

NEBBS News Note No. 15 (v8-Final)

29 October 2022

Compiled by NEBBS
Group coordinator

Sending Autumn Greetings and many thanks for your continuing involvement!

Here's a short, but important, NEBBS News Note.

Please read particularly the sections : 'Notes for surveyors' and especially 'Avian Influenza and guidance to NEBBS Group surveyors'.

Current (2022) NEBBS (regular) surveyors

Martin A Blick (south), Peter Collins (Whitburn to Roker), Jon Everett (Marsden), Daniel M Turner (Tynemouth, Whitley Bay, Druridge Bay), Russell Davis & Maurice Hepple (Blyth to Seaton Sluice), Julia Black (Newbiggin), Mo Dewar (Druridge Bay, Alnmouth to Boulmer), Pauline Gilbertson (Druridge Bay), Helen Wilson (Druridge Bay), Tom Patterson (Coquet to Birling Carrs), Rose Di Mascio (Embleton Bay / Newton), Jane Hardy (northern), Brian Ward (Ross Back Sands), George Moody (Holy Island), Malcolm Hutcheson (north); Barry & Jean Robinson (Embleton Bay / Newton – now retired).

Notes for surveyors (Avian Influenza update)

I have consulted with Professor Bob Furness (MacArthur Green) and Dr Francis Daunt (Centre for Ecology and Hydrology) in regard to UK policy in relation to HPAI. I sent them both a Draft version of this News Note for their comment and have therefore incorporated adjustments.

Professor Bob Furness comments (20 September 2022):

'... .. UK Government policy is that dead seabirds should not be touched because they may well be contaminated with highly pathogenic avian influenza virus. This does present a risk to people, not only through physical contact but potentially through breathing in virus particles in the air. So dead seabirds should be avoided and it is not recommended to bag them up to take to a freezer or to measure them. Over 400 people have died from avian influenza world-wide, so this risk should be taken seriously.'

'I appreciate that beached-bird surveys provide very valuable data on seabird mortality, and so it would be highly desirable to see these continue, but safety precautions are important and I would not advise handling dead birds at present. Having said that, it would be useful to note ring numbers from any dead seabirds to get a better understanding of the likely origins of dead birds, but preferably without picking birds up or handling them, and minimizing the risk of breathing in virus shed into the air. Kees Camphuysen's data on numbers of dead gannets on Dutch beaches show elevated numbers from April 2021 onwards, suggesting that the pandemic in seabirds probably started before any increased mortality at colonies was seen, and possibly occurred in gannets before it spread to great skuas – which is really interesting and might fit with the idea that great skuas acquired the infection from scavenging on freshly dead gannets at sea. But that remains speculation of course.'

Dr Francis Daunt comments (20 September 2022):

'I completely agree with Bob's take on this – we've been given very clear steer to advise members of the public not to touch corpses or ill birds.'

The above notes come from Scotland where NatureScot (formerly known as 'Scottish Natural Heritage') has issued general guidance which researchers are requested to follow or their various project funding will be cut.

I (NEBBS Group coordinator) have also consulted with Dr Jan A van Franeker (retired guest scientist at Wageningen Marine Research and international coordinator of the ‘Save the North Sea’ fulmar project),

Dr Jan A van Franeker general comments (25 September 2022):

Proposal for your text:

Notes for surveyors

Concern has been raised about presence of bird flu (avian influenza) among seabirds in relation to beached bird surveys with surveyors involved in wing tip clipping, checking for bands and the collection of birds. The UK government has made a ‘general advice to the general public’ to not touch dead or sick birds and be careful with dogs and children on beaches. Bird flu is unlikely to go away and not touching dead seabirds at all would be detrimental to many aspects of seabird research and monitoring. We believe that there are valid reasons to continue our work carefully. For participation, it is relevant to know that UK government states that the risk of human infection is very low. As always, volunteer participation remains a personal decision at personal responsibility.

For touching birds during the beached bird survey one may wear thin surgical gloves or similar. Concerning the collection of birds, for the time being, we only ask to collect fulmars. So far (Sep 2022) no cases of bird flu in fulmars have been found in the UK and Europe. For collection, it is recommended to use the double bag method as advised in the Dutch fulmar project and also by UK government for incidental removal of dead birds. See the YouTube film made by our Dutch colleagues on collecting dirty birds with clean hands <https://www.youtube.com/watch?v=QvzadnYkapM>.

Avian Influenza and guidance to NEBBS Group surveyors

Following the various advice above and my / our further discussions and investigations ...

... at this time, my advice to our Northeast England Beached Bird Surveys Group is:

- Handle and collect only fulmars and only those with complete abdomens (and please make your own decision about whether to do this – based on the advice given above and online guidance provided by NatureScot and DEFRA);
- Handle and collect no other species; Do not collect [even single, moulted] feathers;
- Do not cut off wing-tips. An alternative method of marking birds recorded and left on the beach is to use a paint spray;
- When handling fulmars please wear gloves or some other covering, also a face covering and double-bag the birds. Please make use of guidance in this video from Netherlands:
<https://www.youtube.com/watch?v=QvzadnYkapM>

If using gloves – please place them, after handling, in a separate bag and seal it for disposal in household waste. Use a separate pair of gloves for each bird. Clean your hands!

- If you do not wish to collect fulmars at this time, then please:
 - Accurately record the bird’s location (e.g. Ordnance Survey Grid Reference, location descriptions so the bird may be found, photographs), date and time of finding. Report these details asap to me (and Defra) so bird may be collected for Avian Influenza testing. For my benefit – is best to receive these details by email.
- Any fulmars collected at this time will be sent for AI testing with a request to return the bird to me if the test results are negative. This will allow further NEBBS fulmar research.
- Do not touch, using footwear, any birds on beach (otherwise the footwear should be disinfected). You may use a stick, or some other implement, to move the specimen but please dispose of this implement safely afterwards.
- Please continue to record leg-rings on beached birds – through use of gloves and face covering. There is no need to collect the rings, but ensure the ring details are accurately recorded in your notebook and let me know.
- As a general rule – please do not report your beached bird sightings to me via twitter, but use our forms and normal methods. Reports made via twitter run the risk of being lost and also being double-recorded at a national level – which we wish to avoid. Such twitter reporting can also be difficult to understand.

- There is very limited understanding and knowledge of Avian Influenza and its impact on wild birds and therefore many research questions on this topic remain unanswered and a common current response may be ‘we do not know the answer’.

Please continue to survey and record your finds regularly (monthly if at all possible), returning your completed forms and reports to the NEBBS Group Coordinator.

Article in July Newsletter (No. 352) of Tynemouth Photographic Society

Beach finds during June 2022 (article by Daniel M Turner)

While on a beached bird survey at Whitley Bay (22 June), I was surprised to find the remains of a Great Skua *Stercorarius skua* with its dark brown body, head, tail and wings along with white flashes on the outer primary feathers of each wing. Its two central tail feathers were slightly elongate compared to the rest of the tail and I had not realised this to be a feature of this species. This was a rare beached find in our region and I recorded some of the bird's measurements. The right wing was 407 mm in length from the carpal joint while the left wing was 397 mm. The culmen (bill length) was 49.1 mm and left tarsus roughly 68.6 mm (it had set stiffly, making it awkward to measure). These lengths were insufficient to confirm the sex of this large seabird whose bill and legs were black in colour. In Britain the Great Skua nests in Shetland, Orkney and north-western Scotland and this individual may have been unwell, unable to return home for the summer. Avian influenza H5N1 has taken a heavy toll in Scotland this year, particularly among Northern Gannets and Great Skuas, impacting a large proportion of the population of the latter at certain sites. From early June the disease began to spread onto the coast of north-eastern England. Handling with care was required and I wore gloves, but did not collect the specimen. It was not badly emaciated, so there may have been an alternative cause of death apart from starvation, a frequent factor in beached casualties.

On 24 June I was on my Druridge Bay stretch for another beached bird survey. The beach held a fair number of people, several of them with dogs. Among the bird remains found and collected were two Common Guillemots and an adult Sandwich Tern. A Carrion Crow had already begun to scavenge the tern's breast muscle as it washed in on the tide. One of the guillemots *Uria aalge* was of the bridled or spectacled variety and was not emaciated. Some green fluid seeped from its bill. It may have been a victim of bird flu and I triple bagged it for safer transportation and frozen storage. The tide also brought many small jellyfish (likely *Cyanea lamarckii*) ashore while on the sand close to the spectacled guillemot was a small 14-spot ladybird *Propylea quattuordecimpunctata*, yellow and black in colour.



Photo 2 (above): Great Skua, head and bill with mm ruler.
Photo 1 (left): Great Skua, right wing upper-side with mm ruler.
Whitley Bay Beach, 22 June 2022.



Photo 3 (first picture from left): Great Skua, tail upper-side and left tarsus, Whitley Bay beach, 22 June 2022.



Photo 4 (to immediate left): Common Guillemot (spectacled variety), freshly dead, Druridge Bay, 24 June 2022.

Student assistance at Dove Marine Laboratory, Cullercoats

During November 2019 to March 2022 the NEBBS Group Coordinator worked with and provided training to Newcastle University student Matthew Livsey during his Zoology / Biology degree course and projects. Matthew graduated in summer 2022 with a 2:1 in an MBIol qualification.

Fulmar Workshop, 2022, Den Helder / Texel

An autumn workshop is to take place in the Netherlands during 30 Sept to 5 Oct. In addition there will be a symposium to celebrate Dr Jan A van Franeker's work and retirement (at end of 2020), although he seems to be as active as ever. For various reasons I shall be unable to attend on this occasion.

Introductory survey, 29 April 2022, Druridge Bay

I led a survey on Friday, 29 April, on my beach stretch at Druridge Bay, introducing Jane Dixon, Jane Hardy and Richard Simpson to the methodology. It was sunny and the tide was low, with a light ENE breeze and haze in the sky to the south. Live birds included stonechat, swallow, meadow pipit, sandwich tern, linnet, gannet, sanderling and three gull sp. The main bird remains found comprised black-headed gull wings and a headless fulmar (found by Jane Hardy), although the head was close beside the corpse. I collected the fulmar which was our group's 141st found in northeast England since 2002 and suitable for laboratory analysis.



From left: Jane Hardy, Jane Dixon and Richard Simpson.

Selected recent papers and publications (which feature: marine life, plastics, pollution & litter)

Avery-Gomm, S., Provencher, J.F., Liboiron, M., Poon, F.E. & Smith, P.A. (2018, Feb). Plastic pollution in the Labrador Sea: An assessment using the seabird northern fulmar *Fulmarus glacialis* as a biological monitoring species. *Marine Pollution Bulletin*, PMID: 29055560 DOI: 10.1016/j.marpolbul.2017.10.001

Avery-Gomm, S., Valliant, M., Schacter, C.R., Robbins, K.F., Liboiron, M., Daoust P., Rios, L.M. & Jones, I.L. (2016). A study of wrecked Dovekies (*Alle alle*) in the western North Atlantic highlights the importance of using standardized methods to quantify plastic ingestion. *Marine*

Pollution Bulletin, Volume 113, Issues 1–2, 15 December 2016, Pages 75-80.

<https://doi.org/10.1016/j.marpolbul.2016.08.062>

Aytan, U., Özsandıkçı, U., Gönülal, O., Tonay, A.M., Dede, A. & Öztürk, A.A. (2022). Floating macro litter in the Finike (Anaximander) Seamounts and adjacent waters in the eastern Mediterranean. *J. Black Sea/Mediterranean Environment*, **Vol. 28**, No. 2: 282-299.

Bergmann, M., Collard, F., Fabres, J., Gabrielsen, G.W., Provencher, J.F., Rochman, C.M., van Sebille, E. & Tekman, M.B. (2022, April). Plastic pollution in the Arctic. *Nature Reviews Earth & Environment* **3**: 323-337. <https://doi.org/10.1038/s43017-022-00279-8>

Camphuysen, C.J. (2022). Mission accomplished: chronic North Sea oil pollution now at acceptable levels, with Common Guillemots as sentinels. *Seabird*: 34.

<http://www.seabirdgroup.org.uk/seabird-34>

Collard, F., Leconte, S., Danielsen, J., Halsband, C., Herzke, D., Harju, M., Tulatz, F., Gabrielsen, G.W. & Tarrow, A. (2022, September). Plastic ingestion and associated additives in Faroe Islands chicks of the Northern Fulmar *Fulmarus glacialis*. *Waterbird Biology and Security*.

<https://doi.org/10.1016/j.watbs.2022.100079>

Gacutan, J., Foulsham, E., Turnbull, J., Smith, S.D.A. & Clark, G.F. (2022). Mapping marine debris risk using expert elicitation, empirical data, and spatial modelling. *Environmental Science & Policy* **138**:44-55. <https://doi.org/10.1016/j.envsci.2022.09.017>

Gilmour, M., Borrelle, S., Elliott, L., Okawa, R. & Rodriguez, A. (2023). Conservation of Marine Birds. Chapter 6: Pollution - Lights, plastics, oil, and contaminants. Academic Press.

<https://doi.org/10.1016/B978-0-323-88539-3.00012-1>

Haseler, M., Schernewski, G., Balciunas, A., & Sabaliauskaite, V. (2018). Monitoring methods for large micro-and meso-litter and applications at Baltic beaches. *Journal of Coastal Conservation*, **22**(1), 27-50. <https://doi.org/10.1007/s11852-017-0497-5>

Lavers, J., de Jersey, A.M., Jones, N.R., Stewart, L., Charlton-Howard, H.S., Grant, M. & Woehler, E.J. (2022, November). Ingested plastics in beach-washed Fairy Prions *Pachyptila turtur* from Tasmania. *Marine Pollution Bulletin* **184**:114096. <https://doi.org/10.1016/j.marpolbul.2022.114096>

Leistenschneider, C., Le Bohec, C., Eisen, O., Houstin, A., Neff, S., Primpke, S., Zitterbart, D.P., Burkhardt-Holm, P. & Gerdts, G. (2022, August). No evidence of microplastic ingestion in emperor penguin chicks (*Aptenodytes forsteri*) from the Atka Bay colony (Dronning Maud Land, Antarctica). *Science of The Total Environment*: **Vol. 851 Part 2** (151126):158314.

<https://doi.org/10.1016/j.scitotenv.2022.158314>

Multisanti, C.R., Merola, C., Perugini, M., Aliko, V. & Faggio, C. (2022, Oct). Sentinel species selection for monitoring microplastic pollution: A review on one health approach. *Ecological Indicators*: **145**, (December 2022), 109587. <https://doi.org/10.1016/j.ecolind.2022.109587>

Rao, S., Nicastro, K., Casero, M., McQuaid, C.D. & Zardi, G.I. (2021, December). A 6-year survey of plastic ingestion by aquatic birds in southern Portugal. *Marine and Freshwater Research* **73**: 478-490. <https://doi.org/10.1071/MF21221>

Rellan, A.G., Ares, D.V., Brea, C.V., Lopez, A.F. & Bugallo, P.M.B. (2022). Sources, sinks and transformations of plastics in our oceans: Review, management strategies and modelling. *Science of The Total Environment* **854**(7):158745. <https://doi.org/10.1016/j.scitotenv.2022.158745>

Rosing-Asvid, A., Hedeholm, R., Arendt, K.E., Fort, J., Robertson, G.J., 2013. Winter diet of the little auk (*Alle alle*) in the Northwest Atlantic. *Polar Biol.* **36**, 1601–1608.

<http://dx.doi.org/10.1007/s00300-013-1379-4>.

Seuront, L., Zardi, G.I., Uguen, M., Bouchet, V.M.P., Delaeter, C., Henry, S., Spilmont, N. & Nicastro, K.R. (2022). A whale of a plastic tale: A plea for interdisciplinary studies to tackle micro- and nanoplastic pollution in the marine realm. *Science of The Total Environment: Vol 846*, 10 Nov 2022, 157187. <https://doi.org/10.1016/j.scitotenv.2022.157187>

Solomando, A., Pujol, F., Sureda, A. & Pinya, S. (2022, Oct). Evaluating the Presence of Marine Litter in Cetaceans Stranded in the Balearic Islands (Western Mediterranean Sea). *Biology 2022*, **11(10)**, 1468. <https://doi.org/10.3390/biology11101468>

Stenhouse, I.J., Montevecchi, W.A., 1996. Winter distribution and wrecks of little auks (dovekies) *Alle alle* in the northwest Atlantic. *Sula* 10, 219–228.

Technau, B., Unnsteinsdóttir, E.R., Schaafsma, F.L. & Kühn, S. (2022, August). Plastic and other anthropogenic debris in Arctic fox (*Vulpes lagopus*) faeces from Iceland. *Polar Biology*: **45**, 1403–1413. <https://doi.org/10.1007/s00300-022-03075-8>

Turner, A., Wallerstein, C., & Arnold, R. (2019). Identification, origin and characteristics of bio-bead microplastics from beaches in western Europe. *Science of the Total Environment*: **664**, 938-947. <https://doi.org/10.1016/j.scitotenv.2019.01.281>

Valente, T., Pelamatti, T., Avio, C.G., et. al. (2022). One is not enough: Monitoring microplastic ingestion by fish needs a multispecies approach. *Marine Pollution Bulletin* **184(15)**:114133. <https://doi.org/10.1016/j.marpolbul.2022.114133>

Wenneker, B., van Loon, W.M.G.M & Bakker, I. (2022, 31 August). Monitoring of pellets and mesoplastic fragments on Dutch beaches in 2021: a pilot study. Ministry of Infrastructure and Water Management, The Netherlands.

This report is available on: <https://puc.overheid.nl/rijkswaterstaat/>

The monitoring data are available on: <https://waterinfo-extra.rws.nl/>

With grateful thanks to our surveyors and supporters, also to the Dove Marine Laboratory (Cullercoats) and Dr Jan A van Franeker & Dr Suse Kühn (Wageningen Marine Research) and others in the Netherlands for their ongoing help. Thanks also to those housing bird freezers: Martin A Blick, Marian Martin and Helen Wilson; also to Professor Bob Furness, Dr Francis Daunt and Dr Jan A van Franeker for checking and commenting on draft versions (2, 4 and 6) of this NEBBS News Note; also to Maggie Sheddan for her comments, suggestions and our further discussions.

Kindest regards, Dan Turner (NEBBS Group coordinator).

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NEBBS Group web page: <https://www.nhsn.org.uk/north-east-beached-bird-surveys/>

Northeast England Beached Bird Surveys group

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Final update – 3 October 2023:

Bird flu (HPAI) Avian Influenza and the fulmar:

Concerning HPAI in the Fulmar, in week 38 of 2022 (mid-September), two cases of HPAI were identified in the Fulmar in the Highland region of Scotland (near Inverness). These are the first known positive cases in the Fulmar. A further Fulmar was tested from St Kilda and showed a negative result.

In Week 44 of 2022 – 1 fulmar was tested positive in Highland / Scotland

In Week 29 of 2023 – 1 fulmar was tested positive in Cumberland / Cumbria