NEWSLETTER 142

October 2019

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News

Puffarazzi: Call for old photos of Puffins carrying fish

Ellie Owen, Royal Society for the Protection of Birds (RSPB)

The RSPB Centre for Conservation Science are collecting photos of **Atlantic Puffins** (*Fratercula arctica*) carrying fish and are making a call for old photos that may be tucked away in photo albums or on hard drives. The Puffarazzi project started in 2017 and aimed to map the geographic variation in Puffin diet in that year. The project is attempting something new this summer by also aiming to collect older photos to try to piece together a record of puffin diet over the past decades around the coast of the UK and Ireland. So far, the team are encouraged by a huge number of submissions (2,500 pictures so far; 1994 the oldest picture) with promising signs that for some colonies there is already a good sample spanning more than 10 years. However, they still need more pictures to make the study a success and are urging anyone who has a photo to go to upload them along with information on where and when the picture was taken. Print or slide images can be submitted too by taking a photo of the photo or the projected image using a digital camera. Submission closes in August 2020. To follow the project on Twitter, search for the hashtag **#Puffarazzi**.

A Puffarazzi image from Skomer 2012, submitted by Ursula Franklin.

Notice of the 54th Seabird Group AGM

The 54th AGM will take place at **2pm on Saturday 16th November 2019** during the **Scottish Ringers Conference** at the Carrbridge Hotel, Carrbridge PH23 3AB.

We have received nominations for the two upcoming vacancies on the Seabird Group executive committee (Chair and Secretary). If anyone is interested in either post please contact current Secretary Holly Kirk (secretary@seabirdgroup.org.uk) or current Chair Steve Votier (s.c.votier@exeter.ac.uk). Nominations will close on 27th October.

The Seabird Group executive committee is considering the option of providing electronic AGMs in the future (e.g. via Zoom video and telephone conferencing). This is in line with general changes to business and research practises, with a focus on reduced carbon footprints and increased accessibility. The Seabird Group committee believes that moving towards electronic meetings would be more inclusive for our membership across the UK and Europe. We are currently investigating different options and models, and would appreciate the thoughts of our members on this topic.

Research and Census Grants

A reminder that the deadline for the next round of research grants is **31st October**. We accept applications seeking up to £500 for seabird research across the globe. Please go to the grants page on the website for more information and to download an application form.

Applications are still open to fund National Seabird Census survey work (towards Seabirds Count). We have census funds available, and there is no limit on the amount applied for. As part of our support for Seabirds Count, to date we have funded a range of census grants between the value of £300 and £2700.

Grant Reports

Expedition SIMMER DIM 2019 – Royal Air Force Ornithological Society (RAFOS) expedition to Mainland Shetland, June 2019 (Seabirds Count, Year 2)

Keith Cowieson, RAFOS Field Activities Liaison Officer

Following on from last year's very successful RAFOS Orkney foray in support of JNCC's Seabirds Count (Cowieson, 2018), Daisy Burnell, the overall JNCC Seabirds Count coordinator, and Martin Schofield the Regional Coordinator for the Shetland Isles, somewhat 'upped-the-ante' for 2019, and gave us the rather more challenging task of surveying vast inland tracts of Mainland Shetland, concentrating on inland breeding skua and gulls. For self-evident reasons, survey organisers often have difficulty in getting coverage of the remote, sparsely-populated peatlands of Northmavine and the Western Mainland, so it was both a privilege and pleasure to be afforded the opportunity to go and tramp the peat bog and peat hag-dominated landscape with the express intention of finding out how many skua and gull breeding territories they contained.

Northmavine survey area from Ronas Hill – Keith Cowieson

This year we deployed a 13-strong joint RAFOS & Royal Navy Bird Watching Society (RNBWS) team to carry out the survey, and it was with a sense of keen expectation that the enthusiastic RAFOS & RNBWS citizen scientists arrived in Lerwick from Aberdeen in mid-June, courtesy of generous NorthLink Ferries' sponsorship. Our task, to survey as many of the inland grid squares on the northern and Western Mainland peninsulas as practicable. This account is focussed on Northmavine, where I was to spend 12 exhilarating days.

Planning and map study for the survey work revealed mouth-watering opportunities for exploring rarely-visited parts of the archipelago, much of it lying north of latitude 60° North i.e. on a similar latitude to Bergen in Norway. And an early indication of the nature of the terrain and latitude was afforded when, taking advantage of an early arrival on the islands I visited Ronas Hill, the highest point in the Shetlands at 450 metres. The Arctic-alpine, granite, fellfield habitat and terrain there is similar to that found on the highest Cairngorms at 1,200-1,300 metres, although the bird assemblage was rather different. Where I would have expected to find Ptarmigan (*Lagopus muta*), Dotterel (*Charadrius morinellus*) and Snow Bunting (*Plectrophenax nivalis*) in similar habitat in the Cairngorms, the resident Shetland birds were Oystercatcher (*Haematopus ostralegus*), Ringed (*Charadrius hiaticula*) & Golden Plover (*Pluvialis apricaria*), Wheatear (*Oenanthe oenanthe*), Skylark (*Alauda arvensis*)and Red-throated Diver (*Gavia stellata*) in the lee of the hill. To the north, I could see the furthest part of our survey area, the rolling unspoilt peatlands of Northmavine, studded with lochs, dubh-lochans and a myriad of pools harbouring who knows how many breeding seabirds and other species.

Seabirds Count Priorities: Again, the priority for our Seabirds Count work on Mainland Shetland was to be squarely focussed on skua and inland gull colonies, as some of these species are those giving rise to great conservation concern. The State of the UK's Birds (SUKB) 2017 (JNCC 2018) records that **Arctic Skua** (*Stercorarius parasiticus)* numbers have declined by 64% since Seabird 2000 – the greatest decline of any UK breeding seabird over the period. Conversely, **Great Skua** or Bonxie (*Stercorarius skua)* have prospered, increasing by 18% since Seabird 2000 (JNCC 2018). Again, we looked forward to discovering the level of changes, if any, between Seabird 2000 observations and our own.

Dark phase Arctic Skua and chick still with egg-tooth – Keith Cowieson

Observations: So, what did we observe during our survey and what lessons were we able to identify for future breeding seabird surveyors? The task on Northmavine was simple, walk as many of the remote, nominated grid squares visited during Seabird 2000 as time, weather and resources permitted, and conduct a snap-shot, single visit survey. Our observations are tabulated below in Table 1, alongside Seabird 2000 results.

Table 1: Changes in inland breeding seabird populations on Northmavine (from 149 Grid Squares), 2000 v 2019[1]. Source: Seabird Monitoring Programme On-line Database http://jncc.defra.gov.uk/smp/Default.aspx. AOT = Apparently Occupied Territory.

Species	Seabird 2000	Seabirds Count	% Change
Arctic Skua	32 AOT	15 AOT	-53
Great Skua	77 AOT	149 AOT	+94
Great Black-backed Gull	28 AOT	38 AON/AOT	+36
Lesser Black-backed Gull	0	2 AOT	N/A
Herring Gull	6 AOT	2 AOT	-67
Common Gull	65 AOT	177 AON/AOT	+172
Black-headed Gull	21 AOT	34 AON/AOT	+62
Arctic Tern	0	527 AON/AOT	N/A

Inland gull observations: Inland breeding gulls on Northmavine appear to be doing well. Although relatively thin on the ground on the peatlands, many higher, drier, ridges boasted at least one pair of **Great Black-backed Gulls** (*Larus marinus*), often several in loose groupings – and they were the only gulls found close to concentrations of breeding Great Skua, being quite capable of holding their own with such aggressive, predatory neighbours. Meanwhile **Common Gulls** (*L. canus*) have done particularly well, certainly living up to their name in Mainland Shetland, almost tripling in number since Seabird 2000, with many lochs, dubh-lochans and pools hosting small colonies.

Away from the peatlands, on the moorland fringes, we encountered 2 large and several medium-sized **Arctic Tern** (*Sterna paradisaea*) colonies with some isolated groups and pairs on adjacent shorelines.

Skua observations: On Northmavine, our skua observations from the 149 grid squares surveyed mirrored the recent SUKB trends, if not the modest scale of the national great skua increase. Arctic Skua numbers were down 53% over the period from 32 to 15 Apparently Occupied Territories (AOT), while Great Skua numbers had almost doubled, increasing by an impressive 94% from 77 to 149 AOTs.

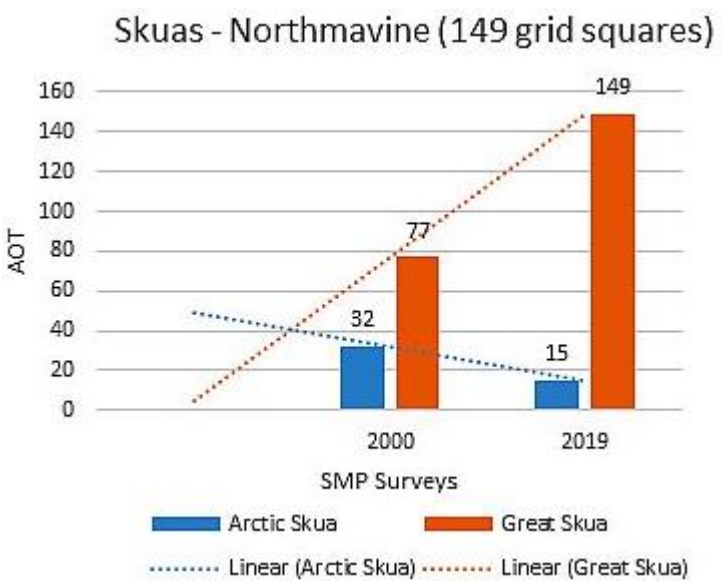
Where Great Skuas bred in the greatest density, Arctic Skuas were absent, and although no 'top down' intra-guild predation by Great Skua of Arctic Skuas, eggs or chicks was observed, the 'top down' pressure of the burgeoning population of

Top: Great Black-backed Gull chick. Bottom: Newly hatched Arctic Tern chicks, still with egg teeth. Photos by Keith Cowieson

[1] Health warning – 2019 figures not yet checked

competing/predatory Great Skua does conform to the broad thrust of the 'combined bottom-up / top-down pressures' effect judged to have led to catastrophic Arctic Skua declines in Scotland (Perkins *et al*, 2018).

Lessons Identified: Two years of breeding seabird surveying, concentrating on priority breeding skuas, inland nesting gulls and terns, have reinforced lessons identified on Orkney last year, namely that in order to most comprehensively and best survey such species, transect walking and flush counting, respectively, are the two most accurate and effective methods - as laid out in the 'Seabird monitoring handbook for Britain and Ireland' (Walsh *et al*, 1995) and 'Bird Census Techniques, 2nd Edition' (Bibby *et al,* 1992).



Changes in skua populations on Northmavine, 2000 v 2019

Sadly, Arctic Skua territories were few and far between on Northmavine, and easily overlooked, as the birds here were relatively undemonstrative, unless surveyors were heading directly towards nest, eggs or chicks. In this respect, I suspect that Arctic Skua numbers in such habitat are highly likely to be under-recorded, despite the best efforts of surveyors. For example, on one occasion while following an agitated Whimbrel (*Numenius phaeopus)* that clearly had a nest nearby, an isolated incubating pale-phase Arctic Skua popped into the field of view of my binoculars, only 40 metres or so distant. Up until that point, there had been no indication of resident Arctic Skua in an area that we had passed through only five minutes previously. Had it not been for the agitated Whimbrel drawing our attention to the skua's nesting area, it would undoubtedly have been overlooked. On three or four similar occasions, breeding Arctic Skua pairs only became obvious when we were within 30 metres or so and heading directly towards them, despite having scoped or glassed the area at regular intervals on the approach.

By contrast, the behaviour of their larger Great Skua cousins was much more obvious with off-the-nest birds flying out to inspect approaching surveyors at ranges of 2-300 metres, often revealing previously unnoticed birds and territories. In this respect our findings mirror those of last year - transect walking is the only sure way of surveying the bulk of breeding skua territories in rolling peatland landscapes, and even then a proportion of Arctic Skua pairs is inevitably going to be overlooked if a close approach is not made. In Northmavine, the peat hag-dominated landscape essentially rendered any attempt at accurately surveying, skuas from vantage points pointless, due to the significant areas of 'dead ground'[2] hidden by folds and dips in the undulating landscape.

'Skua transect' surveyors tackle typical Northmavine peat hag terrain – Mike Hayes

However, these techniques are not without their apparent hazards. Aggressive nest defence by skuas, gulls and terns can be intimidating for experienced and novice breeding seabird surveyors alike. Although it is unusual to be physically struck, it is nevertheless an unnerving experience for many, and some recommend not only wearing stout headgear but also holding a walking pole or suchlike above head-height, as birds invariably attack the highest point of the intruder.

One further technique that has served me well over the years is that of facing the attacker, and looking them directly in the eye during attack runs/mobbing behaviour. In my experience, the birds will always veer away or pull up short of the observer. Conversely, turning one's back on the birds can lead to being hit, occasionally – and I have had the odd 'bump' to prove it. Therefore, it was fascinating to read the recent findings of researchers at the University of Exeter, suggesting that urban gull feeding behaviour may be influenced by human behavioural cues, such as gaze direction. Seventy five percent of urban gulls' were deterred from approaching food sources, and those that did took significantly longer to do so, when experimenters' gaze was directed towards them, compared with when directed away (Goumas *et al,* 2019). This certainly bears out my personal

[2] An area of ground hidden from an observer due to undulations in the land.

experience when translated to attacking & mobbing seabirds. My recommendation to fellow breeding seabird surveyors is to face attacking seabirds directly, if possible, and look them straight in the eye as you make your way gingerly through ternery, gullery and skua colonies. This should not only deter too close an approach, but also allow you to marvel, safely, at the birds' innate grace, manoeuvrability and natural defensive behaviour at impressively close quarters! The trick is just to hold your nerve...

And as reported last year, another good giveaway for locating Great Skua (and Great Black-backed Gull) territories and nest sites are the vivid patches of well-manured, green plots in otherwise uniform brown peat and heathland-dominated landscapes. These invariably indicate historical breeding sites and lookout posts, well-fertilised by guano and the decomposing corpses of prey over the years.

Seabird Nest Incorporation of Debris: In 2018, Dr Nina O'Hanlon of the University of the Highlands and Islands requested that surveyors note any seabird nest incorporation of plastic during their work, in order that the proportion of nests affected could be ascertained. This innovative and worthy, topical initiative has grown like Topsy, and proved so successful, that it has now spawned a website of its own, not only cataloguing plastic incorporation in seabird nests, but also the presence of other debris in all bird species' nests, worldwide (Birds & Debris, 2019). On Mainland Shetland, we found that many shorelines on both survey areas contained varying amounts of plastic and other litter, and 4 nests with plastic and other debris incorporated were found on Northmavine - two Arctic Tern nests in wrack & flotsam-littered shingle beaches, containing thread-like plastic, plastic rope and metal wire; one Oystercatcher's nest immediately adjacent to old plastic sacking; and a Ringed Plover's nest immediately adjacent to a length of plastic rope. One of the tern's nests was part of a small colony of 12 pairs, the other an isolated pair, both on shingle bars just above the Mean High Water Mark.

Top: Surveyor under Great Skua attack, chick in the centre foreground, characteristic Great Skua fertilised mound in centre middle-ground. Middle: Great Skua chick, with signature 'look-out' mound, right middle-ground. Bottom: Looking a Great Skua in the eye. Photos by Keith Cowieson.

Non-target bird species: Shetland's appeal was not limited to seabirds either, there were good numbers of wetland birds and waterfowl such as Eider (*Somateria mollissima*), Goosander (*Mergus merganser*), Greylag Goose (*Anser anser*), Moorhen (*Gallinula chloropus*), Mute Swan (*Cygnus olor*), Pintail (*Anas acuta*), Red-breasted Merganser (*Mergus serrator*), abundant Red-throated Diver, Wigeon (*Anas penelope*), several pairs of breeding Whooper Swan (*Cygnus cygnus*), a pair of Common Crane (*Grus grus*), and an intriguing pair of Barnacle Geese (*Branta leucopsis*) nesting in an apparent wild state in a typical 'tundra' goose-type nesting location – in wild uninhabited terrain in a remote peatland location. Meanwhile, resident breeding raptors were scarce and only Kestrel (*Falco tinnunculus*), Peregrine (*Falco peregrinus*) & Sparrowhawk (*Accipiter nisus*) were encountered. Breeding waders however abounded, including Curlew (*Numenius arquata*), Dunlin (*Calidris alpina*), Golden Plover, Lapwing (*Vanellus vanellus*), Oystercatcher, Redshank (*Tringa totanus*), Ringed Plover, Snipe (*Gallinago gallinago*) and Whimbrel and a couple of over-summering turnstone in suitable breeding habitat. Passerines and doves included Blackbird (*Turdus merula*), Collared Dove (*Streptopelia decaocto*), Dunnock (*Prunella modularis*), Hooded Crow (*Corvus cornix*), House Sparrow (*Passer domesticus*), Skylark, Meadow (*Anthus pratensis*) and Rock Pipit (*Anthus petrosus*), Raven (*Corvus corax*), Rock Dove (*Columba livia*), Skylark, Starling (*Sturnus vulgaris*), Barn Swallow (*Hirundo rustica*), Twite (*Linaria flavirostris*), Woodpigeon (*Columba palumbus*) and Wren (*Troglodytes troglodytes*), as well as several pairs of Red Grouse (*Lagopus lagopus*). All in all an impressive and diverse assemblage of birds with numbers of waders being especially abundant, perhaps reflecting the absence of natural mammalian predators on the island.

In sum, 243 SMP Grid Square and other sites were surveyed by RAFOS and RNBWS personnel on Shetland. The sites ranged in character from 300ft vertical cliffs, through tundra-like heather moorland and peat hags & bog, to stretches of sandy and shingle beaches. Personnel covered between 7-15 miles on foot, daily, often over demanding and unforgiving terrain and in all weathers. In addition, the teams completed 18 species lists for BTO's BirdTrack at the 10km square level. A total of 961 BirdTrack records were created in the survey areas with 72 species recorded. Meanwhile, three British Birds Rarities Committee Rarity Submissions were raised, many individual nest and colony nest record cards covering 25 species are in the process of being generated for the BTO Nest Record Scheme, four Nest Incorporation of Debris Forms were posted on the Birds & Debris website and three Pollinator Monitoring Scheme, Flower Insect Timed (FIT) count records were submitted to the Centre for Ecology and Hydrology FIT database.

Incubating Barnacle Goose, in an apparent wild state – Mike Hayes

Finally, the RAFOS Chairman and Committee would like to express their sincere gratitude to both The Seabird Group and to NorthLink Ferries for their generous grant and sponsorship towards the costs of our 2019 expedition.

Looking forward, immensely, to the final, 2020, Seabirds Count season…

References:

Bibby C. J., Burgess N. D., Hill D. A., Mustoe S. H. (1992) 'Bird Census Techniques, 2nd Edition', Academic Press.

Birds & Debris website (2019) 'Birds & Debris' [Online] Available at https://www.birdsanddebris.com/ (Accessed 22 August 2019).

Cowieson K. R. (2018) 'Expedition Simmer Dim 2018 – Royal Air Force Ornithological Society (RAFOS) expedition to Orkney, June 2018. A volunteer citizen scientist's perspective'. Seabird Group News 139: 3-7.

Goumas M., Burns I., Kelley L. A., Boogert N. J. (2019) 'Herring Gulls respond to human gaze direction' [Online] Available at https://royalsocietypublishing.org/doi/10.1098/rsbl.2019.0405 (Accessed 20 September 2019).

JNCC (2018) 'The State of the UK's Birds 2017' [Online] Available at http://jncc.defra.gov.uk/pdf/2017%20SUKB.pdf (Accessed 20 September 2019).

Perkins A., Ratcliffe N., Suddaby B., Ribbands D., Smith C., Ellis C., Meek E., Bolton M. (2018) 'Combined bottom-up and top-down pressures drive catastrophic population declines of Arctic Skuas in Scotland' [Online] Available at https://doi.org/10.1111/1365-2656.12890 (Accessed 22 September 2019).

Walsh, P.M., Halley, D.J., Harris, M.P., del Nevo, A., Sim, I.M.W., & Tasker, M.L. (1995). 'Seabird monitoring handbook for Britain and Ireland'. JNCC/RSPB/ITE/Seabird Group, Peterborough.

Breeding Season Reports

St Kilda

Sarah Lawrence, National Trust for Scotland

Following the **Atlantic Puffin** surveys undertaken in 2018, 2019 was another exciting season for seabird monitoring on St Kilda. In June, a team of researchers from the National Trust for Scotland (NTS), RSPB, University of Cardiff and University of Gloucestershire, led by NTS Senior Nature Conservation Advisor Dr Richard Luxmoore arrived on the islands. During three weeks of intense survey work the team successfully landed on the outlying islands, allowing burrow-nesting bird surveys to be completed on Boreray, Soay, Dùn and Hirta. The results will be released later in the year, and will represent the first archipelago-wide survey of **Leach's Storm Petrel** (*Oceanodroma leucorhoa*), **European Storm Petrel** (*O. pelagicus*), **Manx Shearwater** (*Puffinus puffinus*) and Puffin in almost twenty years.

The annual Puffin productivity plot on Dùn was visited several times throughout the season when sea conditions allowed, and produced a productivity value of 0.75 chicks fledging per egg laid – which is lower than 2018's 0.82, but still represents the second highest productivity figure since 1992. In continuation of the long-term dataset, mass and wing length measurements were collected during productivity monitoring visits. For the second year, pre-breeding counts of Puffin attendance in five plots on Dùn were made via telescope form Hirta. It is hoped that continuation of this method will provide an index of population change in the years between a full census being completed.

Three pairs of **Arctic Skua** nested on Hirta this year, with three chicks fledging successfully, representing a productivity figure of 0.60 chicks fledged per egg laid.

A full count of **Great Skua** territories on Hirta was completed for the first time since 2016. Maps of Apparently Occupied Territories (AOTs) are yet to be compiled, however, numbers have not increased significantly since the last full island census. Territories remain concentrated in Gleann Mor, Oiseval and Conachair, with some previously unoccupied sites found closer to Village Bay and Mullach Sgar. Several territories were also identified on Dùn, though it was not possible to complete a full census on the outlying islands. As in previous years, pellets have been collected for analysis over the winter.

A Leach's Storm Petrel chick aged 23 days; one of seven hatched in nest boxes on Hirta in 2019.

For the second year, there was not a single **Black-legged Kittiwake** (*Rissa tridactyla*) nest present in any of the seven monitoring plots on Hirta or Dùn. This represents a catastrophic 100% decline since the peak of 513 Apparently Occupied Nests (AON) and 0.72 chicks fledged per nest in 1994. Small colonies do remain on the west side of Dùn and Hirta, with a minimum of 44 active nests counted on Dùn by boat in early June.

The annual survey of inland nesting **Northern Fulmars** (*Fulmarus glacialis*) within the head dyke identified 35 Apparently Occupied Sites (AOS), with a slight increase in AOS in the village breaking the pattern of continuing decline seen between 2013 and 2016. Meanwhile, the two Fulmar productivity plots on Hirta and Dùn yielded a productivity of 0.29 chicks fledged per AOS from 219 sites; a decrease from 2018's productivity figure of 0.47 which was the highest since records began.

The triennial population survey of European Storm Petrel nesting within Village Bay was completed in July. The standard calibration plot outside of the head dyke was visited over seven days, while tape playback inside the head dyke elicited 10 responses. With the application of the correction factor, the total population of European Storm Petrels within the monitoring plot was estimated at 23 AOS. This season's estimate of 23 AOS is a slight increase on the estimated 18 AOS from the most recent survey in 2016. While this increase is not significant, it does suggest that the population may remain stable, as surveys have shown a gradual decline in European Storm Petrels in the village since a high of 39 AOS in 2005. The results of the archipelago-wide surveys will provide further insight into how St Kilda's European Storm Petrel population has changed since the last full survey estimated 1,121 AOS in 2000.

It has been an excellent year for the Leach's Storm Petrel nest boxes on Hirta. This year 65% of the 48 boxes have showed signs of investigation, an increase of 13% since 2018 and the highest since the boxes were installed in 2004. An egg was laid in eight boxes, equalling 2018's occupancy of 17%. Six nests remain active at the time of writing, with the first chick expected to fledge in the third week of September. With six weeks remaining of the chick-rearing period, a productivity figure is not yet available, but early indications suggest a possibility that this could be the most successful season since the project began.

Fair Isle

David Parnaby, Warden, Fair Isle Bird Observatory

It was generally a decent breeding season for seabirds on Fair Isle, despite some poor weather in the summer, with most species more or less holding their own in population terms in comparison to 2018. The biggest increases were recorded by **Arctic Terns**, with the 286 nests representing a 51% rise compared to 2018, and **European Shags** (*Phalacrocorax aristotelis*), which showed an increase of 24% in the population plots.

Productivity was a mixed bag. **Arctic Skuas** fared well with the 28 pairs fledging 18 chicks (0.64 per Apparently Occupied Territories (AOT); the highest recorded since 2006). To put this into context, the previous two years had seen a total of just two chicks from a similar number of breeding birds. Another interesting positive were **Arctic Terns**, which also recorded their highest productivity since 2006 (0.28 chicks fledged per Apparently Occupied Nests (AON)). **Black-legged Kittiwakes** also fared well, with the 0.67 chicks fledged per AON representing the second-highest productivity since 2000.

Razorbill by Richard Cope

Atlantic Puffin, **Razorbill** (*Alca torda*), Shag and **Northern Fulmar** recorded slight falls in productivity compared to 2018. The biggest falls recorded were in **Common Guillemot** (*Uria aalge*), which showed a 53% decrease to 0.31 chicks fledged per egg laid and Bonxie (**Great Skua**). Although Bonxies had their third-highest population count of all time, 490 Apparently Occupied Territories (AOT), their productivity fell 60% to just 0.14 chicks fledged per AOT. Cannibalism was frequently noted amongst the Bonxies, whilst prolonged spells of wet weather in the summer may also have had an effect, particularly on some of the earlier nesting individuals.

Darvic-ringing of Bonxies began on Fair Isle in 2017, with this year seeing two of our 2016 chicks recorded in late winter; one in Germany (which killed and ate a **Herring Gull,** *Larus argentatus*) and the other in Denmark. Even more interesting were chicks ringed in 2017 which were observed from pelagics in Brittany and Portugal in August and September respectively, then 2A13 which became our first returning darvic-ringed Bonxie when it was seen chasing Barnacle Geese in the south of the Isle on 24th September. Rather pleasingly, Richard Cope, the Assistant Warden who found 2A13 had also ringed the bird, which was ringed as part of the first darvic-ringing session of the species on the Isle.

More high-tech tracking of our breeding seabirds away from the Isle was undertaken by Bob Furness and the BTO, who retrieved loggers that will show where Razorbills and Guillemots and Arctic Skuas respectively have spent the last two winters. This data will be especially interesting as it will show where individual birds have been for the last two winters.

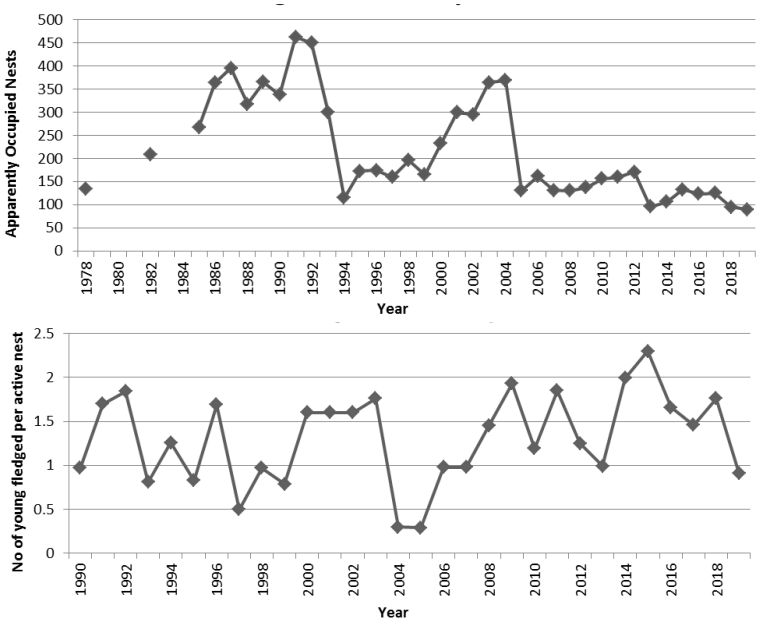
A joint Royal Society for the Protection of Birds (RSPB), Scottish National Heritage (SNH) and Fair Isle Bird Observatory (FIBO) study into Fair Isle's **European Storm Petrels** discovered birds breeding in a number of locations around the Isle and it is hoped to continue the study to look at further details of the breeding population and the dangers they face.

A special thanks to the staff and volunteers for their efforts in carrying out seabird monitoring this year and to JNCC for their crucial support in enabling us to continue carrying out our work as part of the Seabird Monitoring Programme.

St. Abb's Head

Liza Cole, Ciaran Hatsell and Ceris Aston, National Trust for Scotland

It has been another mixed year for the seabird colony at St Abb's Head National Nature Reserve. The **European Shags** had another poor year with just 90 Apparently Occupied Nests (AON) recorded, which is the lowest count on record and represents just 41% of the 35 year mean of 222 AON, and an 81% decline since the highest count of 463 AON recorded in 1991. Productivity was low too, with heavy rains in mid-June causing a lot of chick mortality, resulting in just 0.91 chicks being fledged per active nest; the eighth lowest figure on record (30 year mean of 1.31 chicks per nest). The Shag population has been struggling over the last 15 years, not managing to recover from winter wrecks of 2005 and 2013 even though the mean productivity over this time has been above the mean productivity for the 30 year mean. If declines continue, there will not be enough birds for monitoring to be statistically viable.



Top: Shag whole colony counts (AON). Bottom: Shag productivity.

Herring Gulls fared a little better with 227 AONs, up slightly on 2018, but the figure represents only 70% of

the 35 year mean (324 AON) and a 71% decline since the highest count of 782 AON in 1985.

Northern Fulmar numbers are up on last year too, by 29%, with 99 AOS, but this is still the fourth lowest count on record, represents just 43% of the 35 year mean and a 75% decline since the highest count of 393 Apparently Occupied Sites (AOS) recorded in the mid-90s.

Black-legged Kittiwake had quite a good year, with a whole colony count of 4,651 AON which was an increase of 43% on 2018, and the productivity was 0.86 chicks fledged per active nest which is 28% above the 33 year mean. However, the whole colony count was the eighth lowest on record, representing just 50% of the 35 year mean, and a 75% decline since their heyday in the late 1980s when there were 19,066 AON.

Northern Gannets continue to colonise our largest sea stack, with 11 AON recorded this year, but we are yet to have any fledglings. Late in the season we had birds prospecting and settling temporarily on some other stacks also.

Atlantic Puffins have just about disappeared from St Abb's Head now, with none or very few birds having been seen ashore in late June for the last 5 years.

Staffa

Emily Wilkins, National Trust for Scotland

Wednesday 10th April – An early morning **Black Guillemot** (*Cepphus grylle*) count was conducted after camping overnight. A pair of ravens was seen around along with gulls. The **European Shags** were beginning to nest but there was no sign of any **Northern Fulmars**. Goose droppings were everywhere and several Greylag Geese were seen; it looked like they had been using the island regularly over recent months. A few **Atlantic Puffins** were spotted but most had not arrived yet.

Monday 20th May – The **Shag** nests were counted in Cormorant's, Mackinnon's and Clamshell caves by the visiting Puffin-burrow counters; see Puffin report below for the full results.

Monday 17th June – A flush count of individual **Herring Gulls**, **Lesser Black-backed Gulls** (*Larus fuscus*) and **Greater Black-backed Gulls** present in the gull colony was conducted.

Friday 21st June – The Fulmar and Shag nests were counted by circling the island on a tour boat. Only one Shag nest was visible from this count. The north side crags were revisited from the land, but no additional Shag nests were found. A **Great Skua** was seen overhead.

Thursday 27th June – A partial playback survey of **European Storm Petrels** revealed the presence of four chicks but there was no time for full survey in July this year.

Species	Count	1999	2010	2011	2013	2014	2015	2016	2017	2018	2019
Fulmar	AON	281	148	-	79	123	129	96	-	57	36
Greater Black-Backed Gull	AON	6	2	-	-	-	2	0	-	1	8 IND
Lesser Black-Backed Gull	IND	6	32	-	-	-	12	6 AON	-	10	14
Herring Gull	IND	60	50	-	-	-	26	8 AON	-	30	10
Shag	AON	9	25	-	-	-	12	17	-	16	25
Puffin	IND	328	268	230	250	-	260	~200	-	~250	-
Black Guillemot	IND	-	106	-	60	76	111	101	121	108	81
Great Skua	AOT	-	1	2	1	1	1	1	1	1	1
European Storm-petrel	AON	5	-	-	-	5	7	15	-	22	-

Table 1: Counts of seabirds on Staffa between 1999 and 2019, excluding 2012. AON = Apparently Occupied Nest sites, AOT = Apparently Occupied Territories, IND = Individuals. A dash indicates that a full count was not carried out for that particular species/year.

Staffa Puffin Survey

Richard Luxmoore, Dan Watson and Paul Thompson, National Trust for Scotland

Introduction

The **Atlantic Puffin** colony on Staffa is located on some steep slopes on the east side of the island. While some of the burrows along the top of the cliffs can be safely accessed on foot, many more are located in areas that cannot safely be accessed without ropes. Consequently, all previous attempts to estimate the size of the colony have depended on remote methods, notably counting the number of birds visible on land or rafting on the sea during the early breeding season (May). In 2019, a visit was organised with two trained rope-access staff (Dan Watson and Paul Thompson) to enable counting all of the Apparently Occupied Burrows (AOB) in the colony. Peter Upton also provided assistance with the survey.

Methods

A visit was organised on 20-21st May 2019 so that counting could take place after the tourists had left the island for the day. The colony was divided into four sectors, separated by topographic features (Figure 1). The boundary between P1 and P2 was marked by an old wooden post.

Counting started in Sector P4 to enable familiarisation of the staff with the signs of AOB: signs of fresh digging, feathers, footprints, or faeces. After the last tourist boat had left, counting moved to Sector P2. The remainder of P2 and Sector P1 were counted the following morning. Sectors P3 and P4 were readily easily accessible on foot and these were counted in the evening of 20th May. There were a small number of burrows on a ledge lower down the cliff in Sector P3 and these were not counted.

Large numbers of Puffins were attending the colony on the evening of 20th May and two counts of individuals visible on land (IND) were made to permit comparison with the counts of AOBs.

An opportunity was taken to count Shag nests in the Cormorants and Mackinnon's cave at 15:00 on 20th May.

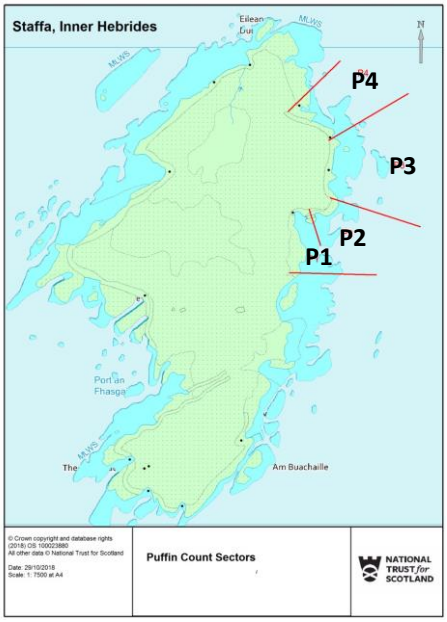


Figure 1: Map of Staffa showing the four Puffin colony sectors.

Results

A total of 637 AOBs were counted and counts of AOB and IND per sector are presented in Table 2. The count at 19:30 in Sector P4 was higher than the count made at 16:00. Following the recommended methodology (Walsh *et al.* 1995), the higher of these was used to estimate the total. It was not possible to count IND at Sector P3 because there was no vantage point from which it was visible. Counts of IND ranged from 36% to 72% of the AOBs eventually counted. A total of 13 Shag nests were counted in Mackinnon's Cave and 12 in the Cormorant's Cave.

Sector	AOB	IND	IND/AOB
P1	65	47 at 15:30	72%
P2	252	91 at 15:30	36%
P3	30		
P4	290	126 at 16:00 173 at 19:30	43%
Total	**637**	**311**	

Table 2: Counts of Puffins (AOBs and IND) made between 15:30 20th May and 10:00 on 21st May.

Discussion

Previous estimates of the numbers of Puffins on Staffa were made by counting IND or rafting on the sea (SEA), and are detailed in Table 3. Numbers have historically varied from about 200 to 328 IND.

The number of 637 AOBs represents the highest number of Puffins ever counted on Staffa and is certainly the most accurate count, because counts of AOBs are thought to be more accurate than counts of individuals.

Year	IND
1999	328
2010	268
2011	230
2013	250
2015	260
2016	200
2018	250

Table 3: Counts of individual Puffins visible on land or rafting on the sea in previous years.

Surveying Puffins on Staffa.

Reference

Walsh, P.M., Halley, D.J., Harris, M.P., del Nevo, A., Sim, I.M.W., & Tasker, M.L. 1995. *Seabird monitoring handbook for Britain and Ireland*. Published by JNCC / RSPB / ITE / Seabird Group, Peterborough.

Shetland (excluding Fair Isle)

Will Miles and Mick Mellor (SOTEAG), Jennifer Clark, Duncan Halpin and Mike Pennington (Scottish Natural Heritage) and Lynne McKenzie (RSPB)

Annual seabird population size and productivity measurements in 2019 were mostly similar to or higher than in 2018, with few sizeable decreases this year. So overall it was a reasonably good season in Shetland. Notable in 2019 was a 17% increase in the total **Northern Gannet** (*Morus bassanus*) population on Noss since the last full survey (in 2014), early nesting and generally high breeding numbers of **European Shags** across Shetland, and very high **Common Guillemot** and **Razorbill** productivity at Sumburgh Head.

Numbers of **Northern Fulmars** at the four annual population monitoring sites across Mainland Shetland and Yell were similar to last year (mean change of –2.5% since 2018). Productivity at these sites also had changed little since last year (average of 0.38 chicks per mean June Apparently Occupied Sites (AOS) count in 2019, 0.40 in 2018). On Noss, however, Fulmar productivity was down from 0.46 in 2018 to 0.36 this year, whereas at Hermaness it was 0.34, similar to 2018 (0.36).

A call-playback survey on 12th July for the existence of **Leach's Storm Petrels** on Gruney Island and Gloup Holm, in northwest Shetland, found four burrows with responding individuals present on Gruney and one on Gloup Holm.

Gannets and other seabirds at the cliffs of Noss, July 2019. Will Miles

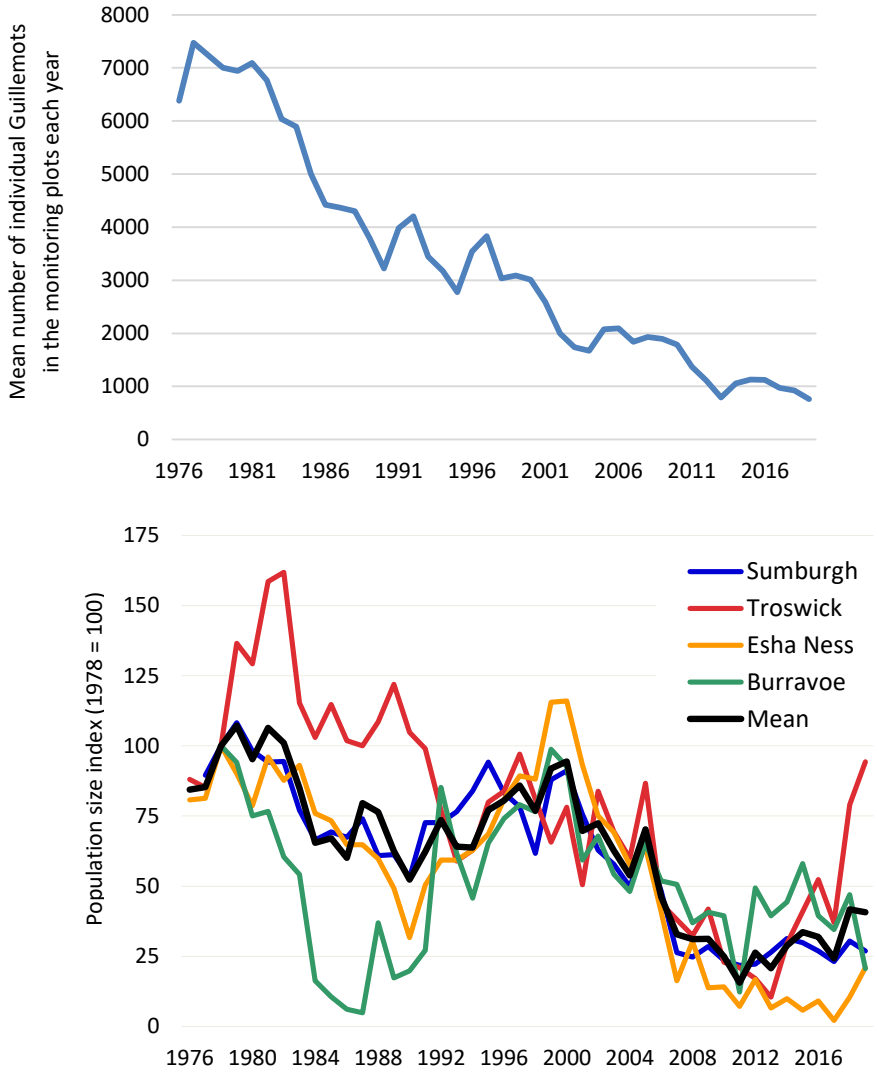
The entire Gannet population on Noss was surveyed in 2019 and the total count was 13,764 Apparently Occupied Nests (AON), an increase of 17% since the last whole-island count, in 2014. Gannet numbers also continued to increase around Hermaness, with birds nesting for the first time on Little Flugga this year, yet another new area to be colonised within the boundaries of the Hermaness National Nature Reserve. Gannet productivity at Hermaness in 2019 was 0.70 chicks fledged per AON, similar to 2018 (0.73).

Shag numbers at the population monitoring plots were up this year, with 116 AON recorded at Sumburgh Head (+28.9% since 2018), 134 AON at No Ness (+50.6% since 2018) and 91 AON at the plots on Noss (+3.4% since 2018). Shag productivity on Mousa was 1.7 chicks fledged per AON, up from 1.6 in 2018. A minority of Shag pairs began breeding exceptionally early in 2019, with a pair at Sumburgh

incubating in mid-March (the earliest site record) and the first chicks fledging on Noss an entire month earlier than in 2018. A protracted period of very mild, calm and spring-like weather in late February across Shetland (extraordinarily unusual!) may account for these very early breeding records.

Many **Black-legged Kittiwake** colonies in Shetland have greatly decreased in numbers or become extinct in recent years. Generally, colonies now occur only in very sheltered and inaccessible locations, for example within in caves, and very few of the historical Kittiwake population plots that were large, visible and monitored from land still exist. Kittiwake numbers have been counted at Compass Head by boat since 1981, when there were 464 AON. In 2019, there were 35 AON at Compass Head, compared with 45 in 2018 (-22.2% annual decrease). Kittiwake productivity at six monitored plots across Shetland was high compared with some recent years, though averaged lower than in 2018 (average of 0.64 chicks fledged per apparently laying pair in 2019, 0.89 in 2018).

A single **Arctic Skua** pair nested on Noss in 2019 but failed to fledge chicks, two having been fledged by a pair there in 2018. A pair of Arctic Skuas nested on Mousa for the first time since 2015 and laid two eggs but, like on Noss, the pair failed to fledge any young. **Great Skuas** appeared to have a relatively poor season. At Hermaness, Great Skua productivity was 0.29 chicks fledged per AOT this year, compared with 0.44 in 2018.



Top: Guillemot population change at the monitoring plots at Hermaness NNR, 1976 to 2019. Bottom: Razorbill population change at the four annual population monitoring sites across Mainland Shetland and Yell, 1976 to 2019. Population size is presented as an index where 1978 = 100. Sumburgh Head, Troswick Ness and Esha Ness are in Mainland Shetland and Burravoe is in Yell.

Numbers of Guillemots at the four annual population monitoring sites across Mainland Shetland and Yell remained low compared with the 1980s but were higher this year than in 2018 (mean change of +26% since 2018). At Hermaness, however, Guillemot numbers again were comparatively very low (mean count of 760 individuals, the second lowest count on record), extending the long-term pattern of population decrease at this site since 1977. Guillemot productivity was 0.76 chicks fledged per laying pair at the Sumburgh Head monitoring plot, the highest record since 1995 and up from 0.54 in 2018. Guillemot chick diet at the Sumburgh Head monitoring plot comprised 93% gadids (80% in 2018) and 6% sandeels (11% in 2018), with no records of clupeids this year (7% in 2018).

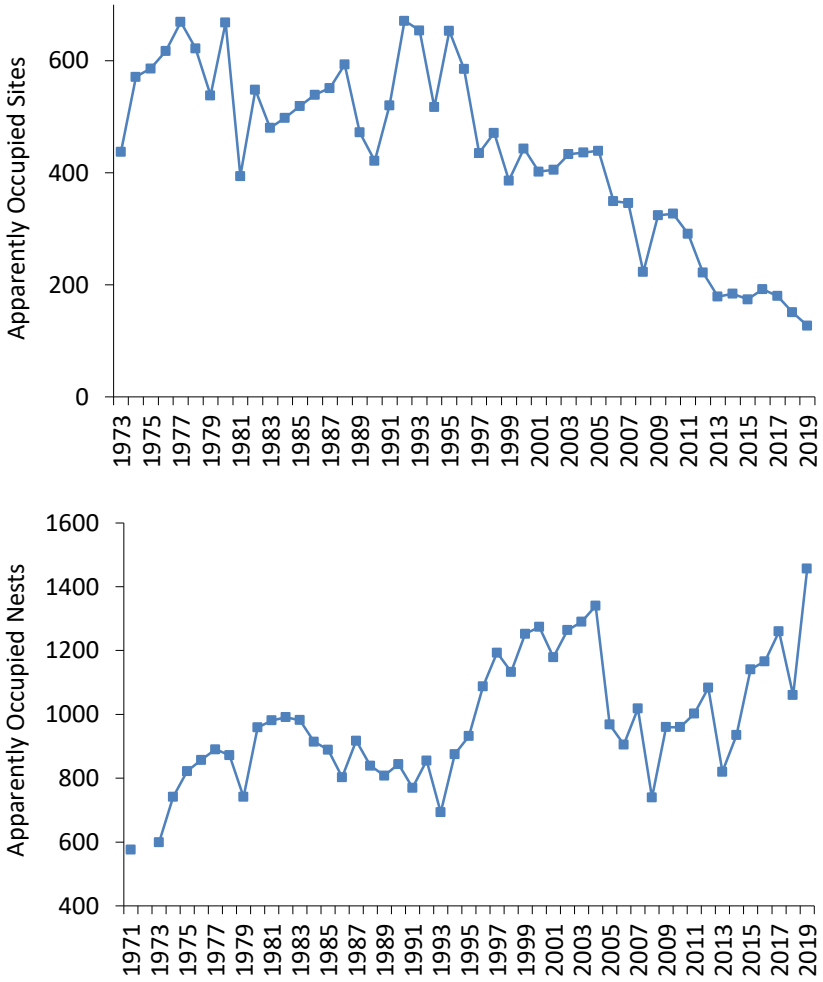
Population counts of Razorbills were higher in 2019 than 2018 at the monitoring plots at Troswick Ness and Esha Ness, but slightly lower than in 2018 at the Sumburgh Head and Burravoe plots. The mean population index for 2019 across these four sites was 40.7, the second highest measurement since 2006 and only slightly lower than the 2018 value of 41.7. Razorbill productivity was 0.64 chicks fledged per apparently laying pair at Sumburgh Head, the joint-highest measurement on record and up from 0.46 in 2018.

Canna

Bob Swann, Canna Ringing Team/Highland Ringing Group

Summer 2019 turned out to be the **best breeding season** for many species on Canna for a long time. The biggest gainers were **Black-legged Kittiwakes** where the count of 1,457 Apparently Occupied Nests (AON) was the highest we have ever counted on Canna (beating the 1,290 AONs recorded in 2003) and bucks the trend in other parts of Scotland where this species has been in decline. **Razorbills** were also big gainers, with numbers almost doubling over the last three years and birds now at the highest level since 1995. **Common Guillemots** showed more modest gains but still reached their highest population since 2004 as did nesting **European Shags** where the population jumped from 280 AONs in 2018 to 440 AONs this summer. **Herring Gulls** recorded their highest number of AOTs since 2006, whilst the populations of **Common Gull**, **Lesser Black-backed Gull** and **Great Skua** remained stable. The one exception was **Northern Fulmars**, where the long term decline in numbers continues, falling from around 600 AOS in the early 1990s to just 127 Apparently Occupied Sites (AOS) this summer.

The increases appear to have been fuelled by a series of good breeding seasons, resulting in high return rates of young birds to the colony. Food also appeared to be abundant in particular sandeels and sprats. The removal of rats has also helped, this is best illustrated by the big increase in **Atlantic Puffin** numbers which have almost doubled since the rats were eradicated in winter 2005/06, with 1,935 individuals being counted in 2019.



Seabird counts on Canna. Top: Fulmar numbers (Apparently Occupied Sites). Bottom: Kittiwake numbers (Apparently Occupied Nests).

Breeding productivity in 2019 showed much variation between species. In our Shag productivity plots 1.6 young were produced per AON above the long-term average of 1.3 young/AON. Herring Gull also had high breeding productivity with 1.4 young/Apparently Occupied Territory (AOT) above the long term average of 0.9 young/AOT. Great Skua productivity at 0.75 per AOT was close to the long term mean of 0.8 young per AOT. **Great Black-backed Gull** productivity at 0.75 young per AON was just below the long term average figure of 0.9 young/AON. Both Fulmar and Kittiwake had well below average productivity. The low Kittiwake figure (0.45 young/AON) was due to the total failure of the plots on Sanday, which appear to have suffered from very high levels of predation, possibly by gulls or skuas. The plots on the north side of the island had productivity figures close to the long term average (0.7 young/AON). Fulmar plots on Sanday also had complete failures and though a few chicks were reared in the plot on the north side of the island the productivity figure of 0.13 chicks per AOS was the lowest we have ever recorded.

The weights of adult Guillemot and large Guillemot chicks were not significantly different from their long term averages, suggesting food was not an issue for them in 2019.

A total of 384 fully grown seabirds and 2,318 seabird chicks were ringed with BTO metal rings and 1,337 fully grown birds were retrapped in breeding colonies. The data from retrapped Guillemots, Razorbills and Kittiwakes were provided to the BTO as part of the RAS project to calculate adult survival rates. 59 geolocators were retrieved and a further 51 deployed.

Isle of May

Mark Newell, Mike Harris, Sarah Burthe, Sophie Bennett, Marine Quintin, Sarah Wanless and Francis Daunt, Centre for Ecology & Hydrology

Seabird sunset on the Isle of May, Mark Newell.

After a relatively benign winter without any prolonged spells of harsh conditions it was perhaps surprising that the 2019 breeding season on the Isle of May got off to a fairly slow start. It was also a very protracted season for most species particularly **European Shags** and **Black-legged Kittiwake** with some individuals not laying until well into July.

The 2019 season proved a fairly average year amongst the main study species. With CEH present on the island continuously for 14 weeks, the cliff-nesting seabirds could be monitored on a daily basis allowing the exact timing of any failures and effects of extreme weather to be recorded. Light winds dominated the season and there was no excessive rainfall to hamper breeding attempts.

Return rates for **Razorbill**, **Atlantic Puffin** and Kittiwake were above average while return rates for Shag were below average for the second consecutive year. **Common Guillemot** had the lowest return rate since 2007, perhaps linked with a wreck of this species in the southern North Sea in the late winter. Despite this the number of Guillemots nesting in the plots showed an increase on 2018 along with Razorbills and Kittiwakes. **Northern Fulmar** and Shag numbers in the plots were almost identical to last year. All island counts conducted by Scottish Natural Heritage reflected this trend with significant increases in the same three species with Kittiwake nesting pairs increasing by 22%. This probably reflects the large non-breeding element to the Kittiwake population in 2018 which returned to the isle but did not attempt to breed and were therefore not included in the count.

The first Shag egg was laid on April fool's day, bucking the recent trend for early starts (there are only two later years in the last decade, including 2018 after the 'Beast from the East'). With the exception of Puffin and Fulmar first egg dates the other monitored species were later than average. However, once things got going it turned into a reasonable season for most species except Puffin and northern fulmar which were a little below average. Razorbills had their highest breeding success since 2010, success of Kittiwakes was also well above average while success of Shags was above the year average for the 12th consecutive year.

Return rates:

- Guillemot return rate at 83.3% was poor, the lowest since 2007.
- Razorbill return rate at 87.2% was above average.
- Puffin return rate at 84.4% was slightly above average.
- Kittiwake return rate at 80.5% was slightly above average.
- Shag return rate at 77.6% was below average.

Breeding success:

- Guillemot breeding success at 0.71 chicks per pair laying was average.
- Razorbill breeding success at 0.66 chicks per pair laying was above average and the highest since 2010.
- Puffin breeding success at 0.68 chicks per pair laying was below average.
- Kittiwake breeding success at 0.92 chicks per completed nest was well above average.
- Shag breeding success at 1.53 chicks per incubating nest was well above the long-term average (1.15) for the 12th consecutive year.
- Fulmar breeding success at 0.37 chicks per incubating nest was slightly below average.

Colour-ringed Shag on the Isle of May, Mark Newell.

Sandeels (*Ammodytes sp.*) remained the main food of young Puffins, Shags, Razorbills and Kittiwakes. The diet of Guillemots was dominated by clupeids.

As the winter approaches we will be delighted to receive sightings of any colour ringed Shags along the east coast. Please send sightings to shags@ceh.ac.uk

For more information check out our CEH webpage.

Twitter: @CEHseabirds, @ShagMigration

Skomer

Nathan Wilkie and Sylwia Zbijewska, Wildlife Trust of South and West Wales

Northern Fulmar: Population counts for Fulmar are undertaken every other year. The population in 2018 was 578 Apparently Occupied Sites (AOS), which was a decrease from 675 AOS in 2016. The productivity for 2019 was 0.50, an increase from 0.30 in 2018 and above the 10 year average of 0.39.

Manx Shearwater: A whole island census was conducted in 2018, which resulted in 349,663 pairs, a 10.7% increase from 316,000 estimated in the last whole island census in 2011. 281 study plots of 314m^2 were monitored in the 2018 census. The annual census of 18 1,000m^2 study plots resulted in 1,418 responses from 4,428 burrows, interestingly this is a decrease in the number of responses but an increase in the number of burrows when compared to 2018, 1,435 and 3,889 respectively.

European Storm Petrel: The population was last estimated at 310 Apparently Occupied Nests (AON) in 2016. The adult survival study continued at the colony at Tom's House, the survival rate figure is in preparation.

Herring Gull: This year's whole island count was 297 AON, a decrease of 23% from last year. Productivity was 0.28, which was even lower than last year's 0.36.

Lesser Black-backed Gull: 5,216 AON were estimated in 2019. This figure was obtained using counts of AON from vantage points, and at some sub-colonies also counting AON by transect counts and subsequently by applying a correction factor. The population size this year has decreased from 5,410 pairs in 2018, and the overall trend remains that of decline. Productivity in 2019 was 0.66, which is higher than 2018 (0.58) and 2017 (0.59).

Great Black-backed Gull: The population remains stable with 108 AON counted in 2019. A very success breeding season with productivity of exactly 2, the highest recorded for the island.

Black-legged Kittiwake: The population increased to 1,451 AON, from 1,236 in 2018. Productivity was 0.68, which is higher than the average productivity for the last 5 years (0.62) and almost the same as the historical average (0.69).

Common Guillemot: The population increased from the last count in 2017 (24,788 individuals) to 28,798 individuals in 2019. Productivity was 0.74, which is slightly down from 2019 (0.76) and slightly above the historical average (0.72)

Razorbill: Population counts for Razorbill are undertaken every other year. The population in 2018 was 7,529 individuals, which was a 4% increase when compared with the population estimate for 2016. Productivity this year was 0.67, the highest figure since 2005 and higher than the historical average (0.54).

Atlantic Puffin: A total of 24,108 individuals were counted on 6th April. Productivity was 0.74 this year, higher than the previous year (0.62) but lower than 2017 (0.77).

More information will be available once the full Skomer Seabird Report 2019 becomes available on our website.

Skokholm

Richard Brown and Giselle Eagle (Wildlife Trust of South and West Wales) and Matt J. Wood (University of Gloucestershire)

On Skokholm there were 4,654 **Common Guillemot** Apparently Occupied Ledges (AOL) and 2755 **Razorbill** AOL, both record totals. A minimum of 7,447 rafting **Atlantic Puffin** on 19th March was the highest early spring count since 1952; adult survival and productivity were close to the mean. There were 198 apparently incubating **Northern Fulmar**, the second highest total on record, and productivity was 0.62 (the highest of the last seven years). A total of 86 **Great Black-backed Gull** nests was seven down on last year and 288 **Herring Gull** nests was 32 down on last year; both species exhibited lower than expected adult return rates. There were 1,010 **Lesser Black-backed Gull** nests (eye counts were again corrected using a series of walk through counts); this was a new post-War low. **Manx Shearwater** and **European Storm Petrel** playback plots suggested that both populations are at least stable. **Manx Shearwater** productivity initially appeared excellent, but several losses of large chicks to the Great Black-backed Gulls pulled the estimate down to 0.72 which is about average. Although the sample size is small, Storm Petrel productivity is currently up on the mean (but several small chicks are still present). The 'Petrel Station' contains three chicks, the first to hatch in our nest box terrace.

Bardsey and Ynys Gwylan

Sam Prettyman, Bardsey Bird Observatory

Northern Fulmar: 14 Apparently Occupied Sites (AOS) were counted on the East Side, equal to the 2018 total and 23.1% below the ten-year average (18.20 ± s.d. 5.63). During visits in August no fledglings were seen and very few adults were noted around the cliffs.

European Storm Petrel: Adults were heard calling in the usual spots around Briw Gerrig, Seal Cave and Bae Felen in June and July. One bird was found nesting in an artificial nest box.

Great Cormorant: 20 Apparently Occupied Nests (AON) counted, 81.8% above the 2010-2019 mean (11.00 ± s.d. 4.27). 25 juveniles were found. The productivity of 1.25 was 11.8% lower than the 2010-2019 mean (1.42 ± s.e. 0.17).

European Shag: Bardsey held 45 AON, the joint highest total since 2006 and 22.6% above the 2010-2019 mean (36.70 ± s.d. 6.13). 73 young fledged. The productivity of 1.62 was 16.6% below the 2010-2019 mean (1.94 ± s.e. 0.13). 52 AON were found on Ynys Gwylan Fawr. Due to the tides and weather a trip to Ynys Gwylan Bach was not possible. 52 AON was a 5.2% increase on the 2009-2018 mean (49.44 ± s.d. 14.56). 106 young were found on Ynys Gwylan Fawr. The productivity of 2.04 was 18% above the ten-year mean (1.73 ± s.e. 0.12).

Lesser Black-backed Gull: 164 AON were counted, a 7.3% decrease on 2018 and 19.1% below the 2010-2019 mean (202.80 ± s.d. 47.82). Minimum of 63 juveniles fledged (compared to 99 last year). The productivity of 0.38 was 15.2% above the 2010-2019 mean (0.33 ± s.e. 0.06).

Herring Gull: Bardsey held 345 pairs, 9.4% below the ten-year mean (380.70 ± s.d. 34.21) and the lowest since the 2016 population (331 pairs). There was a minimum of 245 juveniles. The productivity of 0.71 was 7.8% above the 2010-2019 mean (0.66 ± s.e. 0.03). 89 pairs were counted on the Gwylans, 18.6% below the 2010-2019 mean (109.38 ± s.d. 39.84). There was limited time spent on the Gwylans, therefore data for the whole colony productivity was not collected. Using a sample of 41 pairs at the North end of Ynys Gwylan Fawr, a productivity of 0.76 can be calculated, 2% below the 2010-2019 mean (0.77 ± s.e .0.07).

Great Black-backed Gull: Bardsey held two pairs, 52.4% below the ten-year mean (4.20 ± s.d. 2.04). There was a minimum of two young fledged. The productivity of 1.00 is 42.2% above the 2010-2019 mean (0.70 ± s.e. 0.17). There were 40 nests with 32 juveniles on Ynys Gwylan Fawr, 10 nests on Ynys Gwylan Bach with nine juveniles. The total number of pairs was a 12.5% decrease on the 2010-2019 mean (57.13 ± s.d. 21.28). A combined productivity of 0.82 was 3.8% above the 2010-2019 mean (0.79 ± s.e. 0.06).

Black-legged Kittiwake: 121 AON were counted, 6% above the 2010-2019 mean (114.10 ± s.d. 34.72). There were 31 fledglings from 36 AON at the study plot (productivity = 0.86), which was 52% above the ten-year mean (0.57 ± s.e. 0.09). A minimum of 101 fledged along the full length of the East Side. On 28th July, 137 young were counted including juveniles and chicks.

Common Guillemot: The count of 1,413 Apparently Occupied Ledges (AOL) was 16.8% above the 2010-2019 mean (1,209.00 ± s.d. 191.35). There were 63 chicks in sample plot of 110 AOL at Bae Felen. The productivity of 0.57 was 79.5% above the 2010-2019 mean (0.32 ± s.e. 0.03). On 6th June, 27 AOL were counted on Ynys Gwylan Fawr and 54 AOL were counted on the south west side of Ynys Gwylan Bach. This combined total of 81 was 28.3% above the 2010-2019 mean (63.13 ± 23.54). However, no meaningful sample plots were studied to calculate productivity in this site.

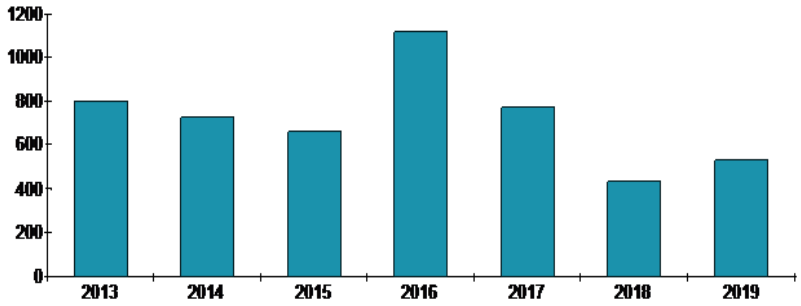
Razorbill: 1,917 AOL were recorded based on flush counts with the one adult to 0.67 pairs conversion factor applied (described in the Seabird Monitoring Handbook, Walsh et al. 1995), which was 2.8% below the 2017 population count. A minimum of 243 young and 68 eggs were counted along the East Side, which combined is a slight 2.3% increase on the ten-year mean (303.90 ± s.d. 40.55). 13 AOL were counted on Ynys Gwylan Fawr, with 7 chicks and 2 eggs recorded.

Puffin: On Bardsey 143 Apparently Occupied Burrows (AOB) were counted. 101 on the cliffs above Ogof Morlas, 42 between Bae Felen and Seal Cave. This is 115.4% above the 2010-2019 mean (66.40 ± s.d. 47.07). Very dense vegetation in some areas meant a low count of 619 AOB were counted on Ynys Gwylan Fawr, 7.7% decrease on the 2009-2019 mean (670.00 ± s.d. 194.59).

Seaford, East Sussex

David Howey, Sussex Ornithological Society

This year's annual boat-based survey of the Black-legged Kittiwake colony at Splash Point, Seaford in East Sussex showed a welcome increase in the number of Apparently Occupied Nests (AON) to 528 compared to only 431 in 2018. Although this is still below the seven-year average of 720 it is an encouraging sign. There was further encouragement in the increase in productivity to a level of 0.91 compared to the average of just 0.60 in the last two years.



Events

World Seabird Conference 3

The third World Seabird Conference (WSC3) will be held at Hobart, Tasmania on the 19th to the 23rd October, 2020. The conference organisers are accepting abstract submissions until 30th November, and decisions will be made on the outcome on the 16th March 2020. Instructions for authors can be found on the website.

The WSC3 is supporting students, Early Career Scientists (ECS), established seabird scientists and conservation practitioners from developing countries, and retired but still active seabird scientists in the cost of transport to the conference through a travel grant scheme. Details of how to apply can be found on the website travel awards pages.

Website: **www.seabirdgroup.org.uk**

Facebook: **www.facebook.com/pages/TheSeabirdGroup/**

Twitter: **www.twitter.com/TheSeabirdGroup (@TheSeabirdGroup)**

Registered charity No. 260907

The Seabird Group promotes and helps co-ordinate the study and conservation of seabirds. Members also receive the journal *Seabird*. The Group organises regular conferences and provides small grants towards research.

CURRENT SEABIRD GROUP COMMITTEE

Current retirement dates (at AGM) are shown in brackets:

Chairman	Stephen Votier (2019)	**S.C.Votier@exeter.ac.uk**
Secretary	Holly Kirk (2019)	**secretary@seabirdgroup.org.uk**
Treasurer	Ian Cleasby (2022)	**ian.cleasby@rspb.org.uk**
Membership Secretary	Danni Thompson (2022)	**membership@seabirdgroup.org.uk**
Seabird Editor	Viola Ross-Smith (2019)	**journal@seabirdgroup.org.uk**
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Current membership rates	
Standing Order	£20
Concession	£15
Institution	£35
International:	£21
Life	£300

The Newsletter is published three times a year. The Editor welcomes articles from both members and non-members on issues relating to seabird research and conservation. We aim to provide a forum for readers' views so that those provided in the Newsletter are not necessarily those of the Editor or Seabird Group.

Submissions for the newsletter should be emailed to the newsletter editor: newsletter@seabirdgroup.org.uk. We recommend a maximum of 1500 words and ask that photographs and figures are sent as separate files and with full credits, where appropriate. **Deadlines are: 15th January (February edition); 15th May (June edition); and, 15th September (October edition).** Every effort is made to check the content of the material that we publish. It is not, however, always possible to check thoroughly every piece of information back to its original source as well as keeping news timely. If you have any concerns about any of the information or contacts provided, please contact the Newsletter Editor.