

Northeast England Beached Bird Surveys Group

Regional Newsletter 22

2015, November



Distribution list

Northeast England volunteers Shetland beached bird survey coordinator
Southeast England volunteers Orkney beached bird survey coordinator
Southeast Scotland volunteers Jersey beached bird survey coordinators
Republic of Ireland Beached Bird Survey South West England Fulmar project

Newcastle University (Dove Marine Lab and others)
Dr Jan Andries van Franeker (International coordinator, Fulmar project)
Interested parties in NE England and elsewhere

Compiler / Editor

Daniel M Turner, Coordinator NEBBS Group, North Shields, England

The photograph, above, shows new beach surveyors Jon Green and Sally Stewart-Moore at Druridge Bay (Northumberland) on 17 May 2015.



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If you notice any errors or have ideas for future content then please get in touch.

Note for NEBBS Group surveyors

Please continue to return your monthly survey forms including ‘nil returns’ i.e. when no corpses are found during any monthly survey – so that we have a record of the exact length of shore that has been surveyed. If you have un-submitted reports for recent months please forward them for future inclusion in later more complete reports and papers.

Thanks again and sending good wishes to you all.

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Publications

- Codina-García, M., Militão, T., Moreno, J. & González-Solís, J. 2013. Plastic debris in Mediterranean seabirds. *Marine Pollution Bulletin*, 77: 220–226.
http://www.ub.edu/web/ub/en/menu_eines/noticies/2014/05/021.html and
<http://dx.doi.org/10.1016/j.marpolbul.2013.10.002>
- Egelkraut-Holtus, M., Knoop, J. & Ortlieb, M. 2015. Antimony in breakfast tea? Consequences going hand in hand with today's materials. *G.I.T Laboratory Journal* 1-2/2015, pages 26-27.
- Harris, M.P. 2014. Aging Atlantic Puffins *Fratercula arctica* in summer and winter. *Seabird* 27: 22-40.
- Harris, M.P., Wanless, S. & Jensen, J-K. 2014. When are Atlantic Puffins *Fratercula arctica* in the North Sea and around the Faroe Islands flightless? *Bird Study*, Vol 61, Part 2, May 2014, pp 182-192.
- Kühn, S., Bravo Rebolledo, E.L & van Franeker, J.A. 2015. Deleterious effects of litter on marine life. Pp 75-116 in: Bergmann M, Gutow L, Klages M (eds), *Marine Anthropogenic Litter*. Springer International Publishing.
http://link.springer.com/chapter/10.1007/978-3-319-16510-3_4
- Rodríguez, A., Rodríguez, B. & Nazaret Carrasco, M. 2012. High prevalence of parental delivery of plastic debris in Cory's shearwaters (*Calonectris diomedea*). *Mar. Pollut. Bull.* 64: 2219-2223. <http://dx.doi.org/10.1016/j.marpolbul.2012.06.011>
- Tanaka, K., Takada, H., Yamashita, R., Mizukawa, K., Fukuwaka, M-a. & Watanuki, Y. 2013. Accumulation of plastic-derived chemicals in tissues of seabirds ingesting marine plastics. *Mar. Pollut. Bull.* 69: 219-222.
<http://dx.doi.org/10.1016/j.marpolbul.2012.12.010>
- Trevail, A.M., Gabrielsen, G.W., Kühn, S & van Franeker, J.A. 2015. Elevated levels of ingested plastic in a high Arctic seabird, the northern fulmar (*Fulmarus glacialis*). Springer Link (open access).
<http://link.springer.com/article/10.1007/s00300-015-1657-4/fulltext.html>
- This paper records the findings from a sample of forty Svalbard fulmars and the plastics found within their stomachs.
- van Oyen, A., Egelkraut-Holtus, M., & van Franeker, J.A. 2015. Polymers found in seabirds' stomachs: Comprehensive analysis applying FTIR and EDX technology. *Spectroscopy Now*. John Wiley & Sons, Inc.
<http://www.spectroscopynow.com/details/advertorial/1506050c429/Shimadzu-EuropaPolymers-found-in-seabirds-stomachs-Comprehensive-analysis-applyi.html?&tzcheck=1>

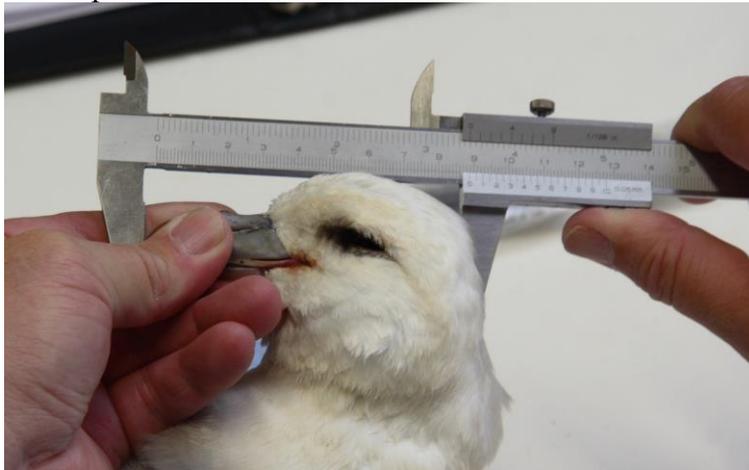
Fulmar Workshop 2015

Thirteenth Fulmar Workshop, 9-14 Oct 2015, IMARES lab, Texel, the Netherlands.

During our two laboratory days we worked on Cory's shearwaters from the Canary Islands and fulmars from Norway, Germany and the Faroes. I paired up to work with a researcher from Norway, Magdalene Langset, who had brought some fulmars with her from Northern Norway – long-line victims. I took four fulmar stomachs to the workshop – each from a bird found in Northeast England during 2014.

The work involved collection of tissue samples from most of the birds: breast muscle, subcutaneous fat, liver and intestinal fat – for future toxicology studies. In addition we carried out the usual external and internal examinations.

We were joined by three chemists, experts in plastic, from the companies Shimadzu and Carat in Germany. They brought instrumentation for the analysis and identification of chemical components from some of the plastic particles found within the bird stomachs. See page three of this Newsletter for examples of their papers: Egelkraut-Holtus, et al (2015) and van Oyen, et al (2015). Shimadzu made a poster presentation at the RAFA Symposium (Recent Advances in Food Analysis, Nov 3-6, 2015, Prague: <http://www.rafa2015.eu/>) on 'Heavy metals in plastic, recycling and environmental aspects'



Workshop photographs

Upper, left: Dr Jan A van Franeker measures head length of fulmar SOE-2015-001 (found 1 May 2015);

Lower, right: Fulmar SOE-2015-001 (from Cornwall) shows a good brood patch;

Upper, right: Samples taken from North Norwegian fulmar NNO-2014-016; stomach, intestinal fat, subcutaneous fat, breast muscle and liver.





Fulmar Workshop photographs

Left: Our workshop group during birding excursion day on Texel, Tuesday 13 October. From left (back): Pieter van Franeker, Elisa Bravo Rebolledo, Dr Jan Andries van Franeker, Markus Ortlieb, Marion Egelkraut-Holtus, Andrea Rodriguez Navarro, Susanne Kühn, Daniel Turner; (front): Dr Ewan Edwards and Magdalene Langset.

Right: Unsorted stomach contents of Northeast England fulmar NEE-2014-005. On the Left side of the petri dish is natural material while on the right side are plastics and non-natural material. This fulmar was found by surveyor Mo Dewar, 1 July 2014, Druridge Bay, Northumberland. Photo by D M Turner, 15 Oct 2015.

Dr Jan Andries van Franeker

Late on Tuesday 13 October our workshop leader and international fulmar project coordinator, Dr Jan Andries van Franeker, became poorly. Hospital examination found a serious tumor on his right kidney. He had an operation on 5 November for the removal of tumor and kidney. The surgery went well and the doctors are positive about Jan's progress ... he is now recovering. I hope you will all join me in wishing him well.

Workshop footnote

I remained on Texel for a further two nights after the workshop was completed. This was so I may learn more about the stomach flushing technique and analysis of guillemots. I spent valuable time, in the labs of NIOZ and IMARES, with Dr Kees Camphuysen and fulmar researcher Susanne Kühn during these two days.

Fulmar specimens NE England

Since our group began (2003) in northeast England, we have found almost ninety fulmars for full analysis. This is a great contribution and I send my **thanks to everyone** for your involvement. Certain other seabirds are also frozen for potential future analysis.

Northeast England Beached Bird Surveys group: New Surveyors

Stephen Wales started surveying at Druridge Bay (Northumberland) from March 2015. We completed a training survey together in February and Stephen told me of his employment as a support worker. Following many years with an interest in the sea, wildlife and birds he has found his forte and has commenced studies at Newcastle University in marine biology. He has performed volunteer cetacean surveys off the Northumberland coast, with the North East Cetacean Project, and in Mull over recent years ... now wishing to progress such interests.

We have two new surveyors from NIFCA (Northumberland Inshore Fisheries and Conservation Authority): Sally Stewart-Moore and Jon Green. I led an introductory survey with them on Druridge Bay in May 2015 and they have commenced monthly surveys on a stretch of this long bay. Sally has been with NIFCA since autumn 2014, following graduation from Southampton University. Jon has over twenty years of experience in his line of work here. His father was a coastguard and consequently the family travelled somewhat, but Jon is a coastal chap immersed in fishy experiences. They will be able to fit in surveys during gaps in their working day, while carrying out fish surveys. **They would like our group** to let them know of fishing-related fatalities please.

Martin Lightfoot accompanied me on a training survey in September 2015. Martin is semi-retired and worked in North Tyneside with youth groups as well as providing work advice, etc. He has trained with the Open University in special needs and management. A keen diver for twenty or more years, Martin has carried out underwater surveys for the Marine Conservation Society in Northeast England at the Farne Islands, Whitley Bay, Marsden, etc. On our training survey he brought his daughter's dog Poppy, an eleven year old Labrador. Martin is to survey from Whitburn Steel to Roker Pier.



Left: Stephen Wales with remains of a little auk, Druridge Bay, 20 February 2015
Middle: Sally Stewart-Moore, right wing of common gull, Druridge Bay, 17 May 2015
Right: Jon Green (NIFCA), left wing of common gull, Druridge Bay, 17 May 2015



Left: Martin Lightfoot with Poppy and a guillemot corpse, Druridge Bay, 25 Sept 2015
Middle: Two conjoined immature herring gull tail feathers, found by Stephen Wales, Druridge Bay, 20 February 2015
Right: Donna Zajac examines a first-summer herring gull, Druridge Bay, 31 May 2015

Donna Zajac has been surveying at Newbiggin Bay since mid-2014, but there were few beached bird finds. She is therefore to survey nearer her home, on the St Mary's Island to Seaton Sluice stretch. We had a delayed introductory survey together in May 2015.

Thank you very much - to all the newcomers and our longstanding regulars of course – your efforts are always greatly appreciated!

Fulmar analysis, Dove Marine Laboratory, 22 September 2015

Analysis proceeded on Tuesday 22 September at the Dove laboratory (Cullercoats), part of Newcastle University. We examined the four complete Northeast England fulmars collected in 2014, plus a gannet and a puffin. Full analysis was performed on the fulmars, internal and external, and their stomachs were extracted for transport to the laboratories of IMARES in the Netherlands. There were three adult females and an immature male. The reference numbers of these birds were NEE-2014-002 to -005. Fulmar NEE-2014-001 was incomplete (headless; internal organs missing) and in arrested moult of the outer primary feathers (perhaps due to poor body condition). Initial stomach analysis of these four fulmars was performed at the lab of IMARES on Thursday 15 October 2015, by researcher Susanne Kühn and myself. Internal examination showed the gannet (collected from Blyth South Beach, by Russell Davis on 9 July 2014) was a female bird (oviduct code 3) in third-year plumage, its stomach was collected and frozen; death was due to starvation. External analysis was performed on the puffin (collected by D M Turner on 19 June 2011 at Druridge Bay). Assisting, by recording, at the Dove Marine Lab, were Northeast England beached bird surveyors Barry Robinson and Russell Davis.



Above, left: NEBBS group member Barry Robinson records at the Dove Marine Laboratory during analysis of four Northeast England fulmars collected in 2014. Above, right: NEBBS group member Russell Davis with a third-year female gannet he found on Blyth South Beach in July 2014. Photos by D M Turner, 22 Sept 2015.



1. Stomachs extracted at Dove Lab, 22.09.15;
 2. IMARES researcher Suse Kühn views stomach contents of a Northeast England fulmar through binocular microscope, 15 Oct 2015;
 3. Contents of the gizzard from fulmar NEE-2014-003 during stomach flushing, 15 Oct 2015.
- Photos by D M Turner



Other News

Researcher Heidi Acampora is studying at the Galway-Mayo Institute of Technology (GMIT) to assess seabirds' potential as a monitoring tool for marine litter in Ireland. She has instigated the Republic of Ireland Beached Bird Survey. See here for their facebook group <https://www.facebook.com/republicofirelandbeachedbirdsurvey/timeline>

Researcher Alice Trevail is now studying (seabird ecology) at the University of Liverpool following a spell with fulmars in Svalbard with the Norwegian Polar Institute. She instigated the 'South West Fulmar Project' in SW England and has set up a facebook group for their involvement ... <https://www.facebook.com/southwestfulmars/timeline>

Dr Hideshige Takada (Tokyo University) and his work on plastics ... <http://www.oceanhealthindex.org/News/Microplastics>

Recording jellyfish for the Marine Conservation Society http://www.mcsuk.org/sightings/jellyfish.php?utm_source=marine%20conservation%20society%20&utm_medium=email&utm_campaign=6146187_GBBC%20-%20September%20-%20Martin&dm_i=104K,3NQFF,HD67WV,D5OWV,1

Steve Holliday

May I pass on my own and our group's many thanks to group volunteer Steve Holliday for his invaluable work at producing educational bird skulls these past few years. He has provided twenty for the NEBBS group, with another to come, and two for me. This is painstaking work. His wife, Julie, is thanked too for her lovely black ink handwriting on the labels. Steve is now retiring from this task.

Other recent papers

Hyder, K., Townhill, B., Anderson, L.G., Delany, J. & Pinnegar, J.K. 2015. Can citizen science contribute to the evidence-base that underpins marine policy? Marine Policy 59: 112-120. See this link <http://dx.doi.org/10.1016/j.marpol.2015.04.022>

Mardik F. Leopold, et al (2014): Exposing the grey seal as a major predator of harbour porpoises <http://rspb.royalsocietypublishing.org/content/282/1798/20142429>

van Franeker, J.A. & Law, K.L. 2015. Seabirds, gyres and global trends in plastic pollution. Environmental Pollution 203: 89-96. See this link <http://dx.doi.org/10.1016/j.envpol.2015.02.034>

Wilcox, C., van Sebille, E. & Hardesty, B.D. 2015. Threat of plastic pollution to seabirds is global, pervasive, and increasing. PNAS, Vol 112, No. 38, pages 11899-11904. See this link ... www.pnas.org/cgi/doi/10.1073/pnas.1502108112

Please see this link for a news item from Sally Stewart-Moore and Jon Green about their involvement (for NIFCA) with our beached bird survey project <http://www.nifca.gov.uk/wp-content/uploads/2015/11/NIFCA-News-October-15.pdf>

Plastics and seabirds: News Articles

Open University article – ‘New biodegradable materials could replace plastic bags’.

<http://www.open.ac.uk/research/main/news/biodegradable-materials-plastic-bags>

On The Guardian newspaper website – ‘After 60 million years of extreme living, seabirds are crashing’. <http://www.theguardian.com/environment/radical-conservation/2015/sep/22/after-60-million-years-of-extreme-living-seabirds-are-crashing>

Recent exhibition (*Tidelines*) involving Northeast England Beached Bird Surveys group: at the Old Low Light, North Shields Fish Quay:

<http://www.whitewingspublishing.co.uk/tidelines-exhibition/theboatoll.wordpress.com> (The Boat, at the Old Low Light)

‘Birds, beaches and boats’ by Daniel M Turner, **new book** to be published 12 Nov 2015:

<http://www.whitewingspublishing.co.uk/>

Useful Web Links -----

NEBBS Group web page <http://www.nhsn.ncl.ac.uk/news/cms/beached-bird-surveys/>

IMARES / Marine litter www.wageningenur.nl/plastics-fulmars

Final Notes

1. Please remember to collect any ringed auks (Guillemot, Razorbill and Puffin), any other ringed seabirds, all Little Auks (whatever the condition and state of completeness) and please continue to collect all Fulmars with complete abdomens for the litter monitoring project. Also collect any interesting specimens that are in good condition – for the Hancock Museum or our own collections. Also please collect all complete Kittiwakes and let Dan Turner know when you have specimens to be taken away.

2. Many thanks to Suse Kühn for checking the draft of this newsletter.

3. Thanks also to James Littlewood of the Natural History Society of Northumbria for storing this newsletter on our Group web page.

Beached bird and ‘Save the North Sea’ Fulmar project *Newsletter 22* (for Northeast England Beached Bird Surveys Group) Completed: 11 Nov 2015. Photos by D M Turner

Project supporters

