NEBBS Group

Regional Newsletter 23

November, 2016







Distribution list

Northeast England volunteers
Southeast England volunteers
Southeast Scotland volunteers
Southeast Scotland volunteers
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, Northern Fulmar project)
Interested parties in NE England and elsewhere

Compiler / Editor

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

Photographs, above: Left – Steve Lowe on Druridge Bay, 15 October 2016 Right – Anne Curtis with greylag goose, Druridge Bay, 18 September 2016



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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.

email: dan.m.turner@btinternet.com



Northeast England Fulmars 2016, those birds collected for lab analysis

NEE-	24.02.16	Warkworth	Gavin and Jane	Complete, quite fresh, initial external
2016-		shore	Dudley	examination (before freezing) indicated a
001				female older than one year.
NEE-	10.02.16	South Landing,	Anthony Hurd of	No tail or legs. Initial measure by DMT
2016-		Flamborough,	Yorkshire Wildlife	indicate female. Moderate oiling on
002		East Yorkshire	Living Seas Centre	lower abdomen. LL phase.
NEE-	14.04.16	Blyth beach,	Maurice Hepple	Fresh, thin, looks like first-year female at
2016-		near Glos.		first check before freezing. LL phase.
003		Lodge Farm		
-004		Yorkshire		Full finding details to come
-005		Yorkshire		Full finding details to come
NEE-	15.10.16	Druridge Bay	Steve Lowe	Initial examination of frozen bird
2016-				(23.11.16): gives the impression of a
006				female older than one year.



Keith Barrow with fulmar NEE-2016-002



Maurice Hepple with fulmar NEE-2016-003



Steve Lowe with fulmar NEE-2016-006

Keith Barrow is a volunteer with the East Yorkshire RSPB members group.

NEE-2016-003 was the sixth complete fulmar collected by Maurice since his first in 2006.

NEE-2016-006 was Steve Lowe's first fulmar find for the project.

I shall plan a session soon at Dove Marine Lab, Cullercoats, for analysis and stomach extraction.

Northeast England Beached Bird Surveys group: New Surveyors and interested folk

On Sunday 18 September (2016) I bought three project newcomers to our coastline for a training survey. I explained the procedure, recorded our findings and showed how to approach such a task. The new starters were Aurelie, Anne and Richard. Aurelie Bohan works with Northumberland Wildlife Trust as Living Seas Officer, an educational and conservation role. Her three-year contract will end soon and she has started to seek further funding for future work. Anne Curtis is an artist and writer living beside the shore at Whitburn. Richard Curtis is retired from the police force. There had been an event at Anne's home in May, with members of the public invited to spend an afternoon learning to paint in the style of Eric Ennion (1900 - 1981) a famous bird artist of the Northumberland coast. Anne borrowed a few of our taxidermy specimens for the event which was organized as part of a project to remember Eric's life and art. During our training survey Aurelie and I collected a bag of litter while we also noted several foil barbecue trays left on the sand. We also gathered three yellow plastic tags from lobster pots as migrating swallows and pipits passed and a pair of stonechats showed nicely. Richard found the furry leg from a rabbit along with a few bones and feathers from a likely adult kittiwake or black-headed gull. He also spied two lion's mane jellyfish as I gathered feathers moulted by coastal species. Anne made the substantial find of a rather fresh and complete greylag goose at our survey end point. This latter specimen was collected and is currently frozen.

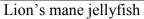
Saturday 15 October (2016) brought Steve Lowe and me together on the Northumberland coast. Steve is Head of Conservation at the Northumberland Wildlife Trust and is to join our beached bird survey group. I showed Steve how to conduct a beached bird survey, what to look for, where and what to record. Our main findings on this introductory survey were an immature guillemot, a group of redwing feathers from left wing and the remains of an adult razorbill from which the right wing was later frozen. We collected other moulted feathers, a few industrial plastic granules and two lobster pot tags. As we surveyed we recorded live birds including carrion crows, pied wagtail, waders, rock pipit, gulls and a calling skylark while many goldcrests were present amongst the trees just inshore. I collected a piece of dark seaweed from the waterline, identified as sea oak *Halidrys siliquosa* at home where it was dried and bagged. Steve has a particular interest in the coast and marine life.

Anna Cucknell (RSPB Marine Conservation Officer of the North East, Yorkshire and the Humber) accompanied me on Thursday 17 November (2016). She had come to learn about the beached bird surveys and fulmar project in order to enhance her knowledge. Together we carried out a beached bird survey on the Northumberland coast and made several discoveries. Anna's finds included a delicate little auk, a kittiwake wing and the remains of a great black-backed gull. We collected some of the day's specimens which I later checked, photographed and stored for the future. It was a productive survey and we discussed the various projects and methodologies as the day progressed. Anna had studied marine biology at Newcastle University, spending time with the Dove Marine Laboratory at Cullercoats. Her current role with the RSPB is part-time and runs during the maternity leave of another staff member. She has another part-time role working with an organisation called Marine Conservation Research which owns research vessel *Song of the Whale* and carries out surveys at sea. Due to her experience with marine mammals, her main area of interest, Anna is now qualified as a Marine Acoustic Scientist and able to monitor life below the waves by listening to the sounds such life makes.

Thank you very much - to all the newcomers, interested parties and our longstanding regulars of course – your involvement is greatly appreciated!









All three photos: 18 September 2016

Above left: Richard & Anne Curtis with Aurelie Bohan during the survey.



Steve Lowe and guillemot



All three photos:
Druridge Bay, Northumberland,

Redwing, left wing remains, collected.

15 October 2016



Razorbill, adult (W+2).

The remains were taken from the beach for examination and the right wing was retained to freeze.





Left: Anna Cucknell with little auk. Above: Immature kittiwake, left wing. Right: Anna with great black-backed gull.

All three photos: Druridge Bay, Northumberland, 17 November 2016



Jan van Franeker, 2016 report (Marine biologist and international coordinator of the fulmar project)

This year has been a rollercoaster for me. On the last day of our 2015 Fulmar workshop on Texel, I was knocked out by what proved to be a large tumor on my kidney that had ruptured and started bleeding. Without being able to say goodbye to the last workshop guests like Dan Turner I had to go straight to the hospital. Really serious business. After three weeks in hospital, on 5th Nov I was finally operated and my right kidney and tumor were completely removed. I appear to be lucky though, as on scans and during operation no signs of spreading of the tumor had been found. That meant I could start recovery without medication, chemotherapy or radiation. I started working half days from home fairly quickly, but it took me to April 2016 to fully return to work. The body really gets a blow from this sort of mishap. Meanwhile my institute had moved from Texel to Den Helder on the mainland. To reduce loss of time and energy on commuting, I now travel to Den Helder only 2 to 3 days a week, and work the remainder of the week from home.

Concerning the kidney story: life is well possible on just one kidney, and I enjoy my beer and other goodies of life again in full. So far, all controls remain good! All that remains now is a huge scar on my belly, and an intense feeling of a miracle recovery. Meanwhile I've worked on fulmars on Orkney for a week, and did workgroups and meetings on Antarctic research of several weeks in Italy in June, and in Hobart Tasmania Australia in October. At work we've finished a synthesis of North Sea wide fulmar monitoring research up to 2015, which will be published by OSPAR somewhere in 2017. On our monitoring work in the Netherlands, the report updating our time series to 2015 has been completed and will soon be published on our plastic dossier. For the first time since many years, in our data we are seeing a significant decline of plastics in the fulmar stomachs, both of industrial granules and of consumer plastic debris (download full report from www.wur.eu/plastics-fulmars). Clearly we hope that that trend will go on! Dan Turner has already been asking about our next international fulmar workshop, and I am looking forward to that too! Likely it will be late January or in February 2017.

Most of my time I have to spend behind my laptop nowadays. Only too infrequently I walk the beaches. But last Friday, a friend reported some fulmars on the coast, so I went out too! So good to be out, enjoy the weather, the birds and things in the tideline. I did find a fulmar, a dark coloured one from the high arctic, but unfortunately all inner parts had been scavenged. A sad guillemot was sitting in the foam in the tideline. For first time in my life I found a fully fresh dead little auk, which of course was collected for stomach inspection and maybe mounting of the skin. For a long time, I also enjoyed watching a dense group of sanderlings. By some pictures you must feel familiar with the outdoor experience. After my year 2016, I appreciate it even more!



Little auk, Texel; photo by JAF



Dark-phase fulmar; photo by JAF



Guillemot, Texel; photo by JAF





Sanderlings on the shoreline, Texel, 4 Nov 2016.

Photographs by Dr Jan Andries van Franeker.

See our institutional web dossiers on the fulmar work and Antarctica.

Marine Litter: www.wur.eu/plastics-fulmars
Antarctica: http://www.wur.eu/antarctica

By the way, my institute not only changed its location: in September we also changed name from

IMARES to 'Wageningen Marine Research'

Jan van Franeker Oudeschild, Texel, The Netherlands, 9 Nov 2016







Jan demonstrates analysis on north Norwegian fulmar NNO-2012-001; then discusses with Magdalene (from Norway). Jan's brother Pieter looks for birds at De Slufter, Texel. Photos: Dan Turner, Feb 2013.

Fulmar study in United Nations report

News from the Fulmar project international coordinator, Dr Jan Andries van Franker ...

UNEP, the United Nations Environmental Program, launched a new report on marine plastics in relation to its meeting in Nairobi in late May 2016. The fulmar study is regularly mentioned, and gets several pages of full attention in a chapter on examples of indicators and trends. Such usage of our work in global policy planning should be a confirmation to all our helpers that all their efforts are really worthwhile. To download the full report or just these specific fulmar pages, please pay a visit to our dossier, where the UNEP report is [the most recent message]. It may be worthwhile to also scroll through earlier news items.

Visit: www.wur.eu/plastics-fulmars

First northern fulmar sighting in the southern hemisphere

We know something about the northern fulmar, but up until recently they have been known as a bird present only in the northern hemisphere. Well, here's the first recorded sighting of a northern fulmar in the southern hemisphere ... off the coast of New Zealand on 9 February 2014. Please take a look http://blog.tepapa.govt.nz/2016/03/15/a-new-bird-for-new-zealand-northern-fulmar/ (This news has been received via a chain from Ricardo Palma, Jens-Kjeld Jensen, Bernard Zonfrillo and Jan A van Franeker).

Donation of skull and bone collection

At the end of February (2016) I received a wonderful donation of a skull and bone collection from Clare Friend. There are other beach finds included and some from inland. This will be used for educational purposes during bird displays at different locations. Clare was inspired by one of her work colleagues, Neil Anderson, to start a collection during her visits to beaches in the 1980s while exercising her collie. Both Neil and Clare are keen ornithologists. Some restorative work was performed on the collection by beached bird group member Steve Holliday, who also prepared labels for the specimens. The photograph shows (from left) Neil, Clare and Steve with part of the collection.



Handing over the collection, 29 February 2016.

Clare's collection had been with Steve for a few weeks while he pieced some items together after a small accident. Species involved include fulmar, pied wagtail, razorbill, gannet, magpie and oystercatcher. Other creatures (found dead) that featured in this handover were adder, mole, common shrew, rabbit, masked crab, sea urchin, mermaid's purse, sea potato and cuttlefish. Neil and Clare had worked together for the Health and Safety Executive. Neil told me that black-headed gull tasted like woodpigeon, having sampled such a delicacy when he was studying at the Ravenglass (Cumbria) gull colony many years ago.

Neil wrote a poem about our meeting to hand over the collection

The Collection

an itinerant apothecary's wares

Nestling neatly in the small-drawed cabinet

Each cranium carefully collected, cleaned and catalogued by Claire

Or painstakingly pieced together by Steve

De- fleshed naturally by scavenging insects,

not bleached by desert sun

or bitter arctic wind and wave,

each skull slightly off-white in colour,

not antibiotic stained but not pure and gleaming.

The smaller birds so fragile and translucent

As this is a poem I suppose

I should be talking of the sights seen by the eyes that once filled these empty sockets or the experiences and memories of the small brains once housed in the crania and making metaphors for the human condition.

But I'm just regarding four people looking at some bones in drawers

No time for comparative anatomy,

Or speculative psychology

Pour me another cup of tea

And I won't muse upon mortality

Each specimen accurately labelled with its collection date and place,

Small cardboard tombstones for an avian ossuary.

But we're seeing not just a catacomb for birds,

Memories of beach walks

always along the strandline, best for collecting carrion

An old haversack with a Diver's head and feet protruding

The Skeleton of an adder

What a lot of bones a snake has

The tiny body of a wren

Mistaken for leaf litter in a country church

Fetishistic collection of dead owls from the roadside

And the shocked expressions of the young, female hitchhikers when they realised those bags contained dead birds

and The Smiths were on the car stereo

By Neil Anderson (2016)







From Clare Friend collection: Masked crab; kittiwake and sandwich tern skulls. Photos: March 2016

Exhibitions (organised and attended by D M Turner)

At the Old Low Light, North Shields fish quay (featuring birds and artefacts from the collections of the Northeast England Beached Bird Surveys group, Clare Friend and Daniel Turner):

2016	February,	15-16	Seabird exhibits
	March,	21-22	Coastal finds of Northeast England
	April,	18-19	Coastal finds of Northeast England
	May,	12-14	Coastal finds of Northeast England
	Aug,	16	Beach and sea treasures from the coast
	Oct,	24-25	Fulmar project and beached / local seabirds and
			coastal birds – alongside Sally Madge (Still Life) exhibition
	Nov,	25	Seabird and coast display, fulmar project: for Cullercoats
			Primary School

At North Shields fish quay, 17 July 2016, Tynemouth lifeboat day: a display of mainly sea and coastal birds.

At the Dove Marine Laboratory, Newcastle University, 10 September 2016, Heritage Open Day: a display about the fulmar project and beached bird surveys in Northeast England.

Presentations: October 27, 'Talking Rubbish', open evening for *Still Life* exhibition. Nov 25, beached bird and fulmar project talk to Cullercoats Primary School

'Strange Harvest' exhibition, Dr Marianne Wilde

Dr Wilde is an artist and Associate Researcher from Fine Art in the School of Arts and Cultures at Newcastle University. Her exhibition 'Strange Harvest' was at the Old Low Light (N Shields) from late January to early May. It was inspired by the extinction of the Great Auk and the possibilities of using ancient DNA to reintroduce extinct species. Another aspect of her exhibition 'A bird in the hand' was at the Great North Museum: Hancock from 15 January to 10 April and featured a gannet found by one of our northeast England beached bird group surveyors.

'Still Life' exhibition, 1 Oct 2016 to 27 Jan 2017

At the Old Low Light, N Shields fish quay, an exhibition by Sally Madge, daily 10 am to 4 pm. Sally's exhibition weaves narratives around the plight of seabirds and their endeavours to adjust to changes in the physical environment caused by human activity and the resulting devastating global processes. Humour and pathos as well as a touch of surrealism are combined in visual scenarios using a range of objects, materials and media, including preserved sea birds, plastic beach debris, children's action figures and scale models as well as performance on film.

Viewers are invited to develop the story lines implicit in the work.

Some further details of the above work and other entries about beached bird surveys in Northeast England may be seen here:

http://www.whitewingspublishing.co.uk/beached-bird-diary-2016/theboatoll.wordpress.com (The Boat, at the Old Low Light)

Photos from some of the exhibitions





Above: Dove Marine Lab, 10 Sept.

Left: Old Low Light, 12 May. Part of display showing some of the Clare Friend collection.



Above: Gannet (a beach find by Russell Davis) on display in Great North Museum: Hancock as part of the '*Bird in the Hand*' exhibition by Dr M Wilde.

In memoriam - Edward Soldaat

We have lost a great friend and associate ... Edward Soldaat, from the Netherlands. Edward attended the international fulmar workshops on Texel for many years and I met and worked with him there on a good number of occasions. He worked with and trained several students and researchers during his attendances at the workshops. He had developed a wonderful collection of seabird bones and skulls and ran a comprehensive website on Seabird Osteology. He was a very knowledgeable, friendly and skilful man; a sad and early loss. May he rest in peace (Edward Soldaat: 19 March 1953 – 29 March 2016).



Edward Soldaat at Fulmar workshop 2011 on Texel, the Netherlands.



During the workshop birding day on Texel, 14 March 2010, Edward spotted a dead Brent goose and quickly went to collect it. He brought it back to show us all. Also in the picture, from left, are: Pieter van Franeker, Rob van Bemmelen and Javier Moreno (University of Barcelona).

Edward's website may be found here ... www.shearwater.nl

Selected (mostly) recent papers and publications

Acampora, H., Schuyler, Q.A., Townsend, K.A. & Hardesty, B.D. (2013). Comparing plastic ingestion between juvenile and adult stranded Short-tailed Shearwaters (*Puffinus tenuirostris*) in Eastern Australia. Marine Pollution Bulletin 78(1-2).

Acampora, H., Lyashevska, O., van Francker, J.A. & O'Connor, I. (2016, August). The use of beached bird surveys for marine plastic litter monitoring in Ireland. Marine environmental research 120. Published online.

Amélineau, F., Bonnet, D., Heitz, O. & Grémillet, D. (2016, September). Microplastic pollution in the Greenland Sea: Background levels and selective contamination of planktivorous diving seabirds. Environmental Pollution.

Allen, R., Jarvis, D., Sayer, S. & Mills, C. (2012) Entanglement of grey seals Halichoerus grypus at a haul out site in Cornwall, UK. Marine Pollution Bulletin 64: 2815-2819.

Avery-Gomm, S, et al. (2016, September). 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. http://dx.doi.org/10.1016/j.marpolbul.2016.08.062

Carpenter, E.J., Anderson, S.J., Harvey, J.R. & Peck, B.B. (1972, December). Polystyrene Spherules in Coastal Waters. Science 178(4062):749-50.

Claessens, M., De Meester, S., van Landuyt, L., De Clerck, K. & Janssen, C.R. (2011). Occurrence and distribution of microplastics in marine sediments along the Belgian coast. Marine Pollution Bulletin 62(10): 2199-2204.

Duis, K. & Coors, A. (2016). Microplastics in the aquatic and terrestrial environment: sources (with a specific focus on personal care products), fate and effects. Environ Sci Eur (2016) 28:2. Published online.

Fischer, E.K., Paglialonga, L., Czech, E. & Tamminga, M. (2016, April). Microplastic pollution in lakes and lake shoreline sediments - A case study on Lake Bolsena and Lake Chiusi (central Italy). Environmental Pollution 213: 648-657.

Frias, J.P.G.L., Antunes, J.C. & Sobral P. (2013). Local marine litter survey - A case study in Alcobaça municipality, Portugal. Journal of Integrated Coastal Zone Management 13(2):169-179. http://www.aprh.pt/rgci/pdf/rgci-395_Frias.pdf

Galgani, F., Claro, F., Depledge, M. & Fossi, C. (2014, Sept). Monitoring the impact of litter in large vertebrates in the Mediterranean Sea within the European Marine Strategy Framework Directive (MSFD): constraints, specificities and recommendations. Marine Environmental Research, September 2014, Volume 100, Pages 3–9. http://dx.doi.org/10.1016/j.marenvres.2014.02.003

Jawad L.A., Humborstad O.B. and Fjelldal P.G. (2016, October). Record of Litter Ingestion by Cod (*Gadus morhua*) Collected from Masfjorden, Western Norway. International Journal of Marine Science, 6(41): 1-4 (doi: 10.5376/ijms.2016.06.0041)

Kain, E.C., Lavers, J.L., Berg, C.J., Raine, A.F. & Bond, A.L. (2016, September). Plastic ingestion by Newell's (*Puffinus newelli*) and wedge-tailed shearwaters (*Ardenna pacifica*) in Hawaii. Environmental Science and Pollution Research.

Lavers, J.I. & Bond, A.L. (2016, June). Ingested plastic as a route for trace metals in Laysan Albatross (Phoebastria immutabilis) and Bonin Petrel (Pterodroma hypoleuca) from Midway Atoll. Marine Pollution Bulletin. Published online.

Li, J., Qu, X., Su, L., et al. (2016, July). Microplastics in mussels along the coastal waters of China. Environmental Pollution 214:177-184.

Liboiron, M., Liboiron, F., Wells, E., et al. (2016, October). Low plastic ingestion rate in Atlantic cod (Gadus morhua) from Newfoundland destined for human consumption collected through citizen science methods. Marine Pollution Bulletin (http://dx.doi.org/10.1016/j.marpolbul.2016.10.043). Note: In Press, corrected proofs are underway.

Provencher, J.F., Bond, A.L., Avery-Gomm, S., Borrelle, S.B., Bravo Rebolledo, E.L., Hammer, S., Kühn, S., Lavers, J.L., Mallory, M.L., Trevail, A. & van Franeker, J.A. (2016). Quantifying ingested debris in marine megafauna: a review and recommendations for standardization.. Analytical Methods xx: xx-xx (online) http://dx.doi.org/10.1039/C6AY02419J (open access)

Ouinn, L.R., Meharg, A.A., van Francker, J.A., Graham, I.M. & Thompson P.M. (2016). Validating the use of intrinsic markers in body feathers to identify inter-individual differences in non-breeding areas of northern fulmars. Marine Biology 16: 1-12. http://dx.doi.org/10.1007/s00227-016-2822-1

Rochman, C.M., Browne, M.A., Underwood, A.J., van Franeker, J.A., Thompson, R.C. & Amaral-Zettler, L. (2016). The ecological impacts of marine debris: unraveling the demonstrated evidence from what is perceived. Ecology 97: 302–312. http://www.esajournals.org/doi/pdf/10.1890/14-2070.1.

Sarafraz, J., Radjabizadeh, M. & Kamrani, E. (2016, Feb). The preliminary assessment of abundance and composition of marine beach debris in the northern Persian Gulf, Bandar Abbas City, Iran. Journal of the Marine Biological Association of the UK 96(01):131-135

Shim, W.J., et al. (2016, October). Identification and quantification of microplastics using Nile Red staining. Marine Pollution Bulletin (DOI: 10.1016/j.marpolbul.2016.10.049).

Unger, B., Bravo Rebolledo, E.L., et al. (2016, August). Large amounts of marine debris found in sperm whales stranded along the North Sea coast in early 2016. Marine Pollution Bulletin, http://dx.doi.org/10.1016/j.marpolbul.2016.08.027

Van Franeker, J.A., Kühn, S. & Bravo Rebolledo, E.L. (2016). Fulmar Litter EcoQO monitoring in the Netherlands - Update 2015. Wageningen Marine Research Report C091/16, RWS Centrale Informatievoorziening BM 16.12. Den Helder, 50pp. http://edepot.wur.nl/393794

Vermeiren, P., Munoz, C.C. & Ikejima, Ko. (2016, October). Sources and sinks of plastic debris in estuaries: A conceptual model integrating biological, physical and chemical distribution mechanisms. Marine Pollution Bulletin (DOI: 10.1016/j.marpolbul.2016.10.002).

The Telegraph: Cotton bud sticks to be made from paper to help save sea life:

http://www.telegraph.co.uk/news/earth/environment/12183883/Cotton-bud-sticks-to-be-made-frompaper-help-save-sealife.html

The Guardian: England plastic bag usage drops 85% since 5p charge introduced: https://www.theguardian.com/environment/2016/jul/30/england-plastic-bag-usage-drops-85-per-centsince-5p-charged-introduced

The Guardian: UK government to ban microbeads from cosmetics by end of 2017: https://www.theguardian.com/environment/2016/sep/02/uk-government-to-ban-microbeads-fromcosmetics-by-end-of-2017

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Savoca, M.S., Wohlfeil, M.E., Ebeler, S.E. & Nevitt, G.A. (2016). Marine plastic debris emits a keystone infochemical for olfactory foraging seabirds. Science Advances, 2, e1600395 (2016). http://www.bbc.co.uk/news/science-environment-37926733

Response on the above paper by Dr Jan A van Francker ... (Note. DMS: dimethyl sulfide)

I'm not very convinced by this paper. Clearly it is a nice hypothesis, but looking at the data on which it is based it is highly speculative without good evidence.

- The level of use of odour between tubenosed seabirds is not as black and white as they suggest. There have been only few experiments on this, and the yes or no classification in this paper is really over the top.
- Also the estimated frequencies of occurrence of ingested plastic in a species is poor incomplete data: yes species like Antarctic Petrel and Snow Petrel eat little plastics, but that has nothing to do with DMS or burrow nesting. Plastics simply are rare in their distributional range (Southern Ocean sea-ice areas).
- DMS is locally strongly released by phytoplankton when grazed by swarms of zooplankton. Not likely this intense grazing with DMS release happens to biofilms on plastics. Their experimental finding of DMS on plastic biofilms may come from damaging the biofilm in the sampling and laboratory procedures.
- Finally, although the authors wisely do not claim it explicitly, it would be unlikely that tubenoses select plastic particles because of their individual DMS smell.

There may be 'accidental' correlations though. Possibly in some cases DMS is more strongly produced in frontal areas that stimulate algal blooms which in turn attract zooplankton swarms and next seabirds (through DMS OR otherwise); such frontal systems can also concentrate floating litter. But at best, one then has a correlation, not a cause and effect relation through DMS.

All this may not be so important, if the authors had not concluded their paper with the suggestion to include (increase) anti-fouling agents in consumer plastics. All known anti-fouling substances are seriously toxic and it is a bad idea to increase their abundance in plastics and environment!

The latest on fulmars from the Netherlands i.e. van Francker, Kühn & Bravo Rebolledo (2016)

Message from Dr. Jan van Franeker: 'The important message in [this] report is that over the past 10 years, stomachs of beached Northern Fulmars in the Netherlands show a slow decline in both industrial plastic pellets and in plastic consumer debris. The tendency was already present before, but now the trend is statistically significant. The changes are slow though, and the current situation is still far away from the ecological quality objectives for the North Sea. Nevertheless this change is a positive message! Our monitoring research is possible only thanks to the dedicated support by many, many volunteers, which we hope continues with everyone's help until our seas are clean.'

Other news

New NEBBS group logo ... with curlew feather and group name. Created by Heather Macpherson, graphic designer with Raspberry Creative Type. I hope you like it – see top of front page.

New books

- a) 'Kisses from above: A collection of short stories and poems' by John Gardham Lowe. Published November 2016 by Steve Lowe (NEBBS group surveyor). The book features writings by Steve's late father, with a focus on the coast.
- a) 'Life on the Tyne' by Daniel Turner published 29 October 2016 by White Wings Publishing. See www.whitewingspublishing.co.uk

read more about City to Sea here: http://www.citytosea.org.uk/about-page/ Web Links (various)

A local environmental charity known as Fidra: http://www.fidra.org.uk/

A report from the Sunday Herald newspaper in which Jan van Francker discusses his research: http://www.heraldscotland.com/news/12408582.Most seabirds are filled with plastic waste Shocki ng study supports demands for charges on disposable carrier bags/

Solar-powered vacuum could suck up 24,000 tons of ocean plastic every year (Eco Watch): http://ecowatch.com/2016/02/19/seavax-vacuum-ocean-plastic/

Comments on this from Jan van Franeker: 'As we demonstrated in the van Franeker & Law article (2015), the [garbage] patches concentrate only a tiny fraction of floating plastics, and most plastic has gone out of reach before reaching the patch or quickly drops out of the patch. So, in my opinion first priority should be actions to reduce single use of plastic materials, proper waste disposal treatment and recycling, and only next any clean-up of lost items should be as close to the source as possible (dump-sites, urban street waste, sewage systems, rivers, river-mouths, bays, beaches).'

'Up to 90% of the world's seabirds have plastic in their guts' (online article): http://www.birdsontheedge.org/2015/09/02/up-to-90-of-the-worlds-seabirds-have-plastic-in-their-guts/

NEBBS Group web page http://www.nhsn.ncl.ac.uk/activities/conservation-research/beached-birds/

Wageningen Marine Research / Marine litter www.wur.eu/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 Great North Museum: Hancock or our own collections. Also please collect all complete Kittiwakes and let me know when you have such specimens to be taken away.
- 2. Many thanks to Dr Jan A. van Francker for checking the draft of this newsletter.
- 3. Thanks also to the Natural History Society of Northumbria for storing this newsletter on our NEBBS group web page. (This may not occur until Feb 2017: staff change)

Beached bird and 'Save the North Sea' Fulmar project Newsletter 23 (for Northeast England Beached Bird Surveys Group) Completed: 28 Nov 2016. Photographs by D M Turner unless stated otherwise.

Supporters of the Northeast England Beached Bird Surveys group









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