 although an impressive sixteen were counted on 1 August including fourteen on the inner group. Other high counts included five on 4 and 18 August with four on 30 August. Throughout this period some individuals took up temporary residence on the islands, including Brownsman from 24-31 July, Inner Farne from 18 August-4 September and Brownsman again from 5-14 September. Numbers declined gradually as September progressed and the last bird was seen on Big Harcar on 20 and on Brownsman on 21 September.

Green Sandpiper *Tringa ochropus*

An uncommon passage visitor.

The birds' eye-catching white rump and distinctive call help locate and identify this elegant wader and the first of the year was discovered on the favoured locality of Brownsman pond on 29 July with another present on 7 August. However the inner group dominated August sightings with two on the Inner Farne pond on 1 followed by singles on 13, 17 and 18 August. The last scattering of reports occurred in early September with one over Brownsman on 7 and another flushed from the pond before eventually heading west (stopping briefly on Staple Island) on 11 September.

Greenshank *T. nebularia*

A well represented passage visitor.

This familiar and distinctive passage wader had an excellent season with records on seventeen dates, representing the best showing in three years. July signals the start of wader passage through the islands and this brought the first sighting of the year with an individual lingering on the east rocks of Brownsman from 28-31 July. However it was not the only record during this period as two flew west over the outer group on 29 July followed by four south on 31 July. Away from the outer group singles were recorded on five dates on the inner group during August with two west on 13 August. The only August records on the outer group concerned different birds with one on Brownsman pond on 6 and three south on 30 August. Gradually birds moved south as the autumn progressed and the number of records declined with singles on 4 and 5, two west on 6 and another on Knoxes Reef on 12 September. The final record concerned one west over Brownsman on 26 September.

Wood Sandpiper *T. glareola*

An uncommon passage visitor.

This striking sandpiper was seen for the fourth consecutive year with the season producing two reports. An adult summer plumaged individual was discovered on Brownsman pond on 1 June and represents the twelfth spring record for the islands. Wader passage during August then produced two sightings on Inner Farne, possibly relating to the same individual, as a vocal bird flew high over on 18 August and it or another was seen on the Ladies Path the following morning.

Redshank *T. totanus*

A common passage and winter visitor. Bred in eight years 1924-46 (Goddard, 1925-1948; Hawkey, 1991; Wilson, 2000-2008).

This former breeder remains a common visitor to the islands although very few are recorded during May and June, probably as a result of birds being away on breeding grounds. Small

numbers were seen throughout March and April with up to eight present on Longstone and 1-2 on the inner group but thereafter numbers dwindled with only four reports during May and June. Records concerned one on 31 May, two on 4 June and one on 23 June with a peak of three on 28 June. As usual good numbers started filtering through the islands from early July with birds taking up residence on the main rocky islands. Although up to twenty were present daily, peak passage brought seventy-five south on 23 August with thirty-three noted on 14 September. As usual, at least twenty-five remained to winter on the islands, favouring Longstone and Knoxes Reef.

Turnstone *Arenaria interpres*

A common passage and winter visitor, uncommon in summer.

Present all year round with large numbers reported in late summer as passage birds filter back into Britain from high northern breeding grounds. The spring period produced regular reports from several islands with up to a hundred on Longstone and sixty on the inner group. Although present throughout the summer months, numbers remained low with no more than twenty non-breeding individuals lingering. Post breeding flocks started to gather from early July with a hundred on Longstone on 2, 108 on Inner Farne on 7 followed by 300 noted on the outer group on 24 July. Numbers remained high in early August and counts suggested 300 on the inner group and 400 on the outer group in the first week. Numbers declined thereafter although up to 300 were present throughout the autumn and early winter months.

Grey Phalarope *Phalaropus fulicarius*

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

This has become a quintessential Farnes bird as this surface feeding specialist was recorded for the tenth consecutive year. In context this year's reports brought the total during the ten year period to twenty-six records involving thirty-one birds and is rivalled by very few other east coast birding localities. This year produced two records, with one seen feeding on the surface of the sea by Gun Rock in Staple Sound on 30 October and another seen flying north on 31 October, having briefly alighted on the sea in Staple Sound.

Pomarine Skua *Stercorarius pomarinus*

A well represented passage visitor, common in some years.

This energetic species had a disappointing showing as the lack of any favourable northerly winds resulted in reports on only five days. Following a spell of northerly winds, two adults with full 'spoons' were seen on 12 June: a dark phase bird powered north through Staple Sound in the late afternoon and was soon followed by a pale phase bird north past the south end of Brownsman. The number of autumn records was disappointingly low with records including an adult (with full 'spoons') and a juvenile north through Staple Sound on 30 October and another juvenile north off the south end of Brownsman on 11 November.

Arctic Skua *S. parasiticus*

A common passage visitor.

This aerial sea pirate was well represented during spring and autumn migration with several birds lingering around the islands during late summer. The first record of the year was a dark-phase individual lingering around Staple Island on 9 May, with further reports during the month including singles on 13, 20, 22 and 26 May. A spring peak of four was noted on 27 May, including a stunning pale phase adult though Inner Sound during the morning. Early

June produced reports on 2, 7 and 8 June with records becoming more frequent after 12 June. During the following two-and-a-half months from 12 June-31 August there were almost daily reports of 1-4 lingering around the islands as birds harried the local seabird population, especially the terns, for valuable food. During this period passage was light with peaks of eleven north on 13 June and seven south on 19 August. September witnessed the best showing of the season with 1-4 on ten dates, peaking at twenty north on 5 and eleven south on 6 September. Gradually numbers declined with reports of 1-3 on seven October dates and the last individuals of the year were noted north through Staple Sound on 1 and 2 November.

Great Skua *S. skua*

A common passage visitor.

This fierce predator is recorded in small numbers on spring passage with large influxes during the late summer and early autumn. Spring passage was light with one north through Staple Sound which was later seen killing an adult Herring Gull off the north-west corner of Inner Farne. Thereafter four north on 12 June were followed by two north on 13 and singles on 17, 23 and 24 June. Return autumn passage commenced from mid-July and following one north through Staple Sound on 12, further individuals were seen on 18, 21, 24 and 31 July. Thereafter reports became more numerous with records of 1-5 on nine August, eleven September and thirteen October dates. Peak passage during this period included ten north and two south on 7 September, twenty-three north on 13 September and a season's best of twenty-two south on 3 October. The last records concerned two north on 1 and singles north on 2 and 3 November.

Kittiwake *Rissa tridactyla*

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

Each season brings its share of problems and it was a difficult time for the breeding population, as another poor season was backed by another drop in the population (Figure 2). Small numbers were present when the wardens arrived in late March and breeding activity increased as the spring progressed. Nest building commenced from 16 April and intensified over the following week, with copulating pairs observed on 27 April. Interestingly the first egg-laying date has gradually been getting later each year, peaking at 31 May in 2005 in that particular season. However it was a complete reversal this year as the first eggs were discovered on 9 May in St Cuthbert's Gut on Inner Farne and on 11 May on the cottage cliff on Brownsman. Thereafter mass synchronised egg laying took place across all the colonies and a total of 4,275 (4,669) pairs nested as follows: Megstone 13 (14), Inner Farne 1,163 (1,324), West Wideopens 187 (226), East Wideopens 240 (249), Skeney Scar 152 (156), Staple Island 1,198 (1,173), Brownsman 1,166 (1,296), North Wamses 57 (74), South Wamses 29 (52), Roddam and Green 14 (22) and Big Harcar 56 (83). Worryingly, the population declined again for the third consecutive year and it appears a combination of several factors is leading to a steady decline in Kittiwakes in the North Sea. The first chicks started hatching in early June and the first fledglings appeared on Brownsman on 12 July and on Inner Farne three days later. The season appeared to be going strong with a plentiful food supply without too many problems from Snake Pipefish. However weather had a detrimental effect on the breeding stock during the late summer as large chicks, almost ready to fledge, were lost from nesting ledges on 20 July due to significant waves and swell. An example of this was a total of thirteen almost ready to fledge chicks being lost in one hour on the west face of Inner Farne. Predation was also a serious problem with large gulls causing major issues in the central gully area of Staple Island, the south cliff of Brownsman

and the quarry area of Inner Farne. All these factors resulted in another poor productivity return as 616 nests monitored produced 202 chicks, with an overall productivity rating of 0.32. This remains agonisingly low and continues the pattern of poor results of previous seasons, despite the early nesting attempts. As usual, only small numbers remained around the islands following the breeding season although an impressive 10,000 moved north throughout 30 October in heavy passage.

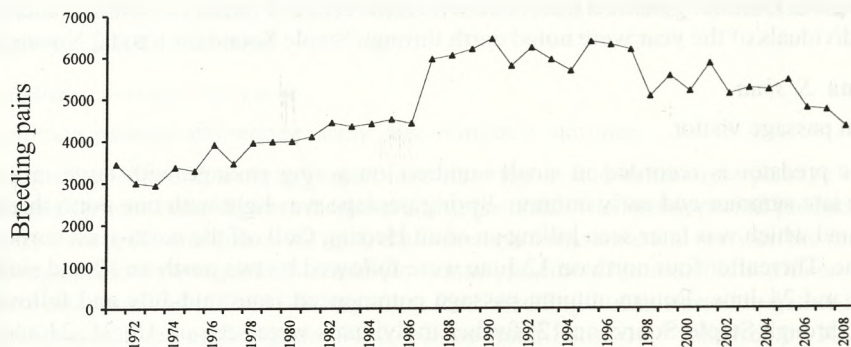


Figure 2 Breeding pairs of Kittiwakes on the Farne Islands from 1971 to 2008.

Black-headed Gull *Chroicocephalus ridibundus*

A well represented breeding species and common visitor.

When the wardens return to the islands in late March they are greeted by the sound of displaying birds, as the species is one of the first to colonise the islands in the spring. There appeared to be healthy numbers across the inner group during this early spring period and up to 800 roosted nightly on Knoxes Reef. As spring developed, nesting activity increased with displaying birds noted on the favoured colonies on Inner Farne in early April, and copulation was observed on 7 April. Following the arrival of birds on the island 'top' from 20 April, well constructed nests were discovered soon after and the first eggs were found on Inner Farne on 29 April and Brownsman on 4 May. A total of 369 (276) pairs nested as follows: Inner Farne 320 (256), Staple Island 5 (0) and Brownsman 44 (20). The first chicks started hatching on Inner Farne on 28 May and the following day on Brownsman. As usual, predation was heavy from the larger gulls although this did help act as a 'buffer zone' to nearby nesting terns. The first fledglings started dispersing from 26 June and despite the predation it appeared a good season with large numbers of fledglings recorded. As late summer progressed, the breeding population dispersed with only small numbers lingering during the autumn months although up to sixty were present in late November and early December.

Little Gull *Hydrocoloeus minutus*

A well represented passage and winter visitor.

It was a very poor year for this neat, small *Larus* and this may have been linked with the generally disappointing seawatching season, which claims many of the island records during a given season. The north-east experienced a small influx of first-summer individuals and one was discovered on the east side of Brownsman on 5 May. This was followed by further sightings with three north through Inner Sound on 17 May and singles roosting on the Ladies Path on Inner Farne on 28 May, 12 and 18 June. The only autumn record concerned a first-winter bird north through Staple Sound on 13 September.

Mediterranean Gull *Larus melanocephalus*

An uncommon passage and winter visitor.

The slow increase in records continues as the islands claimed three records during the year including a stunning summer plumaged adult discovered in the evening roost on Knoxes Reef on 30 March and representing only the ninth recorded adult on the islands. A second bird arrived soon after, as a first-summer individual was attracted to the same evening roost on Knoxes Reef on 13 April. The final record concerned another first-summer bird which was on Brownsman 'flats' for thirty minutes on 11 June, representing the tenth outer group record. The islands have produced a total of thirty-two previous records and birds are now being recorded annually, as Northumberland has seen a general increase over the past decade.

Common Gull *L. canus*

A common visitor. Bred in four years 1910-14 (Booth, 1911, 1912; Miller, 1911-1914; Paynter 1914), and probably in 1916 (March, 1916) and attempted breeding in 1974 (Hawkey and Hickling, 1974).

The majority of Farne records occur in spring as birds move east to breeding grounds in Scandinavia, with a distinct build-up on Knoxes Reef on the inner group during the early spring. The roost on Knoxes Reef attracted eight birds on 28 March and slowly increased nightly with thirteen on 29 and twenty on 31 March. April witnessed the biggest daily increases with twenty-eight on 1, increasing to forty-eight by 12 and sixty-nine on 19 before peaking at 139 on 21 April. Thereafter numbers dwindled rapidly with only four evident on 30 April. Heavy diurnal passage was logged throughout this period as large vocal groups moved east over the islands. Counts generally involved up to thirty although 186 were counted on 21 April. However, this was all eclipsed by the 1,002 which were counted heading east on 13 April, representing the second highest ever Farnes total and falling just short of the 1,200 in 1994. Thereafter the species became scarce throughout the summer months with first-summer birds noted on five dates from May-July. Gradually small numbers filtered back into Farnes waters and up to thirty were evident in late November.

Lesser Black-backed Gull *L. fuscus*

A common breeding species and passage visitor.

The unsettled weather throughout March had evidently halted the return of the breeding population as only small numbers were noted on 28 March. However this was a temporary blip as a count on 1 April revealed that good numbers had poured into the islands. Territorial disputes and nest building were logged throughout April with the first eggs discovered on 30 April. A total of 509 (480) breeding pairs nested as follows: Inner Farne 31 (29), West Wideopens 155 (143), East Wideopens 64 (58), Knoxes Reef 8 (4), Staple Island 31 (12), Brownsman 8 (9), North Wamses 57 (76), South Wamses 81 (75), Roddam and Green 14 (15) and Big Harcar 60 (59). There was a noticeable change in behaviour by one or two individuals, with predation on the inner group becoming rife with some individuals tapping into raiding nests, especially those of the nesting terns. Whether this was due to a lack of Snake Pipefish on which the species had been preying heavily in recent years will remain unanswered, but the problem is as complex as ever and new management strategies will have to be sought. As usual, good numbers of young fledged from nest sites and as the summer progressed, birds started leaving the breeding grounds for southern Britain. Once again the species was absent from the islands during the winter months.

Herring Gull *L. argentatus*

A common breeding species, abundant in winter.

This very abundant resident nested in good numbers across all the islands and large numbers were evident when the wardens arrived in late March. Breeding activity intensified throughout April with pair bonding, territorial disputes and nest scraping all observed. The first copulating pair was noted on 10 April and the first eggs were discovered on 1 May. A total of 530 (566) pairs nested as follows: Inner Farne 4 (8), West Wideopens 66 (59), East Wideopens 58 (52), Knoxes Reef 57 (64), Skeney Scar 17 (14), Staple Island 21 (52), Brownsman 8 (8), North Wamses 101 (120), South Wamses 49 (43), Roddam and Green 17 (19), Big Harcar 61 (58), Longstone End 37 (1) and Northern Hares 34 (29). A good number were once again responsible for the majority of predation recorded on the islands during the season, with attacks on several nesting species very evident on occasions. The first chicks started hatching from 1 June and large numbers fledged young, as birds tactically nest amongst the large colonies of Guillemots and amongst the two inaccessible Cormorant colonies. Following the breeding season good numbers remained to winter around the islands although commuting to the nearby mainland during the day to scavenge for food. As well as the local breeding population, birds of the northern race *argentatus* were reported during the latter part of the autumn.

Glaucous Gull *L. hyperboreus*

An uncommon winter and passage visitor.

This large pale northern gull can brighten up even the coldest of days on the islands and it was a good year for sightings. The first of the year involved a first-summer individual on 28 March which flew through the Kettle and landed on the nearby West Wideopens and was probably the bird present in the Seahouses area during the late winter period. The same individual was then responsible for further sightings on the islands as it was seen to drop onto East Wideopens on the evening of 5 April and fly east over the north end of Inner Farne on 20 April. The only autumn record concerned a first-winter bird east over Brownsman on 8 November which continued in the same direction out over the Longstone complex before being lost to view.

Great Black-backed Gull *L. marinus*

An uncommon breeder, common winter and passage visitor.

This monster gull maintains a toe-hold on the islands as the small population continues to rear young on the Farnes. Following the discovery of the first eggs on 2 May, a total of 9 (9) pairs nested as follows: West Wideopens 1 (2) East Wideopens 3 (3), Brownsman 1 (1), North Wamses 2 (2), South Wamses 1 (1) and Big Harcar 1 (0). The first eggs started hatching on 2 June and fledglings were reported from East Wideopens on 9 July. The brutal reality of having a very small breeding population was felt on Inner Farne in late June as an adult was seen killing and devouring two adult Guillemots in the same afternoon. Other birds were seen to predate adult Puffins and Guillemot chicks during the summer whilst one individual took a liking to large Arctic Tern chicks on Brownsman. As expected, a noticeable influx of northern breeding birds occurred during the late summer, with roosts of up 1,000 recorded on the outer group in October and November.

Little Tern *Sternula albifrons*

A well represented passage visitor.

It was a very disappointing year in Northumberland and this was matched on the islands, where the traditional evening roost at St Cuthbert's Cove, Inner Farne attracted below average numbers compared with recent years (as shown in Table 6). The first record of the year involved a group of ten at roost on 1 May and thereafter numbers increased rapidly. However the roost never matched last season's record-breaking 130, with the maximum count peaking at seventy-one on 12 May. As usual following the peak, birds dispersed to local breeding areas on the mainland and the roost dwindled in the final few weeks of the month. However June produced three reports with two observed fishing below the lighthouse cliff on Inner Farne on 7, and again fishing in Inner Sound on 11 and 27 June, the latter proving to be the last sighting of the year.

Table 6 Evening roost counts of Little Terns on Inner Farne, May 2007.

May										
1	4	6	8	12	13	14	17	20	23	30
10	38	45	64	71	69	68	38	38	15	8

Sandwich Tern *Sterna sandvicensis*

An abundant breeding summer and passage visitor.

The largest and most vocal of all the breeding terns returned to Farnes waters in late March with the first bird of the year discovered sitting on a buoy in the Kettle off Inner Farne on 28 March. The traditional evening roost on Knoxes Reef attracted lone birds on the following two evenings with three present on 31 March. As usual, ever increasing numbers arrived daily throughout April as shown in Table 6. During this period loud vocal displays occurred over the traditional nesting site on Inner Farne and copulation was observed on the Ladies Path in late April. The first eggs were discovered on Inner Farne on 9 May and a total of 1,358 (1,413) pairs nested as follows: Inner Farne 1,358 (1,408) and Brownsman 0 (5). It was an intriguing season as only one island was occupied, with no nesting attempts on Brownsman for the first time in four years. The colony on Inner Farne was slow to increase and this was reflected in two population counts being made, as a second wave of breeding birds were observed moving in from mid-June. The first eggs started to hatch on 4 June and the first young fledged from the colony on 6 July. It was evident that birds have adapted to bringing in a variety of prey items, and various fish species were being fed successfully to young chicks on the colony. As a direct result of their non-fussy diet requirements, the species had a successful year, more so than the other two breeding tern species, with plenty of young fledging. Interestingly the colony produced an albino chick which fledged successfully and was last seen on Inner Farne on 24 July. As the summer progressed the colony dispersed and it was noteworthy that adults and fledged juveniles left the islands early, with most gone by 4 August. However good numbers remained in Farnes waters for another month before records became scarce. The final documented record involved three south through the Kettle on 27 September.

Table 7 Evening roost counts of Sandwich Terns, Knoxes Reef 2008.

Mar	Apr	May									June	
28	31	4	7	10	16	19	21	24	26	29	2	4
1	3	4	11	41	147	184	234	356	550	470	800	1000

Common Tern *S. hirundo*

A common breeding summer and passage visitor.

Small numbers nest on the islands and the first returning birds were seen in the evening roost on Knoxes Reef with a single on the evening of 24 April. Numbers slowly increased with five present on 26 before peaking at twenty-seven on 29 April. The bulk of the breeding birds had returned to the islands by the first week of May and many had settled in the traditional area on Inner Farne, to the west of the Sandwich Tern colony on the top meadow. The first eggs were discovered on 20 May and 104 (117) pairs nested as follows: Inner Farne 103 (115) and Brownsman 1 (2). The first young hatched in late June and although not monitored, it appeared to be a disappointing season with below-average number of chicks fledging. As with the other two numerous tern species, birds left the islands in early August and the last report concerned seven south through Inner Sound on 21 September.

Roseate Tern *S. dougallii*

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

The breeding turmoil of the 2000s continued as the islands failed to record a breeding pair. It was a late arrival for the first returning birds with an adult calling over Brownsman on 20 May signalling their return. However only 1-2 were seen daily thereafter with a peak of four on Inner Farne on 28 May. This small group soon disappeared and the species became noticeably scarce in the first two weeks of June with records on 2 and 7 June. Eventually birds became resident from 12 June and despite showing signs of breeding behaviour, a pair never settled and no attempt was made. It is a sad state of affairs that no breeding occurs on the islands and future breeding success remains uncertain. Small numbers were present throughout late June and all July, with failed breeders arriving from Coquet Island from mid-July. This late summer build-up brought five on 9 followed by eight adults on 11 July with up to five present daily until 25 July. However like the previous year there was no post-breeding roost in August, and the final record concerned one south on 4 August.

Arctic Tern *S. paradisaea*

An abundant breeding summer and passage visitor.

This long distant wanderer is closely scrutinised on the islands throughout the season and the first of the year arrived on Knoxes Reef on the evening of 19 April. Thereafter numbers gradually increased (as shown in Table 7) with good numbers involved in aerial courtship displays over the two main breeding colonies in early May. More and more birds moved into the area as each day progressed and copulating pairs were noted on 5 May. Following nest scraping, the first eggs were discovered on Brownsman on 14 May and Inner Farne on 15 May. A total of 2,239 (2,256) pairs nested as follows: Inner Farne 1,038 (1,096), Brownsman 1,178 (1,153) and Staple Island 23 (7). Although the population decreased, it was a very minor drop and the Farnes population continues to thrive with the welcome expansion of the Staple Island colony. The year witnessed a set-back on food supply, as sandeels appeared sparse in quantities at times, although Snake Pipefish also appeared to suffer from low numbers. Although the usual weather problems affected breeding success, predation from large gulls appeared to intensify this year with some adult gulls specialising in taking fledged chicks, especially on Brownsman. Monitoring work carried out on 385 nests revealed a total of 187 fledged young with an overall productivity of 0.48, being the lowest since 2004. Young started fledging from Brownsman on 27 June and Inner Farne on 6 July and as the summer progressed, numbers dwindled with a rapid clear-out in early August.

However birds remained in Farnes waters until early September with the final report of the year concerning fifteen south through Inner Sound on 14 September.

Table 8 Evening roost counts of Arctic Terns, Knoxes Reef 2008.

		May				June	
19	23	25	26	28	30	2	4
1	3	9	202	220	310	1,000	1,500

Guillemot *Uria aalge*

An abundant breeding resident and passage visitor.

Late March witnessed the return of the most numerous auk on the islands. The first big arrival occurred on 28 March although poor weather resulted in the usual erratic behaviour from the birds, and the masses disappeared from Farnes waters for several days at a time. As spring progressed, many thousands began to settle on nesting ledges and the largest Farnes colony, Staple Island, was the first to produce eggs which were noted on 22 April followed by the lighthouse cliff on Inner Farne on 24 April. A total of 43,864 (48,650) individuals were counted as follows: Megstone 222 (257), Inner Farne 4,289 (5,798), West Wideopens 1,993 (2,016), East Wideopens 2,929 (3,346), Skeney Scar 2,203 (2,446), Staple Island 22,597 (24,647), Brownsman 7,173 (6,906), North Wamses 1,476 (2,239), South Wamses 600 (480), Roddam and Green 110 (170) and Big Harcar 272 (345). Despite the drop in population, this may have been counter error as the Farnes colonies are so large that counting has become a difficult task. Food availability appeared to be good although predation was again evident, especially as the colonies thinned out as young birds fledged. The first chicks started hatching from 29 May and the first 'jumplings' started to take to the open sea from mid-June. Thereafter good numbers were witnessed jumping and as usual the mass clear-out of all the cliffs occurred in the first two weeks of July. The once packed cliff-tops were almost all clear by the third week of July with the last fledgling noted jumping off Inner Farne on 2 August. For the third consecutive year the species was monitored on both island groups and a total of 159 young fledged from 171 monitored nests with a productivity rate of 0.92, the best return in this short three year period. As usual the species became very scarce following the breeding season, although small numbers returned in mid-September with birds evident in Farnes waters during the winter.

Razorbill *Alca torda*

A common breeding resident and passage visitor.

The population growth of the species has been very dramatic over the past decade and the season produced another record number of breeding pairs on the islands (Figure 3). As with all the auks, the early unsettled weather resulted in erratic behaviour around the colonies as good numbers returned to breeding ledges by 27 March although all had gone again by 30 March. This behaviour continued in the first two weeks of April with copulation noted on 11 April followed by the first eggs discovered on 24 April on Inner Farne. A total of 326 (314) pairs nested as follows: Inner Farne 149 (143), West Wideopens 64 (63), East Wideopens 18 (23), Skeney Scar 9 (10), Staple Island 31 (29), Brownsman 6 (5), North Wamses 12 (7), South Wamses 19 (15) and Big Harcar 18 (19). It was an excellent season as the island population reached a new record high, eclipsing the 322 which nested in 2006. As well as good numbers nesting, food availability appeared superb and weather failed to

have any hard hitting impact on the population. As a result, monitoring research revealed that fifty-four chicks fledged from sixty-seven monitored nests, with productivity of 0.80 being the best since monitoring began in 2003. Interestingly, following the closure of the open access to Big Harcar, eight chicks fledged from ten monitored nests, a welcome bonus for the islands. The first chicks started fledging from 13 June and as with Guillemots, the cliffs became bare from mid-July as successful parents took youngsters to sea and the species became scarce from late July. The first wintering birds reappeared around the islands in mid-September and a small number were recorded on passage in November.

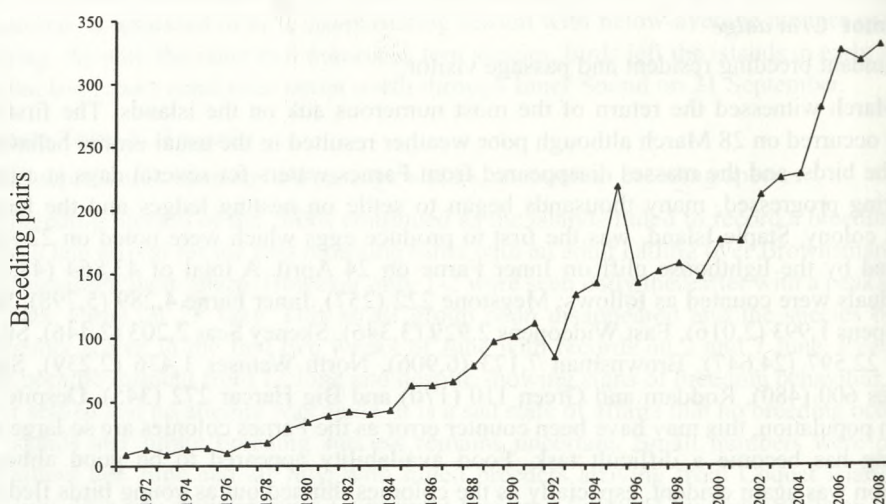


Figure 3 Breeding pairs of Razorbills on the Farne Islands from 1971 to 2008.

Black Guillemot *Cephus grylle*

A well represented winter and passage visitor. Breeding 17th and possibly 18th centuries (Gardner-Medwin, 1985).

The Farnes Islands remain the number one site for birds along the north-east coast as they remain rare along other stretches of the Northumberland coast. However it was a quiet season with only small numbers reported during the late autumn. An interesting report concerned a 'possible' seen by visitors on the outer group on 7 June and, although not confirmed, the islands have produced summering individuals in recent years. The first autumn returnee was seen flying north through Staple Sound on 7 September and was followed by singles in the same area on 29 and 31 October. The number of sightings increased in November with reports on seven dates suggesting two individuals (including one partial summer-plumaged bird) which were resident and favouring the Gun Rock area of Staple Sound. There did not appear to be any further inshore as the area around Megstone and Inner Farne produced no records during the late autumn.

Little Auk *Alle alle*

A well represented winter and passage visitor. Large numbers can occur after northerly gales.

What a difference a year makes. The previous season had witnessed a new British record

from the islands as over 28,000 were counted in one day, but this year the number of records could be counted on one hand. The lack of any suitable northerly winds failed to push many into the southern North Sea and as a direct consequence there were very few reported, with the first bird of the year seen below the lighthouse cliff on Inner Farne on 8 October. The winds turned briefly north in late October and this brought the season's peak, as three flew north on 30 followed by ten north on 31 October, all through Staple Sound. Further records included one north through Inner Sound on 1 November with another on the sea near the Blue Caps on the outer group later that day. The final record concerned three north through Staple Sound on 25 November.

Puffin *Fratercula arctica*

An abundant breeding summer and passage visitor.

The year will long be remembered for the first full breeding (Puffin) census of all the islands in five years (Table 9), although worryingly it revealed a huge decline in the breeding population. Small numbers were evident around the islands in late March with the first mass invasion of the island 'tops' occurring on 1 April. Despite this early activity, birds were very erratic and disappeared soon after until 11 April. Eventually they started to settle in mid-month and the first eggs were found on the central meadow on Inner Farne on 28 April. The first young hatched on 30 May and the first fledglings were seen leaving in early July. As usual, predation and heavy rain (especially on 22 June) caused problems but generally it was a good season as productivity revealed a total of eighty-two chicks fledged from a hundred monitored nests. Throughout the breeding season, a full population census was undertaken by the nine warden staff across all the islands and it revealed a total of 36,835 (55,674 in 2003) pairs, representing a 33% decrease in five years. Despite some good productivity results in recent years, it appears that the species is facing problems on the wintering grounds at sea as opposed to the breeding areas. The census was complete by 23 July and thereafter the breeding population started to leave the islands, becoming very scarce by the first week of August. As usual, the autumn months produced only a handful of records with 1-2 noted on several dates during November and December.

Table 9 Puffin census results Farne Islands 1984-2008.

	Inner Farne	West Wides	East Wides	Staple Island	B'man	North Wamses	South Wamses	Big Harcacr	L'stone End
2008	9,813	4,257	1,362	10,672	9,015	1,083	541	92	0
2003	13,069	8,704	1,676	15,583	14,438	977	1,059	168	0
1993	8,226	5,795	1,474	8,334	9,392	288	1,038	101	62
1989	4,950	5,859	1,097	7,113	6,815	104	305	44	42
1984	3,615	5,416	1,310	4,261	5,850	18	239	3	20

Feral Pigeon *Columba livia*

A common breeding resident.

This common resident was abundant throughout the year although with noticeable peaks in the autumn of ca 500, especially on the inner group. As usual, numerous lost racing pigeons arrived on the islands throughout the season with one befriended by the wardens which became known as 'Freckled Freddie', living by the tower door on Inner Farne from August-November.

Stock Dove *C. oenas*

An increasingly rare visitor.

This former breeder is becoming an increasingly rare sight on the islands with one flushed off Staple Island on 6 May being the first confirmed record in three years. The bird was flushed near the west face jetty on the island and headed directly west over the inner group towards the mainland.

Wood Pigeon *C. palumbus*

An uncommon passage visitor.

The islands only produce small numbers annually although even by these standards it was a disappointing season for this passage migrant. The first record of the year involved a single flushed from Brownsman on 28 April which departed west and the only other spring report concerned two together on Brownsman on 10 May (one having been seen earlier in the day on nearby Staple Island), feeding around the pond area of the island. The first record for the inner group arrived in mid-summer when one flew low over Inner Farne on 23 July, although this was the last sighting for over three months. The autumn was very quiet with only three confirmed reports, all in early November. An individual was flushed from the Brownsman vegetable garden on 2 and it or another was seen by the ponds on Inner Farne on 3 November. The final record of the year involved a lingering bird on Inner Farne on 7 November before it eventually departed westward.

Collared Dove *Streptopelia decaocto*

An uncommon passage visitor.

Although difficult to prove, it appears the Farnes play host to continental migrants which move through the islands in early spring, and this year was no different with a total of five different individuals. The first record of the year concerned a lingering bird on Inner Farne on 23-24 April and during this same period a different individual was present on Brownsman on 24 April, the first outer group record since 2006. Further spring reports included one off Staple Island on 6 May and another over the inner group on 9 June. The final record involved one discovered on the artificial tree on Brownsman on 24 July. There were no autumn records.

Cuckoo *Cuculus canorus*

An uncommon passage visitor.

This is still regarded as a very scarce bird on passage through the islands although the Farnes are going through a purple patch as it was the third consecutive year that the species has been recorded. Interestingly there have been two records in every year since the turn of the millennium in which they have been recorded, as two were recorded in 2000, 2003, 2006 and 2007. That trend continued this year as a female was initially discovered on Brownsman being mobbed by Rock Pipits on the morning of 28 May before flying into the main Arctic Tern colony. At this stage, the majority of the breeding birds around the cottage erupted and it was soon sent packing west towards Staple Island. The second record of the year involved a juvenile which circled the top meadow of Inner Farne on 5 August, but before it had a chance to land was mobbed by more breeding bird species and a flock of Starlings, and duly departed high west back towards the mainland.

Long-eared Owl *Asio otus*

An uncommon passage visitor.

It proved to be an excellent season for this impressive nocturnal hunter, following the lack of any records the previous year. The late autumn period witnesses small numbers crossing the North Sea from Scandinavia where they escape the harsh winter months to spend time in the British Isles. These migrants are often seen on coastal headlands and the Farnes recorded a respectable six individuals, including three in one day. A bird was discovered sitting on the south cliff of Brownsman on 30 October and remained all day, even becoming famous with an appearance on the BBC's Autumnwatch programme. The following week brought a further influx when three were discovered on the outer group on 1 November, with individuals seen on Brownsman, South Wamses and Longstone End. Two of these birds were later seen that day on the inner group, spending time on West Wideopens and Knoxes Reef. This represented the highest day count since three in 1991 and the islands' record of four on 16 November 1984. Further singles were flushed off North Wamses and Staple Island on 4 with the last record involving one west over Brownsman on 5 November to complete a productive autumn.



Short-eared Owl *A. flammeus*

An uncommon passage visitor.

The autumn produces the bulk of records on the Farnes as spring passage has only been logged in eleven of the past twenty years. However it was a good showing this spring as two individuals graced the islands, with one flushed from the vegetable garden on Brownsman on 12 May before tracking high and eventually landing on adjacent Staple Island. A second individual was over Inner Farne in thick fog on 5 June and was seen on several occasions during the morning as it attempted to find an area to rest without hassle from the breeding seabirds. The first sighting of the autumn was flushed off Brownsman on 12 September with one on the north end of Inner Farne the following day. Further singles were seen on Brownsman on 21-22 October and nearby Staple Island on 30 October. It was generally a quiet autumn with further individuals on Staple Island on 1 November, Inner Farne on 7 November and the last of the year off the south end of Brownsman on 14 November.

Swift *Apus apus*

A well represented summer and passage visitor.

Following last season's record number, by Farnes standards the year was more typical for this aerial summer visitor. The first bird of the year was discovered lingering on Brownsman

on 27 April although the next record did not occur for another month. The species is predominately a mid-summer bird on the islands and following one over Inner Farne lighthouse on 2 June, 1-6 were recorded on eleven June and July dates. The species is one of the first to migrate from Britain, leaving sharply in early August, and the islands produced a bumper number of reports during this period. A total of 1-6 were recorded on nine August dates with peak passage logged at twelve south on 9 August. Very late passage birds were seen in September with two south on 13 and singles on 14-15 September. The final record concerned one west over the outer group on 16 September, the latest Farnes record since 2003.

Wryneck *Jynx torquilla*

An uncommon passage visitor.

This charismatic east coast drift migrant has been recorded on the islands in twenty of the previous thirty years, including good numbers recently with eight in 2004 and seven in 2006. The first of five birds to be recorded involved an individual which lingered on Inner Farne from 17-21 August. It remained elusive throughout its time but was seen to feed well during its five day stay and represented the longest staying individual since 1998. A series of easterly airflows in early September brought the main arrival along the east coast, including four to the islands. On the morning of 7 September three were logged including individuals on Brownsman, Staple Island and Inner Farne, but sadly the latter bird was taken by a raptor, believed to be a Sparrowhawk, on the morning of its arrival. Although the following morning witnessed the departure of the Staple bird, the Brownsman individual lingered until 10 September. The final record concerned another on Brownsman on 13 September which favoured the east side of the island and showed well on the artificial tree.

Woodlark *Lullula arborea*

A rare visitor.

It is boom time for this heathland songster as the number of Farnes records reached six, with five of these sightings occurring in the past eight years. The British population, now breeding as close as East Yorkshire, has been increasing annually and a bird was flushed from the north end of Brownsman on 6 August and was still present the following day. Previous Farnes records have generally involved late autumn birds with individuals in October 2000, 2001, 2004 and 2007. The only previous record out of this October trend involved a singing bird on Inner Farne in April 1980.

Skylark *Alauda arvensis*

A common passage visitor. May have bred in 1865 and 1883 and *ca* 1900 (Brown, 1866; Harvie-Brown *et al.*, 1884; Pike, 1902).

This declining farmland vocalist was recorded throughout spring and autumn although numbers appeared low compared to recent years. Spring passage commenced with a single on Inner Farne on 27-29 March followed by five west on 31 March. It was a disappointing showing during April and May as, following two west over the inner group on 4 April, singles were reported on a further three April dates. May fared slightly better as an individual lingered on Brownsman on 1-3 May, with other singles on four dates from 8-28 May and the last spring record of one on Inner Farne on 29 May. There were no reports during the summer months with the first autumn returnee arriving on Brownsman on 17

August. Thereafter 1-5 were recorded on forty-seven autumn dates with the outer group contributing records on thirty-six dates compared to twenty-three inner group dates. Passage birds did linger on both island groups and peak passage included eighteen west on 7 October and nineteen west on 6 November. Interestingly one overwintered on the islands with a bird present on Staple Island from 16 November-31 December.

Sand Martin *Riparia riparia*

A well represented summer and passage visitor.

It was a very poor year for this summer visitor with a total of only five records on three dates, which was well below the annual Farnes mean total. The past ten years have produced records on an average of nine days per year although the first arrived on the typical arrival date of mid-April. A lone individual hawked Inner Farne before flying north on 22 April and was followed by further singles through Inner Sound and east over Brownsman on 31 May. The only autumn record involved two singles which lingered in thick fog on both Brownsman and Inner Farne for the majority of the day on 18 August. This was the poorest showing since 1991.

Swallow *Hirundo rustica*

A common summer and passage visitor. Bred in 19th century; *ca* 1900 (Selby, 1826; Pike 1902); 1984 (Hawkey and Hickling, 1984) and 1990-1997 (Walton and Richardson, 1990-1991; Walton, 1993-1998).

One of the most numerous summer visitors reported during the season as birds use the islands as a 'fly-highway', moving north or south on passage depending on the season. The year produced reports on eighty-two dates (forty-seven during spring and thirty-five in autumn) spanning seven months. The first record concerned one seen circling the lighthouse on Inner Farne before moving north on 18 April (a typical arrival date), followed by another north on 20 April. Thereafter spring passage gained momentum and numbers increased with some noticeable northerly passage in early May. Peak counts during this period included at least eighty-four north on 5, with forty-one north the following day. Numbers continued to remain high with daily movements of up to thirty-four over the following few weeks. Numbers then gradually declined with records of 1-11 on ten June dates and the last spring passage report concerning one west on 18 June. Once again, there were no breeding attempts on the islands and it is now ten years since the last successful breeding in the chapel on Inner Farne. Autumn passage commenced in early July with one over Brownsman followed by small numbers south later that month. Gradually southerly passage swung into full action with 1-28 recorded on thirty-five dates throughout August and September. However a southerly surge occurred on 21 August as 204 were recorded, mostly involving birds moving through Inner Sound. This represents a new Farnes record, eclipsing the previous highest count of 133 on 10 September 2002. Late stragglers were recorded in early October with the final report of a juvenile on Inner Farne on 1 October.

House Martin *Delichon urbicum*

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

In complete contrast to its relative the Sand Martin, the species was well represented on passage with records spanning twenty dates, the best showing for over a decade. The first sighting of the year was of a single lingering on Inner Farne on 27 April which roosted

overnight on the lighthouse and was still present the following morning. The spring produced a further 1-2 on nine May dates with a peak of seven north through Inner Sound on 31 May. The last spring records involved two north on 1 and three south on 6 June. Autumn passage commenced with one west over Inner Farne on 9 August and 1-2 on a further three dates from 11 August-3 September. The final record was of two together which lingered on Inner Farne all day on 13 September, roosted overnight and remained hawking the island throughout the following day.

Richard's Pipit *Anthus richardi*

A scarce visitor.

An easterly airflow during September or October can produce one of these large robust Siberian pipits, and eleven of the fourteen Farnes records have occurred during these two months. On 7 October a bird was heard and then seen as it flew low over Brownsman before joining a group of migrating thrushes and landing on adjacent Staple Island. A second bird was heard calling above the south cliff of Brownsman on 3 November and was seen flying over the island towards Staple Island, narrowly avoiding being taken by a Merlin which was patrolling the area. This was only the third ever November record following individuals on 12 November 1994 and 15 November 2000. Overall these two records constitute the fifteenth and sixteenth Farnes records and the fourth consecutive year the species has been recorded.

Tree Pipit *A. trivialis*

A common passage visitor.

Last year was one of the worst ever years with only two records. In comparison however this year produced a bumper number including an impressive one in September. The first bird arrived on Brownsman on 21 April and lingered until the following day with another on 30 April. Spring passage continued in May with 1-2 noted on eleven dates, with the outer group dominating (claiming nine of the eleven records) and the last spring report concerning singles on Longstone and Inner Farne on 30 May. The first autumn returnees arrived on Brownsman on 6 August and thereafter were well reported throughout the autumn. August produced singles on five days between 20 and 31 August. However better was to come and September produced daily reports, including seven which became resident on the islands from 7-13 September, four on the inner group and three on the outer group. This impressive spell also brought birds on westerly passage with 1-2 recorded daily, peaking at an impressive ten on 13 September, the highest count since 2001. Thereafter passage continued with 1-2 daily until the last report of two on Brownsman on 22 September.

Meadow Pipit *A. pratensis*

A common passage visitor. Bred *ca* 1901 and in eleven years 1946-1973 (Pike, 1902; Wilson, 2000-2008).

This species is abundant on passage as birds move from the lowlands to the upland breeding grounds during the spring and the reverse in autumn. Passage was generally light during spring with the first reports of two on Inner Farne on 28 March and these were followed by almost daily sightings until early May. Northerly passage peaked during the first two weeks of April with regular counts of thirty or more moving over the islands, peaking at sixty on 9 April. Reports dwindled as spring progressed with the last sighting of two on Inner Farne on 4 May. Following the usual mid-summer absence the first returning birds began with three west over Brownsman on 17 July. Thereafter passage steadily increased with a daily presence from 18 August-11 November, with noticeable peaks of ninety on 28 August, sixty

on 12 September and eighty-five on 14 October. Numbers declined as winter approached with the last record of three on Brownsman on 13 November.

Rock Pipit *A. petrosus*

A common resident well represented as a breeding species.

This typical coastal pipit breeds in good numbers across the rocky islands of the Farnes. Birds were singing in territory when the wardens arrived in late March and nest material was observed being carried from 27 April. The first eggs were discovered at a nest site on Brownsman in early May and a total of 24 (22) pairs nested as follows; Inner Farne 4 (5), West Wideopens 2 (2), Staple Island 5 (4), Brownsman 10 (9), North Wamses 1 (0), Longstone Main 1 (1) and Longstone End 1 (1). As usual, a number of pairs took advantage of man-made features including stone walls, a gas cage and the two lighthouse buildings. The first young started fledging from 4 June with second broods noted from 11 July. Small numbers lingered on the islands after the breeding season and local breeding birds were swelled in autumn by northern breeding birds with up to twenty-five resident on Brownsman in late November.

Yellow Wagtail *Motacilla flava flavissima*

An uncommon passage visitor.

This once common passage visitor is in serious decline throughout the British Isles and this has been reflected in the dramatic drop of migrants reported from the islands, culminating in no records being produced from the Farnes last year. However it was a welcome return to form this year as the islands boasted some good numbers (by recent standards) in both spring and autumn. Spring passage produced three records starting with a male which called and circled the inner group on 23 April before eventually landing on the central meadow on Inner Farne and representing the first island record since September 2006. Further records included one by the lighthouse on Inner Farne on 26 April and a female flushed from the south end of Brownsman on 6 May. Autumn passage was even more productive, although all records were confined to the outer group from early-mid September, with one west over Brownsman on 7, another which lingered between Brownsman and Staple Island on 12, a total of four which moved west on 13 (representing the highest Farnes day count since 2000) and one east on 14 September. The final record involved four west on 15 September, completing a very respectable year.

The continental sub-species of Yellow Wagtail, 'Blue-headed Wagtail' *M. flava flava*, appeared on the islands for the first time since May 2003 when a male was flushed from Staple Island and rediscovered on nearby Brownsman on 10 May. A second individual, another male, was found by the lighthouse on Inner Farne on 28 May and these bring the total number of Farnes records to twenty, following the first in April 1961.

Grey Wagtail *M. cinerea*

An uncommon passage visitor. May have bred in the 1890s (Miller, 1911-14).

This passage migrant remains uncommon on the islands and following a blank spring the first birds arrived on 4 September when two were seen briefly on the north rocks of Inner Farne before departing west. Further records included individuals on Staple Island on 6 and over the inner group on 9 and 14 September, one on the east rocks of Brownsman on 7 October and one which lingered around the eastern edge of Inner Farne on 13 October. The final record involved two on Brownsman on 30 October.

Pied Wagtail *M. alba*

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

It was an excellent season as the breeding population increased and good numbers were reported roosting on the islands during late summer. The first song flights were documented on Inner Farne on 28 March when two rival males were heard and seen singing against each other. Both males eventually paired up and bred successfully on the same island as, once again, one pair utilised St Cuthbert's Chapel whilst the second pair were more opportunistic and raised young from a nest built into a stack of Roseate Tern nest boxes piled near the lighthouse. During this period light northerly passage was documented with up to five west on 11 April. Nest building activities commenced from 11 April and the first eggs were discovered on 13 May. There was a welcome increase in the population as a total of 6 (5) pairs nested as follows: Inner Farne 2 (2), West Wideopens 1 (0), Brownsman 1 (1), Staple Island 1 (1) and Longstone Main 1 (1). The first fledglings were seen around Brownsman on 5 June and Inner Farne the following day. Overall it was an excellent breeding season as all six pairs fledged at least one brood of youngsters whilst those on Inner Farne and Brownsman went on to raise second broods in July. Following the breeding season, the now traditional evening roost on the dock bank on Inner Farne attracted good numbers throughout the late summer with a peak of thirty on 6 August. Numbers gradually dwindled during September and the species became very scarce once again during the autumn months, with only two records from the outer group from mid-September to the end of the year.

The continental sub-species 'White Wagtail' *M. alba alba* is recorded annually on the islands and reports included one near the lighthouse on Inner Farne on 30 April, on the south end of Brownsman on 6 August and another on the dock bank of Inner Farne on 13 August.

Waxwing *Bombycilla garrulous*

An uncommon winter and passage visitor.

An outstanding year for a stunning bird. During late October-early November the east coast witnessed a large eruption of these colourful funky birds, as good numbers flooded into the UK for the winter. The first indication of the invasion occurred when one was seen landing briefly on Brownsman and then later on Inner Farne on the afternoon of 29 October. However this was just the start of things to come as three flew west over the inner group on



2 with another individual on Staple Island on 3 November. Then 5 November witnessed an explosion of records as three moved west over the islands but this was eclipsed when an enterprising warden decided to place diced apples onto the artificial tree to attract birds to Brownsman and duly two arrived and roosted overnight. The following morning, on 6 November, the couple were joined by others, with a total of five feeding from the apples before heading west later that day. Soon after, this was

followed by another flock of eight which repeated the exercise before heading west, and a minimum of twenty different individuals were recorded on Brownsman that day with many of these seen going over Inner Farne later. The final record was of one which had roosted overnight on Inner Farne and was still present on 7 November. It appeared that the Farnes boasted at least thirty-one individuals during this period although it still remains a rarity on the islands with records from only thirteen previous years since the first in 1949, with peaks of thirty in 1957 and 2004. The species was last recorded on the Farnes in 2005, with an individual on Brownsman on 3 November.

Wren *Troglodytes troglodytes*

A common visitor and passage migrant. A rare breeder.

The Farnes can boast a new breeding species as at last, long predicted, a pair of Wrens successfully fledged young from the islands. When the wardens returned to the islands in late March it was evident that small numbers had over-wintered as up to five were present on Inner Farne with at least one on Brownsman. These birds remained resident throughout April although numbers gradually declined with just one present on 4 May. However an interesting turn of events occurred on Inner Farne when a resident male began singing from the vegetable garden from 7 April and could be heard holding territory on a daily basis into mid-May. It was starting to dawn on the wardens that this bird was making a serious breeding attempt and at least two nest structures were discovered. Eventually suspicions were confirmed in June as birds were discovered entering the stone wall surrounding the vegetable garden and on 19 June, the first ever Farnes-raised Wrens fledged, when three youngsters with their proud parents were seen in the vicinity of the nest site. The family party remained on the island throughout June and July although at times they could be very difficult to locate. Following this excitement, the first new arrivals occurred on the islands from 18 September and up to ten were present on Inner Farne during the autumn months with up to four noted on Brownsman and singles on Staple Island, Longstone and West Wideopens. It appeared a small resident population had established for the winter, with the main stronghold of Inner Farne holding the greatest number.

Dunnock *Prunella modularis*

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

Despite the British population being generally sedentary, small numbers of the nominate race *P. m. modularis* migrate from the breeding grounds in Fennoscandia to wintering grounds in southern Iberia. It is considered that birds on the east coast in spring involve these birds returning to northern breeding grounds and following one on Inner Farne on 29 March, small numbers of 1-2 were seen on both Inner Farne and Brownsman on thirteen dates from 4-29 April with a peak of five on 23-24 April. Interestingly a pair arrived on Brownsman on 30 April and remained until 6 May, with the male setting up territory around the tern terrace area of the island. The final spring record concerned a very late individual on Longstone End on 12 May. The first autumn returnees appeared on Inner Farne from 11 September and the majority of records occurred on the inner group, with reports on thirty-five dates compared to six dates on the outer group. Although most records involved 1-2 individuals, at least one appeared to be wintering on Inner Farne and was still present on 6 December when the wardens departed.

Robin *Erithacus rubecula*

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

As usual, small numbers were evident when the wardens arrived in late March, having overwintered on the islands. At least three were resident on Inner Farne although this had reduced to a single bird by the first week of April. However following an easterly weather-front mid-month, a noticeable influx occurred across the islands as numbers increased to nine on 18, ten on 19, eleven on 20 and fifteen on 21, peaking at nineteen on 22 April. Birds were scattered across all the islands and numbers remained high until late in the month when birds moved north. The final spring records involved singles on 1-5 May with the last on Brownsman on 14 May. As usual the first autumn returnees appeared in early August with one on Inner Farne on 12 August. Thereafter the species was recorded daily, especially on Inner Farne where birds set up territories for the winter. Reports generally involved up to five individuals with a peak of nine on 7 September. After a disappointing October due to the lack of any easterly weather-fronts, early November was dominated by north-easterly winds which produced the peak numbers of the year. Following nine on 5 November, the following day produced a total of forty-three which included twenty-one on Brownsman, seven on Staple Island and fifteen on Inner Farne. Numbers remained high during the following few days with thirty present on 7 November although they declined thereafter. The species became absent from the outer group from 20 November whilst up to three were wintering on the inner group.

Bluethroat *Luscinia svecica*

An uncommon passage visitor, well represented in some years.

The year was noticeable for a spring 'fall' of migrants and the Farnes rolled back the years as the islands produced an impressive five different individuals, with another to follow in the autumn. The 1980s-90s were 'boom time' for this striking European visitor to the Farnes, with regular day counts of twenty or more typical during May. Sadly those heady times have long gone as the last five years have produced just a total of five individuals. However this year proved to be a superb spring with the islands entertaining no less than five birds in late May and early June. A female was discovered near the Churn pool on Inner Farne on 21 May and showed well to wardens and admiring visitors that afternoon. She remained for two further days and was last seen on 23 May and represented the first inner group record since 2002. Impressively two (a male and female) were together on Brownsman on 30 May with the male heard singing and during the same spell a third (another female) was present on adjacent Staple Island. However the spring was not complete as yet another female (a dull individual) lingered on Inner Farne on 1-2 June. It was an excellent spell and one which will not be forgotten for some time to come. Birds still remain scarce on autumn passage through the Farnes although the islands entertained a late individual, the second consecutive year the species has been recorded during the autumn. A well marked individual (considered to be a first-winter male) was noted on the central meadow on Inner Farne on 7 November and was the last record of the year nationally. Interestingly this represented only the second ever Farnes November record, and the latest ever following one on 4 November 2000.

Black Redstart *Phoenicurus ochruros*

A well represented passage visitor.

The Farnes is arguably one of the best east coast localities for this enchanting summer

visitor and the first of the year arrived following a spell of south-easterly winds, when a pale female arrived on Inner Farne on 7 April. The month brought further inner group records with two females present from 18-25 April with one lingering until 26 April. However records on the outer group were more intriguing as a female arrived on Brownsman on 17 April and was joined by a male the following day. It was evident that both were bonding as they remained resident until 23 April when sadly the male appeared to have been taken by a raptor, possibly a Merlin. During their stay the birds showed an active interest in the large rubble area on the island and it would have been very interesting to see what would have happened if the male had lived. As well as the pair, another female appeared on 21-22, with a second newcomer arriving on 23 April bringing the Brownsman resident total to four. However one disappeared following the death of the male but two females remained until 28 April. The final spring record concerned a female-type on Brownsman on 27-29 May. Autumn passage was disappointing following a lack of easterly winds during October with an individual lingering on Brownsman on 1-7 November with two present on 6 November.

Redstart *P. phoenicurus*

A common passage visitor.

It was another good spring for this colourful summer visitor and it was followed by a much improved autumn, following last season's dreadful showing which produced no records at all. The first birds of the year arrived on the slightly late date of 6 May with two females on Staple Island and Inner Farne, the latter remaining until 7 May. Late May produced an easterly weather front which provided further spring records with one on Inner Farne on 25-26 being joined by a second bird from 27-29 May. The final spring report concerned a spectacular male on Staple Island and a female on Brownsman on 30 May. Following last season's bitterly disappointing showing, the islands produced a plethora of autumn records with reports on five August, sixteen September and one November date. The first autumn returnee was discovered on 17 August when one was caught in the Pele Tower on Inner Farne and another was present on Brownsman until 21 August. Following one on Brownsman on 28 August, a major influx occurred during early September following gale force north-easterly winds with driving rain. A total of seven arrived on 6 but this increased to twenty-three (including a handful of stunning males) the following day with eighteen still present on 8 September. Thereafter numbers dwindled with up to ten daily on both island groups until 13 September when a new intake of arrivals brought the day total to eighteen on that day. Numbers gradually declined as birds moved south with seven on 17, two on 21 and a final September record of one on 25 September. Interestingly a very late individual appeared on Brownsman on the afternoon of 5 November and lingered until dusk. This represents only the third ever November record of the species and the second latest, following individuals on 12 November 1983 and 3 November 1994.

Whinchat *Saxicola rubetra*

A common passage visitor.

It was an excellent year for this distinctive showy summer visitor as the spring produced five records (the best showing since 2004) and autumn migration brought good numbers during September. The first northern bound spring migrant was seen briefly on Staple Island on 9 May and was followed by a male on Inner Farne from 21-23 May. Further spring records involved a female on Staple Island on 24 May and the late spring 'fall' brought the last spring record of a male on Inner Farne on 3 June. It was an excellent autumn with reports

on twenty-nine dates following two on Brownsman on 17-19 August. Thereafter 1-3 were recorded on a further five August dates. The easterly spell of wind in early September produced daily records of 1-8 from 1-23 September with peak day counts of twelve on 7 September and another surge the following week which brought eleven on 13 September. The final autumn record concerned a single on Inner Farne on 7 October, the latest island record since 2001.

Stonechat *S. torquatus*

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

This species has been going through a huge boom period on the islands in recent years as forty-five have been recorded since 2000, compared with just eleven throughout the 1990s. However it was a poor year, the worst since the lean days, with the islands producing just two confirmed records, a lingering female on Inner Farne on 27-29 March and a stunning male on Staple Island on 15 May. There were no autumn reports.

Wheatear *Oenanthe oenanthe*

A common passage visitor. Bred in six years 1931-59 (Goddard, 1925-1948).

The sentinel of the uplands is one of the first summer migrants to arrive on the islands as birds move north through the Farnes to upland breeding grounds. The first of the year arrived on the typical arrival date of 31 March with a female present near the vegetable garden on Inner Farne. Passage was slow to pick up although, following a male on the dock bank on Inner Farne on 4 April, good numbers started filtering through both island groups. Spring produced reports of 1-9 on forty-eight dates during April and May with a modest peak of eleven on 6 May. Large birds of more northern origin (Greenland race birds) were noted passing through the islands from mid-May. An unusual mid-summer record involved a fledged juvenile on Inner Farne on 29 June. The first autumn returnees started moving through from 4 August and were present almost daily throughout August and September with some good numbers recorded. Daily counts involved 1-12 with noticeable peaks of twenty-one on 25 August and twenty-four on 29 August. The easterly winds in early September brought forty-two on 7 with up to forty present daily from 8-13 September. Numbers eventually dwindled with twenty-four on 17 decreasing to sixteen on 21 and down to just two by 23 September. The final records concerned singles on Inner Farne on 2-5 October, Brownsman on 9 October and North Wamses on 12 October.

Ring Ouzel *Turdus torquatus*

An uncommon passage visitor.

It is always interesting to note that certain migrants can have good seasons on the islands and others can have very disappointing years. The latter was true for this 'upland Blackbird', as the only spring report concerned a female briefly on Brownsman on 30 May before she headed high west towards the mainland. October is the peak month to produce Farne sightings but the month was dominated by strong westerly winds (completely the wrong direction to bring migrants to the islands) and the Farnes failed to produce a single autumn record, the first such occasion since 1983.

Blackbird *T. merula*

An abundant passage visitor. Bred in four years 1893-1914, 1934, 1962 then annually 1964-74 (Miller, 1911-1914; Pike, 1902; Thorp, 1935; Hawkey, 1991).

Well recorded throughout spring and autumn passage, although recorded in lower than usual numbers during the latter half of the year due to the lack of any favourable winds. It was evident that birds had once again over-wintered on Inner Farne, as three were present in late March. The islands act as a 'service station' for northern bound birds and small numbers were seen moving through the two island groups throughout April with a peak of five on 25 April. The final spring record concerned an elusive female on Inner Farne on 29 April. An unusual mid-summer record concerned a fledged juvenile on Inner Farne on 15 July. Following one on Inner Farne on 13 September, birds did not become regular until 7 October when six arrived (three on Brownsman, three on Inner Farne). Thereafter there were daily sightings although a very disappointing October peak of forty-one west on 17 October was a direct consequence of the lack of any favourable winds. However November produced some noticeable passage as shown in Table 10 with 20-35 present from 8-16 November. Thereafter numbers dwindled with just a handful lingering into early December with up to three on Inner Farne and two on Brownsman.

Fieldfare *T. pilaris*

A common passage visitor.

This bulky northern thrush is recorded in small numbers on spring passage and large numbers are noted over the islands during the autumn months (if the weather prevails), as birds move into Britain to winter. Typically spring passage was light with records of 1-3 on eleven April dates peaking at eighteen west on 24 April. The final spring record concerned a very late individual lingering on Inner Farne from 2-4 May. The first autumn returnees arrived on 13 September with three present on Brownsman and one of these lingered until 16 September. Following a four week gap which produced no records, five flew west over the outer group on 15 October and thereafter sightings became regular. Due to the lack of any favourable winds during October, passage was poor with a very modest peak of forty-five on 17 October. However the flood gates opened in early November as shown in Table 10. Numbers gradually dwindled following the main course of passage with up to five daily until the end of November. The final records concerned one on Brownsman on 6 December and two on Staple Island on 31 December.

Song Thrush *T. philomelos*

A common passage visitor.

Often overlooked as a migrant, small numbers of northern breeders move through the islands during spring and autumn migration. Spring passage was light and all records were confined to April with 1-2 on eleven dates between 2 and 27 April, with a peak of three west over Brownsman on 23 April. The islands often produce a mid-summer report and individuals were seen on Staple Island on 18 June and Inner Farne on 27 June. The first autumn returnees appeared on 12 September with eight noted on the outer group and this was the start of an influx which produced an impressive fifty-six on the islands on 13 September with thirty-three the following day. Thereafter there was a daily presence although numbers declined to seventeen on 16, eleven on 17, ten on 25 and one on 26 September. It was a very disappointing October with a peak of eighty-two west on 7 October followed by only 1-8 daily, whilst November-December produced only a handful of records with 1-4 recorded until the wardens departed on 6 December.

Redwing *T. iliacus*

An abundant passage visitor.

This northern breeding migrant can be seen in good numbers during the autumn, as birds head into Britain to winter. Spring passage involved reports on ten dates as a single was present on Inner Farne from 27-31 March and 1-2 from 5-24 April. The peak count was a very modest three on 1 April and the final spring record was one on Inner Farne on 24 April. Following a four month absence, the first autumn returnees appeared on Inner Farne on 7-8 September followed by further singles on Brownsman on 13, 21 and 25 September. October usually signals the opening of the floodgates as thousands can fly-over (6,701 moved west on 9 October 2007), but not this year. The winds remained in the west all month and peak passage was a very disappointing 238 on 7 October with the second highest count reaching only 128 on 17 October. Early November witnessed a stronger arrival (as shown in Table 10), but even this was disappointing. Birds were present on a daily basis throughout the autumn period and a single remained on Inner Farne when the wardens departed on 6 December.

Table 10 Westerly thrush passage on selected November dates, Farne Islands 2008.

November	3	4	5	6	7
Blackbird	55	14	75	300	70
Fieldfare	58	20	473	1000	60
Redwing	31	12	476	600	115

Mistle Thrush *T. viscivorus*

An uncommon passage visitor.

This is usually the rarest *Turdus* to be reported during the year, as the islands produce only a handful of records each season. However it was a bumper year for reports, as five different individuals were recorded. The first of the year lingered on Inner Farne on 18-20 April and favoured the central meadow of the island during its stay. The autumn produced singles on Brownsman on the 'flats' area on 11 September, the east rocks on 13 September and one west with four Redwings on 7 October. The only other report was one west calling over the south end of Brownsman on 6 November.

Grasshopper Warbler *Locustella naevia*

A well represented passage visitor.

This skulking, streaky *Locustella* warbler always quickens the pulse when one arrives (especially during the autumn) and it was an improved showing following last season's disappointing two records. The first of the year involved a very elusive individual on Brownsman on 21 April which skulked in the artificial tree on the island. A new arrival appeared on the same island from 23-24 April, although it was much more confiding. The final spring record was one on Brownsman on 10 May. Autumn passage was marked by one favouring the central meadow area on Inner Farne on 13 September, the first inner group record since autumn 2005. The final record was a bird in the Brownsman vegetable garden on 15 September.

Sedge Warbler *Acrocephalus schoenobaenus*

A well represented passage visitor.

It was a lean year for this trans-Saharan migrant as the spring produced records on only three dates (five the previous year) and eight autumn dates (four the previous year). The first of the year was discovered in early May with individuals seen on Longstone and Brownsman on 6 May. Further spring records concerned one on Staple Island on 10 May and another on Inner Farne on 11 May. Despite a late spring 'fall' on the islands, there were no records produced during this late May-early June period. The first autumn returnee arrived on Brownsman on 6-7 August followed by further singles on 21, 23 and 27 August. All other autumn records concerned individuals on Inner Farne with singles on 31 August, 11 September and the final record of the year involving a newly arrived migrant on the dock bank on 12 September.

Marsh Warbler *A. palustris*

A rare visitor.

This difficult-to-identify reed-bed skulker is a rare visitor to Northumberland and the Farne Islands. As a late arriving migrant, the best time for their occurrence is late May or early June and it was during this period that the islands experienced a 'fall' of rare and scarce birds as the winds swung to the east. A very obliging individual appeared on Staple Island on 29 May and showed well to the admiring wardens, remaining until last seen on 4 June. During its stay it showed to several visitors and could be heard singing, indicating the bird was a male. However this purple patch brought further records as another was discovered favouring the Celandine bank on nearby Brownsman on 30 May with a second individual singing from the vegetable garden on the same island. The wardens verified that all three birds were present at the same time, making it a site record for the species, although the two Brownsman individuals were not present the following morning. The islands have produced a total of seven previous records with two in June 1993, a single in June 1997, two in June 1998 and further singles in June 2000 and July 2004. Interestingly all records have been confined to the outer group and this may be as a direct result of high breeding densities of nesting seabirds in prime migrant habitat on Inner Farne during this period.

Reed Warbler *A. scirpaceus*

A well represented passage visitor.

There were no spring records although this reedbed specialist was seen in reasonable numbers during the autumn. The first of the year arrived by the pond on Brownsman and remained from 18-23 August. Following a spell of easterly winds in early September singles were found on Inner Farne and Brownsman on 7 September. After another spell of easterly winds the following week, 13 September produced a day total of five, with three on Inner Farne and two on Brownsman. Although the Brownsman birds stayed for only one day, the Inner Farne individuals lingered for a further four days and were last seen on 17 September. The final record concerned one by the Brownsman pond on 24 September.

Icterine Warbler *Hippolais icterina*

An uncommon passage visitor.

The Farnes is an excellent locality for this classic robust east coast drift migrant and the season produced four reports, all on Brownsman, representing the third consecutive year they have been recorded on the Farnes. During the late spring 'fall', a bird was discovered sheltering on the north hill of Brownsman on 28 May and lingered until the following day. A different individual then appeared on the same island around the pond area on 31 May.

Following last season's first ever July record from the islands, lightening did strike twice, as an individual was found on Brownsman on 26-27 July and was the first autumn returnee recorded in Britain. The fourth and final record of the year concerned a showy bird on the artificial tree on Brownsman on 31 August. The outer group have dominated records in recent years as the last inner group bird was seen in August 2004. This season's four records brings the Farnes total to sixty-six individuals recorded in twenty-nine years since the first on 3 September 1963, as shown in Table 11.

Table 11 Icterine Warbler records 1960-2008.

Period	No. years recorded	No. records
1960 - 1969	3	4
1970 - 1979	6	8
1980 - 1989	6	12
1990 - 1999	8	29
2000 - 2008	6	13

Blackcap *S. atricapilla*

A common passage visitor.

This distinctive summer visitor usually arrives on the islands in mid-April and can characteristically be one of the last reported, as small numbers move from the nearby continent to winter in Britain. It was an excellent showing on spring passage with reports on nineteen dates following the arrival of a male favouring the cemetery bank on Inner Farne on 12-14 April. Numbers remained low with 1-2 northern bound individuals recorded throughout April although four arrived on 30 April, with a pair on both Inner Farne and Brownsman. An unusual report concerned a male in sub-song on Inner Farne on 1-2 May whilst the last spring record was a lingering male on Brownsman on 3-6 May. A male discovered on Inner Farne on 30 August signalled the start of autumn migration and reports were received from fifteen September, five October and twelve November dates. The first surge of records occurred in early September following a north-easterly weather front which dropped eight across the islands on 7-8 September whilst the following week brought a further eight on 13 September. Following the second influx, birds were present daily with up to six noted on 14-17 September. However numbers dwindled rapidly and October was a disappointing month as a series of westerly weather-fronts halted migration. The peak count during this spell was a very modest two on 7 October. However the winds switched again in early November and there was a daily presence from 1-12 November with three noted on three dates and a peak of four on 6 November. The final record concerned a female-type on Inner Farne on 12 November.

Garden Warbler *S. borin*

A common passage visitor.

This large robust Sylvia usually arrives on the islands in late April and this period brought the first sighting of the year when one appeared by the pond on Inner Farne in mid-afternoon on 28 April. As usual, spring passage was light with an individual on Brownsman on 30 April, followed by singles across the islands on five May dates and a very late spring passage bird which was discovered on Inner Farne on 3 June. The first arrival of southern

bound migrants occurred on 17 August with two on Longstone and singles on Brownsman and Inner Farne. The following day saw a further increase with six across the two island groups and thereafter 1-4 were recorded on a further eight August dates. September started slowly with 1-2 on 1-3 September but a major influx occurred following strong north-easterly winds with rain on 7-8 September. A total of twenty-one arrived on the islands on 7, ten on Inner Farne, eight on Brownsman and three on West Wideopens, with fifteen still present the following day. The following week witnessed daily records as birds filtered through with regular counts of up to eleven until 15 September. Thereafter numbers dwindled as singles were reported on four dates between 16 and 20 September and the final record involved one on Brownsman on 21 September.

Barred Warbler *S. nisoria*

An uncommon passage visitor.

The islands go from strength to strength as for the second consecutive year the first autumn returnee in Britain was discovered on the Farne Islands. The islands can only be rivalled by the northern isles for the total number produced as thirty-six have been discovered since 2000 alone. This year matched the very best and the islands produced seven different individuals, equalling the record set in 2004. The first of the autumn (and first autumn returnee in Britain) was flushed off the dock bank on Inner Farne on the morning of 8 August. The bird eventually showed well in the Elders *Sambucus nigra* in the vegetable garden later that day. Amazingly a second bird had arrived on Brownsman on the same day, which moved over to nearby Staple Island that afternoon. Although the outer group bird departed overnight, the Inner Farne individual showed throughout a further four days and was last seen on 12 August. Following a spell of easterly winds with driving rain, a bird was discovered on Brownsman on 7-8 September and showed well on the artificial tree. The following week produced more records as another easterly airflow brought a lingering individual to Inner Farne on 13-14 September and Brownsman on 13 September. The records just continued to come as a skulking first-winter bird was found on Brownsman on 21 September and the final record of this record-equalling year involved one on Inner Farne on 24-26 September. It is an incredible statistic but the islands have now produced a total of forty-three in nine years. The last blank year was 1997.

Lesser Whitethroat *S. curruca*

A common passage visitor.

It was another good showing of this long distant migrant on spring passage as birds filtered through the islands throughout late April and May. Following the first in the lighthouse compound on Inner Farne on 21 April, the spring produced records on a further fourteen dates. The spring peak occurred early with six present on 30 April, four on Brownsman and two on Inner Farne. Thereafter 1-2 were present on eleven May dates with the last spring record involving a single on Brownsman on 1 June and Inner Farne on 1-2 June. The first autumn returnees arrived on 6 September with singles on Brownsman and Inner Farne with 1-2 noted on a further seven September dates. The last record concerned one in the vegetable garden on Inner Farne on 7 October.

Whitethroat *S. communis*

A common passage visitor.

The first arrivals on the islands were two noted on Brownsman and one on Inner Farne on

27 April. Following another on 30 April, the islands produced a healthy 1-4 on thirteen dates with a noticeable peak towards the end of the month involving eight on the outer group on 28 May, with four present the following morning. Autumn migration never reached these dizzy heights although it was a vast improvement on the previous autumn showing (only three records). The first autumn returnees started filtering through the islands from 6 August when one was discovered on Staple Island and it was still present the following morning with a further 1-2 on four August dates. September produced the bulk of reports as 1-3 were recorded on eighteen dates with a peak of five on 15 September which included four on Inner Farne. The final record was a single on Inner Farne on 30 September.

Subalpine Warbler *Sylvia cantillans*

A rare visitor.

The islands produced another stunning record of this Mediterranean species and the Farnes have now boasted three in the previous four years. An adult male of the western form was discovered on Staple Island on 27 April before relocating to nearby Brownsman. The presence of thick fog resulted in the bird remaining for the rest of the day, showing well on occasions on the artificial tree, although it was not seen the following day. This represents the sixth record in total following individuals on 20 June 1977, 26 April 1991, 10 May 2000, 10 September 2005 and 3-4 June 2006.

Greenish Warbler *Phylloscopus trochiloides*

A rare visitor.

From ultra rare to annual in just five years, that is the amazing turnaround of this eastern European migrant on the islands. Following the first on 22 August 1991, there have been a further seven records between 2004 and 2007 and that amazing run continued as the species was seen for the fifth consecutive year. A showy individual was discovered in the Elders *Sambucus nigra* on Inner Farne on the afternoon of 18 August and remained active on the island throughout the following morning. This represents the ninth Farnes record, five of which have occurred on the inner group.

Yellow-browed Warbler *P. inornatus*

An uncommon passage visitor.

This now annual Siberian waif is going through a dramatic upturn of fortunes as the islands have produced no fewer than forty-two since 2000, including a record seventeen in 2006. This increase has been mirrored nationally and this year brought a stunning surprise: the islands' first ever spring record. A bird arrived on Brownsman on the morning of 27 April and lingered for just over one hour before departing south in calm mild conditions. The first autumn returnee arrived in mid-September when one lingered all day on the north rocks of Brownsman on 15 September followed by individuals on Staple Island on 22 and Brownsman on 24-26 September. The afternoon of 25 September brought the autumn peak count when three arrived (with one still on Brownsman), two on Inner Farne and another on Longstone. Following a disappointing migration period in October, a second wave of records occurred during another spell of north-east winds in early November and three individuals were recorded, singles on Inner Farne on 3, Brownsman on 6 and Inner Farne on 6-7 November. The year's total of ten was the third highest annual total for the islands following fourteen in 1999 and seventeen in 2006.

Wood Warbler *P. sibilatrix*

An uncommon passage visitor.

This striking summer visitor remains scarce on passage through the Farnes although spring passage brought two individuals in early May. A confiding bird was discovered on Brownsman on 6 May with another on Longstone later that afternoon which surprisingly lingered on the lighthouse for a further two days until it was last seen on the evening of 8 May. Autumn passage produced two more individuals, both on Brownsman, with an obliging bird on 18-19 August and another favouring the vegetable garden on 6-8 September. This was the first record on the islands since the record year of 2006 (which produced six individuals) and the thirty-fifth year the species has been recorded since the first in May 1951.

Chiffchaff *P. collybita*

A common passage visitor.

This early returning summer migrant is one of the first migrants to appear on the islands and this year was no exception as one was discovered sheltering on the lea side of Inner Farne during a westerly gale on 1 April. Spring passage was slow to start and the next island record did not occur until 13 April with an individual on Brownsman. Thereafter passage gained momentum and sightings increased with daily records from 14 April-23 May with peaks of six on 20 and eight on 21 April. Numbers dwindled as spring progressed, with late migrants passing through in late May, three on 28 May representing the last spring record. Autumn passage commenced from 28 August with the appearance of an individual on Brownsman followed by three on 30 August. Numbers appeared very low during September-October as the islands claimed only 1-3 on ten dates during this period. The arrival of north-easterly winds in early November brought the best showing of the year and eight on 1 increased to ten on 2 with 1-7 present until 11 November. Many of these birds were noticeably 'pale and washed-out' in colouration, suggesting northern *abietinus* individuals were involved. The final record concerned one on Brownsman from 14-16 November.

Willow Warbler *P. trochilus*

A common passage visitor.

It was an excellent year for this summer songster and it was well represented during both spring and autumn passage. The first of the year arrived on 18 April with individuals discovered on Brownsman and Inner Farne and birds were present almost daily thereafter with records on forty-one dates until the last sighting in early June. Generally records involved 1-8 with peaks of eleven on 23 and 27 April and ten on 6 May across the islands. More unusually, spring passage was protracted as pale northern race birds filtered through the islands with 1-3 daily on 1-3 June and the last record concerning one on Brownsman on 8 June. Autumn returnees were not long in arriving as a bird was heard in sub-song on the dock bank on Inner Farne on 4 August. Thereafter there was an almost continual presence throughout the autumn until late September. August brought the arrival of upto eight on

Table 12 Daily counts of Willow Warblers on Farne Islands 6-14 September 2008.

	6	7	8	9	10	11	12	13	14
Outer Group	10	60	40	20	20	20	16	24	19
Inner Group	10	59	30	25	20	20	15	14	10
Day Total	20	119	70	45	40	40	31	38	29

several dates peaking with a noticeable thirty-four across the islands on 30 August. However this was just the start of things to come as an easterly weather-front in early September brought some impressive numbers to the islands as shown in Table 12. The overall count of 119 on 7 September included fifty on Inner Farne, thirty-five on Brownsman, twenty-five on Staple Island, eight on West Wideopens and one on Knoxes Reef. This was the second highest ever Farnes day total short of the 260 present on 8 September 1995. Thereafter numbers dwindled throughout the month with the last report concerning one on Inner Farne on 25 September.

Goldcrest *Regulus regulus*

A common passage visitor.

The presence of this dinky sprite is often given away by its distinctive high pitched call and the islands attract good numbers during both spring and autumn passage. The first record of the year involved three on Inner Farne on 31 March with one remaining until 2 April. Spring passage was very light with 1-3 noted on seven dates, and the last involving an individual on Inner Farne on 24-25 April. As expected, the first autumn returnees arrived in late August when three were discovered on Inner Farne on 26 followed by two on Brownsman on 30 August. Small numbers of 1-6 were recorded on twenty-six September dates with a peak of eleven on 9 September. The big influxes usually arrive in October but due to predominately westerly winds throughout the month, the expected avalanche did not arrive as birds were reported on only fifteen dates with a very modest peak of twelve on 30 October. However a series of north-easterly weather fronts in early November brought large numbers to the islands. The first few days of the month attracted up to twelve but thirty-five arrived on 5 November. The following day witnessed at least 170 across the islands (the highest island count since 2005) with sixty on Brownsman, sixty on Inner Farne, thirty on West Wideopens and twenty on Staple Island. The birds often arrived from the south and interestingly up to thirty were discovered roosting at night on the side of the tower on Brownsman, huddled together in small clusters to keep warm. Good numbers remained on 7 November with sixty still present although they declined rapidly thereafter with thirty-five on 8, twenty-five on 9 and only ten present by 11 November. The final record concerned a single on Brownsman on 12 November.



Spotted Flycatcher *Muscicapa striata*

A well represented passage visitor.

It was a superb season (the best showing since the 1990s) with good numbers recorded throughout the spring and autumn (Table 13), including the second highest ever Farnes day count. The first arrivals occurred on 8 May with individuals on Longstone and Brownsman, followed by an excellent showing throughout the month. Reports were received on a further fourteen May dates with singles noted on several islands including Inner Farne, West Wideopens, Staple Island, Brownsman and Longstone. Peak counts concerned two on Brownsman on 15 and 22 with two on Inner Farne on 28 May. The last spring passage bird

was noted on Brownsman on 1 June and Inner Farne the following day. Autumn passage did not disappoint either, as some impressive numbers arrived following one near the pond on Inner Farne on 27 August. The following day witnessed four scattered across the islands with an impressive six on 30 August and this momentum continued into early September. During strong gale force easterly winds on 6 September, two were seen on Inner Farne including one bird which was literally blown off the island to the mainland, whilst three were present the following day. The morning of 8 September produced an impressive eight across the islands including six on Brownsman, representing the second highest ever day count for the islands although some way off the thirty recorded on 8 September 1995. Thereafter numbers dwindled although five were present on 13, four on 14 and singles on 18 and 24 September. The final record concerned a late individual on Inner Farne on 7-8 October, the latest since 2001.

Table 13 Spring and autumn records of Spotted Flycatchers on the Farne Islands.

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Spring	5	0	4	0	1	2	2	5	see text
Autumn	14	5	4	2	4	4	5	2	see text
Total	19	5	8	2	5	6	7	7	

Red-breasted Flycatcher *Ficedula parva*

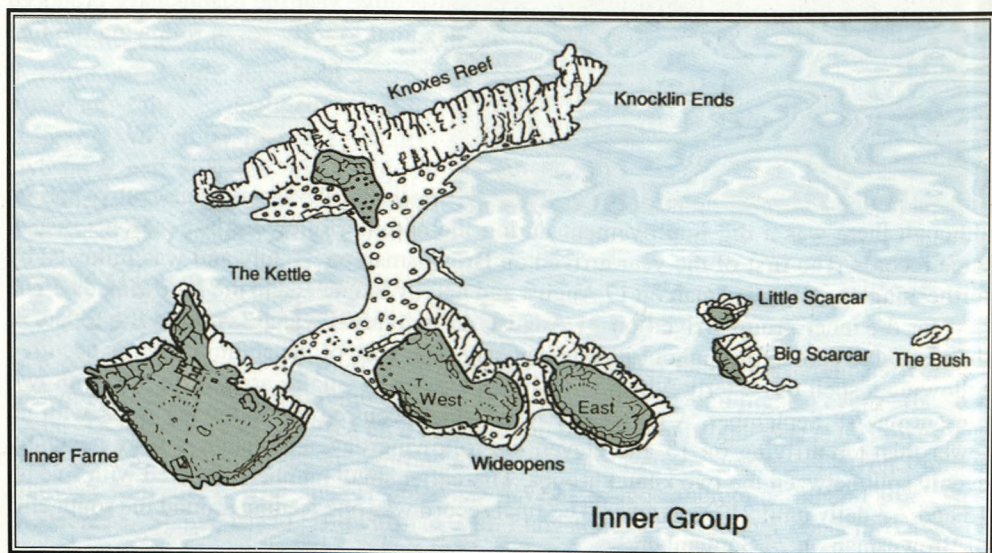
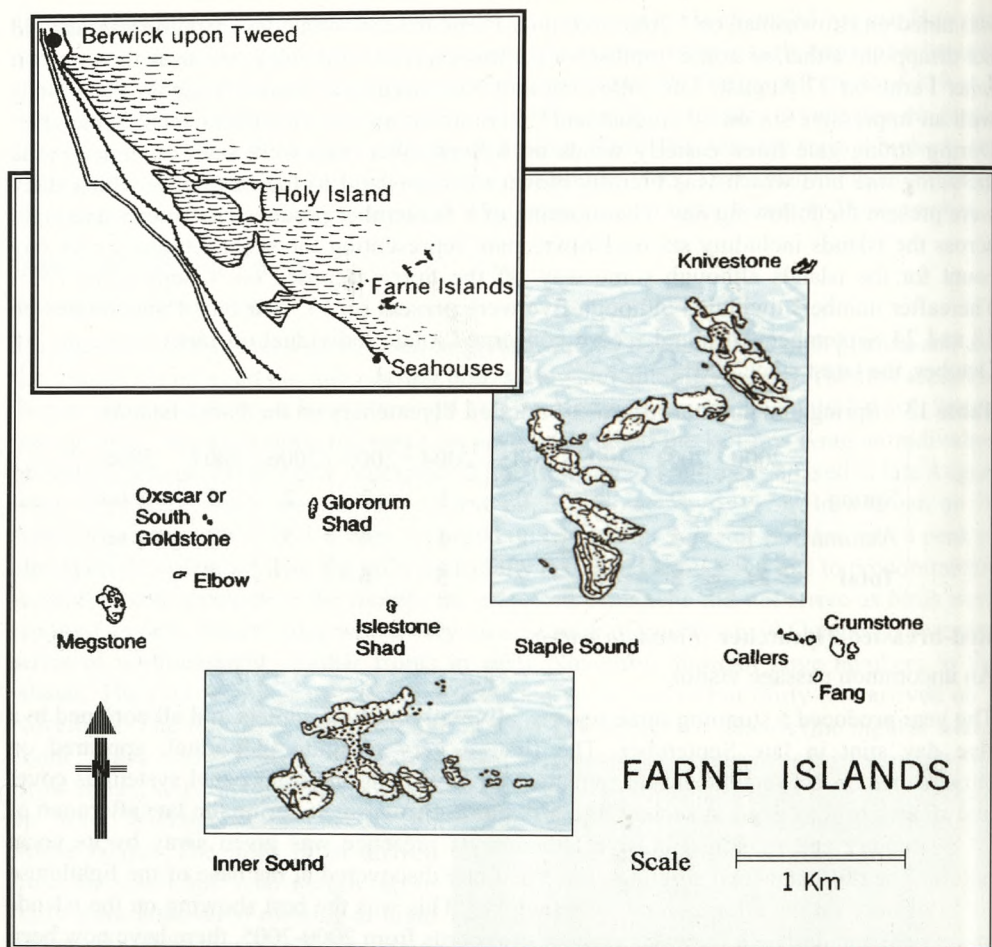
An uncommon passage visitor.

The year produced a stunning three reports, all involving first-winters and all confined to a five day stint in late September. The first, a very obliging individual, appeared on Brownsman on 22 September and remained all day, using the solar panel system as cover and an area to feed from. A second bird arrived on Brownsman during the late afternoon of 24 September and remained elusive although its presence was given away by its vocal nature. The third and final sighting concerned one discovered at the base of the lighthouse on Longstone on the afternoon of 25 September. This was the best showing on the islands since 1993 and despite a five year absence of records from 2000-2005, there have now been five in the last four years. This was the second consecutive year the islands have produced records and this year's three birds brings the Farnes total to forty-seven following the first in September 1949.

Pied Flycatcher *F. hypoleuca*

An uncommon passage visitor.

This majestic black and white flycatcher failed to appear for the second consecutive spring, although there was a big improvement during the autumn following last season's dismal three records. The first of the year arrived on Brownsman on 31 July and was followed by further singles on Brownsman on 17 August and nearby Staple Island the following day. The first for the inner group arrived on 21 August, an individual which favoured the Elders in the vegetable garden throughout its one day stay. The bulk of the autumn records occurred following a spell of easterly winds in early September as singles arrived on 5-6, with two present on 7-8 September. A noticeable influx then occurred the following week with no fewer than ten arriving on 13 and eleven the following day, and numbers were generally evenly split between the two island groups. Thereafter small numbers lingered with five on 15 and 2-3 daily until 21 September. The final record was one feeding around the south cliff of Brownsman on 24 September.





Long-tailed Tit *Aegithalos caudatus*

An uncommon visitor.

It was a magical year for this 'feather-ball', as irruptions brought three parties to the islands during late autumn. A vocal individual arrived on Inner Farne on 25 October during a south-westerly gale and favoured the dock bank area of the island, where it remained throughout its stay. A few weeks later, on 7 November, as all the wardens watched the stunning Great Grey Shrike on Brownsman, a party of nine 'danced' over their heads and that of the Shrike, moving in a south-westerly direction over Staple Island towards the mainland. Less than fifteen minutes later, a repeat performance occurred across the north end of the island as six moved west, bringing the day total



to fifteen. It was not surprising when more appeared, and the following morning three arrived on Brownsman and due to strong westerly winds, the birds remained on the island from 8-10 November. These sightings brought the islands' total to eighteen records involving ninety birds, following the first on 17 April 1965. The sightings were the first since November 2004 and the day total of fifteen was a new Farnes record, eclipsing the twelve seen over Inner Farne on 10 November 1990.

Treecreeper *Certhia familiaris*

A scarce visitor.

This cryptic woodland creeper appeared on the islands for the second consecutive year as a bird was discovered on Inner Farne on 25 September. Initially seen on St Cuthbert's Chapel, the bird favoured the Pele Tower building and was seen creeping up the side looking for insects. Always a joy to observe on the islands, this represents the twenty-first island record with 85% having occurred on the inner group of islands.

Red-backed Shrike *Lanius collurio*

An uncommon passage visitor.

A stunning year for a stunning visitor as an incredible spring influx brought no fewer than seven individuals to the islands in late May and early June. The first indication of the invasion involved a striking adult male which arrived on Brownsman on 27-29 May and showed well throughout its stay, using various parts of the island to feed. However 30 May brought the main surge as during the morning no fewer than four arrived, with a female on Staple Island and two females and a male on Inner Farne. This incredible sight had the wardens buzzing as the female on Staple Island wandered over to adjacent Brownsman, whilst the Inner Farne male commuted to nearby West Wideopens during the day. Although most had cleared out the following morning, at least one female was still present on Inner Farne. The excitement continued when another male arrived in the late afternoon of 1 June on Inner Farne and remained until the following day, whilst another female arrived on

Brownsman on 2 June. It probably should not have come as a great shock when another appeared during the autumn months, as a first-winter bird arrived on Inner Farne and lingered from 6-13 August and was seen feeding on ground insects during its stay. The tremendous showing of seven during the spring matched the previous best spring of 1998 whilst the overall total of eight was just short of the all-time record of nine set in 1977 and 1998.



Great Grey Shrike *L. excubitor*

A scarce passage visitor.



This awesome shrike arrived on the islands following a south-easterly weather-front as one arrived on Brownsman in the early morning of 7 November. The bird, an adult, lingered all day on the island, performing well on man-made perches, and was seen to kill two Goldcrests and a Robin during its stay. Having gone from 1991-2004 without a single record, the islands have now produced three in five years following individuals in March 2005 and October 2006, and the birds' status is creeping back towards becoming a regular passage visitor. This represents the nineteenth Farnes record and the eighth for the outer group of islands.

Jackdaw *Corvus monedula*

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

The species still remains scarce during the season with the majority of reports involving birds passing overhead during the early spring period. The first of the year concerned two west over Inner Farne on 30 March followed by three the following morning. Passage continued during April with three east over the outer group on 12, an impressive thirteen over Brownsman on 22, and three flying east on 24 April. An unseasonable mid-summer report concerned one east over Brownsman on 7 June with three over the inner group later that day, whilst two flew east on 9 June.

Following the discovery of the islands' second ever Nordic Jackdaw *C. monedula monedula* last autumn on Brownsman, another potential was seen on the same island on 1 November but although it appeared to have a very pale collar, the bird departed west before identification was confirmed.

Rook *C. frugilegus*

A well represented visitor.

This well known farmland Corvid had another good season with records during both the spring and autumn period. Spring passage was generally light with small numbers of 1-4 seen flying over the islands on twelve dates between 3 April and 5 May. Birds are generally seen moving east out over or towards the outer group of islands before eventually retreating west towards the mainland. It is assumed these all involve local movements as opposed to migration through the islands. The peak spring report concerned five lingering around the inner group on 20 April. Autumn passage was confined to October when 1-3 were recorded on eight dates, with a peak of six east over the outer group on 12 October which went on to mob a large adult Peregrine over Big Harcar. Birds still remain a rarity actually landing on the islands although two were observed landing on West Wideopens on 4, 29 and 30 October.

Carrion Crow *C. corone*

A well represented visitor and rare breeding species.

As usual, the species was well reported throughout the spring and autumn period with large numbers noted. The spring produced regular sightings of up to six throughout March-May with peak counts including fifteen east on 22 April, fourteen east on 23 April and eighteen east on 2 May. Usually the species becomes absent from the islands throughout the summer months although this year was noticeable for one event: a summering individual. A lone bird commuted daily to the islands from June-August, favouring the inner group throughout its stay. Without doubt the bird would have caused some damage amongst the nesting seabirds but thankfully there was no repeat of last season's breeding attempt. Apart from this lone individual, the islands did not produce any other 'outsiders' from 20 May-20 September. Autumn passage gradually increased from mid-September although peak counts remained modest with eight on 13 October and fifteen on 15 October. Interestingly the species remained very scarce on the outer group throughout the autumn as there were only records on five dates, all involving sightings in mid-October.

Raven *C. corax*

An extremely rare visitor.

This powerhouse of a Corvid remains a very rare coastal sight in Northumberland and two birds (presumed a pair) were seen and heard tumbling down onto East Wideopens where they remained for twenty minutes, picking at a food item believed to be a dead rabbit. Eventually both lifted and flew west, calling, over Inner Farne and over the observers' heads, making it one of the most impressive sights of the season. Regarded as a major rarity on the islands, this represents only the fifth ever record following two on 22 May 1951, singles on 24 June 1972 and 9 May 1989 and two on 15 September 2003.

Starling *Sternus vulgaris*

A common visitor, extremely rare breeder.

One of the most numerous passerines recorded on the islands during the year, especially from mid-summer when local birds commute daily to the islands, with more arriving from northern Europe during the autumn months. As usual, small numbers were present daily in late March when the wardens arrived but these numbers dwindled in early April with the final spring record concerning one on Inner Farne on 27 May. There were no breeding

attempts again (the last was in 2000) but the first family parties appeared from early June, taking advantage of the relative safety of the predator-free environment. Numbers gradually increased with one on 4, increasing to five on 6 and eighteen on 15 June. Thereafter birds were resident until the wardens departed in early December, with large concentrations noted in July on Inner Farne and up to 120 present mid-month. As usual, late autumn brought the major influxes from the continent with westerly passage documented on several dates although numbers remained modest due to the lack of any favourable winds. Up to 160 moved west on 17 October with smaller numbers reported on several other dates.

Chaffinch *Fringilla coelebs*

A common passage visitor.

It was generally a quiet season with only small numbers recorded on passage. The first bird of the year, a female, flew west over Inner Farne on 28 March and was followed by a pair in the vegetable garden on the same island the following day. The only other spring report concerned a female west over Brownsman on 23 April which was probably the same individual which arrived on Inner Farne later that day and remained resident until 25 April. The general bulk of island records usually occur during the autumn, although it was a very disappointing showing with five noted on 14 September followed by 1-3 on four dates until 22 September. The following six weeks produced no records during a very poor October but eventually 1-4 became resident from 7-12 November on both island groups.

Brambling *F. montifringilla*

A common passage visitor.

This handsome northern finch was discovered on spring passage and was a welcome return to spring sightings following their noticeable absence last year (the first recorded spring absence in Farnes history). The northern bound spring birds were all confined to late April with four on the islands (two on both Brownsman and Inner Farne), all lingering throughout 23 April. The only other spring report concerned a male on Staple Island from 26-28 April. The bulk of Farnes records involve migrants moving west to winter in Britain from mid-September and reports included singles west over Brownsman on 23, Inner Farne on 24 and another lingering on the inner group on 25 September. October produced modest passage with peaks of twenty west on 7 and ten west on 15 October with 1-2 on a further six dates. The north-easterly weather front in early November saw the final autumn movement of the year with 1-6 west on five dates from 1-7 November with peaks of ten west on 5 and twenty west on 6 November.

Greenfinch *Carduelis chloris*

A well represented passage visitor.

This large seed eater had another disappointing season as for the second consecutive year large numbers did not congregate during the autumn months. Spring passage was represented by singles west over Brownsman on 22 April and 5 May. Autumn passage did not see much more of an improvement with only one lingering on Inner Farne on 27-29 October and two present on Brownsman on 30-31 October. The only other autumn record concerned three which landed briefly on the artificial tree on Brownsman on 5 November.

Goldfinch *C. carduelis*

A well represented passage visitor.

This colourful visitor was well represented during the spring as the first of the year was seen flying west over Inner Farne on 31 March followed by 1-2 on westerly passage on 8, 14, 22 and 24 April. The last spring reports were of one east on 6 May and one south over Brownsman on 23 May. Autumn passage was disappointing although an improvement on last season's lone sighting as two were present on the artificial tree on Inner Farne on 20 September. October produced 1-2 on four dates with the final record concerning an individual feeding on thistles on Inner Farne on 2 December.

Siskin *C. spinus*

A common passage visitor.

In keeping with the majority of the finches, it was a quiet year with passage birds recorded on fifteen dates during the season. Spring passage was light with two west over the outer group on 23 and 24 April, followed by an individual over Staple Island on 6 June. The only other report concerned a juvenile which appeared very briefly in the Brownsman vegetable garden on the morning of 29 June and was later seen 'dropping out of the sky' on Inner Farne that day, apparently exhausted. The bird was collected and placed in a box for several minutes before being released unharmed. When freed the bird flew off strongly, appearing none the worse after its rest and continued its journey westwards towards the mainland. September heralds the start of autumn passage with individuals on Inner Farne on 12-13, with further singles on 16-20 September, whilst a party of six flew west over Brownsman on 18 September. Autumn passage was never going to match last season's impressive influx with the only October report concerning two flying over Staple Island towards Brownsman on 29 October. Early November produced the only other reports with a male lingering on Brownsman on 6-8 and another west over the outer group on 6 November.

Linnet *C. cannabina*

A common passage and winter visitor. May have bred in the 1890s (Kearton, 1898).

Numerous throughout the year with good numbers lingering and small numbers recorded on passage. There was a daily presence from March to early May with up to ten recorded, including singing individuals on Inner Farne on several dates. Passage was difficult to detect during this period due to the highly mobile nature of the daily flock, although 4-8 moved on six dates during mid-April with nine west on 6 May. The last spring sightings concerned one lingering on Brownsman on 11-13 May and three west over Inner Farne on 16 May. Following a three months' absence, an individual on Brownsman on 26 August heralded the beginning of the autumn passage although it was a slow start with 1-8 recorded on four September dates. Thereafter birds became resident once again, especially on the inner group, with the flock increasing in size as the autumn progressed, four on 13 October increasing to thirty by 26 October with up to thirty-five present throughout November. Smaller numbers were recorded on the outer group during this same period and passage was also logged with fifty-five west on 14 October.

Twite *C. flavirostris*

A well represented passage visitor.

This upland breeder winters along the Northumberland coast with small numbers recorded on passage through the Farnes, predominantly during the autumn months. The first record

of the year involved four discovered by the churn pool on Inner Farne on 2 October with another over the inner group on 4 October. It was generally a quiet autumn for records with further reports of four on Brownsman on 26 October, a season's peak of eight on Inner Farne on 3 November and the last sighting of the year of four south over Brownsman on 12 November.

Lesser Redpoll *C. cabaret*

An uncommon passage visitor.

It was a quiet season for this small distinctive visitor, as the spring produced just a lone record: one east over Brownsman on 14 April. Although the autumn months produced a reasonable number, it was still well below the average Farnes season for the total number of records. The first autumn returnee appeared by the pond on Inner Farne on 14 September with another on Brownsman on 21 September. October produced the bulk of reports with singles west over the islands on seven dates from 6-29 October with another single on Brownsman on 1 November. The final record to complete a disappointing showing concerned three west over the outer group on 5 November.

Common Redpoll *C. flammea*

An uncommon passage visitor.

This taxing family member always provokes much debate and discussion amongst the wardens over the finer points of identification and the autumn produced two records on the islands. An individual was discovered on Brownsman on 5 November and was later seen on Inner Farne before departing westwards and two obliging individuals were discovered feeding around the vegetable garden on Brownsman on 6-7 November. This represents the fourth consecutive year in which the species has been recorded on the islands.

Common Rosefinch *Carpodacus erythrinus*

An uncommon passage visitor.

The Farnes have the monopoly of records of this bulky east coast drift migrant in Northumberland, as it still remains very scarce on the mainland compared with almost annual reports from the islands. The Farnes boast records in no fewer than twenty-six of the previous thirty-two years and this year the islands produced four records. A skulking female was discovered on Brownsman on 27-28 May and was followed by another on the same island on 30 May. When the second bird was discovered, a phone call exchange between islands revealed a third bird, as another female had arrived at the same time on Inner Farne, favouring the dock bank area of the island. As expected, the autumn produced a lone report when a first-winter bird lingered on Brownsman from 8-10 September, and these sightings represent the tenth consecutive year the islands have hosted the species.

Lapland Bunting *Calcarius lapponicus*

An uncommon passage visitor.

Always a welcome bonus to the islands, this predominantly autumn passage bird was recorded during the spring, when one flew over Inner Farne calling as it moved north on 13 April, and represented the first Farnes spring report since 2002. The autumn months produced two records, as two birds were flushed off the north end of Brownsman and landed on nearby Staple Island on 25 September, showing well to the admiring wardens. However it was nothing in comparison to the first-winter bird which arrived on Brownsman on 27

September, which was so tame it fed at the feet of one disbelieving warden, picking seeds from his muddy shoe.

Snow Bunting *Plectrophenax nivalis*

A well represented passage visitor.

This charismatic visitor was recorded on spring passage when a vocal individual flew east over the inner group on 7 April, eventually dipping down and out of sight over the Wideopens. Autumn passage commenced with a single west over Brownsman on 26 September and October produced reports on three dates with singles on 28 and 30, and a peak of three west on 14 October. November witnesses the biggest arrival and in some years small numbers can remain resident on the islands for the winter. Reports involved 1-2 lingering or moving west on eleven dates with peaks of four west on 3 and 12 November. The final record concerned one on Inner Farne on 22 November and no birds lingered thereafter.

Reed Bunting *Emberiza schoeniclus*

A well represented passage visitor.

The islands usually boast small numbers on spring passage followed by large influxes during the autumn, especially during October. However it was not the case this year, as it proved to be the worst showing on the islands since 1979 with only four individuals recorded. The first of the year, a female, arrived on Brownsman on 23 April and was followed by a male on Inner Farne the following day and another on Brownsman on 28 May. The expected autumn floodgates did not open as the period produced just one record, an individual west over Brownsman on 5 November.

Exotica

Saker Falcon *Falco cherrug*

An escaped falconer's bird, complete with jesses, was flushed near the picnic area on Inner Farne on 13 October before it carried out a few short circuits of the island and flew to the nearby West Wideopens. Eventually it returned to Inner Farne before heading direct north towards Lindisfarne. This is the second record for the islands following a bird on the inner group on 28 October 2003.

RINGING AND RESEARCH REPORT FOR 2008

Ringing research projects

Ringing activities on the Farne Islands are focused on collecting biometric data on adults and chicks of three key species, Arctic Terns (Figure 1), Kittiwakes and Puffins. In addition, the ringing of samples of Sandwich Tern and Shag chicks, and adult Eiders and Shags as part of 'Retrapping Adults for Survival' (RAS) studies on Inner Farne and Staple Island respectively, are also key projects being undertaken by the ringing team. Data on Arctic Tern chick biometrics for the Farnes now extend back to 1997 and are beginning to yield important results on factors underlying variation in breeding success. For Arctic Tern chicks, we record chick mass and total head length for chicks of about nine days old or greater (assessed from total head length). Plotting these measurements on a log scale (Figure 2) allows comparisons of chick condition between islands and between years. Similar measurements are also taken for chicks on

Coquet Island and allow data for the Farnes (Inner Farne and Brownsman) to be compared with this similar Arctic Tern colony 30km further south. From that perspective, 2008 was an interesting year: chick condition was worse than in 2007 and, unlike the previous year, there were clear differences in the body condition of Arctic Tern chicks between Inner Farne and Brownsman, with those on Brownsman being heavier than their Inner Farne counterparts. Conversely, Arctic Tern chicks on Coquet were about the same as on Inner Farne. Overall therefore, it was a rather poor year for Arctic Tern chicks, with ones on Inner Farne and Coquet Island being about 20g lighter than expected on the basis of data for previous years (Figure 3); indeed, chick mass for Inner Farne was the lowest on record since the group started collecting these data in 1997 (Figure 3). These results suggest that Inner Farne and Brownsman terns may utilise different foraging areas, with Brownsman birds being rather more successful in finding food. Furthermore, the annual sampling trawl (see below) suggested a severe reduction in sandeel populations at the regular seabed sampling sites, and this may be linked to a shortage of surface food and the poor body condition of Arctic Tern chicks this year.

The body condition of adult Arctic Terns was also lower than previous years on three out of the four sampling occasions, and again, Farnes birds were significantly heavier than Coquet terns in 2008 (Figure 4), supporting the long term trend for greater (size-corrected) body mass of Arctic Terns breeding on the Farnes. The reason for these island differences is not known: differences in food availability may be part of the answer, but it may be more complex than that because the overall long-term trend seems to be for Arctic Tern chicks on Coquet Island to be in better condition than on the Farnes.



Figure 1 Measurement of total head length on an adult Arctic Tern.

Figure 2 Condition of Arctic Tern chicks on the Farnes and Coquet Island in 2007 and 2008: fitted lines are linear regressions on \log_{10} (body mass) against \log_{10} (total head length). Fitted regression lines: Farnes 2007 (black), Brownsman 2008 (red), Inner Farne 2008 (dotted blue), Coquet 2008 (green).

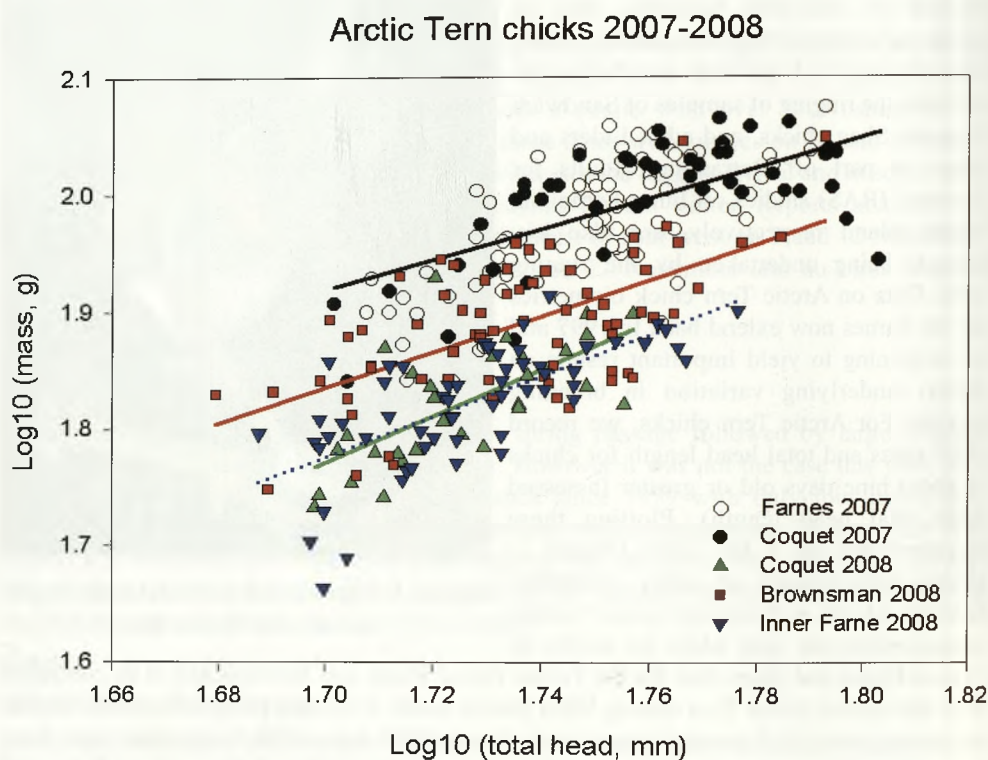


Figure 3 Mean (\pm standard error) size-corrected body mass of Arctic Tern chicks on Inner Farne, Brownsman and Coquet Island in 2008 compared to the long term average and maxima and minima for the Farnes.

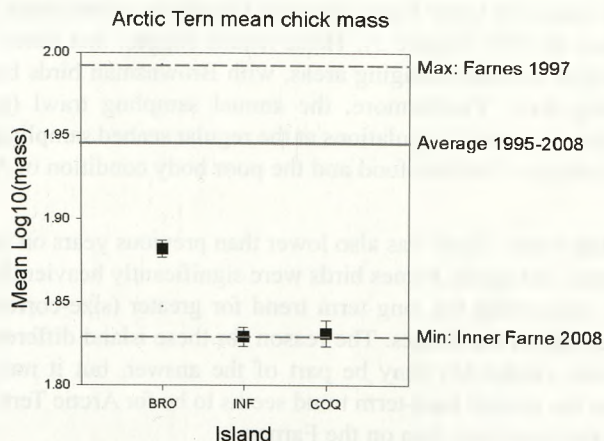
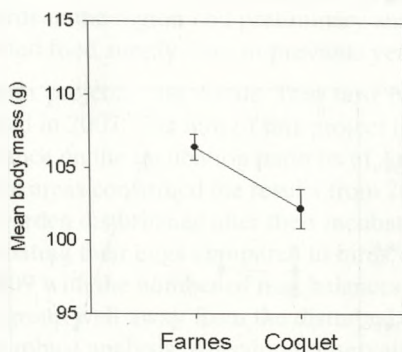


Figure 4 Mean (\pm standard error) body mass of adult Arctic Terns on the Farnes and Coquet Island in 2008, corrected for wing length and seasonal effects.



The importance of sandeels to Farnes seabirds generally is the reason why these body condition studies have been extended to the adults and chicks of Puffins and Kittiwakes: Puffins are not dependent on local surface availability and can feed throughout the water column, while Kittiwakes may forage further out to sea and may not be as restricted to local resources. Data for adult Puffins extend back to 2006 and although birds in 2006 were significantly lighter, there were no significant differences between 2007 and 2008 (Figure 5). We only have data to compare the Farnes with Coquet Island for 2008 and in that year there was no difference in size-corrected adult body mass between Brownsman, Inner Farnes or Coquet Island. For Puffin chicks, there were no differences in body condition between the last three years, and no difference between the Farnes and Coquet Island. These data suggest that Puffins did not experience food shortages in 2008 compared to previous years.

Figure 5 Mean (\pm standard error) size-corrected body mass of adult Puffins on the Farnes Islands 2006-2008. Sample sizes: 26, 20 and 41, respectively.

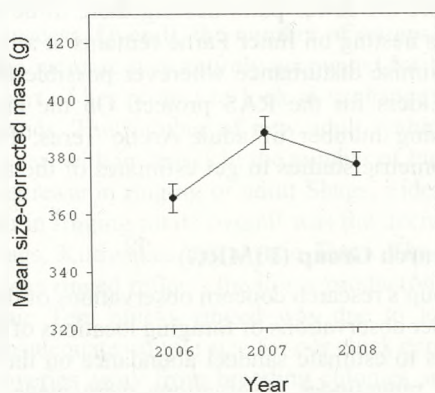
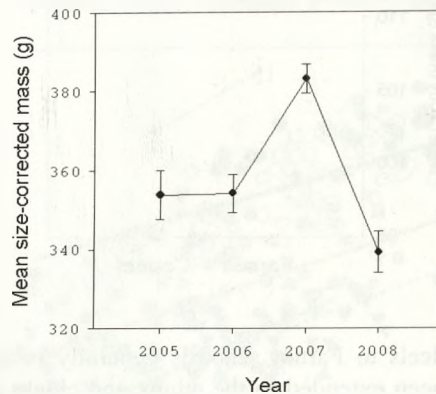


Figure 6 Mean (\pm standard error) size-corrected mass of adult Kittiwakes breeding on Brownsman (all sexes combined) since 2005. Sample sizes 23, 36, 60 and 30, respectively.



For adult Kittiwakes, birds in 2008 were significantly lighter than in the previous three years (Figure 6; data collection started in the Farnes in 2005 and on Coquet Island in 2008) and this suggests that food limitation to surface feeders was not just confined to Arctic Terns. At the time of ringing and biometric data collection, most Kittiwake broods consisted of single chicks, and although the size-corrected body masses of these birds were similar to previous years, the smaller brood size in 2008 at the time of biometric measurements (resulting largely from mortality of young chicks) makes comparisons with previous years somewhat more complicated.

In addition to these biometric studies, the RAS studies on Eiders and Shags were continued. However, the sample size for both species remains low; for the Shag colony on Staple Island the low sample size has resulted from changes in the nesting distribution of Shags in the colony and there are fewer pairs nesting there to be ringed and recaptured. While the numbers of Eiders nesting on Inner Farne remains at a reasonable level, we are sensitive to the need to minimise disturbance wherever possible and this is a factor that limits the sample size of Eiders for the RAS project. On the brighter side, it may be possible to use the increasing number of adult Arctic Terns, Puffins and Kittiwakes recaptured as part of the biometric studies to get estimates of the annual survival rates of the adults of these species.

Farne Islands Marine Research Group (FIMRG)

The main element of the Group's research concern observations of the feeding frequency of Arctic Tern chicks, rangefinder observations of foraging locations of terns and Shags around the Farne Islands, and trawls to estimate sandeel abundance on the seabed at several key locations. As in 2007, few rangefinder observations were made, primarily due to the difficulty of finding volunteers to carry them out. However, data on the feeding frequency of Arctic Tern chicks and their prey size were obtained with the help of Mike Coleman and Jamie Coleman (no direct relation) and these data will be analysed as part of the long run of

data that are now accumulating. The sandeel trawls using the Newcastle University Research vessel *Bernicia* were organised by Dr Richard Bevan and showed an unexpected lack of sandeels in all the main sampling locations. Richard is also carrying out stable isotope studies on seabirds in the region and preliminary analyses also support the idea that terns had a more-restricted food supply than in previous years.

In addition to these main projects, the Arctic Tern nest balance project was repeated to supplement data collected in 2007. The aim of this project is to obtain objective data on the effect of human disturbance on the incubation patterns of Arctic Terns. The data obtained in 2008 on nests in different areas confirmed the results from 2007 suggesting that Arctic Terns subjected to visitor or warden disturbance alter their incubation patterns and spend a greater proportion of time incubating their eggs compared to birds in undisturbed areas. We plan to repeat this project in 2009 with the number of nest balances increased to fourteen and using an undisturbed control group well away from the disturbed nests; the increased sample size will also enable a more robust analysis. Anecdotal observations suggest that there may also be remarkable changes in behaviour depending on the type of disturbance: at least some birds nesting close to the boardwalks will sit tight when exposed to large numbers of people during the visiting hours but, outside these times, will leave their nest readily in response to one or two people walking along the boardwalks. Detailed observations of these behavioural changes may yield interesting insights into habituation cues by nesting seabirds.

Ringling totals and activity in 2008

Ringling totals for 2008 are summarised in Tables 1-3. With a capture total of only 1,218 birds (adults and pulli) in 2008, compared to a total of 1,691 the previous year, the level of ringling activity was rather lower than we would like and represents only a tiny proportion of the 100,000 pairs of seabirds that breed on the islands each year. However, the emphasis of the ringling studies is on obtaining biometric data rather than maximising the number of birds ringed each year. Collecting biometric data, on both adults and chicks, is much more time-consuming and, while this means that we maximise the value of each capture in terms of data obtained, this does reduce the time available for increasing the number of birds ringed. Although there is an argument for getting as many birds ringed as possible so that we can maximise the data relating to patterns of dispersal and mortality rates, biometric data are perhaps of greater value in what these data can tell us about the factors underlying yearly variations in breeding success. Overall, the number of retraps of adult seabirds was up on the previous year but the increase was entirely accounted for by Emily Barlow's efforts in reading Shag rings as part of her project to look at exchange of birds between the Isle of May and the Farne Islands. The number of new adult seabirds ringed in 2008 was also similar to the previous year, with increases in the number of Puffins and Arctic Terns ringed compensating for the decrease in ringling of adult Shags, Eiders and Kittiwakes. The main reason for the reduction in ringling totals overall was the decrease in the number of chicks ringed, particularly Shags, Kittiwakes and Arctic Terns. The reduction in the number of Kittiwake and Shag chicks ringed reflects the lower productivity in 2008, but the reduction in the number of Arctic Tern chicks ringed was due to lower effort on this species. Nevertheless, we had an adequate sample size for our chick condition studies, and for Arctic Terns, the rates of recoveries away from breeding colonies are low and the retrapping of adults is much more important for the estimation of survival rates. However, we do need to maintain levels of ringling activity generally so that there are adequate numbers of birds ringed each year for survival rate estimates; therefore, increasing the numbers of birds ringed while not compromising the biometric data collection will be a target for next year.

In particular, with the recent concern over the decline in the number of Puffins breeding on the Farnes, increasing the number of Puffins ringed over the next few years, in combination with new technological approaches such as the use of geolocator tags to identify wintering areas, will put us in a better position to discover the underlying causes of these declines.

Ringling Recoveries

The ringling recoveries described below refer to reports received from the British Trust for Ornithology during 2008. Most related to Sandwich Terns and Shags, but with six local recoveries of Eiders and single recoveries of Kittiwake, Puffin, Storm Petrel and Lesser Black-backed Gull. The Eiders were all ringed as adult females on Inner Farne between 1997 and 2005 and were recovered dead between Holy Island and Seahouses in the period September 2007 to June 2008. For other species there were a few changes in the patterns of recoveries received during 2008; unusually, there were no reports of recoveries of Sandwich Terns from Africa. The bulk of recoveries for this species, all of which were ringed as chicks on the Farnes, consisted of resightings; this demonstrates the importance of reading rings in the field to our accumulating knowledge of Sandwich Tern movements and migrations.

Within the UK, there were six Sandwich Tern recoveries reported in 2008, three of which were birds found dead and three were sight records. The dead birds were found at Black Dog, Grampian in September 2007 (ringed June 2007 on Inner Farne), Robin Hoods Bay, Yorkshire in August 2005 (ringed June 1986 on Brownsman) and at Hauxley, Northumberland in June 2008 (ringed June 1997 on Inner Farne). Recoveries and sightings of Farnes Sandwich Terns are often received from further north in the autumn and Farnes Sandwich Terns may forage extensively, as family parties, along the east coast of the UK before making their way south for the winter.

The three sight records of Sandwich Terns from the UK were all in June 2008 and may be birds that have settled to breed away from their natal Farnes colony. One from Brownsman in 1984 has been seen near the breeding colony on Brownsea Island, Dorset, in 1998, 2004, 2007 and now again in 2008; another Farnes bird, this time from Inner Farne in June 2006, was seen at the Minsmere RSPB reserve in Suffolk, while one from Inner Farne in June 2003 was seen in the Sands of Forvie National Nature Reserve, Grampian, the site of a well-established Sandwich Tern colony. Although a pair of Sandwich Terns bred at Minsmere in 2008, we do not know if the ringed bird was one of these or a perhaps a bird from the much larger Sandwich Tern colonies at Scolt Head and Blakeny Point on the North Norfolk coast.

Recoveries of Sandwich Terns reported during 2008 from elsewhere in Europe were all (with one variation) from resightings. As in previous years these were dominated by eight individual birds seen at the Hirsholm colony, Jylland, Denmark, by Kjeld Pedersen in the 2007 breeding season. Sightings elsewhere were of two birds, one from Brownsman in July 1981 which was seen near the long-established colony at Griend, The Netherlands in June 2007, and was also seen there in April 1998. At the time of sighting then, this bird was nearly twenty-six years old (the current UK longevity record is just under thirty-one years). The other non-Hirsholm European sighting was of a bird ringed on Inner Farne in June 2006 and seen in the Algarve, Portugal, on 9 March and 16 April 2008. Sandwich Terns generally remain in their wintering quarters throughout their first spring and summer after fledging and return to potential breeding colonies in their second spring. This bird may therefore have been leisurely making its way back to the North Sea to scout for a suitable breeding colony.

The eight Hirsholm sightings bring the total of Sandwich Terns from the Farnes seen there since 2003 to eighteen and consisted of four birds that were seen there in the 2007 breeding

Table 1 Adult seabirds retrapped or 'controlled' in 2008 compared to 2007.

Species	2007	2008
Shag	18	29*
Eider	24	29
Puffin	0	2
Kittiwake	14	11
Arctic Tern	57	54
Total	113	125

* Includes sight records of eleven birds by Emily Barlow.

Table 2 New adult seabirds ringed in 2008 compared to 2007.

Species	2007	2008
Shag	27	6
Eider	23	11
Puffin	39	79
Kittiwake	52	24
Arctic Tern	62	78
Common Tern	0	1
Total	203	199

Table 3 Chicks ringed in 2008 compared to 2007.

Species	2007	2008
Shag	114	45
Puffin	101	100
Kittiwake	302	108
Black-headed Gull	0	3
Sanwich Tern	313	273
Arctic Tern	542	365
Common Tern	3	0
Total	1375	894

season for the first time and four birds that were also resighted there in previous years. These had been ringed on Inner Farne or Brownsman between 1996 and 2003 and, given their presence in the Hirsholm colony between May and July, clearly form part of the breeding colony there. Sadly, one of our Hirsholm terns, ringed on Inner Farne in 1998, and seen in the Hirsholm colony between May and June 2007, was subsequently found dead in August that year in Schleswig-Holstein, Germany, 345km south of Hirsholm. Given the number of Farnes Sandwich Terns that have now been seen in the Hirsholm colony, we do need to get a better handle on the extent of immigration of Sandwich Terns from Hirsholm and other European colonies into the Farne Islands colonies.

The recoveries of Shags related to fifteen birds recovered dead, all except one ringed as chicks. The Shag ringed as an adult (Staple Island, June 2000) was found on Stronsay, Orkney in March 2008. Of the Shags ringed as chicks, eleven were from Staple Island, two from Inner Farne and one from West Wideopens. However, the West Wideopens bird (July 1985) and one of the Inner Farne birds (July 1996) are both very late reports, of birds found in July 1986 and June 2001 respectively, on the Island of Inchkeith, Firth of Forth. Six of the Shag recoveries were of birds ringed in 2007 and all recovered between October 2007 and February 2008, either locally (one bird), south of the Farnes (two birds: one in Cleveland, November 2007, and one in Kent, December 2007) or further north (three birds: one in Grampian region and two on the Fife coast). The other six recoveries were of older birds, ringed on Staple Island in 1996, 2001, 2002 (two birds) and 2006 (two birds), and recovered in Fife (April 2007), Grampian (September 2008, an oil victim), two birds locally (May 2007 and May 2008), Orkney (June 2008) and Fife Ness (February 2008), respectively. The pattern of these recoveries, with the predominance of northerly movements, fits in with previous data.

Apart from the fact that the single Kittiwake and Puffin recoveries received last year were both ringed as chicks on the outer group islands (Brownsman and Staple, respectively) in July 2004, they have one other thing in common: both were shot during the 2007 winter. The Kittiwake was shot off Nuuk, Greenland in September while the Puffin was shot off Nólsoy in the Faroe Islands. While we would probably be unaware that these Greenland waters are important wintering areas for our Kittiwakes without these shooting activities, it is a shame that our seabirds are still subjected to this unnecessary persecution in addition to possible reductions in breeding success as a result of environmental change. The other two seabird recoveries have occurred in happier circumstances: a Storm Petrel, one of only three adults ringed on Inner Farne in early August 2007, was recaptured by ringers on the Island of Sanda, Strathclyde, almost exactly a year later, while a Lesser Black-backed Gull ringed as a chick on the Wideopens in August 1983 was resighted again (it was retrapped and colour-ringed in Gloucestershire in February 2007) in Staffordshire in November 2007.

Acknowledgements

As always, we are extremely grateful to John Walton and his wardening team led by Head Warden David Steel and the Local Management Committee chaired by Charles Baker-Cresswell for their support and encouragement of our seabird research on the Farne Islands. We are also grateful to David for allowing one of his team, Kieren Alexander, to ring seabird chicks in his spare time. Emily Barlow spent some time on the islands reading Shag rings and we are grateful for her resighting data which are a useful addition to the ringing retrap data for this species. I would like to thank Mike Coleman for carrying out the nest balance project and Mike and Jamie Coleman for collecting nest provisioning data. Access to the islands was greatly facilitated by William Shiels and his crews on the *Glad Tidings* boats and we are grateful for their help and support. We continue to be indebted to the Sir James Knott Trust for their support of the FIMRG seabird foraging project and thank the crew of RV *Bernicia* for their help with the trawl sampling. We are grateful to the Natural History Society of Northumbria for providing the rings, essential equipment and backup, to the ringing team for their time, expertise and enthusiasm, and to the Dickinson Memorial Fund of the Natural History Society for funds to purchase the nest-balance equipment.

CETACEAN REPORT 2008

INTRODUCTION

Systematic recording of cetaceans in Farne waters is now in its sixth year and an excellent database of sightings is developing. This year-on-year data can be compared to look at seasonal trends in species and also frequency of sightings. What is already emerging is a worrying decrease in Harbour Porpoise *Phocoena phocoena* sightings. Continued seasonal recording will allow us to follow this to see if it emerges as a long term trend. Much like the previous year, 2008 could be described as 'mixed' and unfortunately failed to produce a record of Risso's Dolphin *Grampus griseus*. This species was recorded in both 2006 and 2007.

Bottle-nosed Dolphin *Tursiops truncatus*

Despite there being only three records of this large robust dolphin during 2008, all three were spectacular. The first, on 3 May, involved three rather playful individuals seen bow riding the wardens' Zodiac boat at the south end of Inner Farne. The dolphins then travelled around Inner Farne with more bow riding observed, before eventually heading north through Inner Sound. The second record involved a total of twenty-two individuals in two pods moving north through Inner Sound on 17 October (pods of ten and twelve travelling between the Shoreston Buoy and Bamburgh Castle). These may have been the same individuals seen off Low Newton a few weeks earlier. The final record concerned a pod of fifteen seen bow riding a visitor boat near North Wamses on 30 December, before heading off north.

White-beaked Dolphin *Lagenorhynchus albirostris*

In keeping with the last couple of years, this species was only recorded on two dates during the 2008 season. The first occurred on 9 July when two individuals were reported by *Golden Gate* off Big Harcar. A short time later they were seen from Inner Farne in Staple Sound and appeared to be feeding. The second occurred on 23 July when a boatman reported four individuals in Inner Sound. A few hours later one surfaced near to *Glad Tidings II*, while a second was watched from Inner Farne heading north through Inner Sound.

Common or Harbour Porpoise *Phocoena phocoena*

It was a disappointing year for this, the Farne Islands' only resident cetacean. The 2008 season saw the lowest number of sightings since systematic recording began in 2003. Harbour Porpoises were recorded on just twenty-six dates. The first record, on 29 March, involved two individuals with one heading north through Inner Sound and the second seen to the south-east of Inner Farne. Shockingly, there were no records for the whole of May and only one record for June, compared to sixteen sightings during these two months in 2005. This is unprecedented and we can only speculate at the reasons for the continued decline in sightings. The maximum pod size was six on 10 July, down from a peak of thirty in August of both 2004 and 2005. The majority of sightings, twenty of the twenty-six records, consisted of 1-3 individuals. The first calf was recorded on 11 July and interestingly was seen by a visitor boat outside Seahouses harbour alongside two adults. The boatman reported that the adults seemed 'agitated' and were surfacing more than usual, possibly in an attempt to protect the calf. A second calf was recorded alongside three adults on 16 August. The season's last record involved a single individual heading south through Inner Sound on 5 November. Continued seasonal recording of Harbour Porpoises is essential to evaluate whether this decrease in sightings develops into the long term trend.

Minke Whale *Balaenoptera acutorostrata*

It was a reasonable year for this, the smallest of the baleen whales, with sightings on six dates between 18 May and 24 September. All but one involved individuals in Staple Sound or around the outer group of islands. The first record, a single individual heading north through Staple Sound on 18 May, represents the earliest recorded date for Minke Whales since systematic recording began in 2003. The final record, on 24 September, was seen by *Glad Tidings V* and involved an adult and calf heading north through Inner Sound. During a pelagic trip by *Glad Tidings V* in mid September, excellent photographs were taken of two individual Minke Whales, both of whom showed distinct, identifying, notches in their dorsal fins. We are currently investigating if anyone is carrying out photo identification work on Minke Whales and will pass the photos on if such a scheme is in existence.

MAMMAL REPORT 2008

Otter *Lutra lutra*

9 November will long live in the memory as a set of tracks along a sixty metre muddy track on Brownsman were confirmed as Otter prints. This is the first known record of Otters on the Farnes and came as something of a surprise. Considering how much commoner this species is becoming, and how they range around the Scottish islands, perhaps the only surprise is that they've taken so long to reach the islands. The animal was not seen but evidence suggested it was still present a few days later.

Grey Seal *Halichoerus grypus*

It was an excellent autumn for Grey Seals as the population peaked at a ten year high, with a total of 1,318 pups counted from September-December (Table 1). A total of nine islands were colonised with the majority of pups born on four major islands: Staple, Brownsman and South and North Wamses. Interestingly, away from the usual pupping grounds, nine were born on Knoxes Reef on the inner group. The first pup of the autumn was discovered on South Wamses on 25 September and was soon followed by individuals on Brownsman (7 October), Staple Island (8 October) and North Wamses (8 October). The first successful pup to reach independence was observed on Staple Island on 24 October. Although the wardens departed on 6 December, a short visit later that month revealed that a small handful of pups had been born in the intervening period.

Staple Island is now the 'number one' pupping ground, edging past South Wamses. A total of 380 pups were born on Staple, although most were restricted to the rocky shoreline. Figures appear to suggest that the colonisation of Staple Island is being made by animals from other islands within the group, rather than recruitment from further afield. 45% of the Farnes pup production is now born on either Staple Island or Brownsman. As expected the weather caused disruption to the team in accessing the colonies, especially in early November. However, the lack of any powerful northerly winds resulted in a lower than expected mortality rate. A total of 582 pups were unaccounted for, resulting in an autumn mortality rate of 44%.

Table 1 Grey Seal pup births on the Farne Islands 2000-2008

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total	1,171	1,247	1,200	1,266	1,133	1,138	1,254	1,164	1,318

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BREEDING BIRDS ON THE FARNE ISLANDS: CORMORANTS, SHEARWATERS AND PETRELS

by

A E Wilson and D C Noble-Rollin

INTRODUCTION

In this current part of the paper covering the breeding birds on the Farne Islands, the order of the species has been chosen to emphasise their importance as breeding species on the islands rather than taxonomic considerations. Shag *Phalacrocorax aristotelis*, Cormorant *P. carbo* and Fulmar *Fulmarus glacialis* are followed by Manx Shearwater *Puffinus puffinus* and Storm Petrel *Hydrobates pelagicus* whose breeding status is unproven. Of the species discussed in this paper, Cormorants have the longest history whilst Fulmars have only been breeding since 1935.

Shag *Phalacrocorax aristotelis*

Historical records to the present day

In 1671 the naturalist John Ray stayed at Bamburgh and was told that 'scarfs' nested on the Farne Islands (Willoughby and Ray, 1678). At that time the name 'scarf' could be used for either a Shag or a Cormorant (Lockwood, 1984) and there is no further information regarding any nesting site. Within a few years in 1677, however, Thomas Kirk called at the islands on his way to Scotland and his account lists 'a few scarps' nesting on the sides of the Pinnacles (Kirk, 1845). This description of the nest site is sufficient evidence to support this record as the first positive breeding of Shags on the Farne Islands.

For most of the 19th and early 20th centuries Shags only bred occasionally, usually on the sides of the Pinnacles but sometimes on the rock ledges opposite (Selby, 1826). By the late 1890s it was noted that a few immature birds were present for most of the year though adults were still comparatively rare. Then in May 1899 Henry Paynter, the Honorary Secretary of the Farne Islands Association, counted at least fifteen pairs around the islands and commented that he had never seen so many before. There is however no evidence that any remained to breed (Bolam, 1877-1933a). This build up continued, and though Edward Miller recorded the presence of several immature individuals during the four seasons from 1911 to 1914 when he was a watcher on Brownsman (Miller, 1918), he only considered them to be particularly numerous in 1912 when on one occasion he counted forty on the south face of Staple Island (Miller, 1911-1914, 13 June). There are no further records from the Farne Islands until the late 1920s. However from 1912 onwards numbers on the mainland continued to rise, especially in winter with Bolam stating that 'crowds took to roosting on the Heugh, Holy Island', and for the first time in 1921 Shags appeared along with Cormorants on the list of 'vermin' killed on the Tweed (Bolam, 1932).

The winter population of Shags round the islands continued to increase, and had risen to several thousand by the late 1920s with hundreds still present throughout the breeding season (Goddard, 1935). It was thus only a matter of time until they bred and in 1929 a nest was finally found on Inner Farne (Thorpe, 1930: Temperley, 1896-1951, 11 June). No nests were reported in 1930, but in 1931 Goddard found a pair 'well up on the west side of the middle stack of the Pinnacles' (Goddard, 1925-1948, 21 June) and this was the start of

regular breeding. A further pair had also been reported in that year in Kittiwake gully but the nest had been washed away (Goddard, 1925-1948, 12 July).

Inner Farne was colonised in 1933 when a nest was found on the cliff near the Stack, and the population was confined to these two islands until 1949 when two pairs were found breeding on Brownsman's south-east cliff (only one nest was successful) (Watt, 1949). In 1946 the first nests were found on Skeney Scar, the small peninsular at the south end of Staple Island (Goddard, 1946) and by the early 1950s Shags were breeding in five main areas: Kittiwake gully, the deep rock cleft behind this gully, the Pinnacles, the cliff opposite them and Skeney Scar (Hickling, *ca* 1983). In 1955 they spread to the cliff adjacent to Skeney Scar (Hickling, 1956), and by 1957 had extended their range in Kittiwake gully. In the same year they also occupied the cleft opposite the Pinnacles (Hickling, 1958).

This expansion continued, particularly on Staple Island and Brownsman, with pairs occupying sites at the edges of colonised areas rather than forming separate groups. Breeding had also been confirmed on Megstone in 1962 (Hickling, *ca* 1983) and in three subsequent years, though the island only came into regular use in 1987.

The 'red tide' episodes of 1968 and 1975 (see later) had a drastic but short-lived effect and momentarily halted this expansion; however within a few years of both episodes numbers had fully recovered. At this point the expansion of Guillemots *Uria aalge* on Brownsman began to impinge on the breeding sites formerly used by Shags and Kittiwakes *Rissa tridactyla* and by 1980 only a few pairs of Shags were left opposite the pier and the south cliff (Hawkey and Hickling, 1980).

After sporadic attempts to breed on East and West Wideopens these islands were colonised in 1974 and 1977 respectively. The same pattern of events occurred on North and South Wamses before regular nesting started in 1981 and 1982.

Big Harcar was used from 1982 and Roddam and Green from 1990, and there was one attempt on Little Harcar in 1991. In 2001 Shags started to breed inside the wreck of the *Children's Friend*, a wrecked fishing boat on the West Wideopens beach that had been decommissioned and was moored in Holy Island harbour before being cut in half to be used as a store; she broke loose in a storm and was carried over the Knoxes onto the beach (Shiel, pers. comm., 2008). By 2006 at least six pairs attempted to construct nest structures on the outside of the vessel (Steel, 2007). Three pairs of Shags had also moved into the Kittiwake dominated area on the cliff below Brownsman cottage and by 2007 this small colony had increased to six pairs (Steel, 2008). In 2008 Shags were breeding on all the cliff ledges on eleven of the available high water islands.

Evidence for numbers

Wallis (1769) and Pennant both noted the presence of Shags in the late 1760s, and while Wallis' information concerning Shags was probably second hand, Pennant described the Pinnacles as being covered with Guillemots and Shags (in Hutchinson, 1778). It thus appears that in the 18th if not in the previous century too there was a healthy population. This was not the case in 1825 since Selby (1826) writes 'A few pairs breed annually in the clefts and upon the ledges of the Pinnacles and the rocks opposite them'. By 1833 the 'few pairs' had become 'two or three pairs' (Selby, 1833) and this situation seems to have continued until about 1840 (Atkinson, 1872). From then until the third decade of the 20th century Shags were only irregular nesters and a comparatively rare sight on the Farne Islands and though Booth (1881-1887) thought that one pair had bred on the Pinnacles, for most seasons up to his visit in 1867 there is no supporting evidence.

Table 1 lists the occasions when they are said to have nested from 1851 to 1929. A number of these records are however questionable. Bolam (1912) believed a pair to have bred in 1897, but was told by Darling (the watcher) that the only nests he (Darling) had known were about twenty years ago. This therefore also raises doubts concerning his other record around 1892. In 1911 Miller noted a pair of Shags continually around the south face of Staple Island (Miller, 1911-1914, 18 May-4 August), and though he suspected they had bred the nest site was never found. However in an undated private letter to Grace Watt (nee Hickling) (Miller, undated) he commented that though there were always a few immature birds, there was no sign of any breeding and furthermore he did not include it in either of his articles concerning his time on the islands (Miller, 1915; 1918).

Table 1 Possible nesting records for Shags 1851-1929.

Date	Reference(s)	Comment
1851	Newton (1864-1907)	Told that there was at least one pair.
1856	Newton (1864-1907)	Two eggs taken from a nest. At least one pair.
1865	Brown (1866)	Three pairs nested and laid. Shot by fishermen.
1873	Bidwell (1882) Evans (1911)	One pair bred on the Pinnacles and seen by Evans.
1876	Bolam (1912)	Two eggs given to Bolam.
1878/79	Bolam (1912)	Nest seen by H. Grey, but vague about the date.
ca 1892	Bolam (1912)	Two nests seen around this date.
1897	Bolam (1912)	Thought to be a nest.
1901	Pybus (1903)	Nest among the Cormorants on Big Harcar.
1902	Bolam (1912)	Thought to have nested.
1911	Miller (1911-1914)	Thought to be a nest on the south face Staple.
1929	Thorp (1930) Temperley (1896-1951)	A nest on Inner Farne.

Figure 1 shows the number of breeding pairs of Shags on the Farne Islands from 1931 to 2008. Initially the population gradually increased until World War II, when the islands were closed. No watchers were present from 1941 until 1944 when two were placed on the outer group, and in 1945 numbers on Staple Island were found to have risen by over 300%. During the next twenty-one years to 1967 the Shag population increased by an average of 10% annually until the 'red tide' in 1967. After 1975 (the second 'red tide') there was a further increase of 15% per year until numbers reached a record 1,948 breeding pairs in 1993. Since then the changes have been much more erratic with rises in one season being followed by a drop in the next, giving an average of over 1,100 breeding pairs each year.

National Counts

The introduction of the bird protection laws around the end of the 18th century which limited the exploitation and persecution of seabirds was the start of the national revival. This, coupled with the establishment of wardened reserves in the first half of the 20th century, allowed the British and Irish population to reach over 33,000 breeding pairs by the time of Operation Seafarer in 1969 and 1970, the first national seabird census. This increase was particularly dramatic on the east coast between the rivers Tay and Humber, which in 1905 held only ten

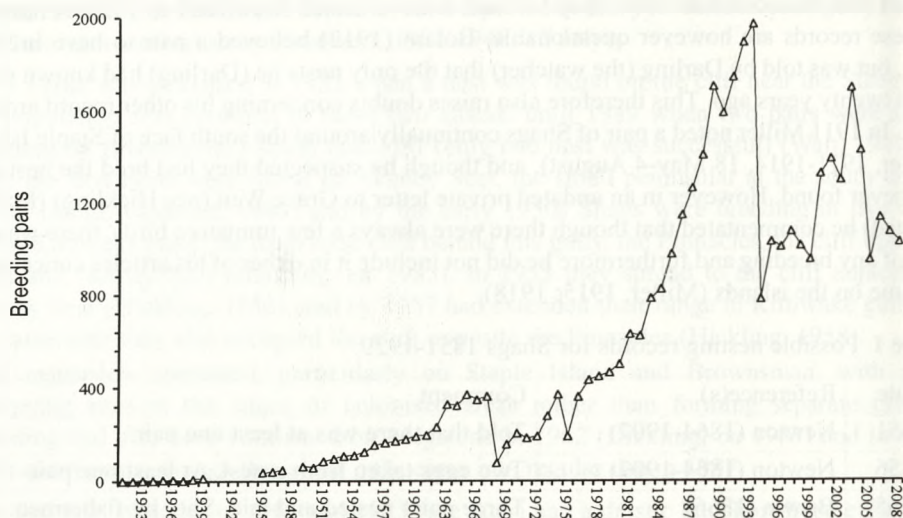


Figure 1 Breeding pairs of Shags on the Farne Islands from 1931 to 2008.

breeding pairs, yet by 1965 the same area held 1,900 breeding pairs (Potts, 1969). Since Operation Seafarer there have been a further two national surveys, The Seabird Colony Register (SCR) from 1985-1987 and Seabird 2000 over the five seasons from 1998-2002.

Shags are colonial breeders and usually form discrete colonies ranging in size from a few to several thousand pairs. The prescribed count unit used for each survey is the Apparently Occupied Nest (AON). As this species generally builds substantial and conspicuous nests counting would be expected to be straightforward. There are however three particular problems (i) they have a prolonged and variable breeding season; (ii) in some seasons a number of the adults do not breed and (iii) nests are not always easy to count (Wanless and Harris in Mitchell *et al.*, 2004):

- (i) Shags have one of the most protracted seasons of any seabird with eggs being reported in every month except September and October. Within a colony the timing of breeding varies greatly from year to year (Wanless and Harris in Mitchell *et al.*, 2004); for example on the Farne Islands first egg laying dates have varied between 23 March (Walton, 1998) and 6 May (Walton, 1995) and on a number of occasions some have not fledged until the middle or late October. In 1985 two downy young were seen on East Wideopens on 7 November some five weeks after hatching (Hawkey and Hickling, 1985) and in 2007 the last chick successfully fledged from the south side of Inner Farne on 15 October (Steel, 2008). This variability in the breeding season means that a single count will miss pairs that have not yet built a nest and those that have already failed (Wanless and Harris in Mitchell *et al.*, 2004).

Double brooding, *i.e.* the raising of two successive broods in the same year, does occur but it is rare. It is probable but not certain that this happened on Staple Island in 1995, though in the same year three pairs were each found to have reared two broods on the Isle of May for the first recorded time in the British Isles (Walton, 1996).

- (ii) In most seasons a proportion of Shags may choose not to breed. Such non-breeding events tend to be localized and may be a response to poor feeding and cold springs. If

the proportion of non-breeding adults is large, a colony will suddenly show a drop in numbers which is then usually followed by a relatively swift recovery (Lloyd *et al.*, 1991). Such an event happened on the Farne Islands in 1963 when, after one of the worst winters in the 20th century, 21% of the Farne Islands population did not lay eggs (Hickling, 1964). Thus a number of unexplained seasonal decreases such as the 7% drop in 1990 and the erratic changes seen recently may be due to the presence of a higher than average ratio of non-breeding adults. It is also of interest to note that though the population reached a record level in 1993 many either failed to breed or deserted nearly and sometimes completed nests (Walton, 1994). This situation was not confined to the Farne Islands since massive numbers of non-breeding Shags had been seen on the Isle of May in both 1992 and 1993 (Harris and Wanless, 1996).

- (iii) Shags nest in three distinct habitats: amongst or under boulders, on steep cliffs where they breed on small ledges or in caves, and on broad open ledges often on off shore islands (Wanless and Harris in Mitchell *et al.*, 2004). On the Farne Islands the majority of the nests are found in the latter habitat and Shags are usually included in the standard cliff counts during the first three weeks of June. Each of the cliff nesting species is counted ten times over this period, and the highest and lowest counts are then discarded before an average is taken. A very small number of nests, around twenty-eight in total on Inner Farne and the Wideopens, are however not visible from the sea and are counted from the top of the island, hence care must be taken not to double count, as may have happened in 2003 (Steel, pers. comm.).

In general the above three problems could underestimate the population nationally, but as all the past surveys will have suffered in the same way it is reasonable to suppose that the long term trends shown in Table 2 are real (Wanless and Harris in Mitchell *et al.*, 2004). Table 2 gives the total number of breeding pairs of Shags in Britain and Ireland for each census.

Table 2 Survey counts for Shags (breeding pairs).

National Survey	Operation Seafarer 1969-1970	Seabird Colony Register 1985-1987	Seabird 2000 1998-2002
Britain and Ireland	33,876	42,970	32,306
The Farne Islands	180	1,115	1,181

The SCR showed that numbers had increased by around 27% since Operation Seafarer, with around 72% of the breeding population concentrated in Scotland and Northumberland. The rest were in small colonies scattered over the remaining coastline, and except for the Isle of Wight none was breeding between Flamborough Head in East Yorkshire and Durlstone Head in Dorset, probably because of a lack of suitable nesting habitat. The largest change appeared to be in North East England where the counts were almost six times higher than for Operation Seafarer (Lloyd *et al.*, 1991). One factor that certainly contributed to this national increase was the passing in 1981 of the Wildlife and Countryside Act. This granted protection to Cormorants and Shags and removed the bounty offered for Cormorant's beaks (Wanless and Harris in Mitchell *et al.*, 2004). At the same time the creation of more reserves and better wardening would have helped to raise numbers.

The 25% decline shown by Seabird 2000 is harder to explain, particularly since there is no single pattern. Numbers in both Scotland and Ireland appeared to have dropped by 32% and 27% respectively, whilst totals for England and Wales have risen by 12% and 16%.

Furthermore the overall decline may have been greater since in the SCR only 62% of the AONs were counted in the recommended dates compared to 84% for Seabird 2000. This suggests that a higher proportion of AONs were missed during the SCR census (Wanless and Harris in Mitchell *et al.*, 2004).

The survival and productivity of Shags is probably affected by the availability of prey, which in turn may affect the total population. Shags eat a wide variety of small fish, but in the British Isles their most common prey is the Lesser Sandeel *Ammodytes tobianus*. This species is also the target of a large commercial fishery with around a million tonnes being taken annually from the North Sea. Though there is at present no proved link between this and population decline, on the Isle of May breeding success was positively and significantly correlated with sandeel availability (Wanless and Harris in Mitchell *et al.*, 2004).

The gradual declines seen in many colonies are more difficult to explain. There has been no reduction in the available breeding habitat, and nesting success has usually remained high in colonies where it has been monitored. Predation by Mink *Mustela vison* certainly affected colonies in Argyll and Bute and numbers at Hermaness (Shetland) declined dramatically after the mid 1970s, probably because of predation by feral cats. However the removal of rats from Ailsa Craig seems to have enabled the colony to increase from fifteen in 1987 to fifty pairs by 2002.

The most obvious reason for this decline is a decrease in the survival of adults and/or young birds between fledging and recruitment to the breeding population, but as yet there is no satisfactory data (Wanless and Harris in Mitchell *et al.*, 2004).

Table 2 also includes the corresponding figures for the Farne Islands; these are quoted as the average over all the seasons for each census. Operation Seafarer came at an unfortunate time on the islands since the first 'red tide' in 1968 had caused Shag numbers to fall by a staggering 72% and the colony was just starting to recover by 1970. Nevertheless even if the figure for 1970 of 204 breeding pairs is considered, the increase is well over the 27% seen nationally and was probably the result of the appointment of a permanent warden/naturalist, an increase in the number of seasonal wardens who then were present for the whole of the breeding season, and the control of the predatory gulls. Table 2 would also seem to indicate that there had been little change between the SCR and Seabird 2000 but as Figure 1 shows this has not been the case and illustrates the danger of using specific single counts to formulate trends.

Human Persecution

The decline first documented by Selby (1826) probably dated from just after 1769 when John Blackett and subsequently his son William became long-term lessees of the Farne Islands. They both actively exploited all the wildlife until their lease was bought out by Trinity House around 1825. In addition the improvements in communications and transportation brought about by the Industrial Revolution led to an increase in the number of visitors, particularly from the newly created middle class, who enthusiastically embraced the hobby of natural history which at that time involved both shooting specimens and collecting eggs. All the breeding birds suffered and while most made some recovery after Archdeacon Charles Thorp became the lessee (Wilson and Noble-Rollin, 2006; 2007), Shags did not and became a rare species on the Farne Islands until well into the 20th century.

Cormorants *P. carbo* have a long history of persecution because of their conflict with man over inland fish stocks where they are regarded as a serious predator, so Shags which have

a similar appearance suffered too. Unlike Cormorants however, they are exclusively marine and feed in deeper off shore waters, though immature birds can occur inland in winter (Nelson, 2005). The build up of winter numbers of Shags in the early 20th century is seen from the fact that from 1921 they were included in the lists of 'vermin' killed on the River Tweed for which a bounty of 2/6d (12½ new pence) per head was offered (Bolam, 1932).

From 1921 to 1931 328 individuals were killed. Initially small numbers (1-5 birds each year) were shot, but from 1927 to 1931 a total of 278 Shags were killed, which further illustrates the rapid increase in the local population. Shooting continued, with many being killed each year; in 1965 for example 3.6% of all first year birds ringed on the Farne Islands in that year were shot (Hickling, 1966). In March 1966 the Tweed Commissioners discontinued the bounty paid for Cormorants and the Farnes ringing returns showed a rapid decrease in the number of Shags deliberately killed (Hickling, 1966).

World War II was a disaster for all the breeding species on the inner Farnes group. The disturbance and vandalism from minesweeper crews stationed in the area drove most of the birds either away or onto the outer group where conditions were better. This together with the pressure for colonisation from the ever growing numbers of Shags in the area was the reason for the population on Staple Island rising by over 300% from eight breeding pairs in 1939 to thirty-three in 1945.

Egg stealing was a problem for a short time in the late 1950s and early 1960s, especially early in the season before the watchers arrived at the end of April. In 1959 at least forty nests on Staple Island were robbed and stones were thrown at those that were inaccessible (Hickling, 1960). This was finally ended with both the implementation of The Wild Birds (Farne Islands Egg Sanctuary) Order 1964 in the 1965 season (Hickling, 1966), and the employment of more resident seasonal wardens for longer periods from 1971.

Gull Predation

Predation from both Lesser Black-backed Gulls *Larus fuscus* and Herring Gulls *L. argentatus* has always taken place, but as the Shag population increased and they were forced into areas that were more exposed to these gulls this became a greater problem, especially from 1965 onwards. The implementation of the Sanctuary Order in 1965 led to a dramatic escalation in the large gull numbers (Wilson and Noble-Rollin, 2008), with a consequent increase in predation. This was first documented in 1967 when Hickling reported that forty eggs had been lost during the season compared to only three in 1963 (Hickling, 1968).

From 1975 onwards there was a major effort to limit the numbers of both Lesser Black-backed and Herring Gulls and Figure 2 shows their numbers against the increasing Shag population.

When Figure 2 is studied it can be seen that the greatest rate of increase in the Shag population occurred from around 1980 when the combined Lesser Black-backed and Herring Gull numbers dropped to around 1,000 breeding pairs.

The predation however is ongoing and is one of the major causes of low productivity, particularly in areas with relatively flat cliff tops where nests are easily accessible (Steel, 2008), such as the central gully on Staple Island and the quarry on Inner Farne.

Table 3 shows the productivity of young fledged per breeding pair in areas exposed to different levels of gull predation. It compares gull-inaccessible areas such as St Cuthbert's Gut on Inner Farne, and Kittiwake gully and the surrounding cliffs on Staple Island, with

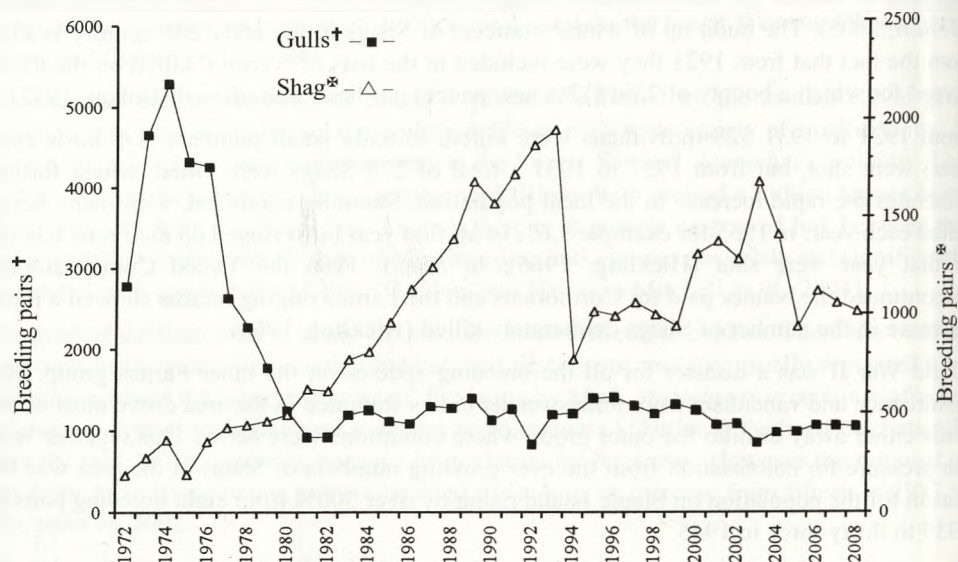


Figure 2 Shags, Lesser Black-backed and Herring Gulls.

easily predated areas of the quarry (Inner Farne) and the central gully on Staple Island. Although productivity varies from year to year the overall level is different.

'Red Tides'

The 1968 and 1975 seasons both saw an exceptionally heavy mortality of Shags on the Farne Islands. At first in 1968 there was a possibility that this had been caused by high levels of organochlorine-containing pesticides. Studies had shown that Shags' eggs on the Farne Islands contained concentrations equivalent to those found in Peregrines *Falco peregrinus* which were known to exhibit toxic effects (Potts, 1968). However, ongoing work had indicated that these levels were decreasing and furthermore the symptoms seen were similar to those found in both people and domestic chicks suffering from Paralytic Shellfish Poisoning (PSP). This diagnosis was later confirmed by postmortem examinations on recovered Shags (Coulson *et al.*, 1968).

PSP is caused by a neurotoxin produced by the dinoflagellate protozoan *Gonyaulax tamarensis*. Such outbreaks are often associated with red or brown discolouration of the sea and are often named 'red tides'. The toxin is concentrated by mussels and other marine organisms and most seabirds ingest it by feeding on infected fish. Not all species are equally affected, but Shags and Cormorants seem particularly susceptible (Armstrong *et al.*, 1978).

Table 3 Shag productivity per breeding pair at different locations 2005-2008.

Location	2005	2006	2007	2008
Quarry	0.72	0.51	0.41	1.00
St Cuthbert's Gut	1.66	2.19	1.22	1.37
Central Gully	-	0.38	0.55	0.54
Kittiwake Gully etc	-	0.94	1.23	1.95

Of the two episodes, that in 1968 was the most serious and had a devastating effect on the colony. Prior to the outbreak, 339 nests had been counted and 80% of the breeding Shags had either eggs or young. Within a period of nine days most of the adults had died and 90% of the nests were deserted, leaving the young to die and the eggs to be predated. Of the surviving birds only seven pairs were successful in fledging chicks and a small number re-laid. Other adults occupied the deserted sites and seventy-nine nests were found to be occupied on 5 July, the overall result was a 78% decrease from 1967 (Coulson *et al.*, 1968; Hickling, 1969).

The 1975 'red tide' was much less severe, but it was still estimated that almost 60% of the breeding population died. Almost every nest on the outer group was deserted but at least 18% of Shags breeding on Inner Farne continued incubation and hatched young.

In both episodes of red tide there were a number of similarities:

- (i) similar ranges of species were involved, though Shags were affected the most.
- (ii) Shags on the inner group of islands were not killed or affected to the same extent as those on the outer group only just over a mile away.
- (iii) the preceding springs had been cold with unusually frequent on-shore winds.
- (iv) the episodes were short lived and the timing of the deaths were within a few days of each other (Armstrong *et al.*, 1978).

Shags do not breed until they are at least two years old. After fledging the immature birds disperse north and south along the east coast and are replaced by immatures from other colonies. Thus in both 1968 and 1975 the birds at risk were the breeding adults and any immatures that had moved into the area from colonies in southern Scotland, especially the Isle of May.

Once they have reached maturity most return to their natal area to breed, though about 8% of young reared on the Farne Islands emigrate to breed at sites they have found during dispersal; however once they start to breed less than 1% each year then emigrate. In addition many more Shags have immigrated to the colony than have left to breed elsewhere (Potts, 1969). It was this that enabled the population to recover so quickly after both 'red tides', supplemented by the dispersed Farne Island young. At this time immigration greatly exceeded emigration as few young were raised in 1968 and 1969 and it was estimated that of 704 females that bred for the first time between 1962 and 1971, 420 (60%) were immigrants (Potts *et al.*, 1980). By 1974 the breeding population was almost back to the pre 1968 level and despite the 60% drop after the 1975 episode the count in 1976 showed that numbers had almost returned to those in 1974. This was again due to the existence of a reservoir of immature birds that had been dispersed out of the local area and to immigrants from other colonies, especially the Isle of May (Armstrong *et al.*, 1978).

Weather

Adverse conditions at the wrong time of year can create seasonal disasters for all the breeding species and Shags are no exception, particularly since only 4% of the nest sites used on the Farne Islands are considered satisfactory, with many forced into areas that are more exposed to rain and heavy swells (Potts *et al.*, 1980).

High mortality has been seen in a number of seasons in the past: in 1963 at least twenty-seven young died in the rain and gales in mid June. Overall 10% of the clutches were washed away by heavy seas and only 38% of the eggs actually hatched (Hickling, 1964). It

should also be noted that heavy rain in late July and early August can be especially damaging as at that time any unfeathered young are too large to be brooded and can quickly become waterlogged, as happened in 1966 when at least forty-one young perished on the outer group in heavy rain and gales (Hickling, 1967). Though around 200 nest structures were destroyed by a south-east swell in early May 1967, 90% of the affected adults managed to relay (Hickling, 1968). During the 1970s, 1980s and early 1990s no major weather effects were noted on Shags. The north-easterly gales and torrential rain that were a prominent feature of June 1997 destroyed nests, eggs and chicks and were the major cause of the drop in productivity seen that season (Walton, 1998), but despite poor weather throughout the 1998 season Shags fared better than many other breeding birds (Walton and Maher, 1999). The 2004 season however was a disaster; heavy rain in mid June flooded nesting areas killing many large chicks and washing out nests and eggs, and led to the lowest Shag productivity ever recorded on the islands (Steel, 2005). Nests were again washed off cliff tops in early June 2007, but breeding pairs attempted to relay and appeared to go on to have a successful season (Steel, 2008). Long periods of hot weather can also be a problem and cause heat stress, as happened in 2003.

Wrecks

Wrecks of seabirds occur when large numbers die unexpectedly and from apparently natural causes. They can often occur after severe weather, especially in winter when there has been a long period of on shore winds. These are thought to cause water turbulence and make it difficult for birds to forage. Guillemots are the commonest species involved, but Shags are victims too, and because they are less numerous, wrecks can have a major effect on the population (Harris and Wanless, 1996).

The winter of 1965 and 1966 was particularly severe and it was estimated that many of the breeding Shags perished, which was sufficient to reverse the population trend for the first time since 1931 (Hickling, 1967). The 60% drop in 1994 was due to a large wreck in early February. Within days of arriving on the islands the wardens had picked up 225 dead Shags of which 90-95% were adults (Walton, 1995). Unlike the 'red tide' episodes which were confined to the Farne Islands, the effects of this wreck were widespread and affected many east coast colonies, particularly those on the Firth of Forth, where 242 Shags ringed on the Isle of May were reported dead in the period from February to May 1994 (Harris and Wanless, 1996). It is clear from Figure 1 that recovery on the Farnes was very much slower than after the 'red tides' as this time there was no reservoir of immature birds from nearby Scottish colonies available for immigration.

January and February 2005 saw a further wreck; not only were large numbers of Shags picked up further north, but wardens found at least forty dead on the islands at the start of the season (Dawson, pers. comm., 2005). In addition the twenty-eight ringed Shags recovered during the winter was double the total than for previous years; most were adults with only three individuals ringed in 2004 (Redfern, 2006). Hence the 34% drop in numbers was not surprising and, as after the 1994 wreck, recovery has been slow.

Food

Shags feed mainly on mid-water and bottom living species, usually sandeels, which are caught by pursuit diving. Research undertaken on the Isle of May in 2005 using underwater cameras attached to breeding adults showed them feeding on Butterfish *Pholis gunnellus* which were brought to the surface before being swallowed. This reduced both the prey

capture rate and the foraging performance, and was thought to have contributed to the poor breeding success seen that season (Watanuki *et al.*, 2007). At present the only evidence of a scarcity of food on the Farne Islands occurred in 2007 when Shags in St Cuthbert's Gut on Inner Farne showed signs of starvation (Steel, pers. comm., 2008), despite the more widespread problems affecting the Terns and Kittiwakes (Wilson and Noble-Rollin, 2007; 2008). Nevertheless any change in the prey species caught around the islands has the potential to influence the overall productivity, and should thus be monitored.

Prior to breeding, adults must reach a certain degree of fitness which will depend on the availability of food during the winter. The increasing frequency of periods of onshore winds experienced in the last few years can make foraging difficult and could well have contributed to the lower breeding success seen recently.

Productivity

Productivity can be defined as the number of fledged young per nesting pair (young/nesting pair) and is an important factor in determining the number of potential recruits to the breeding stock. If this is low over a period of time and there is no immigration from other colonies there will be an inevitable decline in the population.

Figure 3 shows both the overall productivity, and the total number of breeding pairs of Shags from 1993 to 2008, and Table 4 shows the average productivities prior to and after the 'red tide' in 1968 (after Potts *et al.*, 1980), as well as modern values obtained from the routine monitoring by the wardens.

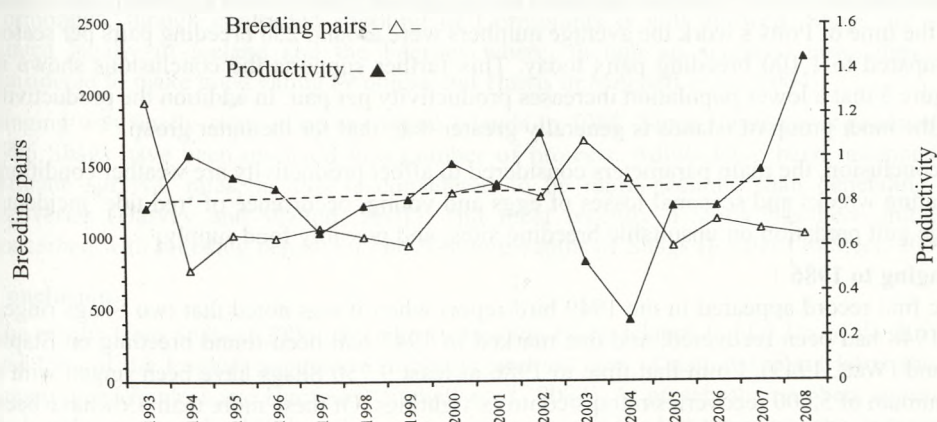


Figure 3 Shag productivity on the Farne Islands, 1993-2008.

A paper published in 1980 gave the results of a ten-year study of Shags on the Farne Islands throughout the 1960s and early 1970s (Potts *et al.*, 1980). As part of the research each nest site was ranked using four criteria to determine its suitability for breeding, and the conclusion was drawn that only 4% of those in use were thought to be entirely satisfactory. As one of the aims was to study the hatching and fledging success, the productivity of a particular nest site was then linked to its suitability for breeding. This was possible as at that time numbers were such that the majority of the population consisted of individually marked adults.

Table 4 The average productivity per breeding pair of Shags over various time intervals.

Time interval	Average Productivity/breeding pair
1963-1967	1.27
1969-1971	1.74
1993-1999	0.80
2000-2008	0.86

It can be seen from Table 4 that productivity was greater after the 'red tide' than before it. This was explained by considering the overall nest site quality. Prior to the 'red tide' in 1967 as the population increased a higher number of less suitable sites came into use so nest site quality declined and there was a drop in the productivity; however after 1968 the better quality sites were not in short supply and productivity increased, even for first time breeders (Potts *et al.*, 1980).

When Figure 3 is studied the obvious feature is the large seasonal fluctuations in the productivity. However, when a trend line is inserted this is almost horizontal and indicates that since 1993 the productivity can be considered to be constant with a value of around 0.88/year. It appears in general that higher productivity is associated with fewer breeding pairs with the seasonal effects of adverse weather, predation and possibly food supply overlain on this. This therefore reinforces Potts's finding in 1980 that site quality is crucial to productivity.

Table 4 shows that today the productivity is on average around 50% lower than that found during earlier studies. However this must be considered relative to the total Shag population. At the time of Potts's work the average numbers were around 250 breeding pairs per season compared to 1,100 breeding pairs today. This further supports the conclusions shown in Figure 3 that a lower population increases productivity per pair. In addition the productivity on the inner group of islands is generally greater than that for the outer group.

In conclusion, the main parameters considered to affect productivity are weather conditions creating wrecks and seasonal losses of eggs and young, occurrence of 'red tide' incidents, large gull predation on unsuitable breeding sites, and possibly food supply.

Ringling to 1986

The first record appeared in the 1949 bird report when it was noted that two Shags ringed in 1948 had been recovered, and one marked in 1947 had been found breeding on Staple Island (Watt, 1949). From that time to 1986 at least 9,750 Shags have been ringed with a minimum of 5,000 recoveries/retraps/controls/sightings. Of these more than 63% have been as a result of the extensive retrapping carried out by Potts from the late 1950s to 1971, and by the wardens in 1982 in a special study of selected nesting sites (Hawkey and Hickling, 1982).

Recoveries have shown that during their first year Shags from all the east coast colonies become extensively intermixed (Potts, 1969) and Farne ringed birds of this age class have been recovered both north and south of the islands. Most are usually found to the north, particularly in the Firth of Forth, but also as far as Aberdeen and Caithness. Those that move south have been recovered along the Durham and Yorkshire coasts to Norfolk, Suffolk and even Dorset. On occasions first year birds have also reached the Netherlands, France, Belgium and Norway. Adults disperse less widely, and most recoveries have been within 50-100km of the Farne Islands.

Potts' ringing programme was particularly valuable in assessing the effects of the 1968 'red tide', as at that time 95% of the breeding population had been marked, many with uniquely coloured rings which enabled individuals to be readily identified (Potts, 1969). It also provided important data concerning survival rates, emigration and immigration. The annual mortality rate was found to be around 17%, compared to the first year survival rate of $59 \pm 12\%$ per annum (Potts, 1969), and there is no doubt that the majority of recoveries have been of Shags within the first year of life. The oldest adult found to 1986 was twenty-two years old (Hickling and Hawkey 1984), though a twenty-four year old individual was found in 1987 (Hawkey, 1988). The studies on immigration and emigration have already been mentioned previously (Potts, 1969).

Farne Islands' Shags have been found nesting on the Isle of May, the Bass Rock and The Lamb at North Berwick, and one ringed as a breeding adult in 1963 was noted on the Isle of May in 1966 and the Bass Rock in 1967 (Hickling, 1968). In return individuals from the Isle of May, Bass Rock, The Lamb and Foula in Shetland have all been seen breeding on the Farne Islands, and it was the immigration from the Firth of Forth colonies, especially the Isle of May, that was responsible for the swift recovery from both 'red tide' episodes.

Only 25% of all recoveries give details of the cause of death. Of those that do 36% have been caught in fishing nets and lobster pots and in a variety of other objects. 22% were shot and 18% suffered from oiling (Harris and Swann in Wernham *et al.*, 2002). Farne ringed Shags have been found oiled, drowned in fishing nets, shot and even killed by foxes on golf courses. In 1965 3.6% of all first year birds ringed that year were shot, the highest ever mortality from shooting (Hickling, 1966). This source of recovery however rapidly decreased when the Tweed Commissioners discontinued the bounty paid for Cormorants in 1966. The Wildlife and Countryside Act in 1981 finally gave protection to Shags and Cormorants, though controlled shooting of Cormorants is still allowed. Shags are still hunted legally in Iceland and the Faeroes where, though an acquired taste, they are considered to make good eating (Wanless and Harris in Mitchell *et al.*, 2004).

Ringing was finally stopped on the Farne Islands in 1986. Since ringing was resumed in 1996 Shags have been involved in a number of projects. Adults have been retrapped to estimate survival rates, as this is considered to be more accurate than depending on recoveries (Harvey and Walton, 2001), and most recently a study has been initiated concerned with breeding behaviour and foraging depths of Shags (Redfern in Steel, 2004).

Conclusion

The results from Seabird 2000 have shown that the Farne Islands hold 4.1% of the British and 19% of the English population of Shags, and are thus of national if not international importance (Wanless and Harris in Mitchell *et al.*, 2004). At present the numbers appear to be healthy at around 1,100 breeding pairs each year and the last three seasons, especially 2008, have shown higher productivity, particularly on the inner group. Nevertheless the events of both 2004 and 2005 have demonstrated the dangers of complacency especially now with the increasing unpredictability of the climate and the threat of warmer seas. There are many factors that affect the Shag population, the most destructive of which is the severe reduction in the adult breeding population on a regional basis by winter storms. Red tide incidents, although creating a sudden decrease in adults, do not have a long term effect. They are very local in nature and consequent immigration from near-by colonies soon returns the population to a healthy level. The apparent decline in average productivity shown in Table 4 between 1960 and the present appears to be an artefact of varying population size, as discussed above. However the trend line in Figure 3 suggests that the population productivity has been almost constant over the last fifteen years.

Historical records to the present day

Excavations at Greenshiel, Holy Island in the late 1980s unearthed Cormorants' bones dated to the 9th or 10th century (Kerr, 2001) and further possible evidence for their early presence on the Farne Islands is obtained from a manuscript note by T Lawson, the cellarer and bursar of Durham from 1422-1442, who included the 'Scarphcarrs' (modern name the Scarcars) in a list of islands (Tate, 1857). Watt (1951a) considered that this was derived from 'scarf' the old name for a Cormorant, though Tate thought it came from a German word meaning acute or sharp.

While both the above indicate that Cormorants could have been on the Farne Islands at these times the first definite evidence comes from Harrison who reported them in 1584 (Raine, 1852). During the next two hundred years Ray (Willughby and Ray, 1678) noted 'scarfs' as building on the islands in the 17th century and in July 1769 Pennant found them nesting on Megstone (Hutchinson, 1778) and Selby (1826) intimated that they were on Longstone. These are the only occasions prior to 1825 when a specific island is mentioned.

By 1826, repeated disturbance had driven the colony from Longstone, where they had bred for many years, to North Wamses (Selby, 1826), and there they appeared to remain until the mid 1860s (Newton, 1864-1906; Tate, 1857; White 1859; Brown, 1866). Booth (1881-1887) then noted them on Megstone in 1867, though it is probable that they had been there on a number of occasions previously, and strangely an attempt is recorded on Goldstone in 1866 (Evans, 1911). It is most likely that the author mistakenly identified a colony on North Wamses as Goldstone is a shoal only visible at the lowest tides. In 1871 Cormorants were on Big Harcar (B, 1872), but in 1875 reappeared on Megstone (Smith, 1876), which then became their principal island. There were however other colonies: South Wamses was used in some years between 1876 and 1882 (Clarke, 1881; Bidwell, 1882), and in 1895 fifteen or sixteen pairs of Cormorants nested on East Wideopens (Lodge, 1895).

From the middle of the 19th century many accounts include a detailed description of the author's visit to at least one of the Cormorant colonies and most include some reference to the pervasive and overpowering smell that hung over everything. Perhaps the most graphic is by Oliver Pike who was writing around 1900: 'The smell is overpowering, intolerable sickening; there are no words in our extensive vocabulary to describe it'. He then goes on to recount the rotting seaweed used to construct the nest structures, the droppings and decaying fish everywhere and pools of dark green liquid covered with a thin crust which if disturbed caused a 'stench' that 'exceeded all former experiences' (Pike, 1902).

During the first part of the 20th century, Megstone, North Wamses, Big Harcar, East Wideopens and possibly South Wamses and Little Harcar were all in use at various times, but Megstone was still the main island, though from 1910, it was deserted and North Wamses gained in importance. This however was not for long, since Best (1916), places the colony back on the Harcars, but by 1920 the birds were once again on Megstone (Stribling, 1920), where they then remained for many years. Interestingly Temperley reported a small colony on the Scarcars in 1922, with Big Harcar deserted; this is the first and only time that Cormorants have been recorded breeding on this island (Temperley, 1896-1951, 18 June).

From 1924 to the start of World War II the main islands used were Little Harcar and Megstone, though small colonies were occasionally reported on other islands. In 1926 Bolam saw a few nests on Big Harcar as well as a small colony on Longstone (Bolam, 1877-

1933b, 13 July). Hull saw some on Clove Car in 1927 (Hull, 1927) but this area adjoins Little Harcar and so could easily be confused with it. Megstone seemed to be in use throughout the 1930s together with one of the other islands, usually Little Harcar. In 1937 Goddard (1925-1948 13 June) refers to nests on Swedman next to Megstone but only in one diary entry and it is probable that he confused this island (Swedman) with a separate area of Megstone away from the main colony. Then in both 1938 and 1939 Little Harcar was abandoned and the birds moved to North Wamses (Goddard, 1925-1948; 11 June 1938, 25 May 1939). After World War II when visiting resumed, Megstone was for a long time the principal island. However it declined rapidly from about 1970 and the last recorded nesting was in 1973 and though birds were present in 1974 there was no proof that any had bred (Hawkey and Hickling, 1974). Throughout this period there was a small colony on North Wamses and in 1950 and 1952 small numbers on East Wideopens. From 1974 for the next six years all the birds were concentrated on North Wamses, and in 1981 for the first time for almost thirty years seventeen nests were found on East Wideopens. Since then the population has been relatively equally divided between these two islands with, in six years between 1968 and 2006 a few nests on Big Harcar. In 2008 Cormorants were nesting on East Wideopens, North Wamses and Big Harcar.

Evidence for numbers

The first reference to any numbers is by Hewitson in 1834, and Table 5 shows the nests present in ten seasons from 1834 to 1897.

Table 5 Cormorant nest counts from 1834-1897.

Year	No. of nests	Comment	Reference
1834	40/50	Probably an average	Hewitson (1834)
1867	<i>ca</i> 100	Visited, may not have landed	Booth (1881-1887)
1870	<i>ca</i> 70	Took eggs 19 June	Seebohm (1885)
1881	<i>ca</i> 40	Landed early June	'D' (1881)
1885	40/50	Landed June	Nelson (1887)
1888	93	Counted, all with eggs	Pigott (1888)
1888	50	Total for season	Barclay (1888)
1889	120	Total for the season	Barclay (1890)
1896	150+	Visited 12 June	Tristram (1899)

The figures given usually refer to the number of nests counted or estimated for a specific island, usually the one which contained the main colony. Though Cormorants have a very variable breeding season (see later) as the birds on the Farne Islands were constantly being disturbed by both egg collectors and fishermen and also heavily predated by the Lesser Black-backed Gulls it is most likely that the adults were present for most of the season and that the figures quoted do give a reasonable guide to the total numbers breeding. Table 5 shows that prior to 1889 the seasonal average was around fifty pairs per annum, whereas from 1889 onwards, after the stricter control put into action by the Farne Islands Association, the breeding population had expanded to over a hundred pairs per annum.

Numbers then remained about this level for the first few years of the 20th century, with 127 nests being counted in 1907 and 157 in 1910 (Bolam, 1912). Furthermore as there were always a significant number of non breeding individuals present, probably about three adults for every nest, the total population was considered to be around 471 individuals (Bolam 1877-1933a). There is no further information concerning the total colony size until after World War II, but it seems probable that the colony continued to expand slowly.

Figure 4 shows the number of nests counted each season from 1945 to 2008. Some figures are available prior to 1945 and though they are usually for only one of the islands they give some indication as to the total number of breeding pairs in that season. In 1932 178 nests were counted on Little Harcar (Goddard, 1925-1948, 26 June), while only two years later the same island was estimated to hold around 200 nests (Goddard, 1925-1948, 13 June). Then in a lecture in July 1936 Goddard stated the population to be around 150 to 200 breeding pairs annually (Goddard, 1936).

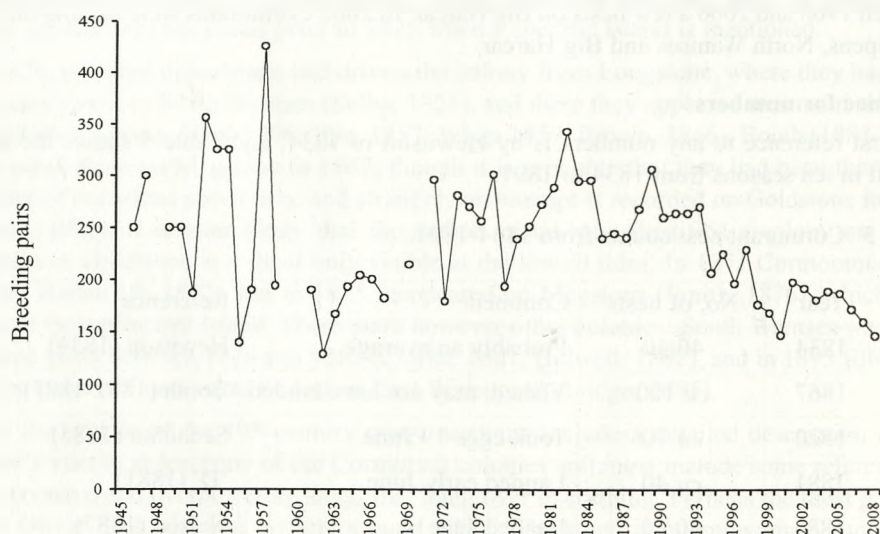


Figure 4 Breeding pairs of Cormorants on the Farne Islands from 1945 to 2008.

The most obvious features in Figure 4 are the changes in successive seasons, particularly during the 1950s when increases of 90% were followed by a sharp decline in the next year. From 1960 onwards these fluctuations are not as intense and are superimposed on a gradual build-up to a maximum of 341 nests in 1982. This is then followed by a slow decline that still continues today.

Cormorants have a prolonged breeding season, as do Shags, and unlike many seabird species the timing of egg laying by different pairs in the same colony is not always synchronous. There is thus no guarantee that a single nest count will accurately reflect the number of breeding attempts. Counts made too early will miss pairs yet to breed, while those at a later date will miss both earlier failures and adults that have successfully fledged young (Sellers in Mitchell *et al.*, 2004). On the Farne Islands, modern first egg dates have varied between 6 April in 1983 (Hawkey and Hickling, 1983) and 12 May in 1993 (Walton, 1994). However because of problems with access and disturbance these dates are only approximate

and in 1993 especially, eggs had probably been laid earlier (Walton, 1994). There is also evidence that a variable proportion of the breeding population does not nest in certain years (Lloyd *et al.*, 1991). Thus the extreme changes seen during the 1950s and to a lesser extent in the 1960s probably had little to do with fluctuations within the actual colony, but simply indicated the number of occupied nests on a specific island when it was visited, for perhaps the only time that season. The actual population from 1947-1953 was thought to be around 300-350 breeding pairs with a slight fall to 250-340 pairs over the next twenty years. (Hickling, *ca* 1983).

There are some seasons for which the changes can probably be accounted: the drop in 1962 could be linked with the establishment of the Firth of Forth colony (Cramp *et al.*, 1974) while the exceptionally high figure for 1957 is most likely an over-estimation caused by pairs that had already been counted being driven from North Wamses because of egg collectors, onto Megstone where they were then included in a later census. The lower numbers in 1951, 1955 and 1958 are again probably due to excessive egg stealing, which certainly occurred in those years. Though Shags were the principal species affected by the 'red tides' of 1968 and 1975, Cormorants also suffered, 4% being found dead in 1968 and 6% in 1975 (Armstrong *et al.*, 1978). A 5% drop in numbers can be seen for 1975, but unfortunately there are no complete figures for 1968.

Regular counting started in 1971 and since 1973 Cormorants have been fully protected from disturbance on the islands. The presence of an indeterminate proportion of non breeding adults each year can explain many of the observed seasonal fluctuations, though the more extensive changes, such as those in 1972 and 1983 when there were declines of 36% and 14% respectively, were probably the result of a protracted breeding season in 1972 when many young fledged early, yet both eggs and young were still present at the end of July (Hawkey and Hickling, 1972), and the lack of an accurate count on North Wamses in 1983 because of the presence of a large number of young Guillemots (Hawkey and Hickling 1984). During the last ten years there have been between 217 and 140 nests annually and as Figure 4 shows the slow decline that started after 1982 is still continuing. Since 2004 Cormorants have been included in the regular cliff counts that are carried out for the other breeding species (Steel, pers. comm., 2008). This change in counting method may have affected the comparative yearly totals.

National Counts

Table 6 gives the total numbers of breeding pairs of Cormorants in coastal colonies in Britain and Ireland for the three national surveys during the 20th century, Operation Seafarer in 1969 and 1970, the Seabird Colony Register from 1985 to 1987 and Seabird 2000 in 1998-2002.

Cormorants construct large nest structures in distinct well defined colonies and so are usually straightforward to count and the count unit in Seabird 2000 was the Apparently Occupied Nest (AON). Many colonies, as is the case with the Farne Islands, have been in the same place over a long period, but others, usually the smaller ones, can come and go, or show sudden shifts in location, so the presence of a colony in one year is no guarantee that it will be in the same place the following season. There can thus be an element of uncertainty when counts from a number of years have to be combined as was the case with Operation Seafarer and the SCR. To minimise this happening again an effort was made during Seabird 2000 to reduce the number of years over which the counts were made within as large an area as possible. In addition, because of the length of the breeding season the recommended

Table 6 Survey counts for Cormorants (breeding pairs).

National Survey	Operation Seafarer 1969-1970	Seabird Colony Register 1985-1987	Seabird 2000 1998-2002
Britain and Ireland	8,010	10,806	11,560
Farne Islands	214	238	146

period for counting was 1 May to 25 June, as this is likely to coincide with the end of incubation or the early nestling stage when the number of birds with nests is likely to be at a maximum and they are most obvious. During Seabird 2000, 70% of all counts were made within the recommended dates, 17% outside and with dates not recorded for 13%. For the SCR 51% were between the recommended dates, 10%, outside and 39% not recorded (Sellers in Mitchell *et al.*, 2004).

Operation Seafarer was the first complete survey of Cormorants in Britain and Ireland. Of the total of 8,000 pairs found in coastal colonies, the majority were concentrated on the north-east coast from East Ross to Sutherland in Scotland, the Farne Islands and from the Isle of Wight and Dorset to the Isles of Scilly in England and Anglesey, Caernarvonshire and Pembroke in Wales. Cormorants were also found to breed on all the coasts in Ireland (Cramp *et al.*, 1974).

The 35% increase in the coastal population between Operation Seafarer and the SCR was mainly in Ireland where numbers had doubled. In England and Wales the largest colonies were on the Farne Islands and Marsden Rock in the north-east and Little Orme Head and Llanddeiniol in Wales (Lloyd *et al.*, 1991). By the time of Seabird 2000 the increase had slowed to 7% since the SCR but growth in the inland breeding population of England meant that the total population of inland and coastal colonies had increased by 15% (Sellers in Mitchell *et al.*, 2004).

The 7% increase seen overall in the coastal colonies for Seabird 2000 was not uniform. A number of areas such as Northern Scotland including Shetland and Orkney had suffered large declines, while numbers had risen in other areas including parts of Western Scotland. North-east England had seen a substantial decrease while colonies in Wales had steadily increased until 1994 then from 1995 to 2000 had declined by 25% (Sellers in Mitchell *et al.*, 2004).

Human persecution, especially shooting, has been a long-standing influence on Cormorant numbers (see next section), and though they have been protected since 1981 both licensed and unlicensed shooting can still occur and may be responsible for the decline seen in Northern Scotland as these birds winter along the salmon rivers of north-east Scotland (Sellers in Mitchell *et al.*, 2004).

In addition to the persecution, population levels in Cormorants are determined by natural mortality, food availability and reproductive success. Mortality appears to be age dependant with 55% dying in the first year of life, 25% in the second year and 15% in all subsequent years. Greater immature mortality compared to adults is a characteristic feature of seabirds which in Cormorants may be linked to differences in foraging ability; adult birds are adept at catching fish, but this is a skill that has to be learned and developed in the first two years of life (Sellers in Mitchell *et al.*, 2004).

Food availability has been found to be a major factor in determining colony size in both Norwegian and French coastal colonies and this is probably true for British birds too, but as yet no definitive studies have been carried out. It is of interest however that even during the sandeel shortages in Shetland in the 1980s Cormorants seemed to have no difficulty in foraging for their young (Sellers in Mitchell *et al.*, 2004).

Reproductive success in the coastal population seems to be in the range 1.8-2.8 young /pair, though there is evidence from a colony in the Netherlands that an accumulation of organochlorine pesticides has resulted in smaller clutch sizes with reduced hatching and fledging success (Sellers in Mitchell *et al.*, 2004). Such residues were found in Shags breeding on the islands in the 1960s (Potts, 1968) so there is a high probability that the Cormorants too suffered at that time. A more recent development has been the discovery in the livers of some British birds of polybrominateddiphenyl ethers used as fire retardants; the long term effects however are not known (Sellers in Mitchell *et al.*, 2004).

Table 6 also includes the numbers of breeding pairs of Cormorants on the Farne Islands for each of the three national surveys. It is unfortunate that numbers seemed to be atypically low for each of the years that the official counts were made. Nevertheless the overall increase seen between Operation Seafarer and the SCR is probably due to both the national trend and the fact that Cormorants had been undisturbed since 1973 (Hawkey, 1991). However as Figure 4 shows the situation is more complex and when Figure 4 is studied it shows that the decline seen today probably dates from the mid 1980s.

Perhaps the most interesting development concerning Cormorants in Britain and Ireland recently has been the establishment and rapid growth of inland breeding colonies in England. Though these colonies were most likely established by the Continental race *P. c. sinensis*, recent DNA analysis has shown that British birds are also present (Sellers in Mitchell *et al.*, 2004). It may thus be that part of the decline seen on the Farne Islands is the result of some emigration to inland colonies elsewhere.

Human persecution and egg collecting

From the earliest times, fishermen have seen Cormorants as a competitor for fish and this coupled with their voracious appetite has led them to be regarded as a pest species; the increase in the inland breeding population at the present time has done nothing to allay anglers' fears. Though there can be problems, it has been shown that the decline in Salmon *Salmo salar* stocks is not because of increased predation from growing numbers of Cormorants, but a result of over fishing which has led to 80% fewer adults reaching the spawning grounds (Lloyd *et al.*, 1991).

The first indication of possible persecution on the Farne Islands dates from Harrison in 1584 who described them as being 'full of gluttony' (Raine, 1852). There is no definite evidence until the late 1850s, but it is likely that Cormorants suffered as did all the breeding species, from the shooting and egg collecting that were prevalent for much of the 19th century (Wilson and Noble-Rollin, 2005; 2006; 2007). White who visited the islands around 1859 was told by his boatman that it would be a good thing if all the Cormorants were shot because they were 'the greediest, after fish of any bird on the islands' (White, 1859). However the Wild Birds Act of 1880, and the stricter control instituted by the recently formed Farne Islands Association from 1888, did have some effect, since Bolam (1912) comments 'Thirty years ago it [the Cormorant] was less than half as abundant as it is now'. Nevertheless destructive persecution and egg collecting on the islands was still a frequent occurrence and there are photographs probably from the late 19th or early 20th century showing egg collecting on Megstone.

Pybus, who had found Megstone deserted in 1904 when he expected a large colony, referred to the 'wanton destruction' which had taken place in the last few years (Pybus, 1905) and recounts an episode in 1901 when a third of the eggs were destroyed and the nests piled on top of one another (Pybus, 1903). The situation was exacerbated in the 20th century by the Tweed Commissioners who paid a bounty of 25p/beak to 1920 and 17.5p subsequently, for each Cormorant shot on the Tweed between February and June (Bolam, 1932) – 389 from 1911-1920 rising to 859 for the period 1921-1931.

Though there were no other breeding colonies in the Tweed-Forth area at that time, it must not be thought that these were all from the Farne Islands, as a number of them would probably be immature birds from more northerly colonies dispersing south in the winter; even so in 1913, 1922, 1928 and 1931 over a hundred Cormorants were shot in each open season, with 235 in 1922. 1922 was a particularly disastrous year on the islands with excessive disturbance from visitors in motorboats and this may have driven more Cormorants than usual into the Tweed during the first part of the breeding season, before the close season started.

Shooting on the River Tweed continued until March 1966 when the Tweed Commissioners discontinued the bounty (Hickling, 1966).

Figure 5 compares the total numbers of ringing recoveries and numbers shot both nationally and on the River Tweed from 1952-1970. Whilst in proportion to the colony size only a small percentage were killed, nevertheless from a total of 525 recoveries during this period over 40% had been deliberately killed, and as Figure 5 shows, there were many years when at least 50% of the birds recovered were victims of shooting; for example in 1952 over 7% of the birds ringed that season were dead by the end of December (Watt, 1953). After the bounty was discontinued shooting rapidly ceased to be a major problem.

The intense persecution continued to the mid-1960s and there were regular reports of egg stealing and more extensive vandalism. In 1928 both Goddard and the Farne Islands

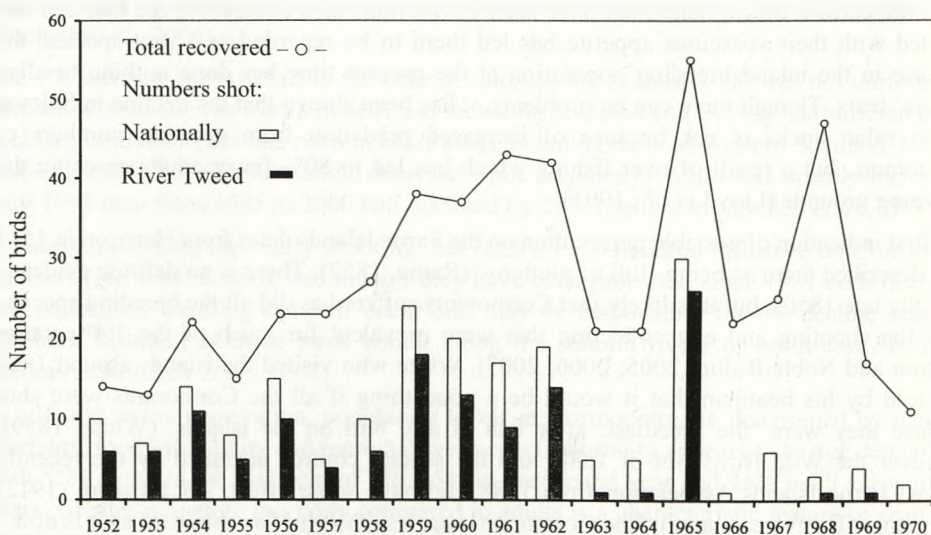


Figure 5 Cormorants shot on the Farne Islands 1952-1970.

Association Report stated that fishermen had collected and smashed the eggs in June (Thorp, 1929; Goddard 1925-1948, 6 June), while in 1934 a man not only destroyed the eggs but killed the young birds as well (Goddard 1925-1948, 23 June). Between 1947 and 1965 there were ten more occasions when the eggs were stolen and at least two more years when the young were killed. Consequently there must have been some years such as 1951 when very few young fledged. The Wild Birds (Farne Islands Egg Sanctuary) Order 1964, which was implemented in 1965, together with the employment of seasonal wardens for longer periods from 1971, finally ended the persecution on the Farne Islands. Though this species has been fully protected since the enactment of the Wildlife and Countryside Act in 1981, individuals can still be shot under special licence to 'control serious damage'. However in 2004 the requirement to prove serious damage was removed with the result that now over 300 licences a year are issued nationally with the potential to shoot nearly 2,000 birds compared to 100-150 licences previously (Lovegrove, 2007). Continued disturbance on Big Harcar meant that most nesting attempts by Cormorants failed at the egg stage. Now that there is no longer open access, in 2008 eight young fledged from seven nests for the first time in many years.

Finally it might be of interest that the Cormorants in St James' Park London were taken from the Farne Islands in 1888 along with Puffins *Fratercula arctica*, Kittiwakes and Arctic Terns *Sterna paradisaea*. Not surprisingly the Cormorants were the only birds to survive (Barclay, 1888; 1889).

Predation by Lesser Black-backed and Herring Gulls

The long persecution has made Cormorants very nervous and sensitive to disturbance whether by man or the Lesser Black-backed and Herring Gulls who are the main predators on the Farne Islands. During the 19th century when Lesser Black-backed Gulls were the most numerous species present (Wilson and Noble-Rollin, 2008), Cormorants suffered particularly badly for as soon as any visitors approached one of their colonies the adults would take flight, leaving their eggs open either to collection or predation. It is thus not surprising that there were seasons such as 1875, 1877 and 1905 when no young were thought to have fledged (Adamson, 1878; Clarke, 1881; Bolam, 1912), and many others when only a few were successful. In 1914, Edward Miller ringed fifty-three young Cormorants on North Wamses and considered that they were the total hatch for the season on the outer group. All the other eggs and young had been taken (Miller, 1911-1914, 10 August).

The sensitivity to disturbance and the heavy predation from the large gulls have probably been two of the reasons for the Cormorants' frequent change of nesting site. The move from Longstone to North Wamses in 1826 was no doubt in response to the disturbance caused by the building of the lighthouse during the summer of 1825, while by 1865 the increase in visitors with the consequent disturbance and predation by the ever greater numbers of Lesser Black-backed Gulls was probably instrumental in the move to Megstone. Megstone was an ideal island for Cormorants; it is very difficult to land on and was not used by the gulls. The attempt to colonise South Wamses in 1876 failed after only a season as according to Clarke (1881) 'the gulls objected and their numbers prevailing the Cormorants had to retire to their companions on the Megstone'. By 1912, Fortune recorded breeding taking place on six islands (Fortune, 1913). This fragmentation was probably an attempt to escape predation rather than a reflection of any lack of space.

Any colony on the Harcars or North Wamses is particularly susceptible to predation as Lesser Black-backed Gulls have nested on Big Harcar, and the Wamses for much of the 19th,

20th and 21st centuries. During his visits in the 1920s and 1930s Goddard documented a number of occasions when as soon as the Cormorants on Little Hancar were disturbed, the gulls pounced on their eggs. Interestingly, he twice reported the Cormorants as 'standing idly by' (Goddard, 1925-1948, 14 June 1930; 30 June 1939), whilst on another occasion the gulls drove off the returning Cormorants (Goddard, 1925-1948, 20 June 1932). The Farne Island annual bird reports, which started in 1946, contain numerous accounts of this predation and the fragmentation of the North Wamses colony may not just have been for protection from the weather, but also an attempt to escape the Lesser Black-backed Gulls. The rapid build-up of the predatory gulls in the early 1970s worsened the situation, but did not seem to be accompanied by a consequent decline in the Cormorants. At this time however, the national population was increasing, probably because of greater protection as many colonies were now wardened and in 1981 the passing of the Wildlife and Countryside Act which for the first time included Shags and Cormorants, though Cormorants could still be shot under special licence. It was expected that the effective control of the large gulls from 1975 would allow the Cormorant population to expand, but as Figure 6 shows this was not the case, and instead from 1983 their numbers have steadily declined.

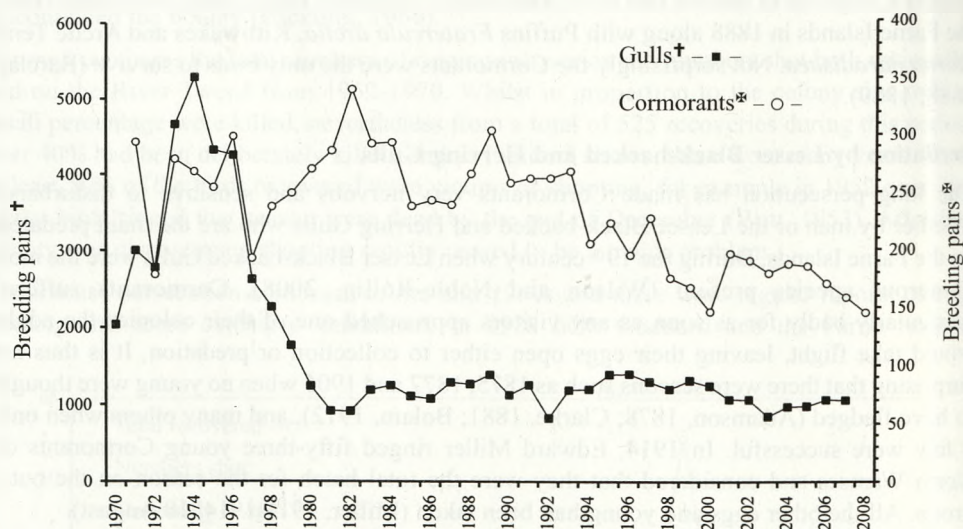


Figure 6 Cormorants, Lesser Black-backed and Herring Gulls.

Egg predation can still be a problem today as an average total of around 340 breeding pairs of Lesser Black-backed and Herring Gulls nest each season on the two Wideopens with a similar number on the Wamses, all in relatively close proximity to the Cormorants. Since 1991 Great Black-backed Gulls have been breeding on the Wideopens and on the Wamses from 1993. Though at present there are only a few pairs, they are voracious predators and like the other large gull species require large breeding territories which could cause space pressure on the bird population on these islands.

Weather

Cormorants, because they usually start to breed early in the season, are susceptible to poor weather in spring as well as high seas and storms in the summer which can kill unfeathered young too large to be brooded. Though there were years during the 19th century such as 1888

when the weather conditions caused breeding failure (Barclay, 1889), any problems suffered by Cormorants would have been insignificant compared to the intense persecution and egg collecting and so probably were not even noticed. This was doubtless also true for the first few decades of the 20th century.

Since the first of the annual bird reports in 1946, there have been numerous occasions when heavy rain and gales in April or early May have washed away nests and caused the adults to desert. This happened in 1950 when for the first time in twenty years around fifty pairs attempted to settle on East Wideopens (Watt, 1950), while in 1963 a period of rain and gales in the middle of June caused the death of several fairly well grown young (Hickling, 1964), as did heavy rain in August 1966 (Hickling, 1967). In 1977 many nests were washed off North Wamses in early June (Hawkey and Hickling, 1977) which would probably account for the 36% drop reported that year, while the poor weather must have played some part in the lower counts of 1996 and 1998. During the late 1960s and 1970s the colony on North Wamses was reported to be fragmenting and continually changing its location on the island which may have been to try to gain some protection from the high seas and gales that seemed particularly prevalent then as well as from predation.

Most recently the storms and gales in June 2004 led to the death of a number of well developed chicks (Steel, 2005). However, in comparison to the Shags who suffered during the hot summer of 2003, the Cormorants appeared to have a successful season with large numbers of fledglings being seen (Steel, 2004).

Cormorants, Guillemots and Shags

Cormorants and Guillemots have a long association on the Farne Islands. The earliest reference is given by Hewitson (1834) who reported that a few Guillemot eggs were sometimes seen in the Cormorant colony. Eggs were also found amongst the Cormorants on North and South Wamses in 1851 (Newton, 1964-1907), Megstone in 1898 ((Blathway, 1903) and the Harcars in 1913 (Miller, 1911-1914, 20 May; 25 June). Miller also documented Guillemots as being present on both Big Harcar and North Wamses in 1912 and 1914 and Big Harcar in 1912 (Miller, 1911-1914), while Fortune (1913) considered that every Cormorant colony contained some Guillemots.

Similar observations were recorded by Goddard and Graham in the 1920s and 1930s (Goddard, 1925-1948, 26 May 1929; Graham, pers. comm., 2000), and though there are no further references until 1946 (Goddard, 1925-1948, 21 June) it is probable that Guillemots were present in the Cormorant colony on Megstone both before and in succeeding years. Little specific information is available for the 1960s, but when regular counting started in 1971 Cormorants still greatly outnumbered Guillemots on this island. The next season saw a dramatic and unexpected reversal when for the first recorded time Cormorants were in the minority and this species has not bred on Megstone since 1973.

In both 1933 and 1934 Goddard noted at least one Guillemot egg among the colony on Little Harcar (Goddard, 1925-1948, 3 June 1933; 13 June 1934). Guillemots were first reported on North Wamses in 1953 and by 1980 they outnumbered the Cormorants on this island. The situation is somewhat different on East Wideopens; though Guillemots have always been the dominant species they breed on the rock ledges rather than the lower flatter area where the Cormorants are found.

There has also been a build up of the Shag population with them nesting on East Wideopens, North Wamses and Megstone from 1972, 1981 and 1987 respectively. It may thus be that

the increase in both of these species which breed in close proximity to the Cormorants prevented them from occupying new territory after the control of the large gulls. It is also interesting to note that in the past except for a few Guillemots, Cormorants were the only birds nesting on Megstone, while today there are Shags, Kittiwakes and Guillemots on this small island, and both the East Wideopens and North Wamses colonies now always contain substantial numbers of Lesser Black-backed and Herring Gulls together with Shags and some Guillemots.

Productivity

Productivity, defined as the number of young fledged/breeding pair is an important factor in determining future recruitment to the breeding population and the long term survival of a colony. It is unfortunate that it is impossible to monitor the Cormorants on the Farne Islands without causing unacceptable disturbance to the other species that breed with them. However in 2003 an effort was made to monitor the colony on East Wideopens, where fifteen nests were found to have an overall productivity of 1.93/breeding pair (Steel, 2004), which is within the range that has been obtained for the coastal breeding population of 1.8-2.4 (Sellers in Mitchell *et al.*, 2004).

All the other information is concerned with the clutch size and numbers of young hatched and is obtained from Miller (1911-1914), Goddard (1925-1948), Watt and the annual reports. Edward Miller has left some unique hatching records of the breeding species on the outer group. In 1912 he recorded a total of 140 young Cormorants, with twelve on North Wamses, 121 on Big Harcar and seven on Little Harcar (Miller, 1911-1914), while he considered the fifty-three chicks he ringed in 1914 (Miller, 1911-1914, 10 August) as the total for that year on the group.

During the 1930s Goddard tried to calculate the average brood size by counting the eggs in a number of nests and Table 7 shows his results for two seasons fourteen years apart (Watt, 1951a).

Table 7 Counts of clutch numbers.

Island	Date	Number	Clutch size					
			1	2	3	4	5	6
Little Harcar	26 June 1932	80	11	13	25	27	3	1
Megstone	21 June 1946	184	26	48	76	32	2	-

He was unable to draw any conclusion as the colonies had been both badly disturbed and had obviously suffered from predation so it was impossible to tell if clutches with only a small number of eggs had been collected or predated or if that was the complete brood. Furthermore there was no guarantee that the eggs would be allowed to hatch out because of the continual harassment by the fishermen (Goddard, 1925-1948, 29 June 1930; 13 June 1934). Watt made a further attempt to analyse Goddard's observations but was unable to add to his conclusions (Watt, 1951a).

In the 1950s some annual bird reports contained a limited amount of information, for example in 1952 forty-three nests on the west side of East Wideopens were found to have an average clutch size of 3.00 eggs/brood, whereas the small colony on the east side of the same island only averaged 2.2 eggs. Only one clutch of five was found and the twelve nests nearest to the sea contained either a single egg or one chick, probably because they had been taken (Watt, 1953). A further count in 1965 on North Wamses gave an average of 2.36 eggs/brood (Hickling, 1966).

There is no doubt that the systematic raiding which continued well into the 1960s together with the problems of predation and poor weather meant that in some seasons relatively few pairs were able to fledge young. In 1953 out of a total of 150 breeding pairs on North Wamses only seven pairs were successful, while on the same island in 1956 only seventy young birds were found from 130 nests (Hickling, 1957).

Though Cormorants are not monitored today, the past three seasons seem to have been relatively successful, particularly in 2006 with good numbers of fledglings being seen from late June (Steel, 2007) and in 2008 for the first time in recent years eight young fledged from seven nests on Big Harcar.

Ringling to 1986

Ringling or marking birds is an important scientific technique and over the years much valuable information has been obtained for many species concerning dispersal, wintering areas, inter colony exchange and longevity.

Edward Miller was one of the first to mark Cormorants on the Farne Islands when he ringed eighty in 1913 and fifty-three in 1914 (Miller, 1911-1914). Ringling was continued, at first only occasionally but regularly from 1949-1974, after which the presence of Guillemots within the colony on North Wamses made it too great a risk to continue (Hawkey and Hickling, 1982). However the re-establishment of breeding on East Wideopens from 1981 allowed a few to be marked each year until 1987 when all ringling ceased (Hawkey, 1988). When ringling was restarted in 1996 Cormorants were not among the species included.

From 1913-1986 at least 2,953 birds were marked and of the 712 recoveries (24%) to the present time, 31% had been deliberately killed and for a number of years between 1952 to 1970 more than half of all the recoveries had been shot. 96% of the recoveries have been in Britain, with the majority being found within twenty-five miles of where they were ringed. It has been shown that adult Cormorants at coastal colonies remain close to their breeding areas outside the breeding season (Wernham *et al.*, 2002), but Coulson (1961) has shown that first winter birds disperse further (than in subsequent winters), with individuals regularly reaching north to the Aberdeenshire coast and some as far south as Atlantic France (17 number of recoveries), Portugal (1) and even Spain (2). The absence of recoveries from the extreme north of France, Belgium, the Netherlands, Denmark and Germany seems to indicate that the North Sea acts as a barrier (Coulson and Brazendale, 1968). These latter authors also suggest that Cormorants from different breeding areas have different dispersal rates and directions of dispersal, which are probably based on local geography and genetic differences. For example Farne Islands birds very rarely move west across the country, only two having been recovered in Ireland, whereas Cormorants from Mochrum on the Wigtonshire coast tend to travel eastwards first before moving further north or south.

Not unexpectedly the majority of recoveries are within eighteen months of ringling, however those that do survive to breed can be long lived. There have been individuals of eighteen and nineteen years though most are between thirteen and fifteen years when found. Intercolony exchange seems relatively rare among Cormorants, more than 60% returning to breed at or near to their natal colony, while only 20% breed more than sixty-three miles away (Wernham *et al.*, 2002). In support of this, two individuals marked on East Wideopens in 1982 were still nesting on that island in 1995 (Walton, 1996).

Conclusion

Cormorants have a long history of breeding on the Farne Islands, and an equally lengthy one of persecution and predation. Despite this, the colony not only survived but increased during the 20th century. Two reasons for this may be that there were potentially greater numbers of non breeding adults and there was some emigration from more distant colonies. Although Cormorants were persecuted on the islands, this was limited and in comparison to other areas there was much better protection.

Today Cormorants are showing a small decline on the Farne Islands and while there does not seem to be an obvious reason for this it may be related to the increasing presence of other species. Each season there appear to be greater numbers of Guillemots, Shags and large gulls present in the two colonies, consequently reducing the available space.

The other factor that is altering is the increasing inland feeding of Cormorants and the consequent conflict with fresh water fishing interests. The escalation of legalised shooting seen from 2004 could well be responsible for the reduction in adult breeding birds. If this is the case then whatever management strategies are devised on the Farne Islands may only slow down the decline and not reverse it.

Fulmar *Fulmarus glacialis*

Historical Records to the Present Day

The first records of Fulmars in Northumberland date from the late 19th century. Hancock (1874) recorded that 'many years ago' he had found one washed up on Whitley Sands with a further one picked up at Bamburgh in 1872. It was at that time, he said, 'a rare casual visitant'. The earliest reference to their possible presence on the Farne Islands is in 1881, when Thomas Cutting, the lightkeeper on Inner Farne, reported that a 'white petrel' had been seen by several fishermen swimming near the islands (Harvie-Brown *et al.*, 1882). Thereafter the number of both sightings and recoveries increased so that by 1912 Bolam was able to describe the Fulmar as 'not infrequent, though only casual visitors' (Bolam, 1912). In his four seasons as a watcher on Brownsman, Edward Miller never saw them, despite records from Holy Island and several on the nearby mainland; however he was told by Darling (a watcher on the inner group) that in the past he (Darling) had picked up a dead one on Big Harcar (Miller, 1911-1914, 27 July 1913). The first definite evidence for this species on the islands is in the 1919 Farne Islands Association Report where Collingwood Thorp, the Honorary Secretary, stated 'A boatman told me that two pairs of Fulmar petrels ... nested, one on the outer and one on the inner islands. This is so far as I know the first recorded instance of one of these birds having nested on the Farnes.' (Watt, 1951a). However no nests or young were seen and Best (1921), who spent some time watching two pairs on the west cliff on Inner Farne in 1921, was convinced that breeding had not yet taken place.

Varying numbers of Fulmars were seen around the west cliff of Inner Farne in most subsequent years and there were reports that they had bred in at least two seasons, 1922 (Bolam, 1877-1933b, 13 June) and 1926 (Bolam 1877-1933b, 13 July; Temperley, 1896-1951, 18 July). There was never any proof and in the case of the 1926 record Temperley considered that the watchers had misidentified a pair of Herring Gulls. However it is usual for this species to prospect for and sit on suitable nest sites for many years before they finally breed. From his first visit in 1925 Goddard was particularly keen to find evidence of breeding, and though the watchers believed two pairs to have bred in 1930 and 1931

(Goddard, 1925-1948, 14 June; Thorp, 1932) no nests were found and it was not until June 1935 that he was able to write in his diary: 'Fulmar Petrel – at last a pair are breeding on the Inner Farne' (Goddard, 1925-1948, 16 June) and just over a week later he climbed down the cliff and secured the first photographs (Goddard, 1925-1948 25 June). For the next sixteen years Inner Farne was the only island used, though in 1945 Thorp (1946) noted a pair with an egg on Brownsman's north-west cliff overlooking the Gut. There is however no further mention despite watchers being present on the island. The record is quoted by Fisher (Fisher, 1952), but despite this it must remain a doubtful one.

The first island to be colonised after Inner Farne was Staple in 1951, though the egg did not hatch (Watt, 1951b); however from that time, breeding has continued every year to the present day. At last in 1953 an egg was found on Brownsman, and though regular nesting did not start until 1971, the island was used on a further eleven occasions between 1952 and 1971.

East Wideopens was colonised in 1964, West Wideopens in 1970, South Wamses in 1972 and Big Harcar in 1973, though breeding had occurred at least once on all of these islands prior to these dates. Regular nesting started on Knoxes in 1968, North Wamses in 1972 and Longstone End in 1981. In addition there has frequently been an odd pair or two on at least one of the following islands: Roddam and Green, Megstone (1974-1979), Little Harcar, Skeney Scar (1987-2000) and Northern Hares. In 2008 Fulmars nested on nine of the available islands.

Evidence for numbers

Figure 7 shows the number of breeding pairs of Fulmars on the Farne Islands from 1935 to 2008. Initially there was only a slow build up because of the large gull predation and egg collecting, but from the 1960s the population started to grow more rapidly, particularly in the late 1970s with the control of the Lesser Black-backed and Herring Gulls. Between 1991 and 2000 numbers stabilized at around 250 breeding pairs, with a record total of 266 breeding pairs in 1996. The slow decline shown in Figure 7 from 2000 is somewhat disguised by the more erratic behaviour of the population with declines in one season followed by increases the next year. After a re-assessment the numbers for Brownsman in 2002 were thought to be around nineteen pairs too high. Figure 7 includes the revised figure.

It can be seen that there are some seasons in which Fulmar numbers show a sharp and often unexplained drop; these are usually short lived with the population returning to its former level very rapidly. The somewhat slower recoveries around 1968 and 1975 were the consequence of the 'red tide' episodes. These were two outbreaks of paralytic shellfish poisoning caused by a neurotoxin produced by the dinoflagellate protozoan; because such outbreaks are often associated with red or brown discolouration of the sea they are named 'red tides'. In both cases Shags and Cormorants were the species most badly affected, though Fulmars suffered too with forty-five corpses (9% of the total) being picked up on the north-east beaches in 1975 (Armstrong *et al.*, 1978).

The 33% drop in 2004 was attributed to a wreck of thousands of Fulmars along the North Norfolk coastline during January and February, which was thought to have been caused by a lack of food (Steel, 2005). The wreck appeared to contain a high proportion of females, many of which had not completed their moult of primaries. These feathers are usually moulted first and are normally completed by December. Moulting places a high energy demand on the individual but can be slowed or interrupted if environmental conditions are bad. This

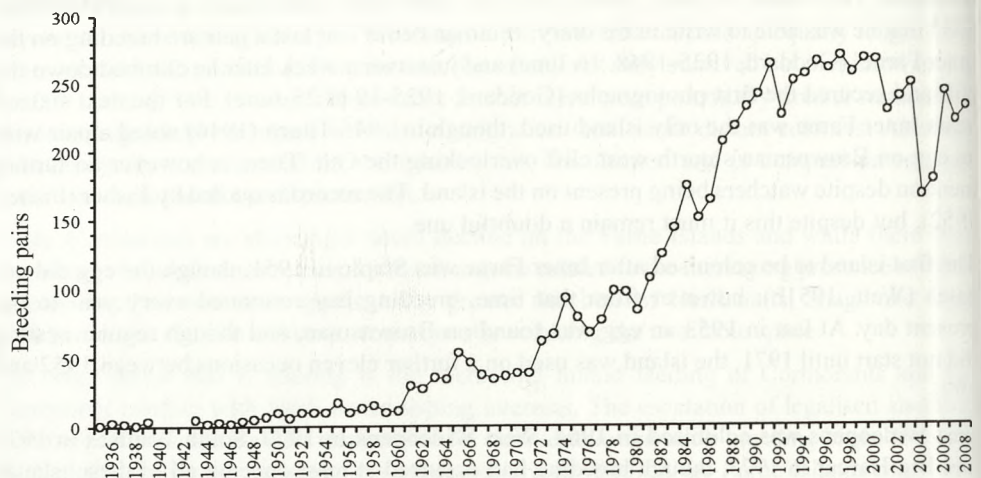


Figure 7 Breeding pairs of Fulmars on the Farne Islands from 1935 to 2008.

condition was found in three out of every four birds. It thus appears that they had encountered serious energy problems at least four to five months before they died. The problems causing the wreck therefore probably date back to at least October 2003 (van Franeker, 2004). Though there is no ringing evidence, Farne Island birds must have been involved. Not surprisingly after the death of so many individuals, numbers on the islands were still relatively low in 2005, but have now returned to over 200 breeding pairs per annum.

National counts

Today Fulmars are one of the commonest seabirds seen around northern Britain. They are present for most of the year with no migration once they are adult. Though adults disperse from colonies at the end of their lengthy breeding season, they return early the following year, but then will leave for a short time prior to egg laying ('honeymoon period').

The recommended count unit is the Apparently Occupied Site (AOS) and this was used in all of the three national surveys during the 20th century, Operation Seafarer (1969-1970), the Seabird Colony Register from 1985-1987 and Seabird 2000 (1998-2002). In each case the small number of forms that were submitted as Apparently Occupied Nest (AON) or Apparently Occupied Territory (AOT) were treated as if they were AOS as for this species there is no practical difference – a site is usually both a nest and the territory. While most occupied sites belong to breeding birds, pairs can occupy nest sites for several years before breeding and such sites cannot often be distinguished from sites with eggs. The results for all the surveys will thus include a number of non breeding pairs and in addition some failed breeders may also be counted (Tasker in Mitchell *et al.*, 2004).

Table 8 shows the total number of pairs of breeding Fulmars found in Great Britain and Ireland, Great Britain only and the corresponding figures for the Farne Islands for each of the three surveys.

The remarkable increase in both population and range expansion shown by this species during the first seventy-five years of the 20th century is well illustrated not just by the difference in the figures between Operation Seafarer and the SCR, but also in the staggering

Table 8 Survey counts for Fulmars (breeding pairs).

National Survey	Operation Seafarer 1969-1970	Seabird Colony Register 1985-1987	Seabird 2000 1998-2002
Great Britain and Ireland	308,960	536,577	537,991
Great Britain	289,641	516,062	537,991
Farne Islands	38	172	252

total found during Operation Seafarer. There is at present no definitive explanation but it seems most likely to be linked to the relative abundance and nature of the major prey species. There are three current main food types, zooplankton, small fish and offal. The key zooplankton *Calanus finmarchicus* has declined steadily in the North Sea since the 1950s and there is evidence to link this to climate change. The numbers of small fish such as first year Cod *Gadus morhua* and Whiting *Merlangius merlangus* have approximately halved when comparing the periods 1976-1985 and 1991-2000, and sandeels especially round Shetland have suffered a major decline (Tasker, in Mitchell *et al.*, 2004). The results from Seabird 2000 has shown that the growth in the Fulmar population that occurred in Great Britain over much of the 20th century has either slowed down or stopped, while numbers in Ireland have continued to increase at a similar rate to that seen between Operation Seafarer and the SCR. It is hard to believe that the decline in the main prey species has not contributed to this, especially when the most significant decreases have been in Shetland where the total number of Fulmars has dropped by 15%. In addition the rate of increase in both Orkney and the Western Isles has also slowed down, and it is in these three areas that almost 75% of the population is concentrated.

The figures for the Farne Islands show that in contrast to many other areas the colony was still increasing at the time of Seabird 2000 though at a much slower rate (4.7%) when compared to that between the two previous surveys (65.3%). This change is mirrored by numbers in Northumberland where the population has also continued to rise. It is interesting to speculate that these areas still have good numbers of potential nest sites available and an adequate supply of prey species to support the increased population, though recent seasons on the Farne Islands have seen a gradual decline from the level in 2000.

Human persecution and egg collecting

There is no evidence that Fulmars ever suffered any persecution on the islands, but from the start of breeding in 1935 egg stealing was a major problem. At that time this species was a novelty and their eggs highly prized so every year at least one, but often several, were taken by visitors, sometimes as in 1957 by schoolboys (Hickling, 1958).

The Wild Birds (Farne Islands Egg Sanctuary) Order passed in July 1964 (Hickling, 1965) had some effect, but egg stealing only ceased to be a problem in the early 1970s with the appointment of a permanent warden/naturalist (Peter Hawkey) and when seasonal wardens became resident on the islands for a much longer period.

However access was allowed on Big Harcar so the local fishermen and boatmen could gather the large gulls' eggs and there is no doubt that this had an effect on any breeding Fulmars as hardly any were successful. This policy was ended in 2007 since when the island has been closed.

Lesser Black-backed and Herring Gull predation

Fulmars hold larger territories than many other seabirds, hence their eggs can often be susceptible to predation. Nationally around 45% of eggs are lost in the first three days after laying and around hatching, and most of the 14.5% loss of young is due to this cause (Cramp and Simmons, 1977).

On the Farne Islands predation has been an ongoing problem from the start of regular breeding in 1935 and for at least the first twenty-five years when there were fewer than twenty-five breeding pairs, there were seasons when most of the eggs and young were taken. No chicks fledged at all in 1949, 1951 and 1961 (Watt, 1949; 1951b; Hickling, 1962) and until the 1960s it was rare for more than one pair to be successful. As the population increased, the unceasing predation gradually had proportionately less effect, though there were still unsuccessful seasons on the outer group where there were fewer Fulmars and a greater number of large gulls.

Figure 8 shows the effect of the culling of the Lesser Black-backed and Herring Gulls from 1975 with the subsequent increase in the Fulmar population from the early 1980s. Predation though is still an ever-present problem and in 2007 a new predator was present for a short while in the late summer when an adult female Peregrine took four chicks on Brownsman (Steel, 2008).

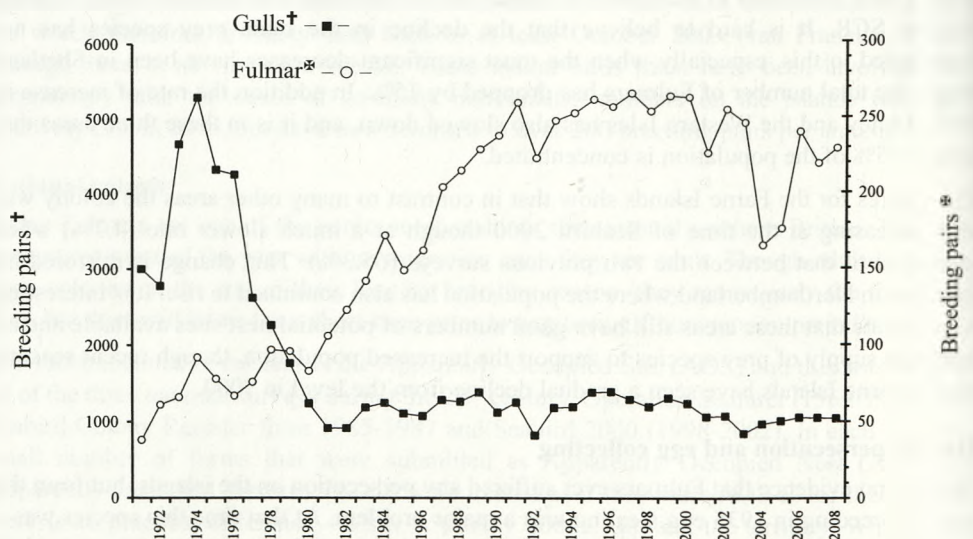


Figure 8 Fulmars, Lesser Black-backed and Herring Gulls.

To try to minimise the threat Fulmars often choose nest sites at the back of cliff ledges or under overhangs where there is some protection. On the Farne Islands sites have been found under the remains of the *Spica* on South Wamses (the *Spica* was the last sailing ship to be wrecked on the islands.), under vegetation, against outcrops of Whin Sill and at the back of eroded ledges at the top of cliffs – as was the first one in 1935.

Productivity

The greatest difficulty in both counting and monitoring Fulmars is to ascertain whether the pair in question is actually breeding or just a young pair prospecting for the future,

particularly as too close an approach may cause them to desert. It can easily happen that such birds are inadvertently included in the monitoring process and will thus affect the final figures.

Fulmars only lay one egg each season and if this is lost for any reason they will not relay. For at least three decades from the start of regular breeding in 1935 the productivity in terms of chicks fledged/breeding pair was appallingly low, mainly because of the previously discussed egg stealing and predation, though eggs and young were also lost through natural causes such as storms, falling off ledges and desertion by the adults both before and after hatching. Thus the initial slow rate of growth of the colony is not surprising.

From the early 1970s once seasonal wardens were employed over the whole of the breeding season the productivity gradually increased to between 0.4 and 0.6/pair. The 0.36 recorded in 1998 was the lowest in thirteen years of monitoring (Thompson *et al.*, 1999) and reflected the atrocious weather conditions present throughout that season. Table 9 gives the total productivity/pair and the productivities on both island groups for as many years as possible from 1997.

Table 9 Fulmar productivity per pair for both island groups, and overall (1997-2008).

Year	Inner Group	Outer Group	Total Productivity/Pair
1997	0.49	0.49	0.49
1998		0.47	0.36
1999	0.27	0.50	0.41
2000	0.65	0.51	0.56
2001	0.81	0.44	0.60
2002	0.77	0.43	0.57
2003	0.50	0.48	0.49
2004	0.43	0.45	0.45
2005	0.56	0.54	0.55
2006	0.51	0.53	0.52
2007	0.33	0.36	0.35
2008	0.55	0.47	0.50

It is not surprising that the productivity on the outer group is usually lower than that on the inner group as the outer group islands are more exposed both to the weather and Lesser Black-backed and Herring Gull predation. The figures for 2004 and 2007 are particularly interesting. In 2004 the predation on the inner group was particularly intense and additionally the poor weather experienced that season resulted in only twenty-nine young fledging from sixty-six monitored nests (Steel, 2005). Furthermore the total productivity that year was the second lowest ever recorded and it is feasible that the starvation experienced in the preceding winter had left survivors in poor breeding condition which, as seen with Kittiwakes, can lead to lowered breeding success (Wilson and Noble-Rollin, 2008). The productivity in 2007 was the worst in over twenty years of monitoring. Table 10 shows the individual productivities for each of the islands in 2007 (Steel, pers. comm., 2007).

When Table 10 is studied it is obvious that the main problems were on Inner Farne and East Wideopens and it is thought that these low values were linked to the poor weather experienced in that season. The predation by a female Peregrine on Brownsman has already

Table 10 Fulmar productivity on individual islands in 2007.

Island	Productivity
Inner Farne	0.11
Knoxes	0.52
West Wideopens	0.50
East Wideopens	0.16
Big Harcar	0.71
North Wamses	0.28
Staple	0.36
Brownsman	0.35

been noted and is certainly one of the reasons for the relatively low figure for this island. Conversely for probably the first time, the new restricted access policy enabled five chicks to fledge on Big Harcar.

Figure 9 shows the productivity/breeding pair from 1997 to 2008. Though there are seasonal differences as has already been discussed, the trend line indicates that over this time period the total productivity has been constant at around 0.50/pair. This may appear to be rather low, but it compares very well to similar long term productivities for other colonies (Mavor *et al.*, 2004). It must also be remembered that Fulmars can be very long-lived so a high productivity is not essential for the survival of the colony.

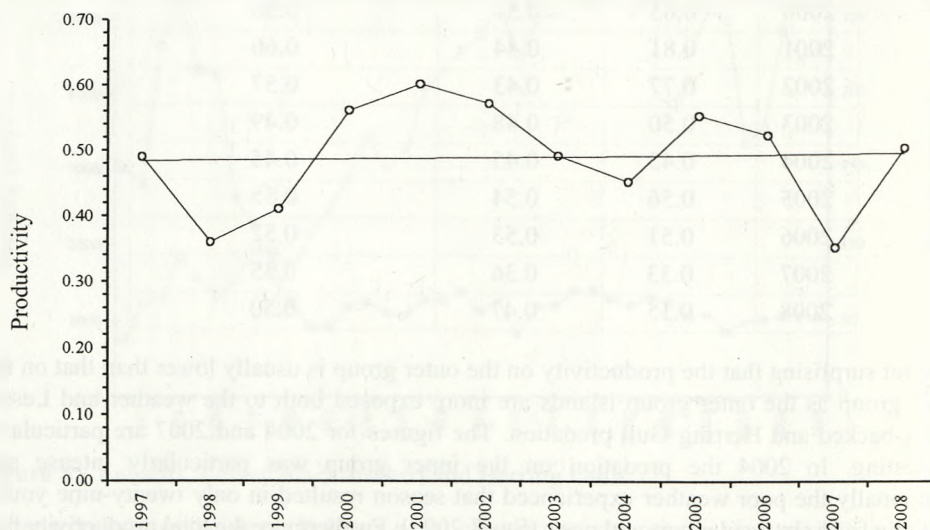


Figure 9 Fulmar productivity on the Farne Islands, 1997-2008.

Ringling to 1986

As far as can be ascertained Fulmars were first ringed on the Farne Islands in 1952 and from then until 1986 when all ringing stopped at least 578 were marked, with twenty-six (4.5%) recoveries/controls/retraps, the majority of which have been found on the islands or locally.

After fledging the young spend around the next four years at sea where they disperse widely and probably never visit land. They then spend the next four to five years at potential nesting sites before starting to breed at around nine years old (Anderson and Cosgrove in Wernham *et al.*, 2002). Farne Islands' ringed birds have been found in Newfoundland (Galloway and Meek, 1978), Denmark (3), Germany, France and the Channel Isles. In addition to individuals re-trapped on the islands, an adult has been controlled in Norfolk (Hawkey and Hickling, 1984) and a twenty-eight year old recovered in The Netherlands (Hawkey and Hickling, 1985). This was at that time the oldest known Farne Islands Fulmar found.

All ringing ceased in 1986, and though it was resumed in 1996 Fulmars were not included in the ringing programme. However a bird marked in 1980 was recovered on Walney Island in 1998 (Walton, 2000). There have also been sightings of two ringed individuals from other areas in 1987 (Hawkey, 1988) and of a bird ringed on the Isle of May in 1991 (Walton and Richardson, 1991).

Conclusion

Nationally Fulmars have experienced the greatest increase of range expansion and population of any of the British seabirds in the 20th century and this has been mirrored on the Farne Islands where numbers rose from one breeding pair in 1935 to 264 pairs in 1999. During the 21st century there appears to have been some downturn in numbers, but the productivity has remained relatively constant. There is however a further threat: Fulmars have the unfortunate habit of ingesting all sorts of litter which they may mistake for fish eggs and other prey. Such debris is retained in the stomach and there is evidence that it is passed onto the chicks when food is regurgitated (Edwards, 2005). Several plastic additives have been found to mimic oestrogen and its presence in human beings can be linked to a decline in fertility rates (Woods, 2007). Though this does not appear currently to present a problem on the Farne Islands, plastics are the most common items collected during the annual beach surveys and comprised some 86% of all the litter found during the survey in 2008 (Steel, pers. comm., 2009). There is however an ongoing study by Dutch scientists to ascertain if it is possible to use Fulmars as a measuring instrument to assess the levels and trends in marine litter in the North Sea with the aim of assisting policy makers to take appropriate measures to reduce the amount of litter discarded (Turner, 2008). It is therefore important to ensure that annual productivities continue to be carefully monitored on the Farne Islands.

Manx Shearwater *Puffinus puffinus*

For a time in the 1920s there were hopes that Manx Shearwaters were breeding on the Farne Islands, particularly as small parties were often seen round the islands in the middle of summer. Furthermore in the middle of May 1922, Lilburn, one of Abel Chapman's boatmen, put one out of a rock hole on Knoxes (Bolam, 1932). It must be noted that Abel Chapman was a well-known naturalist but it is not clear whether he was present at the time.

There were no further potential breeding records until 1998 when on 28 June Dr Chris Redfern, the leader of the Natural History Society's ringing team, whilst working on the north shore of Brownsman was convinced that he could smell the distinctive musty odour associated with breeding Manx Shearwater or Storm Petrel. Then on 20 July one of the wardens on Inner Farne was outside at 3.00am and heard the distinctive calls of a Shearwater (Walton and Maher, 1999).

In none of the above cases was an egg ever found. Consequently they must all be regarded as very doubtful breeding records.

Storm Petrel *Hydrobatis pelagicus*

In both of the seasons 1998 and 1999, Chris Redfern detected the distinctive smell of breeding Storm Petrel (or Manx Shearwater) on Brownsman and in 1999 one was heard calling from a burrow from 17-29 June (Walton, 2000). However despite later intensive searches by the ringers and the wardens no nest site was ever found and it remains a mystery as to whether this was a prospecting individual or one of a pair.

Acknowledgements

A list of major sources of material are given in the references below. It might however be of interest to note those people who are listed as providing personal comments in this and previous parts:

Dawson: Neil Dawson was a seasonal warden on the Farne Islands from 2003-2005.

Graham: Jim Graham was borne in Seahouses in 1914 and as a boy and young man spent much time with his uncle George Archbold a watcher for many years on the Inner Farne. He (Jim) graduated from Leeds University with a degree in Zoology and played a vital part in obtaining permission for Bill Bullough to undertake a study of Arctic Terns *Sterna paradisaea* during the 1938 and 1939 seasons (Bullough, 1942). Jim also amassed a fascinating collection of photographs of the breeding birds. He died in 2006.

Shiel: Billy Shiel is the owner of 'Billy Shiels Farne Island Boat trips'. He has known the islands for all his life and has a unique fund of stories and information regarding the Farnes.

Steel: David Steel has been a warden on the Farne Islands since 2001. He is now the head warden and author of the bird reports from 2003.

Walton: John Walton has a long association with the islands as both a warden and today as the property manager. He is also the author of former bird reports.

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D C NOBLE-ROLLIN

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DR D GARDNER-MEDWIN

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ANNUAL REPORT
OF THE
COUNCIL
FOR THE
YEAR ENDED 31 JULY 2009

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

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	Dr J M Jones ¹	Mr I D Moorhouse	Mr R Wilkin

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2006 No members elected
2007 Professor J Edwardson, Mr A J Hewitt and Mr J Steele
2008 Mr M Turner, Mrs J Angel and Dr L Jessop

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Dr B J Selman¹ (Publications) and Dr J Simkin (Botany)

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Coquet Island Advisory Management Committee Dr C P F Redfern and Mr D C Noble-Rollin

Coquet Island Research Sub-committee Dr C P F Redfern and Mr D C Noble-Rollin

Lindisfarne National Nature Reserve Advisory Committee Mr D G Bell
and Mr D C Noble-Rollin

Wildfowl Panel Mr D C Noble-Rollin

Biodiversity Steering Group for Newcastle and North Tyneside Mr D C Noble-Rollin

Museum Management Sub-committee Dr B J Selman¹ and Mr D C Noble-Rollin

STAFF Mr D C Noble-Rollin (Secretary), Mr S Will (Assistant Secretary) and Ms J Brown
(Development & Marketing Manager)

GOSFORTH PARK NATURE RESERVE Mr Paul Drummond (Warden)

GREAT NORTH MUSEUM: HANCOCK Dr S Glynn (Acting Manager)

¹ Dr Brian Selman and Dr Mick Jones died during the current year; there are obituaries later in this report.

² In attendance

OBJECTIVES OF THE SOCIETY

The Natural History Society of Northumbria is a registered charity and is governed by the rules of the Charity Commission. The objects of the Society, as set out in the constitution which was adopted by the membership at the Annual Meeting held on 3 December 2004, are 'the encouragement by every means of the study of natural history in all its branches and the conservation of the natural environment in the north-east of England, including its geology, flora and fauna'. To further these objectives the constitution requires that the Society shall:

- a) 'endeavour to ensure that the building and grounds of its property, the Great North Museum: Hancock and all its collections are maintained and, where appropriate, the collections are extended and made accessible to the general public;
- b) 'maintain and expand the Society's library and archives'
- c) 'publish the *Transactions* of the Society and other scientific papers'
- d) 'organise lectures, discussions and field meetings'
- e) 'co-operate with other scientific bodies and organisations with similar objects'
- f) 'establish specialist sections within the Society'
- g) 'maintain Gosforth Park Nature Reserve for so long as it holds the lease, and any other reserves the Council may consider appropriate'.

INTRODUCTION

It has been a remarkable and memorable year for the Society, with huge amounts of energy and time being committed by staff and volunteers to the re-opening of the Hancock Museum and the establishment of a new purpose-built store for our research collections. We have worked very closely with Newcastle University and Tyne and Wear Museums on this project, during which some £26 million has been invested to create a magnificent resource for the region. The Museum – re-named as the Great North Museum: Hancock – re-opened to the public at the end of May 2009 to huge acclaim; the large number of visitors – almost half a million in the first few months – was a testimony to the Society's museum and the affection with which it is held by local people. At the time of this report, the research facility at Discovery Museum has been completed and the collections are being moved in from deep store; it is hoped that they will be available for consultation early in 2010. The benefits to the Society have been considerable; not only do we have a vastly-improved museum building with a watertight roof but we also have a purpose-designed library and archive store, and excellent offices and meeting rooms. Our collections have been re-displayed using the latest techniques and our research collections – arguably for the first time ever – have been stored in a place where temperature, humidity and security are fully controlled. The changes to the library are also remarkable; after significant intellectual demands and backbreaking efforts by our honorary librarians and volunteers the Society's library is now back in place and available to the members.

Despite the demands of the new museum project and being based out of the museum for much of the year, the Society continued with its broad sweep of activities for members. Three issues of the *Transactions* have been published during the year and a full programme of field and indoor meetings took place, the details of which can be read later in this report.

Of special note was our celebration of William Turner and John Hancock, held in co-operation with the Society for the History of Natural History, also described below.

The Society has continued to work with a wide range of organisations including Wildlife Trusts, the RSPB, Natural England, local Councils especially their ecological and planning departments, and other museums, contributing scientific expertise and aiding wildlife conservation. The Society is active scientifically, especially in biological recording and bird-ringing. Our specialist sections have been very active, with a comprehensive programme of field meetings and lectures.

Gosforth Park Nature Reserve has been maintained during the year, but our negotiations for a more satisfactory lease arrangement have yet to be concluded. We will continue to make this a priority for the future, as the reserve is a real gem in the heart of the city and a special benefit to Society members; the report below indicates some of the wonderful views of wildlife visitors have experienced, most notably the regular sightings of otters. With a long-term lease we hope that real advances can be made in developing and enhancing the site for education and conservation.

It is especially important at this point to recognise the voluntary input made by our members to all our activities; we need their continued support in order to take real advantage of our new situation and increased resources in the museum. We have begun to capitalise on the new development by giving the Society a new image and through our increased promotional activities, but we can only really achieve more with the help of volunteers. In total this year the Society has had ninety-one active volunteers who have worked in a wide range of tasks such as leading field meetings, giving lectures, running the sections, office and committee work, delivering publications, maintenance work in the reserve and surveying the flora and fauna of the reserve. Without them the richness and diversity of the Society's activities would not be sustained and our thanks go to all of them.

MEMBERSHIP

The total membership on 31 July 2009 (with 2008 figures in brackets) was 819 (811). This was made up of 6 (6) honorary members, 43 (42) life members, 483 (478) members who receive the *Transactions*, 259 (257) members who do not receive *Transactions*, 30 (25) associate members and 6 (5) complimentary members. (Please note that the reason for the total not adding up to 819 is that the Society has two life members who are also honorary.) There were 24 previous members who pay, by standing orders, various sums that were formerly the subscription rate: these are now considered as donors not members. After two years of reporting declines in the membership it is pleasing to be able to say that this year there has been a return to an increasing membership even if the upward trend is small.

During the year the Society was also informed of the deaths of eight members:

Mrs J C Benson (1952), Mr W Carr (1960), Dr J M Jones (1964), Mr F Moorhead (1978), Mr E J Harding (2004), Mr N Finn (2004), Dr G A L Johnson (1957) and Dr Brian Selman (1965). The years in brackets are the dates of their election and there are obituaries of Dr Jones, Dr Johnson and Dr Selman in this report.

ANNUAL MEETING

The Annual Meeting was held on 5 December 2008 in the Percy Building, Newcastle University. It was chaired by Mr Ian Moorhouse in the absence of the Chairman of Council, Professor Peter Davis. Mr Moorhouse went briefly through the Annual Report, commenting that for the first time it included colour photographs. He highlighted several items, saying that the museum alterations were progressing apace and there had been

several meetings in this connection. This period in the Society's history was a great opportunity to increase the profile of the Society and with this in mind Council had appointed a new Marketing Manager, Ms Jane Brown, whose remit was to publicize the Society. He said that other changes had taken place in the office with David Noble-Rollin now working part time and Stuart Will becoming the full time office manager.

News from the Nature Reserve had been both good and bad. Red Squirrels were still in the reserve but on at least two occasions someone had illegally released Grey Squirrels there, resulting in outbreaks of squirrel pox in the Red Squirrel population. Bitterns were back for the third winter running, with two being seen in the reserve on one occasion.

He also commented on the great importance of the voluntary work undertaken by Society members in helping to run all the many varied activities outlined in the report. He commented that it was very gratifying that about ten per cent of the Society's members were volunteers actively involved in the organization of the Society.

Mr Johnson, the honorary treasurer, mentioned the continued generosity of the Dickinson family and that the Dickinson Fund now stood at £50,000. In consequence the interest which could be used for projects would be very useful in the future. He said that the unrestricted funds showed a deficit of around £16,000 which was less than expected from the budget. Mr Johnson also referred to the protracted tussle with the University over their yearly contribution. This issue concerned both the actual payment, which is often very late, and establishing a suitable index for allowing for inflation. Professor Edwardson thought that as in future the University was committed to contributing about three quarters of a million pounds to the museum he felt that it was unnecessary to expect them to contribute in addition to the Society. However Mr Moorhouse pointed out that they were legally bound to make an annual contribution to the Society as a condition of the agreement under which they lease the Hancock building and its collections.

Mr Johnson added that at present there was not an easy financial situation with plummeting interest rates and stock market prices; the immediate outlook seemed very gloomy. However if we did not need to sell shares the losses on investments would be largely unrealized. He proposed the adoption of the Financial Statement and this was seconded by Hugh Chambers and agreed.

The officers of the Society were unanimously re-elected to Council. There were three nominations for members' representatives, Mr Michael Turner, Mrs Janet Angel and Dr Les Jessop. As there were three places available all were elected.

The meeting closed at 7.30pm. There followed a discussion on the lack of AOB on the agenda. Mr Moorhouse stated that although it is not normal to have any other business on the agenda of an Annual Meeting, the purpose of which is to deal with the past year, there was no reason why the members should not be allowed to discuss any issues that they would like to bring to the attention of the management of the Society immediately following the Annual Meeting. Professor Jim Edwardson considered that this should be added to the agenda after the business of the meeting was concluded. This was agreed and Mr Moorhouse agreed to put this to the chairman before the next Annual Meeting and said that he was prepared to take any questions. Miss Ann Stephenson asked about the future of the Geology Section and hoped that it would continue. Mr David Noble-Rollin said that he would try to find people to run the section following Mr Denis Scadeng's resignation as secretary, as at present the section had no-one to organise speakers and field meetings. He said that a questionnaire which was to be included with the next Bulletin would seek to identify anyone interested in Geology. Durham University was apparently very happy

to help and there was also a group of geologists in Chester-le-Street. Mr Ken Patterson, a former Geology Section leader, ran geology classes for Sunderland University. It was felt that a committee should be appointed to revitalise the section. This discussion was followed by coffee and biscuits and a presentation about the new Museum.

GREAT NORTH MUSEUM: HANCOCK

2009 was scheduled as the year of the re-opening of the Museum to the public. The intensity of work to achieve this seemed to build as the autumn and winter unfolded. The Society's liaison team had regular meetings and visits to the site and also to the Resource



Crowd waiting to get into the museum in the first week it re-opened.

Centre planned at the Discovery Museum for the storage of the research collections and other specimens that would not be going on display. The original deadline was January 2009 but it became clear that this was slipping mainly due to the constraints that required that ceiling and wall areas would need re-plastering by traditional methods rather than using modern techniques which dry much faster.

The work on the exhibits was also being undertaken offsite to prepare for installation as the building was finished and expert members of the Society were involved with editing the text for the displays. The scale of preparing completely new exhibition designs for the entire Museum was as great and complex as for the structural work on the building that had gone before. Everything from the case-building to getting someone qualified to lift an elephant into its new lofty home in the biodiversity gallery had to be timed and organised.



The biodiversity gallery.

Finding human models for the Roman Wall gallery illustrating the type of dress and status of different Romans was ingeniously solved. You may find that if you are meeting Tyne and Wear staff in the Museum that some of them look remarkably like the pictures of Romans standing around in the galleries.

By April the decision to open for the May bank holiday had been taken and invitations for the preview week towards the end of May went out to our members and it was pleasing to see them there in large numbers. The Museum opened to the public on Saturday the 23rd of May and was an instant success with queues stretching down to the Haymarket.

The Society's library along with the libraries of the other partners began to be moved to the new building in March, but by July the Society's office had still not relocated from 3-4 Claremont Terrace. The staff were officially moved to our new accommodation in the Museum in August. The complications of this move placed significant demands on the staff which resulted in the decision to postpone the Annual Meeting to give time to prepare this report.

COUNCIL AND GENERAL PURPOSES COMMITTEE

Council and the General Purposes Committee (GPC) met on four occasions during the year and the matters arising from the development of the Museum have again this year dominated the work of Council. As part of the agreed strategy to increase the profile of the Society on its return to the Museum Ms Jane Brown had just been appointed as the Society's Marketing Manager, and she was introduced to Council members at the October meeting. Jane's remit was to review and improve the marketing of the Society, its image and promotion within the new building when it opened.

The Trustees also were concerned at the worsening financial situation in the country and agreed that they should discuss the matter with our financial advisors.

At the January meeting of Council Professor Edwardson presented the draft terms for the formation of a Strategy and Development Group that would look at the potential directions in which the Society could go and also the "branding" of the Society. The group included a number of Trustees and the Marketing Manager who met regularly and produced an outline strategy for the sustainable development of the Society which was discussed and accepted by Council on 17 July and published in the autumn Bulletin 2009. This long-term strategy has four main strands comprising:

- (i) outreach to schools;
- (ii) increased engagement with Newcastle University students and staff, particularly in research through the setting up of a Joint Research Forum;
- (iii) the provision by the Society of high quality educational courses in natural history and geology; and
- (iv) the development of a scientific and educational facility at Gosforth Park Nature Reserve if an appropriate long-term lease can be obtained.

The branding possibilities for the Society were shown to Council and the final outcome of the discussions was presented to Council in April, in time to be marketed and used in the material for the opening of the Museum. The logo was designed by Jane Brown and the drawing was created by Joan Holding.

Council were also concerned at the extreme pressure that was being put on the staff though the increasing work load and it was agreed that they would need to fund a short term contract for an office assistant to reduce the strain on the office. This appointment should be made in the next financial year.

PUBLICATIONS

During the year there were three issues of the *Transactions*. Volume 66 Part 3 was produced in November 2008 with eight papers: 'The wasps and bees of Lindisfarne National Nature Reserve' by M E Archer; 'Supplementary feeding for Red Squirrels' by V Carnell; 'Two rare clubs from American Northwest Coast in the Hancock Museum' by L Jessop; '“Save the North Sea” Fulmar project results for North East England 2003-2005' by D Turner; 'Beached Bird Survey Results for North East England' by D Turner; 'Epsomite from Marsden old Quarry, South Tyneside' by B Young; 'Celestite from Barrow Scar, Northumberland' by B Young, S Arkley and E K Hyslop and finally 'Supergene mineralisation in colliery spoil at Hawthorn Hive, Co Durham: the first record of Apjohnite in Great Britain' by B Young, E K Hyslop, J Baty and D I Green.

This was followed by the Annual Report, Volume 69 part 1, in the same month. The next issue was 'Birds on the Farne Islands in 2008' compiled by D Steele and was published in March 2009 in time to go to the members with their spring Bulletin. This was Volume 69 Parts 2 and 3 and in addition to the bird report it contained the following paper and reports concerning the Farne Islands: 'Ringing and Research Report for 2008' by C P F Redfern; 'Cetacean Report 2008' by A Hurd; 'Mammal Report' by D Steele and the continuation of the paper on the 'Breeding birds on the Farne Islands: Cormorants, Shearwaters and Petrels' by A Wilson and D Noble-Rollin. The whole volume was edited by Margaret Patterson.

It was with great sadness that we learned of the death of Brian Selman at the end of the year. Brian has been the editor of the *Transactions* for many years and continued to edit papers right up to the end. There is an obituary later in this report.

THE OFFICE

Staff

David Noble-Rollin This was David's first year of working part-time, in effect from Wednesday to Friday. He is still responsible for the overall completion of the work and the running of the Society. His main duties are the production of the programmes of members' events and the preparation of material for the meetings of Council and GPC and all the sub-committees that run the sections. During the year Stuart Will became Assistant Secretary and was effectively job-sharing with David. David continued his work on the committees concerned with the Great North Museum Project and as the main liaison point for the Project and the Society's Trustees. He also continued to represent the Society on outside committees reported on elsewhere in this report.

Stuart Will This year Stuart continued his role of Office Manager and then as Assistant Secretary. He maintained the membership database and kept the financial accounts up to date in preparation for the year end audit. During this difficult time he continued to prepare work for the volunteers and maintained the office contact with the membership. He continues to undertake voluntary work with the Society's Ringing group most weekends and extended his work with a six week stint on the Farne Islands, tracking the feeding movements of the terns on the islands.



Jane Brown Jane joined the office staff in November in a part-time post as Marketing and Development Manager. Her first job was to assess the potential for promoting the Society and to learn about the Society's activities and, through a survey, the members' opinions of the different activities. She also needed to re-brand the Society and to update its image to the outside world. After many attempts to use various animals and plants to represent the Society, the heron succeeded in maintaining its position as our logo although it has ceased to look sedentary and is now flying. Jane became involved with the Museum Project and represented the Society with the Trustees on marketing matters, making sure we were getting fair coverage in the new Museum and that our name appeared as a partner of the Project. She worked closely with the Tyne and Wear Museums marketing team throughout the year.



June Holmes During the year June worked as the Society's Archivist in a voluntary capacity. With the recent Heritage Lottery Project the number of enquiries for information from the archives has continued to grow and donations to the collections have also continued at a steady pace even while the offices have been out of the museum building. One of the most publicised projects was a musical event by the composer Michael Nyman, featuring Sparkie the budgerigar. June had to accompany Sparkie to the performance in Berlin and look after his welfare. She also endeavoured to enable scholars to have access to material that was in deep store during the Great North Museum Project and arranged loans of important items during this period. When the Museum opened the material had to be brought to its new home in the Library and stored. This was achieved during the latter part of the year after the Museum opened to the public. A number of volunteers have continued to work on the archive material during the refurbishment but various factors, including lack of computer space for the dedicated Society computers, have made it difficult for them to continue their work in transcribing letters and other archive documents. It is hoped that this situation will improve quickly so this important work can continue. During Stuart Will's work on the Farne Islands June was employed part-time by the Society to help run the office.

VOLUNTEERS

At present the Society has ninety-one active volunteers who undertake a wide range of activities and make it possible for the Society to carry out its commitments. Most of them are mentioned elsewhere in the report and many combine a number of roles to support the Society. However it is appropriate here to thank our thirty-eight deliverers who go out in all weathers to make sure our members receive their publications, and also to thank the many officers of the Society who put in untold hours making sure that our charity is properly run and managed. Also, the lecture programme and the field meetings rely on the voluntary help both of our expert members and the many lecturers who travel from all over the country to keep members informed about the latest research and developments in natural history. Without this help it would be impossible to undertake such a varied and complex programme.

The office has a number of volunteers who regularly help with the administration of the Society. Margaret Patterson continued to come into the office on Wednesdays to

help with letters, minutes and editing and checking of material that goes out to the members throughout the year. She also continued her work as Assistant Editor of the *Transactions*. Rita Wolland continued her epic work on transferring the Society's historical ringing data to the BTO IPMR computer programme which will make it possible to analyse the information that has been collected on the Farne Islands since ringing began there in the 1940s. This will add significantly to the available material from more recent years and could lead to a better understanding of the population dynamics on the islands. She also helps with the office work as required. Joan Holding has been assisting Jane Brown with original art work including the new logo for the Society and continues to help with maps and drawings for the Bulletin and *Transactions*. Dr Anne Wilson continued to support the office by creating an electronic format for the financial records, putting together membership packs and helping with other general office duties, on one day a week. She is also an authority on the history of the Farnes and helps with enquiries concerning the islands as well as continuing to write the history of the species of birds that breed on the Farnes which is being published with the annual Farne Islands report. Margaret and Martin Evans help with the regular posting of the Bulletin, coming in when required and preparing the envelopes for posting and delivery.

MUSEUM MANAGEMENT COMMITTEE

This committee was a Newcastle University sub-committee, with members representing the Society, Newcastle University and Tyne & Wear Museums. It was chaired by Professor Eric Cross and the Society representatives are listed on page 174. This year the committee met only once on 2 December 2008 and this was mainly to present the new constitution of the Great North Museum (GNM) which comprises the building and grounds formerly known as the Hancock Museum, the Hatton Gallery, and the Resource Centre at Newcastle Discovery. The Resource Centre houses the majority of the Natural History Society's collections. The revitalised Hancock building exhibits the Society's collections alongside those of the former Newcastle University Museum of Antiquities and the Shefton Museum. The ownership of different sections of the collection is vested in the two learned societies – ourselves and the Society of Antiquaries of Newcastle upon Tyne – and Newcastle University.

As indicated in the last Annual Report, Great North Museum Project monthly progress meetings between the three parties have over-shadowed the work of the Museum Management Committee and one of the Project's aims was to create a new management committee that would reflect the new partnerships within the Museum. This process was begun at the December meeting and the acceptance of the new constitution effectively meant that the governance of the new museum complex was now vested in the Governing Board of the Great North Museum. The five primary stakeholders are: Newcastle University, Newcastle City Council, The Natural History Society of Northumbria, The Society of Antiquaries of Newcastle upon Tyne and Tyne & Wear Museums. Each of these partners is represented on the Governing Board. With this change, the Museum Management Committee was no longer required and was officially disbanded later in the year. The Great North Museum Board began its work late in 2008 and our representative is our Chairman of Council, Professor Peter Davis.

DICKINSON MEMORIAL TRUST

This year the Society's Dickinson Memorial Trust fund received an application (through Society member, Rinke Vinkenoog), for sponsorship of prizes for a poster campaign to celebrate the 150th anniversary of the publication of Darwin's *On the Origin of Species* being run by Northumbria University. This application was approved and a competition 'Ever since Darwin' was aimed at local school children, undergraduates and graduates who had to design a poster to go with the title.



Student winners of the poster competition.

LIBRARY

For the first eight months of this year our normal steady routine in Claremont Terrace lulled us into a false sense of security, although there was a sense of foreboding and excitement about events to come. Then began a very detailed and intense planning process, re-estimating the lengths of shelving needed, particularly for runs of periodicals: which of our allocation of shelf stacks was to take what? Would the sequence of over eight hundred crates be delivered as requested and how could more than one group of people work in the mobile shelves at the same time? The discussions between the representatives of the three libraries that were involved (ours, The Society of Antiquaries' and the University's Cowen collection) increased from monthly affairs to almost weekly meetings. The bubble burst at the beginning of March when the 'Project' decided that the library floor must be loaded so that the partitions in the exhibition hall below could be accurately measured. So access was given to the library rooms on 16 March and the delivery of crates started at the rate of about forty a day.

To arrange deliveries and do the heavy lifting TWM provided a team of three, Nico, Jo and Jody, and we could not have had a more enthusiastic, happy and glamorous group to work with. Stella Chambers recruited, from the Society's members, a team of volunteers to help with shelving and the security tagging of everything coming into the library. We all worked diligently for many weeks until suddenly there were no more crates and the main job was completed. At first there were no chairs, no drinking water and no lock on the toilet door but everyone involved improvised and the experience was memorable. David Gardner-Medwin took up residence in the closed access mobile shelves occasionally coming out into daylight before changing his allegiance to the rare bookstore, which has been organised to his satisfaction.

By the end of June all our books and serial publications were in the new library and available to members. The task of recording where everything is, so that it can be found, will take some time to complete.

The librarian to care for the three collections housed in the new suite of rooms (Public Access Library, Closed Access Library and Rare Book Store) took up her appointment early in June, and we are very pleased to welcome Nicola Clarke to the joint team. We wish her all the best in this appointment and will do all we can to make her work amongst us as happy and successful as possible.

Throughout the year, and even during the moving chaos, the routine service to members, researchers and students has continued, we trust in a satisfactory manner.

As usual the direction of the 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), Les Jessop (entomology and ethnography), David Noble-Rollin (ornithology) and Bill Pickering (botany).

During the financial year forty-four books were purchased covering all aspects of natural history. Of the long running series there were Volume 13 of the *Handbook of Birds of the World*, Volume 5/2 of *The Freshwater Fishes*



Librarian Nicola Clarke

of Europe and Volume 3 of Sell & Murrell's *Flora of Great Britain and Ireland*. Another purchase was the start of a new series: Volume 1 of the *Handbook of the Mammals of the World* from the same stable as *Birds of the World* and of the same quality. There were five books published in the Collins New Naturalist series, *Dragonflies* by Corbet & Brooks, *Grouse* by Watson & Moss, *Southern England* by Friend, *Islands* by Berry and *Wildfowl* by Cabot, all up to their usual standard. There were three additions to the *Handbook of British Insects, Fleas, Weevils and Diptera* now published by the Field Studies Council and *The History of Natural History* (a bibliography) published by the Linnean Society. The second edition of the *Encyclopaedia of Marine Mammals* was published this year and purchased. Other notable acquisitions were *The Migration Ecology of Birds* by Newton, *The Birds of Borneo* in the BOU Checklist Series, *A Climate Atlas of European Breeding Birds* and *The Vegetative Key to the British Flora* published by BSBI. Two geological books were purchased, *The Role of Women in the History of Geology* published by the Geological Society and *Reading the Rocks, the Autobiography of the Earth*.

One hundred and eighty items were donated to the library this year, the largest collections being fifty books from David Gardner-Medwin and forty-three from Les Jessop. Ruth Chambers was responsible for a donation of thirty-seven books on environmental subjects and Alasdair Wilson gave us fourteen early New Naturalist series books. The generosity of members has been quite overwhelming at times and we must thank all our friends for their donations.

More than 293 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. Until the appointment of Nicola Clarke the library continued to be serviced by the office staff. Margaret Evans has worked steadily during the year on the administration involved in dealing with serial publications and the exchange system and also arranging the binding of periodicals. Twenty volumes were sent for binding to become a permanent part of our collection.

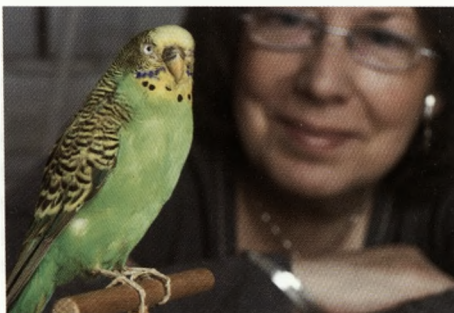
A Joint Library Committee was formed to advise on operation of the library when it opened to the public and iron out any problems that might arise. There are three representatives from each party together with the librarian. Four meetings have been held during the year.

Numerous volunteers gave valuable assistance during the year. The Society thanks them all for their indispensable work.

ARCHIVES

Based in the offices at Claremont Terrace, our archivist June Holmes continued to run the archives dealing with numerous enquiries and working through the backlog of cataloguing. During May and June the archives were returned to the refurbished museum from their various storage facilities, unpacked and placed into the new library stores. After an initial settling in period the archival material was once again available for reference. The lack of core funding continued to cause difficulties in providing staff and equipment for the running of the archives but we will carry on making new grant applications with the hope of some success in the near future.

However, not to be disheartened, June Holmes set out on what proved to be the story of the year, after being approached by the world renowned pianist and composer Michael Nyman for information on Sparkie, the talking budgerigar. The mounted specimen of Sparkie is definitely one of the Society's much loved and unusual celebrities, his usual home being a small perch in a glass case in the Museum. It was, therefore, a huge event when the Society was asked to allow Sparkie to travel to Berlin in March 2009 to appear in



June Holmes with Sparkie ready for his trip to Berlin.

a performance created around his life. Hatched in 1954, Sparkie shot to fame when he won the BBC International Cage Bird Word Contest in July 1958; by then he had a repertoire of more than 500 words and eight nursery rhymes. He was chosen to front the advertising campaign for Capern's bird seed for two years and went on to become a national celebrity appearing on the radio and television, culminating in a record deal with Parlophone for his debut single 'Sparkie the Fiddle' which sold all over the world.

When Sparkie died in 1962, his owner Mattie Williams had him preserved and after a country-wide tour in an exhibition on his life and times he returned to the Hancock Museum as a favourite exhibit. Apparently, our linguistic little bird had not only given us much pleasure over the years but he had also inspired the world-renowned composer Michael Nyman to write a musical tribute to him. Nyman performed the world premiere of 'Sparkie: Cage and Beyond' with fellow artist Carsten Nicolai at the MaerzMusik (the festival for new music of the Berliner Festspiele) in Berlin on the 26th March. The performance was enhanced by selections from an unpublished biography 'The Life of Sparkie Williams 1954-1962' written by Mattie Williams which is held in our archives.

The highlight of the performance was, however, the appearance of Sparkie himself on the stage, carefully transported to Berlin by June Holmes for the occasion. He held the

audience of over five hundred people transfixed. Not bad for a stuffed budgerigar. The story of Sparkie's trip to Berlin went world wide and is still creating a lot of interest within the media.

Closer to home, the Society supported the Whitley Bay Chamber of Trade with their Whitley Great Ox festival on the 28th March. They were celebrating the historical story of the 18th century quadruped immortalised by Thomas Bewick in his copperplate engraving known as *The Whitley Large Ox*. The original engraving was produced by Bewick for the owner Mr Edward Hall and published on the 10th April 1789. Local school children had been invited to submit poetry about the Whitley Ox which was judged by Michael Rosen, children's laureate for the UK. The Society was delighted to present our specially commissioned commemorative shield to the winner of the poetry competition, 12 year old Rosa Garland from Valley Gardens Middle School.

The Public Catalogue Foundation published *Oil Paintings in Public Ownership in Northumberland, Tees Valley and Tyne and Wear* in 2009 featuring the Society's collections. Sadly they neglected to mention our 12 foot portrait of the Banks's Ribbon Fish by A B van Worrell which will remain in storage until we can find a grant for its conservation.

This year has been one of the busiest ever for enquiries due to the increased interest in our archives; in the main they have referred to Thomas Bewick and his collections. We have supported numerous researchers, authors and students looking for information and images, including the distinguished Bewick researcher Nigel Tattersfield for his forthcoming book *The Complete Illustrative Works of Thomas Bewick*. The Society's partnership with the Bewick Society continues to be very productive; we are now recognised as one of the leading authorities on Bewick and often the first point of contact for further information.

As always the archive section has its small band of dedicated volunteers whose enthusiasm for their work is exemplary:

Anne Stephenson has surmounted the difficulties of our sabbatical from the museum to carry on with her digital catalogue of John Hancock's manuscript correspondence. Her work contributed to a greater understanding of John Hancock during his bicentenary celebrations in 2008.

Transcribing manuscript letters is one of the most difficult tasks undertaken in archival research; however volunteer Dr Parameswaran continues to relish his work on the early correspondence of the Society, 1829-1859. This will be a wonderful resource for future researchers in the history of natural history.

Colin Storey and Nigel Sprague have been thwarted in their archive research by our period of upheaval but hopefully they will get back into their studies in the new library.

A large archive kindly donated to us last year by the family of the late James Alder was sorted and prepared for cataloguing by Barbara Harbottle, and Michael Kerr carried on with his transcript of George Townshend Fox's *Synopsis of the Newcastle Museum*.

Les Jessop has prepared a sizable document on the *Conus* species featured in George Gibsons's watercolours of shells. We hope that this work can be accessed through the Society's website in the near future.

The archive section is grateful to our librarians Hugh and Stella Chambers and David Gardner-Medwin who have given their assistance unstintingly during the reinstatement of the archives.

Recent accessions to the archives

Copies of the *Ornithologist's Field Note Book* by R M Garnett, 1932 and *A Checklist of British Birds* by H F Witherby, 1924 both heavily annotated by Richard Fitter have been donated to the Society.

Marine biologist Dr Gavin Hardy has deposited a collection of his manuscript botanical field and lecture notes.

A watercolour portrait of Albany Hancock, attributed to Mary Jane Hancock, was bought at auction and presented to the Society.

A collection of five manuscript ornithological notebooks by Abel and Alfred Crawhall Chapman, c1865-75 was presented by Lord Ridley.

Fourteen manuscript bird ringing notebooks by the late Peter R Evans, donated by Mr Robin Ward.

A bound collection of ornithological separates collected and annotated by Charles Murray Adamson. Presented to the Society by Dr David Gardner Medwin.

A manuscript letter by P J Selby to Lady Grey of Fallodon donated by Mr Norman Moore.

ACTIVITIES

"Turner 500 & Hancock 200: Naturalists in North East England"

A very successful three-day conference was held on 5–7th September 2008 at Newcastle University's Henderson Hall, organised jointly by our Society and The Society for the History of Natural History (SHNH). It celebrated the 500th anniversary of the birth of William Turner and the 200th of John Hancock. Twenty-one of our members were among the forty-one delegates. Professor Peter Davis and Professor Arthur Lucas, President of the SHNH, presided.

There were four scholarly papers on Turner: Frank McCombie, joint editor of the 1995 edition of *A New Herbal*, described in some detail the contemporary sources used by Turner, comparing his work with those of Fuchs, Gessner and Ruel and assessing his accuracy of translation and his many botanical contributions; Marie Addyman, under the title "William Turner – religion, science and politics" set Turner in the context of the teaching of the humanities in 16th century Cambridge and Italy, against the background of religious turmoil; Gavin Hardy described the influence of the classical botanists, Theophrastus, Dioscorides and Pliny on Turner; and David Gardner-Medwin outlined Turner's medical career and the medical content of the herbal, demonstrating that concealed within it was the earliest, and in some ways the most attractive, English translation of the *Materia Medica* of Dioscorides. Angus Lunn brought the North East's contributions to botany forward into the modern era, from the pioneering work of Nathaniel Winch to George Swan's *Flora*.

Les Jessop, in a paper on "Scientific Societies in Newcastle, key personalities and their achievements" set the early history of our Society in the context of the intellectual ferment in early 19th century Tyneside, most appropriately in the only session held in the library of the Mining Institute. Ian Kerr made the link between John Hancock and the many other notable ornithologists in the region from Bewick to the present day. Hancock himself was the subject of three other papers. Pat Morris and Eric Morton gave a fascinating account of his taxidermy illustrated with X-rays of some of his specimens and accompanied by a fine Greenland Falcon. David Gardner-Medwin spoke of Thomas Bewick and the young naturalists whom he encouraged in the 1820s including the Hancock brothers and others

who later founded our Society. Peter Davis who had opened the meeting with a brief sketch of the Hancocks, closed it with a fine account of John Hancock's role in the old museum and its transfer to the present building, embellished with his bird collection, and then outlined the modern developments in the Museum, at that point some eight months short of completion.

A trip to explore William Turner sites in Morpeth was arranged for the Saturday afternoon. Ten minutes before we set off a message arrived to say that the town was being evacuated because of the Wansbeck flood; so at the last moment the bus was diverted to Bewick's birthplace at Cherryburn, itself reached through dramatic flood waters, but the brief visit was declared well worthwhile. The whole meeting, including a fine dinner on the first night, was an undoubted success and brought home to us all, both natives and visitors, the proud and inspiring history of natural history in the North East. It also showed the value of holding occasional joint meetings with other societies.

Pybus Memorial Lecture

On 7 November Professor Brian Huntley gave the Pybus Memorial Lecture on 'the potential impacts of climate change on European Breeding birds'. This was based on his recent book mapping all the potential parameters that could affect the distribution of breeding species and how the distribution of individual species would be affected at different levels and speed of climate change. Brian clearly explained the complex mathematics in terms suitable for his audience and the conclusions were very startling even at the more optimistic scenarios. The predictions for breeding seabirds, such as our internationally important colonies of the Farne Islands and Coquet Island, were most perturbing.

Amphibians and Reptiles

The first evening meeting of the Society was on 3 October and John Grundy of NERAG (the North East Reptile and Amphibian Group) gave a lecture entitled 'Know your Herps: an Introduction to the Amphibians and Reptiles of the UK.' He outlined every species that could be found in the UK, with a special emphasis on the North East. This contained tips on how to identify them, the reasons behind changes in their distribution, and how to create the best kind of habitat for them.

Ornithology Section

On 10 October David Noble-Rollin gave a talk on 'The West of Scotland: birds and mammals'. He went through the highlights of thirty-five years of regularly visiting the West of Scotland in search of birds and mammals. He included his earlier sailing adventures to the islands of the Inner Hebrides and to St Kilda looking at Corncrakes, Storm Petrels, Manx Shearwaters, the St Kilda Wren and the cetaceans he saw on the journeys. The later part of the lecture concentrated on the more recent work concentrating on the Ardnamurchan peninsula area and the search for Pine Martins and Wild Cats.

On 9 January Dr Simon Elliott gave us a talk on 'Great North Wildlife Sounds'. Simon is one of the leading sound recordists in the country and he delighted members with both familiar and unusual sounds he has recorded in Northumberland. He explained how sound recording has changed and that now you can record on tiny recorders and still maintain the quality. His whole lecture was given from a hand held recorder no bigger than an iPod. From the sounds of trees groaning in a gale to the wings and feet of a swan taking off from a lake, this was a unique lecture experience with illustrations for our ears rather than our eyes.

On 23 January John Steele took us on a personal journey of discovery in a lecture called 'Gannets – an artist's view'. He joined a group of artists that spent a concentrated time on the Bass Rock getting to know Gannets and trying to understand and capture the essence of the creature from its behaviour to its movement. He showed both his own development and that of the other artists as they struggled to interpret these fascinating seabirds. Many members of the audience were introduced to a completely different way of looking at a bird and how artists see their subject.

On 27 February Dave Leech spoke to the Society on the 'BTO Nest Scheme: counting your eggs before they hatch'. Dr Leech is Head of the Nest Record Scheme at the British Trust for Ornithology and co-ordinates the collection of thousands of nest record cards submitted by BTO volunteers each year. He gave a fast-moving, very entertaining and enthusiastic account of the joys of nest recording, highlighting the value of nest-record data for understanding the causes of population change in wild birds. The recognition that data from ringing and from nest recording are both vital for understanding the 'demographics' of bird populations has led to a recent reorganization of departments at the BTO, bringing both ringing and nest recording together into a Demography Team. Dave gave many examples of the challenges of finding nests of some difficult species and how rewarding it can be to build up unique datasets on yearly variation in clutch sizes, brood sizes and fledging success of these species.

Dr Chris Redfern gave a talk on 27 March on the ringing studies that the Society's Ringing Group has been undertaking in the nature reserve in Gosforth Park and on the biometric studies into brood patches. He showed how the Constant Effort Site (CES) can be used to monitor the management undertaken by the Society and how the increase in the area of reed bed of over 100% during the 21 years since the CES started has affected the numbers of birds. The main finding was that as the quality and area of the *Phragmites* increased the numbers of breeding pairs of Reed Warbler increased but the Sedge Warbler numbers went down. This was what we expected but it was good to know that our management plan was achieving the desired effect. Chris continued his lecture with a discussion on the importance of collecting measurements from the birds caught for ringing. This helps us to gauge the condition of birds and understand the sequence of the yearly events such as moult and migration. He used an ongoing study into brood patches to illustrate this.

Field Meetings

On 27 September members met at Boulmer. There were good numbers of birds and the waders were particularly easy to see with close views of many of the common species. There was however a distinct lack of small bird migration probably due to the recent prevailing winds.

The annual autumn visit to Holy Island on Saturday 25 October was accompanied by gale force winds which made standing up difficult never mind bird watching. The only obvious migrants were Wheatears which could be seen on the fields. However the group who persevered to go around the island had good views of Black-tailed Godwit and Red-necked Grebe.

On 9 May members met to look for 'Spring Migration at Cresswell and Druridge Bay'. Strong westerly winds not only discouraged warblers from singing, but also David Noble-Rollin from leading this morning outing – he had been unable reach port in his boat in time to meet the party. At the last minute Ian Moorhouse, field secretary for most of the 1970s, was pulled out of retirement and into the breach, dusting off his binoculars to guide the party of 15 around the area. Over the pond were several Swifts as well as Swallows, Sand

Martins and one House Martin. In the reeds at least two Sedge Warblers could be heard, and on the water a male Goosander was amongst the more usual duck. In the farmyard a pair of Pied Wagtails contrasted with two White Wagtails seen a few minutes later, whilst six Greenland Wheatears in a nearby field looked very bright and bold. At Druridge a handsome male Garganey was the star bird, while a Little Egret flew up almost without comment. How different that would have been only a few years ago! Views of Gannets passing north as well as several Sandwich and comic terns fishing in the bay provided an excellent end to a morning which had produced a good number of migrants, despite the weather.



Society members watching Ring Ouzels.

On 31 May the members went up the Harthope Burn on a beautiful day and had excellent views of Ring Ouzels, a family of Ravens and a Green Woodpecker which sang its yaffling song until the party went on the look for other birds. Some members of the party suggested that it might have been stuck to the post however on our return it had flown off!

On 11 June the Society met at Plessey woods to listen to bird song. The morning stayed fair and many of the common birds sang for us including a Blackcap which allowed us to watch it sing for a considerable length of time and a Garden Warbler. The group also saw a Red Squirrel feeding at a squirrel feeder.

Both Roseate Tern evenings (10 and 11 July) had to be cancelled because of the weather.

Mammal Section

On 24 October, Dr Colin McInnes, Principal Virologist of the Moredun Research Institute, Edinburgh, accompanied by Dr Peter Nettleton, gave an excellent presentation on past and present squirrel poxvirus research. The lecture was a superb mix of ecology and cutting edge virology, in which the audience learned how, when and where the virus was discovered, its effect on Red Squirrel populations in Britain, its epidemiology and structure and how closely related the genome is to other pox and orf viruses.

This popular lecture was also attended by members of the Save Our Squirrels Partnership, the Northern Red Squirrels Group, and the press.

On 28 November, Graham Bell, chair of North Northumberland Bird Club and regular guest lecturer on expedition cruises worldwide, used his own beautiful slides to illustrate some of the wonderful encounters with marine mammals, around Northumberland and in the Arctic and Antarctic, which he had experienced during his travels. The talk included reference to pinnipeds (seals, fur seals, sea-lions & walrus), Sea Otters, Polar Bears and cetaceans, including porpoise, dolphins and various odontocetes and mysticetes, and inspired some interesting conservation-related questions.

On 16 January, Jim Cokill, Director of Durham Wildlife Trust, gave an enthusiastic and impressive overview of recent mammal-related projects and public participation surveys conducted by the Trust, with particular reference to Hedgehog, Brown Hare and Water Vole. He described how the 'Coals to Voles' Project was helping build Water Vole populations, and showed how local communities were involved in the Living Landscapes Project, and the Waterways Project. He also outlined the Trust's exciting future, especially with regard to the new Heritage Lottery funded Urban Wildplaces Project.

On 13 February, Bob Wilkin, Vice President of the Society, led the audience on a virtual trek through the rocky, barren mountains and ravines of the Hemis National Park on the Tibetan plateau of Ladakh, as he described his second visit to the region in search of the elusive Snow Leopard during late winter 2007/2008. The beautiful audio and Powerpoint presentation, in Bob's inimitable style, enthralled the audience and all were delighted when he described two separate encounters with Snow Leopards, both with kills. Bob also portrayed the lifestyle and culture of the Ladakhi people, and showed how the Snow Leopard, its prey species and its predatory competitors fit in to this unique ecosystem. He concluded with a brief overview of how the Snow Leopard Conservancy Trust is working to achieve a balance between local communities' livelihoods and protection of the wildlife.

Field Meetings

On 22 August Tina Wiffen from Northumberland Bat Group led a most interesting bat walk in Gosforth Park Nature Reserve, accompanied by the Warden and nine members. Good populations of Common Pipistrelle and Noctule bats were observed hunting along the south path, and in a clearing which the Warden had created last year by removing self-seeded sycamores along the reed-bed boundaries. Good numbers of Daubenton's bats, more than in recent years, were seen from the Pyle hide, hunting over the lake.

A small mammal trapping demonstration by Veronica Carnell, which took place on 14 September, as part of Gosforth Park Exploration Day, demonstrated how the movements of small mammals may be linked to weather conditions. Heavy rain had flooded the nature reserve, and conditions were very wet during the morning of trapping. Only one adult Common Shrew was caught in the first 6 hours. Later in the day, drier weather and some sunshine caused the water level to begin to fall and trapping rates improved: during the last 4 hours of the day we caught 13 Bank Voles (12 juveniles and one adult male of 25g), and two juvenile Common Shrews. All the animals were healthy with no ectoparasites apparent.

After a failed first attempt due to bad weather, 57 people, comprising our members and the general public, left Seahouses on 20 September on a pelagic cruise to look for marine mammals and birds in the North Sea. Reasonable numbers of Grey Seal were seen, and we had excellent views of three Minke Whales (mother, juvenile and sub-adult), as they fed on herring within 30-40



Minke Whale by Veronica Carnell

yards of the boat. Puffin, Gannet, Razorbill, Guillemot, Shag, Eider Duck, Fulmar, Sandwich Tern and four gull species were seen, though numbers were lower than expected for the time of year. No skuas or shearwaters were seen.

On 21 September Jonathan Pounder, from Durham Bat Group, led a bat walk and talk in Gosforth Park Nature Reserve. After an excellent presentation, members were privileged to meet 'Cliff', a rescued Common Pipistrelle bat, and help feed him. A walk through the reserve to the lake with bat detectors revealed one Noctule above the trees and a few Common Pipistrelle bats hawking along the hedge line.

A Red Squirrel walk scheduled for 30 September, with Philippa Mitchell (Save Our Squirrels Partnership) and Veronica Carnell was abandoned when no visitors arrived due to bad weather conditions. Another walk took place on 8 October. No squirrels of either species were seen, and no squirrel feeding remains were found. (However, during the

afternoon of the same day, when the weather improved, two healthy Red Squirrels were seen by members).

October 4th dawned dry and sunny – almost a first for the year! This gave a positive result for a small mammal trapping event, when nine members joined Veronica to help identify and examine small mammals caught in Longworth traps previously set in the Nature Reserve. The woodland edge site produced a female adult Woodmouse and a Bank Vole, and we caught a sub-adult Water Shrew, three Bank Voles, seven Common Shrews (mostly juveniles, one moulting into winter pelage and one with white ear tufts) in the long grass and the reedbed bunds.

Heavy seas prevented November's visit to the Farnes to see the Grey Seal pups, which was to have been led by David Steel.

Badger watches in April and May In an effort to beat the rapid growth of vegetation on 'Fox Island' the Badger watches started several days before the date announced in the Bulletin, with members who had missed out the previous year. Thirteen members attended with viewing spread over several evenings. This year the Badgers put on what must have been their best performance to date. On the pre-watch date two Badger cubs were out at 6.30pm on the island before the members were even seated in the hide. On another occasion at 8.30 in the morning while he was pre-baiting the setts for the evening watch, an adult Badger came out of one of the entrances and ran up to the leader, Bob Wilkin. It was the leader who got the biggest surprise as the Badger merely turned around and trotted back down the hole again. Adult Badgers and cubs were seen on every evening of the watches together with Rabbits, bats and several Roe Deer. It is always a daunting task to estimate the numbers of Badgers seen on the island on any one evening: there are several setts that may be in use at any one time. One evening does stand out from all others; by counting the Badgers that left the island, the adults and the body sizes of the different groups of cubs remaining, we made a grand estimate of at least eleven Badgers viewed that evening.

Otter walk On 4 June at 6.30pm five members met at Lake Lodge to go on the 'Urban Otter walk' and proceeded to Sandy Lane to inspect the culvert built to allow Badgers, Foxes and Otters safe passage beneath this busy highway. A fragment of Otter spraint close to the north side of the culvert proved Otter interest in the area. (Otters from Big Waters use the culvert to gain access to Sacred Heart Pond and Gosforth Park lake, then by the Whitcroft Burn onto the Ouseburn.) The group then made its way to an area close to a well known Newcastle public house and with the use of a small stepladder descended onto the concrete apron beneath a major road system. It was here that they had the opportunity to handle and smell (it has been likened to violets or new mown hay) at least six Otter spraints of various ages. Then at Jesmond Dene and the Craghall extension another five or six spraints were examined. It was in this area over a hundred years ago that a pair of Otters gained a Bonnie and Clyde notoriety, their activities being recorded in *The Field* and the Natural History Society *Transactions*, amongst other publications. In one night they killed twenty-five poultry belonging to a Mr Coleman. As in the film the two main characters met a violent end, the male killed on the railway off the lower Ouseburn and the female caught in a gin trap set at Mr Coleman's farm in Jesmond Dene. Before moving on the leader recited three verses from his poem *The Bywell Otter*. Back in Gosforth Park Nature Reserve, the group viewed two Fox cubs and a Roe Deer before settling into the Pyle hide. At 10.0pm an Otter appeared approximately twenty to thirty feet in front of the hide, moving closer before diving and disappearing near the Kingfisher perch. A short time later it

reappeared at the same spot and there then followed a brief viewing before The Goosefooted Prowler was gone again. It was the perfect end to a red letter evening with members of our Society on an Otter walk, viewing an Otter in their own reserve.

On 30 May, nine Society members and two members of Northumbria Mammal Group (prospective NHSN members), joined Veronica for a morning small mammal trapping session, held in the reedbed bunds in Gosforth Park Nature Reserve. On this occasion, they caught five Bank Voles, four Common Shrews and three Pygmy Shrews, all adult and all healthy. The lack of Water Shrews may be attributed to the dry conditions.

On 11 July, Jonathan Pounder (Houghall College senior lecturer) and Julie Mason (Teemouth Field Centre warden) led eight members on a visit to the Huntsman Tioxide Hide, on the Teemouth estuary. Thirty-eight Common Seals and nine pups were observed, hauled out at low tide on the sandbanks of the estuary, to rest and suckle. The leaders readily answered members' questions, and also identified birds, flowering plants, and insects found on the site.



Common Seal by Jonathan Pounder

On 25 July members set sail from Seahouses on a pelagic cruise to look for marine mammals and birds of the North Sea. Unfortunately on this occasion, sea conditions were not ideal, and only two Harbour Porpoises were encountered in Bamburgh Bay. Seabird numbers were generally lower than expected, but we did see a number of Manx Shearwaters, and excellent views were obtained of Golden Plover and Kittiwake tarrocks on the Farne Islands, together with the expected complement of Grey Seals around the islands.

Geology Section

On 4 July Derek Teasdale stepped in for Trevor Hardy, who had to withdraw at the last moment, to lead a visit to Tarmac Limited's Harden Quarry, near Biddlestone. The quarry creates a distinctive landscape feature in Northumberland, and its famous 'Harden Red' stone gives Horse Guards Parade and The Mall their striking colour. Beautiful weather and a very informative tour led by Neil Flaherty, from Tarmac Ltd., meant that the visit was much appreciated by all. The outline of the mica-porphyrity laccolith and its relationship to the Biddlestone Anticline were clearly visible in the stepped face of the quarry. Finally, Neil explained that planning permission for extraction at the site only has four or so years to run unless an extension is granted, and outlined possible remediation actions at the site. After a sunny picnic at Wedder Leap near Barrowburn, the group extended the scheduled visit with an afternoon's whistle-stop tour of the geological sites of upper Coquetdale.

Botany Section

The winter lecture programme began in October, when Michael Braithwaite spoke on 'Changes in the British Flora 1987-2004'. He explained that, with the countryside changing rapidly, there was an expectation that botanists would have been chronicling the changes in individual plant species decade by decade in the way that ornithologists have long been doing for birds. It is, however, much more difficult because there are many more species, all very individual in their response, and the scale at which surveys are undertaken makes so much difference to the outcome. BSBI Local Change 1987-2004 was a repeat survey at tetrad scale (2km x 2km) and has yielded striking evidence of gains and losses in our flora. Michael had led the planning and interpretation of this repeat

survey, and he illustrated some of the problems and results - some of which, for individual species, were fascinating and unexpected. We were privileged to hear from someone who both led the survey and is President of the Botanical Society of the British Isles.

In November the title of Professor John Richards' talk was 'Some wildlife from KwaZulu Natal, with emphasis on mountain flowers'. John is Emeritus Professor of Botany at the University of Newcastle. He explained that Durban, on the eastern seaboard of South Africa, is an excellent centre from which to explore the very rich natural history of KwaZulu Natal. To the north are huge game parks and wetlands, and to the west the impressive eastern scarp of the Drakensberg mountains which ascend to over 3,400m. He described firstly the birdlife and mammals in the Mkusi district, where it is easy to see 250 species of birds and forty mammals during a short stay. Wonderful plants include stapleias, orchids and magnificent acacias. Moving on to the Drakensberg, familiar garden plants are readily encountered with many species of *Dierama*, *Diascia*, *Gladiolus*, *Kniphofia*, *Phygelius*, *Watsonia*, *Helichrysum*, *Erica*, *Hesperantha*, *Zantedeschia*, *Streptocarpus*, *Begonia* and many others. The area is very orchid-rich, and it is easy to see thirty species in a day. Once again there are many interesting birds, some endemic to these mountains, and it is possible to get fine views of Eland, the main subject of the Sani rock paintings, some of great antiquity.

In February, Alec Coles, Director of Tyne and Wear Museums and formerly Curator of the Society's Hancock Museum and Chief Executive of the Northumberland Wildlife Trust, spoke on 'Wild flowers of Crete'. He has had a long interest in Mediterranean floras, and Crete in particular is a celebrated destination for European botanists with its climatic contrasts and deep gorges with a disproportionate number of endemic species. Many of these, and other more widespread species, were described and illustrated.

The winter lecture programme concluded in March when Rebecca Barrett and John O'Reilly lectured jointly on 'The history and flora of North Pennine hay meadows'. Both speakers were on the staff of the North Pennines AONB (Area of Outstanding Natural Beauty), Rebecca being Area Coordinator and John the AONB Hay Time project officer. They reminded us that upland hay meadows are a rare habitat, rich in wildlife and cultural tradition. Once widespread, only 1,000ha now survive in the UK, of which some 400ha are found in the North Pennines. The annual cycle of haymaking had shaped not only the landscape of the North Pennines but also the lives of those who lived and worked there. In 2006 the North Pennines AONB Partnership established the Hay Time project - a three and a half year project aiming to enhance and restore 140ha of upland hay meadows in the AONB by harvesting seed from species-rich meadows and spreading it on sites to be enhanced and restored. In an enthralling presentation John elaborated on the special nature of North Pennine meadows, and the approach and findings of the project to date, while Rebecca set out the historical context of modern-day hay meadows, with the help of a film of sights and sounds from the past.

Field Meetings

The first summer field meeting, in mid-June, was to 'Tunstall Hills', a Sunderland City Council Local Nature Reserve, led by Alec Coles. This splendid example of Magnesian Limestone grassland and scrub contains a wealth of characteristic species of this distinctive County Durham habitat, and among other species we saw Lesser Meadow-rue *Thalictrum minus*, Burnet Rose *Rosa pimpinellifolia*, Black Bryony *Tamus communis*, Kidney Vetch *Anthyllis vulneraria* and Blue Moor-grass *Sesleria caerulea*. Part of the site is Tunstall Hope, a major spillway from the ice-dammed Lake Wear at a stage in the retreat of the last ice sheet. We also visited Foxholes Dene, further down the Durham

coast, and were delighted to see Spindle *Euonymus europaeus*, Wild Privet *Ligustrum vulgare*, Common Gromwell *Lithospermum vulgare*, Bristly Oxtongue *Picris echioides* and Hoary Ragwort *Senecio erucifolius* - all of these species at or near their northern limit of common British distribution.

Still in June, Dr Angus Lunn and Dr Janet Simkin led a party to the valley of the Bateinghope Burn, within Northumberland Wildlife Trust's extensive Whitelee Moor Nature Reserve (a National Nature Reserve) in upper Redesdale. Janet was mainly recording lower plants, and interesting lichens were *Propannaria pezizoides* on limestone, *Diploschistes scruposus* on an old sandstone wall and *Stereocaulon dactylophyllum* on sandstone block scree. Bryophytes included *Cratoneuron filicinum* in base-rich flushes, and *Scapania undulatum*, *Sphagnum squarrosum* and *S. denticulatum* in an acidic flush. Although the reserve is not known for its less common higher plants, we found Lesser Clubmoss *Selaginella selaginoides* on the calcareous spoil of an old lime kiln, and Moonwort *Botrychium lunaria* near to another kiln. In a valley-floor fen were Marsh Lousewort *Pedicularis palustris* and early Marsh-orchid *Dactylorhiza incarnata*, and, in acidic grassland, Viviparous Sheep's-fescue *Festuca vivipara*. There was also Stream Water-crowfoot *Ranunculus penicillatus* in a burn. Away from botany we had Palmate Newt, Common Lizard and Stonechat.

Towards the end of the month, on a very hot day, Jeremy Roberts led us to Crosby Gill, near Orton, in a limestone area of east Cumbria. A rich flora in a variety of habitats - limestone pavement, grassland, cliff, calcareous flush - included rarities such as Bird's-foot Sedge *Carex ornithopoda*, Rare Spring Sedge *C. ericetorum*, Hair Sedge *C. capillaris*, Black Bog-rush *Schoenus albicans*, Alpine Bartsia *Bartsia alpina*, Bird's-eye Primrose *Primula farinosa*, Alpine Bistort *Persicaria vivipara*, Spring Cinquefoil *Potentilla neumanniana* and the very local Lady's-mantle *Alchemilla glaucescens*.

Finally, in July, Professor John Richards led a well-attended joint excursion with the Alpine Garden Society to Cronkley Fell, in Upper Teesdale. At this famous locality, despite early rain and drizzle, we saw Mountain Avens *Dryas octopetala*, Hoary Rockrose *Helianthemum oelandicum* (neither of these in flower, however), Hoary Whitlow-grass *Draba incana* and Dark-red Helleborine *Epipactis atrorubens*, as well as a good range of the commoner Teesdale specialities.

Midweek Botany Group

The group has gone from strength to strength this year and we are pleased to have welcomed several new members. We meet on Wednesdays throughout the spring, summer and autumn and any member who has an interest in botany is welcome to join the group and can obtain more details via the Society office.

The 2008 season finished with a trip to the Northumberland-Cumbria border at Gilsland to look at the fungi and late-flowering plants in the wooded gorge of the river Irthing.

2009 started with visits to three local woodlands to see the spring flowers, and we were impressed by unusually abundant displays of Toothwort *Lathraea squamaria*. Next came a trip to the coast at Craster where the beautiful Spring Squill *Scilla verna* was flowering profusely at its southernmost locality on the east coast of England.

A walk near Rookhope in Weardale gave good flowers and interesting Horsetails. This was followed by a trip to a very different habitat at East Bog near Hadrian's Wall where we found a good selection of bog plants and a site for wild Chives *Allium schoenoprasum* which was flowering magnificently.

On a very wet day in June we had a walk from Garrigill near Alston towards the head of the South Tyne. In spite of the weather we saw plenty of flowers and ferns and the waterfall at Ashgill was spectacular!

The flora of Blackhall Rocks on the Magnesian Limestone on the Durham coast was very interesting and varied, providing a long list of plants. Trimdon Quarry, a Durham Wildlife Trust site (also on Magnesian Limestone) was also very species-rich, the Common Spotted Orchids *Dactylorhiza fuchsia*, Fragrant Orchids *Gymnadenia conopsea*, Common Twayblade *Listera ovata*, Betony *Stachys officinalis* and Yellowwort *Blackstonia perfoliata* being particularly noteworthy.

The next trip was to a very different locality, on the banks of the river Breamish near Powburn. The frequently shifting river gravels and wet areas created by changes in the river's course, and more permanent pasture and arable land produced a very interesting selection of plants including Marsh Cudweed *Gnaphalium uliginosum*, Branched Bur-reed *Sparganium erectum* and Water Speedwell *Veronica anagallis-aquatica*.

In mid July fifteen members of the group spent a few days away in the botanically rich Morecambe Bay area where we encountered a more southern and western flora than is found in Northumberland. One of the highlights of the trip was a visit to Gait Barrows National Nature Reserve where we saw Angular Solomon's Seal *Polygonatum odoratum*, Lily of the Valley *Convallaria majalis*, Ploughman's Spikenard *Inula conyzae*, Pale St John's-wort *Hypericum montanum*, Tutsan *Hypericum androsaemum*, and Orpine *Sedum telephium* growing in profusion in the deep grykes of the limestone pavement.

The next two excursions of the summer were to Williamston near Alston and Stonecroft Mine near Newbrough, where we concentrated on looking at helleborines and plants which can tolerate soils with a high content of heavy metals.

Several members of the group have continued to help with the North Pennines AONB Hay Time project, monitoring the restoration of hay meadows.

Entomology

On 14 November Dr David George from Newcastle University gave a talk entitled *Lessons from Nature*. Forty people attended. David has worked on a number of projects studying pests in both crop and in livestock production and he based his talk on this experience. Starting with the basis for pest problems, David went on to discuss how natural systems avoid the same pest problems that we experience in man-made systems. He dealt with natural enemies, e.g. ladybirds, the plant's natural defences, and using natural products in pest control.

This was followed on 13 March by Shaun Hackett, Seeding Change Project Officer, Northumberland National Park, giving a talk entitled *The Plight of the Bumblebee* to around eighty people. Shaun discussed why bumblebees are so popular and then went on to explain why some species are under threat. He told us about notable sightings in Northumberland in the last year and ways in which we can all encourage bumblebees in our gardens and elsewhere.

The annual *Bug Day Out* was held at Newcastle University's field station at Close House, Wylam on 20 June. The weather was mixed, but a wide range of insect material was obtained from light traps that had been run throughout the previous night. Later in the day we collected other material using nets, beating trays and pooters. As usual much of the day was given over to putting a name to insects or groups that people were not familiar with. The meeting was organized in conjunction with the School of Biology at the University

and the Royal Entomological Society. Thirteen people (of all ages) were there for all or part of the day. If you missed it this year then watch out for the event in June 2010 when it will be part of National Insect Week.

General Field Meetings

On 19 July there was a joint field meeting of the Entomologists and the Midweek Botany Group to Bishop Middleham Quarry. The site is a disused Magnesian limestone quarry now managed as a nature reserve by Durham Wildlife Trust. Sixteen people formed the group that visited to see the insects and plants. The quarry has a wide range of attractive flowering plants including Pyramidal, Common Spotted, Fragrant and Bee Orchids, Dark Red Helleborine, Common Rock-rose, Fairy Flax and other limestone species. We were lucky with the weather and saw ten species of butterfly including the Northern Brown Argus, and many other insects.

MUSEUM REPORT

2008/2009 saw the completion of the Great North Museum Project and the transformation of the former Hancock Museum into the Great North Museum: Hancock, with the new "brand" officially launched by Jonathon Edwards CBE in August 2008. This launch was the start of one of the most exciting years in the Museum's long and distinguished history. Exhibition fit-out began earlier in the reporting year with teams of specialists ranging from conservators and curators to ICT experts and joiners working together to install more than 3500 objects, including 170 new models and more than 200 new taxidermy mounts, as well as 85 interactive exhibits, film and audio displays.

The first and largest object to enter the new galleries arrived at Christmas time 2008. The life size *T. rex*, a replica of the Museum of the Rockies specimen MOR 555, took two days to piece together. This spectacular specimen is one of the star objects in the new Fossil Stories gallery. Over the following months the displays began to take shape. In February 2009 object installation began in earnest. The new temporary exhibition space provided a holding area for objects while the curatorial team worked with specialist mount makers to ensure each object was displayed to its best advantage with bespoke mount systems. The Living Planet gallery proved to be one of the most interesting to install. Each layer had to be installed in stages using a scaffold system to reach the front opening cases. Despite the logistical difficulties of this gallery, most objects were installed within a few weeks of



Elephant safely inside the Museum.

starting and the gallery quickly began to fill. In other galleries, the sheer size and weight of objects necessitated careful planning. Specialist lifting equipment was bought in to install stones in the Hadrian's Wall gallery and to rebuild the fossil trees in the Fossil Stories gallery. Specialist lifting teams were also required to help install the Hancock's two mummies in their new state of the art cases and to get the new African elephant model into the building. The elephant was too big and wide to go through any of the normal doors and so was hoisted into the temporary exhibition space through a purpose built opening in the west wall (known affectionately as the 'barn door').

As the opening date got closer, the marketing launch swung into action. The city was dressed with orange arrow banners and television viewers were treated to a 'Night at the Museum' style film campaign. In the week leading up to the public launch on 23 May, the communications team ran an extremely successful week of events including guided tours, familiarization visits for tourism workers, taxi drivers *etc.* and evening receptions, culminating in the VIP event on the 21st May attended by 500 guests. In addition to speeches by the five key stakeholders of the project (NHSN, Newcastle University, SANT, Newcastle City Council and Tyne & Wear Archives and Museums), the completion of the GNM project was marked by Dr Mike Dixon, the Director of the Natural History Museum in London. Barbara Follett, Minister for Culture, Creative Industries and Tourism was given a very early preview in March 2008 and hailed the Museum as a 'must see attraction'. Her words rang true when, at 10am on Saturday the 23rd of May, the Museum finally opened its doors to an eager public. Crowds queued down Claremont Road and onto Barras Bridge. Almost 11,000 visitors crossed the threshold on the first day. By the end of this reporting year more than 500,000 visits had been made to the new Museum with an overwhelmingly positive response to the new displays and facilities – fitting testimony to all the hard work by so many people dedicated to producing the best Museum they could.

While the curatorial, design, conservation and communications teams were busy working on the new displays, the learning team was busy in the background preparing new resources and workshops to complement the



Entertaining the crowds waiting to visit the Museum.

galleries and the new learning facilities which would be available in the new museum. The learning team also ran a series of outreach sessions working with pupils and teachers to showcase the new educational facilities at the Museum. In the five months leading up to the opening more than 5000 pupils were visited by the learning team.

The temporary exhibition programme was initiated with two photographic displays. The first was the 'making of the Great North Museum: Hancock', showing photographs taken before, during and after the building and exhibition work. The second was an exhibition by Sam Taylor Wood showing a series of photographs whose subjects have been affected in some way by cancer and have worked with Maggie's Cancer Caring Centres.

In June 2009, the ever popular 'Wildlife Photographer of the Year' exhibition opened. This exhibition featured more than 80 photographs chosen from entries to the Natural History Museum and BBC Wildlife Magazine Wildlife Photographer of the Year competition. This exhibition ran until late September.

Elsewhere, Sparkie the Budgie hit the headlines, as described in detail in the 'Archives' section above. One of the Museum's most famous residents, Sparkie the talking budgerigar, travelled to Berlin to take part in a musical performance at the Berliner Festspiele MaerzMusik festival. Sparkie and his recordings were the inspiration for a new opera by Michael Nyman and his fellow artist and musician Carsten Nicolai (Alva Noto). Sparkie returned to the UK in time to take up residence in the Living Planet gallery.

The EYE Project

2008 to 2009 has been the final full year of the EYE Project in its current form. From January 2010 the Project will evolve into ERIC, the North East Environmental Information Centre. ERIC will be based in the Great North Museum: Hancock and will be governed by a Board, made up of a range of stakeholders and including the voluntary recording community. The key aims of this centre are to maintain and develop a central database of environmental data for the benefit of a huge range of people who need access to good quality, verified and validated data. This includes biodiversity professionals, planners, statutory agencies, recorders and researchers amongst others. Without access to a central point of data, it is impossible to plan effectively for the future of the natural environment because finding the information becomes very difficult.

Key to ERIC will be to continue promoting recording activity in the region and encouraging people to become aware of, and more involved in their natural heritage. ERIC will continue to run the EYE Project wiki website, which allows people to record their wildlife sightings and find out more about what others have seen in their local area. We are in the middle of a second phase of website development, which will incorporate new designs, enhanced function and the ability to raise awareness of a host of wildlife organisations and recording schemes going on around the North East.

ERIC will build on the EYE Project's Data Hub, which now stands at 573,157 brand new records. We also hold an older database of 422,000 records, which we have just started working on to ensure that the data are verified, validated and free from duplication. During recent months, Katherine Pinnock, our newest member of the EYE Team, has set up the GIS (Geographical Information System). This allows us to map the data much more effectively, and is especially useful for the management of habitat data.

A large part of our work over the past year has been the digitisation of data. Much of this has been held in paper form and is very difficult to use in this form. Ensuring data are also in electronic form means that they can be much more useful for everyone. Our volunteer team has been working very hard indeed to digitise data and we are extremely grateful for their time and assistance. A small team has started to work on the digitisation of historic museum collections, currently the Evelyn Lobleby bryophyte collection held in the new offsite store at Discovery Museum. These data are particularly useful for the regional recorder and will inform the re-investigation of historic sites in the near future.

Over the past year, we have run a variety of very successful public events. Highlights of these include 'Wildlife Wonders at Low Barns' with Durham Wildlife Trust, the annual Northumberland Bioblitz with the Northumberland Biodiversity Partnership, this year on Holy Island, and the Gosforth Park Exploration Day with the NHSN which is always a favourite with the EYE Team! We have also run a schools programme and events and talks for a variety of community groups around the region.

GOSFORTH PARK NATURE RESERVE

Gosforth Park Nature Reserve (GPNR) is a Site of Special Scientific Interest (SSSI) on account of the extensive *Phragmites* reedbeds and management of the reserve is directed towards maintaining and enhancing this habitat. Reed-bed management work was again carried out in winter 2008-2009, with a much-needed grant from Natural England. The work involved clearing dead reed stems in discrete areas, carried out on a yearly rotation, to minimise the build up of debris, and the control of willows within and bordering the reedbeds. This task was also aided by the University Conservation Society who provided a working party to help with willow coppicing. Sensitive management of the willows is

important as we need to keep their growth in check rather than remove them completely as this helps to maintain a diverse habitat with nesting and foraging areas for Reed Warblers. Other jobs carried out in the winter were directed at enhancing nesting opportunities for other bird species. GPNR management committee member Geoff Lawrence constructed a multi-hole Sand Martin nest box and this was erected by Geoff and other Society members on an island in the reserve. We hope that it will provide a new nest site for birds returning in 2010. Geoff and Stuart Will also cleaned out the forty-seven nest boxes that Geoff had made and erected last year; the majority of these had been used by birds the previous season and in the 2009 breeding season many of the nestlings were ringed by Geoff and Stuart. Maintenance of the tern platform is an annual winter job, but while replenishing the gravel it was discovered that some original parts of the platform were rotten and will need replacing.

Temporary repairs were carried out for the coming season and protective inverted guttering was added to the platform in an attempt to prevent predators climbing up and eating the tern eggs and chicks. Facilities for members have been improved by creating an observation screen, designed and constructed



Geoff Lawrence and volunteers building a screen for watching ducks.

by Geoff Lawrence, to the west end of the main lake. In addition, a Society volunteer, John Gajdus, has improved the path, including a couple of bridges, from the feeding station northwards. He has also repaired the bridge near the race course that was causing concern. The lake was again re-stocked with fish during the winter thanks to a generous donation from a GPNR Management Committee member.

The management strategy for the reedbeds and the regular re-stocking of the lake seems to be having a positive effect in increasing the diversity of wildlife in the reserve. Bitterns are now regular autumn visitors and were seen up to the beginning of November 2008. Water Rails were seen throughout January and there were records of Peregrine and Green Woodpeckers. Marsh Harriers are occasional visitors in spring and the Reed Warbler population appears stable. A particular excitement this year was the appearance of a Great Reed Warbler, a first for the reserve. Found by GPNR Management Committee member



Lunar Hornet Moth
by Paul Drummond

Ian Davidson near the Pyle Hide at the beginning of June, it remained until early July. Although it was a singing male and clearly holding territory, sadly there was no evidence of a breeding pair. Three other new species for the reserve were added this year: a Lunar Hornet Moth and a White-letter Hairstreak Butterfly were found in the reserve by Paul Drummond and *Cyperus Sedge Carex pseudocyperus*, a new county record in the wild for Northumberland, was discovered by the Mid-Week Botany Group.

With respect to mammals, Roe Deer were recorded on most visits to the reserve with up to twenty-seven seen on one occasion; foxes are also seen regularly. Otters are now well established in the reserve and evidence of their activity or the animals themselves can be seen. The Red Squirrel population is a source of continuing concern: a group of volunteers led by GPNR Management Committee member Veronica Carnell continue to monitor the status of Red Squirrels and attempt to keep invading Grey Squirrels at bay by trapping them whenever possible. After a period without any sightings of Red Squirrels during the winter, they were seen during the summer at different locations throughout the reserve and this suggests that we still have a small surviving population.

The reserve continues to be an important wildlife asset for the region. The Society is grateful to the many members and volunteers who have contributed to the upkeep and security of the reserve. In particular, the Society is grateful to members of the Management Committee for their hard work and dedication to the cause. The Society is deeply grateful to Geoff Lawrence for his carpentry, design and construction skills, and his hard work in maintaining hides, paths and providing nesting facilities. Veronica Carnell and her squirrel team deserve special thanks for their efforts to conserve the Red Squirrel population. For the continuing strength of the Otter recovery we are indebted to Bob Wilkin, his expertise and his fish, and were it not for Ian Davidson's sharp eyes and ears our knowledge of the birds and other wildlife in the reserve would be poorer. The Committee is held together by the vital organisational skills (and many good ideas) of Margaret Patterson and the Society is very grateful for her input. Finally, the continual presence of Paul Drummond, the reserve Warden, has been vital to security and has helped keep the human wildlife at bay. Paul is always first on the scene whenever there is a job to be done and the Society is grateful for his commitment and dedication to the reserve.

RINGING GROUP

Ringling Team The year to 31 July 2009 saw the Society's Ringing Team continuing their three major activities: the Constant-Effort ringing project at Gosforth Park Nature Reserve, seabird ringing on Coquet Island and the Farne Islands, and the coastal autumn migration project at Low Newton-by-the-Sea.

At Gosforth Park, capture totals (new-for-year birds) for this and the previous 'Annual Report year' are shown in Table 1. Although the total to 31 July 2009 is rather up on the



Great Reed Warbler in the hand during Constant-Effort ringing at Gosforth Park Nature Reserve in June 2009.

previous year, analysis of capture totals by calendar year suggests that, overall, the 2009 season was not as good as in 2008 and the higher capture totals for the 2009 annual report are due to birds caught in August 2008. Perhaps the most notable changes were a doubling of the numbers of Willow Warblers, Blue Tits and Great Tits, and Blackbirds. However, Long-tailed Tit numbers were half those of the previous period and the numbers of finches (except

Table 1 Captures (new birds and new-for-year retraps) at Gosforth Park in the last two 'Annual Report' years

Species	01/08/2007-31/07/2008	01/08/2008-31/07/2009
Mallard	1	
Moorhen	1	
Common Tern	1	
Woodpigeon	1	
Tawny Owl	1	
Kingfisher	3	
Swift	1	
G S Woodpecker	2	2
Swallow	4	0 [+3 pulli]
House Martin	2	
Wren	51	44
Dunnock	17	13
Robin	18	21
Blackbird	12	22
Song Thrush		2
Grasshopper Warbler	1	1
Sedge Warbler	68	75
Reed Warbler	84	75
Lesser Whitethroat		3
Whitethroat	10	12
Garden Warbler	6	2
Blackcap	60	67
Chiffchaff	45	61
Willow Warbler	49	101
Goldcrest	1	5
Long-tailed Tit	55	23
Coal Tit	1	13
Blue Tit	47	115 [+142 pulli]
Great Tit	30	55 [+76 pulli]
Treecreeper		3
Chaffinch		3
Greenfinch	8	1
Goldfinch	21	1
Linnet		1
Bullfinch	8	14
Reed Bunting	34	31
Total	642	767 [+ 221 pulli]

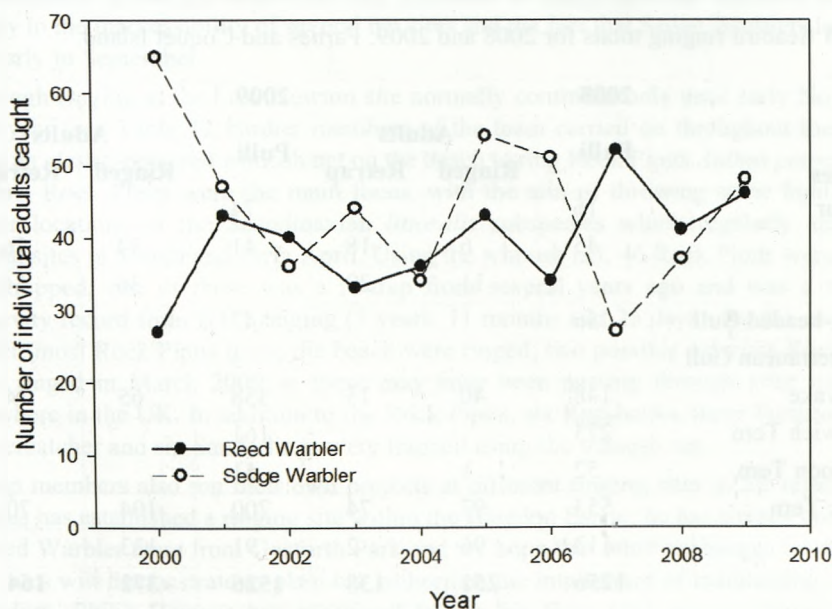
Bullfinches) were down substantially. Overall, Reed and Sedge Warbler populations seem to be relatively stable. Calendar-year capture totals for individual adults and juveniles in 2008 and 2009 (thus extending outside the ‘annual report year’) are shown in Table 2.

Table 2 Captures of Reed and Sedge Warblers at Gosforth Park. Adults – newly ringed adults and birds returning from previous years; First-year – birds hatched in the current calendar year.

	2008	2009
Sedge Warbler		
<i>Adult</i>	37	48
<i>First-year</i>	39	27
Reed Warbler		
<i>Adult</i>	41	46
<i>First-year</i>	34	35

The number of adults of both species caught in 2009 was higher than the previous year although the number of young birds for both species were down, particularly for Sedge Warblers. Over the last 10 years, the population of Reed Warblers has been relatively stable (Figure 1), perhaps with even a slight upward trend. The numbers of adult Sedge Warblers seems to vary more between years, but otherwise seem also to be relatively stable (Figure 1).

Figure 1 The number of individual (new birds and individuals retrapped from previous years) adult Reed and Sedge Warblers caught in Gosforth Park Nature Reserve in each of the last 10 years.



Apart from the constant-effort ringing, there has been a substantial increase in the number of pulli ringed. This is a result of some hard work by Ringing Team member Geoff Lawrence who made and erected more than 50 nest-boxes in the woodland parts of the reserve; Geoff and Stuart Will, the Society's Assistant Secretary, then monitored the boxes during the spring and early summer to ring the nestling Blue and Great Tits (142 and 76, respectively).

Perhaps the most notable event for the Ringing Team at Gosforth Park was the Great Reed Warbler *Acrocephalus arundinaceus* which was captured in one of the regular net sites used by the group. This bird had been identified in the reserve a week earlier, in early June 2009, by Ian Davidson who recognised its loud and distinctive song. After being ringed and released, the bird stayed at least to the end of June and held territory near the Pyle Hide. From biometric data it was identified as the *arundinaceus* subspecies. Great Reed Warbler is on the British Birds Records Committee rarity list and the record has now been submitted to this and the County Records Committee. As the bird appeared to be holding territory in potential breeding habitat, details were not released to the birding community other than Society members visiting the reserve.

The ringing of seabirds breeding on the Farnes and Coquet Island is focused on obtaining biometric data on adults and chicks of three key species: Arctic Terns, Kittiwakes and Puffins. Data collection this year was greatly aided by the presence of the Society's Assistant Secretary who spent 6 weeks on Inner Farne from mid-May, gathering data for the Coastal Research project (see below). In addition, many of the Farne Wardens have helped with the ringing and this has given a welcome boost to ringing totals. As a result, the numbers of Arctic Tern chicks ringed was increased to 700 compared with 150 the previous year. It is worth stressing that the Ringing Team's efforts on Arctic Terns makes a substantial contribution to the national ringing totals for this species; in 2008, for example, the team ringed 97 adults and 553 chicks of Arctic Terns and these represented 89% and 43%, respectively, of the national totals in that year. A sustained effort on Puffins and Kittiwakes also increased the total of adult Puffins ringed to 133 and Kittiwake chicks

Table 3 Seabird ringing totals for 2008 and 2009: Farnes and Coquet Island.

Species	2008			2009		
	Pulli	Adults		Pulli	Adults	
		Ringed	Retrap		Ringed	Retrap
Fulmar	16			74		
Shag	45	6	18	41	34	26
Eider		11	29		36	54
Black-headed Gull	56			47		
Mediterranean Gull				3		
Kittiwake	148	40	15	358	65	14
Sandwich Tern	273			161		
Common Tern	52	1		51		
Arctic Tern	553	97	74	700	104	70
Puffin	113	96	2	91	133	
Total	1256	251	138	1526	372	164

to 358. The numbers of these two species ringed on the Farnes and Coquet Island are less significant in a national context but still important; the 2008 total for Puffin chicks represent 27% of the national total (but adult Puffins were only 5% of the national total), while for Kittiwakes the chicks represent 18% and the adults 11% of the national totals.

The number of adult Shags ringed in 2009 also increased compared to last year, and this was partly in response to a request from Emily Barlow, a PhD student based on the Isle of May studying Shag dispersal patterns, to fit 'darvic' rings on as many Shags as possible. Darvic rings are essentially PVC plastic rings, and the ones fitted to Shags on the Farnes in 2009 were bright red and each carried a unique 3-letter code (white lettering), allowing birds to be identified uniquely at long range using a telescope. Already, there have been over 15 sightings of Farnes birds between the Isle of May and Aberdeen, so this approach will substantially increase our understanding of Shag dispersal and survival, and also means that we may be able to address questions about mate fidelity in the Farnes birds. Overall seabird ringing totals were 2062 for 2009, compared to 1645 the previous year.

Coastal migration ringing by the team takes place at Newton Pool, mainly in the reedbeds, willow and hawthorn scrub around the pool, but also using mist nets placed at the north end of the beach in Newton Haven. Ringing totals there for autumn 2008 (beginning of September to first week of November) were rather lower than the previous year at 293 compared to 441 in 2007, and would have been even lower were it not for the 60 Long-tailed Tits that were ringed there in autumn 2008. One of the main reasons for the low ringing total is the amount of rain that fell in a couple of days in early September, rendering the coastal path inaccessible to anyone without a boat or waders. The water took several weeks to drain away, and this left several of the most productive mist-net sites inaccessible for most of the autumn. The main species of note were four Redstarts, a Spotted Flycatcher and Pied Flycatcher, all caught in a mini-fall of these species in October 2008. Apart from two Whitethroats and two Garden Warblers ringed in 2008 and a dramatic reduction in the number of Sedge Warblers, other warbler species were similar in abundance to the previous year; the reduction in Sedge Warbler numbers was due simply to the inaccessibility of several net sites and the fact that Sedge Warblers leave the site early in September.

Although ringing at the Low Newton site normally continues only until early November each year (see Table 4), hardier members of the team carried on throughout the winter using an elastic-powered whoosh net on the beach to ring Rock Pipits *Anthus petrosus* and waders. Rock Pipits were the main focus, with the aim of throwing some light on the winter locations of the Scandinavian *littoralis* subspecies which regularly appear at coastal sites in March and early April. Using the whoosh net, 46 Rock Pipits were ringed or re-trapped; one of these was a re-trap from several years ago and was a national longevity record from BTO ringing (5 years, 11 months and 25 days). By the end of the winter, most Rock Pipits using the beach were ringed; two possible *littoralis* Rock Pipits were ringed in March 2009 so these may have been passing through after wintering elsewhere in the UK. In addition to the Rock Pipits, six Redshanks, three Turnstones, an Oystercatcher and six Sanderlings were trapped using the whoosh net.

Group members also run their own projects at different ringing sites in the region. Bob Gajdos has established a ringing site within the Blagdon Estate; he has already controlled a Reed Warbler there from Gosforth Park and we hope that other exchanges between the two sites will demonstrate to planning authorities the importance of maintaining wildlife corridors. Philip Hanmer has continued to run his Barn Owl project, sponsored by individual farmers together with the Coast AONB, Coquetdale Group NWT, Alnwick

Table 4 Ringing totals at Low Newton in autumn 2007 and autumn 2008.

Species	2007	2008
Kestrel		1
Sparrowhawk	1	
Redshank		3
Wood Pigeon		1
Great Spotted Woodpecker	2	
Kingfisher		1
Swallow		
Meadow Pipit	1	11
Rock Pipit		25
Pied Wagtail	1	3
Wren	65	27
Dunnock	31	15
Robin	37	15
Redstart		4
Stonechat	5	4
Wheatear		1
Blackbird	102	7
Song Thrush	12	6
Redwing	9	
Sedge Warbler	23	1
Whitethroat		2
Garden Warbler		2
Blackcap	3	2
Chiffchaff	8	7
Willow Warbler	9	6
Goldcrest	7	9
Spotted Flycatcher		1
Pied Flycatcher		1
Long-tailed Tit		60
Willow Tit	1	
Coal Tit		11
Blue Tit	16	9
Great Tit	7	6
Starling	1	6
House Sparrow	1	8
Chaffinch	4	2
Brambling	1	
Greenfinch	2	2
Goldfinch	16	9
Siskin	2	
Linnet	1	5
Yellowhammer	6	
Reed Bunting	67	20
Total	441	293

NHS, Alnwick Timber, and the National Trust. In 2009 to July 31, Phil ringed 69 Barn Owl chicks, 26 new adults and recaptured 29 adults. This project will help provide important scientific data on the diet, survival, productivity and dispersal of Barn Owls in Northumberland.

The Society is extremely grateful to many people for their help with the ringing studies and the coastal research projects. In particular David Steel and his team of Wardens on the Farne Islands have been extremely supportive and have helped to get the ringing team across to the Farne Islands. Some members of the Ringing Team are particularly grateful for their hospitality (and excellent cooking!) when an unexpected arrival of fog forced an overnight stay. Many of the Wardens have also helped with the ringing and have gone on to become trainee ringers with the team and the Society is grateful for their enthusiastic support; Jason Moss in particular has increased the Fulmar ringing totals for the Farnes this year. As always, John Walton and David Steel of the National Trust have been a particular strength, and the work on the Farnes Islands would not be possible without their enthusiastic support and encouragement. The Society is also grateful to Billy and William Shiels and their crews and boat skippers for the occasional lifts from the islands back to Seahouses. The Society is also grateful to the RSPB's Paul Morrison and Zoe Tapping, Coquet Island Wardens, for their hospitality and transport. Laura Morris has helped tremendously by ringing Arctic and Common Tern chicks and other seabirds on Coquet Island. The Society is also grateful to Kevin Redgrave and Chuck Cuthbert, National Trust wardens based at Low Newton, for their support and encouragement of the Society's coastal migration project ringing at Newton Pool. The Ringing Team themselves put a tremendous amount of effort into the Society's ringing projects and the Society is very grateful for their hard work.

Coastal Research

The coastal research projects are a collaboration between the Society, the National Trust and Newcastle University, and in part are an important extension of the ringing studies. On both Inner Farne and Coquet Island, optical coincidence rangefinders in combination with compass binoculars are being used to plot the foraging locations of terns (Arctic, Common and Sandwich) and Shags. These data were collected in the 2009 season by Stuart Will on Inner Farne and Laura Morris working on Coquet Island. In addition, Stuart and Laura also collected data on the feeding frequencies and food sizes brought back to Arctic Terns chicks (and Common Tern chicks on Coquet Island). Laura is using the data as the basis for her PhD studies on tern foraging behaviour.

The use of more advanced technology to complement the range-finding observations and obtain more precise locations of foraging sites and foraging behaviour was investigated this year. Global Positioning System (GPS) data loggers were fitted by Richard Bevan to a small number of Puffins and Shags; these record accurate 'sat-nav' data, and as long as the bird can be recaptured again, the device can be recovered and the data downloaded into software (basically Google Maps!) to show where the bird has been. These trials, which generated considerable media interest, were successful and some of the devices were recovered. Further work using this technology is planned for next season. GPS loggers used in this way give us important information about foraging locations and habitat use by seabirds in the breeding season. Identifying the locations of birds outside the breeding season is important for conservation planning and in the past has relied on the recoveries of ringed birds. New technologies are being developed which will enable us to get more detailed information from much smaller numbers of marked birds. Small devices called geolocator loggers can be attached to a leg ring (plastic or metal); these

devices record the time (from an internal clock) of sunrise and sunset and can collect and store these data for over a year. Once the bird is recaptured, back on its breeding grounds, its daily location during the non-breeding season can be calculated from day length and sunrise/sunset times (as long as the bird is outside equatorial regions!). A small number of these were fitted to Puffins in the 2009 season and we hope to be able to recover some of these devices next year.

In a separate study to measure the effects of visitor disturbance on the incubation activity of Arctic Terns, nest balances were again deployed on Inner Farne. This year, however, the number of balances in use was increased to 14 to increase the value of the data. All balances functioned correctly and thanks to careful observations and regular data-logger downloads by Stuart, the study has yielded an extensive dataset which is currently being analysed.

At the beginning of the breeding season, researchers from the Joint Nature Conservation Committee (JNCC) contacted members of the Coastal Research Team to request collaboration on a project to obtain information on the foraging ranges of tern species nesting on Coquet Island as part of an initiative to safeguard the foraging resources of these seabirds by extending the limits of Special Protection Areas. At the time, GPS loggers light enough to attach to Arctic Terns were not available so two alternative approaches were used: JNCC researchers used a rigid inflatable boat to follow individual birds at sea, and radios were fitted to 15 adult Arctic Terns to see if these would provide more precise location data. The radios were not as useful as was hoped, and required more-intense observation time than was available. However, the method of using a boat to follow individual terns at sea yielded useful data which complements Laura's rangefinder observations. This project will continue next season when we hope that GPS loggers to fit to some terns will be available.

COQUET ISLAND ADVISORY COMMITTEE

The Committee met once during the year. The normal summer meeting was postponed until August 2009 and so is outside the scope of this report. The main issues that arose this year were the increasing presence of Grey Seals around the island and the prospect that they may attempt to breed on the plateau of the island. This could have a very large and unwelcome effect on the very fragile vegetation covering the island. At present they have not found a way to reach the plateau and it was agreed that this should be discouraged and that steps should be taken to block any possible passage ways. This would leave them free to breed on the coastal rock areas surrounding the island. So far this has not taken place. The vegetation management is also of concern. The effect of the rabbits dying out on the island, in recent years, may possibly be beginning to show an adverse affect on the vegetation. At present this is being dealt with by further cutting of rank material that can effect the survival of the chicks of particularly the Arctic and Common Terns. The situation will be closely monitored and actions will be considered on a yearly basis.

The good news from the island is that the birds have had food available and production has been up for most of the important species. The number of adult pairs has also increased on last year with 90 (70) pairs of Roseate Terns and 131 chicks hatched. The other terns have also increased with 1,228 (1022) pairs of Common Terns, 873 (841) Sandwich and 1,259 (1247) Arctic Terns present on the island. The only species to show a reduction in breeding presence were Eider's which dropped to 260 (305) females.

LINDISFARNE NATIONAL NATURE RESERVE

Joint advisory Panel The Society is represented by Graham Bell and David Noble-Rollin (for as long as he is Chairman of the Wildfowl Panel) and the Committee encompasses a wide range of organisations that are concerned with the whole of the area. Their remit is to monitor and advise Natural England on activities that could have an impact on the National Nature Reserve (NNR). One of the major concerns is the impact of tourism and the best way to promote the importance of the natural environment to the local economy and to preserve the integrity of this internationally important habitat. New commercial developments in the area are looked at and this year the effect of the wider remit of Natural England compared with English Nature was discussed and closer cooperation between stakeholder groups in the area was proposed.

Wildfowl Panel The Society is represented on the Panel by David Noble-Rollin who is at present the Chairman of the Committee. The main role of the Panel is to monitor the organising of the wildfowling operations that take place in the National Nature Reserve and to advise Natural England on improving the regulation of the sport. The panel is made up of representatives of the wildfowl organisations including BASC (British Association for Shooting and Conservation) and ecologists and naturalists to advise on the wider implications of the sport on the reserve. In recent years the Committee has monitored the effect of the refuge area that encompasses the southern half the Holy Island tidal slake and Budle Bay. In most cases the presence of these safe areas for the birds has increased the number and in some species the duration of their winter visits. The findings of this group are then reported to the Joint Advisory Panel.

NEWCASTLE AND NORTH TYNESIDE BIODIVERSITY ACTION PLANS (BAPs) STEERING GROUP

The Society has been involved with the production of Biodiversity Action Plans (BAPs) for both Newcastle and North Tyneside. At present the Society's representative David Noble-Rollin is the chairman of the Steering Group. The Society's special interest in supporting this group is mainly because of the very important position that Gosforth Park Nature Reserve plays in the wildlife resources within the Tyneside conurbation. Its position as a refuge for wildlife is dependent on the wildlife corridors that feed it and therefore on the whole area and how it is managed. The BAPs are statutory controls on the Councils to not only understand the wildlife in their care but to undertake management to enhance and increase the biodiversity of Tyneside. The job of the Steering Group is to monitor the success of the Councils in fulfilling their obligations and to try to create opportunities to inform the public and the planners on the importance of the green spaces in the area. Originally the two BAPs were monitored separately and it was just in the last couple of years that the decision was made to look at the two as a single wildlife area. In line with this the first stages on updating the plans and trying to integrate the two Council areas have begun and will be the main focus of the Steering Group for the foreseeable future.

STRUCTURE, GOVERNANCE AND MANAGEMENT

The general management and conduct of the affairs of the Society, its property, the investment and expenditure of its funds and the enforcement of its constitution are the responsibility of an executive body called the Council. The Council comprises the following who are elected at the annual meeting: up to ten Vice-presidents and an Honorary Treasurer, who stand for one year but may be re-elected; a representative proposed by each section and additional members proposed by the members, who are elected for three years. In addition the Council comprises up to three members nominated by Newcastle University. All members of the Council are Trustees of the Society. At their first meeting after the Annual Meeting of members, they elect a Chairman to act for the following year. The President of the Society, who is elected by the members, is entitled to attend all meetings of the Society but is not a Trustee.

The governing document is the constitution and the charity is constituted as an unincorporated association. Whilst the Council oversees the general management of the Society, more detailed management is provided by the General Purposes Committee (GPC). This is chaired by the Chairman of Council and consists of the Honorary Treasurer and Trustees appointed by Council.

Other sub-committees are as follows: the investment sub-committee, which is appointed by Council and has no fewer than three members, with delegated powers to manage jointly the Society's investment portfolio; section sub-committees and the library committee, which elect their chairman and representative on Council. The management of the Hancock Museum was vested until December 2008 in a Museum Management Sub-committee of Newcastle University which included up to three representatives appointed by Council from those of its members who are not on the staff of the University, together with an equal number of University representatives and a chairman provided by the University. From January 2009 the management of the Museum was vested in the Great North Museum Board.

The senior member of staff is the Secretary who is responsible for the smooth running of the Society and has such delegated powers as the Council shall decide.

OBITUARIES

Dr Tony Johnson (1925-2009)

George Anthony Lobjoit Johnson died in Durham on 9th April 2009.

Although Tony's name will always be linked with the geology of North East England, he was not a native of these parts. Tony was born, the second of three brothers, on 5th September 1925 in Langley Marish then in Buckinghamshire, but now part of Berkshire, where his father was a farm manager and company director. His mother came from the Lobjoit family of market gardeners.



Dr Tony Johnson (second from the right) on a 1st year field excursion to Hilton Beck below Dufton, Cumbria in the 1960s with other lecturers from Durham University.

After graduating in 1949 with first class honours in geology from King's College, Newcastle, then part of

Durham University, he embarked on research into the Carboniferous rocks of the Hadrian's Wall area which led to the award of his PhD in 1953.

In 1952 he was appointed as a lecturer in geology at the University of Wales in Cardiff but returned to the north of England in 1954 as a Research Assistant in the Department of Geology at Durham University to work with the late Professor Kingsley Dunham on the mapping of the Moorhouse Nature Reserve in Upper Teesdale, a major project funded by the then Nature Conservancy. This culminated in the publication in 1963 of the Nature Conservancy Monograph, co-authored with K C Dunham, *The Geology of Moorhouse*, (Nature Conservancy Monograph No. 2, HMSO), a text which remains a standard work on the geology of the Northern Pennines and which was to help establish Tony as a leading authority on the rocks of North East England. Appointed Lecturer in Geology at Durham in 1960, Tony was promoted to Senior Lecturer in 1968 and to Reader in 1970. Upon his retirement from the Durham Department in 1988 he was awarded the honorary title of Emeritus Reader, enabling him to continue his close research links with the Department until 2005 when failing health eventually prevented him from working.

Tony's research was directed mainly towards the Carboniferous stratigraphy and palaeontology of northern England, though he also maintained an interest in interglacial deposits. A long-standing interest in Carboniferous palaeoecology is reflected in his description of the Brunton and *Chaetetes* bands from the Great Limestone of the Chollerford area. He played a prominent role in the Rookhope Borehole project during its planning and drilling (1960-61) and in the subsequent research on the cores recovered from it. He was one of the co-authors of the first papers in *Nature* (1961, Vol. 190, 899-900) and the *Quarterly Journal of the Geological Society of London* (1965, Vol. 121, 383-417) in which the results of this extremely important borehole were reported. A detailed account of the biostratigraphy of the borehole, the product of many years of work, jointly authored with J.R. Nudds, and published in the *Transactions of the Royal Society of Edinburgh* in 1996, was one of around 115 research papers, books and field guides produced by Tony during his long working life. In retirement his long association with the Hadrian's Wall area led to his *Geology of Hadrian's Wall* (*Geologists' Association Guide* No. 59, 1997).

At the time he was overtaken by illness he was completing a detailed interpretation of the stratigraphy of the deep Seal Sands Borehole on Teesside: it is hoped that his account of this unique borehole succession will be published in the near future. His many important research contributions were recognised in 1972 by the award of a DSc from Newcastle University.

In addition to his research activities, Tony was a greatly valued member of staff in the Durham Geology Department where his teaching roles included stratigraphy, palaeontology and the supervision of around 1000 undergraduate field mapping projects and numerous PhD students. He will long be remembered by his many colleagues and former students for his tireless contributions to the running of the Department and for his unfailing friendship and support.

Tony's long association with the Natural History Society began with his election to membership in 1957, soon after his return to the North East. He gave his first lecture to the Society, on the Natural History of the Pennines, in 1959 and subsequently gave further lectures, led field excursions and contributed to the *Transactions*. Perhaps his most notable contributions to this journal were as compiler, editor and author of several papers in *Geology of Durham County* (1970) and *The Geology of North East England* (1980), the latter revised and published as a second edition under the new title of *Robson's Geology of North East England* (1995). Both were immediately, and will long remain, classic texts on the region's geology. Tony was the first to represent the Geology Section on the Society's council in 1962 and in 1980 he was made a Vice-President of the Society, a post he held until he resigned due to ill health in 2004.

Tony served as President of the Yorkshire Geological Society (1979-80), was awarded that Society's Phillip's Medal in 1984 and was made an Honorary Life Member of the Society in 1991.

Tony was Chairman of the Council of the Durham Wildlife Trust (1979-80) and a trustee of the Freeman of Durham from 1980 onwards. He acted as an advisor on geological matters to the then Nature Conservancy and Durham County Council Planning Department. He had a long association with Durham Cathedral, where for many years he was a Voluntary Steward for special events and services and where he chaired the Banks Committee for several years. Tony took particular pleasure in guiding parties from conferences based at Durham, around the Cathedral. No one who enjoyed accompanying him on one of these outings could ever forget his amiable and infectious enthusiasm for this building for which he had such a deep affection.

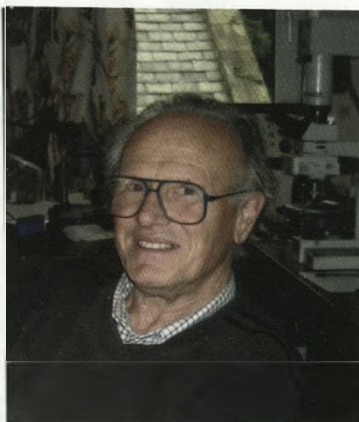
Tony married Dr Hazel Green, a palaeobotanist, in 1961, with whom he shared interests in natural history and gardens. He is survived by Hazel and by their son Edward, daughter Pam, and by his younger brother David.

With his passing, geology in the North of England has lost one of its greatest and most enthusiastic champions. All who knew him have lost a much valued friend.

Dr Brian Young

Dr Mick Jones (1932-2009)

It was with great sadness that we heard that Dr Mick Jones died on 15th March 2009. He was a great supporter of the Society and gave his time very generously to the Geology Section with many excellent geological lectures and field meetings and as the Chairman of the Geology section his many academic friends and contacts particularly enriched the winter programme. He appears to have invariably introduced the geology speakers at the winter lectures from becoming the Chairman of the Geology Section in the early 1970s and often his introductions were as entertaining as the lectures.



Mick was elected to the Society in 1964 and was until very recently a Trustee. He was on Council for many years, becoming a Vice-President in 1999 in recognition of his voluntary work.

He wrote a number of papers for the *Transactions* and contributed to 'The Geology of North East England' and its later up-date, 'Robson's Geology of North East England'. His guides to the coastal sections from Tynemouth to Seaton Sluice and from Howick Bay to Foxton Hall were classics and 'bibles' for many young geology students studying the local landscape.

I have only known Mick for the last twenty years or so and felt that I needed help to really do justice to his life. I asked Professor Duncan Murchison who worked with Mick for many years and Professor Paul Younger Pro-Vice Chancellor of Newcastle University and a former student and colleague to help. Both were delighted to contribute their memories of Mick: they show how privileged we are to have known him.

David Noble-Rollin

Mick Jones and I began a long relationship when Mick had begun a PhD in the Newcastle Department of Geology and after I had spent time with Shell International but had had to resign due to ill-health and return to the Department. The Department had useful and friendly contacts with the coal industry, both regionally and nationally, and there was a desire on the part of the industry to develop research on coal microscopy within the Newcastle Department which would add to the wide-ranging efforts which the National Coal Board was already making in other scientific fields to make better usage of what at the time was Britain's principal national fuel resource.

A principal aim of the Newcastle research was to try to add microscopical studies of coal to the already widespread 'macro' methods of chemical analysis which were in use in National Coal Board 'Coal Survey' laboratories throughout the country – the feeling being that there was much to be gained from study of the properties of individual coal constituents rather than just analysis of mass samples. Such work continued successfully for many years and the methodology was apposite (highly so) to application in studies to assist the oil industry to define parts of the crust which were suitable for possible development for oil exploitation, as well as in defining the properties of materials needed as fuels for use in atomic piles.

In all this development work Mick Jones was a main force, constructing and using microscopical equipment to assess the character and efficiency of the different fuel sources needed in these different industrial processes. There is no doubt that he was a prime force responsible for the developing reputation of what became known as the

'Organic Geochemistry Unit' in Newcastle. Alongside these projects Mick took a full part in the development of the Department of Geology under Stanley Westoll. Mick was an excellent geologist – both as a teacher and as a demonstrator of geological processes in the laboratory and in the field. Many generations of students, not just 'real' geologists, but students from other disciplines such as mining engineering, civil engineering and town and country planning benefited from his wide geological background. None were left with any impression that geologists were only 'stamp collectors', but in reality were scientists with much to contribute to the successful prosecution of many disciplines.

Mick Jones liked to practise alone but he was not a lonely person. He was a most enjoyable companion and ideal company on field trips – an excellent leader and always challenging students (and staff!) with questions about field geology. Although I think he disliked having to be involved in 'administration', he was a fine administrator within the University, no better shown than when he was appointed as 'Head of Geology' in the later part of his career – but that must have been well known to all members of the Natural History Society where for many years Mick also ran the Geology Section to the great benefit of the Society and to the general public with an interest in geology.

I know nobody who 'just got on with it' as Mick did. It is impossible to quote here the numerous examples of this attribute known to me, but one I shall. We were on our way to an important meeting with staff of BP in London, no doubt with the singular intent of extracting money from the BP group to prosecute our research. As we walked along the platform at King's Cross, Mick's left shoe fell into two parts – he was always economical with certain necessities of life and I am sure he confessed to the shoe having thirteen partial soles on it, all put in place by him. When we arrived at BP, Mick asked for a workshop and was given access where he repaired his damaged shoe while directors and others waited for him to speak to them to advance us some more money. He 'got on with it'.

Mick Jones will be a tremendous miss to all around him, to the University and the earth sciences widely, but particularly to Pam and the children. I am so glad to have known him and to have been his colleague for so many years. It was great fun!

Professor Duncan Murchison

Mick Jones was the most inspiring teacher I ever had, and I consciously modelled my own teaching style on his. He was marvellous in the classroom and the field. He never let-up from an intense sense of humour which was dry to the point of arid; this often caught "wet-behind-the-lugs" new students well and truly off guard. An example of this is a classic first year practical on 'coal rank variation': he had the whole class spend a couple of hours painstakingly contouring data for a wide range of coal parameters on to basemaps of the NE, then posted them up at the front of the lab. He then approached each one. "Now then", he'd say. "This here's a map of ash content. But ash content's got nothing to do with coal rank, so that's useless!". Then he'd rip it down and tear it up, in front of the aghast first years who'd just spent hours drawing it! And so on, for about twenty maps. None of those present ever forgot what parameters were relevant to coal rank and which were not!

Jonesy, as we all called him, also ran a classic first year mapping course on the coast near St Mary's Island. This is an area for which he had published an excellent description in the Society's *Transactions*, but none of us realised this till later – it is now amongst my most treasured possessions. Jonesy would be there, wandering the foreshore, keeping an eye on the students, dispensing pearls of wisdom seasoned with gentle micky-taking, and collecting bits of sea coal and driftwood in an old sack, all of which would end up on his fire at home. Years later I turned up at an NHSN field trip he was leading at the same place,

where he was revealing the wonders of the Hutton Plant Bed - my oldest son (then a tender 12 years) also got to experience the Jonesy wit that day, and has never forgotten it.

Jonesy was famous for his lack of concern for appearance. He dressed more like a 'coal man' (which is the phrase he often used to describe himself) than an academic. His shoes were famously unpolished. One night on an Honours field trip to Morvern, we persuaded the postdoc who was sharing a room with him to purloin one (just one!) of Mick's shoes for an hour, and we then gave it the most glistening polish you could imagine. You could see your face in it. As the postdoc returned it to the room, Jonesy made some cryptic comment, apparently in his sleep, but which seemed to reveal he knew what was up. He wore the pair of shoes thereafter without comment or apparent consciousness, one gleaming, the other scuffed as ever.

Memories abound of many magic moments in the field with Mick. His invariable packed lunch was simply a tin of Ambrosia creamed rice. I remember a leisurely afternoon on the Morvern Hills with Mick and a radiometer, measuring U, Th, K on a range of outcrops and soil types. He had a great eye for the outcrops. Along the coast of the Sound of Mull he spotted a hitherto unseen coal seam, probably Jurassic in age. By tea-time he'd made a polished block and was showing it to us all, explaining the macerals we could see and its thermal history as revealed by its vitrinite reflectance.

Mick Jones was famous the world over for his expertise in vitrinite (or, latterly, phytoclast) reflectance measurement, and he prospered post-retirement in this niche service sector. One of my proudest moments in recent years was finally becoming a joint author on a paper with Mick, in which he did the phytoclast reflectance work alongside my hydrogeology. That was, as far as I can tell, Mick's last publication (full reference: Manning, D A C, Younger, P L, Smith, F W, Jones, J M, Dufton, D J and Diskin, S 2007, A deep geothermal exploration well at Eastgate, Weardale, UK: a novel exploration concept for low-enthalpy resources. *Journal of the Geological Society, London* 164: 371-382).

Just a couple of weeks before Mick died, I wrote to him to ask if he had any old polished blocks or other samples of coal which the GNM:Hancock might borrow, with a view to using some of these as the starting point for one of our next possible developments of an exhibition on the Great Northern Coalfield. As it happens, he had kept almost nothing, but he wrote me back a tremendously entertaining letter full of all sorts of anecdotes, and a recommendation that we rescue a pillar from the grounds of Close House, which is actually a complete section through the Cleveland Ironstone Main Seam. I must get round to that; but a far greater treasure to me already is Mick's wonderful letter, which made me aware for the first time that he had followed in his father's footsteps in his chosen profession.

Mick Jones is owed many debts of gratitude by loads of people. As I've already said, I aped his teaching style, and it has always gone down well with the students. I also learned excellent robust coal geology from him, which allows me to hold my head high in any debate, be it about mine water or underground coal gasification (Mick found the latter particularly interesting). When the Newcastle University Geology Department was forced to 'merge' with the Durham one (which was the weaker of the two at the time), Mick had the awful job of acting as the final Head of Department, presiding over the break-up of the undergraduate programme. This he did with great dignity and professionalism, making sure that much of the Department's collections of teaching material were deposited with the Hancock. However, he at least had the pleasure of seeing his own group, the former Organic Geochemistry Unit, flourish and become in time the Earth Science nucleus of the University's present "School of Civil Engineering and Geosciences".

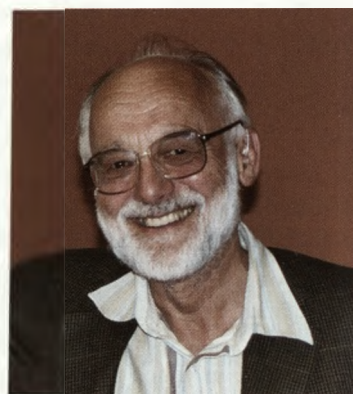
I am sure I'm not alone in concluding that I'll never forget Mick Jones: he was an astonishing human being, absolutely unique and thoroughly engaging. I'm proud to do what little I can to perpetuate his powerful intellectual and human legacy.

Professor Paul Younger

Dr Brian Selman (1934-2009)

Brian Selman, Vice President of the Society and Editor of our *Transactions*, died at his home in Heddon-on-the-Wall on 1st August 2009.

Brian was a Gloucestershire man and took his first degree at Bristol University before working there in Professor Hinton's department on blood circulation in insects for his PhD. The Commonwealth Institute of Entomology then appointed him to work on their behalf in the Entomology Department of the British Museum (Natural History) on the taxonomy and identification of insect pests that were of significance in Commonwealth countries. It was therefore as an expert taxonomist that he joined the newly independent University of Newcastle in 1964 as a Lecturer in Entomology, teaching Agricultural Zoology. Apart from a period spent investigating the leaf beetle pests of eucalypts in Australia in the late 1970s, for the Commonwealth Scientific and Industrial



Research Organization, he remained in the North East for the rest of his life. With time the structure of the university changed and Brian was successively in the departments of Agricultural Biology and then Agricultural and Environmental Science and in each he played a central role in managing the degree programmes and in every aspect of departmental life. His principal research interests remained the leaf beetles and the role of insect diseases as a means of pest-control, but Brian was a naturalist with broad interests as well as a first class entomologist and an inspiring teacher. He officially retired as a Senior Lecturer, in 1999, but he continued to teach as a guest member of staff until 2002 and he only slowly relinquished his day to day involvement in departmental life.

It was more difficult to detach Brian from his involvement with the central administration of the university, partly because he represented the Natural History Society in discussions about the Hancock Museum, but throughout his career he played a significant part in the academic and wider social role of the university. He was forever rushing to meetings and bringing his common sense and his sense of justice to bear on the proceedings. His wise counsel and this sense of justice and fair play were hallmarks of his character and he was not averse to achieving that justice through Machiavellian means if they were needed, though always delivered in his soft West Country accent and with a quizzical smile.

His great enthusiasm for the natural world in general and entomology in particular was evident to all who knew him. Whether he was talking to you one to one or lecturing to large classes it was his enthusiasm that affected everyone. His tales of his travels in Australia and his passion for leaf beetles are just two of many examples. Apart from his expertise with insects, he also had a prodigious knowledge of collecting sites in the region and he was a keen alpine gardener which gives some idea of the breadth of his knowledge. In the days before health and safety and form filling, a field class usually involved loading students into his Morris Traveller and Martin Luff loading the rest into his Ford Cortina

and then setting off into the wilds. His enthusiasm and his particular interest in insects made him an advocate for the educational use of the Society's collections and a major link between us and the University. He was recently deeply involved with the Great North Museum Project at all levels of the planning. We were very pleased that he was able to attend the previews of the new Museum in May.

In his academic teaching life he seemed to find endless time to help students who were experiencing difficulties. He would coax, cajole and jolly them along and there is many a career that owes its origins to Brian's help. Chris Reid, a former student at Newcastle and now an expert on leaf beetles in his own right at The Australian Museum says: 'Brian was the most generous and patient of supervisors. If it had been anyone else I'm sure I would have foundered.' This generous nature was so characteristic. Before Brian came to Newcastle, at the Natural History Museum a student going there to identify insects found himself sitting opposite him. True to form Brian took a great interest in what the student was doing and where his material had come from, and then, at lunchtime, made sure he had company for the meal. The student was in fact Martin Luff who was to become a life-long friend and colleague.

In the early days of his time at Newcastle University, it was Brian together with Martin, John Kershaw and Alan Ibbotson who ran the Agricultural Zoology degree, but Brian always seemed to be the father figure. Indeed one student from the Sudan described Brian as the 'Father of the Department'. During this time there were many scientific careers that Brian helped to launch and several people who have expertise in biological control of insects that owe their start to Brian, but it his contribution to the international community in Newcastle and across the world that will be one of his greatest legacies. Brian always had a great fondness for international students, indeed it was also a family affair given Margaret Selman's role in the University Wives International Group and in teaching English. He played a very major role in the links between Newcastle and the University of Rajshahi in Bangladesh, with the setting up of an MSc in the Zoology Department of the University of Dar es Salaam in Tanzania and with students in Pakistan and so on.

Brian joined the Society in April 1965, not long after he came to work in Newcastle, giving his first lecture to us in 1976 on 'Finding and Catching Insects'. For many years he was one of our most experienced and stimulating naturalists. He first joined the Society's Council in 1982 when he was elected as a members' representative. By 1986 he had become one of the four University representatives on Council and remained so for the next 18 years. He was also a Vice-President and Trustee of the Society and became a member of the General Purposes Committee and Editor of the *Transactions* in 2000. He continued with this work load right up to the week before his death, both emailing helpful comments on important issues being discussed by Council and working with Stuart Will on the editing of the next issue of the *Transactions*.

For more than forty years Brian devoted much of his 'spare' time to his home village of Heddon-on-the-Wall, for most of this time as the very active and much admired Chairman of the Parish Council. He attended his last meeting within days of his death, and was buried in the churchyard of St Andrew's, Heddon.

One of the most fitting tributes to Brian's life is the worldwide network of scientists who he helped in their careers and we are grateful to his family for allowing him to spend so much of his time in this endeavour.

Dr Gordon Port, with contributions from Dr Martin Luff.

FINANCIAL STATEMENTS

31 JULY 2009

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA

REPORT OF THE TRUSTEES FOR THE YEAR ENDED 31 JULY 2009

CHARITY NUMBER 526770

Reference and Administrative Information

These details are disclosed on page 174 of the Annual Report.

Objectives and Activities

These are detailed on page 175 of the Annual Report.

Structure, Governance and Management

This is described in full on page 210 of the Annual Report.

Achievements and Performance

The detailed report of the Society's activities during the year appears on pages 175 to 209 of the Annual Report.

Risk Management

The trustees have assessed the major risks to which the charity is exposed, in particular those relating to the operations and finances of the charity, and are satisfied that systems are in place to mitigate exposure to the major risks.

Reserves Policy

It is the policy of the Society to maintain unrestricted funds, which are the free reserves of the charity, at a level which equates to approximately six months of unrestricted expenditure. This provides sufficient funds to cover management, administration and support costs and to ensure all ongoing projects can continue.

Investment Policy

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

Public Benefit Statement

The trustees have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing the aims and objectives, and in planning future activities. The charitable objectives also are set in order to provide a clear and demonstrable public benefit.

Financial Review

Net (Outgoing)/Incoming Resources

2009	2008
(£30,369)	£775

Statement of Trustees' Responsibilities

The charity's trustees are responsible for preparing the Trustees' Annual Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales requires the trustees to prepare accounts for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustees are required to:

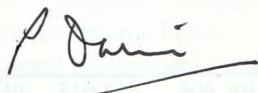
- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- 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 Charities Act 1993 and the Charity (Accounts and Reports) Regulations 2008. The trustees 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.

Independent Examiners

Mr Graham Moore has expressed his willingness to continue in office as independent examiner, and a resolution to reappoint him will be proposed at the Annual Meeting.

Signed on behalf of the Trustees



PETER DAVIS

Chairman and Trustee

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 JULY 2009

					2009	2008
	Notes	Endowment	Restricted	Unrestricted	Total	Total
		£	£	£	£	£
Income and expenditure						
Incoming resources						
Incoming resources from generated funds						
Voluntary income	2	3,590	5,010	21,724	30,324	100,748
Activities for generating funds	3	-	119	10,162	10,281	9,897
Investment income	4	-	-	25,326	25,326	28,370
Incoming resources from charitable activities	5	-	-	1,755	1,755	1,763
Other incoming resources		-	-	654	654	547
Total incoming resources		3,590	5,129	59,621	68,340	141,325
Resources expended						
Cost of generating funds	7	-	-	18,563	18,563	-
Charitable activities	8	-	5,814	68,104	73,918	134,126
Governance costs	9	-	-	6,268	6,268	6,424
Total resources expended		-	5,814	92,935	98,749	140,550
Net (outgoing)/incoming resources before other recognised gains and losses		3,590	(685)	(33,314)	(30,409)	775
Other recognised gains and losses						
Realised and unrealised losses on investments assets		-	-	(71,970)	(71,970)	(100,247)
NET MOVEMENT IN FUNDS		3,590	(685)	(105,284)	(102,379)	(99,472)
Transfer between funds			387	(387)	-	-
Funds brought forward		50,019	2,796	602,579	655,394	754,866
FUNDS CARRIED FORWARD						
31 JULY 2009		53,609	2,498	496,908	553,015	655,394

THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
BALANCE SHEET AS AT 31 JULY 2009

	Notes	2009 £	2008 £
FIXED ASSETS			
Tangible assets for use by the society	12	10,143	10,547
Investments	13	512,705	581,299
		<u>522,848</u>	<u>591,846</u>
CURRENT ASSETS			
Debtors	14	5,680	2,673
Cash at bank and in hand		28,740	65,893
		<u>34,420</u>	<u>68,566</u>
CREDITORS			
Amounts falling due within one year	15	4,253	5,018
NET CURRENT ASSETS		<u>30,167</u>	<u>63,548</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>553,015</u>	<u>655,394</u>
NET ASSETS		<u>553,015</u>	<u>655,394</u>
FUNDS			
General Fund		74,991	180,420
Expendable Endowments:			
T B Short Memorial Fund		230,993	230,993
Grace Hickling Memorial Fund		181,433	181,433
		<u>487,417</u>	<u>592,846</u>
Life Members' Fund		1,543	1,362
Designated Capital Funds	16	7,948	8,371
Total Unrestricted Funds		<u>496,908</u>	<u>602,579</u>
Restricted Income Funds	17	2,498	2,796
Restricted Endowment Fund	18	53,609	50,019
TOTAL FUNDS		<u>553,015</u>	<u>655,394</u>

Approved by Council on 22nd January 2010
and signed on its behalf by

 PETER DAVIS – 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 2009

1. Accounting Policies

1.1 Basis of Accounting

The financial statements have been prepared under the historical cost convention, as modified by the inclusion of investments at their market value, and in accordance with the Statement of Recommended Practice: "Accounting and Reporting by Charities" (SORP 2005) issued in March 2005 and applicable accounting standards and the Charities Act 1993.

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 2009.

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.

Included within fixed assets as Property is the cost of Lake Lodge, less donations and grants received. The net cost 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 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 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.

The charity has a single permanent endowment which is made up from the capital donated by living relatives to the Dickinson Memorial Fund. This capital is not to be utilised, but the income generated from it is to be allocated to the Dickinson Memorial Designated Income Fund.

1.8 Charitable activities

Costs of charitable activities includes grants made and an apportionment of overhead and support costs as shown in note 8.

1.9 Governance Costs

These comprise all costs involving the public accountability of the charity and its compliance with regulation and good practice. These costs include statutory audit and legal fees together with an apportionment of overheads and support costs, as shown in note 9.

2. Voluntary Income

	Endowment	Restricted	Unrestricted	2009 Total	2008 Total
	£	£	£	£	£
Subscriptions	-	-	19,812	19,812	20,506
Life Membership	-	-	400	400	-
Sir James Knott Trust (GNM)	-	-	-	-	50,000
Member (Archives)	-	-	-	-	2,148
Bewick Society	-	-	-	-	300
Dickinson Bursary	3,590	-	-	3,590	17,455
Storrow Scott Trust	-	-	-	-	1,000
Natural England (GPNR)	-	4,995	-	4,995	7,000
The Percy Hedley Foundation	-	-	500	500	-
Samares Investors Ltd	-	-	500	500	500
Fishermans Company	-	-	-	-	1,100
General public donations	-	15	512	527	739
	3,590	5,010	21,724	30,324	100,748

3. Activities for Generating Funds

	Endowment	Restricted	Unrestricted	2009 Total	2008 Total
	£	£	£	£	£
Library sales	-	119	-	119	-
Binding proceeds	-	-	-	-	219
Lease payment	-	-	10,162	10,162	9,678
	-	119	10,162	10,281	9,897

4. Investment Income

	2009	2008
	£	£
All investment income is unrestricted:		
UK equity dividends	13,098	14,636
UK fixed interest	5,568	3,896
UK unit trusts	665	512
Non UK unit trust	1,113	1,636
Non UK fixed interest	2,138	2,137
Non UK equities	1,092	625
Bank interest	1,652	4,928
	<u>25,326</u>	<u>28,370</u>

5. Incoming resources from Charitable Activities

	Endowment	Restricted	Unrestricted	2009 Total	2008 Total
	£	£	£	£	£
Publications	-	-	92	92	135
Field Trips	-	-	266	266	254
Transactions	-	-	745	745	838
GPNR	-	-	287	287	229
Ringling Group	-	-	365	365	232
Ornithological Research	-	-	-	-	75
	<u>-</u>	<u>-</u>	<u>1,755</u>	<u>1,755</u>	<u>1,763</u>

6. Allocation of support costs and overheads

	Cost of Generating Funds	Direct Charitable	Governance	2009 Total	2008 Total
Unrestricted (Basis - Staff time)	£	£	£	£	£
Depreciation	785	2,388	167	3,340	5,463
General expenses	225	686	48	959	532
Insurance	533	1,623	114	2,270	2,220
Post and telephone	790	2,402	168	3,360	2,729
Printing and stationery	643	1,954	136	2,733	3,065
	<u>2,976</u>	<u>9,053</u>	<u>633</u>	<u>12,662</u>	<u>14,009</u>

7. Cost of Generating Funds

	2009	2008
	£	£
Unrestricted		
Salaries, pension contributions and National Insurance	13,985	-
Fundraising and advertising	1,602	-
Allocated support costs	2,976	-
	<u>18,563</u>	<u>-</u>

8. Charitable Activities

	Note	Restricted	Unrestricted	2009 Total	2008 Total
		£	£	£	£
Salaries, pension contributions and national insurance		-	42,665	42,665	46,334
Archive costs		700	-	700	2,960
Advertising		-	-	-	423
Great North Museum project		-	-	-	50,100
Coastal Research		-	1,418	1,418	2,229
Gosforth Park Nature Reserve		4,995	1,075	6,070	9,033
Dickinson Memorial Fund		-	725	725	-
Asset restoration		-	299	299	-
Library costs		119	2,545	2,664	3,269
Transactions		-	8,335	8,335	4,690
Other publications		-	634	634	560
Field expenses		-	192	192	341
Lectures		-	1,163	1,163	922
Allocated support costs	6	-	9,053	9,053	13,265
		<u>5,814</u>	<u>68,104</u>	<u>73,918</u>	<u>134,126</u>

9. Governance Costs

	2009	2008
Unrestricted	£	£
Salaries, pension contributions and national insurance	2,972	2,503
Printing and stationery	136	145
Postage and telephone	168	163
Insurance	114	118
General expenses	48	28
Depreciation	167	290
Accountancy and bookkeeping fees	1,763	2,277
Independent review	900	900
	<u>6,268</u>	<u>6,424</u>

10. Information regarding Employees and Trustees

	2009	2008
Average number of employees during the year	<u>3</u>	<u>2</u>
Total emoluments	<u>£59,622</u>	<u>£53,581</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 seven (2008 – six) trustees in respect of reimbursement of expenses incurred on the charity's behalf totalling £1,574 (2008 – £2,007).

11. Coastal Research

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

12. Tangible Fixed Assets for use by the Society

	2009 £	2008 £
Hancock Museum	Not valued	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	7,796	7,718
Net book value	<u>1,403</u>	<u>1,481</u>
Hides, equipment, office furniture and computers		
Cost	28,156	24,048
Additions	2,936	4,108
	<u>31,092</u>	<u>28,156</u>
Less Depreciation to date	22,352	19,090
Net book value	<u>8,740</u>	<u>9,066</u>
Total net book value	<u>10,143</u>	<u>10,547</u>

There were no capital commitments at 31 July 2009 (2008: £Nil).

13. Investments

	2009 £	2008 £
Market value at beginning of year	581,299	637,845
Additions	116,970	224,057
Disposal proceeds	(113,594)	(180,356)
Net investment gains	(71,970)	(100,247)
Market value at end of year	<u>512,705</u>	<u>581,299</u>

The investment portfolio includes the following holdings which represent more than 5% of the market value of the portfolio:

UK Government 4% Stock	8.11%
Old Mutual Fund Managers	5.02%
HSBC Holdings Ord USD 0.5	5.36%

	2009 £	2008 £
Investments at market value comprised:		
Listed on a recognised stock exchange	512,705	581,299
	<u>512,705</u>	<u>581,299</u>
Historical cost at end of year	<u>536,082</u>	<u>577,360</u>

14. Debtors

	2009	2008
	£	£
Trade debtors	96	88
Prepayments and accrued income	5,584	2,585
	<u>5,680</u>	<u>2,673</u>

15. Creditors

	2009	2008
	£	£
Trade creditors	23	464
Deferred income	1,764	2,086
Accruals	2,466	2,468
	<u>4,253</u>	<u>5,018</u>

16. Designated Funds

Gosforth Park Nature Reserve Restoration Fund

	2009	2008
	£	£
Sir James and Lady Steel donation for lake rejuvenation	6,185	6,608
	<u>6,185</u>	<u>6,608</u>

	2008	New Designations	Utilised	Transfer	2009
	£	£	£	£	£
Gosforth Park Nature Reserve	6,608	652	(1,075)	-	6,185
James Alder Memorial fund	1,763	-	-	-	1,763
Ornithological Research	-	136	(1,418)	1,282	-
Dickinson Memorial Fund income	-	725	(725)	-	-
	<u>8,371</u>	<u>1,513</u>	<u>(3,218)</u>	<u>1,282</u>	<u>7,948</u>

17. Restricted Income Funds

	2008	New Designations	Utilised	Transfer	2009
	£	£	£	£	£
Archives	298	15	(700)	387	-
Library	-	119	(119)	-	-
Farnes Sandeels Research	1,159	-	-	-	1,159
Natural England	-	4,995	(4,995)	-	-
GPNR Fish stocking	1,339	-	(661)	-	1,339
	<u>2,796</u>	<u>5,129</u>	<u>(5,814)</u>	<u>387</u>	<u>2,498</u>

During the year, designations were made as following:

the receipt of £15 in respect of Archives from a member,

the library income was the receipt of a book sale,

money donated by Natural England for specific works at Gosforth Park Nature Reserve.

18. Endowment Funds

	2008	New Designations	Utilised	Transfer	2009
	£	£	£	£	£
Dickinson Memorial Fund – – capital	50,019	3,590	-	-	53,609
	<u>50,019</u>	<u>3,590</u>	<u>-</u>	<u>-</u>	<u>53,609</u>

The permanent endowment fund, the Dickinson Memorial Fund, was established in 2007 by the trustees to create a permanent visible memorial to a great supporter of the society. It was decided that all past and future gifts from the relatives of Tony Dickinson and the applied gift aid should be added to this fund. The income generated is to be designated to the Dickinson Memorial Income fund and expenditure offset for projects agreed by and at the discretion of the trustees.

INDEPENDENT EXAMINERS REPORT TO THE TRUSTEES
OF THE NATURAL HISTORY SOCIETY OF NORTHUMBRIA
YEAR ENDED 31st JULY 2009

I report on the financial information of the charity for the year ended 31 July 2009, which are set out on pages 218 to 228.

This report is made solely to the charity's trustees, as a body, in accordance with section 43(3) of the Charities Act 1993 ("the Act"). My examination has been undertaken so that I might state to the charity's trustees those matters I am required to state to them in an independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the charity's trustees as a body, for my examination, for this report, or for the opinions I have formed.

RESPECTIVE RESPONSIBILITIES OF TRUSTEES AND EXAMINER

As described on page 219 the charity's trustees are responsible for the preparation of the financial statements. The charity's trustees consider that an audit is not required for this year (under section 43(2) of the Act) and that an independent examination is required and the charity's income for the year was below £500,000.

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 financial statements presented with those records. It also includes consideration of any unusual items or disclosures in the financial statements, 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 financial statements.

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 -
 - (a) to keep accounting records in accordance with Section 41 of the Act; and
 - (b) to prepare financial statements 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 financial statements to be reached.

BULMAN HOUSE
REGENT CENTRE
GOSFORTH
NEWCASTLE UPON TYNE
NE3 3LS



G. J. Moore
Independent Examiner
Tait Walker LLP
Chartered Accountants

Date 23 February 2010.



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