



SKOKHOLM

BIRD OBSERVATORY



South and West Wales
De a Gorllewin Cymru

Annual Report 2017

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Wardens' Report

Introduction to the Skokholm Island Annual Report 2017

The 2017 season will be remembered as a record breaker, partly due to some extreme weather and, to a certain extent as a direct consequence of the weather, partly due to the number of different bird species encountered. There were six additions to the Island list, the most added in any year since the nine of 1990; **Bittern**, **Cattle Egret**, **Crane**, **Avocet**, **Marsh Warbler** and **Myrtle Warbler** took the Skokholm total to 295 species. Climate change is in part responsible for changes in the distribution of the former four species, all of which are likely to occur more regularly in the future. The Myrtle Warbler, a stunning male which sang in the Courtyard on 18th June, was only the fifth British spring record. Whereas the last North American passerine to occur in June, the Swainson's Thrush of 2015, arrived on the back of a deep area of low pressure which tracked quickly across the Atlantic, the arrival of our latest 'yank' was harder to explain, although a low had crossed a week earlier. The most notable weather event of the year had a more easterly origin, indeed Ex-hurricane Ophelia had proven the easternmost major Atlantic hurricane of the satellite era.

The morning of 16th October dawned calm and humid, with unusually hazy skies the result of Iberian forest fire smoke and Saharan dust brought north by a system which in the afternoon delivered hurricane force southerly gusts and produced a phenomenal sea. Waves which were covering the 16 metre tall St Ann's Weather Beacon approximately every ten seconds were large enough to lift debris up Skokholm's southerly cliffs and through the Lighthouse. The resulting damage was unprecedented, with windows smashed, doors torn open and an entire upstairs window frame cast inwards, whilst torrents of seawater washed through the corridors and ran down the central stairwell. Boarding up the holes was all that could be achieved before the departure of staff; the repairs will be a job for the 2018 season. One of the more notable items discovered amongst the wreckage was a piece of lantern glass, almost certainly a shard of the original lantern pushed over the cliff by Trinity House in the 1960s; it was somewhat ironic that a prism thrown into the ocean forever returned 50 years later to smash its previous home.

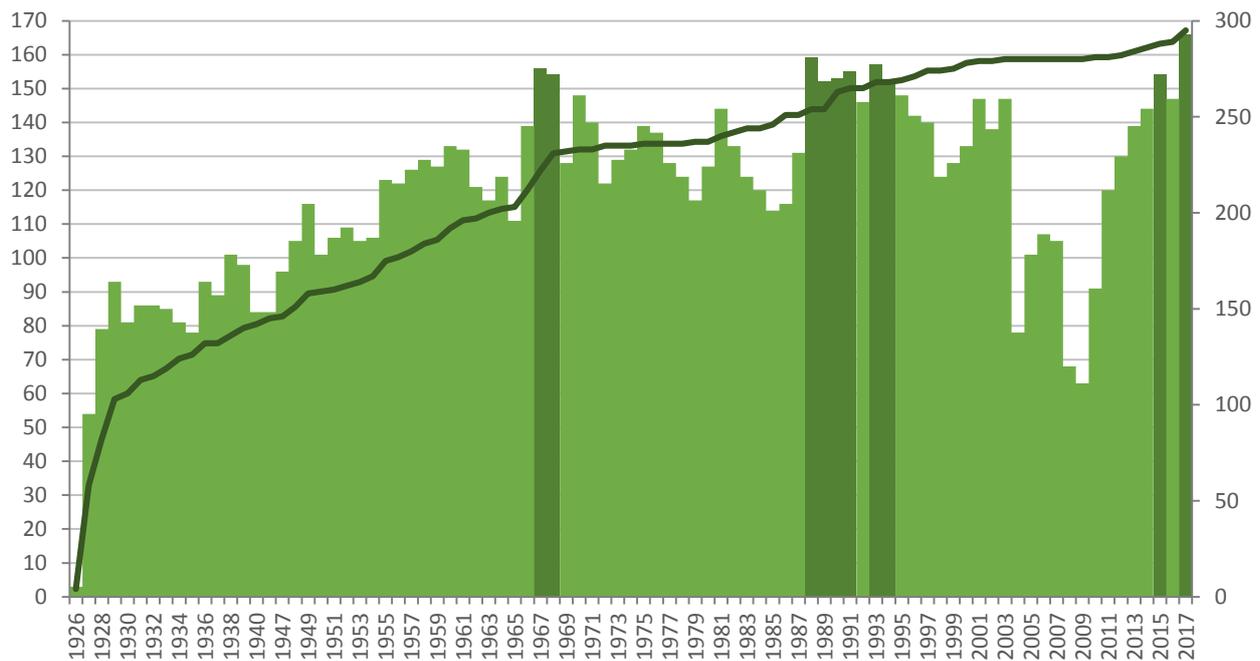


Ophelia did not only bring destruction to Skokholm's shores; the same weather system brought a significant influx to Britain of birds which had been working south through central Europe, most notably large groups of Hawfinch and Firecrest. On Skokholm this resulted in four **Hawfinch** sightings, the same number as had previously been logged since 1933, and an arrival of **Firecrest** which took the autumn total to the fourth highest on record. The rough seas brought record numbers of **Sabine's Gull** to our surrounding waters. Even without the Ophelia related birds, it proved a remarkable year for Island rarities, with 14 species logged which had been seen on fewer than ten previous occasions; in addition to the Hawfinch records, there were 2017 sightings of **Great Shearwater**, **Little Grebe**, **Great Crested Grebe**, **Honey-buzzard**, **Red Kite**, **Long-billed Dowitcher**, **Long-tailed Skua**, **Feral Pigeon**, **Long-tailed Tit**, **Western Bonelli's Warbler**, **Radde's Warbler**, **Dartford Warbler** and **Bullfinch**. These, coupled with more regular Island scarcities such as **White-fronted Goose**, **Red-breasted Merganser**, **Quail**, **Spoonbill**, **Coot**, **Pectoral Sandpiper**, **Pomarine Skua**, **Hoopoe**, **Wryneck**, **Magpie**, **Blue Tit**, **Yellow-browed Warbler**, **Melodious Warbler**, **Barred Warbler**, **Bluethroat** and **Richard's Pipit** took the Skokholm yearlist to an unprecedented 166 species, seven more than the previous Island record. It was also an excellent year for our breeding birds, with a pair of **Short-eared Owl** nesting for the first time since records began, two pairs of **Peregrine** nesting for only a second time and record **Chough** productivity, whilst the breeding populations of all three auks increased yet again.

This report follows the same format as in the previous four years. It provides a full account of the 2017 season, documenting the fortunes of Skokholm's breeding birds, along with an in depth record

of migrant birds and the non-avian wildlife recorded this year. Each avian species logged in 2017 is addressed separately and every piece of information we have gathered during the season can be found under that species title; thus details of first and last dates, numbers, breeding, ringing totals, ringing recoveries, specific projects and all other relevant information can be found in the one place. Following the success of our four previous online reports, the Skokholm Annual Report 2017 has again been produced in a free to download PDF format. For any readers wishing to contribute to our work, a 'donate now' button is available on the source page.

The number of species logged in each year since 1926, with the ten most productive years in darker green, and the cumulative number of species logged on Skokholm (which had reached 295 by the end of 2017).



The 2017 Season and Weather Summary

The season ran from 12th March to 9th November and we welcomed visitors from 17th April to 3rd October. After sailing from Neyland through heavy drizzle, we arrived to Skokholm in warm sunshine. However the remainder of March was dominated by damp conditions; rain or drizzle fell on nine dates, hail and thunder struck on the 21st and mist descended on three dates, whilst the temperature averaged a cool 8.5°C. Winds were typically moderate, although a steady force seven between the 17th and 21st veered southwest from south-southeast and produced a lingering swell. The 23rd was the first dry and sunny day since our return and the first day of a calm and almost cloudless spell which lasted until the 28th, from when rain and mist again dominated. April saw much drier weather, with sunny conditions logged on 13 dates and precipitation only falling on seven; the majority of rain fell overnight, although squally hail and rain showers passed through on the 25th and persistent rain lingered for much of the day on the 30th. Light northerly winds were prevalent, with warm temperatures and glassy sea states enjoyed on over 60% of April dates; wind speeds only exceeded force four on the 25th, 29th and 30th when cooler conditions were also felt.

Although the 1st proved a drizzly affair, sunny weather again dominated during May, with over two-thirds of dates proving to be pleasant and hot diurnal temperatures between the 24th and 26th which peaked at 22.8°C. Gentle winds, typically from the easterly quarter, prevailed until the 12th, after which southwesterly or southerly winds became the norm; the only rough spell fell on the 15th and 16th when a southerly near-gale resulted in very rough seas. Mist enveloped the Island for much of

the 23rd and 28th, rain was recorded on six dates and a thunder and lightning storm on the 27th saw very heavy overnight showers. Fresher winds in June, which blew from the southwest on all but five dates, brought a considerable amount of rain to the Island, however the bulk fell overnight or in the early morning before clearing to leave glorious weather by the afternoon. Heavy rain was logged on seven dates, with exceptionally heavy downpours observed between the 27th and 30th; early evening showers on the 27th were so intense that an adult Storm Petrel was forced from of its nest crevice near the Knoll. It was a typically warm month, but temperatures were particularly high between the 17th and 21st when it averaged 21°C.



The first three weeks of July offered some respite from the rain, with predominantly calm and sunny conditions and precipitation only noted on seven dates; whilst the majority of rain was light, the exception came on the evening of the 18th when heavy showers were accompanied by thunder and lightning. Most days were warm or hot, with a high of 24.4°C on the 18th and decidedly humid conditions felt on the 1st, 11th and 15th. A stiff southwesterly which blew from the 26th to the 28th roughened the seas and produced a moderate swell for the remainder of July, whilst rain fell on five dates during the last week of the month. Over half of August days were sunny, with typically pleasant temperatures warming towards the end of the month when it averaged 18.3°C between the 22nd and 28th. Rain or drizzle was noted on 14 dates, primarily at the beginning and end of the month; luckily the majority of heavy showers again fell overnight, although a substantial deluge on the morning of the 8th flooded the Lighthouse Track. A fresh southwester blew for the first week of August and the 18th saw westerly winds briefly touch gale force, however the remainder of the month was calm. With rain falling on 60% of dates, September proved to be the wettest month of a wet season. Although the majority of the rainfall was light and the Island regularly avoided heavier showers which passed to both the north and south, prolonged and heavy rain on the evening of the 16th resulted in widespread flooding. However it was also warm, with the coolest days between the 14th and 17th still delivering average temperatures of 14°C. A classic September saw winds, often brisk, from all points of the compass and stronger blows on the 11th, when a northwesterly gale

strengthened to storm-force and produced very rough seas, and on the 12th when a light westerly backed to produce a southerly gale by the evening.



It became increasingly overcast during October, whilst fets lingered on the 1st, 7th and 24th and thick fog descended on the 26th; nevertheless it proved a largely dry month, with rain only recorded on seven dates. Winds were mostly gentle to moderate westerlies, with frequent swings to the north or south resulting in temperatures yo-yoing between 20.7°C on the 17th and 12.6°C on the 31st. The arrival of Storm Ophelia on the 16th saw a southeasterly near gale veer and rapidly strengthen to a hurricane force southerly by the afternoon; the resulting seas were phenomenal. Remarkably, all that blew the following day was a light southwesterly breeze. Early November was generally calm, although a northwesterly gale on the 7th produced a sizeable swell. Dull and overcast days prevailed, producing mild diurnal temperatures for the time of year which averaged 12.7°C, whilst rain fell on all but two of the evenings prior to the departure of the Wardens on the 9th.

Spring Work Parties

The 2017 spring work party began on 2nd April, four days later than planned due to a substantial swell at sea; nine volunteers arrived and immediately set to work. Half of the team worked at the Lighthouse where, over the next five days, they painted the ceiling in the lower tower, replaced the cracked panes of glass in the lantern room (not a straightforward job!), painted the roof of the tower, power-washed and scrubbed salt and algae from the westerly gable and then painted it. Low-energy bulbs were fitted to replace the power hungry strip lights which were in every room of the Lighthouse; there was an immediate increase in our solar power reserves. An infrared lighting system was wired up in the Quarry Storm Petrel colony; spot lamps which direct infrared light into the amphitheatre of the Quarry improve the quality of the image received by the infrared viewer and provide an enhanced nocturnal experience for our visitors. Down at the Farm the second half of the team fitted some new sink units in the accommodation, painted the interior of the Cottage, sanded down and re-oiled tired furniture and carried out essential maintenance work on the dumper truck (including the fitting of a new accelerator and hand-brake). The first work party left on the 7th and the second team arrived; tasked with the annual lime-washing of all of the Farm buildings, including the roofs, there could be no hanging around. Additionally a new boardwalk was installed in the Well Heligoland Trap, the old South Haven Hide was replaced, floors were painted, window frames and doors were glossed and gutters were cleaned. By the time the second team departed on the 14th the Island infrastructure was once again looking stunning and ready for the busy season ahead. Just how did two small teams of people achieve so much in such a short time? They were

fuelled by substantial amounts of delicious and varied food cooked by our volunteer chefs; without their stupendous efforts the work party weeks would not be nearly as productive.



Spring Long-term Volunteers

On 2nd April we welcomed Long-term Volunteers Maddy Rawlings and Victoria Hope to the Island. It was immediately apparent that they would form a great team; when plunged straight into helping with the work party they tackled scrubbing, sanding, painting and lime-washing with great diligence and wearing huge smiles. Their enthusiasm and endless energy made the spring and early summer season an exceedingly pleasurable one. In addition to contributing daily sightings to the Log, one of their main roles was to assist with the spring seabird research; they continued with the four-year project of monitoring daily fluctuations in Puffin numbers around the Neck, invested a lot of time at the Crab Bay Puffin colony where they amassed a significant number of colour ring resightings and also established the annual Fulmar productivity plots. We did not take on a Storm Petrel Volunteer this season, as has been the case since 2014; thus, on top of all of the above, Maddy and Victoria were integral to the annual Storm Petrel census, allowing us to survey all of the Walls and Quarry transects on ten dates during the crucial period. That they both carried out their research work with such passion and thoroughness, and yet were still able to appreciate the need to keep the visitor accommodation looking amazing, was to their great credit. A willingness to share their knowledge with our guests undoubtedly enriched the experience of staying on Dream Island. In mid-June we were joined by Katy Westerberg, a zoology student at the University of Exeter who, for her undergraduate dissertation, was investigating the diet of Skokholm's Great Black-backed Gulls during the breeding season. Katy analysed regurgitated pellets and carcasses collected at 26 nest sites between the start of egg incubation and fledging; some of the fascinating results can be found in the systematic list. Katy became a much valued member of the team; on top of her data collection and analysis she assisted with a range of monitoring projects, as well as carrying out regular seawatches and helping with the cleaning of the accommodation during changeover days.

Spring Migration Highlights

A **Ring Ouzel** on 16th March was the second earliest to date. A **Hooded Crow** on the 22nd was the 15th for Skokholm and a **Red Kite** on the 23rd, with what was possibly the same individual the following day, was only the eighth Island record. Two **Lapland Bunting** on the 23rd and 24th, with a single on the 25th and 26th, were the first to be seen in March and the first in spring since 1995. A **Barnacle Goose** between the 24th and 27th was only the sixth spring record. Three **Crane** on 25th March, which

arrived from the east before heading north, were later seen in Anglesey, Cleveland and possibly further afield; these were the first for Skokholm. A **Little Grebe** on North Pond on 7th April was the third April and tenth Island record, whilst a **Great Crested Grebe** off Channel Point on the 18th was the first spring and third Island record. A Dark-bellied *B. b. bernicla* **Brent Goose** on the 18th and 19th was a tenth post-War spring sighting. Two **Avocet** on North Pond on the 20th were a first for Skokholm and a **Black-tailed Godwit** which arrived on the same date had been in France the day before. A **Greylag Goose** on the 26th, with possibly the same bird on 3rd May, was the 14th spring record. A **Bittern**, briefly grounded by gulls on 6th May, was another first for Skokholm. A flyover **Spotted Redshank** on the 19th was a fifth spring observation and a **Honey Buzzard** over the Farm on the 24th was only the seventh for the Island. A **Blue-headed Wagtail** lingered at Winter Pond on the 25th and 26th and a **Bluethroat** the following day, which may subsequently be assigned to a subspecies following DNA analysis of a retained feather, was the fifth spring and 13th Skokholm record. A **Siberian Chiffchaff** on 28th May was the latest British spring sighting of this subspecies to be confirmed using mitochondrial DNA analysis.



A **Marsh Warbler** on 2nd June was the first for Skokholm and the second for Pembrokeshire, whilst a pair of **Tufted Duck** on the 4th was the 12th Island record. A **Quail** flushed on the 10th was the third this century. A stunning first-summer male **Myrtle Warbler**, singing in the Courtyard on the 18th, was the first for Skokholm, the second for Pembrokeshire and the 22nd for Britain, only five of which have occurred in spring. Two **Little Egret** heading north on the 26th were the first of three 2017 sightings; there have only been 24 previous records. A **Spoonbill** discovered at North Pond on the same date

was only the 15th for Skokholm. Spring 2017 records of **Crane, Avocet, Bittern, Marsh Warbler and Myrtle Warbler** take the Skokholm list to 294.

The Breeding Season

A pair of **Short-eared Owl** nested for the first time in the history of recording on Skokholm and fledged at least two young. Two pairs of **Peregrine** nested for the second time, although productivity was again poor. **Reed Warbler** were territorial at the Well for a second year, although no young were produced on this occasion, and **Shoveler** bred for only the second time since 1999. **Shag, Water Rail** and **Chiffchaff** did not breed.

A summary of breeding birds on Skokholm in 2017. Productivity is the average number of fledglings produced by each breeding pair ('-' indicates insufficient data).

	Total (2016-2013 in parenthesis)	Productivity (2016-2013 in parenthesis)
Canada Goose	7 pairs (7, 10, 11, 18)	0 (0, 0, 0, 0)
Shelduck	2 pairs produced ducklings (2, 1, 3, 1)	0 (-, 0, 0, -)
Shoveler	1 pair produced ducklings (0, 1, 0, 0)	0 (0, 0, 0, 0)
Mallard	4 pairs produced ducklings (3, 2, 1, 2)	0 (0, 0, 0, 0)
Storm Petrel	89 transect responses (76, 87, 82, 91)	0.50 (0.58, 0.55, 0.69, -)
Fulmar	213 aia (194, 179, 179, 170)	0.45 (0.57, 0.47, 0.53, 0.34)
Manx Shearwater	295 responses in 8000m ² (297, 269, 241, 263)	0.80 (0.68, 0.68, 0.63, 0.75)
Shag	0 (0, 0, 0, 1 nest)	0 (0, 0, 0, 0)
Buzzard	1 nest (1, 1, 1, 1)	1 (1, 2, 1, 1)
Water Rail	0 (0, 0, 0, 1 territory)	0 (0, 0, 0, 0)
Moorhen	3 pairs (3, 3, 3, 2)	2.67 (2.67, 2.33, 1.00, 1.00)
Oystercatcher	61 pairs (54, 55, 51, 40)	0.57 (0.82, 0.36, 1.55, 1.00)
Great Black-backed Gull	93 nests (93, 83, 84, 74)	1.54 (1.38, 1.66, 0.93, 1.80)
Herring Gull	302 nests (322, 289, 300, 263)	0.70 (0.86, 0.66, 0.70, 0.72)
Lesser Black-backed Gull	1123 aia (1397, 1486, 1565, 1476)	0.38 (0.23, 0.15, 0.30, 0.16)
Lesser Black-backed x <i>Larus</i> hybrid	0 pairs (1, 1, 2, 2)	0 (0, 0, 0, -)
Guillemot	4038 aol (3949, 3603, 3512, 3466)	- (-, -, -, 0.55-0.61)
Razorbill	2491 aol (2242, 2382, 2052, 2294)	0.40 (0.39, 0.21, 0.40, 0.66)
Puffin	7800 adults (6692, 6665, 5070, 4834)	0.80 (0.73, 0.75, 0.74, 0.73)
Short-eared Owl	1 nest (0, 0, 0, 0)	2+ (0, 0, 0, 0)
Peregrine	2 nests (2, 1, 1, 1)	0.5 (0.5, 0, 0, 3)
Chough	2 pairs (2, 2, 2, 3)	4.00 (2.50, 1.00, 1.50, 0.67)
Jackdaw	20 pairs (20, 20, 19, 16)	- (-, -, -, -)
Crow	9 nests (9, 8, 8, 8)	1.11 (1.78, 1.88, 1.25, 0.38+)
Raven	2 nests (2, 2, 2, 3)	4.00 (3.00, 4.50, 4.00, 3.33)
Skylark	21 territorial males (16, 12, 11, 10)	- (-, -, -, -)
Swallow	4 nests (4, 6, 4, 5)	3.25 (5.75, 2.50, 2.00, 4.00)
Chiffchaff	0 pairs but nest building (0, 1, 1, 0)	0 (0, 1, 0, 0)
Sedge Warbler	13 pairs (11, 7, 9, 8)	- (-, -, -, -)
Reed Warbler	1 pair (1, 0, 0, 0)	0 (3, 0, 0, 0)
Wren	58 territorial males (60, 52, 57, 55)	- (-, -, -, -)
Blackbird	6 pairs (7, 7, 6, 5)	2.83+ (2.29, 1.29, 2.17, 2.80)
Wheatear	25 pairs (20, 16, 13, 12)	2.12+ (2.65, 4.00, 3.38, 2.67)
Pied Wagtail	5 pairs (4, 3, 3, 3)	3.60 (5.25, 4.33, 3.67, 5.00)
Meadow Pipit	38 territorial males (40, 30, 28, 28)	- (-, -, -, -)
Rock Pipit	61 territorial males (53, 44, 34, 32)	- (-, -, -, -)
Reed Bunting	7 pairs (7, 7, 5, 5)	1.86+ (1.43, 2.00, 1.80, 2.40)

Autumn Migration Highlights

A **Cattle Egret** which roosted at North Pond on the evening of 17th July was a first for Skokholm. A fully-spooned adult **Pomarine Skua** on the 27th was the 24th Island record, a **Sooty Shearwater** on the same date was one of only two noted in 2017 and the 18th July record and a **Balearic Shearwater** on the same date was the first of six birds seen this year. A **Wood Sandpiper** was present between the 17th and 20th August. A **Great Shearwater**, west off the Lighthouse on the morning of the 19th, was a third Island sighting and a **Wryneck** on the 23rd was the only individual to be seen this year. Given that there have only been 34 previous records, a **Sanderling** on the 29th, with another on 20th September, was notable. A **Pectoral Sandpiper** at North Pond on 30th August was the 18th record and 22nd bird for Skokholm. An adult **Pomarine Skua** on 4th September was the 25th Island record and a **Magpie** on the same date was the sixth to be seen in autumn. An adult **Sabine's Gull** found on the 12th was the first of a record six singles to be seen in 2017. A **Feral Pigeon** was around Crab Bay on the 15th and 16th; previous records are confused by sightings of flyover racing pigeons, this being only the fifth acceptable 'wild' bird. A **Red-breasted Merganser** in Peter's Bay on the 16th was possibly the same individual seen off the Neck on the 21st and the 17th Island record, whilst a **Coot** in South Haven and Hog Bay on the former date made 2017 the 16th year with a sighting. A vocal **Western Bonelli's Warbler** on the 24th was the second Western Bonelli's and third Bonelli's for the Island and a **Barred Warbler** on the same date, which was also seen on the 25th, was the 20th for Skokholm (below photograph). A **Little Stint** between 27th September and 2nd October was the first of two to be logged during the autumn and a **Melodious Warbler** lingered between 28th September and 8th October. The first **Lapland Bunting** of the autumn on 29th September became only the second to be ringed by the Bird Observatory.



Two **Barnacle Goose** on 14th October were the 12th autumn sighting since the first in 1966. A **Hawfinch** present on the 15th and 16th was the first of a record four individuals logged during the autumn, with further birds on the 23rd, 31st and on 7th November; there had only been four records prior to this influx. Two late sightings of **Long-tailed Skua**, namely a single on the 20th and two on the 28th, were the fourth and fifth Island records. There were three **Little Gull** on the 25th and a single the following day when the second **Radde's Warbler** for Skokholm was also found. A **Dartford Warbler** on the 27th was only the third for Skokholm and a **Blue Tit** on the same day was the first

since 2011. A flock of eight *A. a. flavirostris* **White-fronted Goose** on the 29th was a 23rd Island record and a **Hoopoe** on the 31st was the latest of 12 autumn sightings. A flyover **Long-billed Dowitcher** on 1st November was the second for Skokholm and the fourth for Pembrokeshire and a grounded **Richard's Pipit** the following day made 2017 the 18th autumn with a bird. A first-winter female **Bullfinch** on the 3rd was only the fourth Skokholm sighting and a **Yellow-browed Warbler** on the same day was the latest Island record. A first-winter **Little Gull** was logged on the 5th and four **Long-tailed Tit** on the 8th was the last notable sighting of the year, this only the tenth Island record. The autumn **Cattle Egret** takes the Skokholm list to 295 species.

Autumn Long-term Volunteers

On 1st July we welcomed Long-term Volunteers Holly Pickett and Jacob Peterken to the Island. Maddy stayed on to continue with the Storm Petrel census and to show Holly and Jacob the ropes. They were soon up and running with the Fulmar productivity and Puffin survival monitoring and began helping with the annual Manx Shearwater plots, investigating which pairs had produced chicks and following these through to fledgling size. Both Jacob and Holly performed a daily census and, amongst many other things, discovered two Island firsts: a Cattle Egret at North Pond and a Banded Demoiselle at Well Stream. They ran the moth trap whenever conditions allowed, adding to our understanding of Skokholm's resident species as well as collecting records of migrants and wanderers from the mainland. Holly and Jacob also assisted with the July and August Storm Petrel ringing sessions at South Haven. Whilst volunteering in spring starts with a work party, the autumn typically ends with one; despite having worked incredibly hard for nearly three months, they both got stuck in with several maintenance jobs and even found time to paint some new signs.

Autumn Work Party

The autumn work party, which ran from the 4th to 8th September, was cut short by an ominous weather forecast. It was something of a mini volunteer group, numbering just three, invited out for one specific job: to sort out the Lighthouse soil pipes. Hidden under the concrete which forms the compound were an array of pipes; some still had a purpose, others were long redundant, some were still working, whilst others were broken and leaking their contents into the foundations.



They began work smashing through the concrete and piecing together the puzzle as to what each salt-glazed pipe was doing, before eventually finding and replacing the broken sections. They then

had to refill and level the compound, repair the manhole and remove the debris. Although at times an unpleasant job, it was clearly a satisfying one, as can be seen in the above photograph.

Skokholm Bird Observatory Digitisation of the Paper Logs

Last year saw the completion of a project to digitise the paper bird logs; the result is an easily searchable database which includes a record of everything logged since Ronald Lockley's arrival to the present (excluding the War years when the Observatory was closed and 2004 when the records were lost). The bird data has been given to the British Trust for Ornithology's BirdTrack scheme and is an excellent source of information when writing the Annual Report. The keen eyed will thus spot that some of the totals given in previous reports have now been revised; discrepancies this year are hopefully not typos but a more accurate record than what has been published before.

Ringling Projects

In 2015 we joined an Oystercatcher colour ringling project, run by the Pembrokeshire Ringling Group and funded by the Crown Estate. Efforts to colour ring Skokholm's breeding birds continued this year with adults, captured on the nest, fitted with an orange darvic ring inscribed with a unique alpha-numeric code. As well as providing information on the movements of our birds during the non-breeding season, we are also learning about survival, breeding site fidelity and their often extensive movements around the Island with pre-fledging sized chicks. Being able to recognise individual adults and thus family groups is increasing the accuracy of our productivity estimates.



The Great Black-backed Gull colour ringling project, established in 2014, continued for a third year. Both breeding adults and their fledglings were fitted with red darvic rings inscribed with unique white alpha-numeric codes. The ability to recognise individuals in the field is providing a wealth of information which allows us to understand the factors influencing their population; an accurate assessment of adult overwinter survival and of the number of juveniles eventually recruiting into the breeding population will help explain the current increase in numbers. Although the project is still somewhat in its infancy, a substantial number of winter resightings are highlighting the importance of the southwest, particularly Cornwall, to our maturing youngsters. Additional resightings of Skokholm fledglings have come from Jersey, Guernsey, Ireland and France.

A project monitoring adult survival in Herring Gulls has for some time been carried out on Skomer, however owing to recent difficulties in trapping sufficient adults to produce a meaningful estimate, the project was expanded this year to include Skokholm. In May 13 adults, trapped on the nest by visiting ringers Chris Brown and Eric Wood, were fitted with red darvic rings inscribed with white alpha-numeric codes. Although the primary purpose of this project is to provide data on adult survival, we will no doubt also obtain some interesting information on their winter movements.

This year saw the start of an exciting project designed by visiting ringer Ian Beggs to study the Skokholm Wheatear population. Over the next few years adult breeding birds and their offspring will be colour ringed in order to determine survival rates, pairings and movements, without the need to retrap returning birds. Findings will be compared to those made by Peter Condor between 1947 & 1952, work which was published as part of his seminal monograph, *The Wheatear*, in 1989. Any conclusions will be published to support conservation work on Skokholm and elsewhere. Study birds are fitted with a green darvic ring on their left leg, each inscribed with a unique alpha-numeric code which can be read in the field. A total of 69 individuals were colour marked this year, with 37 adults from the 25 breeding pairs and 32 of their offspring. On 26th July a Skokholm juvenile was sighted at Samphire Hoe, Kent; it had been ringed at Wallsend on 3rd July.



Visiting Ringers

Skokholm Bird Observatory continues to attract visiting ringers who assist us with our monitoring work and provide additional coverage on the Island between April and September; the benefits of increased ringing effort to the Observatory mean that accommodation is provided at a discounted rate. There are many other benefits for the ringers involved; apart from the thrill of ringing on Skokholm during the spring and autumn migration periods, two of the big draws are our long-term studies targeting the Manx Shearwaters and Storm Petrels. These are species which most ringers rarely have the privilege of encountering on their own patch and which we are particularly interested in monitoring. This year we welcomed a total of 39 ringers, taking the 2013 to 2017 total to a marvellous 203. The Manx Shearwater transect again proved popular, with a total of 988 birds handled (1761 in 2016, 1688 in 2015 and 3388 in 2014), 721 of which were new (1166 in 2016, 1188 in 2015 and 2104 in 2014). When the weather allowed for it, effort was again put in at the Storm Petrel ringing site in South Haven, resulting in a total of 646 adult birds trapped (699 in 2016, 919 in 2015 and 688 in 2014), 84% of which were new (91% in 2016) and 4% of which were controls ringed elsewhere (4% in 2016). Visiting ringers also assisted with other long-term projects such as the ringing of adult Puffins in Crab Bay (as part of a continuing study into adult survival) and the colour ringing of Great Black-backed Gulls, Herring Gulls and Oystercatchers outlined above.

Birds Ringed in 2017

A total of 6030 birds of 69 species were caught and processed this season, a total which was the third highest of the last six years but 6.2% down on the 2013-2017 mean (6427.8 \pm sd 1500.0). Seabirds comprised 44% of new birds ringed (51% in 2016 and 45% in 2015) and Manx Shearwater accounted for 62% of these and 27% of the overall total (32% in 2016). Seabirds made up 52% of the retrap total (birds caught which had previously been ringed on Skokholm), and Manx Shearwater accounted for 90% of seabird retraps and 46% of overall retraps (45% in 2016). It proved a poorer year for controls (birds caught which had been ringed elsewhere), with nine fewer than in 2016; this was primarily due to the weather restricting the Storm Petrel catch to the smallest of the last four years. Nevertheless seabirds provided the majority of controls, although ten passerines wearing rings from elsewhere were also encountered (14 in 2016, ten in 2015, seven in 2014 and six in 2013). There were more species handled than in any of the preceding five years with **Fulmar, Woodpigeon, Short-eared Owl, Bluethroat, Marsh Warbler, Radde's Warbler, Western Bonelli's Warbler, Blue Tit, Siskin, Bullfinch, Hawfinch, Myrtle Warbler** and **Lapland Bunting** taking the total number of species ringed on Skokholm since 2012 to 95. Details of each control, of the more interesting retraps and of where the birds we ringed have been found are given within the Systematic List of Birds, as is the total number of each species ringed between 1933 and 1976 and between 2011 and 2017.

The total number of New Birds, Retraps and Controls processed between 2012 and 2017, along with the number of different species handled.

	Total Birds Processed	New Birds (full grown)	New Birds (pullus)	Retraps	Controls	Species processed
2017	6030	4285	295	1411	39	69
2016	5979	4263	274	1394	48	59
2015	7245	5367	270	1563	45	67
2014	8439	5785	313	2303	38	59
2013	4446	3436	297	680	33	64
2012	697	648	2	46	1	25
Total	32836	23784	1451	7397	204	95

Catching Methods

There are three Heligoland traps on Skokholm (at the Well, in the Cottage Garden and alongside the Wheelhouse), two of which are constructed on the footprints of those originally erected by Ronald Lockley in 1933. These provide an invaluable method of trapping birds when blustery weather prohibits the use of mist nets. The Heligolands were driven regularly on every day of the season and with increased frequency on good fall days. There are three permanent mist nets at the Well: Well 6, Well 9 (with a six metre extension) and the Stream Net (a new site in 2015). Around the Farm there are a further three permanent nets: the Courtyard Net, the Wheelhouse Net and the Library Net, the latter of which was extended this autumn. The mist nets were opened on most occasions when conditions were suitable. Additionally four potter traps, eight spring traps, two very large spring traps and a perch trap were used to target rails, gulls, chats and pipits. Seabirds were caught using a variety of methods, although the majority were trapped by hand in the colony. Adult and fledgling Manx Shearwaters were trapped in study burrows, but also by hand along the Manx Shearwater transect. Adult Great Black-backed Gulls and Herring Gulls were trapped on the nest using a remote-controlled leg-noose. Lesser Black-backed Gulls and Herring Gulls were caught using a baited Gull Trap on Home Meadow. Adult Puffins, trapped as part of our colour ringing studies, were mist netted in the colony at Crab Bay. Adult Storm Petrels were mist netted in South Haven using a tape lure to attract the birds towards the net.

The Heligoland traps produced 1125 new birds, 44% of the new non-seabird total; there were 952 in

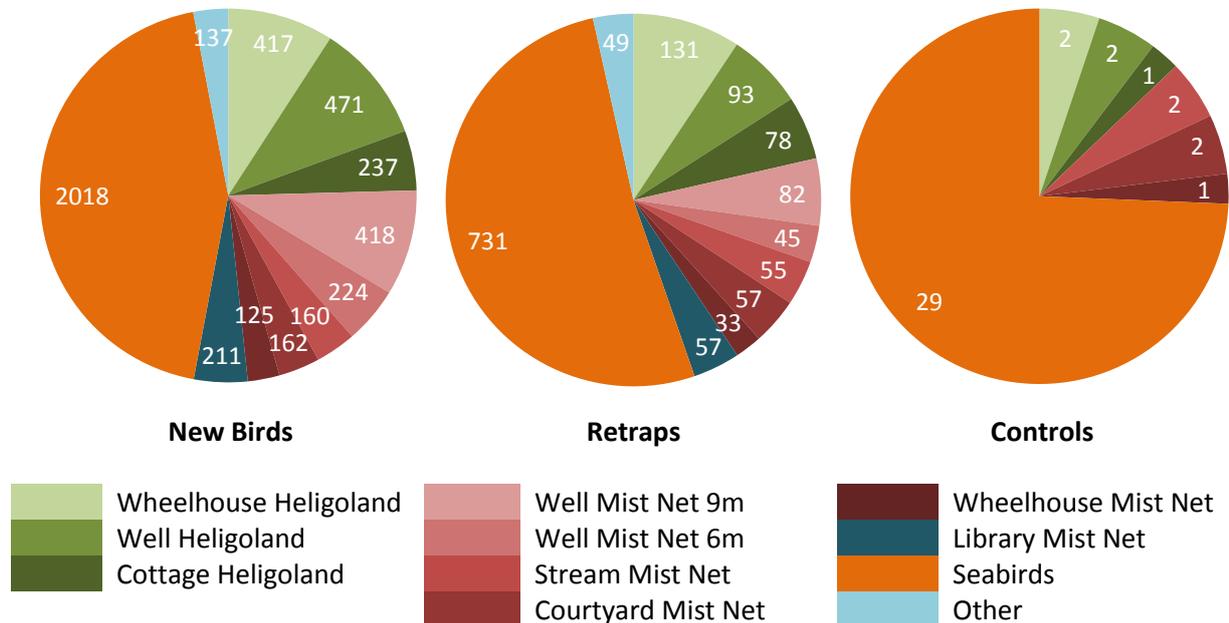
2016 (46% of the total), 1237 in 2015 (40%), 1426 in 2014 (57%) and 818 in 2013 (70%). There were 302 retraps (291 in 2016, 448 in 2015, 500 in 2014 and 242 in 2013) and five controls (seven in 2016, one in 2015, five in 2014 and two in 2013). The Well, for a fifth consecutive season, proved the most productive of the three Heligolands, providing 42% of the total (52% in 2016, 49% in 2015 and 48% in 2014). The Cottage Trap again caught the fewest, contributing 21% of the new birds total (17% in 2016, 14% in 2015 and 11% in 2014). The proportion of birds caught in each trap is unsurprisingly quite similar year on year, with the continuing success of the Well Heligoland no doubt due to the corridor of vegetation which runs from South Haven and funnels migrants towards a trap where more extensive cover and standing water hold birds for longer. The three most abundant species were the same for each trap, with **Willow Warbler** the most commonly encountered (398 new birds from the three traps), **Chiffchaff** the second most regularly trapped (224 new birds) and **Blackcap** the third (92 new birds). Highlights from the Well Heligoland included a **Sparrowhawk**, three **Water Rail**, the first **Woodpigeon** in six years, a **Tree Pipit**, two **Redstart**, a **Whinchat**, six **Stonechat**, a **Marsh Warbler** and a **Firecrest**. Highlights from the Wheelhouse Heligoland included two **Redstart**, a **Whinchat**, a **Stonechat**, a **Firecrest**, the first **Blue Tit** in six years, a **Brambling** and the first **Myrtle Warbler** for Skokholm. Although it catches fewer birds, the Cottage Heligoland produced a fine range of species including a **Merlin**, a **Cuckoo**, three **Redstart**, three **Stonechat**, a **Bullfinch**, a female **Hawfinch** (below) and only the second **Lapland Bunting** to be ringed on the Island.



The permanent mist nets produced 1300 new birds (1110 in 2016, 1673 in 2015, 1182 in 2014 and 556 in 2013), 329 retraps (397 in 2016, 405 in 2015, 351 in 2014 and 155 in 2013) and five controls (seven in 2016, seven in 2015, two in 2014 and four in 2013). As has been the case for the past three years, the Well provided the majority of birds, with Well 9 and Well 6 catching a combined 49% of new birds (51% in 2016). The least productive was the Wheelhouse Net, catching just 10% of new birds for a second year running, however this is likely due to it being opened on fewer occasions owing to its more exposed aspect. As was the case at the Heligolands, **Willow Warbler** was most commonly trapped with 455 new birds mist netted during the season. However the Well nets, in contrast to the Heligolands, saw **Goldcrest** and **Sedge Warbler** as the second and third most abundant species, with 99 and 85 new birds trapped respectively. Around the Observatory **Meadow Pipit** and **Wren** were the second and third most encountered species, with 112 and 61 new birds trapped respectively. Highlights from the Well mist nets included a **Bluethroat**, a **Whinchat**, nine **Stonechat**, a **Yellow-browed Warbler**, two **Firecrest** and a **Brambling**. Around the Farm the mist

nets produced a **Tree Pipit**, a **Black Redstart**, a **Whinchat**, a **Stonechat**, a **Barred Warbler**, a **Radde's Warbler**, a **Western Bonelli's Warbler** and a **Firecrest**.

The number of new birds, retraps and controls trapped during 2017 and the proportion made up of seabirds, birds trapped in each Heligoland and birds from each permanent mist netting site.



Arrival and Departure Dates

The first arrival and latest departure dates of 2017 migrants, along with the extreme earliest and latest dates on which they have been recorded in the past, are documented at the beginning of each species account in the Systematic List of Birds. There were four records of a species outside of its period of previous occurrence this year, two fewer than last year and 2014 and three fewer than in 2015. This year they were of five **Wigeon** through Broad Sound on 29th May (nine days later than a female in 1992), an **Arctic Tern** in Broad Sound on 27th October (two days later than birds in 2015 and 1996), a **Hoopoe** on 31st October (14 days later than one in 2016) and a **Yellow-browed Warbler** on 3rd November (four days later than one in 2016). The following species were recorded close to their Skokholm limits: Two **Barnacle Goose** on 14th October (earliest on 8th October 1987), a summer-plumaged **Great Northern Diver** on 20th May (latest on 30th May 1983), a moulting adult female **Hen Harrier** on 8th September (earliest on 5th September 2012), a ringtail **Hen Harrier** on 10th April (latest on 17th April 2016), a flyover **Greenshank** on 14th April (earliest on 5th April 2015), a northbound **Swift** on 23rd April (earliest on 15th April 1991), two **Swallow** on 12th March (earliest on 11th March 2000), two **House Martin** on 27th October (latest on 29th October 1975), five **Willow Warbler** on 23rd March (earliest on 13th March 2007), a singing male **Reed Warbler** on 27th April (earliest on 17th April 2015), a lingering **Melodious Warbler** on 8th October (latest on 12th October 1995), a **Lesser Whitethroat** on 30th April (earliest on 20th April 2016), a **Ring Ouzel** at the Well on 16th March (earliest on 15th March 1955), a male **Wheatear** on 12th March (earliest on 2nd March 2003) and a grounded **Tree Pipit** on 10th October (latest on 13th October 1959).

2016 Rarity Decisions and DNA results

Male **Eastern Subalpine Warblers** *Sylvia cantillans cantillans/albistriata* on 24th April and 14th May were both accepted by the British Birds Rarities Committee based on descriptions and photographs prior to the results of DNA testing; these were the second and third records for Skokholm. A summer-plumaged **Spotted Sandpiper** seen briefly on the Neck on 12th July was also accepted by

BBRC as the first for Skokholm and the second for Pembrokeshire. A **Golden Oriole** on 11th May (the fifth live record for Skokholm), a female **Red-backed Shrike** on 23rd May and a juvenile **Red-backed Shrike** on the 23rd and 24th August (the 27th and 28th Skokholm records), a **Red-breasted Flycatcher** on the 28th and 29th October (the 34th for Skokholm) and an **Ortolan Bunting** on 17th August (the 69th Skokholm bird and earliest autumn record) were all accepted as such by the Welsh Records Panel. Additionally a female Western-type **Subalpine Warbler** on 13th May was accepted by the Welsh Records Panel as being a Subalpine Warbler, however a pending DNA analysis of a retained feather should allow this record to be submitted to BBRC for acceptance to (sub)species level in the future. Feathers from a **Siberian Chiffchaff** logged on 9th October were analysed and found to belong to a female of this subspecies. Feathers of putative **Siberian Lesser Whitethroat** and **Siberian Chiffchaff**, present on the 10th and 11th October and between the 15th and 20th November respectively, are held at the University of Aberdeen for future analysis. A **Richard's Pipit** logged on 21st October was accepted as such by the County Records Panel. The July **Spotted Sandpiper** takes the Skokholm list to 289 species as of 31st December 2016 (note the revised total due to the removal of Bewick's Swan from the Island list).

Bird Observatory Fundraising

The Ticks Jar

The Skokholm Bird Observatory Ticks Jar was once more in action; prominently positioned on the top shelf in the Common Room of Lockley's Cottage, it attracted donations amounting to £244.50. Since implementing this Bird Observatory tradition in 2013, whereby birders and ringers are encouraged to make a small donation if they see or ring a new species during their stay, the jar has banked a whopping £1356.94. It has thus allowed us, over the years, to purchase equipment such as the Storm Petrel sound system, the eco-fan on the wood-burning stove in the Cottage, two-way radios for communicating sightings to the guests and each other, bat detector accessories, gardening equipment for the trapping area, additional ringing equipment, local artwork for bedroom walls and other bits and bobs which help make Skokholm feel more homely or function more efficiently.

Acknowledgements and Thanks

We have tried to make this section shorter, but it is just not possible! Although we should perhaps be used to it by now, we were yet again amazed by the generosity of everyone involved in making Dream Island the unique and magical place we all love. The first and biggest thank yous must go to this year's Long-term Volunteers Maddy Rawlings, Victoria Hope, Holly Pickett and Jacob Peterken. It cannot be emphasised enough just how much they have contributed to the Island; from providing the extra staffing required for implementing both our core seabird work and additional research projects to being the constant presence at the Farm which ensures that our guests have a happy and thoroughly immersive stay, having such an enthusiastic support team on the Island is something we are so grateful for. We know that they will each go on to achieve great things in conservation.

Skokholm also attracts shorter-term volunteers who generally come out for a particular task; we would like to thank all these people who have contributed to specific wildlife monitoring or practical management on the Island. John Jones, with fellow lichenologist Tony Fletcher, surveyed Skokholm's lichens, adding more new species to the list. Fiona Gomersall, with help from her daughter Tilly and Skokholm enthusiast Phil Blatcher, continued to work on the permanent vegetation quadrats and the historic plant data. Professor Chris and Mary Perrins, who have contributed an unimaginable amount to the Islands over the years, continued to assist with the annual Manx Shearwater study plots. Tina Wiffen shared her bat trapping and handling expertise for what could become an exciting new project. Howard Driver again donated vast amounts of his time, lending his hand to a myriad of odd-jobs and all our carpentry needs; there is barely an inch of the Island infrastructure which doesn't owe thanks to Howard's amazing abilities. Emyr Roberts was, fortuitously, resident at the

Lighthouse during Storm Ophelia and was a huge help during the boarding up process; we would have struggled to do it without him. Alan Wilkins and Nick Davison of the Wildlife Sound Recording Society continued to put a huge amount of effort into their project designed to recognise individual Manx Shearwaters and Storm Petrels by their unique calls.



We cannot offer enough thanks to all of the work party volunteers who once again contributed so much hard graft, both at the beginning and the end of the season. So much of what our guests see and appreciate is down to these extraordinary people who are a hilarious pleasure to have around; without them it would be impossible to keep the Island looking so loved. It goes without saying that the enormous amount achieved during work party weeks would not happen were it not for the volunteer chefs who put a tremendous amount of thought and effort into making delicious meals and perfect break-time treats. It is important that we also remember with gratitude the volunteers who accompanied us on our first trip over to Skokholm in March and who regularly show up to assist with huge deliveries of heavy building materials.

As always we would like to thank the brilliant team at Dale Sailing, particularly John and Gareth Reynolds, for delivering all of the materials and volunteers to the Island and for allowing materials and equipment to be delivered to and stored at Neyland. Thanks go also to the skilled boat crews who work incredibly hard during the season to bring guests to and from the Island.

We must thank our colleagues at the Wildlife Trust of South and West Wales who take care of all of the behind-the-scenes jobs, taking and managing bookings and sending out blank maps and stationary items that we cannot just pop to the shops for. We specifically wish to thank Lizzie Wilberforce, our line-manager, who is an absolute pleasure to work for and who supports us in so many ways throughout the year. We must also acknowledge the staff at Natural Resources Wales for their advice and consents, but particularly Mike Alexander for his guidance on the Seabird Management Plan. The Bird Observatories Council continue to support and publicise Skokholm Bird Observatory, making sure we have a presence at high profile events such as the Bird Fair. We are also extremely appreciative of experts who have offered us identification assistance during the year; Professor Martin Collinson and his team at the University of Aberdeen again carried out DNA analysis on feather samples obtained from migrant birds and Pembrokeshire Moth Recorder Robin Taylor provided moth dissection and identification.

The regular arrival of visiting ringers contributes significantly to ongoing research on Skokholm, as well as providing a wealth of interesting information for our visitors and helping to create that special Bird Observatory feel; we are indebted to them all for the extra ringing effort and census

coverage which they provide. We would specifically like to thank Wendy James and Richard Dobbins, of the Teifi Ringing Group, who visited several times this year to assist with colour ringing projects and migration monitoring, Chris Brown and Eric Wood, of the Tees Ringing Group, who aided with the colour ringing of both Great Black-backed and Herring Gulls and Ian Beggs for establishing the Wheatear project. Wendy also continued to take charge of the must-have Skokholm Bird Observatory merchandise and Chris was again the brains behind our Annual Report front cover. Kenny Cramer and the Northants Ringing Group also deserve a special mention; they have supported Skokholm since 2013 through annual large group visits, but as well as this they have also donated innumerable items of equipment to the Ringing Hut. Much of the work carried out at the Observatory relies on birders, from all over western Europe and northwest Africa, who observe and submit sightings of colour ringed birds; we are hugely appreciative.

That we can all stay on Skokholm at all is primarily thanks to the Friends of Skokholm and Skomer, a loyal group of Island supporters who want nothing more than to see them thrive. They care for Skokholm in so many ways, but they also support us and our Long-term Volunteers. We are grateful to each and every person involved, but would like to specifically mention Steve and Anna Sutcliffe who are instrumental in the organising and running of the work parties, who offer their home to us when we need a Pembrokeshire base in the winter and who bring out their boat in the spring to help with our seabird counts. We would like to say a huge thank you to Shirley Matthews and Renate Thome who have once more taken care of supplies for the Skokholm food-shop, whilst Renate also dealt with the laundry from the guest accommodation. Sam O'Shea offered her catering expertise during the work party and donated supplies and equipment to the Kitchen. Mark Burton and family again took delivery of the staff grocery shopping, meticulously checking it, packing it and making sure it made it to the boat; it makes a huge difference to us and the Long-term Volunteers.

This season we received many kind donations of thoughtful and useful items; we would need an extra ten pages to mention them all. Thank you to everyone who saw a gap in the Skokholm inventory and took it upon themselves to fill it; donations included items to sell in the shop, ringing equipment, soft furnishings, kitchen equipment, reference books, artworks and building supplies. Everything we receive, big and small, makes a genuine difference to Island life. We would like to say a specific thank you to John Parker of E.H. Smith Builders Merchants who, for a third year running, donated a substantial quantity of building materials and equipment, saving the Trust a huge amount of money. Mark Soesan generously gave the Island a Swarovski telescope, which is now on one of two extremely good tripods provided by Helen Harding; thank you both. Jeff Thomas kindly donated two wooden hides to replace the dilapidated structures at South Haven and Orchid Bog; they look brilliant in their new homes.

Last, but by no means least, thank you to everyone who came to explore Dream Island this year, both new guests and Skokholm regulars. The thousands of records which you have contributed have been added to the longest running Bird Observatory Log in the UK, your stay finances the management of the Island and your company is something we are forever grateful for. We look forward to welcoming you back soon.

Giselle and Richard



Definitions and Terminology

The status summaries used in this report follow those established by Betts (1992) and used by Thompson (2007); they refer to the period prior to this season. Where the status has changed in the years subsequent to Betts' 'Birds of Skokholm', the current status is used but the change is noted. The definition of each status is as follows:

Status	Definition
Vagrant	1-10 records since 1927
Rare	11-50 records or breeding records
Scarce	1-5 birds, records or breeding pairs per year
Uncommon	6-50 birds or breeding pairs per year
Fairly Common	51-250 birds or breeding pairs per year
Common	251-1000 birds or breeding pairs per year
Abundant	1001-2500 birds or breeding pairs per year
Very Abundant	More than 2500 birds or breeding pairs per year

The systematic list below follows that of the British Ornithologists' Union (McInerny *et al.*, 2017).

The Systematic List of Birds

Brent Goose *Branta bernicla*

Gwydd Ddu

Rare Only nine spring and four autumn post-War records, although three long-stayers in spring

Earliest 9th September 2003 **Latest** 20th June 2015 (19th April 2017)

A dark-bellied *B. b. bernicla* present around North Pond on the 18th and 19th April was the only sighting of the year (PB *et al.*). There have now been birds in three consecutive years, a regularity of occurrence not previously witnessed on Skokholm. Lockley mentions Brent Goose passing in the winter and notes a flock of 16 on 10th April 1936, however no Brents were recorded between 1939 and 1983 and only 14 records totalling 23 individuals have been logged since (including seven in the last three years); nine of the records have come in April. Given that the majority of Pembrokeshire Brent Goose sightings assigned to race each year have been *B. b. hrota*, the pale-bellied Greenland breeding subspecies, it is perhaps surprising that of the ten Skokholm records where race has been determined, all but three have belonged to the dark-bellied nominate form of Arctic Russia.

Canada Goose *Branta canadensis*

Gwydd Canada

Uncommon Breeder and Common Visitor first bred in 1996

The majority of spring sightings were of birds which would attempt to breed on Skokholm, with only six March or April daytotals exceeding the 14 breeders, including highs of 30 on 28th March, 21 on 19th April (when a skein of 13 headed for the mainland) and 20 on 21st April. Although seven territorial pairs matches last year and the lowest total since 2007, all of the pairs made at least one nesting attempt; only six of ten territorial pairs were found with nests in 2015 and seven of the 11 territorial pairs nested in 2014. The first incubating bird was logged on 26th March (8th April in 2016) and six of the pairs had eggs by 21st April (14th April in 2016); the Gull Rock pair were not found with eggs until 12th May. All seven breeding attempts failed, with just two pairs re-laying but again failing at egg stage (five pairs re-laid in 2016); Canada Goose productivity thus remains very poor, with a single fledgling in 2012 and no fledglings at all in the last five years (by contrast there were 38 fledglings in 2006 and a minimum of 40 in 2007). Birds became more mobile following failed breeding attempts and several departed the Island, leading to May lows of six on the 26th and 28th, eight on three dates and nine on five dates. Numbers dropped rapidly during early June, with two on

the 8th the last record until 4th August; this was thus only the third year since 1999, and the first since 2010, without a July record.

The number of territorial pairs with the peak coinciding with low disturbance during the renovation period.

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
9	8	6	-	36	41	23	16	18	11	10	7	7

Two birds took up residence on North Pond from 4th August and were joined there by a second pair from the 11th, although both pairs then departed between the 24th and 25th. Two returned for the last two days of the month but departed with a further eight birds which arrived to roost on the evening of 1st September. Up to seven roosted on eight further September nights and there were at least eight roosts in October. Although a late, typically post-sunset, arrival to the North Pond roost and a very early departure inevitably lead to undercounting, the autumn high of 44 on 14th October was the lowest autumn peak since 2005, well down on the 205 of 2016, the 168 of 2014 and the 110 of 2014. There were no November records for the first time in five years. Following singles on 9th March and 23rd November in 2016 and 25th September 2015, there were no Lesser Canada Goose records this year; a feral origin was considered possible in all three of these cases.

Barnacle Goose *Branta leucopsis*

Gwydd Wyran

Rare five post-1965 spring records of up to five birds and 12 autumn records of up to ten birds

Earliest 8th October 1987 (14th October 2017) **Latest** 16th April 1981 (27th March 2017)

One which arrived to North Pond on 24th March spent the following three days commuting between there and the Bog (GE, RDB); this was only the sixth spring record for the Island and the first since a single in 2002. Two birds with the Canada Goose flock on 14th October was the only record of the autumn. October continues to be the most likely month for a sighting of this surprisingly rare Skokholm species, with ten of 13 autumn records coming in this period.



Greylag Goose *Anser anser*

Gwydd Wylt

Rare 13 post-1953 spring records of up to five birds and seven autumn records of up to 11 birds

A single on North Pond on the morning of 26th April soon headed west (HD *et al.*). What was perhaps the same bird was again on North Pond on 3rd May. April continues to be the best month for encountering this feral species on Skokholm, with eight separate records. There have now been Greylags in three consecutive years, an increase in sightings which mirrors an increase in the size of the Pembrokeshire population, however records were most regular in the period 1992 to 1995.

White-fronted Goose *Anser albifrons*

Gwydd Dalcenwyn

Rare Winter Visitor 22 previous records of between one and 40 birds

Earliest 12th October 1971 (29th October 2017) **Latest** 26th June 1992

Eight heading north on 29th October was the only record of the year. Some of the group were certainly Greenland breeding *A. a. flavirostris*, the race typically encountered on Skokholm; there are only three Island records attributed to the nominate race, with a single between 28th April and 1st May 1990, two on 9th November 2002 and a single on 18th May 2014. This is another goose species being encountered more regularly in recent years, with four sightings in the last five; as with the preceding species, this regularity of records was last seen in the early 1990s.



Shelduck *Tadorna tadorna*

Hwyaden yr Eithin

Scarce Breeder first seen with young in 2006 and only eight post-July records before 2013

There were again almost daily records from the start of the wardening season, with highs of ten on 15th April and the 5th and 6th May and peak flock counts of seven on five dates and nine on 5th May; numbers were thus down on spring 2016 when there were highs of 13 on three dates, 14 on four dates and 15 on 3rd May. The first indication of a breeding attempt this year was the appearance of eight ducklings, accompanied by both adults, on North Pond on 28th May; this was two days earlier than the appearance of eight ducklings last year. The adult birds were repeatedly disturbed by an aggressive male Shelduck, perhaps leading to the loss of a chick on 30th May. The aggressive male accompanied a new female on 3rd June and an amalgamated brood of 14 young, seven from each female. Later on the same day all four adults were present, but two young had been lost and three more chicks disappeared over the following two days. Only two adults accompanied nine young on 6th June and all nine were protected by four adults during the 7th and 8th. There were only six chicks present the following morning (their sizes suggesting three from each brood), all of which survived (protected each day by between two and four adults), until the 19th when two of the adults departed. Two chicks were taken by gulls during the course of the next day but four were still present on the 21st. There were no birds at North Pond on 22nd June, but what was almost certainly the same pair with three chicks of the expected size were along the Lighthouse Track, near the Gap. Only a mobile pair of adults were seen over the following two days and a lone female back at North Pond on 25th June was the last record until October. That at least some chicks lasted for 25 days was an improvement on most years, but 2011 remains the only year in which young definitely fledged (it is also possible that the adults which swam with their young towards St Ann's Head last year managed to protect them through to fledging). Two broods matches that observed last year and in 2008; there have also been single broods logged in seven years since chicks were first noted in 2006 and three separate broods were seen in 2014.

As is now typically the case, birds were occasionally logged during the autumn with a pair on 28th October, a single on 31st October and two on 7th November. A single on 11th November 2013 was only the ninth post-July record for Skokholm, however there were up to three birds present on nine dates in November 2014, up to six birds present on nine dates in autumn 2015 and three singles during October and November last year.

Shoveler *Spatula clypeata*

Hwyaden Lydanbig

Rare Breeder and Uncommon Visitor bred in 1988, 1993-1996, 1999 and 2015

Following records of a mobile pair on the 28th and 29th March and a lone female on the 31st, there were daily sightings from 3rd April, peaking at five males and four females on the 6th and 7th and seven males and a female on the 21st; a daycount of nine was the highest to be logged in April since 1995 when nine were also present. There were five males on 2nd May and three were noted on each day between the 3rd and the 23rd along with occasional sightings of up to two females. A female accompanied eight ducklings at North Pond on 22nd May and at least six were still present the following day, although there were no sightings thereafter; this was only the eighth recorded breeding attempt on Skokholm, none of which have proven successful. Following a blank day on 28th May, there were up to three males and three females noted on ten dates between 29th May and 7th June, a pair on all but two dates between the 10th and 19th June and singles on 12 dates between 17th June and 12th July. In August six headed northwest off the Lighthouse on the 9th, there were singles on the 25th and 26th, three were present on the 27th and two were on North Pond on the 30th.



Wigeon *Mareca penelope*

Chwiwell

Uncommon Winter Visitor

Earliest 22nd August 1986 (28th September 2017) **Latest** 20th May 1992 (**29th May 2017**)

1936-1976: 1 trapped

A flock of 32 at North Pond, including 12 breeding-plumaged males, was present upon the return of staff on 12th March; this was the largest group to be recorded since 34 were logged on 16th November 1997 and the highest March count since 55 were present on the 15th in 1973. There were 30 birds noted the following day, 20 on the 14th, 16 on the 16th and six on North Pond each day between the 17th and 20th. Five through Broad Sound on 29th May was the only other spring record, only the fifth May record for the Island and the latest record to date. The only autumn sightings were of four on 28th September and five at North Pond on 28th October; autumn numbers were thus well down on last year, when there were 103 birds logged during October and November, but rather typical of recent years such as the nine noted in 2015 and the ten of 2014.

Mallard *Anas platyrhynchos*
Scarce Breeder and Fairly Common Visitor
1936-1976: 10 trapped

Hwyaden Wylt

There were daily records in March and highs of ten on the 13th, including seven males, and nine on the 22nd, when there were eight males. Daily counts in April peaked at seven on the 19th and 28th, with five males logged on five dates and six males on the 14th, 19th and 28th. A female found dead at East Bog on the 17th had seemingly been predated by a Great Black-backed Gull, leaving at least one moribund chick which was later found dead. A nest at South Pond still contained eggs on the 22nd. May counts also peaked at seven, on the 4th, and up to five males were still present on occasion. A female accompanied three chicks at Orchid Bog on the 4th, although one was taken by a Jackdaw and the remainder were not seen again. A second female arrived to Orchid Bog with ten ducklings on the 10th, at least four of which were last seen alive on the 22nd. June counts peaked at eight on the 21st, 23rd and 27th, nine on the 25th and ten on the 30th, up to seven of which were males. Orchid Bog again played host to a female with at least five ducklings from the 23rd, a group which moved to the Well on the 26th and which was last seen the following day. Four broods of ducklings in a season is seemingly a new Skokholm record, one up on the peak count listed by Thomson (2007) and the three broods noted in 2016, however it is seemingly well over a decade since any young fledged (there were occasional fledglings between 1985 and 2000, with a peak of 25 in 1988). The South Pond clutch was not seen to have hatched and for consistency is not counted. In July there were daily counts until the 17th, peaking at ten on the 4th and 5th and 12 on the 6th, along with a single on the 22nd; the peak count was the highest July daytotal since 1999 when 15 were logged on the 5th. Up to four birds were noted on four August dates, a typically low showing for this month, and September proved similarly quiet with 15 birds over seven dates and a high of five on the 27th. The only October records were of six on the 26th and two on the 28th, whilst 13 at North Pond on the 7th was the only November sighting; it was thus the quietest autumn since 2007, although it should be noted that this species, as with the other ducks, regularly exhibits a post-dusk arrival and pre-dawn departure from roost sites which makes an assessment of numbers challenging.

Teal *Anas crecca*

Corhwyaden

Common Visitor recorded in all months but more regular in winter, possibly bred in 1936
1936-1976: 16 trapped, 2014: 1 trapped

Although numbers were up on 2016, it proved something of an average spring with daily records from the 12th in March totalling 205 birds, including highs of 27 on the 13th and 20 on the 15th, and April records on all but two dates to the 14th, totalling 48 birds and with a high of 11 on the 4th. A pair was logged between the 17th and 19th April and on 16th May but there was no indication of a breeding attempt. Two were on North Pond on 9th July, six days before the first autumn birds of 2016, and there were records of up to seven birds on all but six dates between 22nd August and 9th September totalling 49 birds. Two went northwest off the Lighthouse on 16th September, there were singles on the 27th, 28th and 30th September and North Pond held two on 6th October, four on the 7th and five on 7th November. It thus proved the quietest autumn since 2011.

Tufted Duck *Aythya fuligula*

Hwyaden Gopog

Rare only 11 previous records but logged in each month between May and October

A pair at North Pond on 4th June was the first Skokholm record since a male which lingered for four days from 23rd June 2004 (CF, RDB *et al.*). The only other Skokholm records concern a male on 3rd July 2000, a female on 28th August 1999, three on the 21st and two on 29th September 1994, a male for nine days from 1st June 1991, a female on 10th October 1982, a pair on 8th May 1981, two on 3rd May 1972, a single on 8th August 1961 and a female which stayed for 16 days from 5th May 1958. On

mainland Pembrokeshire Tufted Duck numbers tend not to build up until November and peak in January and February when birds are thinly distributed across several freshwater sites, whilst cold weather movements result in a further increase in numbers (Donovan and Rees, 1994); a Wardening presence during the winter would perhaps thus increase the number of Island records.



Common Scoter *Melanitta nigra*

Môr-hwyaden Ddu

Common recorded offshore in all months, but particularly June to September
 1936-1976: 11 trapped (oiled birds following rehabilitation)

It proved to be the best year ever for this species on Skokholm. In April 14 headed west on the 19th, five groups totalling 157 birds did likewise on the 21st and there were a further 40 the following day; the highest previous April daycount was the 30 logged on the 8th in 1995. A group of 50 west through Broad Sound on 6th May was the only record that month and the third highest May daytotal behind counts made in 1992 and 2002. The only June record concerned four groups totalling 210 birds which headed west on the 26th; previously the highest June daycount was the 176 logged on the same date last year. Numbers increased in July with records on 17 dates from the 6th, including highs of 55 on the 6th, 43 on the 27th and 57 on the 29th, which totalled 415 birds; this was the fourth highest July total on record. Whereas numbers in the previous five years peaked in July, this year saw an August passage which totalled 1044 birds over 16 dates and with highs of 247 on the 5th, 128 on the 6th, 392 on the 9th and 84 on the 13th; the monthly total was the second highest to be made on Skokholm, only down on the 1411 of September 1992, and the peak count was the second highest daycount on record, only down on the 420 of 29th May 1992 and well up on the previous August high of 127. In September there were sightings on 18 dates, totalling 449 birds and with highs of 60 on the 12th, 75 on the 14th and 59 on the 16th, whilst in October there were 52 birds noted over eight dates including 13 on the 17th and 14 on the 26th. Two on 5th November was the last record of the year. Virtually all of the birds seen during the autumn were heading southeast, presumably towards wintering grounds in Carmarthen Bay. An annual total of 2393 birds was a new Skokholm record, fractionally up on the 2383 of 1992, although inevitably records are in part a reflection of seawatching effort.

Red-breasted Merganser *Mergus serrator*

Hwyaden Frongoch

Rare 16 records totalling 24 birds in 11 previous years

A brown-headed bird which drifted from South Haven to Peter's Bay on 16th September was the first Skokholm record since three were logged on 21st September 2001 (HP, HD). What was perhaps the same bird lingered to the east of the Devil's Teeth five days later (TW *et al.*). The only other Skokholm records are of singles on 13th May 1995, 21st July 1994, 22nd June and 26th September 1993 and on 4th October 1992, two on 30th June and 28th September 1991 along with a single on 21st

October that year, one on 24th May 1985, two on 28th October 1980, three on 9th August and a single on 30th October 1977, one on 12th September 1973 and in 1968 a single on 19th February and two on 3rd November.



Quail *Coturnix coturnix*

Sofliar

Rare noted on 45 previous dates, probably concerning 38 records of 41 birds but only two in autumn 1936-1976: 1 trapped

One flushed from the coastal grassland above Purple Cove on a drizzly 10th June was the first record since 2nd June 2015 and only the third sighting this century following a singing bird on 16th May 2014 (GE). There were three singles in the 1990s, approximately six records in the 1980s (three of which were probably of two birds lingering for up to three days), five singles in the 1970s, seven singles in the 1960s, eight singles in the 1950s, four singles in the 1940s and three between 1938 and 1939 including one found dead on the roof of the Lighthouse.

Red-throated Diver *Gavia stellata*

Trochydd Gyddfgoch

Scarce passing at sea from September to May, not recorded every year but occasionally Uncommon

The first of the year headed north off South Haven on 10th April and three heading north together the following day was, equal with 21st April 2016 and 15th February 1998, the highest count since four were noted on 25th September 1992 (MH, IB). The only other records this year were of singles seen from the Lighthouse on the 3rd, 21st and 22nd September and west past Spy Rock the following day. There were thus six fewer birds than in 2016, which proved the third most productive year to date, and 11 fewer than the 1990 Skokholm record.

Great Northern Diver *Gavia immer*

Trochydd Mawr

Scarce passing at sea from September to May but not recorded every year

Earliest 11th August 1991 (2nd November 2017) **Latest** 30th May 1983 (20th May 2017)

There were only two records this year, namely a summer-plumaged bird which went west off the Dip on 20th May, the third latest spring record to date, and a single which steamed south across the Neck on 2nd November. The record monthly total on Skokholm is the six logged in the November of 2015 and the maximum daycount is the four noted on 12th November 2015 and 22nd September 1930.

Storm Petrel *Hydrobates pelagicus*

Pedryn Drycin

Abundant to Very Abundant Breeder a 2016 whole Island survey predicted 1910 occupied sites

593 trapped (including 8 pulli), 60 retrapped, 27 controls

1936-1976: 18,526 trapped, 2011-2016: 2543 trapped, 174 retrapped, 97 controls

Despite the sizable breeding population on Skokholm, Storm Petrels again proved a relatively rare sight at sea; there were however more diurnal records than in recent years, all of which are listed

here. One went east off the Lighthouse during a strong southerly breeze on 15th May, two were seen off the Lighthouse during six hours of observations in a southwesterly near gale on 28th July, seven (possibly nine) were logged there during a full day seawatch in similar conditions on 3rd August, a remarkable 27 were seen following the potting vessel Boy's Pride as it returned to Milford in a west-southwest moderate breeze on 6th August, another was off the Lighthouse on the same day, two lingered around a Grey Seal breaking up a fish below the Lighthouse on the morning of 3rd September, a single went through the same afternoon, one headed west into a near gale on 9th September and finally another single went west during a northwesterly severe gale the following day. All other observations came at night, with the exception of a small number of incubating adults visible in shallow crevices or in nest boxes. A minimum of 12 birds watched after dark at the Quarry on 20th April was the first record of the year, one day later than the first of 2016 and two days earlier than the first of 2015. The first diurnal record was of two vocal birds in the Cottage Garden Wall on 23rd April, 15 days earlier than the first diurnal record of last year. Nights in May saw small numbers observed at various locations around the Island and there were counts from the Quarry of at least 100 on the 21st and 82 on the 28th. A bedraggled bird washed out of the Knoll Wall during very heavy rain on 27th June was boxed for drying and released after dark that night.



Four transects established at the Quarry in 2010, along with further plots in North Haven Gully and along two of the walls which radiate from the Farm, seemingly provide a sound method for monitoring changes in the Skokholm population. Between 90 and 130 responses were elicited at

these sites in the years 2010 to 2015, however 2016 saw a substantial rock slide significantly reduce the area which could be compared with those years; Quarry transect two, which held between eight and 21 responding birds, was almost entirely destroyed and Quarry transect one was undercut on its southern edge, rendering both transects too dangerous to survey (see the 2016 Seabird Report for photographs and further details). It would seem from the records that the 2016 Quarry rock fall was by far the largest such event for over 30 years. Visits to the Quarry this season established that there had been no further significant slides on any of the transects and the decision was made to reinstate transect one entirely and to use the upper section of transect two. It was originally intended that an analysis of the 2010 to 2015 data would allow us to deduce how many birds had been present in just the upper section of transect two and allow a direct comparison to be made with this year, however it became apparent that there were considerably more birds in this upper area in 2016, perhaps due to the rock fall displacing birds from further down. It was therefore decided that all of the data previously collected for transects one and two would be compared with this and future years, but it is noted here that transect two has been shortened and that one and two were missed in 2016.

We were not joined by a long-term Storm Petrel researcher this year, however undergraduate researcher Katherine Westerberg accompanied staff and Long-term Volunteers to allow the survey work to be completed in the usual period. Ten visits were made to the study areas between 9th June and 10th July. A recording of male song was played into every crevice encountered along the transects, both numbered (and therefore used previously) and unmarked, with each crevice from which a response was elicited being recorded and marked if new. It was first noted in 2013 how some marked burrows had deviated from the two metre wide transects and in 2014 the data collected since 2010 was reassessed to bring it back in line with the original protocol. As has been the case since 2014, the playback census this year was focused on the area of the transects delineated by marked burrows, although the results were then divided into those which fell within the true two metre transect and those which fell just outside (see table below).

The total number of apparently occupied crevices (located over ten visits) responding to a recording of male song at each of the seven study sites. Numbers in parenthesis are the totals from the 2m wide Quarry transects (as stipulated in the project guidelines) as opposed to the more wayward crevices included since the project's inception. The mean is that from 2010-2017.

Year	North Pond Wall	Little Bay Wall	North Haven Gully	Quarry transect 1	Quarry transect 2	Quarry transect 3	Quarry transect 4	Quarry transect total	Total						
2017	7	20	14‡	15 (5)	13† (7) †	10 (9)	48 (27)	86 (48)	127 (89)						
2016	6	15	17	9* (4)*	** **	11 (8)	41 (26)	61 (38)	99 (76)						
2015	7	17	17	14 (5)	21 (9)	12 (7)	42 (25)	89 (46)	130 (87)						
2014	9	12	13‡	14 (5)	18 (9)	18 (12)	37 (22)	87 (48)	121 (82)						
2013	8	15	22	14 (4)	15 (8)	10 (7)	46 (27)	85 (46)	130 (91)						
2012	5	9	21	12 (5)	8 (4)	10 (5)	33 (17)	63 (31)	98 (66)						
2011	7	5	19	11 (5)	13 (8)	10 (7)	25 (14)	59 (34)	90 (65)						
2010	4	9	18	8 (5)	15 (12)	11 (8)	30 (17)	64 (42)	95 (73)						
Mean	6.6	12.8	17.6	12.1	4.8	14.7	8.1	11.5	7.9	37.8	21.9	74.3	41.6	111.3	78.6

* Transect 1 was only visited on four occasions due to safety concerns.

** Transect 2 was not visited in 2016 due to a rock fall.

† Transect 2 was shortened in 2017 due to the 2016 rock fall.

‡ There was substantial scouring in the winters of 2013-14 and 2016-17 and during Ophelia.

One of the most striking increases logged this year was along Little Bay Wall where responses were elicited at an extra five crevices. There is a general consensus that the number of pairs utilising the 18th century herringbone walls on Skokholm has declined (Vaughan and Gibbons, 1996; Vaughan, 2001; Thompson, 2003; Sutcliffe, 2010), perhaps due to a loss of suitable nest sites as vegetation and

soil fills gaps in the collapsing walls. There is however pleasing evidence here that this decline has currently halted and numbers, at least along Little Bay Wall, are gradually increasing (although see discussion below regarding a decline in the Walls response rate this year).

There was further substantial scouring in North Haven Gully during the winter of 2016-2017, with several boulders in the lower section being relocated, an event which destroyed crevices and moved painted markers away from their original locations. As was the case following the last major change to the North Gully boulder slope, a below average number of responses were elicited this season (with three fewer sites found than in 2016 and 3.6 fewer than the eight year mean). The largest drop in numbers observed during the last eight years came in 2014 following storms during the previous winter, storms which removed 21 of the crevices occupied between 2010 and 2013 (and 16 of those occupied in 2013). The huge swell caused by Storm Ophelia (the remnants of the easternmost major Atlantic hurricane on record) on 16th October this year made further alterations to the North Gully landscape, entirely removing boxes installed by Whittington in 2014, the access ladder to the lower portion of the slope and the central section of boulder scree which traditionally held many active crevices (see photograph below). It would seem likely that North Gully will again hold a below average number of pairs next year.



Owing to the loss of Quarry transect two and a reduced number of visits to transect one, the number of active crevices located last year was the lowest since 2012. Transect one was accessible for the full ten visits this season and a cumulative five responses were elicited, matching that observed in 2015 and in five of seven previous survey years. Despite the shortening of transect two, seven responses was only two down on the 2015 and 2014 totals and 13.6% down on the mean. Transects three and four were both very similar to last year, with one extra site found along each two metre transect and both were up on the mean. Overall there were ten more active sites at the Quarry this year (primarily due to the visits to transects one and two) and a cumulative total of 48 responding sites matched 2014 as the highest total of the last eight years (15.4% up on the eight year mean).

Overall there were 89 responses elicited this year, two more than in 2015 (the year before the Quarry rock fall), only two less than in the record year of 2013 and 13.2% more than the eight year

mean. It seems likely that the Skokholm study population can still be regarded as stable, a conclusion which is probably applicable to the Island population as a whole. This is positive news following what may have been a significant population decline between 1996 and 2010 (Sutcliffe and Vaughan, 2011, Wood *et al*, 2017). It is clear that some Storm Petrel nest crevices can be short lived (a third of those found over the course of this study have only been occupied for one year), however there also seems to be evidence here that the birds react to the changing landscape and maintain a stable population; this of course assumes that further nest sites open up as others are lost. Stable sites are also in existence; over a quarter of the active crevices located during this eight year study have shown signs of occupancy in five or more years and 4.95% of crevices have contained a calling bird in every year.

The number of crevices which have at some point been occupied over the eight year study (a total of 283), subdivided to show how many years the crevices have been apparently occupied for and the percentage of crevices occupied for a particular number of years.

	Quarry Transects	The Walls	North Haven Gully	Total	% of total
1 year of apparent occupancy	43	24	29	96	33.92
2 years of apparent occupancy	24	18	7	49	17.32
3 years of apparent occupancy	7	5	7	19	6.71
4 years of apparent occupancy	28	10	8	46	16.25
5 years of apparent occupancy	14	1	4	19	6.71
6 years of apparent occupancy	26	1	4	31	10.95
7 years of apparent occupancy	7	1	1	9	3.18
8 years of apparent occupancy	12	1	1	14	4.95
Total	161	61	61	283	

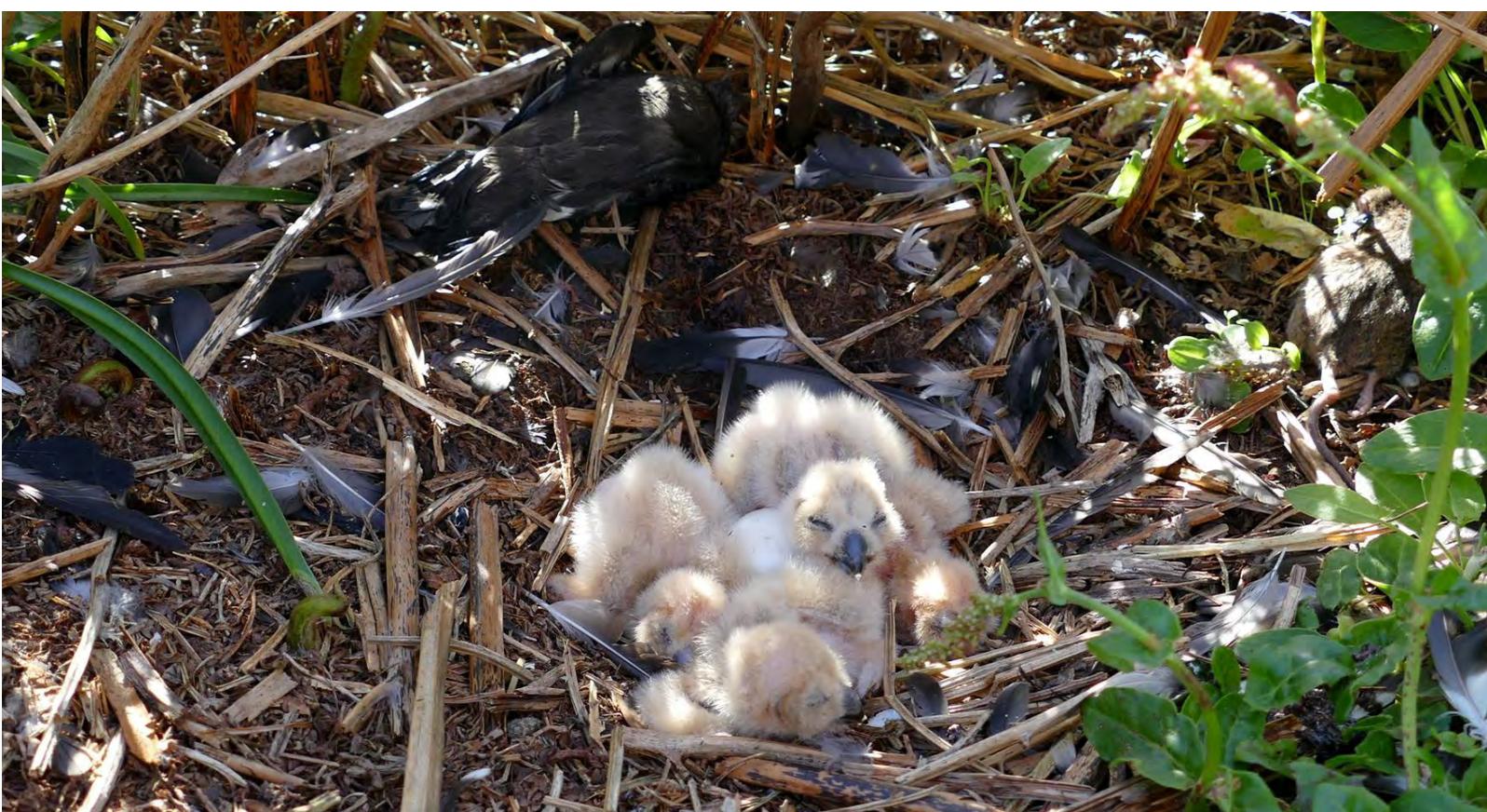
The percentage of known active Wall crevices which responded to a recording of male song during any single visit was considerably down on the previous three years; whereas between 28.7% and 40.0% of active Wall burrows have responded in the past, this season saw only 21.9% respond. This may be cause for concern as it perhaps suggests that the active crevices were occupied less frequently, hinting at an increase in the number of crevices occupied by non-breeders (birds which may leave a crevice unattended or occupy multiple crevices during the study period). Although of course more non-breeders could be a positive sign for the future, it should thus be noted that the above figures suggestive of a stable or increasing Walls population are open to interpretation. In areas of rock fall (in the Quarry and North Haven Gully) the proportion of active crevices which responded on any single visit fell within that recorded in previous years (see table below) and the average response rate fell just below the relatively tight spread observed during the same period (between 27.1% and 30.1% of active crevices have responded over the last four years). Although this overall response rate has proven consistent between years, there is considerable variation over the ten visits; on one occasion there were no responses from the Walls and on another there were 13, whilst the number of responses at North Haven varied between two and six and at the Quarry between 15 and 45. Despite the observed variation, the use of response rates to produce a correction factor remains the best way to predict the number of birds present in a large area when ten visits are not logistically feasible (for example during the whole Island census). However the uncertainty surrounding this year's figures is a reminder of how difficult it is to assess the breeding population of a species which usually cannot be seen.

There is an obvious need to know what responding birds are actually doing; it is unclear how many of the 1910 active sites predicted in last year's whole Island census were actually occupied by breeding birds. Given that previous attempts to use an endoscope in natural sites have failed, one way to improve our knowledge is to encourage petrels to occupy accessible artificial nest sites. With

this in mind a study wall containing 119 nest holes was created during the 2016 season (with the final inspection hatches and endoscope holes being added in April 2017). This season saw the regular use of MP3 playback in an attempt to lure prospecting petrels into the crevices and on 10th July this proved successful when a bird twice entered the wall. However no birds responded from the ‘Petrel Station’ during the playback survey period and the dream of having a study population with which to check the breeding status of responding birds is some way from becoming reality.

The percentage of known active crevices which responded to male song during any single visit, averaged across all visits (the resulting correction factor is given in parenthesis).

Year	The Walls	North Haven	Quarry	Rock fall	Average
2017	21.9 (4.58)	30.9 (3.23)	28.1 (3.55)	28.5 (3.51)	27.1 (3.69)
2016	40.0 (2.50)	25.9 (3.86)	23.3 (4.30)	23.9 (4.18)	27.7 (3.61)
2015	28.7 (3.48)	37.4 (2.68)	28.9 (3.46)	30.4 (3.29)	30.1 (3.33)
2014	36.2 (2.76)	40.0 (2.50)	26.2 (3.82)	26.4 (3.79)	28.1 (3.56)



In 2013 a thermal imaging camera recorded a Short-eared Owl hunting Storm Petrels in the Quarry, an event which is seemingly becoming more regular. The remains of six petrels were found that year, with 16 in 2014, 18 in 2015 and 51 in 2016, the vast majority of which were believed to be owl victims. This season there were 98 corpses located between 23rd April and 14th October (the latter one of two juveniles found dead); although five were certainly taken by Great Black-backed Gulls (as the corpses were found in their pellets or nests), the majority of birds were again thought to have fallen prey to Short-eared Owls (due to the presence of feathers or pellets near the bodies). The increase in the number of corpses found this season is primarily due to the presence, for the first time on record, of a breeding pair of Short-eared Owls on Skokholm. Breeding was confirmed when an owl was flushed from a single egg on 21st April and a visit on 21st May revealed four chicks, a failed egg and a nest littered with Storm Petrel feathers and a headless corpse (photograph above).

Four owlets were still alive on 21st June (although one was considerably smaller than its siblings), the smallest of the three large chicks was still alive on 21st June and at least two ringed fledglings were at the Hills on 15th July. There were no sightings of Short-eared Owl between 22nd July and 1st September, only two records in October (including a high of three on the 29th) and a single in November, however 14 freshly predated Storm Petrels were found during the same period. Both breeding adults were surprisingly dark of face, probably due to oil regurgitated by Storm Petrels.

There were 14 sites discovered this season where an incubating bird was evident early enough in the nesting period to allow a productivity estimate to be made (12 sites in 2016, 20 in 2015 and 13 in 2014); four traditional sites used last year for the BTO tracking project were not occupied this year. Although some early egg stage failures may have been missed, the study is biased towards birds in shallow crevices or boxes and the sample size is far from great, these visible birds provide a rare opportunity to estimate productivity on Skokholm. Of the 14 monitored nests, two failed at egg stage, four failed at either egg or very small chick stage and one failed at chick stage; productivity was thus calculated at 0.50 fledglings per pair, a figure similar to the 0.58 observed last season and the 0.55 logged in 2015 but down on the 0.69 recorded in 2014. The first hatched eggshell was found on 3rd July this year, 14 days earlier than the first of 2016 and one day later than in 2015, whilst another adult was still incubating on 13th August. This latter attempt was still ongoing when staff left the Island on 9th November, although by this time the chick had attained a wing chord of 101mm and was considered large enough that it would go on to fledge.



Although only small numbers of accessible chicks are ringed each year on Skokholm, tape luring of adult birds in South Haven is giving some indication as to their post-fledging survival. Of 31 chicks ringed between 2013 and 2015, six (19.35%) have been mist netted in South Haven in subsequent years (at between one year, 323 days and two years, 350 days later). Intriguingly 12 of the 31 were ringed at either the Quarry or Wall's End and have not been encountered again; although this may infer differing survival rates, it is perhaps more likely that young non-breeders return to sites close to their natal crevice, in this instance sites far enough from the South Haven tape lure that birds are not

attracted. If the Quarry and Wall's End birds are removed from the equation, six of 19 birds (31.58%) have been reencountered. If only the 2014 data is used, three of seven chicks have survived for at least one year, 323 days since being ringed (42.86%).

Adult Storm Petrels were mist netted on four nights between the 23rd and 28th May in an attempt to retrieve the BTO tracking devices fitted in 2016; an MP3 playback lure was not used on these occasions. Additionally birds were lured to the traditional South Haven netting site on nine nights between 24th July and 7th September, one more night than in 2016 but two fewer than in 2015. Disappointingly all but three dates during the peak trapping period of 15th July to 7th August were missed due to the weather conditions prevalent at the time. The largest catch was the 252 trapped on the night of 24th July (up on 247 on the night of the 22nd in 2016). Of 672 adults handled this year, 12.9% were already wearing a ring (6.8% in 2016, 12.3% in 2015, 7.5% in 2014), there were two retraps from 2013, six from 2014, five from 2015, 15 from 2016 and 27 (4.02%) had been ringed elsewhere (3.03% in 2016, 3.45% in 2015). Along with generating some fantastic data, these nights also proved very popular with guests to the Island. Unless stated otherwise, all of the following recoveries were of birds deliberately mist netted. Additional to the birds listed below, we received news of two birds ringed at Wooltack Point (4km to the NNE) retrapped on Skokholm (one of which was ringed in 2001 and retrapped 5778 days later, one of which was retrapped 381 days later), one bird ringed on Skokholm and retrapped on Wooltack (after 326 days), two birds ringed on Skomer (4km to the NNW) retrapped on Skokholm (after three and 13 days) and three birds ringed on Skokholm and retrapped on Skomer (after one, four and 17 days).

Ringing recovery 2513380

Originally ringed as an adult, STRUMBLE HEAD, PEMBROKESHIRE 30th July 2010

Recovered SOUTH HAVEN, SKOKHOLM 25th May 2017

Finding condition This bird was not tape lured and is probably a Skokholm breeder

Distance travelled 40km at 202 degrees (SSW)

Days since ringed 2491

Ringing recovery 2534993

Originally ringed as an adult, CAPE CLEAR, CORK, IRELAND 4th July 2017

Recovered SOUTH HAVEN, SKOKHOLM 7th August 2017

Distance travelled 294km at 85 degrees (E)

Days since ringed 34

Ringing recovery 2633281

Originally ringed as an adult, CALF OF MAN, ISLE OF MAN 13th July 2017

Recovered SOUTH HAVEN, SKOKHOLM 10th August 2017

Distance travelled 263km at 187 degrees (S)

Days since ringed 28

Adult 2706631 made the reverse journey, reaching the Calf from Skokholm in 343 days from 14th August 2016.

Ringing recovery 2637108

Originally ringed as an adult, ST JUSTINIAN, ST DAVID'S, PEMBROKESHIRE 30th July 2016

Recovered SOUTH HAVEN, SKOKHOLM 25th July 2017

Distance travelled 19km at 170 degrees (S)

Days since ringed 360

Amazingly 2637490, ringed at the same site on the same night, also reached Skokholm on 25th July (360 days later). Additionally 2637483, ringed at the same site one day earlier, reached Skokholm on 6th September 2017 (404 days later).

Ringing recovery 2647667**Originally ringed** as an adult, BARDSEY ISLAND, GWYNEDD 15th July 2016**Recovered** SOUTH HAVEN, SKOKHOLM 8th August 2017**Distance travelled** 122km at 196 degrees (SSW)**Days since ringed** 389**Ringing recovery 2655562****Originally ringed** as an adult, HARTLAND POINT, DEVON 8th July 2016**Recovered** SOUTH HAVEN, SKOKHOLM 12th August 2017**Distance travelled** 95km at 326 degrees (NNW)**Days since ringed** 400**Ringing recovery 2674671****Originally ringed** as an adult, MWNT, CEREDIGION 20th June 2017**Recovered** SOUTH HAVEN, SKOKHOLM 25th July 2017**Distance travelled** 65km at 223 degrees (SW)**Days since ringed** 35

Adult 2721405 made the same journey in three days between the 22nd and 25th July 2017 and 2721410 made it in ten days between 26th July and 5th August 2017.

Ringing recovery 2685661**Originally ringed** as an adult, SOUTH HAVEN, SKOKHOLM 22nd July 2014**Recovered** BARDSEY ISLAND, GWYNEDD 30th May 2017**Distance travelled** 122km at 16 degrees (NNE)**Days since ringed** 1043

Additionally 2706282 made the same journey between 24th July 2016 and 5th August 2017 (377 days and also retrapped on the 12th after 384 days), as did 2706312 between 24th July 2016 and 6th July 2017 (347 days) and 2706368 between 24th July 2016 and 30th May 2017 (310 days). The same locations were also visited by 2706477 between 26th July 2016 and 7th July 2017 (346 days), with this latter bird being retrapped at St Justinian, St David's on 30th July 2016 (four days after Skokholm).

Ringing recovery 2699028**Originally ringed** as an adult, PORTLAND BILL, DORSET 28th June 2016**Recovered** SOUTH HAVEN, SKOKHOLM 5th August 2017**Distance travelled** 238km at 304 degrees (NW)**Days since ringed** 403**Ringing recovery 2699052****Originally ringed** as an adult, PORTLAND BILL, DORSET 4th July 2017**Recovered** SOUTH HAVEN, SKOKHOLM 4th August 2017**Distance travelled** 238km at 304 degrees (NW)**Days since ringed** 31**Ringing recovery 2699053****Originally ringed** as an adult, PORTLAND BILL, DORSET 5th July 2017**Recovered** SOUTH HAVEN, SKOKHOLM 10th August 2017**Distance travelled** 238km at 304 degrees (NW)**Days since ringed** 36**Ringing recovery 2705851****Originally ringed** as an adult, SOUTH HAVEN, SKOKHOLM 12th August 2015

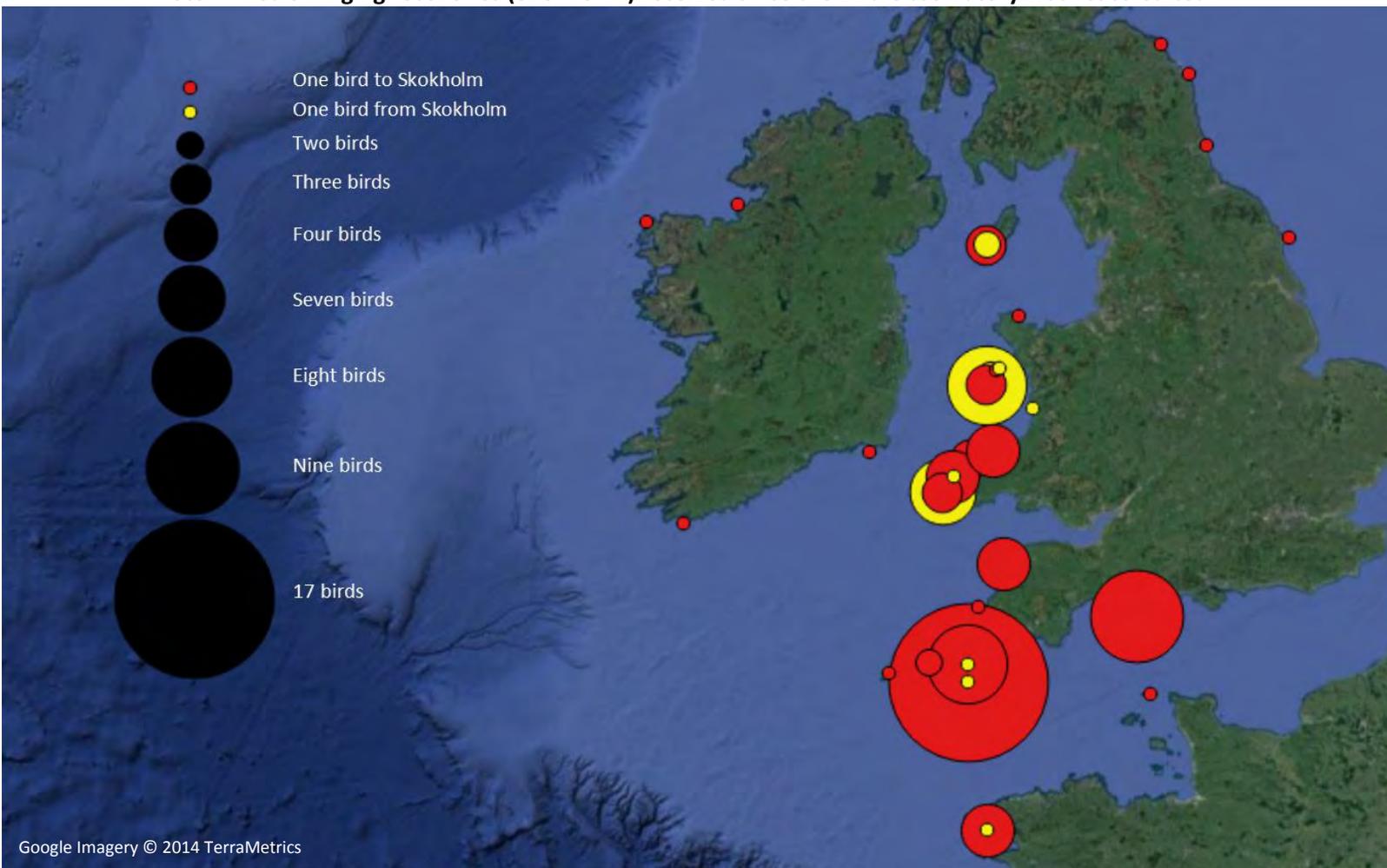
Recovered BANNEG, LE CONQUET, FINISTÈRE, FRANCE 9th June 2016

Distance travelled 366km at 177 degrees (S)

Days since ringed 302

Additionally FRP SE23385, ringed at Banneg on 7th August 2013, was found dead in the Quarry on 17th July 2016 (1075 days later); there was no obvious cause of death. Along with the islands of Balaneg and Trielen, Banneg forms part of the Iroise Nature Reserve within the Molène Archipelago, the most westerly islands of France. Banneg is the largest Storm Petrel colony in the country, thought to be home to just under a thousand pairs which primarily nest in abandoned Rabbit burrows. Intriguingly this nesting habitat was not found to be in use on Skokholm during the 2016 whole Island census.

Storm Petrel ringing recoveries (over 10km) received since the Bird Observatory was reaccredited.



Ringing recovery 2706465

Originally ringed as an adult, SOUTH HAVEN, SKOKHOLM 26th July 2016

Recovered HOT POINT, THE LIZARD, CORNWALL 22nd June 2017

Distance travelled 193km at 178 degrees (S)

Days since ringed 331

The reverse journey was made by 2714489 ringed on 4th July 2016 and controlled on Skokholm 25th August 2017 (417 days later), by 2726026 ringed on 6th July 2016 and controlled on the 6th, 8th and 11th August 2017 (396 to 401 days later), by 2726155 ringed on 26th June and controlled on the 8th and 10th August 2017 (43 and 45 days later), by 2726169 ringed on 5th July and controlled on 10th August 2017 (36 days later) and by 2726240 ringed on 1st August and controlled on 8th August 2017 (seven days later).

Ringling recovery 2722620

Originally ringed as an adult, SOUTH HAVEN, SKOKHOLM 7th August 2017

Recovered BROWNSTOWN HEAD, WATERFORD, IRELAND 13th August 2017

Distance travelled 134km at 292 degrees (WNW)

Days since ringed 6

Fulmar *Fulmarus glacialis*

Aderyn-drycin y Graig

Fairly Common Breeder first bred in 1967

3 pulli trapped

1936-1976: 34 trapped

A minimum of 101 were already on ledges when staff returned to the Island on 12th March. However the majority of counts during the remainder of the month were low, including just 11 on the 24th, a single on the 26th and eight on the 29th. There were March highs of 139 on the 13th, 99 on the 17th and 137 on the 20th, totals which failed to suggest that it would go on to be a record year. April saw regular departures from the cliffs, with lows of between 30 and 54 noted on five dates but three-figure counts logged on eight dates. Following a 1st May total of 99, there was the usual prelaying exodus with 11 days when counts ranged between 56 (on the 2nd) and nine (on the 5th). Numbers then increased slowly, with 84 on the 13th and 14th, 94 on the 18th and 120 on the 23rd. The first eggs were seen on 19th May, one day later than the first of last year and two days earlier than the first of 2015; the first egg of 2014, following prolonged and severe winter storms, was on the 28th.

The six study plots counted annually since 2006 were visited on ten dates between 29th May and 12th June. Up until this season only three of these plots have contained Fulmars, however an apparently incubating bird occupied a niche in the top third of the North Gully auk colony for five dates from 1st June. Although the number of apparently incubating adults was not quite as consistent between visits as in the previous two years, with a range of six compared with five in 2016 and four in 2015, this was still the third tightest spread to date. The mean of 29 was two up on the previous three years and the most recorded since the plots were instigated, although this was not due to an increase at every plot; the number of apparently incubating birds at Guillemot Cliff remained at five for a fourth successive year, whilst there were two extra pairs at Little Bay (where the number of sites had declined at a rate of one a year since 2013) and one fewer at Middlerock (where the number of sites had increased at a rate of one a year since 2013).

The whole Island totals (apparently incubating adults), mean plot totals, range of totals over the ten study plot visits and the percentage of the Island total made up of study plot birds.

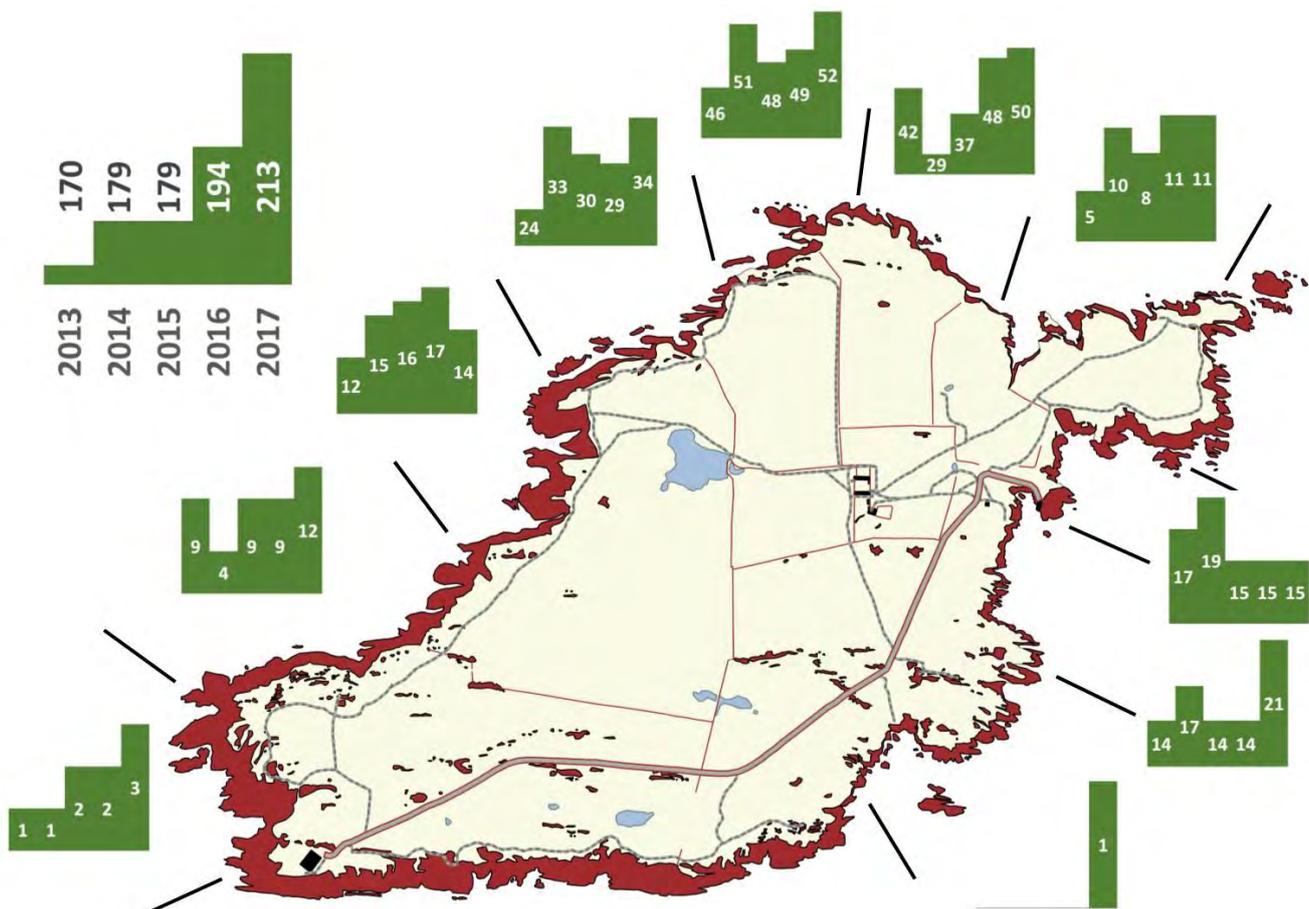
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Island	119	116	118	128	136	170	179	179	194	213
Plots	19	20	20	19	20	25	27	27	27	29
Range	(16-25)	(16-27)	(17-24)	(16-22)	(16-25)	(22-28)	(23-29)	(26-29)	(25-29)	(26-31)
Plot %	16.0	17.2	17.0	14.8	14.7	14.7	15.1	15.1	13.9	13.6

The whole Island count of apparently incubating adults (aia) undertaken between 28th May and 2nd June yielded an average of 213aia, an increase of 9.8% on the 194 logged in 2016 and the highest total yet recorded on Skokholm. The largest increase was observed around Hog Bay where there were seven extra nest sites this year. There were five additional sites around North Gully and three extras were mapped at the Bluffs and Little Bay Point. Numbers around the Neck remained stable and there was breeding in Crab Bay for the first time in at least five years (an attempt which went on to fail). The only decline was noted between Purple Cove and Twinlet, with this drop in numbers at least in part attributable to early failures before the survey period (failures brought about by aggressive interactions between adjacent pairs).

The total number of apparently incubating Fulmar recorded on Skokholm since breeding began in 1967 and the number within the study plots since 2006.



The distribution of apparently incubating Fulmar 2013-2017.



The 2017 whole Island count includes approximately 40 pairs which would be difficult or impossible to see from the Island itself (birds seen from a boat north of North Gully, near Wreck Cove, on the Little Neck and in hidden crevices between Smiths Bay and Little Bay Point). The drop in numbers observed between 2006 and 2012 may perhaps thus be linked to a lack of boat access, although the study plots broadly mirrored the dip in the Island total. The proportion of the Island total made up of study plot birds dropped to 13.6% this year (from a high of 17.2% in 2009); this was the lowest recorded since the plots were begun and perhaps an indication that they are not, due to a lack of space for expansion, representative of the Island as a whole.

It is likely that the increase in Fulmar numbers will affect other species; the previous two years saw both adult and young Herring Gulls oiled by nesting Fulmars, on 15th June this season a Razorbill and its chick were evicted from a ledge by prospecting birds and a bedraggled juvenile Peregrine between the 18th and 22nd July was seemingly also oiled. More intraspecific interactions were noted this year; incubating birds at both Middlerock and North Gully were oiled by aggressive neighbours and in both cases the egg was lost. Additionally an adult was heavily oiled at Little Bay.



On 20th May 58 incubating adults were selected for productivity monitoring (eight at Twinlet, seven at North Gully, 22 around Little Bay Point, five at Rat Bay and 16 at Peter's Bay); birds seen with eggs or those apparently incubating for ten consecutive days from this date were included in the sample (thus more birds were initially monitored but were soon found not to be incubating). Of these four failed at early egg stage (eggs were broken in three of these cases, at least twice due to aggressive interactions with other Fulmars), a further five definitely failed at egg stage, 21 failed at the egg/small chick stage and two failed having definitely produced a chick (with one chick going missing after 13 days and the other after 14 days); there were none of the failures at large chick stage seen in 2014 and 2015. Thus 26 (44.83%) of the monitored attempts produced a fledgling; a productivity estimate of 0.45 fledglings per pair is 21.1% down on the 0.57 logged in 2016 but 4.7% up on the post 1972 average of 0.43. Despite such average productivity, the increase in the Island population leads to a predicted 95 Skokholm fledglings in 2017, equalling that predicted in 2014 and only previously exceeded by the 111 predicted last year. Poor productivity at Peter's Bay between 2013 and 2015 influenced the overall figure for those years; Peter's Bay productivity in 2013 was 0.06 (compared with an overall figure of 0.34), in 2014 it was 0.33 (compared with 0.53 overall) and in 2015 it was 0.18 (compared with 0.47 overall), however last season saw 0.54 fledglings per pair (virtually identical to the overall value of 0.57). This year again saw below average productivity at Peter's Bay, with 0.31 fledglings per pair; the reason for this near annual discrepancy is still unclear.

Fulmar productivity (total number of fledged chicks per monitored pair) for each year that it has been calculated between 1972 and 2017. The 1972-2017 mean is 0.43 chicks per pair.



As was the case last year, the first two fledglings departed their nest ledges on 22nd August (20th August in 2015, 23rd August in 2014 and 25th August in 2013). All of the study chicks departed over the following 12 days (seven fewer days than last year), with 38.5% having fledged by 24th August (38.7% by the 28th last year), 50.0% by 29th August, 80.8% by 1st September (64.5% by 30th August last year) and 96.2% by 2nd September (80.6% by the 3rd in 2016). The last study chick fledged on 3rd September, five days earlier than the last of 2016 and seven days earlier than the last of 2015. The number of birds around the cliffs dropped rapidly as the fledglings departed, with 63 logged on 6th September (when only a single fledgling was seen on the cliffs), 34 the following day (the first date when the cliffs were apparently empty), a late peak of 45 close in on the 11th and only single-figure counts from the 14th to the 23rd. Despite considerable seawatching effort there were no further birds logged until 24 on 25th October. Seven were in Broad Sound on 28th October and 11 were close in on the 31st but did not land. There were daily counts in November until the departure of staff on the 9th, all of which were below 14 with the exception of 116 on a calm 6th (when 33 birds were back on ledges, four days before the first autumn landing of 2016), 54 on the 7th (when only seven birds came ashore) and 73 on the 8th (when at least 30 birds were ashore).

Sooty Shearwater *Ardenna grisea*

Aderyn Drycin Du

Scarce but occasionally Uncommon recorded most autumns from mid-July onwards

Earliest 3rd July 1968 (27th July 2017) **Latest** 26th October 1994 (28th August 2017)

One off the Lighthouse on 27th July, heading northwest during a stiff southwesterly, was only the 18th July sighting for the Island (JR). The only other 2017 record of this southern hemisphere breeder was

of one shearing west during flat calm conditions on the evening of 28th August (RDB). This remains a surprisingly scarce Skokholm species, with this year's records taking the 21st century total to just 38, 22 of which came in 2011 and only eight of which have come in the last three years.

Great Shearwater *Ardenna gravis*

Aderyn Drycin Mawr

Vagrant only two previous records totalling three individuals

A substantial amount of seawatching effort in recent years has proven this to be a truly rare species in this part of the world, however it is perhaps surprising that one heading into moderate westerly winds off the Lighthouse on the morning of 19th August was only the third Skokholm record (RDB). The only other Island records to be accepted by the Welsh Records Panel concern two birds logged on 9th September 1993 and a single on 9th August 2000. A probable was noted on 11th September 1969 and singles in 2007 and 2011 have subsequently been deemed 'not proven'.

Manx Shearwater *Puffinus puffinus*

Aderyn Drycin Manaw

Very Abundant Breeder a 2012-2013 census estimated approximately 63564 pairs (46184 in 1998) 1248 trapped (including 135 pulli), 655 retrapped, 1 control
1936-1976: 169,895 trapped, 2011-2016: 6810 trapped, 2690 retrapped, 15 controls

One calling near the Lighthouse after dark on 19th March was six days earlier than the first to be logged last year, one day earlier than the first of 2015 and five days earlier than in 2014. The first to be eaten by a Great Black-backed Gull was noted the following day and it was not until the 26th onwards that birds were obvious each night. Numbers increased quickly but, as in the previous two years, seawatching during a remarkably calm April produced some surprisingly small counts, with highs of just 1100 on the 9th and, with a stiff south-southeasterly wind, 6143 on the 30th. May was for the most part calm, with maximum raft counts of 4476 on the 10th and 4000 on the 11th and 14th, whilst the largest counts in what was also a settled June came on the few days of stronger winds, with a minimum of 10000 on the 6th, 16000 on the 10th, 10500 on the 11th and 7500 on the 30th. July was another predominantly calm month, with the highest counts coinciding with stiffer winds during the last six days; a minimum of 43000 were logged on the 26th, 20000 on the 27th, 28000 on the 28th and 36900 on the 30th, the former being the highest July count and the second highest daycount of the last five years. Moderate southwesterlies in August produced 11 five-figure daycounts and highs of 35050 on the 3rd, 36230 on the 9th, 42021 on the 11th and 26000 on the 21st.

A Manx Shearwater ringing transect was established in 2013. It was defined as the track between the Observatory and the Lighthouse and the length of a landing net to either side; ringers were not to deviate from the track. The aim was to see whether, by ringing birds on the surface in this defined area, the retrap data could be interpreted to provide large sample size estimates of adult survival and the recruitment of juveniles to the breeding population. This is still a project in its infancy which is producing a substantial amount of data, but here follows a brief summary of the results so far. Of the 3200 adult birds ringed along the transect between 2013 and 2015, 731 (22.84%) were retrapped in a subsequent year. Unsurprisingly the proportion of birds retrapped increases with cohorts ringed longer ago, for example 291 (33.26%) of the 875 adults ringed in 2013 have been found in later years (including 12 seen during this season but in no other). Of the 3200 adults ringed, 67 (2.09%) have been found dead, primarily the result of Great Black-backed Gull predation; this proportion again increases with older rings, with 29 (3.31%) of 2013 ringed adults having been found predated. There were 991 fledglings ringed along the transect during the same period, only 30 (3.03%) of which have been encountered subsequently (including 6.34% of 2013 ringed youngsters). An adult found on the surface on the night of 3rd July was surprisingly in the process of laying an egg.

Three areas of study burrows, that is to say natural burrows where a paving slab covers a manmade access point to the nest chamber, were established in 2012 and 2013 with all birds encountered

within the burrows ringed. Of 287 breeding adults bearing rings in 2016, 238 were found this year (82.93%). This figure is not an accurate estimate of adult survival as there was no searching for marked birds in neighbouring non-study burrows, thus it may well be revised upwards when birds are discovered in future years; for example 82.27% of 2013 adults were encountered in 2014 but we now know that at least 87.94% of birds were alive. Additionally there is a large discrepancy in return rates depending on the breeding success of the previous year; of 177 birds successful with their 2016 breeding attempt, 158 returned in 2017 (89.27%), whereas only 62 unsuccessful birds returned (71.26%). Indeed, of 44 birds which went missing in 2017, 25 (56.82%) had either failed with their breeding attempt in 2016 or had been found without an egg in a burrow in which they had previously bred; given that this failure rate is significantly higher than the 32.26% observed overall in 2016, it could perhaps be concluded that some of the missing birds have not perished, but rather opted for more suitable nesting sites. The study burrows perhaps thus give a better insight into burrow fidelity and show an interesting correlation with the stability of the colony; in the fragile Lighthouse colony 36 (44.4%) marked birds were in the same burrow this year as that in which they bred in 2013, whereas in the more stable Crab Bay and Quarry Track colonies 31 (77.5%) and 11 (61.1%) were still present respectively. The fragile nature of the Lighthouse colony, along with the high density of burrowing birds, sees the structure of the breeding tunnels change annually and clearly some lose their suitability as nest sites. Considerable damage caused by the 2017 Storm Ophelia to burrows in the Lighthouse Study Plot is likely to result in an even higher proportion of birds moving nest site in 2018. Ringed as a chick in 2013, FB42748 was seemingly paired and very close to its natal burrow; this was the first of our study chicks to be found back in the study burrows.

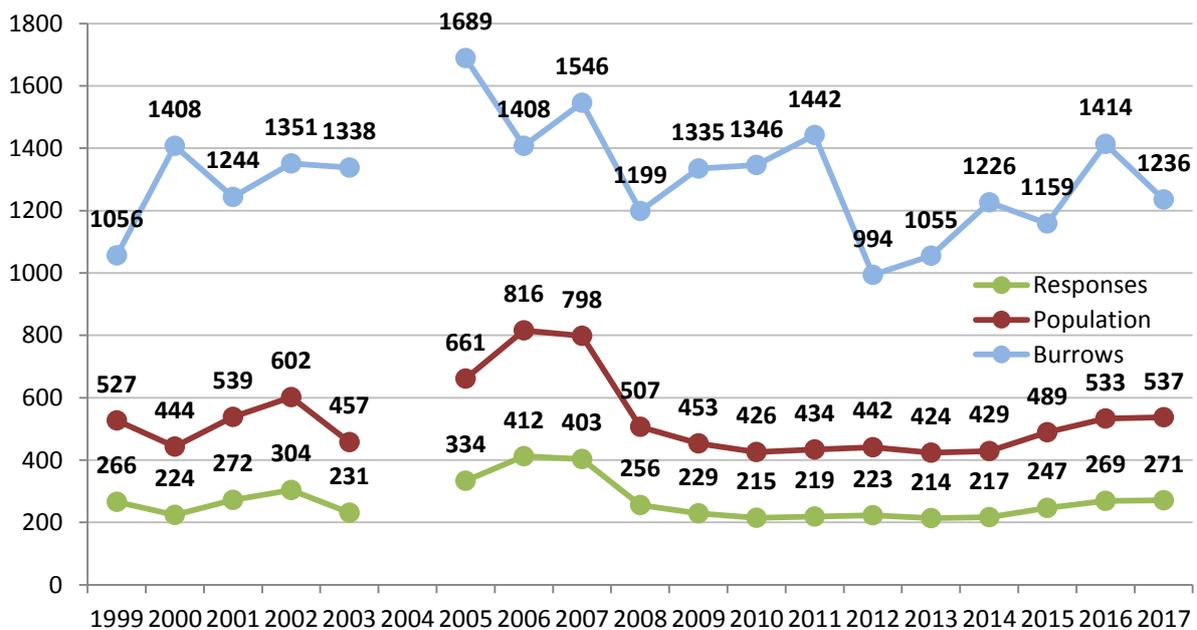


The study burrows also facilitate an accurate assessment of breeding success on Skokholm. There were 128 burrows at the Lighthouse occupied by a pair which produced an egg, eight burrows contained an egg along the Quarry Track and 23 pairs produced an egg inland of Crab Bay. There were thus 159 burrows this year from which productivity could be assessed. Of these 11 definitely failed at egg stage and 15 failed at egg or very small chick stage (but neither eggs nor dead chicks were found). Six pairs failed with chicks which were yet to put on any significant primary growth. For a chick to be assumed to be of fledging size it was required to reach a wing length in excess of 200mm (although not ready to fledge, we have shown that chicks larger than this size may swap to a

different burrow and therefore go undetected). There were 127 chicks which reached this size in 2017. Productivity was thus 0.80 fledging sized chicks per breeding pair (79.87% of pairs produced a fledging sized chick). This is a 17.6% increase on the 0.68 logged last year, is 12.7% up on the five year average of 0.71 \pm se 0.02 and is the highest productivity recorded for many years. It should be noted that this is the number of chicks which attained fledging size and does not reflect the number of fledglings which are lost to Great Black-backed Gull (and to a lesser extent corvid) predation as they exercise their flight muscles and make their first flights (see below). Having said that, only two of the 135 fledglings ringed in the study plots were found predated (with a third bird found dead due to puffinosis).



The total number of burrows, responses and the corrected population estimate for the 7000 square metres sampled annually since 1999.

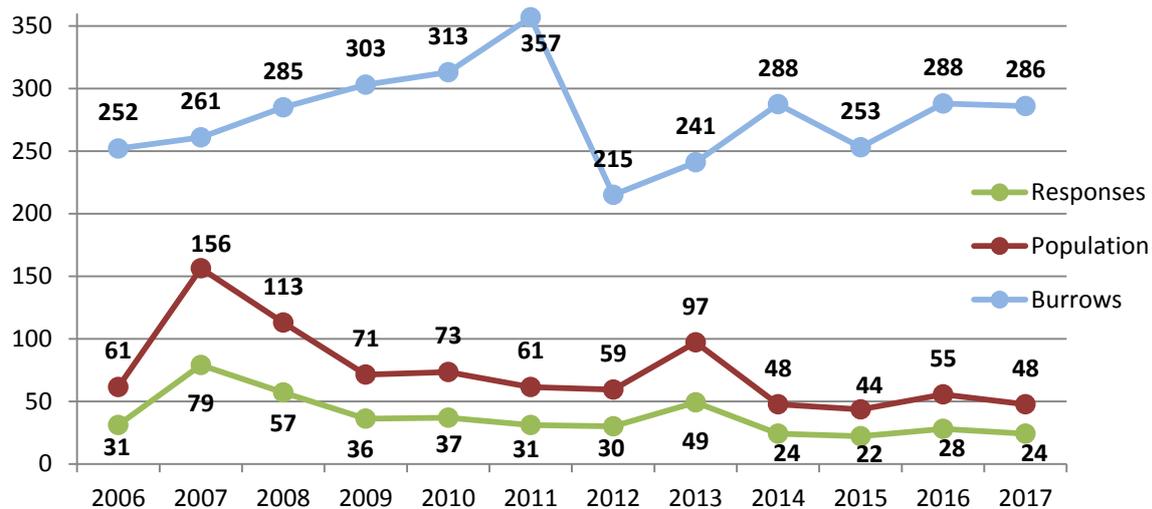


In 1999 nine study areas, each a circle of 1000 square metres, were established to allow a reasonable subset of the Skokholm Manx Shearwater population to be monitored from year to year.

Two of these plots were discontinued, one in 2006 and one in 2007, as the survey work was disturbing the Lesser Black-backed Gull colonies. New plots were established in 2006 and 2015 to maintain a good sample area, however only seven plots have been sampled for a full 18 years. On each annual visit the number of burrows within the area is counted, along with the number of burrows from which a response is elicited when the call of a male bird is played down them. The standard correction factor (1.98) is then used to estimate the population within the area (see the 2013 and 2014 Seabird Reports for checking of the correction factor).

The crash from 2007 numbers was previously attributed to the collapse of many burrows in the more fragile areas of Skokholm, particularly near the Lighthouse which was at one time the densest area of breeding Manx Shearwaters on the Planet (Smith *et al.*, 2001). Although this may certainly have played a role, it seems unlikely that it would be a major factor as there are considerably more burrows than pairs and the number of burrows appears to fluctuate independently of the number of tape playback responses. The eighth sample plot, begun in 2006, shows nicely the apparent lack of connectivity between the number of burrows and the apparent number of breeding pairs (see graph below). This may be attributable to the number of burrows frequently being altered by Rabbits, the weather, in some areas by Puffins and perhaps most markedly in some places, the digging of non-breeding Manx Shearwaters, particularly later in the season.

The total number of burrows, responses and the corrected population estimate for the 1000 square metre plot sampled annually since 2006.



Although the number of birds in the 2006 plot (which lies to the south of North Pond) has seemingly declined since its introduction, this drop has apparently stabilised. The overall number of responses across 8000 square metres was just two down on last year and otherwise the highest since 2008. This was the result of a drop of between three and 11 responses in five plots (the largest decline being along the Quarry Track) and an increase of between four and 12 at three plots (the largest increase coming at Horse Bottom). It would appear that the Skokholm breeding population can still be cautiously regarded as stable, although the observed variance in the percentage of birds which respond to the playback on a given day highlights both the degree of error in these numbers and the importance of continued monitoring (see Brown and Eagle, 2013 and 2014). Further evidence for a stable population comes from the adult ringing programme, with an overall return rate this year of 82.93% compared with 81.27% in 2016, 77.34% in 2015 and 82.27% in 2014. However a decline in the number of shearwater corpses found in recent years may suggest otherwise (see below).

This season saw the final analysis of the 2012-2013 whole Island census data. Although this will be reported upon elsewhere, the result is included here for easy future reference. A total of 63980

breeding pairs was estimated, with a standard error of 8134 and 95% confidence limits putting the actual total somewhere between 48037 and 79923 pairs (Perrins, *pers. comm.*). Even the lowest extreme is up on the 1998 estimate of 46184, although different methodologies were used for each survey.

The estimated number of pairs in the 8000 square metres sampled since 2006.

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
869	954	620	525	499	495	501	521	477	533	588	585

In the period between 1957 and 1997 the number of dead Manx Shearwaters located on Skokholm was recorded in the daily census log. The corpses were either stored or thrown into the sea to ensure that birds were not counted more than once. The practice was stopped in 1997 as it was felt that the removal of the corpses would be impacting the specialist community of species evolved to exploit this food source. However, with a Great Black-backed Gull population more than twice the size it was when the counting was stopped, the study was begun again in 2014. To limit the impact on the scavenging community, the birds were left in situ but their wings were painted with stock marker so that they were not double counted. This year, as in the previous two, corpses were marked by neatly slicing the flight feathers of both wings with a pair of scissors.

The number of Manx Shearwater corpses found between 1957 and 1983 from Gynn (1984) plus data from 1984 to 1991 and 2014 to 2017. The number of Great Black-backed Gull breeding pairs is also included for each year.

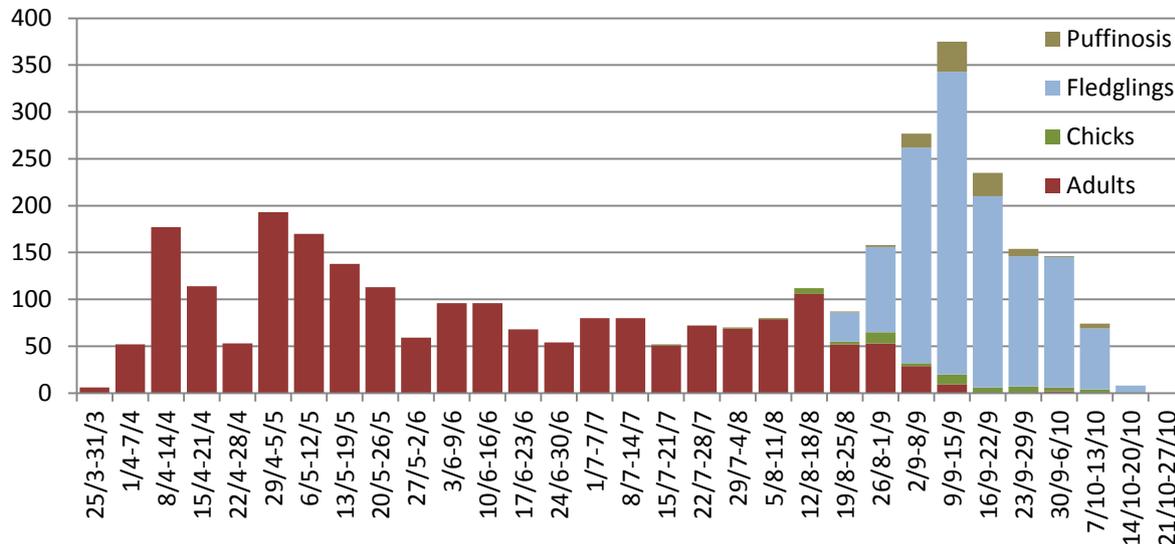
	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Corpses	2465	1886	924	1354	1089	640	688	1059	857	946
GBBGU	27	30	30	10	12	5	7	12	8	10
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Corpses	816	841	829	304	606	1350	1082	869	1051	1266
GBBGU	10	3	14	11	16	12	12	7	7	7
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Corpses	1913	1820	1153	1024	1080	1479	1373	1316	1571	1068
GBBGU	6	10	10	10	11	16	11	14	11	10
	1987	1988	1989	1990	1991	2014	2015	2016	2017	
Corpses	1759	1760	1694	1915	2703	4272	4123	3782	3449	
GBBGU	11	12	15	16	20	84	83	93	93	

As might be expected with a larger Great Black-backed Gull breeding population, the number of corpses marked over the last four years has been the most ever. However the average number of corpses per pair has been lower than in all years except 1959 and 1970. One possible explanation for this reduction in kills per pair is that the breeding gulls were routinely disturbed between 1949 and 1985 which, although reducing the number of breeding pairs, probably inflated the non-breeding flock which would still be taking shearwaters.

There was a decline in the number of dead Manx Shearwaters located this season, despite the record equalling number of breeding Great Black-backed Gulls. This was primarily due to a significant drop in the number of adult birds located; in 2014 there were 2931 dead adults marked, in 2015 there were 2702, in 2016 there were 2299 and in 2017 there were just 2071 (29.3% fewer than in the record 2014 season). Up until 30th June there were only 1389 corpses located this year, 289 fewer than last season. This substantial decline in the number of located corpses could be cause for concern. It would seem likely that the majority of the predated shearwaters are younger, less experienced birds, perhaps those which spend longer on the surface as they prospect for burrows and mates. A reduction in corpses may thus reflect a reduction in the abundance of these younger

birds, a decline which would perhaps not be obvious during the playback and study burrow surveys and which could have a substantial effect on the future growth of the population. However there are several other factors which could influence the number of predated shearwaters, perhaps most importantly the size of the Rabbit population (Rabbits being the other main prey item on Skokholm).

The number of Manx Shearwater corpses found during each week from 25th March until 27th October.

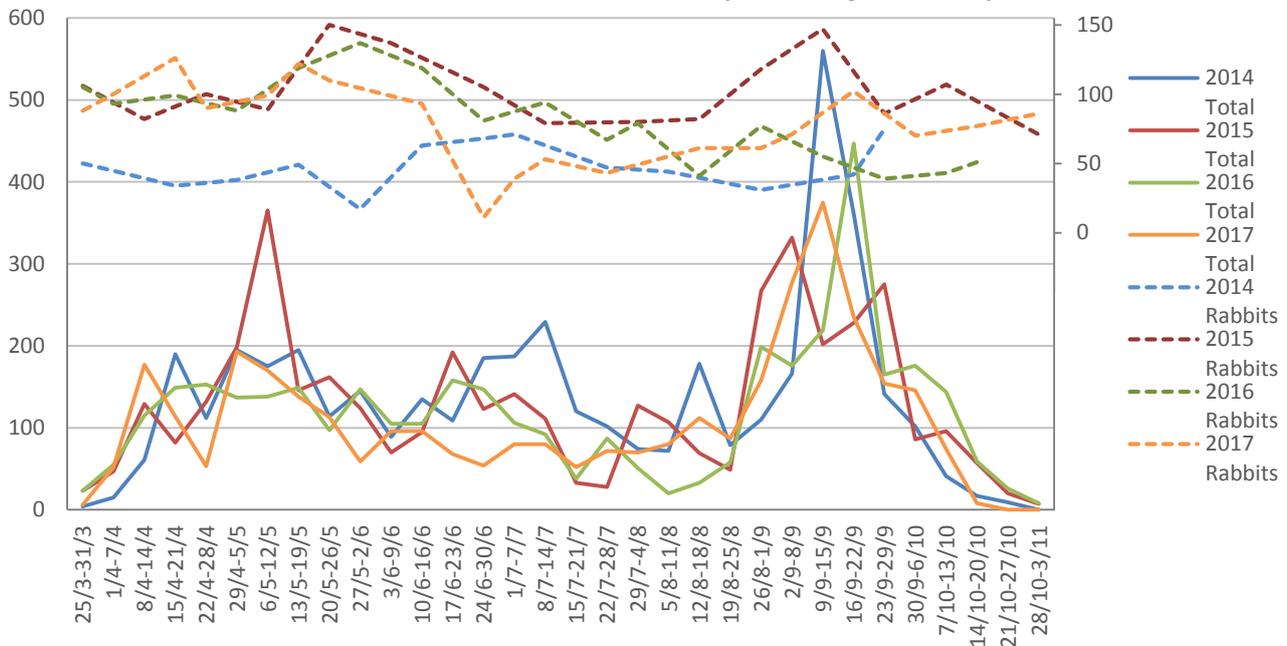


The data from the last four years lends some support to this theory, with the North Plain Rabbit population being considerably lower in 2014 when adult mortality was at its highest. However the highest North Plain Rabbit density was observed in 2015, a year which saw considerably more predated shearwaters than in the following two, despite the fact that there were fewer Rabbits in those years. One potential issue with this comparison is that the North Plain Rabbit survey is probably not representative of the Island as a whole, with the effects of Viral Haemorrhagic Disease seemingly differing in different parts of the Island at different times. Despite higher productivity this year (see above), there were 109 fewer fledgling corpses found; although this could perhaps be linked to an increase in fledging period Rabbit numbers compared with 2016, there was higher fledgling mortality in 2015 when the North Plain Rabbit population was higher still. Of course young shearwaters, which provide a considerably larger meal than an adult and which are less experienced on land, may prove to be the preferred prey item for the gulls regardless of the number of Rabbits. The Skokholm Rabbit population has been considerably lower than average during the four years of this carcass marking study; for example in 2013 the highest plot count was 463 on 22nd May compared with a maximum count of 150 during the last four years. A return to 2013 Rabbit numbers would provide ideal conditions for monitoring their influence on shearwater predation.

An undergraduate study by Katherine Westerberg and supervised by Dr Stephen Votier, both from the University of Exeter, was undertaken this season to investigate the diet of Great Black-backed Gulls during the Skokholm breeding season and to assess if pairs exhibit dietary specialisation. This was achieved through the collection and analysis of regurgitated pellets and carcasses found at 26 nest sites around the Island. Pellet collection began during the egg incubation period on 7th May and continued until 9th July when fledglings had ventured away from nest sites and prey remains could no longer be confidently assigned to a nest. In total, 1035 pellets and 81 carcasses were collected. Birds (primarily Manx Shearwater) and mammals (Rabbit with low levels of Sheep and a Brown Rat) formed the most significant prey sources, making up 48.2% and 38.1% of the average diet. The presence of non-Skokholm mammals and birds, along with refuse (which made up 7.3% of pellets), highlights how some gulls are regularly foraging away from Skokholm. Furthermore there was

evidence that dietary specialisation is present in the breeding population of Great Black-backed Gulls on Skokholm, with food sources varying greatly between pairs. Pellets at some nest sites contained almost solely Manx Shearwater, while other pairs were seemingly generalists. Understanding this dietary specialisation will be key to making management decisions in relation to the impact of Great Black-backed Gulls on Manx Shearwaters.

The total number of Manx Shearwater carcasses found each week 2014-2017 and the number of Rabbits counted in the North Plain census plot during the same period.



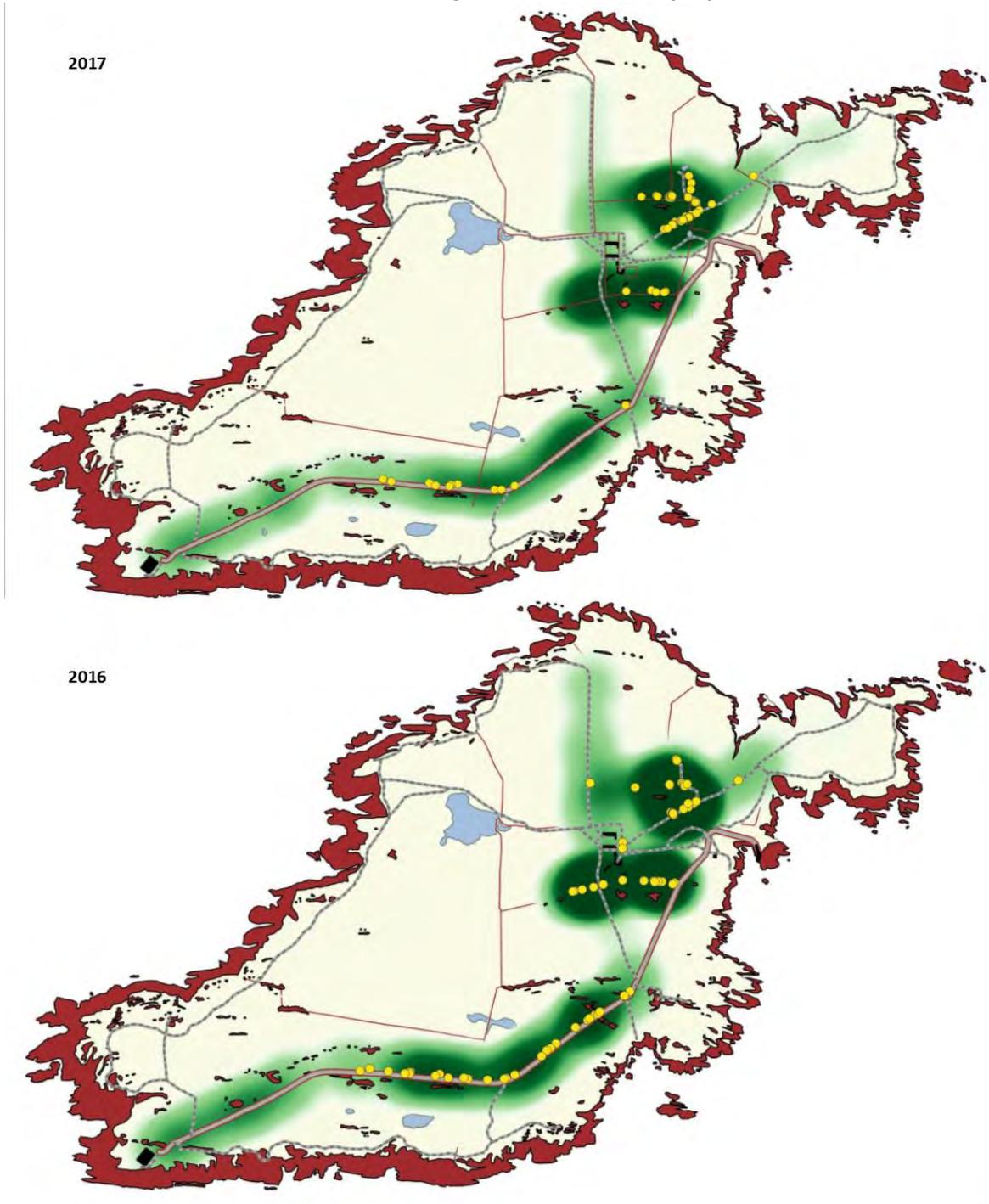
As in 2015, the first fledglings were seen above ground on the night of 21st August, two days earlier than in 2016 and 2013 and four days earlier than in 2014. The first fledgling showing symptoms of puffinosis was encountered on 24th August, at least five days earlier than in recent years. The number of puffinosised birds found dead has been consistent over the last three years, with 89 this year, 85 in 2016 and 97 in 2015, totals up on the 53 of 2014; it should be noted however that, unlike predated birds which are taken to open areas, puffinosised birds may die deep in the Bracken and thus go undetected. Puffinosis is a mysterious affliction which, possibly due to the actions of a virus which leads to bacterial infection, sees the development of blistered feet, conjunctivitis and problems with limb control; it is often fatal. In an attempt to achieve a better understanding of how puffinosised birds are distributed across Skokholm during the course of the autumn, a transect established in 2015 was walked by Island staff over eight nights during September (see the 2015 report for details of the route). The position of each encountered fledgling was recorded using a GPS unit before it was inspected for signs of puffinosis.

The number of fledgling Manx Shearwater encountered along the transect between 2017 and 2015, the number which showed signs of puffinosis and the proportion of encountered birds made up of those showing signs.

2017	1 st -2 nd	4 th -5 th	8 th -9 th	11 th -12 th	14 th -15 th	17 th -18 th	20 th -21 st	23 rd -24 th
Birds	44	77	100	115	66	43	42	21
Puffinosised	4	13	16	10	4	16	14	1
% Puffinosised	9.1	16.9	16.0	8.7	6.1	37.2	33.3	4.8
2016	2 nd -3 rd	5 th -6 th	8 th -9 th	11 th -12 th	14 th -15 th	17 th -18 th	20 th -21 st	23 rd -24 th
Birds	110	194	159	88	42	33	43	51
Puffinosised	20	18	22	13	8	5	5	6
% Puffinosised	18.2	9.3	13.8	14.8	19.1	15.2	11.6	11.8

2015	1 st -2 nd	4 th -5 th	7 th -8 th	10 th -11 th	13 th -14 th	16 th -17 th	19 th -20 th	21 st -22 nd
Birds	54	164	219	155	162	101	58	41
Puffinosised	3	29	63	31	55	55	32	10
% Puffinosised	5.6	17.7	28.8	20.0	34.0	54.5	55.2	24.4

The 2017 and 2016 puffinosis surveys. Manx Shearwater fledgling density is shown in green, with the darker areas around the Well and Knoll Wall holding more birds. Each puffinosised bird encountered over the eight visits is marked by a yellow dot.



The number of Manx Shearwater fledglings located along the transect is likely to be different between years, not just because of fluctuations in productivity, but perhaps more critically due to differences in the weather and the moon cycle. In total over the eight visits there were 212 fewer fledglings encountered compared with 2016 and 446 fewer than in 2015. The overall proportion of

birds showing signs of puffinosis was similar to last year and well down on 2015, with 15.35% exhibiting signs this year compared with 13.47% in 2016 and 29.14% in 2015. As in previous years, puffinosis birds were primarily distributed in the wetter areas of Skokholm, away from more exposed aspects which also typically lack Bracken. Intriguingly there were no infected birds found along West Knoll Wall, Little Bay Wall or at the crossing of South Pond Lower Drain, all sites which held infected birds in 2016. For the second time in three years, a Crab Bay Plot study chick found along the transect exhibited the symptoms of puffinosis.

The last two adult birds to be encountered along the study transect were retrapped on 20th September, six days before the last of 2016, however a recently predated adult was found on 2nd October. September seawatch counts were up on three of the last four years, with a peak of 2260 individuals on the 3rd, six further three-figure counts logged before the 12th (with a high of 663 on the 4th) and daily counts of 86 or less until a late peak of 1043 on the 23rd when a minimum of 870 passed through Broad Sound. The only seawatching records in October were of 13 on the 1st (in two hours 40 minutes) and eight on the 2nd (in two hours 30 minutes). A minimum of 12 birds at the Lighthouse after dark on 15th October was the last record of the year; there were no November sightings for the first time since 2013 (there have only been November records in eight years since 1927, including the previous three).

Ringing recovery EX17685

Originally ringed as an adult, LUNDY ISLAND, DEVON 27th April 2011

Recovered SKOKHOLM 12th August 2017

Finding condition Dead, eaten by Great Black-backed Gull

Distance travelled 74km at 325 degrees (NW)

Days since ringed 2299

Ringing recovery FC93323

Originally ringed as an adult, LUNDY ISLAND, DEVON 27th June 1996

Recovered SKOKHOLM 16th April 2017

Finding condition Dead, probably in 2016, leg and ring only

Distance travelled 74km at 325 degrees (NW)

Days since ringed 7598

Ringing recovery FR86417

Originally ringed as an adult, LUNDY ISLAND, DEVON 20th May 1987

Recovered SKOKHOLM 21st June 2017

Finding condition Dead, ring only found in hole in wall

Distance travelled 74km at 325 degrees (NW)

Days since ringed 10990

Rats had officially been eradicated on Lundy by 2006 (although the last recorded activity was in February 2004). By 2013 the Manx Shearwater population there had increased by over 3000 pairs. Recoveries from this population are proving to be a more than annual event.

Ringing recovery EX28101

Originally ringed as a juvenile, FRESHWATER WEST, PEMBROKESHIRE 9th September 2011

Previously recovered MANX SHEARWATER TRANSECT, SKOKHOLM 5th August 2016

Recovered MANX SHEARWATER TRANSECT, SKOKHOLM 28th July 2017

Finding condition At colony but not necessarily breeding

Distance travelled 16km at 291 degrees (WNW)

Days since ringed 2149

Further evidence that birds which inadvertently reach the mainland after fledging can go on to survive, as long as they make it back out to sea.

Ringing recovery EY27539

Originally ringed as a chick, RAMSEY ISLAND, PEMBROKESHIRE 7th September 2012

Recovered as an adult, SKOKHOLM 29th July 2017

Finding condition Dead, eaten by Great Black-backed Gull

Distance travelled 18km at 165 degrees (SSE)

Days since ringed 1786



Ringing recovery EY41935

Originally ringed as an adult, MANX SHEARWATER TRANSECT, SKOKHOLM 3rd July 2013

Recovered PRAIA DO POMPILHO, SERRA GRANDE, BAHIA, BRAZIL 19th September 2017

Finding condition Dead on beach

Distance travelled 8052km at 205 degrees (SSW)

Days since ringed 1539

Ringing recovery EZ17763

Originally ringed as an adult, SKOKHOLM 27th June 2016

Recovered SACO DA CAPELA, ILHABELA, STATE OF SÃO PAULO, BRAZIL 19th October 2017

Finding condition Dead on beach, not fresh

Distance travelled 9270km at 206 degrees (SSW)

Days since ringed 479

There was a single recovery from Brazil in the winter of 2014/15, two from the winter of 2015/16, three from 2016/17 and already two this winter, totals which reflect the increase in the number of Skokholm ringed birds.

Ringing recovery EZ53969

Originally ringed as a fledgling, SKOKHOLM 6th September 2017

Recovered PORTREATH, CORNWALL 9th September 2017

Finding condition Dead on beach

Distance travelled 162km at 181 degrees (S)

Days since ringed 3

Balearic Shearwater *Puffinus mauretanicus*

Aderyn Drycin y Baleares

Scarce to Uncommon first recorded in 1960

Earliest 15th May 1997 (27th July 2017) **Latest** 29th October 1990 (19th August 2017)

One heading northwest on the afternoon of 27th July was 14 days earlier than the first of last year and the earliest record since a single on the 17th in 2015. The only other records were of two west on the evening of 2nd August, another west the following afternoon and two through off the Lighthouse on the 19th, one of which was in the morning and one of which was in the afternoon. An annual total

of six birds was nine down on last year and the lowest total since 2014 when five were logged. All of the 2017 sightings occurred during periods of moderate or strong west or southwesterly winds.

Little Grebe *Tachybaptus ruficollis*

Gwyach Fach

Vagrant nine records in seven previous years

One at North Pond on 7th April, the third April and spring record for the Island, spent much of the day feeding on Palmate Newts (*AS et al.*). This was only the tenth Skokholm record following singles on 7th September 2003, 4th July and 28th August 2001, 10th April 1996, the 8th and 9th September 1971, 8th April and 31st October 1968, on four dates between 28th September and 4th October 1948 and on 21st October 1929.



Great Crested Grebe *Podiceps cristatus*

Gwyach Gopog

Vagrant two previous records, one of two birds and the other a single

One with Puffins off Channel Point on 18th April was only the third Skokholm record and the first to be logged in spring (*RDB et al.*). Two together in Mad Bay on 23rd September 1997 and one east at sea off Crab Bay on 13th November 1996 are the only other Island records.



Spoonbill *Platalea leucorodia*

Llwybig

Rare Summer Visitor 14 previous records, all of singles bar two together in 2009 and 1988

One was seen briefly at North Pond on 26th June, although it soon departed for the north (VH, MR). This was the first Skokholm record since 14th March 2014 and only the 15th for the Island following

further singles on 19th May and 7th August 2013, 2nd June and 27th October 2011, the 1st and 2nd June 2009, 21st June 2001, 1st May and 21st September 1996, 24th June 1994, 22nd August 1993 and 20th October 1957. Additionally two birds were seen together on 9th June 2009 and 12th October 1988, the latter pair including a bird colour ringed in the Netherlands.

Bittern *Botaurus stellaris*

Aderyn y Bwn

Vagrant no previous records

One on 6th May was grounded near Spy Rock by aggressive Lesser Black-backed Gulls before being chased off northwards (RDB *et al.*). Views were far from great, but the barred primaries confirmed it as being of this species rather than American Bittern. Although Bitterns are regular winter visitors to Pembrokeshire, this is seemingly the first record for the Islands and is the first for Skokholm.



Cattle Egret *Bubulcus ibis*

Crëyr y Gwartheg

Vagrant no previous records

A stunning breeding-plumaged individual roosted with gulls at North Pond on the evening of 17th July, however this first for Skokholm had already departed by the following morning (HP *et al.*). The first for Pembrokeshire was not logged until 11th December 1980, since when there have been approximately 15 further records prior to this bird, all but one of which occurred after 1997. This species was removed from the British Birds Rarities Committee description list on 1st January 2009.



Grey Heron *Ardea cinerea*
Uncommon but in some years Scarce

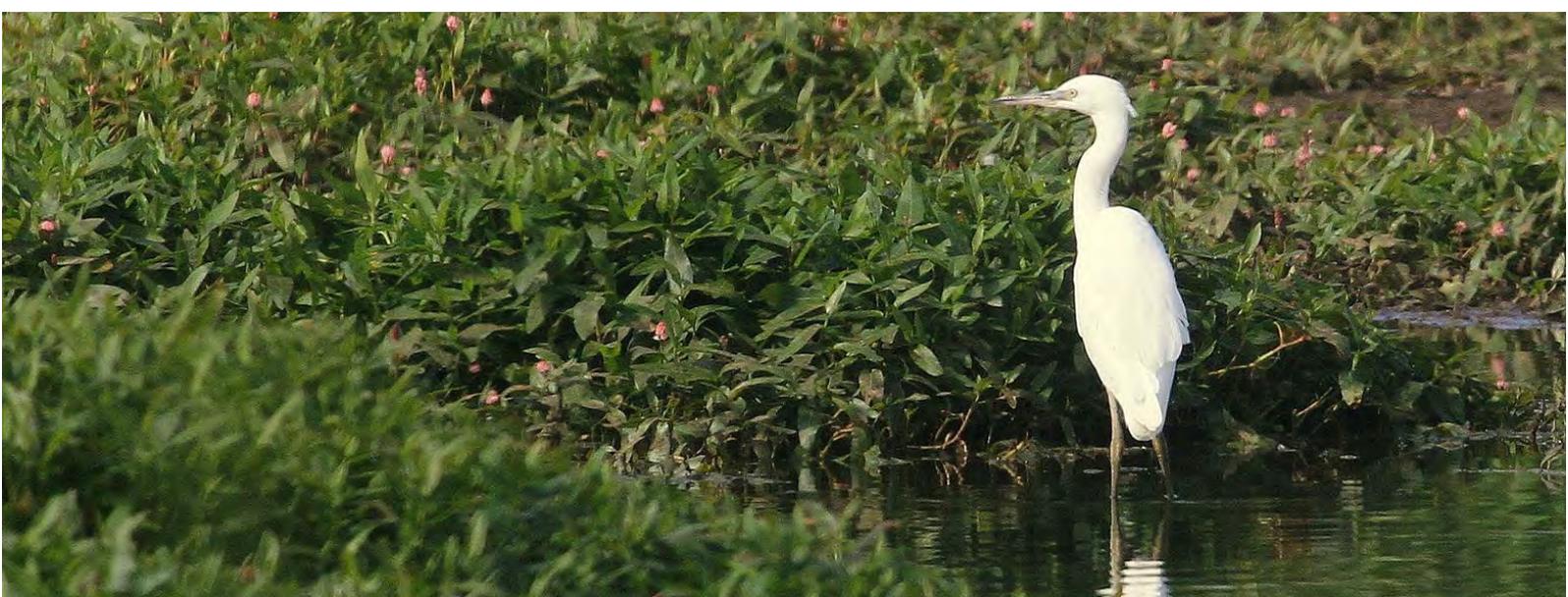
Crëyr Glas

Four circling together on the afternoon of 13th June later increased to a group of eight, the highest Skokholm daycount since a record 11 were logged on 13th September 2000 and the fourth highest daycount to date. Although six birds drifted south that evening, what were probably the same six were seen again the following day. In July there was a single on the 6th, two on the 8th and further singles on the 23rd and 25th, whilst August saw three on the 9th, one the following day, two on North Pond on the 25th and further lone birds on the 26th and 27th. In September there was a single on the 24th and four headed south two days later. The October records consisted of two on the 5th, one on the 8th and finally two on the 18th. A cumulative 2017 total of 37 bird-days was the highest since 1990, when 39 were recorded, and the fourth highest year total to be logged here.

Little Egret *Egretta garzetta*
Rare 24 previous records, usually of singles but with eight together on 25th September 2014

Crëyr Bach

Two north over the Farm on 26th June was the first record of the year and only the fifth time that multiple birds have been observed here. Singles at North Pond on 25th July and 14th August were the only other records. Three sightings in a season matches 2014, a year which saw a record ten individuals logged, but was one down on the four records made last year. The first for Skokholm was not until 18th May 1983, the second was on 10th October 1993 and all subsequent records have occurred after 1996. Little Egrets have been seen in every month between March and November inclusive, now with two records in April, five in May, two in June, eight in July, four in August, two in September and two in October.



Gannet *Morus bassanus*
Very Abundant but Uncommon between November and March

Hugan

Counts followed the same general pattern as in the previous four years, with numbers steadily increasing until an early autumn high, however the 2017 peak totals were again later, with the six highest daycounts all coming in September. There were September highs of 563 on the 3rd, 613 on the 9th and 11th, 601 on the 14th and 801 on the 22nd, all of which coincided with winds of force seven or above. However the highest count of the year came on 18th September when the wind was a light northwester but a minimum of 120 Common Dolphins led to a feeding frenzy which included at least

800 Gannet and contributed to a daycount of 951, the second highest of the last four years. That the 2017 peak was primarily made up of feeding birds is unusual; the majority of recent high counts have been of birds pushed inshore by gales, although increased seawatching effort on such days inevitably adds some bias. Despite the totals for six 2017 months being down on 2016, a cumulative year total of 18478 was up on the 16989 of last year and was the highest since the 19695 of 2013.

The total number of Gannets logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2014 to 2016 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	60	443	762	1326	2841	4239	8619	176	12
2016	85	945	1425	1458	2161	3552	6694	437	227
2015	119	391	1632	566	3094	3415	3324	345	106
2014	119	533	1131	1473	2111	5640	3150	1222	25
2017	13	65	118	290	383	496	951	35	5
2016	22	348	435	186	345	710	1003	51	47
2015	19	69	279	93	830	320	455	61	41
2014	38	84	95	159	449	612	735	225	7
	21 st	22 nd	20 th	30 th	27 th	9 th	18 th	7 th	5 th

Considering the presence of roughly 36,011 breeding pairs on Grassholm (JNCC, 2015), only 14km to our west and the third largest Atlantic gannetry, it is perhaps a surprise that the number seen from Skokholm is so small. However recent studies using GPS tracking devices on Grassholm birds have shown that the majority head west and south from the gannetry before returning by a similar route (Morgan, 2013). Unusually an adult was seen sat on rocks at East Bay on the 2nd and 3rd August, whilst a juvenile was ashore in North Haven on 30th September.



Shag *Phalacrocorax aristotelis*

Mulfran Werdd

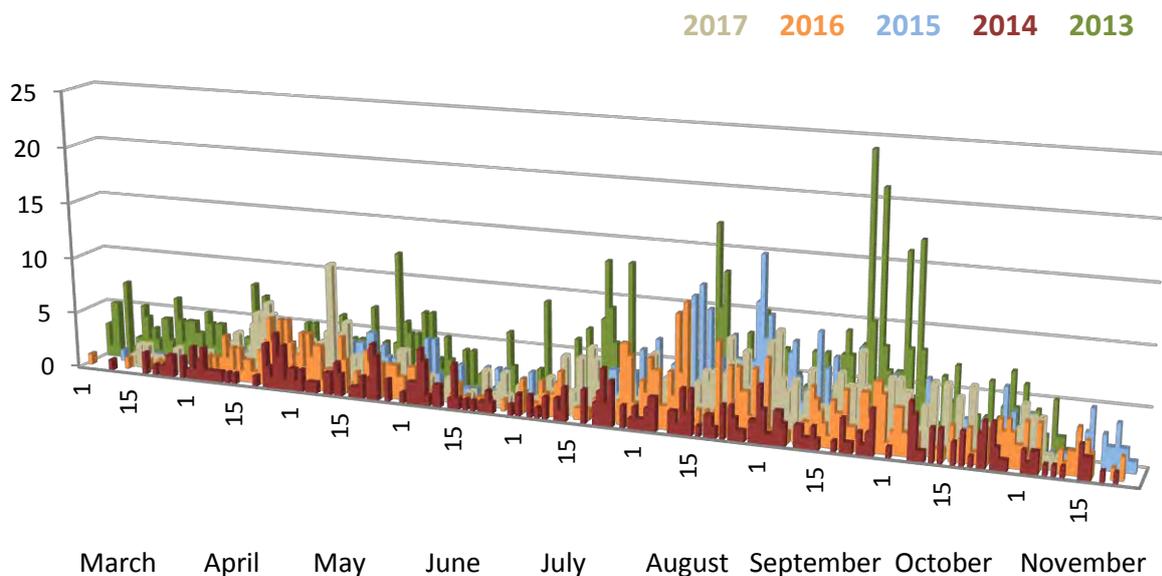
Common Resident and Irregular Scarce Breeder last attempted to breed in 2013

Shag numbers were heavily impacted by prolonged and severe storms in the winter of 2013-2014, with the number of birds logged in 2014 well down on the record totals of 2013. The first five months of 2015 provided little evidence of a comeback with maximum daycounts and monthly totals very much comparable with 2014; indeed counts during March, April and June 2015 were even

lower than in 2014. There was however a significant increase in numbers during autumn 2015 with both adult and juvenile birds becoming much more frequent around the coast, a reflection of both adult post-breeding dispersal and a better than average breeding season at the Middleholm colony. Disappointingly there was little evidence of a continued recovery in 2016 and this year continued in a similar vein, with a peak count of 11 on 10th May matching the 2016 autumn high. A cumulative year total of 559 bird-days was very similar to the 516 of 2016 and the 565 of 2015 and suggests that the recovery is set to be a slow one. There was again no indication of a breeding attempt this season, with the Smith’s Bay site used unsuccessfully in 2013 showing no signs of occupation. Shag last bred successfully in 1987 when a pair fledged two young.

Comparing the number of Shag seen during the 2017-2013 seasons.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Maximum count	2	7	11	3	6	10	9	6	5
Bird-days	12	64	69	24	61	108	125	79	17
Maximum count	1	6	5	4	7	11	7	4	4
Bird-days	5	67	74	28	57	114	83	57	31
Maximum count	1	3	5	5	6	15	10	6	5
Bird-days	8	24	66	32	40	171	127	55	42
Maximum count	2	5	5	5	5	4	5	5	3
Bird-days	12	38	37	35	35	47	42	39	19
Maximum count	7	8	12	7	13	17	24	17	5
Bird-days	84	86	104	63	90	147	189	146	20



Cormorant *Phalacrocorax carbo*

Mulfran

Common Visitor particularly in late August and September

Although not recorded every day, Cormorants were again regular around Skokholm in numbers similar to those logged in the previous four years. Unlike Shag, which were severely affected by the winter storms of 2013-2014, there has been no indication that this species was impacted, perhaps due to their readiness to move inland during the winter. The majority of records this year were again of loafing birds on the Stack, between Mad Bay and North Haven and in Crab Bay. There was again little evidence of a spring movement, with one high and northwest on 22nd March, five north on 9th April, one north on 18th April and two southeast on 25th May the only movements logged. Two together on the plateau above Little Bay on 31st March was unusual. There were 19 dates between July and September when birds were noted high over the Island, two more than last year, however

the number of birds logged during this period was well down on recent years. The vast majority of passage birds were again heading in a southeasterly direction, as previously noted by both Betts (1992) and Thompson (2007); the largest movements were of five on the 2nd and six on 21st July, 12 on the 29th and 17 on 30th August and in September of ten on the 25th and six on the 30th. Passage continued into October with 22 southeast on the 18th contributing to a day total of 24, the highest of the year and the highest October count since 2001 (although down on the highest day totals of the last five years, all of which have occurred in September).

The total number of Cormorants logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2014 to 2016 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	10	51	58	46	93	117	66	67	23
2016	10	39	38	27	102	98	174	42	12
2015	15	55	50	41	52	133	179	56	10
2014	2	49	54	44	51	90	177	59	12
2017	2	7	5	4	8	17	14	24	6
2016	3	5	4	3	21	13	57	11	4
2015	2	5	5	6	4	15	28	19	3
2014	1	9	6	4	4	26	51	19	3
	22 nd & 31 st	23 rd	3 dates	14 th & 17 th	21 st	30 th	25 th	18 th	1 st

Honey-buzzard *Pernis apivorus*
Vagrant six previous records

Bod y Mêl

One on 24th May which briefly circled over the Farm before drifting off south was the first Skokholm record since 25th June 2003 and only the seventh for the Island (GE, RDB). The only other records concern singles on 6th June 1996, 26th July 1991, 19th May 1990, 14th July 1989 and 10th August 1982.



Sparrowhawk *Accipiter nisus*

Gwalch Glas

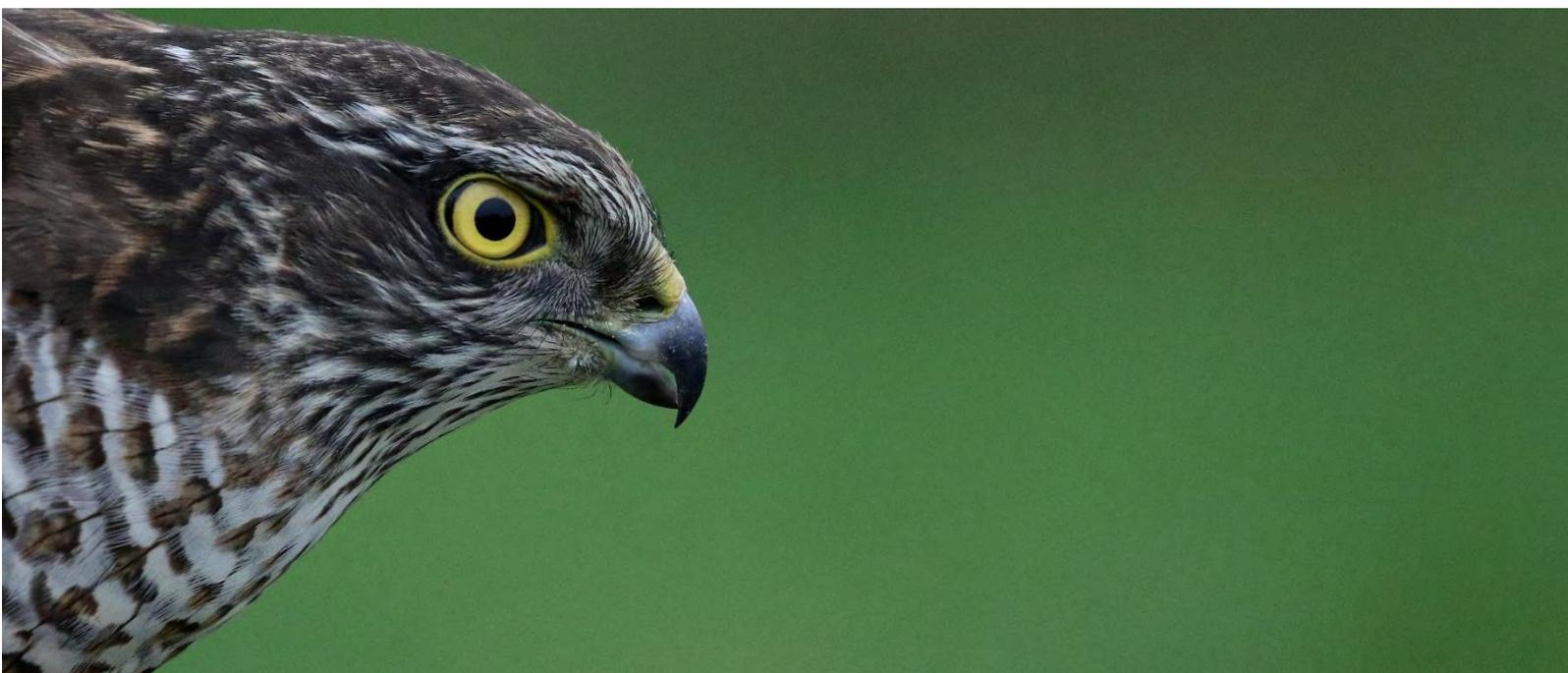
Uncommon Visitor occurring in all months but more frequent outside of the breeding season

1 trapped

1936-1976: 10 trapped, 2013-2015: 6 trapped, 1 retrapped

A female ate a Water Rail on 16th March, another was seen on the 22nd and there were further singles on 13th April and 7th May; four spring records is the lowest total since 2013, when four were

also logged, although this is never a common species at this time of year, with recent highs of only eight in 2016 and 2015 and nine in 2014. A female on 23rd August was 26 days later than the first autumn bird of 2016 and was perhaps the same individual responsible for records of singles on seven further August dates and on six September dates to the 8th. An unsexed bird was noted on 17th September, a female on the 19th and two birds, one of each sex, on the 22nd and 23rd. There were further singles on 28th September and the 3rd, 4th and 7th October, a juvenile female was ringed on 14th October and one at Spy Rock on 25th October was the last of the year. It was thus the quietest autumn since 2012, although it should be noted that the previous three years have seen the highest cumulative autumn Sparrowhawk totals ever logged on Skokholm, with a high of 66 in 2015. Given the mobile and often secretive nature of this species, records of multiple individuals were again due to differences in the age or sex of the birds concerned; rarely is it possible to prove the presence of two birds of the same age and sex, an uncertainty which must lead to undercounting.



Hen Harrier *Circus cyaneus*

Bod Tinwen

Scarce Winter Visitor but no records between 2004 and 2011 inclusive

Earliest 5th September 2012 (8th September 2017) **Latest** 17th April 2016 (10th April 2017)

In spring there were sightings of a ringtail on the 1st, 5th and 10th April; the latter was, equal with a bird in 1982, the second latest spring record for Skokholm, the latest having been logged on the 17th last year. A moulting adult female on 8th September was three days later than the earliest autumn record. The same bird was noted each day between the 16th and 26th September and it was seen to depart for the north on the latter date; good views obtained during this period revealed that it was not ringed and was thus different to the presumed returning adult female of 2015 and 2016 which had a metal ring on its right tarsus. What was thought to be the same unringed bird was again seen on all but two dates between 28th September and 9th October. A different ringtail was logged on 15th October and there were further records of singles on 27th October and the 3rd and 6th November.

Red Kite *Milvus milvus*

Barcud Coch

Vagrant only seven previous records but becoming Scarce

One west and then east to the mainland on 23rd March was the eighth record for the Island (GE). What was perhaps the same bird spent two hours the following day attempting to scavenge pieces

of Rabbit carcass from Great Black-backed Gull territories (RDB). Two of the previous seven Island records have also occurred in spring, with singles on 15th April 2015 and 28th March 2012 and a single, the first for Skokholm, was logged on 6th June 2000. The four autumn records concern singles on 20th September and 23rd October 2016, 13th October 2015 and 6th October 2012. An increase in the number of birds breeding in Pembrokeshire is inevitably going to lead to an increase in the number of Skokholm sightings, although a crossing to the Island is seemingly not attractive to this species which is much more regular on the adjacent mainland.

Buzzard *Buteo buteo*

Bwncath

Scarce Breeder and Uncommon Visitor

1 pullus trapped

1936-1976: 11 trapped, 2013-2016: 6 pulli trapped

Although a pair again held territory in Wreck Cove from March and toured widely, this proved an unobtrusive species which was not recorded every day. In spring the only indication that birds other than the Skokholm breeders were present came on the 5th and 19th April, when three birds were logged, and on 10th May, when two dark birds were noted (one of the Skokholm breeders is a pale bird). The same rocky shelf used as a nest site between 2013 and 2016 was again occupied and three eggs were again produced. Only one egg had hatched by 19th May and on 7th June only one chick and one unhatched egg remained; the nest visit again revealed Rabbit and Puffin as food items. The ringed chick had fledged by 3rd July and was regularly encountered around the coast thereafter, sometimes giving good views such as on 18th August when it was seemingly struggling to deal with a dead Rabbit. This was at least the fifth year in succession that a Wreck Cove pair have managed to fledge young, although only in 2015, when two fledged, have they produced anything more than a singleton.



The only evidence this autumn of birds other than the Skokholm pair and their fledgling came on 2nd September when four were together over the Neck, on 17th September when five were logged and on 9th October when four were again noted. The only Buzzard counts of five or above in recent years were of six on 16th April 2015, five on 5th April 2013 and of eight on 20th September 2013. There have

only been five Skokholm counts of ten or above, with a maximum of 16 logged on 20th September 1951.



Water Rail *Rallus aquaticus*

Rhegen y Dŵr

Uncommon Winter Visitor and Irregular Scarce Breeder confirmed in 1929, 1931 and 2012

3 trapped

1936-1976: 19 trapped, 2013-2016: 11 trapped, 3 retrapped

Following successful breeding in 2012 and 94 records of up to two birds during a 2013 breeding season without a confirmed attempt, 2014 saw only two spring singles logged (probably due to the severe preceding winter). Subsequent springs have seen up to three birds noted in a day, but there have been no sightings between 19th April and the autumn influx. This spring proved the quietest since 2014 with March records at the Well of a single on the 12th and 13th, one eaten there by a Sparrowhawk on the 16th, a single the following day, two on the 19th and another single on the 24th. The remains of a bird were found at East Bog on 9th April, although these had seemingly been there for some time, and the last of spring was one at the Well on the 20th and 21st April.



The first of the autumn, a juvenile at the Well on 23rd July, was the first July record since 2013 (when there were records throughout the breeding season) and otherwise the first July record outside of a

breeding year since 1998. The next sighting was not until 4th August, when singles were logged at the Well and South Pond, and there were up to two birds noted on 12 further dates during the month. Up to two birds were logged at the Well on all but four September dates, with the only additions being singles near the Pig Sty on the 9th and 29th and four on the 28th which included birds at East Bog and Gull Field. There were records on all but one October date, with highs of four on three dates, five on three dates and six on the 25th; records came from South Pond, the Bog, East Bog, around the Farm, to the south of Home Meadow, North Haven, Little Bay and the Well, with up to three being present at the latter site. November saw records on all but one date before the departure of staff on the 9th, including a high of six on the 2nd. Given that the previous three autumns had proven the most productive on record, perhaps due to increased breeding success in the areas from which our wintering birds originate or due to an increase in the amount of available cover on Skokholm during an extended period of low Rabbit numbers, it was disappointing to see such low autumn counts this year; indeed it proved the quietest autumn since 2012 with a cumulative total of 152 birds well down on the 391 of 2016, the 496 of 2015 and the 480 of 2014.

Moorhen *Gallinula chloropus*

Iâr Ddŵr

Scarce Breeder

2 trapped

1936-1976: 10 trapped, 2013-2016: 10 trapped, 4 retrapped

The early period was again quiet, with a single between the Well and Orchid Bog on ten dates to 19th April, one at North Pond on three dates between the 5th and 14th April (which was joined by a second bird on the latter date) and one at South Pond on 14th April; whether this annual paucity of records reflects an absence of birds or just skulking non-breeding behaviour is yet to be resolved. There followed daily records of up to four birds from 17th April; all came from the same three sites with the exception of one at the Top Tank on 18th May and a vocal bird over the Lighthouse on the night of 6th July. An adult was found dead at North Pond on 5th May, however two were still present the following day and seven chicks appeared from 2nd June; only one chick was seen from 5th June onwards, a bird which had fledged by 3rd July. The adults were again nest building on 28th June and five chicks came from cover on 6th August when they were seen to be fed on Broom Moth caterpillars; only three were present from 30th August, all of which went on to fledge. The pair commuting between the Well and Orchid Bog proved harder to monitor, although a large chick was at the Well on 17th June, two empty nests were found at the Well on 31st July and two independent fledglings were at Orchid Bog on 6th August; it is assumed that the chick may have been one of the two fledged. Regular records of adults at South Pond were followed by an observation of two recently fledged young on 28th August. Three confirmed breeding pairs matches the previous three seasons; four pairs in 2007 and four or five in 2011 are the only higher counts. A minimum of eight fledglings gives a 2017 productivity figure of 2.67, the same as last year (productivity between 2015 and 2013 was between 1.00 and 2.33 fledglings per pair). There were fewer sightings in October, as is typically the case, and no birds were logged at all on the 11th. There followed up to three birds on four dates to the 18th and further singles on ten dates to 9th November.

Coot *Fulica atra*

Cwtiar

Rare recorded in 15 previous years

1936-1976: 2 trapped

One swimming in the sea off South Haven and Hog Bay on 16th September was the first Skokholm record for over a decade (RDB *et al.*). The exact number of Skokholm records is somewhat confused by what may have been lingering birds not logged on every day of their stay, however there have been a minimum of 21 records concerning at least 33 birds which have produced a total of 73 bird-days. The first Skokholm record was of a group of seven south over the sea on 26th July 1939; this remains the highest Skokholm daycount. There followed two more birds that year, singles in 1948,

1958 and 1960, three records of up to two birds in 1964, two records of up to two birds in 1970, singles in 1976, 1978, 1980 and 1985, up to three birds over 14 dates during August and September 1988, a single in 1991, three records of up to two birds in 1993 and most recently singles in 1998 and 2007, the latter of which lingered on North Pond for six days. There are single records in each month between March and June inclusive, with the remainder of previous sightings coming in the period between 2nd July and 11th September; the 2017 record is thus the latest to date.



Crane *Grus grus*

Garan

Vagrant no previous records

Three unringed birds which approached from the east on 25th March, reached the Lighthouse and then headed northwest over North Plain (GE, RDB); this was the first record for Skokholm and the 11th for Pembrokeshire. They were seen later on the same day over New Quay, Ceredigion and near City Dulas, Anglesey on the following day. What were almost certainly the same three birds were seen at RSPB Saltholme, Cleveland on 27th March, Potter Brompton, North Yorkshire on 28th March and at Flamborough Head, East Yorkshire on 29th March. It is tempting to think that records of three birds at Loch of Strathbeg, Aberdeenshire on the 27th, 29th and 30th April, Papa Westray, Orkney on 4th May and Noss, Shetland on 5th May were the same group.



It is also tempting to think that three over Cleveland and then Fairburn, West Yorkshire on 21st May were perhaps the same birds heading back south. Although Cranes at this time of year are often considered to be European migrants, it is also possible that these movements may have been made

by typically resident Norfolk birds which sometimes wander in spring; indeed it is thought that such a movement may have led to breeding in Yorkshire by birds which return to Norfolk for the winter (Stanbury *et al.*, 2011). That three Cranes were seen heading west over Norwich Cathedral on 23rd March perhaps lends some support to the theory that ours were Norfolk birds and the lack of rings almost certainly rules out the possibility that they were reintroduced birds or their offspring from Somerset or Gwent.

Oystercatcher *Haematopus ostralegus*

Pioden y Môr

Fairly Common Breeder and Common Visitor previously an Uncommon Breeder

8 trapped (including 3 pulli)

1936-1976: 1882 trapped, 2014-2016: 24 trapped

Numbers again fluctuated widely during March with peak counts of 103 on the 13th, 111 on the 17th and 95 on the 19th when larger high tide roosts formed on the Anticline (with up to 98 birds roosting there on the 17th), but with lows of 27 on the 23rd and 24th, 24 on the 25th and 34 on the 30th. The average number of birds per day was up on the previous four years, perhaps the first indication that there was to be an increase in the number of breeding pairs mapped. Roost sizes declined earlier in April than normal, with the majority of counts during the month being of birds on territory rather than at the Anticline, where there were peak roosts of only 25 on the 1st and 47 on the 4th, or at Oystercatcher Rock where there were five roosts exceeding 20 birds and highs of 36 on the 10th and 29 on the 12th. A whole Island census during May revealed 61 territorial pairs, seven more than in 2016 and seemingly a new Skokholm record; this was well up on the 2002-2016 mean (38.43 \pm sd 9.97). It seems likely that at least part of this increase is being driven by high adult survival; all four colour ringed adults logged in 2016 were back on the same territories this year. A further five adults were colour ringed on Skokholm during this season to improve what is still a low sample size; one of these birds was found overwintering in Côtes-d'Armor, France (see below). As in the previous four seasons, nests were selected for productivity monitoring during early May (14 in total); 11 contained three eggs, two contained two eggs and one was only ever seen to contain a single egg. Only six of the pairs fledged young, with two pairs fledging two and four pairs fledging singletons. Productivity was thus 0.57 fledglings per pair, the second poorest total of the last five years, 30.5% down on last year and 33.7% down on the 2013-2017 mean (0.86 \pm se 0.14).



The first flying youngster was logged on 16th June and the number of adults roosting on the banks of North Pond slowly increased during the month, presumably augmented by failed breeders and

increasing from 19 on the 9th to 31 on the 11th, 33 on the 25th, 43 on the 27th and 45 on the 29th. There were five further North Pond roost counts in excess of 40 individuals in July, peaking at 46 on the 12th, and the number of birds logged across the whole Island dropped noticeably on the 24th (with only 55 birds logged compared with 111 on the previous day). The peak August count of 45 came on the 2nd and there were no more than 23 logged on any date from the 10th. There were records on all but two dates from 1st September until the departure of staff on 9th November, with the majority of records coming from the Anticline roost where there were daycounts of 18 on six dates, 19 on six dates, 20 on four dates and 22 on the 6th and 7th September and 25th October.

Ringing recovery FB42819

Originally ringed as a chick, SKOKHOLM 3rd June 2014

Recovered as a first-winter, THE GANN, PEMBROKESHIRE 6th February 2015 (sic)

Finding condition Intentionally taken

Distance travelled 9km at 78 degrees (ENE)

Days since ringed 248

Ringing recovery Left tarsus orange over FB46110, right tarsus orange with black 6A

Originally ringed as a chick, SKOKHOLM 25th June 2016

Recovered as a second-winter, GINST POINT, CARMARTHENSHIRE 28th December 2017

Finding condition Colour ring read in field as bird fed

Distance travelled 117km at 85 degrees (E)

Days since ringed 552

Ringing recovery Left tarsus orange over FB46115, right tarsus orange with black 9A

Originally ringed as a breeding adult, SKOKHOLM 28th May 2017

Recovered as an adult, PLAGE SAINT-MAURICE, CÔTES-D'ARMOR, FRANCE 12th December 2017

Finding condition Colour ring read in field

Distance travelled 402km at 152 degrees (SSE)

Days since ringed 198

Avocet *Recurvirostra avosetta*

Cambig

Vagrant no previous records

Two found in North Pond on the morning of 20th April did not linger for long (PB, TB *et al.*). Intriguingly two had been seen flying south off Aberaeron, Ceredigion on 9th April; it is tempting to assume that these were the same birds. This was the first Skokholm record of what is a surprisingly scarce species in Pembrokeshire; there have only been approximately 23 previous sightings in the county, five of which have occurred since 2000 including, most recently, one at Newport Boat club on 14th January 2013.



Lapwing *Vanellus vanellus***Cornchwigen**

Scarce previously Common and an Uncommon Breeder, but last bred in 2000
1936-1976: 694 trapped

It proved the first year since 2013 without a spring sighting; there have only been records of up to two birds on 18 spring dates since 2004, a sobering statistic for a species which produced chicks on Skokholm as recently as 2000. The first of the autumn was briefly on North Pond before heading south on 13th July. Further singles were on the Neck on 20th September and at North Pond on 26th October. A total of three autumn individuals was well down on the previous three years; there were 19 autumn bird-days in 2016, 34 in 2015 and 13 in 2014, but only singles in 2013 and 2012. Winter visits would probably increase the number of Skokholm records; historically numbers peaked in the winter months and a visit late in the November of 2011 found eight birds.

Golden Plover *Pluvialis apricaria***Cwtiad Aur**

Uncommon only 35 birds 2006-2013 and not recorded in 2008, 2009 or 2011
1936-1976: 1 trapped

The first of a rather typical spring was on South Pond on 21st April. A summer-plumaged bird lingered between the 1st and 2nd May and a flyover on 13th June was perhaps the same bird which frequented the area around the Lighthouse between the 14th and 18th June. The first of the autumn was a flyover on 30th September; there was thus no August record for the first time since 2012. There followed singles on the 1st, 3rd and 6th October, 14 on the 7th (including a flock of 13 which headed east after grounding in the Bog) and further flyover singles on the 20th, 27th and 30th October. Although down on autumn totals of 56 in 2015 and 45 in 2014, the 21 birds logged this autumn was four up on last year and matched 2013.

Grey Plover *Pluvialis squatarola***Cwtiad Llwyd**

Scarce records in 54 years since 1929, with only five singles 2004-2012 and 12 singles 2013-2015

Two northwest on 17th April was the first record of multiple birds since three were logged on 12th September 1996. A single lingered near North Pond between the 20th and 23rd April and what was believed to be the same bird, at South Pond on the 25th, was the last sighting of the year. It was thus the first year since 2011 without an autumn sighting, although three individuals in a year is of late a rather typical Skokholm total.

Ringed Plover *Charadrius hiaticula***Cwtiad Torchog**

Uncommon but Scarce between 2004 and 2011
1936-1976: 3 trapped

With the exception of two singles in the March of last year and singles in the February and March of 2002, the first record of the season has come in April during every year of the 21st century; this trend continued in 2017 with the first of the year a single on the 8th. It subsequently proved the quietest spring since 2012, with a cumulative total of 34 birds down on the 35 of 2016, the 47 of 2015, the 62 of 2014 and the 45 of 2013. Autumn passage began with a single at North Pond on 18th July, 12 days later than the first of last year. Considering the excellent passage logged in the autumn of 2016, this year was rather quiet by comparison; following a record August total of 65 in 2016, only seven were noted this year (the 21st century mean is 8.4 birds per August) and the September total of 19 was also well down on the record 74 noted last year (the 21st century mean is 11.1 birds per September). A minimum of 11 birds on 26th September equalled the 2016 maximum counted on 27th August; there have only been five higher daycounts on the Island, with 12 on 23rd May 1991 and 2nd October 1961, 13 on 30th September 1975 and 16th May 1959 and 14 on 22nd May 2014. Flyover singles on

the 6th and 20th October were the last records of the year; the only later sightings this century were in 2016 and 2002 (intriguingly the same two years which share the earliest spring records).

The total number of Ringed Plover logged each month (2016 to 2014 in parenthesis), along with the monthly maximum (2016 to 2014 in parenthesis) and the date(s) on which the 2017 peak was recorded.

March	April	May	June	July	August	September	October	November
0	13	18	3	4	7	19	2	0
(2, 0, 0)	(14, 18, 8)	(18, 22, 52)	(1, 7, 2)	(11, 3, 2)	(65, 24, 7)	(74, 39, 17)	(7, 2, 1)	(1, 0, 0)
0	3	4	1	1	1	11	1	0
(1, 0, 0)	(2, 7, 2)	(4, 5, 14)	(1, 2, 1)	(2, 2, 1)	(11, 3, 1)	(9, 8, 3)	(3, 1, 1)	(1, 0, 0)
	18 th	6 th	3 dates	4 dates	7 dates	26 th	6 th & 20 th	

Whimbrel *Numenius phaeopus*

Coegylfinir

Common Visitor has seemingly overwintered on at least 17 occasions
1936-1976: 30 trapped

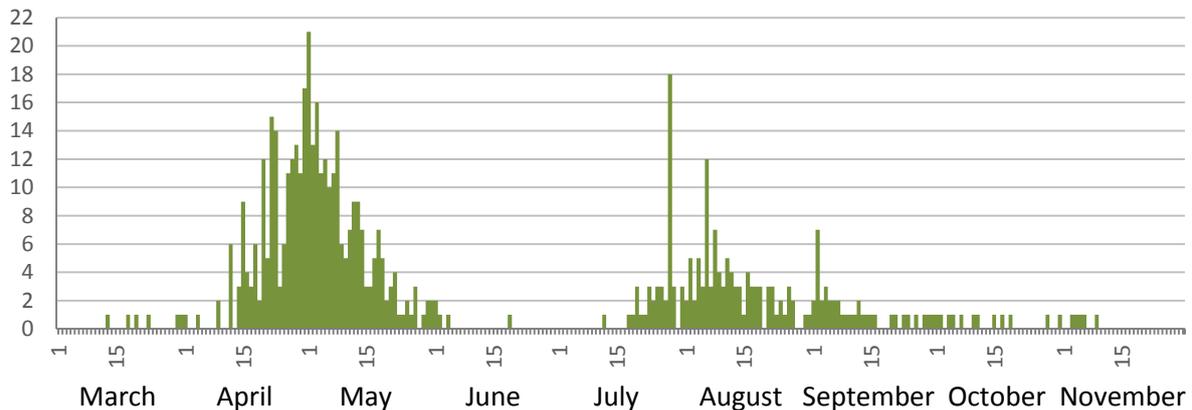
An adult seen around South Haven and the Anticline on six March dates from the 13th and on 4th April was probably an overwintering individual; it is tempting to think that this was the same lone bird which also spent the previous two winters at this site and perhaps one of the two birds which had spent previous winters here. A single on Oystercatcher Rock on 1st April was potentially the same overwintering bird; two on 9th April (one at Crab Bay and one on North Pond) was thus the first indication of spring passage. It subsequently proved the fourth most productive April on record, with a total of 156 birds only down on the 179 of last year, the 173 of 1989 and the 159 of 1978. As was noted last year, a good April total was in part a reflection of an earlier spring passage; the May total was again down on the recent high of 2014, although the 196 birds logged was 30 more than last year. Indeed the combined April, May and June totals for the last five years show a tight spread, with between 321 and 357 birds logged; the highest of these spring totals came this year. The last Whimbrel of spring was at North Pond on 19th June; bar one on the 29th in 2014, this was the latest spring bird since 2003.



One off the Lighthouse on 12th July was the first of the autumn, four days later than the first of last season but on the same date as the first of 2015. There were a further 44 birds logged during the month, taking the July total to the same as in 1995 and otherwise the highest total in this month since 1983. The 18 birds logged on the 28th, which included a group of 16 heading west, was the

highest July daycount of all time. There were 92 birds logged in August, a substantial improvement on the 49 of last season and, bar the 135 of August 2015, the highest total in this month since the 172 of 1989 and the 97 of 1960. The September total of 38, although down on the previous two seasons, was similar to the 1946-2016 average of 33.97 and only included records of singles after the 12th (although the possibility of a second bird was noted on the 23rd, 24th and 28th). As in the previous two years, all of the October and November records were of a single bird which was usually to be found near the Anticline and which looked set to overwinter.

The number of Whimbrel logged on each day of 2017.



The total number of Whimbrel logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2014 to 2016 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	6	156	196	5	45	92	38	12	5
2016	4	179	166	3	14	49	52	9	18
2015	3	119	203	0	24	135	54	15	14
2014	8	55	248	18	29	84	34	34	13
2017	1	17	21	2	18	12	7	1	1
2016	1	45	23	2	2	6	12	1	1
2015	1	29	18	0	4	17	6	1	1
2014	2	6	19	3	6	19	4	2	2
	6 dates	30 th	1 st	1 st	28 th	6 th	2 nd	12 dates	5 dates

Curlew *Numenius arquata*

Gylfinir

Common Visitor previously Abundant and usually present throughout the year, but has never bred 1936-1976: 141 trapped, 2016: 1 control

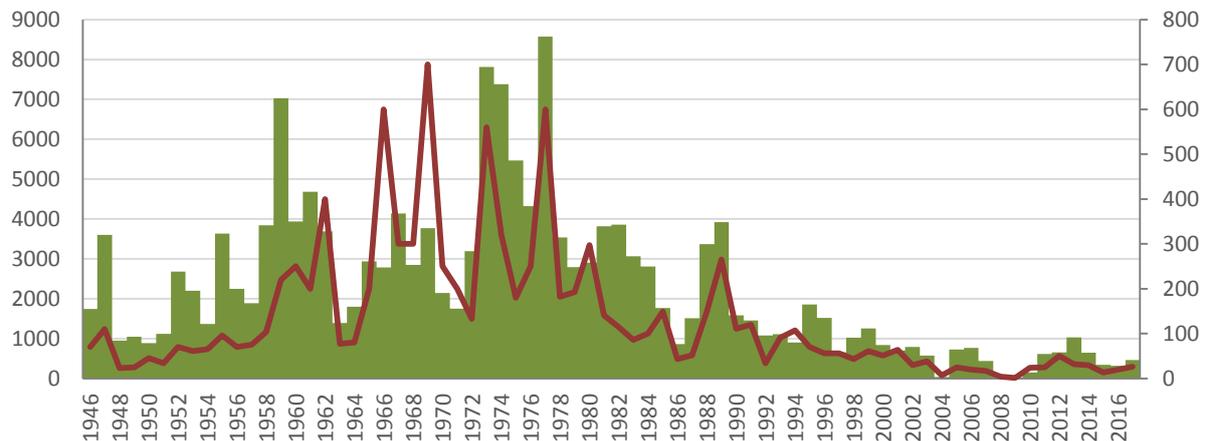
The decline in the number of Curlew on Skokholm has been alarming, with the 2017 season proving one of the worst on record for this charismatic red-listed wader which between 1994 and 2010 has declined in the United Kingdom by 46% and in Wales by over 50% (BTO, 2016). Up to four birds were present in March, perhaps again a suggestion that Skokholm is still of some importance to this species during the winter months, and birds sang on five dates. Although up on the previous two years, the April total of 39 was barely half of the 1946-2016 April mean (75.62) and was well down on highs of 269 in 1977 and 203 in 1978. A May total of three was the lowest since records began; although only four were counted in the May of 1962, the post-War May mean is 39.92 and there were highs of 155 in 1981 and 115 in 1959. Numbers increased fractionally in June, with 17 birds logged over seven dates including a high of ten on the 30th; it was noted in the 2016 Annual Report how birds at this time of year may already be departing their mainland Europe breeding grounds for coastal wintering quarters, as exemplified by the failed German breeder observed on 16th June last year. The 90 birds recorded in July was the highest total in this month since 2014, although this was

still a sobering count bearing in mind that this month saw over 1000 birds logged as recently as 1988 and a high of 1741 in 1959.

The total number of Curlew logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2013 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	39	39	3	17	90	126	109	36	3
2016	28	10	17	7	38	82	82	28	18
2015	69	18	14	29	60	83	24	32	9
2014	18	50	17	21	132	181	91	57	79
2013	271	62	25	18	113	211	94	169	64
2017	4	5	1	10	11	26	22	4	1
2016	8	2	4	2	4	11	20	2	4
2015	10	1	2	6	11	13	2	2	1
2014	2	7	3	5	18	30	14	12	22
2013	32	7	3	4	17	26	8	9	23
	3 dates	3 rd	3 dates	30 th	22 nd	21 st	3 rd & 5 th	19 th	3 dates

The total number of Curlew (green) and the maximum daycount logged in each year since 1946.



The August total of 126 birds, although up on the previous two years, proved the sixth lowest ever logged in this month; all of the six poorest years have occurred since 2006. Although substantially down on historical counts, which have reached four-figures in nine previous Septembers including a high of 2069 in 1977, the September total of 109 was the highest since 2011 and the 22 birds noted on the 3rd and 5th were the highest September daytotals since 23 were noted on the 1st in 2002. The monthly total in October 1973 was an almost unimaginable 4305; that only 36 were present this year is a sad reflection of the Curlew's plight. Numbers dwindled further in November, with just three singles noted; just 50 years ago a herd of at least 600 were present on one November date.

Bar-tailed Godwit *Limosa lapponica*

Rhostog Gynffonfrith

Uncommon Visitor although occasionally Scarce or Fairly Common

1936-1976: 8 trapped

The first of the year, a single at North Pond on 18th April, was two days earlier than the first of last year and the earliest spring record since 3rd March 2001. The only other April sighting was another single logged two days later. In May there were two on the 6th, with one off the Lighthouse and a summer-plumaged bird which commuted between Orchid Bog and North Pond; the latter individual lingered for the following two days. One at North Pond on 4th June was the last in a disappointing year for this species; there was no autumn record for the first time since 2014 and an annual total of

seven bird-days was the lowest since the four of 2014, well down on the 68 of last year. Traditionally this has proven the commoner godwit on Skokholm, although this was not the case this year or in each year between 2010 and 2015.

Black-tailed Godwit *Limosa limosa*

Rhostog Gynffonddu

Scarce or Uncommon Visitor but Fairly Common in 2012, 2013 and 2015

1936-1976: 1 trapped

In sharp contrast to the preceding species, the five best years ever for this godwit on Skokholm have occurred in the last six, although only two individuals were seen in 2014. One on Oystercatcher Rock on 23rd March was the first record of the year and the earliest since one on the same date in 2013. In April there were seven at North Pond on the 4th (equalling record April counts made in 1993 and 1957), a single there on the 7th, three on the 20th, two on the 25th and two on the 30th; all of the birds logged from the 20th were considered to be of the subspecies *L. l. islandica* and one on the 20th had been colour ringed in Iceland as a chick in 2013. The last two birds logged in April remained together at South Pond until 4th May, a single was noted there on the 5th, 7th and 8th and a second bird visited North Pond on the latter date. A pantheon of 20 circled above the Island on 10th May, this the highest May count ever, up on the 16 of 2016 and the 15 of 2015. Three at North Pond on the 11th was the only other May sighting. In June four went over on the 15th, eight on North Pond headed north to sea on the 16th, two went east on the 20th and one was at North Pond on the 21st.



Four were at North Pond on 1st July, one of which remained until the following day when it was joined by a fifth individual; five breeding-plumaged adults the following day probably included the two birds from the 2nd. Two summer-plumaged *L. l. islandica* on North Pond between the 10th and 12th were joined by a further 24 birds on the 11th; a daycount of 26 is a new Skokholm record, up on the 21 of 28th August 2013 and the 20 of 10th May this year. In August there were singles on the 15th, 18th and 19th, 12 together on the 20th, one on the 21st, two on the 22nd, one on the 23rd, four on the 24th, five on the 25th and four on the 27th. A mobile juvenile noted on each day between the 3rd and 9th September was joined by two adults on the 6th. A flyover single on 26th October was the last record of the year and only the second October record for Skokholm following one on the 12th in 2013. An annual total of 149 bird-days was a new Skokholm record, up on the 116 of 2012, the 61 of 2015 and the 54 of 2013.

Ringing recovery white over black left tibia, white over black right tibia, 634127 right tarsus
Originally ringed as a chick, KALDAÖARNES, SELFOSS, ÁRNESSÝSLA, ICELAND 4th July 2013
Previously recovered as a juvenile, THURSTASTON, THE DEE, MERSEYSIDE 11th-19th October 2013
Previously recovered as an adult, LEIGHTON MOSS, LANCASHIRE 12th July 2014-29th April 2015
Previously recovered as an adult, CLEY, NORFOLK 12th August-16th September 2015
Previously recovered as an adult, LEIGHTON MOSS, LANCASHIRE 28th April-1st May 2016
Previously recovered as an adult, HAUKE-HAIEN-KOOG, GERMANY 17th August-2nd October 2016
Previously recovered as an adult, GUÉRANDE, LOIRE-ATLANTIQUE, FRANCE 19th April 2017
Recovered as an adult, NORTH POND, SKOKHOLM 20th April 2017
Finding condition Colour rings read in field
Distance travelled 1639km at 151 degrees (SSE)
Days since ringed 1387

A fantastic example of the value of colour ringing. The distance between Guérande and Skokholm is over 529km, a distance which was covered in less than 24 hours as the bird headed north towards Iceland.



Turnstone *Arenaria interpres*

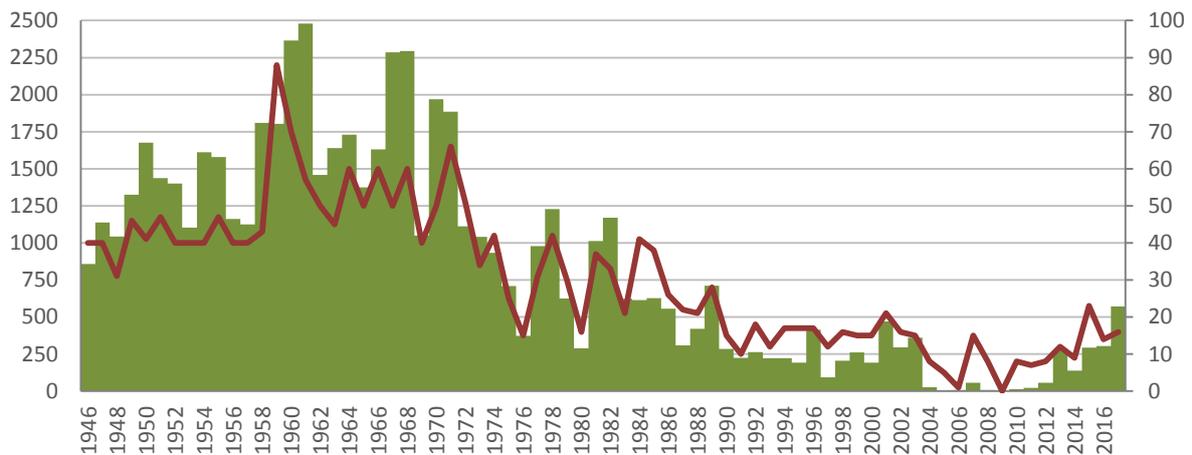
Cwtiad y Traeth

Common Visitor once Abundant but sometimes only Fairly Common in recent years
 1936-1976: 12 trapped

Although Turnstone are no doubt under recorded due to their predilection for spending the majority of time below cliffs and their sporadic use of visible high tide roosts, off-path coverage was similar to recent years suggesting that totals will be comparable. There were only sightings on six spring dates, all between 23rd March and 26th May. The peak spring count, a group of six which went over on 19th May, was the lowest of the last six years and the 17 birds logged during the period was the lowest total since 2012 (when 17 were also counted), well down on the 62 of last year. Historically spring counts were much higher; an April total in excess of 400 was not uncommon between 1947 and 1961, although the last time that three-figures was reached was in the April of 1982 when 137 were noted. Four off the Neck on 11th July were the first of a much more productive autumn. There were a further 16 noted over seven July dates from the 19th and a total of 135 over 27 August dates included highs of 14 on the 23rd and 13 the following day; these were the highest July and August monthly totals since 1992 and 1989 respectively, but were well down on the record July total of 228 logged in 1960 and the record August total of 781 logged in 1971. Birds were seen on all but one date in September, including highs of 16 on the 8th and 21st; the majority of these sightings were of birds roosting on the Anticline. The September total of 268 birds was the highest to be logged in any month since 323 were counted in the September of 1985. There continued to be regular sightings in October, with 113 birds noted over 16 dates to the 25th, including another high of 16 on the 10th. The

only November sightings again came from the Anticline where there were seven on the 6th, eight on the 8th and four on the 9th. A cumulative autumn total of 555 birds over 83 dates was well up on the 242 over 52 dates counted in autumn 2016, the 235 over 63 dates in 2015, the 115 over 38 dates in 2014 and the 217 over 43 dates in 2013; indeed it was the busiest autumn since 1989, when 601 birds were counted. However totals were considerably down on historical levels which exceeded 636 birds a month on six occasions between 1950 and 1971. Given that the majority of monthly totals are certainly in part made up of counts of the same birds over multiple dates, the highest daycount made each year is telling; the maximum daycount of 88 logged on 26th August 1959 was 72 up on this season and starkly illustrates how the number of Turnstones visiting Skokholm has declined markedly since the 1960s and 70s.

The total number of Turnstone (green) and the maximum daycount logged in each year since 1946.



The total number of Turnstone logged each month (2016 to 2014 in parenthesis), along with the monthly maximum (2016 to 2014 in parenthesis) and the date(s) on which the 2017 peak was recorded.

March	April	May	June	July	August	September	October	November
4	3	10	0	20	135	268	113	19
(10, 4, 6)	(20, 10, 5)	(30, 44, 11)	(2, 0, 1)	(2, 4, 4)	(16, 70, 27)	(141, 112, 48)	(62, 27, 31)	(21, 22, 5)
2	3	6	0	4	14	16	16	8
(6, 3, 1)	(7, 4, 5)	(5, 23, 9)	(2, 0, 1)	(1, 3, 2)	(5, 20, 6)	(14, 9, 8)	(13, 6, 7)	(8, 9, 1)
28 th	4 th	19 th		11 th 24 th	23 rd	8 th 21 st	10 th	8 th

Ruff *Calidris pugnax*

Pibydd Torchog

Scarce usually singles or pairs but with 14 south on 13th September 1958 the highest daycount

Earliest 3rd March 1964 (5th May 2017) **Latest** 26th October 1971 (28th September 2017)

1936-1976: 7 trapped

Two on 5th May was the only record of the spring and only the third May record this century following birds in 2015 and 2014 (HD); although this species has been logged in 31 previous springs on Skokholm, a reeve in June last year, a reeve and male in 2015 and a lone black-ruffed male in 2014 are the only spring birds since 1998. A moulting adult male on 18th July was the first autumn sighting this year. A juvenile male was on North Pond on 21st September and a similar looking bird was at the same site on the 24th and 25th, although early on the 25th it departed high and east with a Ringed Plover. Nevertheless it may have been the same young male which was back at North Pond during the 27th and 28th, the latter observation being the last of the year. A minimum of four individuals this season was down on the seven of last year and the 23 of 2015, however there were only three birds logged in 2014, two in 2013 and two singles between 2001 and 2012. There have now been records in 53 of 86 recording years.

Sanderling *Calidris alba*

Pibydd y Tywod

Rare only 34 previous records including five records totalling ten birds this century
1936-1976: 2 trapped

One at North Pond on the morning of 29th August was the first since one on 13th September 2015 (RL). Another single was at the same site on 20th September. There have only been sightings in 28 previous years on Skokholm, now with a total of 36 records accounting for 72 bird-days. Although there are records from every month between March and November inclusive, the most productive month is May, with a total of 11 records, whilst there have been three in July and now six in August and eight in September. All but six sightings have been of singles, with 11 on 7th August 1994 and five on 4th September 1979 being the maximum counts.



Dunlin *Calidris alpina*

Pibydd y Mawn

Common Visitor recorded in all months but only Fairly Common in some years
1936-1976: 181 trapped, 2014-2015: 4 trapped

Three at North Pond on 19th April were the first of the year; it was thus the first year since 2010 without a March record. There were sightings on a further 21 spring dates, totalling only 82 bird-days and with a peak count of just 15 on 5th May; this was the lowest spring total since 2012 and the lowest peak spring count since a high of only six in the same year. That May 2016 produced the third highest monthly total ever, along with the seventh highest Skokholm daycount of 34, made spring 2017 feel all the quieter. However, in stark contrast to the poor spring totals, autumn proved excellent for Dunlin sightings.

The total number of Dunlin logged each month (2016 to 2014 in parenthesis), along with the monthly maximum (2016 to 2014 in parenthesis) and the date on which the 2017 peak was recorded.

March	April	May	June	July	August	September	October	November
0	21	58	3	134	192	30	12	0
(1, 2, 1)	(55, 35, 30)	(167, 146, 71)	(7, 15, 9)	(30, 26, 12)	(53, 139, 22)	(32, 69, 45)	(10, 3, 2)	(13, 0, 2)
0	8	15	1	17	22	6	3	0
(1, 1, 1)	(13, 8, 6)	(34, 28, 16)	(2, 3, 4)	(10, 9, 3)	(6, 18, 5)	(6, 10, 14)	(5, 1, 1)	(4, 0, 1)
	22 nd	5 th	3 dates	21 st	22 nd	26 th	2 nd	

There were birds present on all but seven dates in July and the monthly total of 134 was over 100 birds up on previous July highs of 32 in 1949 and 31 in 1956. Although impressive by Skokholm standards, that the only records of juveniles during this period concerned two on the 19th and 20th and four between the 21st and 23rd was perhaps indicative of a disappointing breeding season. As is

typically the case, passage again peaked in August with birds present on all but two dates from the 4th, totalling 192 bird-days and with highs of 22 on the 22nd and 21 the following day (19 of which were juveniles); the monthly total was the highest ever logged in August, well up on the 139 of 2015 and the 97 of 1988. Indeed only May 1967 has seen more birds logged in a calendar month, when 193 were noted, whilst the total matched the 192 of January 1968. There were records on 21 dates in September, but with a high of only six and a monthly total of 30, the lowest in this month since 2013; however there are still only 11 higher September totals, the 83 of 1981 being the maximum. There were birds on nine dates in October, five of which were flyover singles including one on the 30th which was the last of the year. Despite the poor spring, the 450 birds noted throughout the course of 2017 was well up on the 368 of last year and a new Skokholm record, topping the 417 of 1968 and the 435 of 2015.



Purple Sandpiper *Calidris maritima*

Pibydd Du

Scarce Visitor but recorded by Thompson and Betts as Uncommon and previously Fairly Common
1936-1976: 8 trapped

What was quite probably the same individual, roosting with Turnstones at the Devil's Teeth on the 18th, 21st and 25th September, was the only record of the year. It thus proved another disappointing season following only two records of up to two birds last year, a single in 2015 and the recent high of 13 records totalling 32 birds logged in 2014. Prior to 1983 three-figure annual totals were the norm, with record monthly totals of 279 in August 1971, 234 in August 1978 and 229 in August 1979 and with maximum daycounts of 32 on 20th March 1968 and 26th August 1978 and 30 on 27th March 1966. As noted for Turnstone, it is likely that birds go under recorded as they inhabit the spray zone at cliff bases, however the decline in Island records seems to suggest a genuine lack of birds, a sad reflection of the situation nationally and their amber listing as a species of UK conservation concern.

Little Stint *Calidris minuta*

Pibydd Bach

Scarce on passage August to October, with a lone spring record on 27th May 1990
1936-1976: 9 trapped

A juvenile found at North Pond on 27th September remained at the same site until last seen on 2nd October (RDB *et al.*). A different juvenile frequented North Pond on 6th October (GE *et al.*). The only other records this decade concern a juvenile at North Pond on the 23rd and 24th August 2015, singles

on the 21st and 23rd September and between the 17th and 19th October 2014, a single on the 20th and 21st September 2012 and one on 12th October 2010 which was joined by a second individual the following day. There have now been Skokholm Little Stints in 32 recording years, including seven years with sightings later than the second 2017 bird and one on 31st October 1976 which is the latest Island record.

Pectoral Sandpiper *Calidris melanotos*

Pibydd Cain

Rare at least 17 previous records of at least 21 birds including the first for Wales in 1958
 1936-1976: 5 trapped

A pristine juvenile on North Pond for much of 30th August was the first since a single at the same site on 15th May 2013 (RL, RDB, *et al.*). The only other records this century, all from North Pond, are of a single on the 7th and 8th September 2012, two birds between the 16th and 18th September 2012, one of which remained for a further three days, and two on the 13th and 14th May 2011, one of which also remained for a further day. The exact number of previous records is somewhat confused by what may have been long-staying individuals going absent for short periods; some birds are certainly known to have lingered for up to 19 days. There have only been five spring records, all between 13th May and 10th June, with the autumn sightings all falling in the period 23rd August to 11th October and with the majority occurring in September. Three together on 27th September 1970 is the highest Skokholm daycount.



Long-billed Dowitcher *Limnodromus scolopaceus*

Gïach Gylfin-hir

Vagrant a juvenile between the 20th and 24th September 2015 is the only previous record

A vocal flyover on 1st November looked to be landing on North Pond but pulled up and banked sharply towards South Pond (RDB). A similar descent was made over South Pond, with the bird spiralling in with dangling legs, however it again pulled up before heading east and away from the Island. The high pitched *kwip-ip* alarm and then straight *kwip* flight call were both indicative of Long-

billed Dowitcher; Short-billed Dowitcher typically give more Turnstone-like notes. The record was accepted by the British Birds Rarities Committee as the fourth for Pembrokeshire following first-winter birds at the Gann between 12th December 1987 and 3rd January 1988, at the Gann between 1st January and 23rd March 2013 and on Skokholm between the 20th and 24th September 2015 (Rees, 2014, Brown and Eagle, 2015).



Woodcock *Scolopax rusticola*

Cyfflog

Scarce Winter Visitor not recorded every year but over 200 corpses found in February 1963

Earliest 15th July 1962 (31st October 2017) **Latest** 19th May 1999

1936-1976: 3 trapped

There were no spring birds recorded, as has been the case in 52 of 84 previous years. The first of 2017 was thus a bird flushed at East Bog on 31st October; this was four days later than the first of 2016, three days later than the first of 2015 and one day earlier than the first of 2014. A single was at the Hills on 3rd November and three were logged on the 8th, two at East Bog and one on the Neck; this was the highest autumn daycount since four were noted on 20th November 1991. A winter presence would no doubt increase the number of records; for example there were 93 in January 1982, including 47 on the 15th which was the highest count of live birds to be made on Skokholm.

Jack Snipe *Lymnocyptes minimus*

Giach Bach

Scarce Winter Visitor although not recorded every year

Earliest 18th August 1938 **Latest** 22nd May 1995 (1st April 2017)

1936-1976: 8 trapped

Perhaps surprisingly the only record of the year was a bird at South Pond on 1st April (GE). This species has only been logged in 33 previous springs, with the only spring records since 1996 being one in April 2003, three singles in March 2013, one in March 2014 and one in both the April and May of 2015. There was no autumn record for the first time since 2011. Although Lockley described Jack Snipe as 'common from 7th October to 24th March', by 2004 they had become 'far less common, but recorded in most years' (Thompson, 2007); the latter status summary is still accurate today.

Snipe *Gallinago gallinago*

Giach Cyffredin

Common Winter Visitor and Passage Migrant breeding most recently suspected in 1927 and 1965

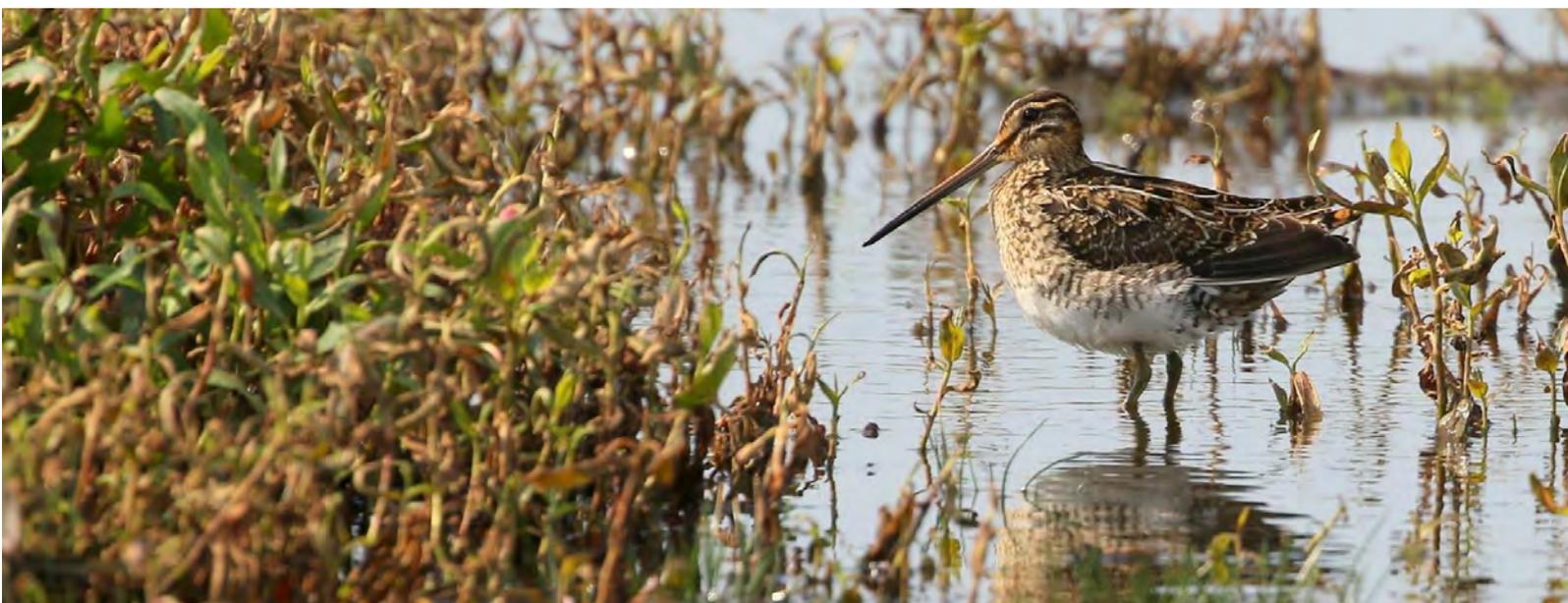
1936-1976: 54 trapped

A March total of 20 was the lowest of the last five years, well down on the recent high of 145 logged in 2013, but very similar to counts in 2016 and 2014. Conversely the April total was the highest since 51 were logged in 1995, with 30 birds noted over 15 dates. Two on 3rd May, namely singles at South Pond and the Red Hut, were the last of the spring; this was the third time in the last four years that

the latest spring bird has occurred on this date. One at North Pond on 15th July was the first of the autumn and a further four were at the same site three days later; these were the first July records since 2014 and the earliest since 2012. There were four singles at North Pond between the 4th and 18th August before daily records from the 21st which took the monthly total to 42, the highest in this month since 77 were logged in 1982 and well up on the 27 noted in August 2015 which was previously the highest total since 1982. Despite this early peak in numbers, September proved to be the quietest since 2012 with records on only 15 dates, nine of which were singles. As is typically the case, numbers peaked in October, with 51 birds noted over 17 dates including highs of six on the 26th and nine, the highest daycount of the year, on the 15th which included a wisp of six at South Pond; nine is the poorest peak annual daycount since 2012. The November total was also the poorest of the last five years, although this was in part due to the earlier departure of staff. As has been noted in previous autumns, Snipe were a regular prey item for Hen Harriers visiting Skokholm.

The total number of Snipe logged each month (2016 to 2014 in parenthesis), along with the monthly maximum (2016 to 2014 in parenthesis) and the date(s) on which the 2017 peak was recorded.

March	April	May	June	July	August	September	October	November
20	30	2	0	5	42	29	51	14
(24, 51, 22)	(7, 23, 9)	(1, 0, 1)	(0, 0, 0)	(0, 0, 4)	(11, 27, 11)	(40, 52, 46)	(65, 87, 23)	(56, 22, 32)
6	4	2	0	4	8	6	9	5
(4, 13, 10)	(2, 5, 4)	(1, 0, 1)	(0, 0, 0)	(0, 0, 2)	(6, 18, 6)	(10, 12, 5)	(7, 9, 4)	(23, 4, 6)
17 th	19 th	3 rd		18 th	22 nd 23 rd	1 st	15 th	2 nd



Common Sandpiper *Actitis hypoleucos*

Pibydd y Dorlan

Uncommon more regular in autumn

Earliest 21st March 1948 (20th April 2017) **Latest** 29th October 1975 (20th August 2017)

1936-1976: 23 trapped

A single in South Haven on 20th April was one day later than the first of last year and four later than the first of 2015 and 2014. Further singles on the 23rd and 24th April were the only other spring sightings; three spring records is the poorest total since 2013, when three singles were also logged, and is well down on the 2017 spring total of 16. A nocturnal flyover on 8th July was the first of the autumn; this was five days later than the first of 2016 and 2014, seven days earlier than in 2015 and on the same date as in 2013. The only other July record was of three birds distributed around the

coast of the Neck and South Haven on the 24th; this was the highest daycount of the year but, equal with 2015, the lowest of the last five, well down on the 14 noted on 6th August 2013. August singles in South Haven on the 2nd and off the Neck on the 20th were the only other records this year, this the poorest August total since 2009. It thus proved a disappointing autumn, with the six birds logged being the lowest autumn total since 2012, well down on the post-War autumn mean of 20.2, the 2015 total of 15 and recent highs of 36 in 2014 and 58 in 2013.

Green Sandpiper *Tringa ochropus*

Pibydd Gwyrdd

Scarce not recorded every year, only seven records 1998-2013 and only 15 spring records

Earliest 2nd April 1997 (20th July 2017) **Latest** 21st October 1967 (31st August 2017)

There was no spring sighting for a third consecutive year; 2014, 2013 and 2011 remain the only years since 1997 with a spring record. A single over North Pond on 20th July was thus the first of the year, ten days earlier than the first of both 2016 and 2015. In August there was a vocal bird over the Observatory on the night of the 4th, two mobile birds regularly visiting North Pond on the 20th and 21st, a North Pond single on the 25th, mobile birds on the 27th and 30th and finally one on the 31st which was the last of the year. Ten autumn bird-days was up on the two of last year; although down on the 13 of 2015, this was otherwise the highest autumn total since 1997 when 31 were logged.

Redshank *Tringa totanus*

Pibydd Coesgoch

Uncommon more regular in autumn

1936-1976: 4 trapped

In spring there were singles at North Pond on 2nd April and 1st May, two at North Pond on 26th May with what were presumably the same two at Winter Pond the following day, one on 31st May and finally an adult at North Pond on 30th June; the number of spring bird-days thus matched the last two years, a total about average for a species which has proven relatively consistent in terms of abundance during the history of recording on Skokholm. In July there was a single in Mad Bay on the 1st, a mobile bird on the 6th, one at North Pond on the 11th, three there on the 12th, a mobile bird on the 16th, five at North Pond on the evening of the 17th and a flyover on the 18th. In August there were three at North Pond on the 6th and 8th, two at the Neck on the 9th, six on the 13th, a single at North Pond from the 14th to the 17th, three there on the 19th and 20th, two on the 21st and 22nd, a single on the 24th, four over on the 27th and a single on the 31st; perhaps surprisingly, a total of 34 bird-days was a new monthly record, up on the 30 logged in August 1966, the 22 of August 2015 and the 21 of August 1970. The six birds logged on 13th August is the 15th highest daycount on record, down on peaks of 15 on 4th August 1939 and of 14 on 17th August 2001. In September there were singles on the 5th and 16th, there were two on 6th October and a single on 2nd November was both the last of the year and only the eighth November record for Skokholm.

Wood Sandpiper *Tringa glareola*

Pibydd y Graean

Scarce not recorded every year and only ten spring records

Earliest 22nd April 1973 **Latest** 22nd September 1966 (20th August 2017)

1936-1976: 2 trapped

A juvenile found at North Pond on 17th August was relocated at South Pond the following day (GE *et al.*). It was back at North Pond on the evening of the 18th, commuted between the two ponds on the 19th and spent the day at South Pond on the 20th. This was the third consecutive August with a Skokholm record, following a single between the 9th and 14th in 2016 and one on the 7th, two on the 23rd and one on the 30th in 2015. A single at North Pond on 22nd May 2014 means that there have now been records in four consecutive years, a regularity of occurrence which has not previously been recorded here; there were sightings in the three consecutive years between 1994 and 1996,

1971 and 1973 and 1962 and 1964. There have now been approximately 48 records totalling at least 53 individuals and with birds logged on 91 dates, all in 28 of 86 recording years.



Spotted Redshank *Tringa erythropus*

Pibydd Coesgoch Mannog

Scarce records in 26 previous years of up to five birds

Earliest 15th April 1983 (19th May 2017) **Latest** 26th September 1989

A vocal flyover picked up by a very experienced observer on 19th May was the only record of the year (EW). This was the first spring observation since a summer-plumaged bird which lingered on North Pond between the 18th and 21st April 1983 and only the fifth spring record for Skokholm. The only other records this century are of a juvenile which briefly dropped into North Pond on 16th August last year and a single on the 3rd and 4th September 2005. This species was more regular in the past, with five bird-days logged between 1st September 1995 and 5th September 1992, 20 in the 1980s, 13 in the 1970s, 20 in the 1960s and six between 25th May 1958 and the first Island sighting on 14th August 1955. The drop in Skokholm records has mirrored a decline in the number of birds passing through and wintering in Pembrokeshire.

Greenshank *Tringa nebularia*

Pibydd Coeswerdd

Uncommon but not recorded every year and only seven records between 2005 and 2012 inclusive

Earliest 5th April 2015 (14th April 2017) **Latest** 9th November 1958 (17th September 2017)

A flyover on 14th April was the first of the year, five days earlier than the first of last year but nine days later than one in 2015, the earliest Skokholm spring record. There were further April singles at North Pond on the 17th and Winter Pond on the 29th; only in 1966 were there more April bird-days, with 13 logged, although three were also noted in 2015. The next record was not until 19th July when a single spent just a couple of minutes on North Pond; this was 12 days later than the first autumn bird of last year. Two were present on 10th August, with one at North Pond and another flyover, and a single briefly at North Pond before heading east on 17th September was the last of the year.

Kittiwake *Rissa tridactyla*

Gwylan Goesddu

Very Abundant a single pair attempted to breed in 1959

Although present offshore in all months, Kittiwake were logged in smaller numbers than might be expected given the presence of 1336 breeding pairs on nearby Skomer. The pattern of records

broadly matched that observed in recent years with a quiet pre-breeding period, an increase in numbers during the breeding season, an August dip and a peak in counts during the autumn. Given that seawatching effort during the busy summer months fluctuates between years, maximum counts during this period perhaps provide a better indication as to changes in abundance; peak summer daycounts in 2017 were similar to recent years but approximately 90% down on historical highs, unsurprisingly so given that the Skomer population has steadily declined since the early 1990s and has dropped by 32% in the last 15 years. Kittiwake were first seen ashore on 18th June when 28 loafed at East Bay. There were further roosts of between 12 and 17 birds at Crab Bay Rocks on the last three days of June, a peak of 96 loafed there on 3rd July and between eight and 39 were noted ashore at the same site on six further dates between the 4th and 15th July.

The total number of Kittiwake logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	37	688	779	1422	1820	472	3847	3070	2263
2016	603	620	1254	1022	1272	573	799	2273	13913
2015	387	1271	2363	1727	1467	570	495	1096	9963
2014	336	224	835	2197	930	854	163	2703	606
2017	9	259	323	390	440	78	1049	585	800
2016	125	161	465	176	210	158	204	700	2548
2015	190	426	457	167	191	65	165	556	2820
2014	207	51	164	392	250	163	66	1245	248
	27 th	18 th	20 th	30 th	3 rd	9 th	16 th	2 nd	4 th



Seawatching effort increases in August and September as autumn passage attracts more observers and prolonged observation, so the annual decline in Kittiwake numbers during the start of this period no doubt reflects a genuine absence; adult birds moult their primaries during early autumn, although whether the drop in numbers is connected to moult or just the pelagic nature of Kittiwake during the post-breeding period is unclear. Autumn counts increased earlier this year, perhaps in part due to a period of strong westerly winds. Birds passing the Lighthouse at a rate of up to 600 an hour on 16th September contributed to a peak daycount of 1049, this the highest September daycount since 1978 when a minimum of 5000 were logged; the 16th was the first calm day following a week of rough or very rough seas. Of 210 birds watched on 18th September, only 21 were juveniles. As is typically the case, the majority of October and November records were of birds feeding in Broad Sound, although the maximum daycounts were considerably lower than in recent years.

Sabine's Gull *Xema sabini*

Gwylan Sabine

Rare records in only seven previous years, totalling 15 birds and with two logged on three dates

An adult which lingered with Kittiwakes off the Lighthouse on 12th September was the first since three singles logged between the 8th and 14th September 2011 (RDB, GE). Perhaps unsurprisingly

given the gale, and occasionally storm, force westerlies prevalent during the period, a second adult was found later on the same day (JP), a first-winter was close in off the Lighthouse the following day (HP, RDB, *et al.*), a first-winter was again off the Lighthouse on the 16th (RDB *et al.*) and another went northwest through Broad Sound on the 18th (JHI). The last of what was the best Skokholm year on record for this species was a first-winter which lingered off South Haven for over an hour during a southwesterly storm on 21st October (below photograph, RDB, GE). A total of six bird-days doubled the previous Skokholm record of three logged in 1980, 2003 and 2011. All 21 birds seen from Skokholm have occurred in the period 8th September to 1st November.



Black-headed Gull *Chroicocephalus ridibundus*

Gwylan Benddu

Abundant offshore during the winter. Two pairs defended North Pond territories in 1968

Given the size of the Broad Sound gull flocks which gather each winter, it was again surprising that there were very few spring records, probably suggesting that Black-headed Gulls have already dispersed towards their breeding grounds by the time that staff return to Skokholm. Two adults on North Pond on 20th April was the first record of the year and two breeding-plumaged birds were again at the same site on 5th May. A group of nine adults headed west over the Neck on 9th June, the first two juveniles of the year were at North Pond on the 28th and two adults and a second-summer were there the following day; during the last five years the first juvenile of the season has been logged between 26th June and 15th July, with the earliest record coming in 2015 and the latest last year. A total of 24 birds were logged over 11 July dates, including a peak of five on the 12th, and in August there was a single on the 5th and 16 were feeding to the north of the Neck on the 27th. As was the case last year, birds were slow to exploit the waters around Skokholm this autumn, with just 38 logged over nine September dates including a peak of only 13 on the 29th. Although seemingly entirely absent from traditional feeding areas on some dates in October, there were nonetheless 4711 birds logged during the month, primarily due to a sharp increase in numbers from the 27th which saw Broad Sound highs of 1735 on the 30th and 1537 the following day. Counts remained high in November with daily records until the 8th totalling 6177 birds and with highs of at least 2400 on the 4th and 1433 on the 5th. The three highest daycounts this autumn were three of the seven biggest Skokholm counts of all time, only down on the 2500 logged on the 11th and 13th October 1992 and with the other highs being 2000 on 30th October 1993 and 20th October 1992.

Little Gull *Larus minutus*

Gwylan Fechan

Scarce offshore mid-July to November, primarily from mid-October and with one spring record

Two adults and a second-winter were with the Broad Sound gull flock on 25th October and what may have been the same second-winter was at the same site the following day; there have only been

more than three birds logged on three previous dates, with six on 21st November 1996 and 31st October 1980 and seven on 14th November 1967, although three birds have also been logged on five previous dates, most recently on 20th November 1997. The only other record this year was of a lone first-winter in Broad Sound on 5th November. There have been more bird-days in five previous years.

Mediterranean Gull *Larus melanocephalus*

Gwylan Môr y Canoldir

Common offshore during the winter but Rare prior to 2013 and first noted in 1968

Considering that there had only been a total of 49 records up until 2003 (Thompson, 2007), that there were no birds logged at all between 2004 and 2011 inclusive and that there were only four records in 2012, the 21 records totalling 130 birds logged in 2013 was exceptional. However there has followed a remarkable increase, primarily due to a rise in the number of birds feeding in Broad Sound during October and November, with 934 bird-days logged in 2014, 1743 in 2015 and 2407 last year. The first of this season, a summer-plumaged adult off the Lighthouse on 10th July, was only the fifth July record for Skokholm following birds in 1998 and 2015; there followed further records on the 27th, when an adult went west, and on the 29th, when three adults went southeast off the Lighthouse. The only August record was of a winter-plumaged adult on the 12th, this the eighth August record for the Island, five of which have occurred in the last five years. There were records on seven September dates from the 13th, including a peak of nine in Broad Sound on the 29th; there have only been birds in eight previous Septembers and the 27 bird-days logged during the month equalled the record set in 2013.

There were records on all but seven dates in October, with the majority of zero counts attributable to poor visibility rather than a definite lack of birds in the Sound. Following peak daycounts of 16 on the 5th and 11th and 19 on the 12th and 14th, there was a substantial increase in numbers on the 15th when 101 were logged, only five of which were first-winters; this was the earliest three-figure count on record, with the 133 noted on 24th August last year being the previous earliest. There followed three further three-figure counts in October including 191 on the 27th, ten of which were first-winters; this was the highest October daycount on record and the second highest Skokholm count following the 234 logged on 14th November last year. The 175 logged the following day, which included nine first-winters, became the third highest daycount of all time. A paucity of younger birds was also noted last year, when the total peaked at 12. Given the sharp increase noted in the number of Mediterranean Gulls using Skokholm waters, an increase perhaps indicative of relatively recent high productivity, it could be that a higher proportion of young birds are in existence but winter elsewhere; an alternative hypothesis could be that the proportion of young birds is typical and that the birds have changed their wintering habits. Although only marginally up on last year, the October total of 1186 was the highest in that month to date; it thus seemed likely that the November record of 1222 set in 2016 would also fall, however an inclement forecast led to the early departure of staff on the 9th. Nevertheless daily sightings to the 8th produced a total of 383, including a count of 100 on the 5th, this still only the 12th three-figure daycount to be made here; there were 427 birds counted in the same period last year. The most recently published estimate of the British overwintering population is 1800 individuals (Musgrove *et al.*, 2011), although numbers were increasing during this 2004 to 2009 study and have continued to do so since; nevertheless it would seem likely that the Broad Sound feeding grounds are of significant importance to this species.

Common Gull *Larus canus*

Gwylan y Gweunydd

Uncommon offshore during the winter and with only 25 records between April and July
1936-1976: 12 trapped

There were no spring records for a second consecutive year; there have only been sightings in 29 springs since 1932, most recently in 2015, 2013 and 2007. A first-winter in Broad Sound on 12th

October was thus the first of the year, nine days later than the first of last autumn but five earlier than in 2015 and two earlier than in 2014. There followed up to two birds on four dates between the 13th and 20th October and daily records from the 25th which peaked at 15 on the 28th and 30th; a total of 62 bird-days was the eighth highest to be recorded in this month and the highest since a record 182 were logged in 1992. There were sightings on six of the first eight days of November, with highs of 22 on the 4th, 23 on the 5th and 16 on the 6th. A cumulative total of 86 November bird-days was, perhaps surprisingly given the early departure of staff from the Island, the fifth highest total for this month; although down on the 146 logged between the 1st and the 25th last year, it was otherwise the highest count since the 297 of 1990, although these totals are eclipsed by November highs of 823 in 1968 and 573 in 1967. Similarly there were substantially higher daycounts in the past, most recently with 60 on 20th October 1992 but with 150 on the 15th and 16th November 1968 and 120 on 15th November 1967.

**Great Black-backed Gull *Larus marinus*
Fairly Common Breeder and Common Visitor**

Gwylan Gefnddu Fwyaf

44 trapped (including 37 pulli), 1 retrapped

1936-1976: 219 trapped, 2013-2016: 235 trapped, 7 retrapped, 4 controls

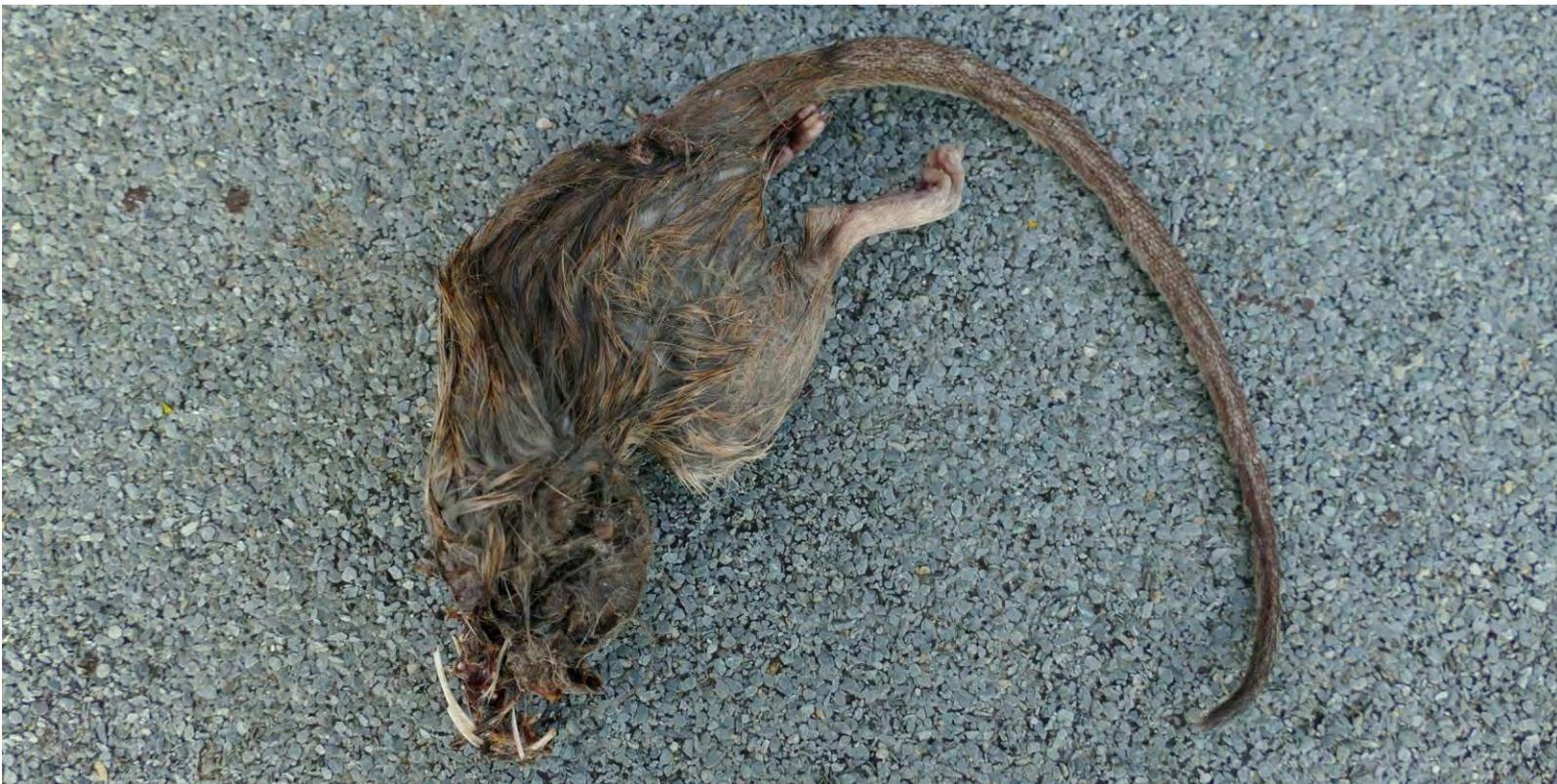
This year saw spring totals at the Bog roost very similar to the previous three years, with a March high of 48 on the 19th (March highs were 48 in 2016, 37 in 2015 and 34 in 2014) and April highs of 52 on the 4th, 58 (including ten subadults) on the 8th and 53 (including 11 subadults) on the 29th (April highs were 58 in 2016, 63 in 2015 and 54 in 2014); the sizable roost which formed at the Bog during the early part of the 2013 season, which peaked at 213 individuals, again failed to materialise. A whole Island census on 19th May located 91 apparently incubating adults (86 accessible nests contained eggs) and a further two nests were encountered over the following ten days. A total of 93 nesting pairs was the same as mapped in 2016 and the most yet recorded on Skokholm.

The number of Great Black-backed Gull breeding pairs 1928-2017 (where data exists). Control of numbers started in 1949 (destruction of both nests and adults) and stopped in 1985.



The increase in the population is in part being driven by a high adult return rate; of 33 adults bearing colour rings in 2016, 32 (97.0%) returned to the same territories this year and one was not seen. As all of the adults present on Skokholm this breeding season were checked for rings, it seems likely that this is a very good approximation of survival. Of 23 adult birds ringed in 2014, 19 (82.6%) returned in 2015 and none of the four missing birds were encountered in the two subsequent years. Of 21 ringed adults in 2015, 19 (90.5%) returned in 2016 and neither of the two missing birds were encountered this year. Although survival is clearly high, four unringed dead found on Skokholm

following the 2016-2017 winter suggests that this may be a more challenging period for them. On 3rd August this year an adult arrived to the Lighthouse with a bloody leg which was missing its foot, the cause of which was perhaps most likely to be entanglement in fishing gear. Great Black-backed Gulls were again regularly observed behind fishing vessels, with a peak of 20 seen alongside Boy's Pride on 17th August; an important step in understanding the Skokholm Great Black-backed Gull population will be to discover if such anthropogenic food sources are regularly exploited, particularly during periods of low seabird or Rabbit numbers when they may increase survival.



We were joined this season by Katherine Westerberg, an undergraduate supervised by Dr Stephen Votier at the University of Exeter, here to investigate Great Black-backed Gull diet during the breeding season. Regurgitated pellets and carcasses were collected at 26 nest sites from 7th May until 9th July when chicks had moved away from their natal areas; prey remains could no longer be confidently assigned to a particular nest after this period. In total, 1035 pellets and 81 carcasses were collected. Birds (primarily Manx Shearwaters) and mammals (Rabbits, with low levels of Sheep and a Brown Rat) accounted for the majority of the remains, making up 48.2% and 38.1% respectively. Only the back half of the rat was present, perhaps suggesting that it was a road or ploughing casualty and almost certainly not from the Island (photograph above). The remains of Pheasant and domestic fowl were found in a small number of pellets, both indicating that some pairs forage on the mainland. This was further illustrated by the third main food source, refuse, which made up 7.3% of pellets. The types of refuse present, mainly plastic waste and packaging, suggested that birds were travelling away from the Island to landfill sites; the nearest landfills are located 17km and 20km from the Island. Whitefish, invertebrates (crustaceans and molluscs), eggs and vegetation were also present in collected pellets, but only in small proportions, whilst more unusual prey items recorded away from the study nests included an adult Rook, a female Mallard and a Crow chick. Prey sources varied greatly between pairs, with pellets at some nest sites made up almost entirely of Rabbit remains, whilst others contained almost exclusively Manx Shearwaters. Other pairs were apparently generalists, with pellets containing a wide range of prey. Variation in the proportion of anthropogenic material present at nests, which ranged from 54.5% to zero, also implies that

different pairs have different diets. Differences between the diets of the study pairs will be the main focus of Katherine's dissertation and further analyses will be used to determine the levels of specialisation present. Understanding dietary specialisation is key to making management decisions regarding the impact of Great Black-backed Gulls on their prey species.

The Great Black-backed Gulls are spectacular apex predators and an exciting component of the Skokholm seabird assemblage, however it is important that we monitor the impact of these high breeding numbers on the Manx Shearwater population. Dead Manx Shearwaters were counted for a fourth consecutive year, the vast majority of which had been predated by Great Black-backed Gulls; a total of 3360 corpses, comprising 2071 adults and 1289 youngsters, were marked this year (3697 comprising 2299 adults and 1398 youngsters in 2016, 4026 comprising 2702 adults and 1324 young in 2015 and 4219 comprising 2931 adults and 1288 young in 2014). This was thus the third year in succession that the number of dead adult shearwaters has fallen, with a 9.9% drop this year following a 14.9% drop in 2016 and a 7.8% drop in 2015. Although at first this may appear to be good news, it is possible that a decline in the number of corpses may reflect a decline in the number of shearwaters available. Younger pre-breeding shearwaters are believed to comprise the majority of predated birds (although ringing has shown that old breeders are also taken), but the number of birds present on Skokholm in this age cohort is something of an unknown as current survey work focuses on the breeding population. Fluctuating Rabbit numbers complicate the picture further, with the lowest Rabbit counts coinciding with the 2014 peak in shearwater mortality (see the Manx Shearwater section above for more details). Interestingly the number of youngsters predated this year fell within the relatively tight range observed over the previous three years. Ultimately more data is required to understand the effect of gull and Rabbit numbers on the Manx Shearwater population; although the number of dead birds currently being found represents a relatively small proportion of the Skokholm shearwater population, it seems likely that continued growth of the Great Black-backed Gull population will increase their impact on the shearwaters.



The first egg of the year was found along Medicine Rock Wall on 18th April; the first two of 2016 were found on the 12th, the first two of 2015 on the 19th and the first of 2014 on the 10th. Of 26 monitored nests, three pairs failed at the egg incubation or small chick stage, four pairs failed having

hatched chicks, five pairs fledged a singleton, seven pairs fledged two and seven pairs fledged three. There were thus 40 fledglings and a productivity figure of 1.54 fledged young per monitored pair; productivity was thus 11.6% up on 2016, 41.3% up on the 1989-2004 mean of 1.09 and 30.5% up on the 2007-2016 mean (1.18 ±se 0.12). Although eggs and young were typically lost to other Great Black-backed Gulls, a Raven was seen to take a chick on 26th May.

Productivity estimates 2005-2017 (average number of fledglings per sample pair).

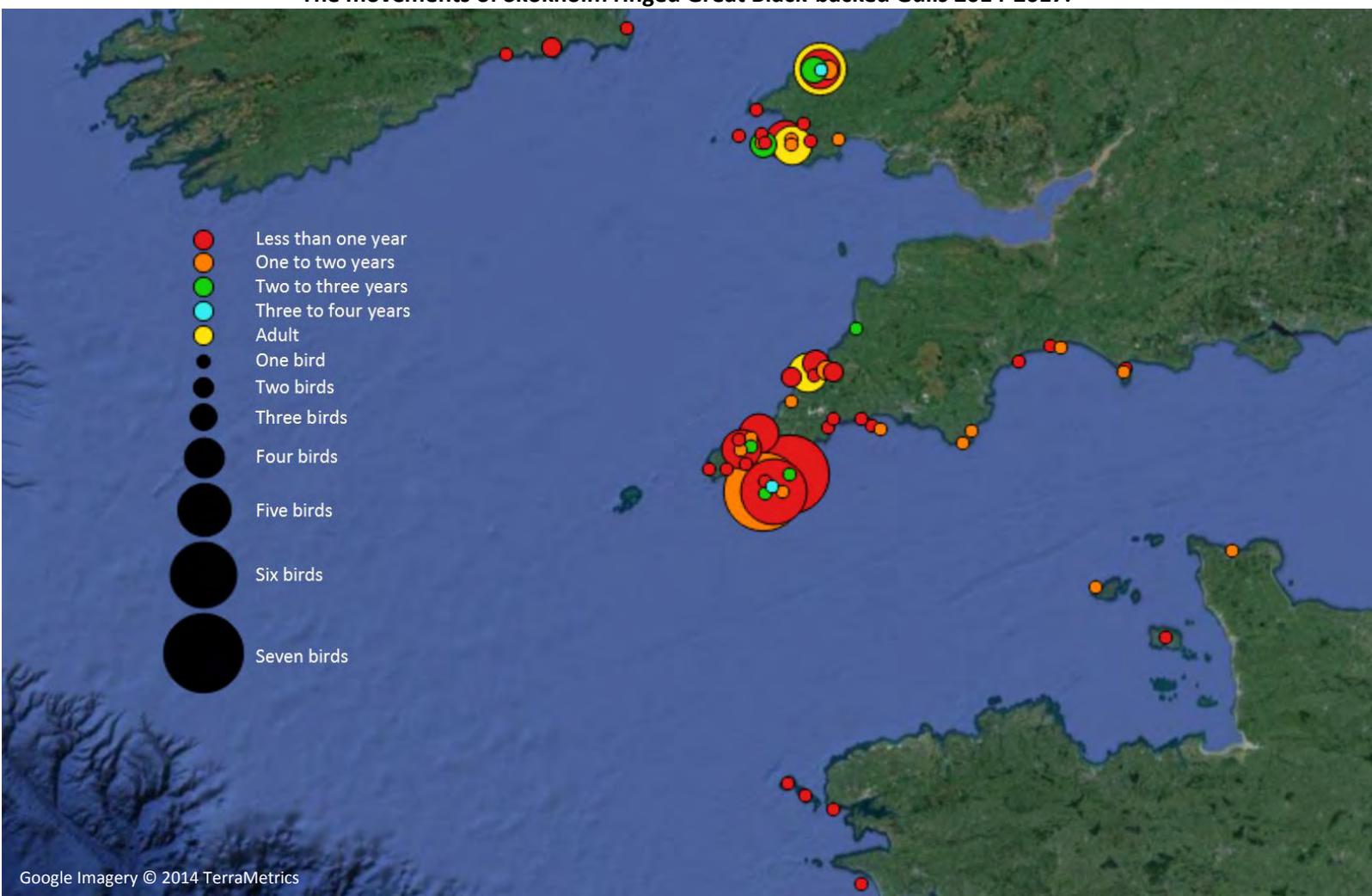
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0.76	1.07	1.02	1.02	-	0.71	0.89	-	1.80	0.93	1.66	1.38	1.54

In an effort to further understand observed population growth, a Great Black-backed Gull colour ringing project was begun in 2014, in part to shed light on juvenile survival and recruitment. Of 43 fledglings ringed in 2014, 26 (60.47%) have been resighted subsequently and five have been found dead. At least 15 birds (34.88%) definitely survived their first full year, ten (23.26%) survived their second years and five (11.63%) have survived at least three years. Of 52 fledglings ringed in 2015, 20 (38.46%) have been resighted subsequently, 11 (21.15%) have survived their first full year and seven (13.46%) have survived their second. Ten of the 28 2016 fledglings have been seen again, four (14.29%) have survived their first year and three have been found dead (including one at Portland, Dorset with fishing line wrapped around its legs, apparently a regular cause of death in that area). These survival estimates are more accurate for the birds ringed in 2014 as there has been longer to look for them, however clearly these figures do not give an exact measure of juvenile survival. Only time will tell whether this study provides a good estimate of survival to breeding age, something which may well be dependent on how many birds return as adults to Skokholm or Skomer (where they should be seen) as opposed to other less studied breeding sites. Six youngsters have so far returned to Skokholm, two of which were back in their first summers, two in their second summers and two in their third summers. Although the resighting records will be somewhat biased by a preponderance of birders at the main roost sites in Cornwall, it seems likely that there is a genuine southerly bias to the movements of young Skokholm Great Black-backed Gulls (see map below). All of the records below were received since a similar table was published in the 2016 Seabird Report.

Darvic	Ring	Location	County	Age	Date
W:025	HT94870	Nevern Estuary	Pembrokeshire	Adult	21/02/17
W:026	HT94871	Nevern Estuary	Pembrokeshire	Adult	27/03/17
W:027	HT94872	Nevern Estuary	Pembrokeshire	Adult	08/03/17, 14/03/17
W:029	HT94874	Camel Estuary	Cornwall	Adult	13/01/17, 03/12/17
W:031	HT94876	Camel Estuary	Cornwall	Adult	03/12/17
W:032	HT94877	Nevern Estuary	Pembrokeshire	Adult	12/06/17
W:032	HT94877	Pentewan Sands	Cornwall	Adult	13/12/17
W:037	HT94899	The Lizard	Cornwall	Fourth Winter	06/01/18
W:048	HT94909	Hayle Estuary	Cornwall	Third Winter	18/01/17
W:055	HT94917	Nevern Estuary	Pembrokeshire	Fourth Winter	19/01/17, 20/11/17
W:060	HT94921	Camel Estuary	Cornwall	Fourth Winter	28/10/17
W:060	HT94921	The Lizard	Cornwall	Fourth Winter	07/11/17
W:071	HT94897	Widemouth Bay, Bude	Cornwall	Third Winter	15/01/17 (dead)
W:073	HT94930	Nevern Estuary	Pembrokeshire	Third Winter	14/12/16
W:079	HT94936	Nevern Estuary	Pembrokeshire	Adult	27/03/17, 26/06/17
W:081	HT94938	Gann Estuary	Pembrokeshire	Second Winter	19/03/17
W:089	HT94950	Hayle Estuary	Cornwall	Second Winter	24/02/17
W:089	HT94950	Gwithian	Cornwall	Third Winter	09/02/18
W:094	HT94957	Nevern Estuary	Pembrokeshire	Third Winter	18/03/17, 21/12/17
W:109	HT94972	The Lizard	Cornwall	Third Winter	13/03/17, 30/11/17

W:112	HT94974	Nevern Estuary	Pembrokeshire	Third Winter	04/09/17
W:116	HT94976	Coverack	Cornwall	Third Winter	21/10/17
W:124	HT94955	Coverack	Cornwall	Third Winter	22/12/17
W:152	MA37809	Prawle Point	Devon	First Summer	05/07/17
W:152	MA37809	Portland	Dorset	First Summer	16/08/17 (dead)
W:156	MA37813	Boatstrand Harbour	Waterford, IRELAND	First Winter	14/03/17
W:160	MA37818	The Lizard	Cornwall	First Summer	25/06/17
W:169	MA37827	Coverack	Cornwall	First Winter	27/01/17
W:173	MA37832	Coverack	Cornwall	First Winter	26/01/17, 10/03/17
W:193	MA37860	Skokholm	Pembrokeshire	First Winter	03/11/17
W:195	MA37862	Coverack	Cornwall	First Winter	02/11/17
W:211	MA37876	Sennen Cove	Cornwall	First Winter	10/09/17
W:214	MA37879	Nevern Estuary	Pembrokeshire	First Winter	10/10/17, 29/10/17

The movements of Skokholm ringed Great Black-backed Gulls 2014-2017.



A roost of up to 52 birds, but more typically less than 35, frequently formed in the Bog during the breeding season, totals slightly up on 2016 but down on 2015 when there were regular counts of up to 40 birds and a peak of 82 on 27th May; the majority of 2017 birds were in full adult plumage, although there were up to seven subadults regularly in May. The first fledglings were recorded during the first week of July however, with the exception of August roosts of 53 on the 14th, 52 on the 18th and 60 on the 24th, it was not until September that larger communal roosts formed. North

Plain, North Pond and the area to the north of the Sugarloaf again proved the most popular post-breeding roost sites, with peak September counts of 173 on the 11th, 174 on the 13th and 183 on the 15th; numbers were thus down on September 2016, when there were six counts in excess of 200 birds and a peak of 247 on the 14th, down on the 2015 peak of 249 and well down on the September 2013 peak of 355 (the September 2014 maximum was only 52). The first fledgling to be recorded away from Skokholm was at Sennen Cove, Cornwall on 10th September, 20 days earlier than the first southwest resighting of 2016 and five days earlier than the first of 2015. There were only two October counts in excess of 100 individuals (seven counts in 2016), with highs of 141 on the 2nd and 109 on the 11th. There were 69 or fewer birds logged each day from 12th October and 28 or fewer from the 22nd until the departure of staff on 9th November. November counts were thus the lowest of the last five years and well down on the 2013 highs of 270 and 243 (both of which occurred in the first five days of the month).



Herring Gull *Larus argentatus*

Gwylan y Penwaig

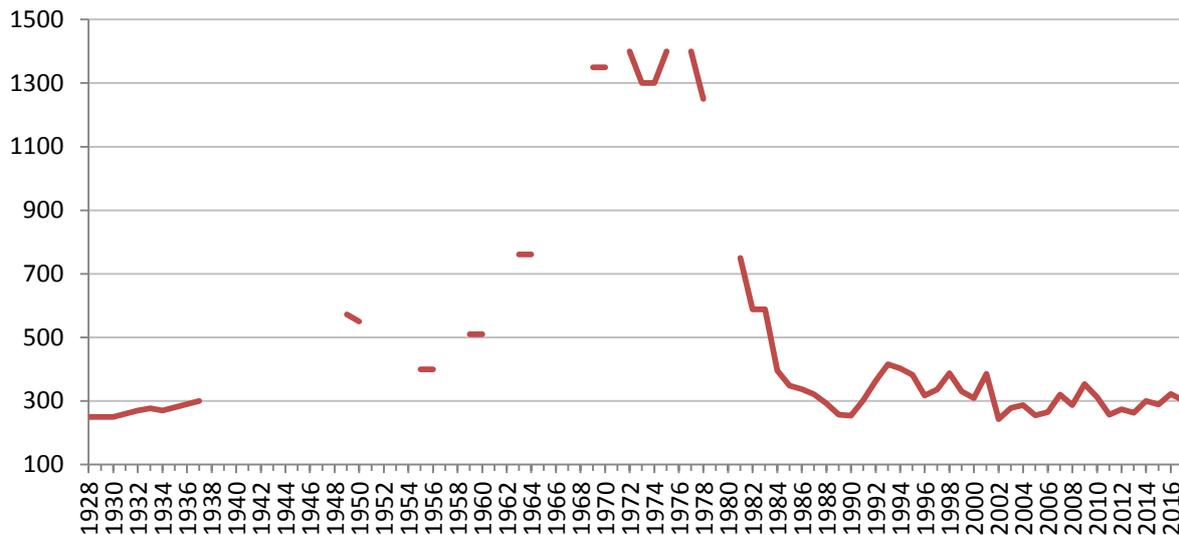
Common Breeder abundant breeder in the 1970s

20 trapped, 1 retrapped, 1 control

1936-1976: 13,164 trapped, 2013-2016: 68 trapped, 12 retrapped

Counts in March again fluctuated widely, with birds frequently feeding away from Skokholm but returning to roost on the Neck. The peak March count of 176 logged on the 27th was the lowest of the last six years and April counts were similarly down; this reflected both lower numbers of subadult birds and a lack of feeding flocks around the Island (although up to 55 were seen following potting boats on occasion). The first egg, found opposite the Devil's Teeth on 18th April, was one day later than the first of 2016 (the first egg was found on 25th April in 2015, 14th April in 2014 and 18th April in 2013). It became apparent during April that the male of the pair which had frequented the Courtyard for at least the previous four years was missing; the female quickly attracted two different males to the territory, but she departed towards the end of the month. Whole Island counts took place between the 18th and 20th May when 296 active nests were located and an additional six nests were found on the back of the Stack during boat-based surveys on 28th May. A whole Island total of 302 active nests was a 6.2% drop on the 322 nests of 2016 but marginally up on the 2007-2016 mean (297.7 ±sd 29.75); there have only been four higher totals since 2001. The number of breeding pairs has apparently stabilised at a level close to that seen in the 1930s (the 1928-1937 mean was 269.70 ±sd 17.47), counts well down on the artificial peak of the 1970s.

The number of breeding pairs 1928-2017 (where data exists). The 1970s peak was attributed to the exploitation of local fish waste and the decline to botulism (Thompson, 2007).



The monitoring of adult survival in Herring Gulls has been undertaken on Skomer for many years, however recent struggles with trapping sufficient adult birds to produce a reliable estimate led to the Island Conservation Advisory Committee recommending that a project be established on Skokholm. The Neck was selected as the Skokholm study area and 13 nesting adults were trapped there between the 18th and 22nd May this year. Each trapped adult was ringed with a red darvic inscribed W:9** in white, the latter two digits identifying the bird as an individual. Two of the birds were subsequently seen away from Skokholm, with W:989 visiting the nearby Gann on 31st July and W:987 reaching the Nevern Estuary, Newport on 30th September.

The first chicks were seen at Warden’s Rest on 22nd May and the first flying fledglings were logged on 7th July (30th June in 2016, 10th July in 2015, 2nd July in 2014 and 7th July in 2013). Checks of the Neck productivity plot in early July, where 125 pairs had established nests, located a maximum of 88 fledging-sized young (which equates to a productivity estimate of 0.70 fledged young per pair). This was 18.6% down on the 0.86 logged in 2016 and 9.1% down on the 2007-2016 mean (0.77 ±se 0.05). Nevertheless there have been lower productivity estimates in six of the previous 13 years and, following a good year in 2016, it appears that current levels are sufficient to sustain a stable breeding population at this time. Herring Gull productivity remains consistently higher than that of the closely related Lesser Black-backed Gull, circumstantial evidence suggesting that this may be due to differing feeding habits. Additionally Great Black-backed Gulls seemingly target the coastal nesting Herring Gulls less frequently than they do the inland gull colonies, although predation by Greats was again witnessed around the Neck this year and probably led to an underestimate of the breeding population due to the emptying of nests prior to the whole Island count.

The number of breeding pairs and productivity estimates (average number of fledglings per sample pair) 2004-2017.

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
287	255	265	320	287	353	312	257	274	263	300	289	322	302
0.18	0.57	0.47	0.61	-	-	0.82	0.67	1.15	0.72	0.70	0.66	0.86	0.70

In contrast to the lower than average spring counts, it proved a productive autumn. Following the customary departure of both adults and fledglings in late July, the highest August counts of the last five years peaked at 348 on the 26th and 409 on the 27th when swarming ants across North Plain, the Neck and Horse Bottom provided a popular source of food. As in the previous four seasons, few

Herring Gulls visited Skokholm in September, with daily totals of 70 or less primarily made up of birds feeding offshore. October counts remained low until the 26th when 185 birds returned to territories around the Neck. The following days saw large numbers of birds feeding with the smaller gulls in Broad Sound, with highs of 493 on the 27th and 364 on the 31st, the former being the highest October count on record. Early November proved similarly productive, with highs of 540 on the 2nd and 612 on the 3rd, the latter marginally up on the 2016 record of 588 and the 585 of 2015.



Ringing recovery Left leg blue darvic with orange 128, right leg GN84214

Originally ringed as an adult, GLOUCESTER LANDFILL SITE, GLOUCESTERSHIRE 26th November 2005

Previously resighted as an adult, GLOUCESTER LANDFILL, GLOUCESTERSHIRE 7th January 2006

Previously resighted as an adult, GLOUCESTER LANDFILL, GLOUCESTERSHIRE 3rd February 2006

Previously resighted as an adult, GLOUCESTER LANDFILL, GLOUCESTERSHIRE 30th November 2010

Previously resighted as an adult, GLOUCESTER LANDFILL, GLOUCESTERSHIRE 3rd December 2010

Recovered as an adult, FAR BAY, SKOKHOLM 20th May 2017

Finding condition Ring read in field

Distance travelled 206km at 265 degrees (W)

Days since ringed 4193

Lesser Black-backed Gull *Larus fuscus*

Gwylan Gefnddu Leiaf

Abundant Breeder previously very abundant breeder

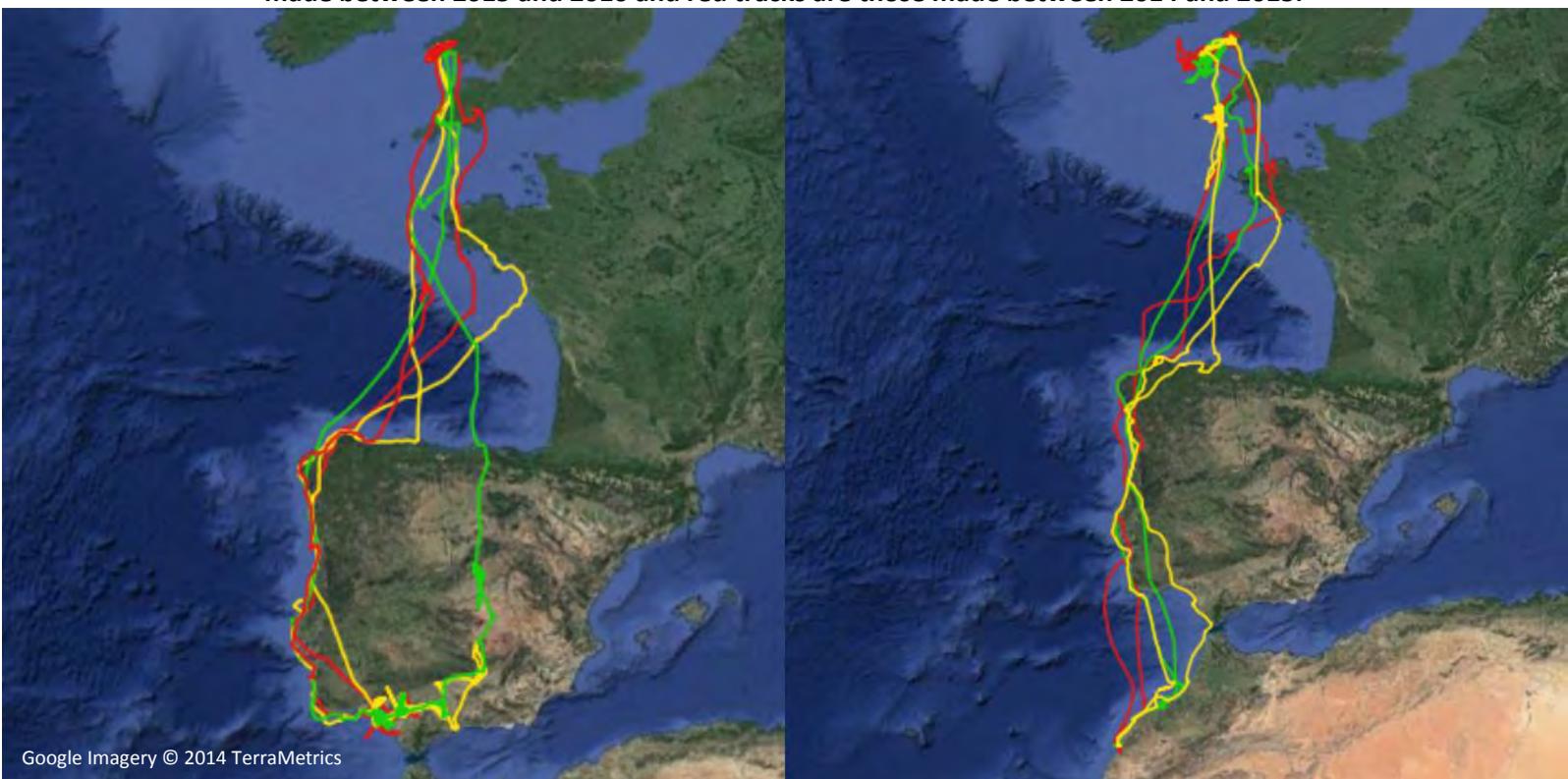
45 trapped (including 39 pulli), 4 retrapped, 1 control

1936-1976: 12,085 trapped, 2013-2016: 370 trapped, 11 retrapped, 12 controls

Even taking into account the later arrival of staff in 2017, the March total of 10365 logged birds was poor; this was reflected in the average number of birds logged per March day which was the lowest of the last five years, 330 down on 2016 and 242 down on 2015, and the peak daycount of 802 which was between 477 and 1289 down on the peak March counts of the previous four years. The number of birds within the colonies again fluctuated considerably during the day, however the larger communal roosts recorded in previous years were generally absent, with the majority of March counts being of birds on territory; the largest roosts away from the breeding colonies were a minimum of 110 at North Pond on the 23rd and 108 on the 26th. In 2015 and 2016 the GPS trackers

fitted by the British Trust for Ornithology in 2014 (funded by the Department of Energy and Climate Change) gave some idea as to when birds first returned for the breeding season (see the relevant Skokholm Seabird Reports for details of return dates and the range of over-wintering strategies used). This year there were only two tagged birds with functioning trackers, individuals which could not be retrapped in 2016. These again revealed some impressive winter movements and one last surprise; whereas the 2016 data had suggested that birds make relatively similar journeys each winter (as was seen with the individual shown below which overwinters in Morocco), this year it was revealed that a bird overwintering in the Huelva region had returned by a totally different route (via central Spain in an extension of a journey it made towards Ciudad Real in the winter of 2015-2016). This summer saw the removal of the BTO base station from Skokholm and the end of what has been a fascinating project.

Comparing the winter range of two Lesser Black-backed Gulls over successive winters. Green tracks are those made between the 2016 and 2017 breeding seasons, yellow tracks are those made between 2015 and 2016 and red tracks are those made between 2014 and 2015.



Numbers logged in April were again relatively consistent, although there were occasional mass movements such as on the 4th, when the number of birds in the Frank's Point subcolony increased from 17 to 130 as the day progressed, or on the 17th when the number there increased from 44 to 184. There were also occasional roosts away from the main subcolonies during the month, peaking at 260 to the south of North Pond on the evening of the 25th. All of the apparently incubating birds checked on 27th April were found to be sitting on empty nests and it was not until 1st May that a single egg was located; this was six days later than a single in 2016, three days earlier than the first of 2015 (when two nests at North Pond contained three eggs and three contained a single egg) and seven days later than the first of 2014 (when it was again a single egg found).

Vantage point counts of all the inland breeding colonies and a full census of the coast nesting pairs were made between the 18th and 23rd May, during which 903 apparently incubating adults (aia) were located (the lowest total in over 50 years and well down on the 1209 of 2016, the 1275 of 2015, the 1407 of 2014 and the 1476 of 2013). Walk through counts were undertaken at six subcolonies on the

24th to check the accuracy of the point counts. A comparison of the number of apparently incubating adults and the number of nests containing eggs suggested that there was a discrepancy (see table below). The number of incubating birds in the plot to the south of Spy Rock was overestimated by the vantage point count, presumably due to resting guard birds or non-breeders appearing as if they were incubating or due to birds sitting on empty nests. The remaining five plots contained more nests with eggs than the number of apparently incubating adults, presumably due to incubating birds being hidden in vegetation; this was most apparent to the south of the Top Tank ridge where there were 53.97% more nests containing eggs than aia, to the south of North Pond where there were 36.17% more nests with eggs than aia and to the north of the Top Tank ridge where there were 30.88% more nests with eggs than aia. On average across the six plots there were 27.32% more nests containing eggs than were predicted during the vantage point counts (466 with eggs compared with 366 aia during the counts); in 2016 there were 18.18% more nests with eggs than picked up during the vantage point counts, in 2015 there were 25.00% more and in 2014, when the vegetation was particularly low, there were 12.89% more. A correction factor of 1.27 (466/366) was thus applied to inland vantage point plots containing similar dense vegetation to that encountered in the walk through plots, but not to the cliff counts and areas of very short sward.

The corrected total for the inland plots was 558 pairs. This, combined with the 466 nests with eggs encountered on the walkthroughs and the 99 birds incubating in open areas, gave a 2017 whole Island total of 1123 pairs. This was 19.6% down on the 1397 pairs recorded in 2016, down on the 1486, 1565 and 1476 pairs logged in 2015, 2014 and 2013 respectively and the largest drop in numbers since the 32.9% decline observed between 2012 and 2013.

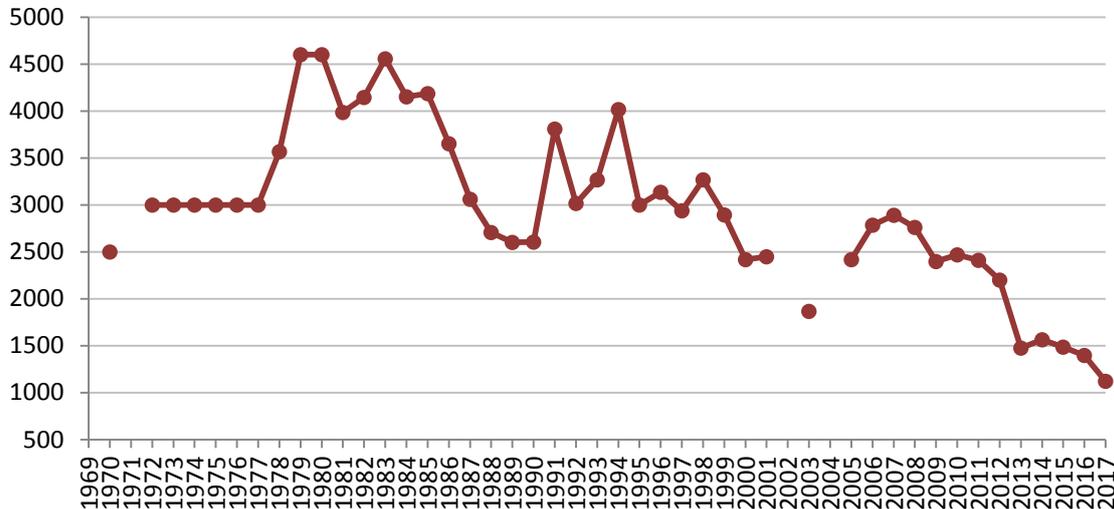
A comparison of vantage point counts (of apparently incubating adults) and walk through nest counts, along with a summary of nest contents. *how many more/less active nests (containing eggs) were present than the number of incubating birds seen (%).

	Vantage point count	Walk through count	Empty/ With egg(s)	Percentage of empty nests	Difference between counts*	Egg count	Eggs per nest with eggs
Spy Rock S	52 aia	61 nests	12/49	19.67%	-5.77%	135	2.76
Top Tank N	68 aia	90 nests	1/89	1.11%	+30.88%	250	2.81
Top Tank S	63 aia	106 nests	9/97	8.49%	+53.97%	257	2.65
North Pond	47 aia	86 nests	22/64	25.58%	+36.17%	165	2.58
Orchid Bog	39 aia	54 nests	5/49	9.26%	+25.64%	126	2.57
Frank's Point	97 aia	120 nests	2/118	1.67%	+21.65%	322	2.73
Total	366 aia	517 nests	51/466	9.86%	+27.32%	1255	2.69

As the walk through plots mirrored those used in 2016, a direct comparison can be made. The most striking decline occurred to the north of the Wheelhouse (to the south of Medicine Rock Wall) where, for the first time, no birds nested at all. Within the occupied walk through plots it was the area to the south of Spy Rock which saw the largest fall in numbers, dropping by 26.9%. The subcolony to the west of Orchid Bog showed a similar decline, with a drop of 24.6% (which follows a fall of 12.2% between 2015 and 2016). There was a 19.0% drop in numbers to the south of North Pond (following an 8.1% fall last year), a 13.2% drop at Frank's Point (following a 2.3% increase last year) and an 11.0% drop to the north of the Top Tank ridge (which increased by 14.9% last year). The only plot where an increase was noted was to the south of Top Tank ridge where there were 2.1% more nests with eggs this year. Although it should perhaps be no surprise that the Skokholm breeding population is declining given the poor productivity witnessed for many years, it was suggested last year that disease may also be taking its toll; there were 21 dead adults found between 4th March and 1st August 2016 which were thought to be diseased, with the period before death characterised by very lethargic behaviour and a fine shaking of the head before a loss of limb

coordination. This year only one adult was seen with similar symptoms (on 3rd August) and another two adults were found dead at North Pond. A bird behaving very strangely on 15th June, spinning in circles and aggressively biting its own right carpal, was perhaps diseased or poisoned.

The total number of Lesser Black-backed Gull breeding pairs 1970-2017. Control measures started in 1984 (destruction of nests) and stopped in 1998.



Over the period 1991-2002 the count of empty nests varied from 11-44% of the total number of nests, with a mean of 22.7% (Thompson, 2007). Four subcolonies contained fewer empty nests than Thompson’s lower extreme this year, with the Top Tank north and Frank’s Point colonies holding only 1.11% and 1.67% empty nests respectively; intriguingly these two colonies have also contained the lowest proportion of empty nests in each of the last two years, with the former containing only 1.96% in 2016 and 7.45% in 2015. Overall, of 517 visited nests, 9.86% were found to be empty this year (17.62% in 2016, 17.30% in 2015, 16.32% in 2014 and 19.84% in 2013). It was unclear whether the empty nests were second nests made by the pairs present, nests which had been robbed of eggs or nests where the adults had yet to lay. The breeding season was certainly a protracted one, with the first chicks located on 24th May (20th May in 2016), other birds still incubating eggs on 5th July (two days before the first fledgling took to the wing) and with two youngsters still with half-grown primaries on 15th August. It would thus seem likely that at least in some cases the latter two of the above three options may have been the case, meaning that the Skokholm breeding population is actually higher than that suggested above. However, even if we wrongly assume that all empty nests belonged to additional pairs, the predicted Island total would only be in the region of 1235 pairs (an extra 112 pairs and still the lowest population estimate for over 50 years).

The breeding success of the Skokholm Lesser Black-backed Gull population has been low for many years and is a major factor contributing to the observed population decline. The poor success has been linked to a reduction in food availability during the chick rearing period, primarily due to changes in the fishing industry (for example in Thompson, 2007). Studies on Skomer in the 1970s and 1980s suggested that earthworms were an important adult food item during the egg incubation period but that adults switched to taking fish during the chick provisioning period. The decline in reproductive success has been attributed to a failure to make this switch in food, with regurgitate studies suggesting that chicks are fed on earthworms in years of poor productivity. Circumstantial evidence suggested that hot, dry summers resulted in productivity being further reduced, perhaps due to earthworms being less available in dry conditions (Thompson, 2007). The 2014 tracking data suggested that the majority of adult birds did make a switch to maritime feeding during the chick rearing period, a switch which may have been responsible for the improved productivity witnessed that season. In 2015, a year which saw productivity drop to a typically low level, the tracking data

suggested that far fewer birds made the switch to maritime feeding in June and July, although it was not known whether the tracked birds had chicks (see the 2015 and 2016 Skokholm Seabird Reports).



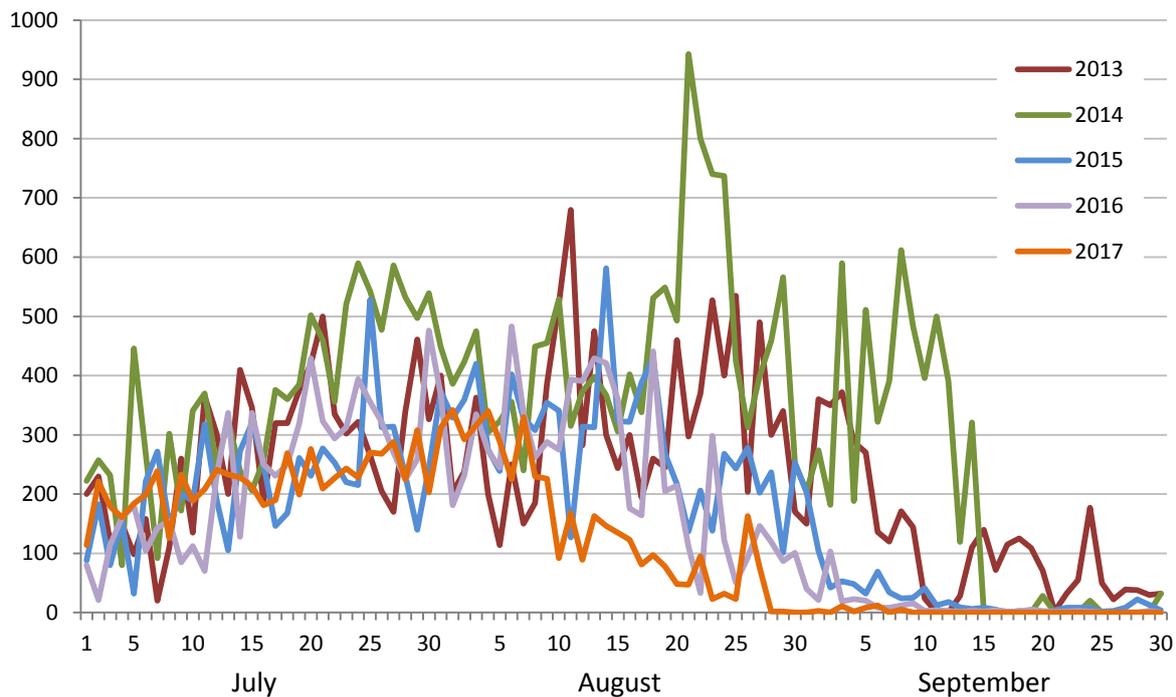
The colonies at Frank's Point and to the north of the Top Tank again proved suitable for productivity monitoring this year (using BTO rings as a mark for a mark/recapture population estimate). In an attempt to increase the number of resightings, the colonies were again re-entered this season (rather than observing fledglings at a distance with a telescope, a method which was failing to locate any rings due to the long vegetation which has resulted from recent low Rabbit numbers). A simple calculation was again used, (number of fledglings ringed x number checked for rings on second visit)/ number of birds found to have rings on second visit, to predict the number of fledglings within the area. There were 12 fledglings ringed at the Top Tank and, of 19 subsequently checked for rings, five were marked; it is thus predicted that the 89 pairs produced 45.6 fledglings, giving a productivity figure of 0.51. There were four fledglings ringed at Frank's Point and, of only three birds subsequently checked, one was marked; it is thus predicted that the 97 pairs produced only 12 fledglings, giving a productivity figure of 0.12. Additionally a third plot was used on the coastal slope of Purple Cove, a discreet subcolony with very short sward or rocky substrate where it was possible to accurately count the number of fledglings with a telescope; here 18 pairs had produced a minimum of 20 fledglings, giving a productivity figure of 1.11 per pair. That productivity was so much higher in a smaller, coastal subcolony fits ad hoc observations made in recent years and perhaps supports the theory that the birds in the larger colonies are struggling in part due to intraspecific predation. Pooling the 2017 observations suggests that 204 pairs produced 77.6 young and that

overall productivity was in the region of 0.38 fledglings per pair. Observations from elsewhere also suggested that productivity in 2017 was up on recent years; although fledglings at North Pond could potentially have come from anywhere on Skokholm, the 133 counted there on 1st August was 8.1% up on the peak 2016 count, 95.6% up on the 2015 maximum and 4.7% up on 2014 (which was up until 2017 the most productive year of the last ten).

Lesser Black-backed Gull productivity estimates.

2004	2005	2008	2011	2012	2013	2014	2015	2016	2017
0.07	0.27	0.27	0.03	0.16	0.16	0.30	0.15	0.23	0.38

The number of Lesser Black-backed Gulls roosting on North Plain and in the vicinity of North Pond 2013-2017.



North Plain and the area around North Pond again proved to be the usual site for the largest post breeding roost, with smaller numbers congregating around the coast and at South Pond. As is typically the case, the number of birds using the roosts increased during July, however, despite the larger number of fledglings produced, there were fewer birds present this year; the July total was 6.4% down on 2016 and the lowest of the last five years. The highest July count, the 308 logged on the 29th, was 35.3% down on the 2016 peak. As in the previous four years, the majority of the largest roost counts were logged in August, however the number of roosting birds tailed off quickly after the first week of the month and the peak counts were well down on recent years; the August total was 41.5% down on last year and the peak count, the 342 logged on the 1st, was 29.2% down on 2016, 41.1% down on 2015 and 63.7% down on the 2014 high of 943 roosting birds. September proved similarly disappointing, with only 41 roosting birds logged during the entire month; the last three years have seen very small September roosts, quite the contrast to 2013 and 2014 when counts were still regularly in the hundreds. A small number of birds visited Skokholm in October, with 44 logged over 17 dates and a high of 12 on the 31st, and in November when there were daily sightings to the 8th, also totalling 44 birds and with a high of 11 on the 5th.

Ringling recovery GC34122

Originally ringed as a chick, SKOMER ISLAND, PEMBROKESHIRE 17th July 2006

Recovered NORTH POND, SKOKHOLM 14th July 2017

Finding condition Recently dead
Distance travelled 4km at 163 degrees (SSE)
Days since ringed 4015

Ringing recovery GR77022

Originally ringed as an adult, HOME MEADOW GULL TRAP, SKOKHOLM 19th May 2013

Recovered SKOMER ISLAND, PEMBROKESHIRE 22nd May 2017

Finding condition Breeding adult nest trapped and colour ringed green with white AI above left knee

Subsequently resighted SKOMER ISLAND, PEMBROKESHIRE 24th May 2017

Distance travelled 4km at 343 degrees (NNW)

Days since ringed 1464 and 1466

Our GPS tagged birds, along with an additional 48 non-tagged controls, were all fitted with yellow darvic rings with a black alpha-numeric code (number/letter:W e.g. 5A:W) in 2014. The colour ring is on the left leg and a BTO metal ring on the right. The darvic rings have yielded a fantastic number of field resightings; the 73 ringed birds have produced 143 separate resightings of 33 different individuals away from Skokholm. The following table summarises resightings received since similar tables were published in the 2016, 2015 and 2014 Seabird Reports. As has been shown by the British Trust for Ornithology GPS tracking project (see above) and at other British Trust for Ornithology tracking sites (Ross-Smith, *pers. comm.*), Lesser Black-backed Gulls show a high degree of wintering site fidelity. This is also reflected in the colour ringing data, with 15 birds having been resighted at the same location in successive winters; records of returning birds have come from several sites in Portugal and Spain along with two in France and one in Morocco.

Darvic	Ring	Location	Country	Date
5C:W	GR98202	Nevern Estuary, Pembrokeshire	UK	21/02/17
5H:W	GR98204	Malaga Harbour	Spain	06/12/16, 21/01/17
6A:W	GR98215	Anza	Morocco	05/01/17, 12/01/17
6N:W	GR98223	Isla Canela Beach, Ayamonte	Spain	24/01/17
6U:W	GR98226	Figueira da Foz	Portugal	14/11/17
6U:W	GR98226	Malaga Harbour	Spain	19/02/18, 24/02/18
7N:W	GR98240	Langford Lakes, Wiltshire	UK	25/01/17
7X:W	GR98245	Courant de Mimizan, Landes	France	12/01/17
8A:W	GR98247	Praia da Caparica, Lisbon	Portugal	14/09/17, 30/09/17
8V:W	GR98260	El Jadida Landfill	Morocco	09/01/17, 10/01/17
9H:W	GR98264	Leixões harbour, Matosinhos	Portugal	01/09/17, 02/10/17, 13/10/17
9J:W	GR98265	Barbate Harbour, Cadiz	Spain	23/02/17
9J:W	GR98265	Malaga Harbour	Spain	09/12/17, 03/01/18
9U:W	GR98273	Sonzay's Landfill, Loiret	France	17/01/17, 16/12/17, 15/02/18
9Y:W	GR98276	Portimao Harbour, Faro	Portugal	15/01/17, 03/03/17, 14/01/18

Larus hybrid *Larus fuscus* x *Larus argentatus*
Scarce Breeder

The apparent hybrid, which has held territory with a Lesser Black-backed Gull above South Haven in at least the previous four seasons, was not seen until 29th May when it appeared alone in the vicinity of its usual territory (see photographs of this bird in the 2015 and 2014 Seabird Reports). It was not seen again until it reappeared alone and in the same area on 3rd November, an absence which perhaps suggests that it has lost its usual partner. The only other hybrid noted in 2017, and possibly the same bird, was at North Pond on 2nd June. Whether these hybrids are remnants of cross-fostering experiments (500 Herring Gull and 400 Lesser Black-backed Gull chicks were raised by

adults of the ‘wrong’ species between 1963 and 1966 with the result that they frequently paired with the species of the adopting parents) or whether they are the result of natural interbreeding, is unclear. The latter may certainly be the case on occasion; an apparently pure male Herring Gull was watched as it mounted an apparently pure female Lesser Black-backed Gull in Crab Bay on 30th April 2016, although these birds were not paired and had same-species partners incubating on nests positioned in close proximity to each other.

Sandwich Tern *Sterna sandvicensis*

Morwennol Bigddu

Uncommon although Scarce in all but one year between 2006 and 2012

Earliest 29th March 1984 (30th April 2017) **Latest** 25th October 1967 (6th October 2017)

It proved a quiet spring, with three west on 30th April the only record; although well down on the 31 spring bird-days logged last year, a total which marked the second most productive spring ever, a count of three was only four down on 2014 and up on 2015 and 2013. There were July singles on the 1st and 30th and in August there was one on the 9th and four west on the 19th. As is often the case, the majority of observations came in September with three west on the 4th, one in South Haven on the 5th, two on the 18th, seven on the 21st and 11 on the 23rd (eight of which went south off the Lighthouse and three of which were in Broad Sound); a September total of 24 bird-days was the highest since 32 were logged in 2015 and otherwise, bar 60 in 2011 and 82 in 1994, the highest since 1993. A single in Broad Sound on 6th October came on the same date as the last three birds of 2016; there are only 16 later Skokholm sightings.

Common Tern *Sterna hirundo*

Morwennol Gyffredin

Scarce but ‘commic’ terns Uncommon or Fairly Common. Bred at the Stack in 1894 but gone by 1916 1936-1976: 3 trapped

One floating on a pallet off Peter’s Bay on 18th June was only the sixth June record for Skokholm. In September there were three adults west on the 4th, two on the 16th, five on the 18th, two on the 21st (including the only youngster of the year) and a single on the 23rd. Additionally there were unidentified ‘commic’ terns logged on three August dates from the 5th (totalling 31 birds and with a high of 18 on the 10th), on 11 dates between the 4th and 19th September (totalling 54 birds and with highs of 18 on the 13th and 12 on the 18th) and on 2nd October when three were in Broad Sound.



Arctic Tern *Sterna paradisaea*

Morwennol y Gogledd

Scarce although unidentified ‘commic’ terns Uncommon or Fairly Common

Earliest 27th April 2016 (19th August 2017) **Latest** 25th October 2015 and 1996 (**27th October 2017**)

1936-1976: 3 trapped

As is often the case, there was no spring sighting; the only spring records this century concern four north on 27th April last year (the earliest Skokholm record) and a single on 10th June 2001, indeed

there are only ten previous spring records. The first two of the year, and the only August sighting, headed west off the Lighthouse on the morning of the 19th. In September there were records on six dates between the 11th and the 18th, totalling 34 birds and with highs of six west on the 11th and 17 west on the 13th. Two were in Broad Sound on 26th October and a single there the following day became the latest Skokholm record to date, two days later than birds in 2015 and 1996; the last four years have produced six of the 19 Skokholm October records including four of the five latest. Additionally there were unidentified 'commic' terns logged on three August dates from the 5th (totalling 31 birds and with a high of 18 on the 10th), on 11 dates between the 4th and 19th September (totalling 54 birds and with highs of 18 on the 13th and 12 on the 18th) and on 2nd October when three were in Broad Sound.

Great Skua *Stercorarius skua*

Sgiwen Fawr

Uncommon sometimes Scarce and more regular in autumn

Earliest 4th April 2015 (17th May 2017) **Latest** 15th November 2015 (21st October 2017)

The only spring sighting was of a single off Crab Bay on 17th May; there was thus no April record for the first time since 2013. One off the Lighthouse on 5th August was the first of the autumn; there have been July records in the previous two years but the first autumn birds of both 2014 and 2013 were on 10th August. There were birds on 19 September dates, all singles bar three on the 11th (when there may have been up to five) and two on the 15th. Only singles were logged on the 22nd and 27th, although there were six passes of the Lighthouse on the former date and two on the latter, considered on each date to probably relate to the same mobile bird. A total of 22 September bird-days is the second highest monthly total recorded on Skokholm, only down on the 26 noted in September 2011. Singles were in Broad Sound on the 13th and 15th October and one off South Haven on the 21st was the last of the year; there have been three later October records, with two on the 27th in 2013 and singles in 1967 and 1987, plus four November singles all in the previous two years.

Pomarine Skua *Stercorarius pomarinus*

Sgiwen Frech

Rare 23 previous records totalling 34 birds

Earliest 28th April 1997 (27th July 2017) **Latest** 16th October 1987 (4th September 2017)

A stunning fully-spooned pale-morph adult went west at close range off the Lighthouse at 0740 on 27th July (RDB); this was the first July record for the Island. A pale adult also headed west on the more typical date of 4th September. Of the 36 birds now recorded from Skokholm, eight have occurred in August and 13 in September, whilst the most productive spring month is May, with six birds logged (albeit courtesy of the record Skokholm daycount of five made on the 28th in 1981).

Arctic Skua *Stercorarius parasiticus*

Sgiwen y Gogledd

Uncommon sometimes Scarce and only recorded in five seasons between 2004 and 2014

Earliest 9th April 1996 (20th May 2017) **Latest** 26th October 1967 (2nd October 2017)

A pale bird north through Broad Sound on 20th May was the first of the year and the only spring record (CB); the first of 2016 was 11 days earlier and the first of 2015 was on the same date. The first of the autumn was off the Lighthouse on 6th August (ME). In September there were birds on 13 dates from the 3rd, including two on the 8th, 12th, 17th, 18th, 19th and 30th and three on the 11th; a total of 21 September bird-days was the fourth highest monthly total to date, down on the 67 of September 2004 (which came courtesy of a remarkable record daycount of 63 on the 5th), the 27 of September 1993 and the 50 of September 1980. A single west over the middle of the Island on the 23rd was unusual. The six birds noted on 1st October was the highest daycount of the year and the seventh highest Skokholm daycount; the only higher totals were the eight logged on the 10th and 21st September 1980, 23rd September 1981 and 13th September 1993, the ten logged on 15th September 1993 and the 63 in September 2004 noted above. A single on 2nd October was the last of the year.

Long-tailed Skua *Stercorarius longicaudus*
Vagrant only three previous records

Sgiwen Lostfain

A single west through Broad Sound on 20th October was the first since what was presumed to be the same dark juvenile logged on the 22nd and 23rd September 2015 (GE). There followed two in Broad Sound on the surprisingly late date of 28th October (RDB). Four of the five Skokholm records have come in the last four years, with the other a bird which chased Kittiwakes off the Head on 4th October 1995. Singles logged in the May and July of 1996 are not included in the Friends of Skokholm and Skomer report for that year, nor Thompson (2007).

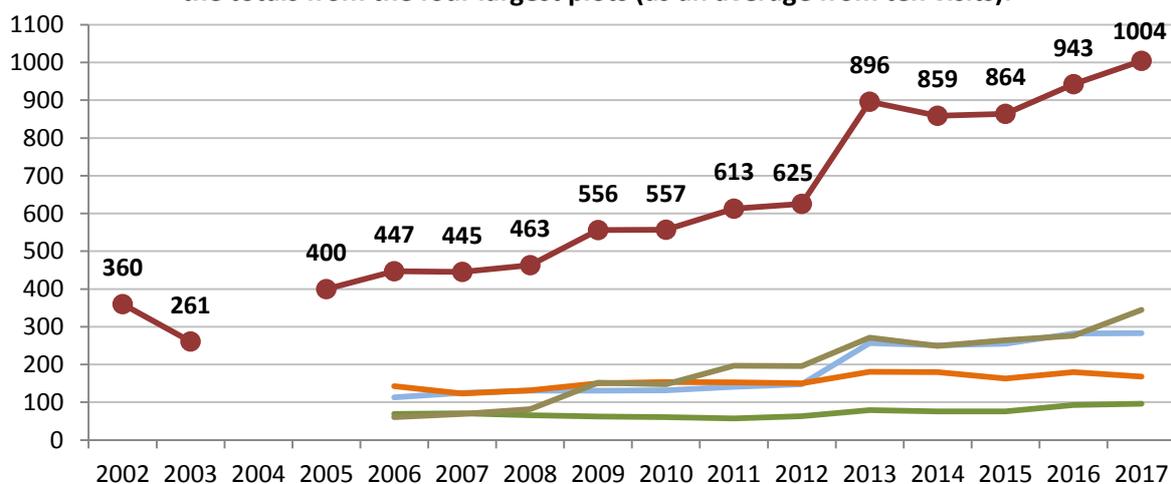
Guillemot *Uria aalge*
Abundant Breeder

Gwylog

2 controls
 1936-1976: 1023 trapped, 2013-2016: 3 pulli trapped, 14 controls

Telescope views of the Island from Dale Airfield on 8th March had revealed what appeared to be a full complement of Guillemots occupying ledges, however there were no birds present when staff returned to Skokholm on the 12th, no birds on the 13th and only 34 at sea on the 14th. Although March counts then increased, peaking at 2922 on the 28th, there were a further seven dates during the month when birds were absent and six dates with fewer than 155 individuals logged. The customary departures for the sea continued in April, with no birds logged at all on the 5th and with 12 further counts of 362 or less before the end of the month, including 96 on the 26th which was the last significant pre-breeding departure (13 mass departures matches that observed in April 2016 and 2015, this compared with 19 in 2014 and 2013). The first egg of 2017 was found at North Gully on 29th April; this was the first confirmed April egg for Skokholm, although there was a possible one on 26th April 2003. The first egg of 2016 was noted on 5th May, three days later than the first of 2015 but ten days earlier than in 2014 (following the winter auk wrecks) and eight days earlier than in 2013. Whereas colony attendance continued to fluctuate during the first half of May in 2013 and 2014, the last three seasons have seen consistently high totals from early in the month. A bird at North Gully on 29th April exhibited patchy pink and red staining to all areas of white plumage, the cause of which could not be ascertained; it was not seen again.

The total number of adult birds in all six study plots 2002-2017 (as an average from ten visits) and the totals from the four largest plots (as an average from ten visits).



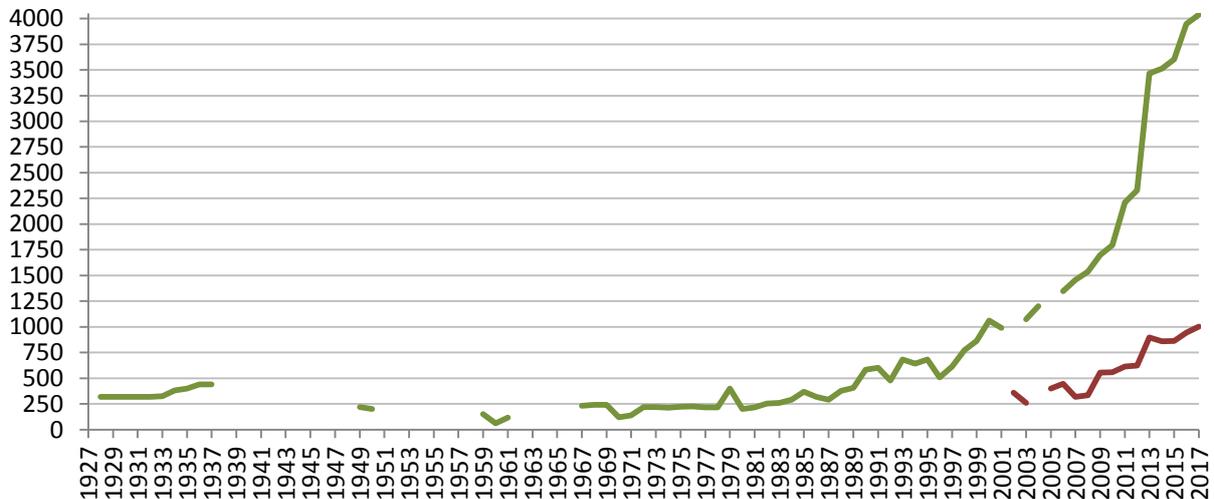
The six study plots were counted on ten dates between 29th May and 12th June. The mean total from all plots was 1004 adults on ledges; this was 6.5% up on the record total set last year and 36.0% up on the 2008-2017 mean (738.0 ±sd 193.84). The majority of this increase was due to a 25.0% rise in

the number of birds at North Gully, an area which has seen remarkable growth from a ten visit mean of 61 birds in 2006 to 345 this year. Smaller increases of between 3.2% and 12.8% were logged at Steep Bay and the slope to Purple Cove and the Little Bay Point count proved to be almost identical to last year, with an average of one extra bird taking the total to 283 (150.4% more than were present in 2006). However there were not increases across the board, as the average number of birds at Middlerock dropped from 64 to 59 and the total at Twinlet dropped from 180 to 168; interestingly the number of Razorbills at these two sites has also plateaued whilst Fulmar activity has increased to the point where eggs were lost during aggressive encounters. The majority of the 2017 study period was again dominated by high pressure, although the latter three counts were delayed due to inclement weather; this disruption may have been responsible for the larger than average difference between the highest and lowest counts, with the 2017 spread being the widest since 2012 when poor weather hampered the survey period. Given that there had only ever been one four-figure plot count in the history of this project, that there were four this year was notable.

The whole Island totals, mean plot totals and the percentage of the Island totals made up of study plot birds 2007-2017. Also the range of plot counts since 2012 and the standard deviation observed over the ten plot visits since 2013. (*includes a boat-based count)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Island	1455	1538	1697	1795	2212*	2330	3466*	3512*	3603*	3949*	4038*
Plots	445	463	556	557	613	625	896	859	864	943	1004
Range						530-746	824-949	797-947	756-939	887-1003	939-1144
±SD							39.20	54.25	58.30	40.25	57.45
Plot %	30.6	30.1	32.8	31.0	27.7	26.8	25.9	24.5	24.0	23.9	24.9

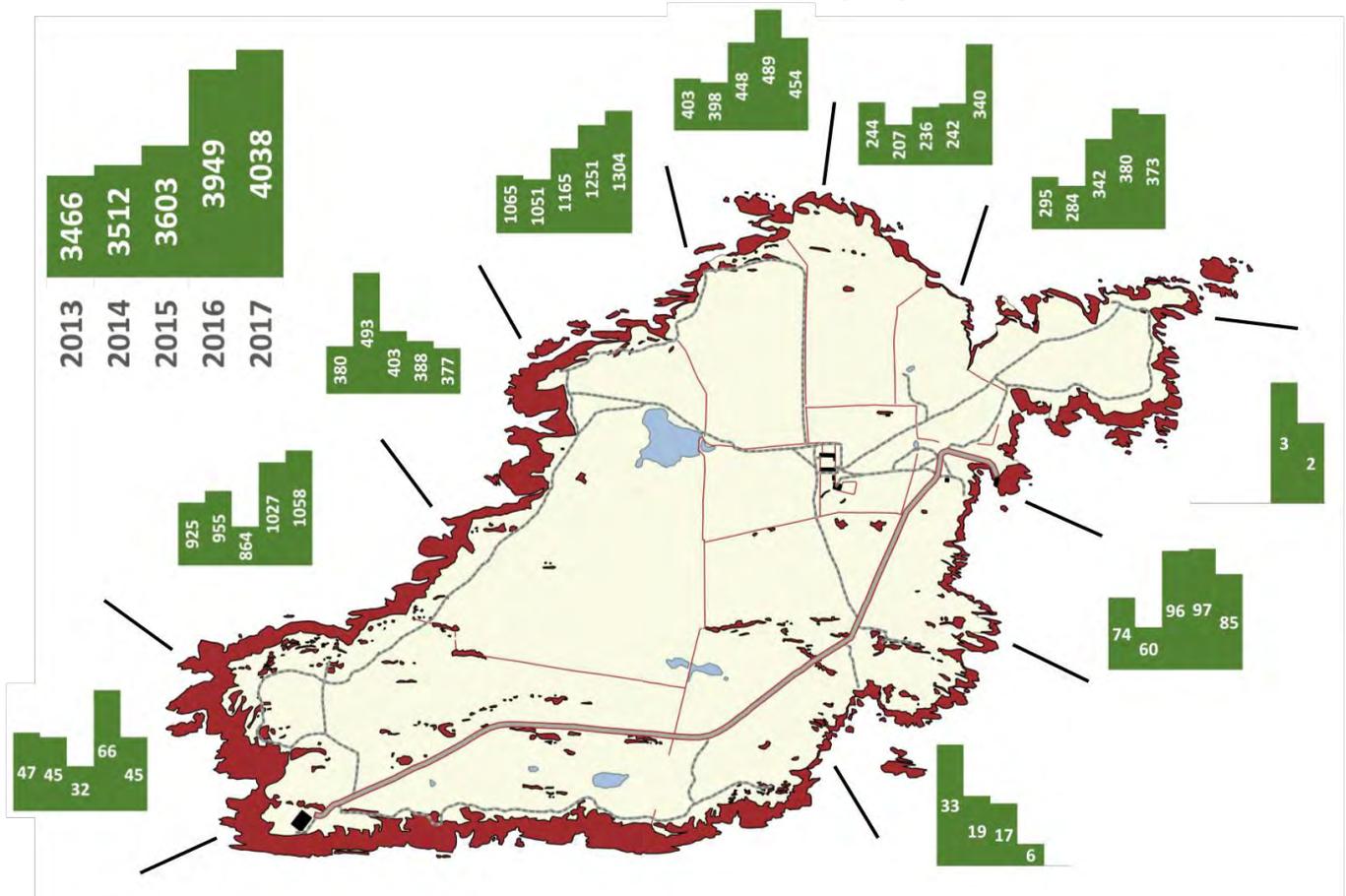
The total number of Guillemots (adults on ledges) recorded on Skokholm since 1928 and the number of birds within the study plots since 2002.



Whole Island counts were made from the land between 28th May and 2nd June and calm seas allowed for a boat-based count on 28th May. Boat-based surveys allow some areas to be monitored which cannot be viewed from on the Island and enable closer access to some areas which can normally only be viewed at a distance. A total of 4038 adults in suitable breeding habitat was a 2.3% increase on the 2016 count and the highest total yet recorded on Skokholm. This is the smallest increase in the population noted since 2014 and the second smallest increase of the last ten years, well down on the 2007-2017 average of 17.75% growth per year. The proportion of the whole Island count made up of study plot birds (24.9%) was very close to the 2013-2017 average of 24.6%, as might be expected if the change in the whole Island population is mirroring that observed in the more intensively studied plots (assuming that there is equal room for expansion in both the plots and across the Island as a whole); it thus seems likely that there was a genuine drop in the rate of

population growth this year. That the increase in the whole Island count was smaller than that observed in the plots perhaps reflects the fact that the Island count is based on fewer visits and only one boat-based count (and is thus more likely to be further from the actual mean). As can be seen from the below map, the largest increases were observed along Near and Far Bays (98 more birds) and either side of North Gully (53 more birds), whilst there were drops in seven areas, most notably around Little Bay Point (35 fewer birds) and the Quarry (21 fewer birds). These counts of individuals on ledges potentially include incubating adults, some of their partners, failed breeders, non-breeding adults and younger birds yet to breed; a correction factor is thus sometimes adopted to convert the count to an estimate of breeding pairs (Harris *et al.*, 2015). A 2015 survey on Skokholm found the correction factor to be 0.64, a figure similar to the 0.67 widely adopted in previous studies (see the Skokholm Seabird Report 2015); the latter correction factor predicts the Skokholm breeding population to be in the region of 2705 pairs.

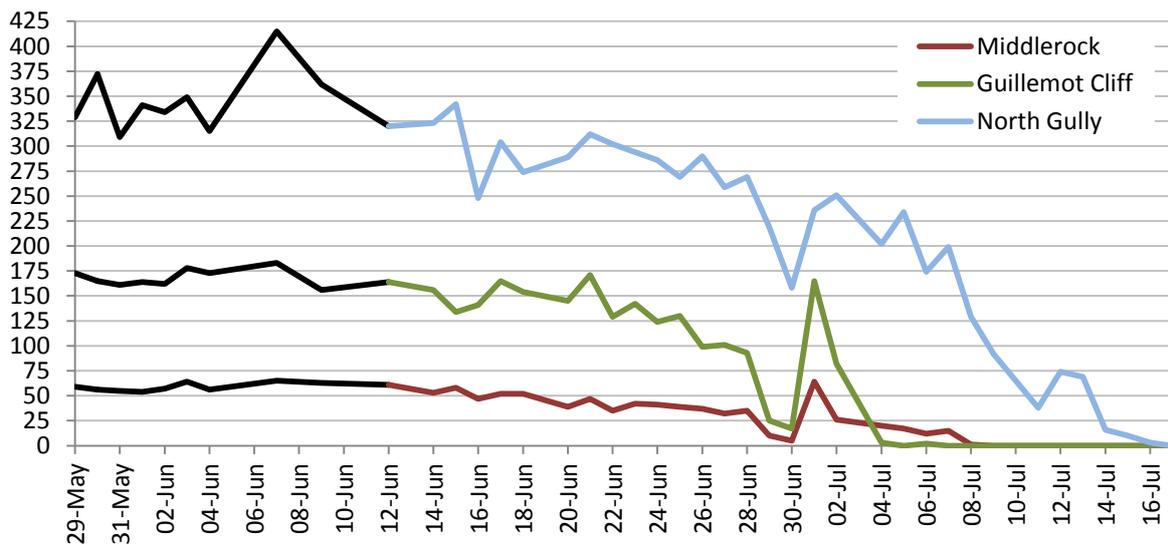
The distribution of Guillemots on suitable breeding ledges 2013-2017.



The first chick to be seen this season was found at Middlerock on 2nd June, four days earlier than the first of 2016, five days before the first of 2015 and 11 days before the first of 2014 (the year following the severe winter wrecks). Productivity, calculated at between 0.55 and 0.61 chicks per pair in 2013 and 0.6 in 2007, was not assessed in 2017 in accordance with recommendations from the Islands Conservation Advisory Committee. Chicks were jumping from 17th June and the number of adults recorded in the plots dropped steadily from 530 on the 21st to 180 on the 30th. A late spike to 465 plot birds on 1st July was an increase observed across the Island as a whole and which was also seen in the number of Razorbills present (see below). Plot counts then fell sharply to 225 on the 4th, 92 on the 9th and 16 on the 14th. The last birds had left Guillemot Cliff by the 5th, Middlerock by the 9th and North Gully by the 17th; this was the fourth year running in which birds were later to depart from North Gully, although this may in part reflect the larger breeding population at this site. The three birds occupying North Gully ledges on 16th July were one day earlier than the last of 2016,

two days earlier than the last of 2015 and six days earlier than the last of 2014. Whole Island counts mirrored those made at the plots, with two brooding birds near North Gully on 18th July the last to be seen ashore (23rd July in 2016 and the 25th in 2015). There were daily sightings at sea until the end of the month, totalling 128 birds, and in August there were records on 22 dates, totalling only 178 individuals and with peaks of 70 on the 19th and 11 on the 5th and 28th; although Skokholm counts were low, a boat trip four miles offshore during August revealed hundreds of rafting birds. Two red rings with white lettering (1211 and 1258) were found in the same Great Black-backed Gull nest during the fledging period; both belonged to Skomer Guillemot chicks ringed only a few days before.

The number of adults on ledges within three of the plots (standard study period in black).



September counts were typically low, with 100 birds logged over 22 dates and peaks of 27 on the 11th and 13 on the 12th, although a further 495 unidentified large auks were noted at sea during the month (268 Guillemots and 679 unidentified auks were logged in September 2016). The 30 birds noted over six dates in October echoed the 45 of 2016 and the 25 of 2015, however the 131 distant, unidentified auks logged during the same period was well down on the 2055 of last year. Early November proved similarly quiet, with 30 birds over five dates to the 9th and a further 337 distant auks. Although a return of Guillemots to the breeding ledges in early winter is to be expected, there was no record of this behaviour on Skokholm between 2000 and 2014, despite the fact that staff did not depart until 24th November in 2014 and 16th November in 2013. However November 2015 saw up to 540 birds return to the cliffs over five dates and last season there were up to 216, again on five dates. Such a return to the colony outside of the breeding season, with the risk of being predated, must have a substantial benefit; it has been suggested that the return may be to secure the best breeding ledges and thus secure the best mate (Harris *et al.*, 2006), but birds ashore may also use less energy than those at sea (Humphreys *et al.*, 2007). Despite the potential benefits, there were no auks seen ashore before the departure of staff this year.

Razorbill *Alca torda*

Llurs

Abundant Breeder

33 trapped (including 32 pulli), 3 retrapped, 1 control

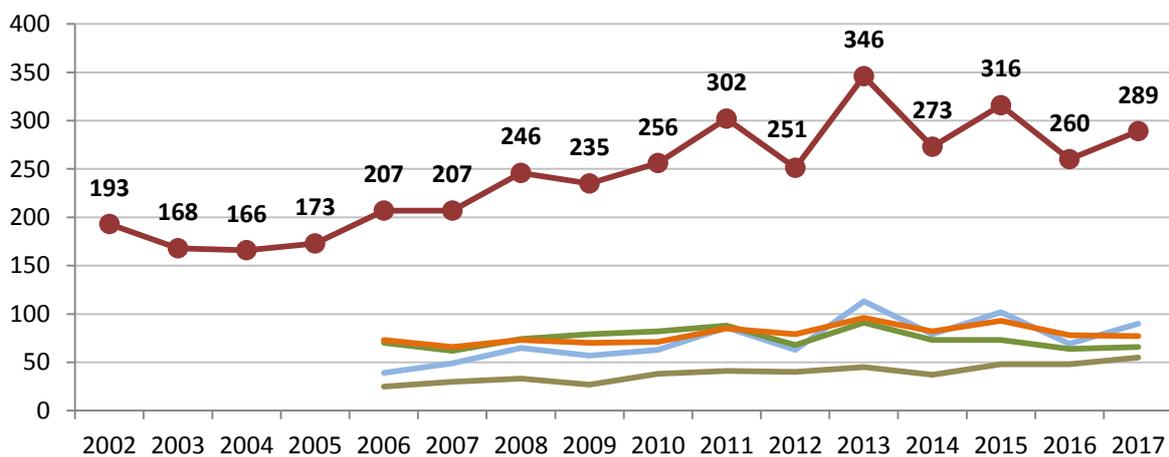
1936-1976: 9220 trapped, 2013-2016: 120 trapped, 1 retrapped, 2 controls

The average March daycount was down on the previous two years, at least in part due to poor visibility hampering morning surveys, but 117.2% up on 2014 (the year following the winter wrecks). There were lows of between 23 and zero on ten dates from the 12th, an increase in low counts compared with 2016 when there were between 24 and zero on only nine dates during the entire month. The majority of birds during the highest March counts were again on the sea; March peaks of

1340 on the 14th, 1234 on the 15th, 1779 on the 23rd and 1210 on the 25th included only 56, 339, 269 and 116 cliff occupying birds respectively. It proved the most productive April of the last five years with 19155 logged birds being the highest cumulative total and the 2100 counted on the 11th being the highest day total. Low April counts were few, with no birds present on the 4th, a single at sea on the 5th and 86 on the 25th, this compared with 2016 when there were 11 dates with fewer than 70 birds present and four zero counts. Although fewer than 600 individuals were noted on each of the last six days of the month, the first egg was found at North Gully on the 26th; this was just one day earlier than in 2016 and 2015 but 17 days earlier than the first of 2014 (probably again a consequence of the winter storms preceding that breeding season).



The total number of adult birds in all six study plots 2002-2017 (as an average from ten visits) and the totals from the four largest plots (as an average from ten visits).



Six study plots, established in 2002, were visited on ten dates between 29th May and 12th June and every adult in suitable breeding habitat was counted. There was an 11.2% increase in numbers compared with 2016 and the mean total of 289 adults on ledges was the fourth highest on record, just 0.7% down on the 2011-2017 mean (291.0 ±sd 33.32). Almost all of the population growth noted this year was due to a 30.4% increase in the mean number of birds occupying ledges at Little Bay Point (with an increase from 69 to 90 individuals taking the total to the third highest on record for that site). Numbers were otherwise very similar to 2016 with an average of seven extra birds at North Gully and two at Middlerock whilst the total was down one at both Twinlet and Steep Bay. The

plot counts are seemingly affected by the weather in some years; in the unsettled June of 2012 the total fluctuated between 164 and 338 birds whereas the 2015 spread was the tightest on record, with a prolonged period of high pressure coinciding with the lowest standard deviation of the last five years. Conditions during this survey period again began settled, although the latter three counts were delayed due to a spell of poor weather. It is unclear why the mean number of adults within the plots has begun to oscillate so much in recent years; although the 2013-2014 winter wrecks may still be taking their toll, another possible factor is that the six Skokholm study plots are all areas shared with both Guillemots and Fulmars, species currently increasing rapidly both in the plots and on Skokholm as a whole and which may be competing with Razorbills for space in the plots.

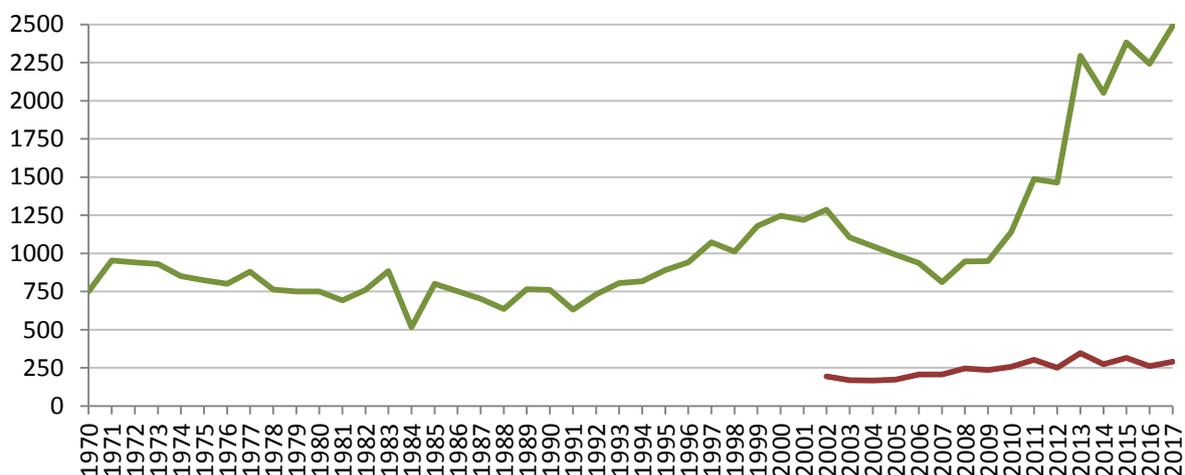
Whole Island counts were made between 28th May and 2nd June, including a boat-based count on the 28th. This was the fifth year running that access to a boat had been available, inevitably leading to higher but more accurate whole Island counts; in 2012 rough seas meant that there was no opportunity for a boat-based count and it was concluded that 'there remains a section of North Coast that was missed, while other parts of the North Coast and Bluffs were counted less accurately at a distance' (Gillham and Yates, 2012). A whole Island total of 2491 adults in suitable breeding habitat this season was 11.1% up on the 2242 logged in 2016 and the highest total yet recorded on Skokholm (42.8% up on the 2008-2017 mean of 1744.6 ±sd 613.55).

The whole Island totals, mean plot totals and the percentage of the Island totals made up of study plot birds 2007-2017. Also the range of plot counts since 2012 and the standard deviation observed over the ten plot visits since 2013. (*includes a boat-based count)

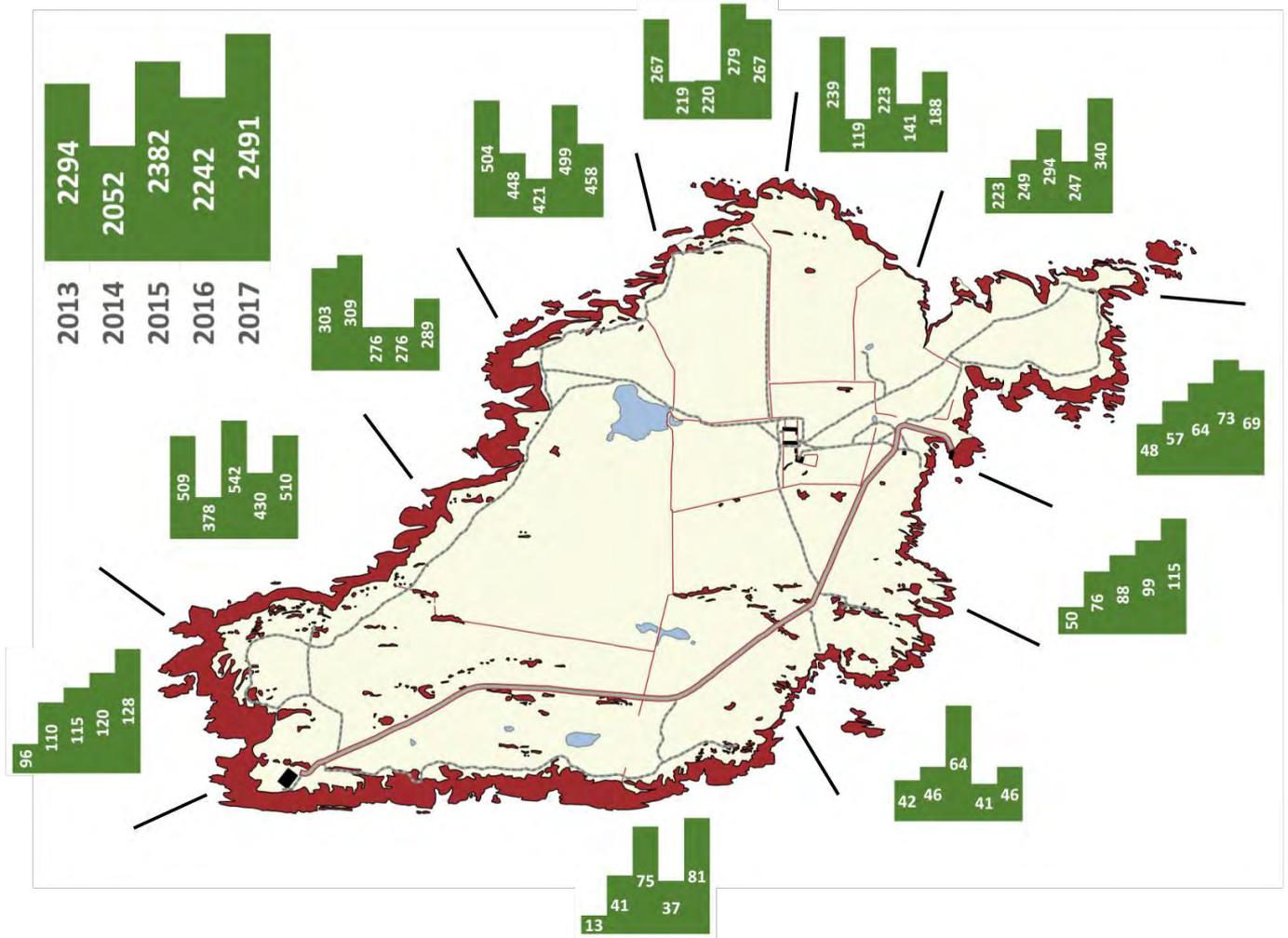
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Island	812	946	950	1140	1486*	1463	2294*	2052*	2382*	2242*	2491*
Plots	207	246	235	256	302	251	346	274	316	260	289
Range						164-338	301-397	254-315	291-346	236-324	253-334
±SD							30.54	19.96	15.78	26.58	25.61
Plot %	25.5	26.0	24.8	22.5	20.3	17.2	15.1	13.4	13.3	11.6	11.6

The increase in the whole Island total almost exactly mirrored the increase observed in the study plots. As can be seen from the map below, the largest increases came along the north side of the Neck (93 more adults on ledges), at the Bluffs (80 more), along Near and Far Bays (47 more) and along the South Coast (44 more). Nevertheless the period of rapid population growth witnessed on Skokholm in recent years has seemingly slowed, almost certainly linked in part to the winter wrecks of 2013-2014 which in Pembrokeshire impacted this species more than any other.

The total number of Razorbills (adults on ledges) recorded on Skokholm since 1970 and the number of birds within the study plots since 2002.



The distribution of Razorbills on suitable breeding ledges 2013-2017.



Productivity monitoring was undertaken for a fifth year running and the same two study sites were used, one a cliff below the Neck Razorbill Hide where 28 incubating pairs were located by 22nd May and one a site among the Bluffs boulder slope where 40 egg sites were marked on 20th May. There are currently concerns among ICAC members that recent Pembrokeshire productivity estimates have been quite low (on Skokholm ranging between 0.21 in 2015 and 0.66 in 2013), perhaps lower than what actually occurred given the continued growth of the population and certainly too low to maintain the expansion. One explanation for low productivity estimates could be that the plots, particularly the exposed Neck plot where predation is seemingly very high, are not representative of the Island as a whole. With this in mind an additional cliff plot was established this year, with 24 sites monitored at North Gully from 19th May.

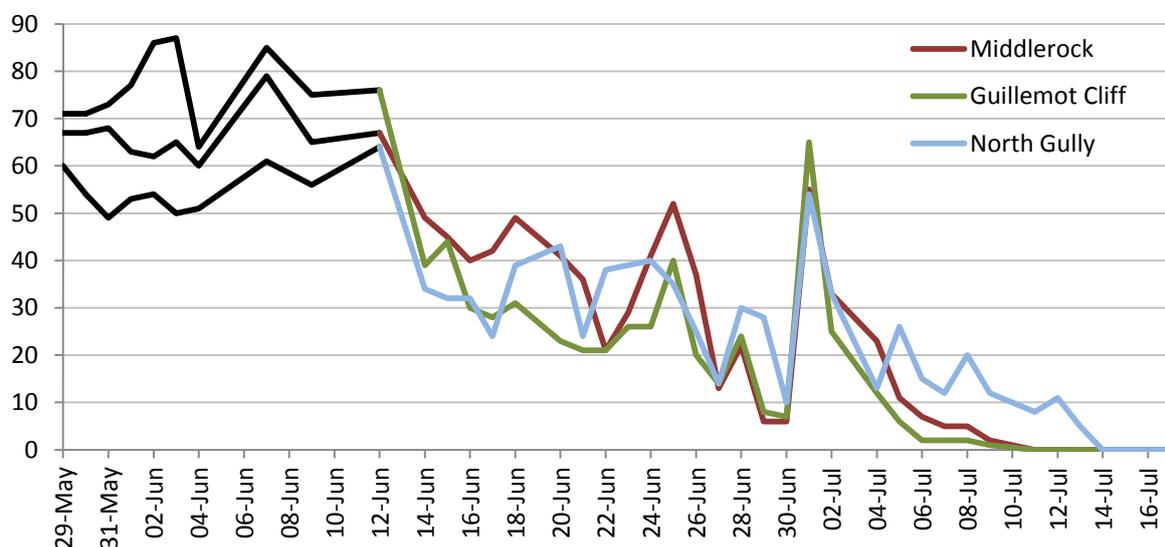
At the Neck there were six failures at egg stage, seven failures at either egg or small chick stage and 11 attempts failed during chick rearing; although the reason for failure was typically unclear, elsewhere on the Island eggs and young were seen to be taken by Ravens, Great Black-backed Gulls and most commonly by Herring Gulls. Thus only four chicks reached jumping age at the Neck; the resulting productivity figure of 0.14 mirrors recent lows at this site (there were 0.03 jumplings per pair in 2016, 0.17 in 2015 and 0.36 in 2014). The new cliff site at North Gully proved more productive with just two egg stage failures, four failures with eggs or small chicks and four failures at chick stage; the resulting productivity value of 0.58 jumplings per pair was the highest cliff site productivity logged since 2013 (when productivity at the Neck plot was found to be 0.77). Among the Bluffs boulders three pairs failed at egg stage, with the eggs found abandoned rather than

disappearing. A further 12 pairs failed with either eggs or small chicks and six pairs failed with chicks (two of which were found dead and abandoned rather than being predated). There were 19 pairs which produced a jumping sized chick; the resulting productivity value of 0.48 jumplings per pair is down on the 0.74 logged in 2016 and the 0.55 of 2013 but up on the 0.29 of 2015 and the 0.44 of 2014. For a fifth year running the last of the breeding attempts within the boulders were concluded before the last of the attempts on the cliffs; this perhaps reflects a tendency for large chicks among the boulders to move away from the egg site, whilst cliff chicks have little room for movement.



Combining the productivity figures for the cliff plots and the boulder plot to give an indication of overall productivity on Skokholm can be achieved in two ways, either by averaging the final values obtained for the three sites, as recommended in the Seabird Monitoring Handbook (Walsh *et al.*, 1995), or by combining all the data from the three plots (that is to say by dividing the total number of jumplings at all sites by the total number of monitored sites). This year both techniques result in the same overall productivity value of 0.40 jumping-sized chicks per active site, a value pulled down by low productivity on the Neck. The 2017 estimate is virtually identical to the 0.39 logged last year, matches observed productivity in 2014 and is up on the 0.21 of 2015, all values well down on the 0.66 of 2013 (the figures given here for previous years were calculated by averaging the overall productivity values of each site, as suggested in Walsh).

The number of adults on ledges within three of the plots (standard study period in black).



For a fourth year running counts at three of the study plots were continued beyond the normal study period to ascertain the pattern of colony attendance during the remainder of the breeding season (see chart above). There were again fluctuating numbers in all three colonies and regular peaks when the totals were presumably augmented by the return of failed adults or the presence of more non-breeding birds; interestingly these peaks were again broadly consistent between colonies suggesting that the returning birds respond to the same environmental cues. The first jumpling had departed the productivity plots by 20th June, two days earlier than last year and six days earlier than in 2015, and all but one productivity chick had departed by 3rd July; the jumping period was thus very similar to that observed in the previous two years but considerably earlier than in the late 2014 season when only 60% of young had jumped by 7th July. There was a similar departure of adults and the number logged dropped rapidly from 1st July. There were only double-figure counts from 11th July (14th July in 2016, 8th July in 2015 and 17th July in 2014) and these had dropped to single-figure counts by the 22nd (25th July in 2016, 22nd July in 2015 and 27th July in 2014). Adults were last seen on the cliffs on 24th July, the same date as in the previous two years, seven days earlier than in 2014 and three days earlier than in 2013.

There were daily records at sea until 31st July, the first blank day since the spring. In August there were 48 birds, predominantly adults escorting young, logged over 12 dates and a high of 18 on the 19th. There were almost daily sightings in September, with a spike in numbers between the 10th and 19th when gale or storm force winds from the westerly quarter, coupled with rough or very rough seas, coincided with daily counts of between 41 and a remarkable 1148 on the 16th; all of the birds on the 16th were flying northwest and passage peaked at 277 in 30 minutes. The historical Log data suggests that this was the largest September movement to be noted from Skokholm, although the number of unidentified large auks passing has approached these levels in the past. There were 237 birds noted over 17 dates in October and in November 167 over seven dates until the departure of staff on the 9th; no birds were seen to return to the breeding ledges. Further large auks were present at sea during the autumn but they remained unidentified due to their distance from the Island; there were 495 in September, 131 in October and 337 in early November.

Ringing recovery K30934

Originally ringed as a chick, THE BLUFFS, SKOKHOLM 14th June 2017

Recovered BURELA, LUGO, SPAIN 27th February 2018

Finding condition Dead on beach, died within about a week

Distance travelled 908km at 190 degrees (S)

Days since ringed 258

Ringing recovery M83929

Originally ringed as a chick, BARDSEY ISLAND, GWYNEDD 22nd June 1998

Recovered THE BLUFFS, SKOKHOLM 20th May 2017

Finding condition Metal ring read in field

Distance travelled 122km at 196 degrees (SSW)

Days since ringed 6907

Puffin *Fratercula arctica*

Pâl

Very Abundant Breeder

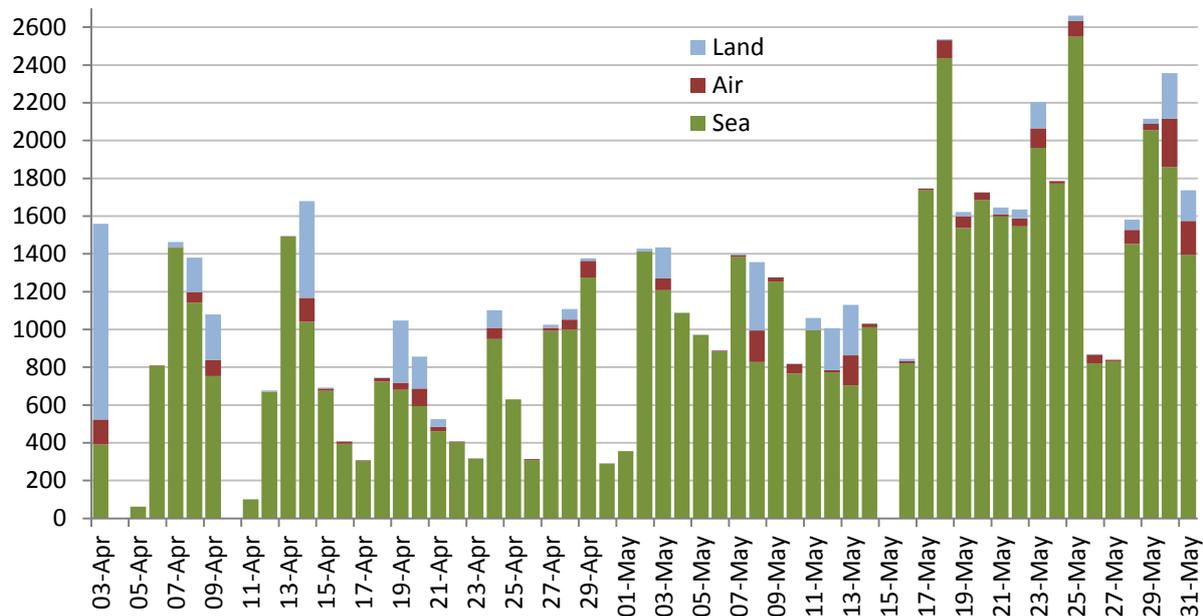
30 trapped (including 3 pulli), 2 retrapped

1936-1976: 5411 trapped, 2011-2016: 467 trapped, 15 retrapped, 1 control

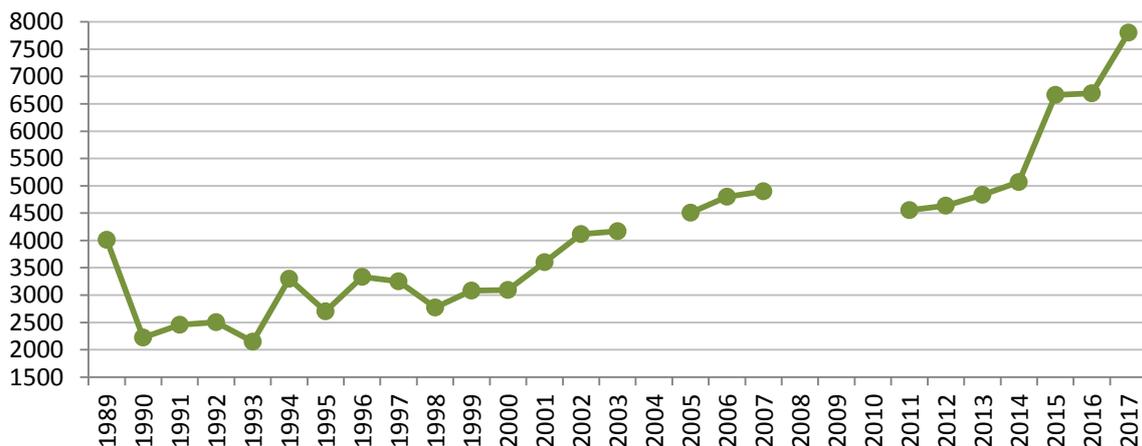
Four birds drifting offshore on 14th March (two off the Lighthouse, one off the Quarry and one off the Bluffs) were the first of the season. Although one day later than the first of last year these were otherwise, equal with 12 in 2010 and five in 1993, the earliest since 28 were logged on 26th February 1983. The March total of 9164 proved the second highest since 1960, only down on the 2012 total of

12074. The bulk of the March total was made up of raft counts of 1022 on the 23rd, 3411 on the 17th, 1635 on the 28th and 1285 on the 29th, with the former count including at least 50 birds which landed in South Haven that evening; a 23rd March landfall was eight days earlier than in 2016 and between eight and 14 days earlier than in the three years prior to that, but three days later than in 2012. April counts varied dramatically with totals of 3396 on the 1st, 2883 on the 7th and 2986 on the 14th, but lows of four on the 4th, 67 on the 5th and 138 on the 10th. Although the peak counts logged in April were thus well down on last year, the cumulative monthly total of 45011 was only 528 birds down. Daily counts were made from around the Neck each evening, from 3rd April until 31st May, to record the pattern of colony attendance (see chart below).

The number of Puffins seen from the Neck between 3rd April and 31st May 2017. The transect again began from a line due north of North Haven and finished at Peter's Bay. There was no count on 15th May due to the weather.



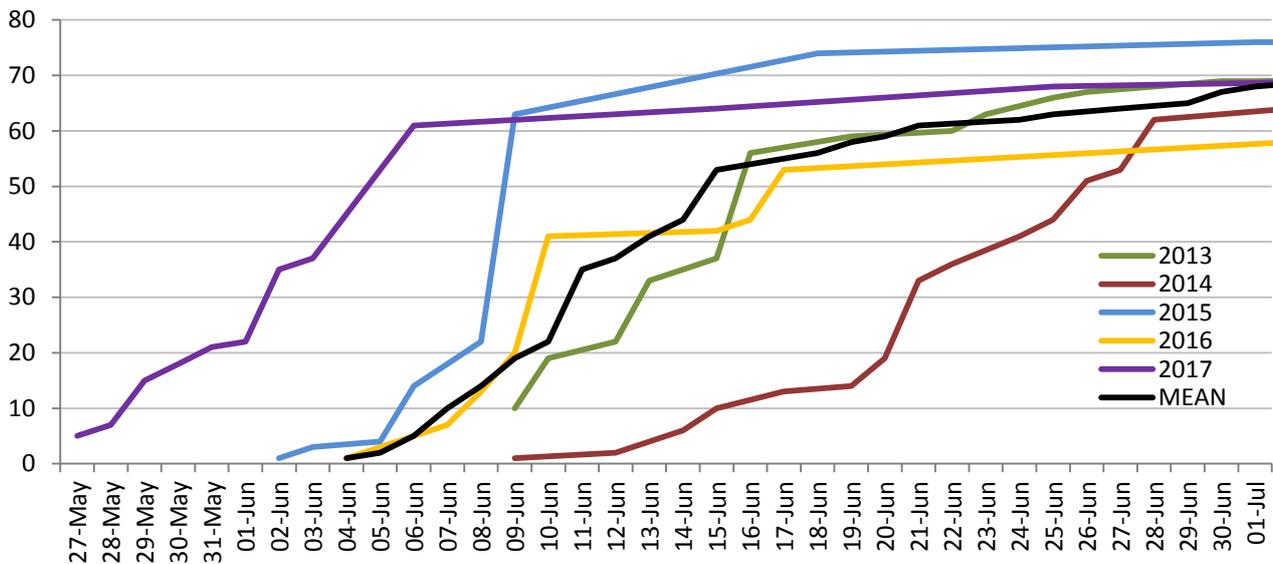
The maximum number of Puffins recorded each spring during the period 1989-2017.



It proved to be the first year of the last four where a whole Island count did not coincide with the highest April or May count from the Neck, however the 2536 birds logged at the Neck on the evening of 18th May (the date of the maximum 2017 whole Island count), was only 125 birds down on the 25th May Neck count. The whole Island count of 7800 logged on the 18th (with 2531 birds to the south and 2733 to the north, in addition to the Neck count), was 16.6% up on the 2016 total and

the highest spring count since the early 1950s (when a minimum of 10000 was logged on 22nd April 1953 and 25th May 1951); numbers are however still well down on Lockley's pre-War spring estimates of approximately 40000. Although the whole Island counts provide a relatively consistent long-term method for monitoring the trend in numbers, how the totals reflect the Skokholm breeding population is difficult to ascertain. The Crab Bay count for the evening of 18th May was 996 birds, however more focused monitoring at this site revealed a study population of 69 burrows in an area which comprises approximately 10% of the colony and where less than half of the active burrows in that area were study burrows; thus we might predict a very rough minimum of 1380 pairs for Crab Bay (as active burrow distribution is apparently quite even) and expect more than twice the number of birds to be using this area of sea than were logged during the peak whole Island count.

The number of study burrows which had been provisioned with fish by a particular date.



A productivity plot established at Crab Bay in 2013 was used for a fifth season. The majority of the 100 burrows individually numbered in 2013 were again used this year, although a small number of posts lost during the winter had to be repositioned, as did three where further excavations had

made it difficult to tell which burrow a bird was entering. Of these, 69 were seen to be occupied and were visible throughout the season (66 in 2016); productivity estimates are based on observations of these burrows. Four active burrows (5.80%) were not seen to be provisioned with fish and it is assumed that these failed at egg stage (7.58% in 2016, 5.00% in 2015, 6.58% in 2014). The first fish delivery witnessed anywhere this year was on 24th May (29th May in 2016, 31st May in 2015, 3rd June in 2014 and 30th May in 2013), but it was not until 27th May that fish were seen to be brought to the study plot (4th June in 2016, 2nd June in 2015 and 9th June in 2014 and 2013). Despite the very early start to the 2017 chick feeding period, the pattern of fish delivery was rather typical with over half of the study burrows being provisioned within a week of the first delivery to the plot. Indeed the cumulative number of burrows which had been provisioned remained approximately nine days ahead of the five year mean. The 2017 chick feeding period was over two weeks earlier than in 2014, the breeding season which followed the most severe winter storms recorded during this study.

Calculating productivity using only three daylight watches. The first watch was between the 6th and 28th June (depending on the date of first fish delivery that year), the second between 25th June and 8th July and the third between the 12th and 24th July. Chicks are assumed to have fledged if fed on a minimum of two watches.

	First fish in plot	Last fish in plot	Fed watch 1 & 2	Min. chick age	Fed watch 2 & 3	Min. chick age	Fed all 3 watches	Min. chick age	Prod. based on 3 watches	Ad hoc prod.
2017	27-May	30-Jul	33	20 (6/6 - 25/6)	6	18 (25/6 - 12/7)	16	37 (6/6 - 12/7)	0.80 (55 of 69)	0.57
2016	04-Jun	13-Aug	7	16 (17/6 - 2/7)	3	13 (2/7 - 14/7)	38	28 (17/6 - 14/7)	0.73 (48 of 66)	0.64
2015	02-Jun	05-Aug	16	14 (18/6 - 1/7)	2	12 (1/7 - 12/7)	42	25 (18/6 - 12/7)	0.75 (60 of 80)	0.55
2014	09-Jun	06-Aug	14	11 (28/6 - 8/7)	4	17 (8/7 - 24/7)	38	27 (28/6 - 24/7)	0.74 (56 of 76)	0.50
2013	09-Jun	14-Aug	11	15 (16/6 - 30/6)	6	14 (30/6 - 13/7)	39	28 (16/6 - 13/7)	0.73 (56 of 77)	0.49

Although the study plot was visited for a minimum of one hour every day, it certainly cannot be assumed that the first and last fish provisioning was seen for each burrow. Indeed the daylight hours Puffin watches highlight how some burrows are provisioned infrequently (see table below). Additionally it proves difficult to standardise ad hoc recording effort between years. It was thus decided in 2016 that a three visit method would be used to calculate productivity on Skokholm, but that five visits and ad hoc records would still be collected to allow further comparisons to be made in the future (see table above and the 2016 Seabird Report for more details). This is more in line with the Seabird Monitoring Handbook (Walsh *et al.*, 1995) which states that, when monitoring Puffin productivity in colonies where the nest is inaccessible and the colony is shared with Manx Shearwaters, the most appropriate technique is ‘When birds are feeding large chicks, make a few watches to determine which burrows/crevices have fish taken down them’. Establishing which burrows contain large chicks is inevitably the main issue with this technique, necessitating earlier watches to detect chick hatching dates.

The number of fish deliveries to known active burrows during five daylight watches.

No. of deliveries	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
No. of burrows 6 June		8	2	4	7	9	7	5	6			1	2	2	
No. of burrows 15 June	4	3	2		6	6	6	10	8	5	1	2			2
No. of burrows 25 June	1	6	1	5	5	7	11	7	4	3	4	1	2		1
No. of burrows 4 July	2	9	9	7	8	4	2	2	1	6	2				
No. of burrows 12 July		10	5	2	3	2	1	1							

Puffins can fledge having spent a minimum of 34 days as a burrow-bound chick, although this is more typically 38 days and can be anything up to 60 days (Ferguson-Lees *et al.*, 2011). A flaw with the three visit technique is that some chicks could potentially be counted as fledged when they had reached as little as 11 days of age (although this year they had to reach at least 18 days). However it would be incorrect to assume that only those provisioned on all three watches went on to fledge as early hatchers could potentially have departed by the third watch whilst others may have hatched after the first watch. Although this three visit technique is more standardised than the ad hoc recording, the 2013 to 2017 productivity estimates of between 0.73 and 0.80 fledglings per pair certainly include birds which did not fledge. For example a bird counted as fledged this year was known to die of an apparent eye injury at approximately 25 days old, whilst larger chicks were seen to be taken by Great Black-backed Gulls. Nevertheless this more standardised monitoring method suggests that 2017 was the most productive of the last five years (with 0.80 fledglings produced per pair). If the ad hoc records are included and it is assumed that a chick seen to be provisioned for 31 days or more was of fledging size, then the 2017 data suggests that, of the 69 monitored breeding attempts, perhaps as few as 39 (56.5%) were potentially successful (63.6% in 2016, 55.0% in 2015, 50.0% in 2014 and 49.4% in 2013), although at least 52 attempts saw a chick reach a minimum of 26 days (75.4%, see table below).

The number of days between first and last observed chick feeding based on ad hoc recording and five daylight hours watches.

Days	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-55
No. of burrows	6	1		5	1	13	9	20	5	5



Whilst these productivity estimates attempt to deduce the number of fledging sized birds, fledging success is almost impossible to ascertain reliably. Puffin chicks are particularly vulnerable when exercising their flight muscles at the burrow entrance prior to fledging and when making the journey to the sea. Great Black-backed Gulls were seen patrolling within the colonies during the chick provisioning period and were regularly watched taking fledging sized Pufflings.

The five daylight hours watches (made on the 6th, 15th and 25th June and the 4th and 12th July), were also used to monitor kleptoparasitism by gulls. The study plot was again confined to the area of the 100 numbered burrow stakes at Crab Bay. On 6th June 844 Puffins arrived to the study area with fish and of these 30 (3.55%) were successfully robbed. On 15th June 991 birds arrived and of these 11 (1.11%) were robbed. On 25th June 1100 birds arrived and only three (0.27%) were robbed. On 4th July 527 birds arrived and seven (1.33%) were robbed. On 12th July 177 birds arrived and five (2.82%) were robbed. It should be noted that these figures do not take into account the number of fish lost to gulls at sea or on the approach to the colony.

The number of fish deliveries made to the study plot during each daylight hours watch, the number of Puffins which lost fish to the gulls over the plot and the percentage which lost fish.

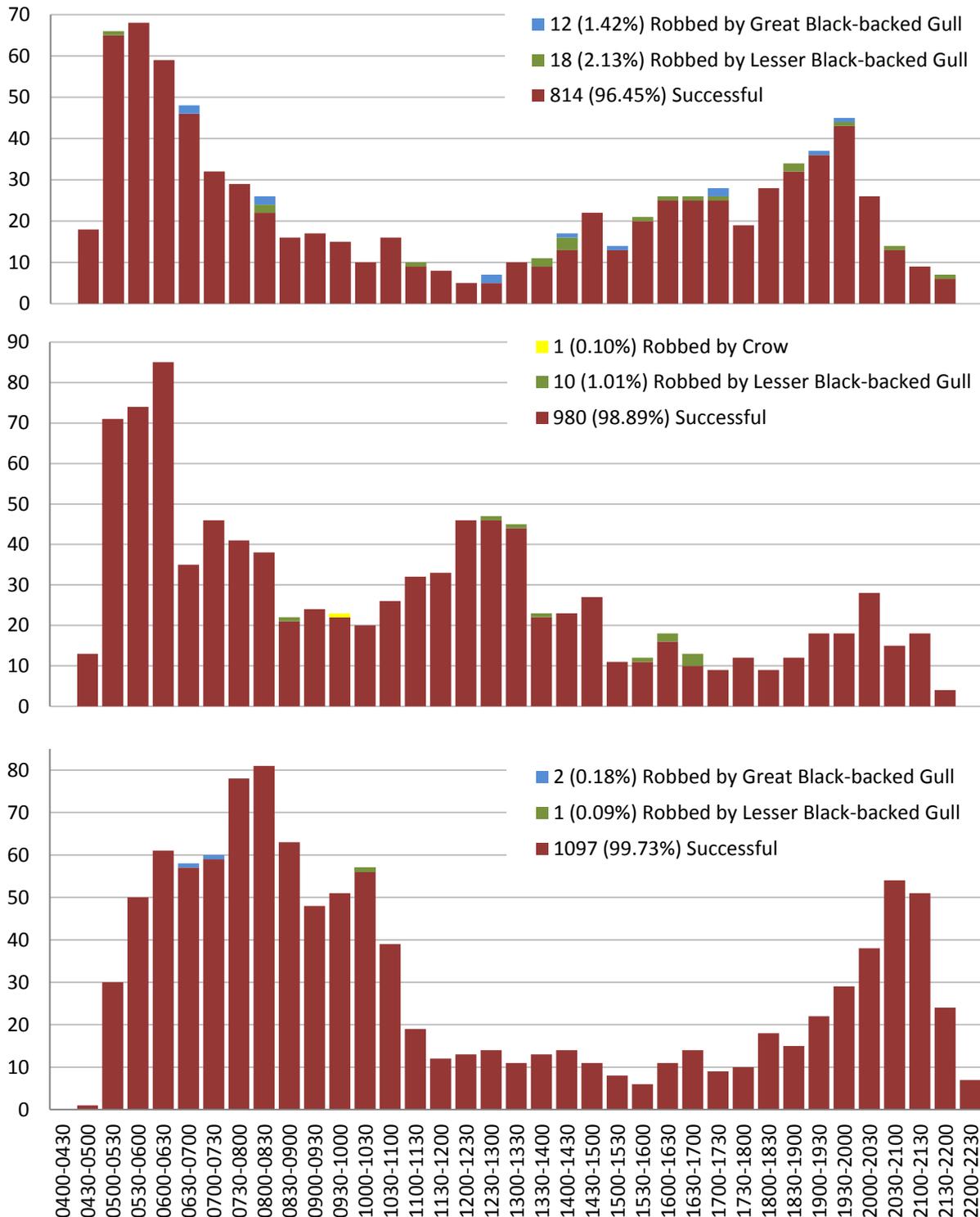
		Watch 1	Watch 2	Watch 3	Watch 4	Watch 5
2017	Number of deliveries	844	991	1100	527	177
	Number parasitised	30	11	3	7	5
	Percentage parasitised	3.55	1.11	0.27	1.33	2.82
2016	Number of deliveries	421	733	889	489	525
	Number parasitised	20	45	35	10	28
	Percentage parasitised	4.75	6.14	3.94	2.04	5.33
2015	Number of deliveries	699	927	916	521	123
	Number parasitised	43	34	23	10	4
	Percentage parasitised	6.15	3.67	2.51	1.92	3.25
2014	Number of deliveries	262	513	643	670	179
	Number parasitised	28	37	29	3	1
	Percentage parasitised	10.69	7.21	4.51	0.45	0.56
2013	Number of deliveries	413	684	610	107	
	Number parasitised	76	40	32	11	
	Percentage parasitised	18.40	5.85	5.25	10.28	



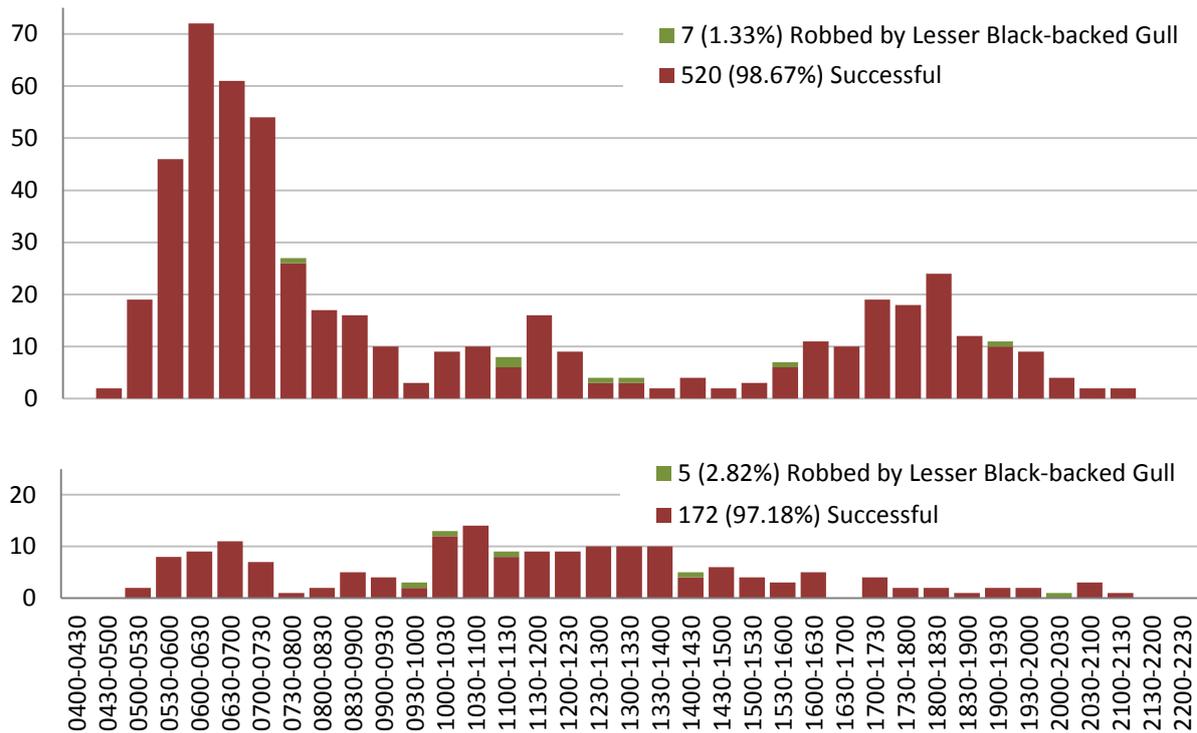
The peak in monitored kleptoparasitism in 2017 was down on each of the previous four years, both in terms of the percentage of deliveries lost over the study plot and the actual number of deliveries stolen. This is perhaps in part due to the declining Lesser Black-backed Gull population, although an

increase in Great Black-backed Gull numbers may at the same time be having an effect, with the more aggressive large gulls keeping the Lesser Black-backed Gulls from the study area. The highest levels of kleptoparasitism to be logged so far occurred in 2013. Given that the size of the study plot has remained constant over the five years of this study, it is also interesting to note how the number of recorded deliveries has shown an increase; although annual variations in Puffin productivity and the timing of the breeding season will influence the number of deliveries to the study area on each visit, these figures perhaps support the theory that the population here is increasing.

The number of chick provisioning attempts during daylight on the 6th, 15th and 25th June 2017, along with the number of times that gulls or crows successfully robbed the fish.



The number of chick provisioning attempts during daylight on the 4th and 12th July 2017, along with the number of times that gulls successfully robbed the fish.



Survival in adult Puffins. An average survival figure for each year is based on the number of birds ringed in the preceding year plus the number of previously ringed birds known to be still alive, for example 166 birds are now known to have been alive in 2013, of a 2012 total of 172 (58 ringed in 2012 plus 114 ringed previously and known to be alive). Survival after a one year establishment period means that birds have been seen within the study area before (and are therefore assumed to be located in visible positions); birds ringed in the preceding year are therefore excluded from the calculations as they may be occupying hidden areas of the colony.

Year of ringing	Total ringed	Seen in 2012	Alive in 2012	% survival 2012	Seen in 2013	Alive in 2013	% survival 2013	Seen in 2014	Alive in 2014	% survival 2014	Seen in 2015	Alive in 2015	% survival 2015	Seen in 2016	Alive in 2016	% survival 2016	Seen in 2017	Alive in 2017	% survival 2017
2011	128	72	114	89.06	103	111	97.37	86	93	83.78	79	85	91.40	68	76	89.41	72	72	94.74
2012	58				52	55	94.83	36	40	72.73	37	39	97.50	34	37	94.87	35	35	94.59
2013	51							37	40	78.43	35	37	92.50	32	35	94.59	31	31	88.57
2014	57										50	53	92.98	43	47	88.68	44	44	93.62
2016	23																19	19	82.61
Total	317	72	114	89.06	155	166	96.51	159	173	79.72	201	214	93.04	177	195	91.12	201	201	92.20
Survival after one year				-			97.37			80.12			93.06			91.12			93.33

A colour ringing project was begun at Crab Bay in 2011 to allow an estimate of adult survival to be made each year. There were 128 birds ringed in the first year, 58 in 2012, 51 in 2013, 57 in 2014, 23 in 2016 and a further 24 were added to the scheme this year. The table above summarises the resighting data collected so far. What is apparent is that some birds are not seen every year, perhaps because they have not returned to the study plot or perhaps because their colour rings have not been seen (which may well be the case in years where the vegetation is longer); we now know for example that the 155 birds seen in 2013 was only 93.37% of the number actually alive. The survival estimates for more recent years are thus likely to be modified in the future, to take into account

birds which have not yet been seen. Nevertheless, with six years of resighting data now available, we can start to look at fluctuations in survival over time. Survival between the 2011 and 2012 breeding seasons was 89.06%, between 2012 and 2013 it was 96.51%, between 2013 and 2014 it was 79.72%, between 2014 and 2015 it was 93.04%, between 2015 and 2016 it was 91.12% and between 2016 and this season it was (a likely to be revised upwards) 92.20%. A flaw with this survivorship estimate is that colour marks were added to Puffins caught in flight, individuals potentially resident in areas not visible to researchers. A better estimation of survival may therefore come from looking for birds previously seen in the field (thus discounting individuals in the year after ringing); thus of 114 known to be alive in 2012, 111 (97.37%) survived to 2013, of 166 alive in 2013, 133 (80.12%) survived to 2014, of 173 alive in 2014, 161 (93.06%) survived to 2015, of 214 alive in 2015, 195 (91.12%) survived to 2016 and of 195 alive in 2016, 182 (a likely to be revised upwards 93.33%) survived to this season. The most striking feature of these survivorship estimates is the substantial drop noted after the severe 2013 to 2014 winter wrecks; it remains to be seen how often such drops in survival can occur before the spring raft counts show a decline in overall numbers.

The colour ringing project revealed an interesting case of ‘progressive greying’ this year. Although the Puffin pictured below (Black and White stripe over BTO EX83523, Yellow over Black) may appear to be partially leucistic, with predominantly white feathers in the throat, nape and mantle, we know from previous years that this bird had the appearance of a normal Puffin (the inset photograph is the same bird in 2013). This condition is caused by a progressive loss or failure of pigment cells with age.



There were noticeably more birds lining the walls to the South Haven jetty on 3rd July than seen in the previous four years, this perhaps another positive sign for the future. Unsurprisingly given the earlier 2017 breeding season, Puffins left Skokholm earlier this year than in the previous four years. There were no loafing birds in the colonies from 25th July, a day when only 460 birds were seen rafting offshore, and the following day saw a movement of over 600 birds at sea. There were 24 fish deliveries to the west side of Crab Bay in five hours of observations on 30th July (31 in one hour on the 31st last year). August saw highs of only 38 on the 2nd, 43 on the 3rd and 32 on the 6th before numbers dropped to just three on the 7th. A single fish delivery to Crab Bay on 10th August was the last to be seen this year, three days earlier than the last of 2016, six days earlier than in 2015, 13 days earlier than in 2014 (the latest breeding season in recent years) and four days earlier than in 2013. Singles off Peter’s bay on 27th August, Howard’s End on 6th September and west on 12th September were the only birds logged in what was a typical autumn.

Ringing recovery EY68802

Originally ringed as a pullus, CRAB BAY PUFFIN PLOT, SKOKHOLM 18th July 2013

Recovered SKOMER ISLAND, PEMBROKESHIRE 1st August 2017

Finding condition Dead in Great Black-backed Gull nest

Distance travelled 4km at 343 degrees (NNW)

Days since ringed 1475

Ringing recovery EZ16250

Originally ringed as an adult, CRAB BAY PUFFIN PLOT, SKOKHOLM 17th July 2015

Recovered FRESHWATER EAST, PEMBROKESHIRE 6th June 2017

Finding condition Dead on beach, died within about a week

Distance travelled 29km at 102 degrees (ESE)

Days since ringed 690

Feral Pigeon *Columba livia domestica*

Colomen Ddôf

Vagrant status clouded by the regular passage of racing pigeons

The vast majority of pet pigeons are marked with a closed ring squeezed over the foot of a growing squab. Racing pigeons marked in such a way regularly rest on Skokholm's buildings and cliffs, such grounded birds often failing to find the energy to continue with their journeys. Larger cohesive flocks which regularly pass over are almost certainly also racing pigeons. Although the systematic recording of such pets has been sporadic, a typical annual total is over 100 and up to 250 have been logged in a single day. Approximately 3000 pairs of Feral Pigeon were thought to nest in Pembrokeshire in 1988 (Donovan and Rees, 1994), a figure which may have increased to somewhere in the region of 5000 pairs by 2007 (Rees, 2012); nevertheless good views are required to confirm that a pigeon is not a wayward pet. The only previous Skokholm records attributable to genuinely wild birds are singles on 17th June 1958, 14th April 1959 and 1st July 1994 along with two which lingered around the cliffs between 27th April and 6th May 1980. A flighty bird occasionally seen in Crab Bay during the 15th and 16th September this year was not wearing rings and is here treated as the fifth Skokholm record (HD, RDB *et al.*).

Woodpigeon *Columba palumbus*

Ysguthan

Uncommon Visitor has bred, most recently in a South Haven sea cave in 2007

1 trapped

1936-1976: 3 trapped

A bird trapped in the Well Heligoland on 20th March became only the fourth individual to be ringed on Skokholm; what may have been the same bird was also seen on the 26th and 27th. In April a mobile single was logged on the 27th, 28th and 30th and in May there was one on the 3rd and 4th, two together at Twinlet on the 5th, one in the same area on the 11th and further singles on the 25th, 26th and 29th. Lone birds at the Hills on the 17th and the Cottage on 19th June were the last of the year; there was thus no autumn record for the first time since 2013 and the annual bird-days total of 16 was down on the 24 of last year and the 2012-2016 average of 21.4. Skokholm daycounts have never been high, with peaks of 11 in the May of 1989 and the August of 1987, 12 in the April of 1978 and 18 in May 1960.

Collared Dove *Streptopelia decaocto*

Turtur Dorchog

Uncommon Visitor the majority of sightings coming in spring. First recorded 7th June 1962

1 trapped

1962-1976: 36 trapped, 2013-2016: 4 trapped, 2 retrapped

One around the Observatory buildings on 27th March was the earliest spring record since one on the same date in 2014; there have only been earlier records in six previous years. A male sang on 27th April and in May there was a mobile single on the 3rd and 4th, two on the 6th including a singing bird, one at the Lighthouse on the 23rd, one at the Bluffs on the 25th (which may have accounted for the

large pile of feathers found along the Lighthouse Track later that day), one ringed on the 26th and a singing male on the 27th. Two were at the Farm on 1st June, three together the following day was the largest group since June 2013 (when three were also seen together), there was a single on the 3rd, two at the Observatory on the 11th and singles on the 19th and 21st. In July there was one on the 9th and 12th and in August a male sang at the Red Hut, Courtyard and Lighthouse on the 10th. The last of the year, at the Farm on the morning of 3rd September, was seen to fly to the mainland that evening. Although not as common as during the 1970s, 80s and 90s, the 24 bird-days logged this year was the third highest total since 2007.



Cuckoo *Cuculus canorus*

Cog

Scarce Migrant has bred, most recently suspected of having done so in 2006

Earliest 6th April 1960 (6th May 2017) **Latest** 8th September 1956 (9th August 2017)

1 trapped

1936-1976: 82 trapped 2015: 3 trapped

A female ringed on 6th May was two days earlier than the first of last year; there have been seven earlier records this century. There were no other spring sightings, marking this as one of the poorest springs on record for this species and the quietest since 2010.



The only other record this season was of a juvenile commuting between the Well and North Plain on 9th August; this was the first autumn record since 2013. The only other autumn records this century are of two juveniles noted over eight days in 2013, a single in 2008 and in 2006 a juvenile, suspected as having hatched on Skokholm, which was logged on three dates.

Short-eared Owl *Asio flammeus*

Tylluan Glustioig

Uncommon described in 1936 as a 'rare visitor', listed by Thompson as Scarce and has never bred
3 pulli trapped
1936-1976: 5 trapped

The previous four years have seen a significant increase in the number of Short-eared Owls logged on Skokholm, with records in every month. Sightings on 12 dates in May 2016 included a male giving an advertising call on two nights and two birds seen together near South Pond; this series of records gave rise to the theory that a pair may have been attempting to breed for the first time in the Observatory's history, however there was no proof of an attempt and it was concluded that, if they had bred, they were certainly unsuccessful. This year saw singles logged on the 30th and 31st March and further lone birds on six April dates to the 10th. Two were seen together over East Bog on 17th April and one mobbing Crows over Gull Field on the 19th was the first indication of a defended territory. An incubating adult was flushed from a single egg during a Canada Goose nest search in Gull Field on 21st April; although a regular breeder on nearby Skomer, where the fluctuating population is supported by Bank Voles, this was the first confirmed breeding of Short-eared Owl on Skokholm. The Skokholm owls, perhaps due to their routine use of Storm Petrels as a food item, proved far more secretive than their crepuscular neighbours, with only two further sightings in April, one of which came at night, and no records at all between 26th April and 13th May inclusive. Adults were seen on the Hills on the 14th and 15th May and a bird which hunted near the nest site for much of the 16th was later seen to fly to the mainland. Following a further single on the 19th, a visit to the nest on 21st May revealed the presence of four chicks and an unhatched egg.



Sightings subsequently became more regular, with four further records in May including three adults on the 30th. Three healthy chicks were ringed on 2nd June, with a fourth still noticeably smaller than its siblings. There were birds on 19 further dates in June and on ten July dates to the 22nd, including

adults seen chasing a Raven, Carrion Crows and Jackdaws from near the nest site. The smallest of the three ringed young was in the Bracken below the Hills on 21st June and two were sat high on a Hills crag on 15th July; these latter two were the only youngsters known to have fledged, although no dead young were found. The sole indication of a continued presence in August was the discovery of predated Storm Petrels on the 25th and 26th which looked to have been taken by an owl rather than a gull. In September a hunting bird was logged on the 1st, two were quartering over the Bog on the 4th, four were together in the Bog on the 5th, two were there on the 23rd and there were singles on the 24th and 25th. The only October records were a single at East Bog on the evening of the 17th and three after dark on the 29th. One calling near the Lighthouse on the night of 2nd November was the last record of the year. Thus, despite the successful breeding attempt, there were only 76 bird-days logged, 31 more than last year, 17 more than in 2015 and four more than in 1989 when a record daycount of nine on 14th November contributed to what was the most productive pre-2017 year.

As has been noted in previous years, Storm Petrels were again used as food, so much so that the face feathering of the breeding adults became oiled and black. A minimum of 98 petrel corpses were found between 23rd April and 14th October; although five of these were certainly taken by Great Black-backed Gulls (the corpses were found in either pellets or nests), the vast majority were believed to have fallen prey to Short-eared Owls (due to the presence of feathers or pellets). There were 51 Storm Petrel corpses located last year, 18 in 2015, 16 in 2014 and six in 2013.

Swift *Apus apus*

Gwennol Ddu

Fairly Common Migrant Common in some years and more regular in spring

Earliest 15th April 1991 (23rd April 2017) **Latest** 28th October 1976 (26th August 2017)

1936-1976: 12 trapped

The first, a single north over the Lighthouse on 23rd April, was two days later than the first of 2016 and the only April sighting of the year; there are only 24 earlier Skokholm bird-days with singles on the 15th in 1991, the 16th in 1961, the 17th in 1970 and the 19th in 1951 being the earliest records. Birds were logged on ten May dates, although the counts were all of four or less bar eight on the 9th and an impressive 89 northeast on the 5th; although there have been 33 higher monthly totals, including a record 282 in May 1948, the latter daycount was the highest since 150 were logged on 8th May 1989 and the sixth highest on record (a total of 100 was logged on 11th May 1969, 4th May 1950, 10th May 1948 and 27th July 1948). A further 67 birds were counted over nine June dates including highs of 22 on the 19th and 12 the following day. There were records on 13 July dates including 16 on the 18th and 15 on the 19th; a July total of 61 was the highest since 2000 when 87 were logged. The last sightings of the year came in August with two on the 4th, one on the 21st, six on the 22nd and a single on the 26th; the latter bird was eight days later than the last of 2016. Four on 28th August 2014 is the most recent later record, a single on the 4th in 2005 is the most recent of 117 September bird-days and there have been four October singles, all between 1960 and 1976.

Hoopoe *Upupa epops*

Copog

Rare more regular in spring with only 11 previous autumn records

Earliest 12th March 1940 **Latest** 17th October 2016 (**31st October 2017**)

1936-1976: 1 trapped

One which relocated from North Haven to around the Observatory on 31st October was only the 12th autumn record for Skokholm, approximately the 40th individual to be logged since the first in 1928 and the latest to date (RDB, GE). Interestingly the latest two Skokholm records have come in the last two years and coincidentally both have been persistently harassed by Kestrels. There have now been 101 Skokholm bird-days in 30 post-1927 years, with seven in the last five years and a record ten in 1977 when a record three individuals were logged on 17th April. Two individuals have been logged in six previous years, most recently in 2016.



Wryneck *Jynx torquilla*

Pengam

Scarce Migrant regular in autumn, rare in spring with only nine records

Earliest 3rd April 1995 **Latest** 12th November 2014 (23rd August 2017)

1936-1976: 11 trapped, 2013-2015: 4 trapped, 2 retrapped

One found foraging on the short sward around the Sugar Bowl on 23rd August was the only sighting of the year and the earliest autumn record for Skokholm (RJ *et al.*); following the latest spring record on 23rd May 1949, the only previous August Wrynecks were on the 28th in 1970 and from the 29th in 1998. There have now been 202 Skokholm bird-days logged in 37 years since the first in May 1938, including at least ten individuals accounting for 43 bird-days in the last five years.

Kestrel *Falco tinnunculus*

Cudyll Coch

Uncommon recorded in all months but more regular post-breeding

1936-1976: 8 trapped, 2013: 1 trapped

It proved a typical year for this species which breeds on the nearby mainland but which is yet to nest on Skokholm. A male on 3rd April was the first of the year and a female the following day was probably the same individual logged each day to the 7th. There were three further April singles, on the 14th, 19th and 27th, but no May record for the first time since 2014. June saw singles on the 3rd, 7th and 26th, but there was no July record for the first time since 2012. Following August singles on the 25th and 30th, there were 27 September bird-days noted over 24 dates including highs of two on the 17th, 18th and 25th; the mobile nature of small raptors on Skokholm has the potential to lead to overcounting, however it was suspected that three individuals were present on the 18th. A total of 27 September bird-days almost matched the all-time average for this month (26.14) and matched the 2016 total, although there were five fewer than in 2015 and 25 fewer than in 2014. There were sightings on 25 October dates totalling 32 birds, including records of two on seven dates; although 19 down on last year, five down on 2015 and three down on 2014, the bird-days total was up on the October mean of 19.80. There were November records on all but one date to the 9th (when the staff departed), all singles bar two birds on the 4th.

Merlin *Falco columbarius*

Uncommon recorded in every month but with only three June and seven July records

1 trapped

1936-1976: 9 trapped, 2013-2016: 3 trapped

An adult female and a first-winter male (photograph below) accounted for records of singles on 16 dates between the 13th and 31st March; the only higher March total was the 25 logged in 1959, although it was again a tally made up entirely of singles. There were records on 19 dates in April including two birds on the 2nd, 20th, 23rd and 24th, an adult male on the 13th different to the birds seen in March and three individuals on the 22nd when one flew northwest to sea at the same time as two were being watched at the west end of the Island; the value of UHF radios in allowing birders to coordinate observations was obvious. The 25 April bird-days matched the April 1979 total, a count only bettered in 1972 when 27 were logged, and the three individuals seen on the 22nd was a new spring daycount record; the only higher daycount is the four logged on 7th October 1968. A female was noted on seven May dates to the 12th and the last of the spring was a new individual, a first-winter female at South Pond on the 19th; only the springs of 1959 and 1951 have proven more productive. The earliest autumn arrival since 1994 was a single logged on 15th August. There were three further August records, with one on the 25th, a male and female on the 27th and a female on the 28th; this was the first August record of multiple birds for Skokholm. There were five lone birds between the 3rd and 10th September, with a female and a juvenile male potentially accounting for all of the observations; there have been 13 higher September totals, but none since 1996. Records on 22 October dates included two birds on six dates; the only higher October total came in 1967 when 30 bird-days were logged. There were sightings on eight November dates before the departure of staff on the 9th including three individuals, two females and a male, logged on four days to the 6th; despite the early departure of staff, there has never been a higher November tally. An annual total of 105 bird-days was the second highest on record, only down on the 118 of 1968.



Peregrine *Falco peregrinus*

Hebog Tramor

Scarce Breeder and Uncommon Visitor resumed breeding in 1988 following a 56 year absence

2013-2016: 4 pulli trapped

Following an increase in the number of non-breeding birds logged alongside the resident pair during the 2014 and 2015 seasons, two pairs of Peregrine attempted to nest on Skokholm for the first time

in 2016. Unsurprisingly this led to an increase in the number of aggressive interactions logged; although it is possible for a seabird Island the size of Skokholm to support two pairs (despite the considerably lower seabird numbers, Bardsey Island in Gwynedd frequently holds two successful pairs), time spent interacting with neighbours perhaps led to the reduced productivity noted in the last three years. Two pairs again established territories in 2017 and again there were regular aggressive encounters observed between these four birds and, in May, with at least one visiting first-summer female. The Bluffs ledges used during the previous eight years were occupied in April when a neat nest scrape was prepared on the 2013-2015 ledge (accessed on 20th May), however this pair had relocated to an inaccessible and hidden crevice above Near Bay by 17th May. The South Coast ledge used in 2016 was accessed under a Schedule One Licence on 18th May but fragments of predated eggshell were the only signs of a 2017 breeding attempt. Irregular visits to the slope above Near Bay revealed that a guard bird was still present and a recently fledged youngster was found near Rat Bay on 10th July. The fledgling was sat on the bench above South Haven on 14th July, at Little Bay on the 17th and on Oystercatcher Rock on the 18th when it looked to be oiled. Better views were obtained at the Lime Kiln on 22nd July; although flying comfortably, the juvenile was coated in what was probably Fulmar oil. Nevertheless it was seen on four further dates until 11th August.

Breeding pairs, location and fledging success since 2005.
BI = The Bluffs, NB = Near Bay, NH = North Haven, SC = South Coast,

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pairs	1	1	1	1	1	1	1	1	1	1	1	2	2
Site	NH	BI	SC	SC	BI	BI SC	NB SC						
Fledglings	0	2	1	2	1	0	4	2	3	0	0	1	1



All four adults were seen on 26th July, the males aggressively interacting over the Lighthouse. Along with the fledgling, up to two adult males and an adult female were seen during August, although sightings became less frequent and the number of hostile encounters declined. The four adults accounted for records on all but seven dates in September, although they were routinely hunting away from the Island; this situation continued into October when up to two birds were logged on 12 dates to the 14th. Only seven singles were noted between 15th October and 9th November, one of which was harassing a Merlin and another pursuing a Snipe.

Magpie *Pica pica*

Pioden

Rare approximately 16 previous records including an apparent semi-resident bird in 2007

1936-1976: 1 trapped

One seen in flight between the Lighthouse and the Quarry on 4th September was the first since 2015 and the sixth autumn record for Skokholm (JH). Considering that Magpies breed on the adjacent mainland and on Skomer Island to the north, it is perhaps surprising that there are so few Skokholm records; the open water of Broad Sound is seemingly enough to deter regular visits. The most recent previous records are of one on four dates between the 17th and 23rd April 2015, one on 22nd May 2012, one for four days from 19th April 2011 and one on 3rd June 2010. With the exception of a semi-resident bird in 2007 which apparently crossed Broad Sound frequently between 23rd May and 4th September, there have been ten records between 8th March and 3rd June, with the remainder arriving between 11th August and 17th November.

Chough *Pyrrhocorax pyrrhocorax*

Brân Goesgoch

Scarce Breeder and Uncommon Visitor bred in 1928 and then annually since 1992

1936-1976: 1 trapped

There were only two breeding pairs for a fourth consecutive year, with territories around the Dip and Steep Bay again being occupied. The Steep Bay pair were watched collecting nest material on several occasions from 18th March and the Dip pair were courtship feeding and displaying on 19th April. The only evidence during this period of birds other than the Skokholm breeders came on the 23rd and 24th March when a group of seven were logged (which probably roosted on Spy Rock), on 25th March when five extra birds were seen and on 26th March when there was a single in addition to the two pairs; only the breeding birds were noted during April. A flock of 20 watched as they arrived from the north on 5th May took the daycount to 24, the highest ever spring total logged on Skokholm and the highest count in any month since 26 in September 2007. Birds were seen collecting food during May and early June and successful breeding was confirmed at Steep Bay on 14th June and at the Dip two days later; both territories contained young from the 17th last year. Both pairs fledged four, setting new Skokholm records for both the total number of young fledged in a season and for mean productivity; indeed productivity was four times higher than on neighbouring Skomer Island and twice as high as in the Pembrokeshire Coast National Park as a whole (Hodges, 2017). Disappointingly both pairs seemingly lost a single fledgling by 27th June, although the remaining six youngsters were thought to survive until the family groups dispersed in late July.



Given the mobile nature of the four Skokholm adults and their six extant young, only a witnessed arrival or counts in excess of ten confirmed the presence of birds from elsewhere. There were 18 such occurrences in August, with ten counts of 18 or more and highs of 23 on the 19th, 26 on the 27th and 30 on the 29th; the latter count, which comprised a flock of 28 feeding around Sugar's Delight at the same time as a pair were on the North Coast, was the second highest Skokholm daycount, only

down on the 32 logged on 28th September 1965. Numbers remained high in September, with 11 counts of 12 or more and highs of 22 on the 1st, 19 on the 2nd and 17 on the 6th. One playing in the wind on 26th September was watched as it dropped a stick through the air, swooped to catch it in its bill before it hit the ground, transferred the stick back to its foot as it gained height to the starting position and then repeated the game several times. With the exception of 11 on the 2nd, 13 on the 9th and 10th, seven on the 14th and nine on the 29th, daily counts in October were all of six or less. No more than five were logged each November day until the departure of staff on the 9th, birds which were thought to include the two breeding pairs.

The number of Chough pairs, the total number of fledged young and productivity 2004-2017.

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	1	1	2	2	2	2	2	3	3	2	2	2	2
2	3	1	5	4	3	2	4	0	2	3	2	5	8
2	3	1	2.5	2	1.5	1	2	0	0.67	1.5	1	2.5	4

Jackdaw *Corvus monedula*

Jac-y-Do

Uncommon Breeder and Fairly Common Visitor

14 trapped, 4 retrapped

1936-1976: 83 trapped, 2011-2016: 53 trapped, 4 retrapped

The number of breeding Jackdaw on Skokholm has always been difficult to assess due to semi-colonial nesting and their secretive habits. Following their establishment as a breeding species in 1965, numbers rose to between 50 and 60 pairs between 1974 and 1976, dropped to 16 to 20 pairs between 1982 and 1988, dropped again to between six and 14 pairs from 1989 to 1996 and were most recently estimated at between 15 and 20 pairs during the period 2011 to 2016. This year again saw a minimum of 20 pairs with the majority nesting colonially in the crevices and burrows of South Haven and the Quarry, but with further pairs in Rat Bay, Peter's Bay, Hog Bay, Crab Bay and near Frank's and Little Bay Points. Daycounts again suggested that there were more birds present during the breeding season than were proven to be nesting, although regular movements from the mainland were noted and perhaps accounted for some of the larger counts. Adult EY72035, ringed as a fledgling in August 2013, was retrapped in the Cottage Heligoland on 22nd May after three years, 279 days; the current British longevity record stands at 17 years, 22 days.

The total number of Jackdaw logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2014 to 2016 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	661	809	1118	1545	1533	1438	431	986	554
2016	1155	920	1063	1434	1483	1501	366	1215	408
2015	916	937	986	1584	1669	2271	818	806	70
2014	1154	1134	1073	1216	1304	1469	1015	834	89
2017	69	46	57	81	88	100	62	123	189
2016	101	68	51	72	116	102	49	140	74
2015	84	79	62	134	180	120	112	115	43
2014	104	79	53	66	110	93	73	179	55
	22 nd	29 th	27 th	3 rd	22 nd	14 th	28 th	12 th	2 nd

The average March daycount was similar to recent years, although a total of only 69 was the lowest peak daycount since 2011. Birds were seen collecting nest material in several locations from the 25th, three days later than last year, and into early April. Following a count of 50 on 27th March, an average of 29 birds a day were logged until 18th May, a typical drop in numbers seen during the incubation period each year. There were 12 larger groups during April and May containing 23 or more birds and May flocks of at least 40 on the 18th, 52 on the 24th and 45 on the 27th. Chicks were

first heard at South Haven, the Quarry and Rat Bay on 23rd May, one day earlier than the first to be heard last year but two days later than the first of 2015. The first chicks to be seen out of the nest were at the mouth of the South Haven cave system on 2nd June, but it was not until the 9th that youngsters had fledged to the Well; the first fledglings were logged on the 8th in both 2016 and 2015. It proved impossible to calculate the number of fledglings present in the mobile and nervous post-breeding flocks, although minimum counts of 19 between South Haven and the Well, two at the Quarry, two at Little Bay and three at Frank's Point were made; the total was just one less than last year. A fledgling was taken by a Great Black-backed Gull on 21st June, an occurrence also logged on the 24th last year (also see Rook and Crow below). Peak counts in July and August were down on the last two years, albeit only fractionally so in August, perhaps due to the arrival of fewer birds from the mainland. There was the customary departure for the mainland in late August, with no counts in excess of nine and 11 blank days between the 24th and the arrival of at least 37 birds on the morning of 16th September. Subsequent arrivals were sporadic, with 12 blank days and seven single-figure counts until the departure of staff on 9th November, but with highs of 92 or more on seven calm mornings and peaks of 123 on 12th October, 189 on 2nd November and 114 on 8th November; the 2nd November count was the fourth highest on record and the highest since 300 were logged on 23rd October 1993. The only other higher counts are 200 logged on 5th November 1990 and a record 500 on 24th October 1993, the latter on the day following the second highest Skokholm count.



Rook *Corvus frugilegus*

Ydfran

Scarce daycounts of up to 25 in 64 previous springs and of up to 21 in 32 previous autumns

A very approachable bird seen around the Bird Observatory and then the Lighthouse on 4th April was still present near the Lighthouse the following day. Although it was not logged on the 6th or the 9th, what was assumed to be the same Rook, given its rather tame demeanour, was seen on every other subsequent April date and daily in May until the 15th. A vocal group of three heading east for the mainland on 22nd April was seemingly not enough to tempt the lingerer into a return across Broad Sound. Although typically found around Home Meadow or East Bog, it was assumed to be the same bird seen at the Lighthouse on 23rd April as it was not logged elsewhere on that date. Nevertheless a bird at the Lighthouse on 5th May was certainly a different individual as the simultaneous presence of the Home Meadow bird was confirmed via UHF radio. Although it remained far more approachable than a typical Skokholm Rook for the duration of its unprecedentedly long stay, it was seemingly feeding adequately and there was no indication that it was getting weaker. It fell prey to a Great Black-backed Gull on the morning of 16th May; although Great Black-backed Gulls are known

to take a wide variety of bird species, including Carrion Crow (Cramp *et al.*, 1983 and see Carrion Crow below), there is seemingly no record of one taking a Rook, or indeed a Jackdaw (see above). Five individuals in a year was down on the 12 of last year, but up on other recent years; there were no birds logged in 2015, 2013 or between 2008 and 2011 inclusive, only two flyovers in 2014 and a singleton in 2012.



Carrion Crow *Corvus corone*

Brân Dyddyn

Uncommon Breeder and Uncommon Visitor

1936-1976: 152 trapped, 2013-2016: 8 pulli trapped, 1 retrapped

There were nine nesting pairs mapped this season, the same as logged last year and one more than in each of the previous three. Similar territories to last year were held to the west of North Gully, in Peter's Bay, to the east of Crab Bay, east of the Dip, on the Hills and near Warden's Rest. A pair occupied a new site at Fossil Bay but the Hog Bay birds were missing, whilst the missing Little Neck pair were perhaps the birds which nested near the Devil's Teeth and the Little Bay Point birds perhaps had the nest in Far Bay. There were thus more pairs than in any of the previous 50 years except 2016; although prior to 1963 there were up to 12 pairs nesting on Skokholm, this had declined to just two by 1982, there was no breeding in 1984, 1985 and between 1991 and 1995 and there were only between two and five pairs between 1996 and 2012. There were seemingly more non-breeding birds present this season; in March a flock of 12 in South Haven contributed to a record-equalling spring daycount of 32 (matching the 16th March 1959 total), in April there were six flocks in excess of 12 birds (including highs of 16 on the 13th and 16th) and in May there were six murders of ten or more (including 16 on the 7th and 18 on the 9th). Daycounts suggested that these birds were frequently departing the Island, although four north over Broad Sound on 23rd April was the largest movement noted and breeding birds no doubt joined the flocks on occasion. An increase in the number of non-breeding birds perhaps led to the reduced productivity noted this year; only six of the nine pairs produced fledglings and only the Far Bay and Crab Bay pairs produced more than one, with two and four respectively. A productivity figure of 1.11 fledgling per pair was down on the 1.78 of last year, the 1.88 of 2016 and was the lowest since 2013. The Devil's Teeth fledgling was soon eaten by a Great Black-backed Gull; Jackdaw and Rook were also taken by Great Black-backed Gulls this year, albeit almost certainly by different individuals. Although the larger murders were absent during late summer, leading to maximum daycounts of only 20 in July and 24 in August, there were daily counts and occasional small movements including six northeast on 2nd August, nine over on the 25th and ten east on the 26th. In September ten went east on the 16th and nine went over very high on the 19th, whilst raucous groups of up to 18 were noted regularly from the 25th and into October (although the average daycount in September was only 13 and in October 16). Daily counts

continued until staff left on 9th November, including a total of 34 on the day prior to departure which included a group of 25 together; this was the second highest daycount on record, only down on the 48 of 9th November 2014 (when an unprecedented 44 were seen in a single flock).

Hooded Crow *Corvus cornix*

Brân Lwyd

Rare 14 previous records of up to two individuals

One watched as it arrived to the Bluffs on the morning of 22nd March was later seen on the ground in the Bog and on North Plain (GE, RDB). This was the first since a flyover on 4th April 2015, only the 15th record for the Island and the earliest to date. Of the 14 other sightings, ten have come in the period between 30th March and 21st May, with further singles on 31st May, the 14th and 15th June and, the only autumn bird, on 11th September 1952. There have been several large gaps between records, with no sightings between April 1939 and May 1951, September 1952 and April 1959, April 1959 and May 1970, May 1970 and April 1978, June 1982 and May 1994 and May 1994 and April 2012.

Raven *Corvus corax*

Cigfran

Scarce Breeder and Uncommon Visitor

1936-1976: 67 trapped

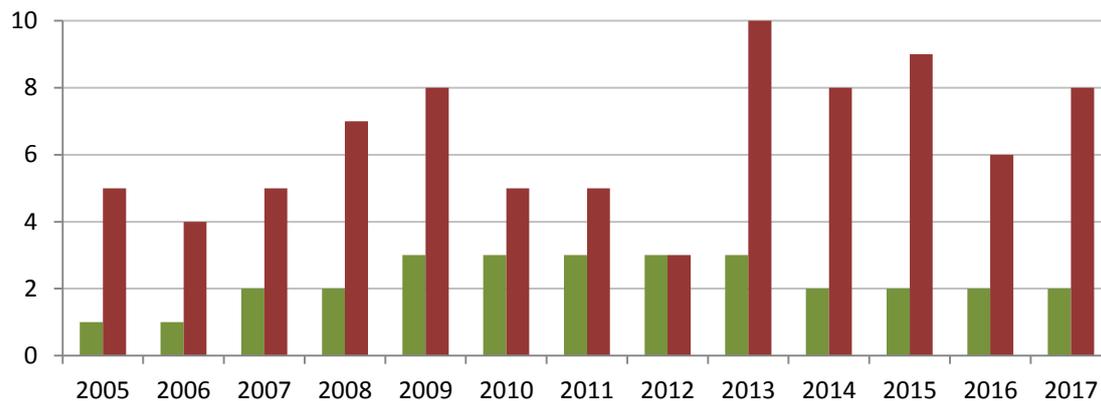
For a fourth consecutive year only two active nests were located. Both sites were different to those used in recent years; a west facing crevice on the eastern side of Steep Bay was further north than the Steep Bay ledge last used in 2013 and in North Haven the ledge used in 2013, 2015 and 2016 was eschewed for a hidden ledge ten metres further south. With the exception of the two pairs which nested in 1966, only one pair of Raven were recorded on Skokholm between 1928 and 2006, this season being the 12th year in which two or more pairs have bred. The few spring records of birds additional to the breeders were a group of ten at the Quarry on 14th March (seven of which later drifted north), three high over the centre of the Island on 23rd March which were escorted away by the breeding birds, a third mobile pair on the 6th, 24th and 27th April and a lone adult on 22nd April and 4th May.



A dead chick, presumably from the Steep Bay nest, was found near Twinlet on 9th April, however four large chicks were still present on the 16th. Although the North Haven pair were regularly seen transporting Rabbit and Razorbill eggs to the nest area, the nest contents were hidden from view. The first North Haven fledgling had departed the nest by 2nd May, seven days earlier than the first to do so in 2016 but two days later than in 2015. All four Steep Bay youngsters had fledged by the end

of the following day and, following daily sightings of fledglings dispersed around the Neck, four were finally confirmed there on 11th May. An average of four fledged young per pair was up on last year and matched 2014 as the second most productive year in which more than one pair has nested; only in 2015 has mean productivity been above four when more than one pair has been present and only in 2013 and 2015 have more young fledged in a single season. An adult was watched as it buried a Manx Shearwater near the Quarry on 19th May; similar caching of food was also witnessed last year. The 12 Skokholm birds potentially accounted for all sightings logged during May, June and July, although the family groups were often widely dispersed and toured widely; seven birds seen together on four dates between 27th June and 21st July was typical of the more social behaviour often seen at this time of year, whilst four in off the sea on 23rd July were perhaps from elsewhere.

The number of breeding pairs (green) and the number of fledged young between 2005 and 2017.



There were daily sightings of up to nine birds during August, plus highs of ten on the 5th (when seven birds were again together), 15 on the 17th (when nine flew north to Skomer leaving six along the Lighthouse Track) and 11 on the 27th. Up to seven birds were logged on each September date bar the 19th when at least 19 birds arrived from the north; when a lone bird attempted to do likewise later on the same date it was met over Broad Sound and escorted back to Skomer by what was presumably one of the Skokholm adults. With the exception of 12 on the 2nd, which included a flock of eight, and eight on the 28th, daily records of up to six birds were logged during October; what were assumed to be the same two pairs occupied the 2017 breeding coves and a third mobile pair was noted on occasion. The late autumn arrival of a third pair also occurred in 2015 and 2016, although this is yet to result in the reestablishment of a third nesting pair. A bird on 20th October was dropping and catching a stick in much the same manner as described for Chough (above). Following a count of eight on 1st November, the two Skokholm pairs seemingly accounted for all records until the staff departure.

Blue Tit *Cyanistes caeruleus*

Titw Tomos Las

Scarce records in 43 previous years, typically of singles or small groups but with up to 50 on occasion
 1 trapped
 1936-1976: 186 trapped

A vocal bird high over the Bog and later grounded near the Lighthouse on 27th October was probably the first-winter which dropped in at the Well later that day and which was subsequently ringed (GE, RDB); this was the first Skokholm record since one on the same date in 2011. Since the first for Skokholm, six birds together on 16th October 1948, there has only been one longer period with no sightings, that between 27th October 2003 (that date again) and 12th October 2010. There have been no observations in any year between 12th April and 10th September inclusive, with the majority of sightings coming in October, including record counts of 50 on the 17th in 1964 and the 16th in 1957. A winter wardening presence would no doubt increase the number of birds logged; there were regular

records during the Decembers of 1997, 2000 and 2001, the January of 1998 and the Februarys of those years plus 1958, 1965 and 2003, although the provisioning of peanuts in November almost certainly encouraged individuals to linger into the winter in some of these years.



Skylark *Alauda arvensis*

Ehedydd

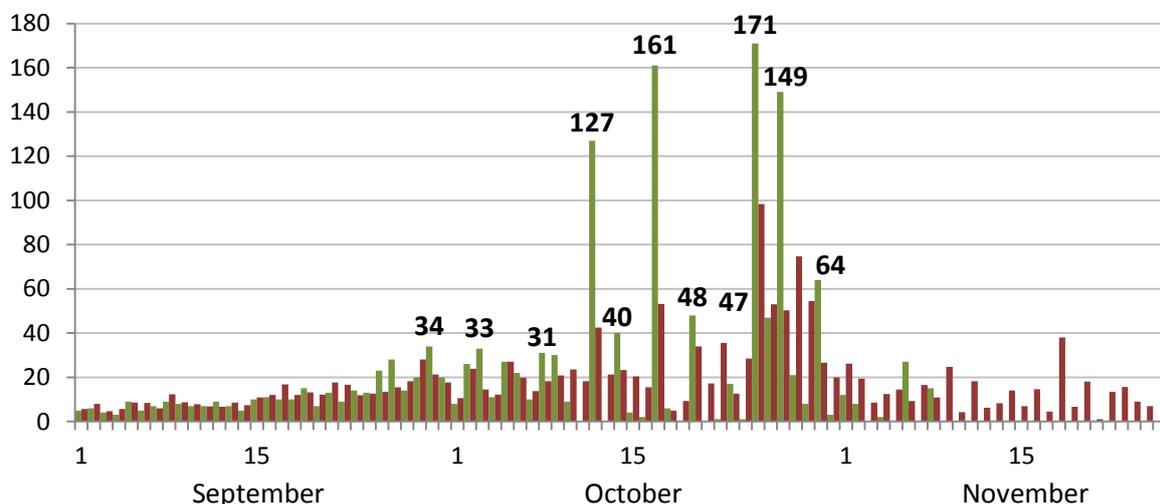
Uncommon Breeder and Common Visitor

1 trapped

1936-1976: 299 trapped, 2015: 5 trapped (including 4 pulli)

The 21 territorial males mapped during April and May this year was five more than recorded in 2016 and the most for over 20 years; although up to 48 pairs bred in the 1960s, the most recent higher count was 26 pairs in 1995. Additionally three singing males were logged on a single date but were not encountered subsequently. There was again little evidence of a spring passage, with maximum daycounts of 40 in March, 34 in April and 30 in May attributable to the Skokholm breeders. Chick provisioning was first noted on 28th May, 11 days later than in 2016, and the first fledged young to be seen were around North Pond on 23rd June. Given the number of overlapping territories and the skulking nature of this species, it proved impossible to accurately assess productivity, however young were noted at eight sites. The number of birds logged each day declined during the post-breeding moult, with no more than 24 noted on each date between 1st July and 25th September.

The number of Skylark logged on each day of autumn (green) compared with the 2013-2017 average. 2017 counts above 30 labelled.



Although the number of Skylark being logged steadily rose through September, peaking at 34 on the 29th, there was no obvious passage; all of the birds logged were potentially Skokholm breeders and their offspring. This contrasted with the previous three years when the first high flyovers were noted in a narrow window between the 17th and 19th September. There were daily October counts of up to 33 birds until the 11th when the first blank day since 19th March occurred. The first substantial passage of the autumn saw a count of 127 the following day, although this was followed by another blank day on the 13th. There were three further large October counts, with 161 on the 17th, 171 on the 25th and 149 on the 27th, the latter two coming in what has proven to be the peak week for Skylark passage during the last six years (see above chart). It thus proved the first year since 2014 without a daycount in excess of 200 birds, although the 25th October total was still the third highest since the 200 of 30th October 1991 and the October total of 1077 bird-days was seven up on last year and the highest since October 1988. Despite high autumn numbers, there were 18 days between 1st October and 9th November with fewer than ten birds and seven days without a record.

Sand Martin *Riparia riparia*

Gwennol y Glennydd

Fairly Common and Common in some years with daycounts of up to 400 in spring and 500 in autumn
Earliest 8th March 2000 (23rd March 2017) **Latest** 25th October 1997 and 1971 (25th September 2017)
 1936-1976: 8 trapped

One north on 23rd March was four days later than the first of last year, five later than four in 2015 and six later than one in 2014. It went on to be a quiet March, however the 189 bird-days logged over 15 dates during the following month was the highest April total since 2006 and the tenth highest on record (seven of which were between 1948 and 1967). The 73 birds counted on the 9th was the eighth highest April daycount and the highest since 200 were logged on the 29th in 1990. There were 40 over 15 dates in May, the lowest total in this month since 2014, and two on 4th June which were the first June birds since 2013. For a second consecutive year it proved the most productive July on record, with 211 birds noted over ten dates including an unprecedented 185 southeast in two hours on the morning of the 18th; the previous highest July count was the 75 logged on the 19th last year. The August total of 125 birds over 12 dates was the sixth highest on record for this month and the highest since a record 472 in 1969; the August 1969 total was primarily made up of a minimum of 300 on the 30th, this the most recent August daycount higher than the 64 logged on the 26th this year. As was noted last year, September proved disappointing by comparison, perhaps suggesting an earlier than average departure for a second year running; there were 109 birds noted over 13 dates during the month and only one count in excess of 20, this compared with record highs of 554 in 2002 and 1455 in 1967. Three on 25th September were the last of the year, seven days earlier than the last of 2016, one day earlier than the last of 2015 and the earliest last record since 23rd September 2012.

The total number of Sand Martin logged each month (2016 to 2014 in parenthesis), along with the monthly maximum (2016 to 2014 in parenthesis) and the date(s) on which the 2017 peak was recorded.

March	April	May	June	July	August	September	October
9 (22, 4, 4)	189 (67, 80, 41)	40 (70, 47, 28)	2 (0, 0, 0)	211 (94, 1, 26)	125 (74, 54, 53)	109 (14, 142, 158)	0 (3, 0, 1)
2 (15, 4, 3)	73 (12, 12, 9)	9 (17, 8, 7)	2 (0, 0, 0)	185 (75, 1, 16)	64 (29, 33, 24)	27 (3, 31, 31)	0 (3, 0, 1)
4 dates	9 th	7 th	4 th	18 th	26 th	18 th	

Swallow *Hirundo rustica*

Gwennol

Scarce Breeder and Very Abundant Migrant

Earliest 11th March 2000 (12th March 2017) **Latest** 28th November 1932 (27th October 2017)
 29 trapped (including 13 pulli), 16 retrapped, 2 controls

1936-1976: 238 trapped, 2011-2016: 216 trapped (including 59 pulli), 47 retrapped, 8 controls

A minimum of two birds hawking insects along the South Haven cliffs greeted staff as they returned to Skokholm on 12th March; this was the second earliest spring record, one day later than a single in 2000 and six days earlier than the third earliest Island records. A single east on the 27th and three on the 31st were the only other March birds. There were daily sightings in April, including highs of 94 on the 16th, 151 on the 17th and 194 on the 23rd, totalling 1184 birds; this was the highest April bird-days total since 1319 were logged in 1990. Birds were prospecting at traditional nest sites from 24th April, six days earlier than observed last year but six days later than in 2015, and nest material was first seen to be collected on 6th May. Four pairs again took up residence during late May and early June, whilst a fifth pair frequented the ledge above the Wheelhouse door from 20th May but failed to settle. Four breeding pairs matched 2016, 2014, 2012 and 2011, was one down on 2013, two down on 2015 and three down on the 2007 record. May passage was disappointing by recent standards, perhaps due to the increase in the number of birds which went through in April; the May bird-days total of 1163 was the lowest since 2013 and peak counts of 123 on the 6th, 124 on the 7th and 141 on the 10th were the lowest May highs since 2011. The first three cold eggs of the season were noted on 3rd June, one day before a single cold egg logged on the 4th last year and three days before the first of 2015; this pair, in the Lighthouse Smoke Room, had failed by 16th June when adult feathers and an empty nest were discovered, perhaps most likely the work of a Jackdaw. A Jackdaw was seen holding the body of an adult on 17th May, although whether it had caught the Swallow or found it dead was not apparent. A pair at the Red Hut selected one of the purpose built ledges in the gas store and fledged five by 2nd July (below photograph). The unusual Courtyard site was again used this year, with the nest hidden behind a thick screen of Sycamore and Elder; this pair had fledged three by 6th July, nine days earlier than the first from this site last year. The fourth pair built a nest in the new Orchid Bog Hide and had produced four eggs by 5th July, however these were always found to be cold, one was found to be damaged on 9th July and the nest was subsequently abandoned.



As was the case in 2016, three pairs attempted second broods. The Smoke Room pair, which may have included a different adult given the discovery of feathers with the empty first attempt nest, produced three eggs and fledged two on 23rd July following the death of a chick. The Red Hut pair had produced a single egg by 12th July, had four eggs on 23rd July and fledged three by 9th September, again following the death of a chick. The pair occupying the unusually enclosed Courtyard nest had four eggs by 31st July but had failed, probably at egg stage, by 9th August (again probably due to a Jackdaw). Following one successful and one failed clutch, the Smoke Room pair had produced another egg by 2nd August, however this nest was again empty by the 16th. The four

pairs thus fledged 13 young, eight first brood and five second brood individuals. The resulting productivity figure is 3.25 fledglings per pair; although down on the 5.75 recorded last year, this was a figure up on both 2015 and 2014 and only fractionally down on the 2013-2017 mean of 3.5. The only returning bird encountered this year had been ringed as an adult female on 12th May 2016.

The total number of Swallow logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	6	1184	1163	298	488	927	18018	707	0
2016	9	771	2457	349	576	1062	2720	624	0
2015	0	907	1570	360	317	942	11446	729	0
2014	0	946	1220	329	416	454	30693	753	0
2017	3	194	141	17	40	153	12979	136	0
2016	5	184	313	18	74	210	698	292	0
2015	0	112	203	24	15	77	5403	141	0
2014	0	198	176	26	46	45	12000	199	0
	31 st	23 rd	10 th	28 th	25 th	29 th	18 th	8 th	

Four southeast on 18th July was the first indication that birds were on the move and low numbers of passage birds were noted thereafter, including single-figure counts watched crossing the sea and July highs of 31 on the 23rd and 40 on the 25th. Although down on the 1062 of 2016 and the 942 of 2015, the 927 bird-days logged in August was the third highest August total on record and a total of 153 east on the 29th was the fifth highest August count, down on the 210 of the 24th last year, the 300 of the 28th in 1989, the 180 of the 30th in 1961 and the 350 of the 31st in 1959. There were records on every date bar the 27th in September, including 14 further dates with fewer than 20 birds logged, but with highs of 618 on the 1st, 1053 on the 16th, 12979 on the 18th, 698 on the 19th, 722 on the 24th and 721 on the 25th; a monthly total of 18018 was the highest since 2014 and the third highest in any month on record behind the Septembers of 1993 and 2014, whilst the maximum daycount was the highest ever recorded on Skokholm, up on the 12000 logged on 16th September 2014. There were birds on all but one October date to the 12th, including 108 on the 6th and 136 on the 8th, and single-figure counts on seven dates between the 17th and the 27th; two on the latter date were the last of the year, four days earlier than the last of 2016, two days earlier than the last of 2015 and just over a month earlier than a straggler seen in 1932.

Ringing recovery S147183

Originally ringed as one of five chicks, THE RED HUT, SKOKHOLM 20th June 2017

Previously recovered as a juvenile, WELL 9 MIST NET, SKOKHOLM 4th July 2017

Recovered as a juvenile, SKOMER ISLAND, PEMBROKESHIRE 13th August 2017

Finding condition Intentionally taken

Distance travelled 4km at 343 degrees (NNW)

Days since ringed 54

Ringing recovery S190042

Originally ringed as a juvenile, SKOMER ISLAND, PEMBROKESHIRE 16th July 2016

Recovered as an adult female, COURTYARD NET, SKOKHOLM 29th July 2017

Distance travelled 4km at 163 degrees (SSE)

Days since ringed 378

Ringing recovery Z006277

Originally ringed as a juvenile, WHEELHOUSE HELIGOLAND, SKOKHOLM 31st July 2016

Previously recovered as a juvenile, IN THE WHEELHOUSE, SKOKHOLM 15th August 2016

Recovered as an adult, SKOMER ISLAND, PEMBROKESHIRE 13th June 2017

Finding condition Intentionally taken
Distance travelled 4km at 343 degrees (NNW)
Days since ringed 317

Ringing recovery Z182388
Originally ringed as a juvenile, SKOMER ISLAND, PEMBROKESHIRE 19th July 2015
Recovered as an adult female, STREAM NET, SKOKHOLM 24th May 2017
Distance travelled 4km at 163 degrees (SSE)
Days since ringed 675

Ringing recovery Z805531
Originally ringed as one of five chicks, LLAN FARM, RHONDDA CYNON TAFF 26th May 2016
Recovered as a juvenile, WELL HELIGOLAND, SKOKHOLM 29th July 2016 (sic)
Distance travelled 138km at 277 degrees (W)
Days since ringed 64

House Martin *Delichon urbicum* **Gwennol y Bondo**
Common Migrant with record daycounts of 330 in April 1948 and 710 in September 2013
Earliest 20th March 1988 (7th April 2017) **Latest** 29th October 1975 (27th October 2017)
 1936-1976: 17 trapped, 2015: 1 trapped

One on 7th April was six days earlier than the first of last year but three days later than the first two of 2015 and 18 days later than the earliest Skokholm record. There were sightings on a further 13 April dates, including highs of nine on the 11th and 37 on the 23rd, taking the monthly total to 81; although down on the 118 of April 2016 and a record 357 in 1948, this was the third highest April total on record. May proved similarly productive, with records on 27 dates, including highs of 28 on the 6th and 24 on the 11th, one in the volunteer bedroom Eclipse on the 15th and one sat on the ground by the Central Block on the 31st which took the monthly total to 200; there are only four higher May tallies including a record 361 logged last year. There were birds on six June dates including a high of six on the 1st, two seemingly prospecting at the living room window of the Lighthouse on the 17th and the last of the spring on the 26th. The nest boxes installed in the autumn of 2014 at the Lighthouse are still to be used. The first of autumn was over the Observatory on 10th August and there were up to eight birds noted on seven further dates during the month, taking the total to 23. Autumn passage again peaked in September with 226 birds over 11 dates including highs of 26 on the 17th, 37 on the 24th and 91 on the 25th; the monthly total and peak count were the highest since 2014 and the total the third highest since 1997, however there have been 11 higher September totals and 16 higher peak September counts. A total of 32 birds were seen over seven October dates to the 9th, included highs of eight on the 3rd and 8th, and two on the 27th were the last of the year. The only later Skokholm sighting was a single on the 29th in 1975; three of the seven latest records have occurred in the last four years. Although the autumn total of 283 bird-days was well down on record highs of 713 in 2014 and 782 in 2013, it was otherwise the ninth most productive autumn to date, only down on six autumns between 1952 and 1966 when between 293 and 568 House Martins were logged.

Long-tailed Tit *Aegithalos caudatus* **Titw Cynffon-hir**
Vagrant just nine previous records, all bar one between 7th October and 9th November
 1936-1976: 1 trapped

Four which arrived to the roof of Crab Bay Hide during light northwesterlies on the morning of 8th November were later seen at Home Meadow and Orchid Bog (RDB, GE). These were the first Skokholm birds since five on 1st November 2015 and only the tenth record for the Island following one on 12th October 2004, three on 24th October 1993, one on 9th November 1980, three on the 7th

and a single on the 24th and 25th October 1975, eight on 28th October 1973, three flyovers on the early date of 22nd August in 1969 and two on 11th October 1957.



Willow Warbler *Phylloscopus trochilus*

Telor yr Helyg

Abundant Migrant although only Common in some years

Earliest 13th March 2007 (23rd March 2017) **Latest** 31st October 1954 (5th October 2017)

853 trapped, 73 retrapped

1936-1976: 11,665 trapped, 2011-2016: 3361 trapped, 445 retrapped, 7 controls

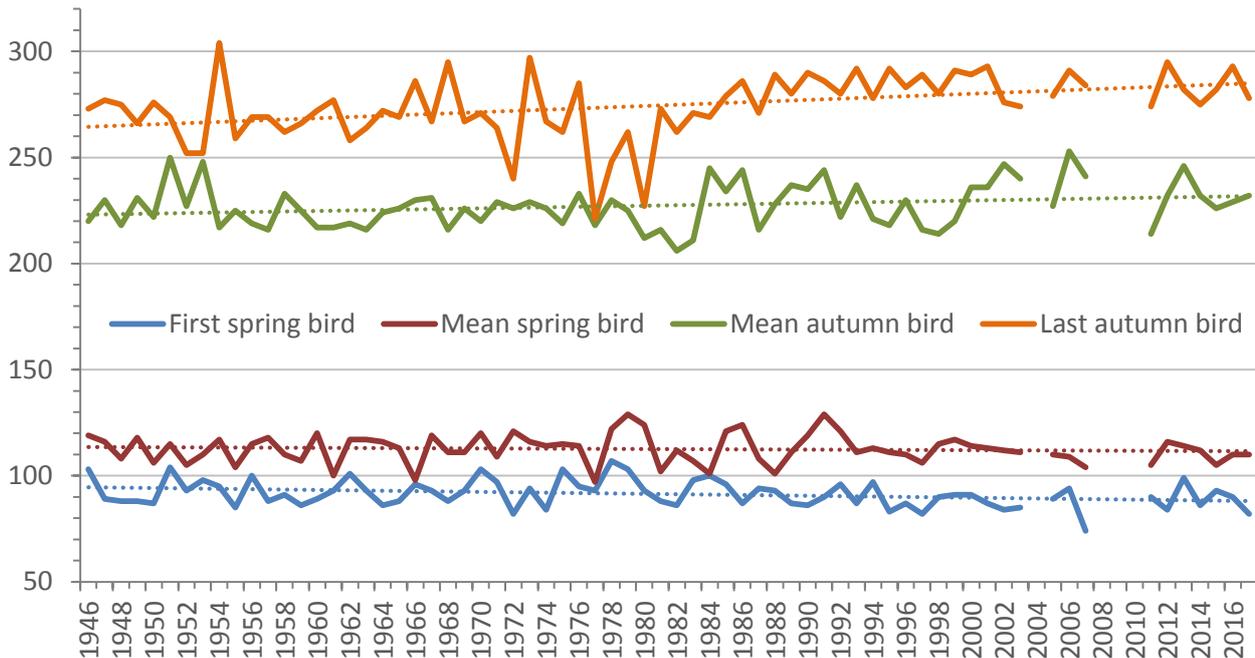
The first five of the year were logged on 23rd March, eight days earlier than the first of last year; singles in 1997 and 1972 also arrived on the 23rd but only in 2007 has there been an earlier arrival, with 13 noted over five dates between the 13th and the 21st. The early 2017 arrivals fit nicely with an analysis of the recently digitised Birdlog data which reveals that the first individual of spring is arriving significantly earlier than it did only six decades ago (see chart below). Singles were logged on five further March dates and there were two on the 31st. There were daily sightings in May, including 16 counts of fewer than ten but with highs of 87 on the 18th, 263 on the 20th and 113 on the 22nd; a monthly total of 954, although only two up on April 2015, was the third highest April total to date and the peak was the second highest spring daycount behind the 300 of 26th April 2012. Despite the earlier start to spring passage, half of counted birds had gone through by 20th April, the same date as the mean 2016 bird; an analysis of the Birdlog data again suggests that the mean spring bird is passing through earlier than it did in the early post-War years. Daily records in May totalled 160, the highest total in this month since 2012 and the 11th highest on record; eight of the highest May totals came before 1993 and fit nicely with the pattern of earlier spring passage in more recent years. As is typically the case, June proved quiet with six bird-days including the last of spring on the 4th; the highest June total was the 26 logged in 2013.

The total number of Willow Warbler logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	12	954	160	6	100	402	70	10	0
2016	4	496	93	0	104	441	116	4	0
2015	0	952	66	7	72	719	282	5	0
2014	23	677	135	9	457	378	550	1	0
2017	5	263	25	4	15	60	10	6	0
2016	4	61	36	0	20	34	13	1	0
2015	0	180	9	2	21	113	61	1	0
2014	15	150	19	1	101	38	134	1	0
	23 rd	20 th	5 th	2 nd	29 th	29 th	1 st	3 rd	

As noted in the previous three years, the vast majority of spring birds moved through very quickly; of 630 ringed during the period, four lingered for between one and three days, one stayed at least seven days, one 38 days and a male was present for 46 days between 12th April and 28th May but was not seen to exhibit any behaviour indicative of a breeding attempt. An early juvenile ringed on 4th July was the first of the autumn, ten days earlier than the first of 2016 and 14 days earlier than in 2015; although there are eight earlier July records, at least some of these were of adults. There were sightings on all but four subsequent July dates including highs of 14 on the 23rd and 15 on the 29th; a monthly total of 100 birds was the lowest since 2015 and the peak count was the lowest since 2013.

The number of days into the year that the first and last Willow Warblers were logged in each year 1946-2017 and the number of days after which the mean spring and autumn bird went through.



As has been the case for the last four years, there were daily records in August, however the total of 402 bird-days, which included highs of 24 on the 4th, 60 on the 29th and 53 on the 30th, was the lowest since 2014. Nevertheless there have only been 16 higher August totals since 1928 and three higher August daycounts in the last five years. September proved disappointing by comparison with daily sightings of up to ten birds to the 9th and records of up to four birds on 14 further dates; a total of 70 bird-days was the lowest since 2011 and the sixth lowest this century. In October there were singles on the 1st and 2nd, six on the 3rd which equalled the record October count logged on the 10th in 2006 and two on the 5th which were the last of the year; although there have been later birds in four of the last five years, the mean autumn passage bird went through on 20th August, three days later than in 2016 and six days later than in 2015. Indeed the digitised Birdlog data reveals that the date on which the mean autumn Willow Warbler goes through has been getting significantly later, a trend which mirrors a shift in the date on which the last bird is logged each year. Documented changes in phenology linked to climate change frequently cite earlier spring arrival dates, however the Skokholm Willow Warbler data suggests that it is departure dates which are changing more rapidly. As was noted in the previous four seasons, autumn juveniles frequently lingered for longer periods; of 223 birds ringed during the autumn, 19 were present for a further one to three days, seven were present for between five and eight days and further singles lingered for 11, 13, 15, 36 and 41 days.

Chiffchaff *Phylloscopus collybita*

Siff-saff

Abundant Migrant although only Common in some years. Bred successfully for the first time in 2015

Earliest 19th February 1998 (12th March 2017) **Latest** 14th December 2000 (8th November 2017)
280 trapped, 121 retrapped, 4 controls
1936-1976: 2565 trapped, 2011-2016: 1370 trapped, 416 retrapped, 5 controls

At least six birds were already present when staff returned to the Island on 12th March; although one day earlier than the first of last year and on the same date as the first of 2015, it would seem quite likely that the first birds of 2017 were missed. There followed records on all but two dates to the end of the month, including highs of 26 on the 16th, 27 on the 23rd and 17 on the 25th, totalling 169 bird-days; this was the second highest March total on record, only down on the 207 of March 1989, and the peak was the fifth highest to date, only down on four counts of up to 60 all logged in 1989. Daily records during April, including highs of 14 on the 2nd and 18th and 26 on the 5th, totalled 248 bird-days; although typical by recent standards (the 2013-2017 April mean is 256), five of the most productive seven Aprils have come in the last five years, including a record 369 bird-days in 2015. For a second year in succession it proved the best May ever, with daily sightings and peaks of 15 on the 11th and 16 on the 12th taking the monthly total to 197; the four highest May totals have occurred in the last four years. It is plausible that this increase in numbers has led to recent breeding attempts; in 2014 a pair lingered between May and October but were seemingly not successful with any nesting attempt and in 2015 a pair successfully fledged at least one, although there was no evidence of breeding in 2016. On 10th May this season a bird was nest lining near the Lime Kiln, however only a single bird was observed and there was no indication that this attempt progressed beyond the construction of a nest. Four spring individuals lingered for between 38 and 58 days, although only males were apparent, and a fifth male held territory for at least 69 days between 25th June and 2nd September but was not known to pair. There were records of up to five birds on all but four days in June, including males regularly singing around the Observatory trapping area. The first juvenile of the year on 9th July, three days later than the first of last season, was probably from elsewhere. As in previous years, the majority of the 197 birds ringed in spring passed through quickly, although, in addition to those mentioned above, six were retrapped the following day, eight were present for between two and four days, eight stayed for between five and eight days and two lingered for ten days.



A Siberian Chiffchaff *P. c. tristis* found in the Courtyard on 28th May was later trapped and ringed (RDB *et al.*). Subsequent mitochondrial DNA analysis of a dropped feather secured the identification and established this as the latest spring record for Britain and Ireland to be confirmed in this manner

(Collinson *et al.*, 2018). It was seen in and around the Courtyard for the following three days but was not found on 1st June (above photograph).

The total number of Chiffchaff logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	169	248	197	50	25	71	208	164	23
2016	57	251	177	24	17	1	88	135	14
2015	18	369	164	97	32	19	178	253	112
2014	73	201	171	64	28	31	482	307	109
2017	27	26	16	5	2	17	49	21	6
2016	14	46	12	6	2	1	15	25	2
2015	3	72	9	8	3	2	41	57	12
2014	12	19	19	4	2	4	133	24	11
	23 rd	5 th	12 th	2 nd	3 dates	29 th	16 th	26 th	1 st

Records of up to two birds on all but nine July dates were perhaps solely attributable to two lingering adults and juveniles which arrived on the 9th and 11th. The same birds were responsible for most of the eight singles logged to 14th August, although a different bird was on the South Coast on the 5th. There followed sightings on all but two August dates including an arrival from the 24th which peaked at 17 on the 29th and ten the following day; the August bird-days total of 71 was the highest on record and the maximum count was only down on the 25 noted on the 30th in 1952. Autumn passage peaked earlier this year with 208 birds logged over 26 September dates, including highs of 23 on the 14th and 49 on the 16th; this was the fifth highest September total to date, down on a peak of 482 in 2014, and the maximum daycount was the highest in September since a record 133 in 2014. Daily sightings in October, including highs of 13 on the 15th and 21 on the 26th, contributed to a monthly total of 164, the second lowest of the last five years but the fifth highest on record. Following six on 1st November, there were daily counts of up to three before the departure of staff on the 9th. Unusually there was no autumn record of Siberian Chiffchaff, this the first autumn in four without a record; despite several *P. c. tristis* having been described in the past on Skokholm, only birds present on 2nd November 2014, 22nd October and 1st November 2015 and on 15th November 2016 have been confirmed using DNA analysis. An absence of staff during the winter months and an increase in the number of birds overwintering in Wales have inevitably reduced the relevance of the early and late dates recorded for this species; winter birds may well be going unrecorded. All of the following ringing recoveries were intentionally trapped.

Ringing recovery FRP 2W3909

Originally ringed unaged, LES PRES LARGEMENT, EVETTE-SALBERT, FRANCE 9th October 2016

Recovered as a first-summer, COTTAGE HELIGOLAND, SKOKHOLM 21st April 2017

Distance travelled 977km at 298 degrees (WNW)

Days since ringed 194

Ringing recovery AVX034

Originally ringed as an adult, DUNGENESS BIRD OBSERVATORY, KENT 10th April 2015

Recovered as an adult, WHEELHOUSE HELIGOLAND, SKOKHOLM 21st April 2017

Recovered as an adult, WELL HELIGOLAND, SKOKHOLM 22nd April 2017

Distance travelled 442km at 282 degrees (WNW)

Days since ringed 742 and 743

Ringing recovery EXX920

Originally ringed as a juvenile, WELL 9 MIST NET, SKOKHOLM 19th September 2014

Recovered as an adult, PORTLAND BIRD OBSERVATORY, DORSET 4th April 2017

Distance travelled 238km at 124 degrees (SE)

Days since ringed 928

Ringing recovery JDK659

Originally ringed as a first-summer, COTTAGE HELIGOLAND, SKOKHOLM 22nd May 2017

Recovered as an adult, PORTLAND BIRD OBSERVATORY, DORSET 24th May 2017

Distance travelled 238km at 124 degrees (SE)

Days since ringed 2

Ringing recovery JDK668

Originally ringed as an adult, COTTAGE HELIGOLAND, SKOKHOLM 25th May 2017

Recovered as an adult, TRUNVEL, TREGAT, FINISTÈRE, FRANCE 6th October 2017

Distance travelled 430km at 172 degrees (S)

Days since ringed 134

Ringing recovery JEH221

Originally ringed as a juvenile, BELVIDE, BREWOOD, STAFFORDSHIRE 21st September 2016

Recovered as an adult, WELL HELIGOLAND, SKOKHOLM 16th October 2017

Distance travelled 237km at 243 degrees (WSW)

Days since ringed 390

Western Bonelli's Warbler *Phylloscopus bonelli*

Telor Bonelli

Vagrant the first for Britain was trapped on 31st August 1948 and a 'Bonelli's sp.' was logged in 1991

1 trapped

1936-1976: 1 trapped

One found during dark and damp conditions on the morning of 24th September initially proved elusive, although it was eventually heard to give a diagnostic upturned 'hweet' on several occasions (TW, SW, RDB *et al.*). It was trapped in the Courtyard mist net, allowing for an assessment of wing shape which supported the identification; the straightened wing chord was 61mm, a length more typical of Western, and the second primary was closer in length to the emarginated sixth than the seventh. The bird had a healthy fat score of four and was not seen the following day.



A dropped feather was retained for mitochondrial DNA analysis, however the record was accepted by the British Birds Rarities Committee before the analysis was made. This becomes the second Western Bonelli's and third Bonelli's for Skokholm following the first for Britain which was trapped and killed on 31st August 1948; identified as a female by R. Wagstaffe of the Yorkshire Museum, the retained specimen allowed for the record to be confirmed as a Western bird when the Bonelli's Warblers were split in 1997. The second Bonelli's Warbler for Skokholm, coincidentally found on 31st August but in 1991, was accepted as such but could not be assigned to a species when the nominate form was split from *P. orientalis*. There were 148 accepted British records of Western Bonelli's Warbler up until the end of 2017 including four in Pembrokeshire, the others coming from Ramsey Island in 2013 and St David's Head in 2011. One claimed here on 30th April 2000 was rejected by the British Birds Rarities Committee; there were 18 acceptable British spring records as of the end of 2015.

Radde's Warbler *Phylloscopus schwarzi*

Telor Radde

Vagrant only one previous record, the first for Wales logged in 1968

1 trapped

1936-1976: 1 trapped

One caught in the Library Net on 26th October was the second for Skokholm and only the fourth Pembrokeshire record of this Siberian leaf warbler (GE, RDB). The first for Skokholm was ringed on 22nd October 1968.



Yellow-browed Warbler *Phylloscopus inornatus*

Telor Aelfelyn

Scarce Autumn Migrant the first for Wales was found on 2nd October 1959. Rare until 2013

Earliest 23rd September 2015 **Latest** 30th October 2016 (**3rd November 2017**)

1 trapped

1936-1976: 2 trapped, 2013-2016: 12 trapped, 3 retrapped

It proved a disappointing year by recent standards, with a single ringed on 3rd November the only bird logged; this becomes the latest Island record, four days later than one on 30th October last year. Although clearly still a Skokholm scarcity, this species has become commoner in recent years, primarily due to its continued breeding range expansion to the west of the Ural Mountains which has resulted in an increase in the number of birds wintering in western Europe. Nevertheless there have still only been approximately 33 Skokholm individuals since the first for Wales found in 1959, although recent ringing has shown that records on consecutive dates, assumed in the past to be the

same individual, may have actually been more than one bird. There have been 15 individuals in the last five years, including a record five last year.

Sedge Warbler *Acrocephalus schoenobaenus*

Telor yr Hesg

Common Migrant and Uncommon Breeder previously a Scarce Breeder

Earliest 6th April 1961 and 2005 (19th April 2017) **Latest** 17th October 1957 (16th September 2017)

153 trapped, 77 retrapped

1936-1976: 1977 trapped, 2011-2016: 675 trapped, 331 retrapped, 12 controls

Three on 19th April were the first of the year, seven days later than the first of last year and the latest arrival since one on the 20th in 2014. There were records on all but one subsequent April date, including a high of 17 on the 20th, totalling 38 bird-days; this was the fourth highest April total and the third highest April daycount to date. Daily records in May, including highs of 19 on the 12th and 16 on the 13th and 17th, took the monthly total to 336, the fourth highest May total on record behind the 575 of 1953, the 376 of 1967 and the 351 of last year. A male retrapped on 3rd May was the first of 15 ringed birds to return this year, four of which were returning adults and 11 of which were 2016 fledglings; there were more confirmed returning birds than in any year since ringing was reinstated, two more than last year. Of the four adults, a female ringed as a juvenile in August 2014 is the oldest known, having been ringed for two years, 348 days. Of 30 juveniles ringed between the 21st and 26th July 2016, five (16.7%) were retrapped this season and a sixth was retrapped on Skomer Island. An accurate census of breeding pairs again proved challenging due to the number of birds which sing on passage, many of which may hold territories without pairing; thus, as in previous seasons, further evidence of a breeding attempt was required.

The number of confirmed breeding pairs 2004-2017.

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
5	7	3	4	-	-	4	13	4	8	9	7	11	13

Birds were first seen with nest lining on 23rd May, 11 days later than the first nest building of 2016 and two days later than the first of 2015. In total 13 pairs showed signs of breeding, two more than last year and, equal with 2011, the most on record; the majority were again situated close to fresh water, with pairs at the Top Tank, near the Red Hut, to the south of Home Meadow and on Isthmian Heath occupying drier areas. Adults were first seen to be provisioning chicks on 19th June, one day earlier than last year and one day later than in 2015. Productivity proved impossible to calculate, primarily due to young birds frequenting dense vegetation, closely positioned territories and the early arrival of fledglings from elsewhere. The 386 birds logged in July, including a new record July daycount of 48 on the 25th and further peaks of 18 on the 16th and 33 on the 29th, was the highest July total ever, well up on the previous tally of 268 logged last year. There were 52 juveniles ringed during the month, this compared with 42 in 2016, 34 in 2015 and 47 in 2014, whilst adults were again nest building in the Cottage Garden on the 13th; although this attempt went on to fail at egg stage, pairs at East Bog, the Red Hut and South Pond were again feeding young from the 10th, 12th and 14th August respectively. The August total of 263, including highs of 25 on the 4th and 17 on the 17th, was the second highest on record, only down on the 335 of last year, whilst the peak was the fourth highest August daycount to date and the highest since 45 were logged on the 30th in 1966. September proved quiet by recent standards, with records on four of the first five days of the month totalling 13 birds and further singles on the 6th, 8th, 11th and 16th; the monthly total was the lowest since 2011 and the last of the year was 11 days earlier than the last of 2016 and the earliest last bird since one on the same date in 2012. There were 101 juveniles ringed during the autumn, this compared with 107 in 2016, 79 in 2015, 86 in 2014 and 70 in 2013.

Ringing recovery S147306

Originally ringed as a juvenile, WELL 9 MIST NET, SKOKHOLM 4th August 2017

Recovered as a juvenile, RESERVE DE CHASSE DU MASSERAU, FROSSAY, FRANCE 16th August 2017

Finding condition Intentionally taken

Distance travelled 552km at 154 degrees (SSE)

Days since ringed 12

Ringing recovery Z006185

Originally ringed as a juvenile, COTTAGE HELIGOLAND, SKOKHOLM 21st July 2016

Recovered as an adult, SKOMER ISLAND, PEMBROKESHIRE 9th July 2017

Finding condition Intentionally taken

Distance travelled 4km at 343 degrees (NNW)

Days since ringed 353

Reed Warbler *Acrocephalus scirpaceus*

Telor y Cyrs

Uncommon Migrant previously Scarce. Bred for the first time in 2016, fledging three

Earliest 17th April 2015 (27th April 2017) **Latest** 30th October 1997 (26th September 2017)

12 trapped, 11 retrapped

1936-1976: 15 trapped, 2011-2016: 39 trapped (including 4 pulli), 24 retrapped, 2 controls

The first definite of the year was singing at the Well on 27th April; although ten days later than the earliest Island record, this was still the seventh earliest bird to date and seven days earlier than the first of last year. A male singing at the same site on the 30th and on every date in May was seen to be ringed on the 2nd and was confirmed as the 2016 breeding male (Z006143) when retrapped on the 7th and 18th. There were two additional birds on the 10th and 11th, with a male at the Farm and a second bird at the Well, and additional singles at the Farm between the 12th and 14th, between the 16th and 18th, on the 20th and on 1st June; at least two individuals accounted for the additional singles, as unsexed birds were ringed on the 13th and 20th May. There was no sign of the Oxwich Marsh ringed female which paired with Z006143 in 2016, nor their three ringed offspring. What was presumed to be the returning male continued to sing on each June day to the 11th and again on each day between the 13th and 25th, however it was not seen to have paired or to exhibit nesting behaviour. Following a seven day disappearance, what was again assumed to be the same male sang at the Well between the 3rd and 10th July and on four dates between the 12th and 16th; although it was not retrapped to confirm its identity, a ring was seen on the 16th. A female at the same site on 9th July had a brood patch but, in contrast to the obvious nest building of 2016, there was no visual indication that a nesting attempt was ongoing. Nevertheless at least one bird was skulking at the Well on the 17th, the female was retrapped on the 25th and one was at the Well on 3rd August.

Following a single on 11th August, the first juvenile of the autumn was trapped on the 12th, six days before the first non-Skokholm juvenile of 2016. Although it is conceivable that this fully-winged youngster was the result of Skokholm breeding, the total lack of any breeding behaviour, from nest building to the provisioning of young which was so obvious in 2016, suggested that this was not the case. A second autumn juvenile was ringed the following day; neither this nor the first youngster were seen again, perhaps another indication that they were migrants rather than Skokholm hatched. A third juvenile was ringed on 17th August when there were further birds at East Bog and the Well, whilst singles at the Well on the 18th and 19th included an unringed bird on the latter date. One of the two birds logged on the 20th was wearing a ring whilst one was not and one trapped the following day was present until at least the 25th. An unringed adult was seen at the Well on the 22nd, as was a juvenile with a ring, and three on the 23rd included another trapped juvenile which lingered until at least the 31st. The only bird seen on the 24th was already marked, another new juvenile and two birds ringed previously accounted for the three logged on the 25th and another new bird, the only individual to be seen on the 26th, was present until at least 2nd September. Three on the 27th included the eighth juvenile to be ringed this autumn, a retrap and one along the Lighthouse Track

which was almost certainly different to those logged previously; the same birds were perhaps the three logged the following day. Two previously trapped juveniles were probably responsible for singles logged each day between 29th August and 2nd September, whilst one at the Knoll on 5th September was perhaps different. A juvenile trapped at the Well on 26th September was the last of the year; there have been later birds in each of the previous three years. A total of nine non-Skokholm hatched juveniles matched the 2016 ringing total; although it is impossible to estimate the number of individuals present in previous autumns based on a list of sightings, record autumn bird-days totals suggest that more birds have visited Skokholm in the last two autumns than ever before.

Marsh Warbler *Acrocephalus palustris*

Telor y Gwerni

Vagrant no previous records

1 trapped

One trapped in the Well Heligoland on 2nd June was the first for Skokholm and the first spring record for Pembrokeshire (RDB *et al.*). Along with differences in structure and plumage, the wing formula confirmed the identification; in the hand the second primary, which had a shorter notch than a Reed Warbler, was longer than the fourth primary and the end of the emargination of the third primary fell level with the tip of the eighth rather than the tenth. The only other Pembrokeshire record was found on Skomer Island by Dave Boyle on the late date of 2nd November in 2009; singles on Skokholm between the 21st and 22nd September 1995 and on Skomer on 23rd September 1993 were both rejected by the Welsh Records Panel.



Melodious Warbler *Hippolais polyglotta*

Telor Pêr

Scarce almost annual 1955-1996 but less frequent subsequently and only eight spring records

Earliest 15th May 2015 **Latest** 12th October 1955 (8th October 2017)

1936-1976: 37 trapped, 2011-2015: 4 trapped, 2 retrapped

One found frequenting the dead Bracken and Elder bush at Boundary Hill, southwest of East Bog, on 28th September was the first since a May single in 2015 and only the eighth this century (SWO *et al.*). Following four blustery days, a bird taken to be the same individual reappeared at the same site on a calmer 3rd October and during a near gale the following day. It was again missing on the 5th and 6th but was found skulking through the large tract of Bracken to the north of Boundary Hill on the 7th

and 8th. Although a probable was seen in flight towards Spy Rock on the 9th, this could not be confirmed. There has only been one later Skokholm record, logged on six dates between the 3rd and 12th October 1955, this one of five previous October birds. A stay of at least 11 days is probably the fourth longest on record, although field sightings of multiple birds have clouded an assessment in some years; if it were indeed the same individual, a bird logged on five occasions during the 15 days between 22nd September and 6th October 1975 would hold the record, with probable stays of 14 days logged in 1962 and 12 days in 1981. Following the first for Skokholm in 1955, there were records of up to three birds in every year to 1971 and in most years up to and including 1996, however the only sighting between 1997 and 2010 was a bird logged on the 30th and 31st May 2002. More recently there were two birds in 2011 (singles between 31st July and 1st August and between the 19th and 20th August), three birds in 2012 (singles between the 2nd and 3rd September, the 15th and 17th September and on 6th October) and the 2015 bird mentioned above.



Grasshopper Warbler *Locustella naevia*

Troellwr Bach

Uncommon Migrant occasionally absent in autumn

Earliest 30th March 1981 (19th April 2017) **Latest** 7th November 1968 (4th September 2017)

8 trapped

1936-1976: 298 trapped, 2011-2016: 42 trapped

Although five days earlier than the first of last year, one trapped on 19th April was five days later than the first of 2015 and on the same date as the first of 2014. A minimum of 15 the following day, including six birds ringed and seven singing males, was the highest daycount since 29th April 1990 when 15 were also logged; a count of 15 was also made on 22nd April 1971 and the only higher April totals are a minimum of 40 on the 28th in 1967 and 25 the following day. There were further April counts of one on the 21st, two on the 22nd, one on the 26th, three on the 27th and two on the 30th; an April bird-days total of 25 was the highest monthly total since 34 were logged in the April of 1990 and an equal 13th highest monthly total (nine of which have occurred in spring, including a spring record of 80 in April 1967). One in South Haven on 2nd May was the last in what was an excellent spring by recent standards; indeed it proved the most productive spring since 1990 and the 20th most productive on record (there were 17 springs with more birds between 1949 and 1972 and just over twice as many were noted in 1989). Autumn was disappointing by comparison with a single south of the Knoll on 4th September the only record; this was in contrast to last year when a total of seven birds proved to be the eighth best autumn on record, down on counts of between eight and 39 birds in six previous years and well down on a remarkable 99 logged in the autumn of 1970.

Blackcap *Sylvia atricapilla*

Telor Penddu

Common but recorded by both Thompson and Betts as Uncommon and Scarce prior to the 1960s

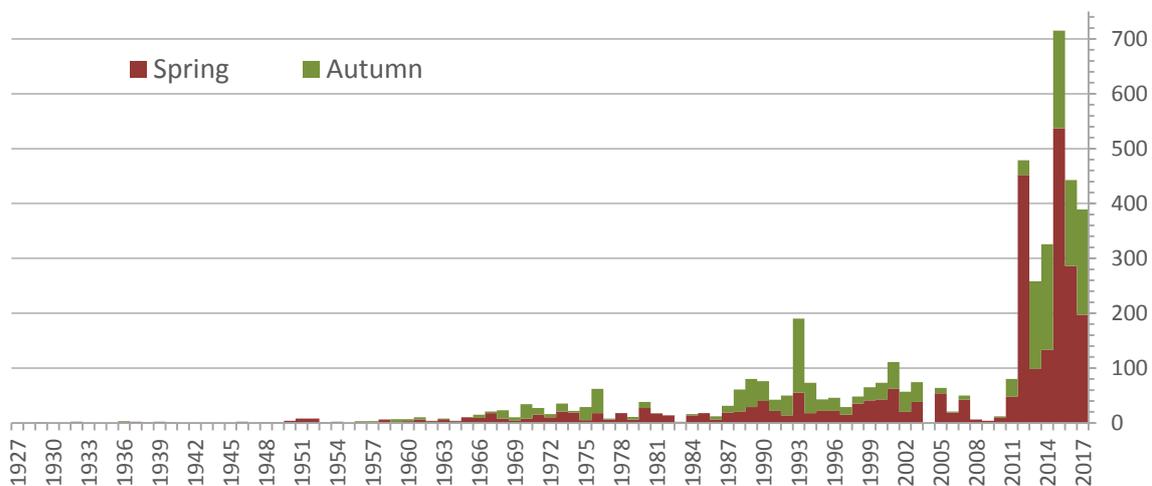
Earliest 9th March 1997 (24th March 2017) **Latest** 2nd December 1996 (8th November 2017)

168 trapped, 23 retrapped

1936-1976: 211 trapped, 2011-2016: 877 trapped, 142 retrapped, 1 control

A female ringed on 24th March was perhaps surprisingly an equal fourth earliest record for Skokholm and the earliest female to date; males on the 23rd in 2013, the 15th in 2012 and the 9th in 1997 are the only earlier records, whilst two males were also present on the 24th in 2011. A single on the 26th and two on the 31st took the March total to four; six in March 2012 is the only higher total in this month. In April there were up to four birds logged on ten dates to the 16th, including the first singing male on the 8th, 11 on the 17th and daily records from then until the end of the month which included peaks of ten on the 18th and 28th, 12 on the 22nd and 68 on the 20th; the latter daycount was the second highest to be logged in any month on Skokholm, only down on the 129 of 15th April 2015, and the monthly bird-days total of 164 was the fourth highest to date, down on the 469 of April 2015, the 276 of April 2012 and the 170 of May 2012. May proved quiet by recent standards, with daily counts of up to four birds until the 6th, up to seven birds on each date between the 9th and 12th and a lone male on the 16th; although there have only been six higher May totals, a total of 27 birds was the second lowest of the last six years, well down on the 2012 record of 170. Single females on the 19th and 23rd were the only June birds; there have been sightings in 18 previous Junes, including each of the last five. As noted for other species, Blackcaps typically moved through quickly during spring; of 105 ringed during the period, the only known lingerers were singles present after one, two and three further days.

The cumulative number of Blackcap logged in each spring and autumn since 1927.



The total number of Blackcap logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
2017	4	164	27	2	1	3	75	107	6	
2016	0	151	122	13	0	0	41	101	15	
2015	0	469	63	5	8	5	53	103	9	
2014	3	114	14	2	1	4	80	90	18	
2017	2	68	7	1	1	2	21	19	3	
2016	0	17	19	3	0	0	6	18	4	
2015	0	129	13	4	1	2	8	12	4	
2014	2	20	4	1	1	2	10	9	4	
	31 st	20 th	11 th	19 th	23 rd	6 th	31 st	16 th	26 th	7 th

A juvenile on 6th July was the only Blackcap to be seen during the month and the first July sighting since 2015; there have been 33 previous July bird-days logged over 12 years since the first in 1956. A single in South Haven on the 23rd and two ringed on the 31st were the only August records and also the first since 2015; there have only been 23 previous August bird-days logged over eight years since the first in 1986. In September there were up to three logged on five dates to the 9th and records on all but four dates between the 11th and 28th which included highs of seven on the 14th and 17th, 21 on the 16th and six on the 25th; a September bird-days total of 75 was only bettered in 2014 and the peak count was the most ever logged in this month, well up on the previous high of ten. In October there were sightings on all but two dates to the 27th, including highs of six on the 1st, seven on the 12th, ten on the 15th and 19 on the 26th; an October total of 107 was a new autumn monthly record, fractionally up on the 101 of October 2016, the 103 of October 2015 and the 104 of October 1993, whilst the count of the 26th was the second highest to be logged in this month behind the 20 noted on the 27th in 1989. Different lone females on the 2nd and 3rd, three on the 7th and a single on 8th November were the last of the year, although no doubt more birds were present following the departure of staff on the 9th. It was thus the second most productive autumn to date, with a total of 192 bird-days only down on the 193 of 2014 and up on the third-highest total of 178 logged in 2015. Of 63 birds ringed in autumn, seven were present for between one and two more days, three more were present for either three or four days and further singles remained for at least ten and 11 days.

Ringing recovery D297660

Originally ringed as a juvenile female, WHEELHOUSE HELIGOLAND, SKOKHOLM 1st October 2015

Recovered as an adult female, TRIMLEY MARSHES, SUFFOLK 10th June 2017

Finding condition Intentionally taken

Distance travelled 453km at 87 degrees (E)

Days since ringed 618

Garden Warbler *Sylvia borin*

Telor yr Ardd

Uncommon Migrant although Scarce between 2005 and 2012

Earliest 6th April 1966 (11th May 2017) **Latest** 2nd November 1968

1 trapped

1936-1976: 172 trapped, 2013-2016: 19 trapped, 6 retrapped

One trapped in the Cottage Heligoland on 11th May was three days later than birds logged last year and in 2013, 17 days later than one in 2015 and 18 days later than one in 2014. One in the Courtyard the following day was perhaps the same bird and the only other sighting of a disappointing year. The spring total was thus the lowest since a single logged in 2009, a stark contrast to the 1980s and 1990s when numbers peaked at 62 in May 1993 and 17 in May 1988. Up to 17 bird-days have been logged in recent autumns which, when coupled with slightly more productive springs, saw the status of this species revised following eight scarce years, however Garden Warbler was again a true scarcity in 2017. The last year without an autumn sighting was 2012.

Barred Warbler *Sylvia nisoria*

Telor Rhesog

Rare Autumn Migrant 19 previous records, including the second for Wales in 1956

Earliest 27th August 2004 (24th September 2017) **Latest** 26th October 1990 (25th September 2017)

1 trapped, 1 retrapped

1936-1976: 3 trapped, 2013: 1 trapped

A first-winter found near North Pond on 24th September was watched as it worked its way east towards the Courtyard; it was subsequently trapped and ringed (RDB *et al.*). It was retrapped in the Wheelhouse Heligoland the following day; in 25 hours and 20 minutes it had increased in weight from 24.1g to 26.2g. This was the 20th record for Skokholm, 12 of which have occurred in September. Of the 19 previous records, one was in the 1950s (the second for Wales on 12th September 1956),

five were in the 1960s, one was in the 1970s, one was in the 1980s, seven were in the 1990s, two were in the first decade of this century and most recently there were records on 8th September 2013 and 24th September 2015; all have been singles bar two birds logged on 30th September 1992.



Lesser Whitethroat *Sylvia curruca*

Llwydfron Fach

Scarce Migrant not recorded every year

Earliest 20th April 2016 (30th April 2017) **Latest** 3rd November 1927 (7th October 2017)

3 trapped

1936-1976: 31 trapped, 2011-2016: 14 trapped, 7 retrapped

One at the Well on 30th April was ten days later than the first of last year (the earliest Skokholm record); in total there have been eight earlier individuals and three more have also been logged on the 30th. A second spring bird was trapped in the Well Heligoland on 4th May. Two spring individuals was down on the four of last year (which matched the record totals of 2002, 1993, 1990, 1984 and 1972), equalled 2015 and was one up on 2014 and 2013. The only autumn bird, found in the Courtyard on 7th October, appeared a good candidate for a Siberian Lesser Whitethroat *S. c. blythi*, however when later trapped the tail pattern and wing formula, with a second primary longer than the sixth, were a better match for *S. c. curruca* (below photograph). An analysis of the mitochondrial DNA held within a dropped feather confirmed the identification as *S. c. curruca* and highlighted the importance of in-the-hand examination when faced with subspecific identification.



The only autumn record of last year was a probable Siberian bird, with a wing formula and tail which supported the identification; a sample collected from this 2016 individual currently resides with Professor Martin Collinson at the University of Aberdeen. The only Siberian Lesser Whitethroat for Skokholm, and one of only two DNA confirmed birds to be logged in Wales, was ringed on 5th October 2014.

Whitethroat *Sylvia communis*

Llwydfron

Fairly Common Migrant previously Common, has bred in eight years (most recently in 1998)

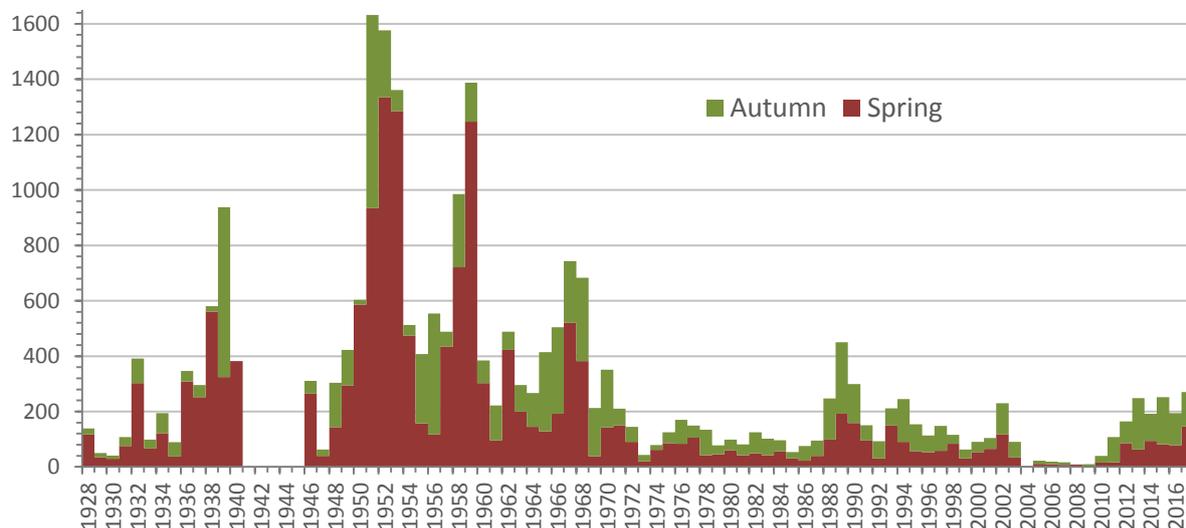
Earliest 5th April 1966 (20th April 2017) **Latest** 30th October 1968 (24th September 2017)

76 trapped, 13 retrapped, 1 control

1936-1976: 5898 trapped, 2011-2016: 278 trapped, 72 retrapped, 1 control

The first of the year in each of the previous four seasons arrived between the 17th and 20th April; this year proved no exception with ten on 20th April the first birds of the year, an arrival on the same date as a single last year but 15 days later than the earliest Island record. Up to six birds were logged on seven further April dates taking the monthly total to 29, the highest April total since 29 were also logged in 2014 and otherwise the highest since 43 were counted in 1968. The peak April daycount of ten matched the 1966 high and was otherwise the highest since 20 were logged on the 29th in 1961. There were daily May counts until the 16th, including highs of 11 on the 5th, 12 on the 8th, 17 on the 11th and 15 on the 12th, and two were logged on both the 19th and 20th; although the peak daycount matched 2016, a monthly total of 100 was the highest since the 113 of 2002. In June there was a single on the 1st and daily records of up to two birds on the 11 dates between the 19th and 29th which included a singing male seen nest building on the 22nd; males were also observed building cock-nests in 2015 and 2014, although there has been no confirmed breeding on Skokholm since 1998. Of 45 ringed during the spring, one retrapped the following day was the only individual known to linger.

The cumulative number of Whitethroat logged in each spring and autumn since 1928.



Singles logged on each date between the 2nd and 5th July included an adult ringed on the 3rd and retrapped on the 5th, a different adult trapped on the 8th was present until the 25th and records of up to three birds on all but three dates from the 12th until the 29th included the first definite juveniles of the year on the 14th, eight days later than the first of last year; a July bird-days total of 29 was lower than in the previous six years when the tally ranged between 30 and 64. In August there were 74 noted over 21 dates including highs of eight on the 20th and nine on the 23rd; this was the third highest August total since 1968, down on the 125 of 1989 and the 105 of 2015. Following a September peak of five on the 1st, there were up to three on five further dates to the 7th, singles on the 13th and on each date between the 16th and 19th and two on the 24th, an adult male and a

juvenile, which were the last of the year; a September total of 21 was fractionally down on the previous four years and the last of the year were two days earlier than the last of 2016. Of 31 birds marked during the autumn, adults lingered for one, two and 17 days, two juveniles remained for at least a day and further youngsters were present for a minimum of three, six, eight and 23 days.

Ringling recovery S190205

Originally ringed as a juvenile, SKOMER ISLAND, PEMBROKESHIRE 25th July 2017

Recovered as a juvenile, COURTYARD NET, SKOKHOLM 23rd August 2017

Distance travelled 4km at 163 degrees (SSE)

Days since ringed 29

Dartford Warbler *Sylvia undata*

Telor Dartford

Vagrant two previous records

The third for Skokholm worked its way west through the dead Bracken surrounding Orchid Bog on 27th October (RDB, GE). The only other Island records are a juvenile in South Haven on 17th October 2015 and a female at the Well on the 1st and 2nd June 1981. The first Dartford Warblers to be found nesting in Pembrokeshire were mapped during the first year of the 2003-2007 Breeding Birds Survey; birds in suitable breeding habitat have subsequently been found in eight tetrads, although the closest to Skokholm are in the west of the Castlemartin Range and near St David's (Rees, 2012a).



Firecrest *Regulus ignicapilla*

Dryw Fflamben

Scarce Migrant recorded in 39 years since 1949, including 22 since 1988. More regular in autumn

4 trapped, 4 retrapped

1936-1976: 23 trapped, 2013-2016: 13 trapped, 8 retrapped

There was no spring individual for the first time in three years; the first of the year was thus a bird found in Crab Bay on 28th September. In October a first-year male was ringed on the 15th and two on the 17th included another first-year male which was logged on eight further dates to the 26th. A fifth autumn bird was found on the 23rd and four on the 26th included the lingering male, a new first-year male ringed and two on the Neck; a daycount of four was the fourth highest to date and the highest since a record seven were logged on 19th October 1967. Two on the 27th comprised an adult male trapped at the Well and an unmarked bird in Rat Bay. Another unmarked bird commuted between North Haven and the Well on 31st October, with what was probably the same bird also noted on 1st November. A minimum of ten autumn individuals was well up on the two of last year and the highest total since 2015 when what were seemingly 11 different autumn birds were logged. Although it is inevitable that more individuals are confirmed in years when ringers are active on Skokholm, 20

autumn 2017 bird-days was more than in any year except 2015, 1968 and 1967 when 39, 27 and 28 were counted respectively.



Goldcrest *Regulus regulus*

Dryw Eurben

Common but only Fairly Common in some years

194 trapped, 33 retrapped

1936-1976: 438 trapped, 2011-2016: 365 trapped, 104 retrapped

In March there were 60 birds logged over ten dates from the 12th, including highs of 24 on the 16th and 13 on the 24th; perhaps surprisingly this was the third highest March total on record, only down on the 94 of 1989 and the 124 of 1974, whilst the peak count was the highest March daycount to date, up on the 20 logged in the same two previous years. April proved quiet by comparison with eight on the 1st, singles on three dates to the 6th and two on the 23rd; up to 112 birds were logged during Aprils in the early 1970s, although the 49 of 2013 is the highest post-1975 total. A male ringed on the 7th and three on the 10th were the only Goldcrests in May and the last birds of the spring; there have now been records in 27 Mays including five of the last six. No ringed birds were retrapped during this period, suggesting that individuals were moving through quickly.



The first of the autumn was found on 13th August, one day before the first of 2016 and two days before the first two of 2015. There were records on seven further August dates from the 22nd, including a record August daycount of 18 on the 30th which took the monthly total to a record 31;

the previous August high was the 19 counted in 2015. September was also record-breaking, with daily sightings including highs of 45 on the 14th, 121 on the 16th, 54 on the 17th, 57 on the 19th, 46 on the 25th and 49 on the 28th, taking the monthly total to 728; the highest previous total logged in any month was the 494 of September 1989, whilst the only higher daycount was the 250 to 300 estimated on 8th October 1959. Numbers remained high in October with birds on every date bar the 21st, peaks of 28 on the 3rd, 26 on the 4th and 46 on the 12th and a total of 344 bird-days logged; although there have been six higher daycounts in this month, this was the third highest October total on record, only down on the 452 of 1988 and the 346 of 1975. Different singles on the 2nd and 3rd November were the last of a record autumn. Goldcrests remained for longer in autumn than they had in spring; 21 of the 185 individuals ringed during the period were retrapped, with 15 still present between one and three days later, four present between five and seven days later and further singles lingering for 11 and 17 days.

Wren *Troglodytes troglodytes*

Dryw

Fairly Common Breeder only noted as a Common Winter Visitor prior to first breeding in 1988

134 trapped, 82 retrapped

1936-1976: 876 trapped, 2011-2016: 388 trapped, 276 retrapped

The 58 territorial males mapped this year included 55 registered over multiple visits and three songsters in discreet areas noted on only one date. The total was two down on 2016 but the second highest on record, one up on the 57 mapped in 2014. The last seven years, all with over 50 mapped territories, are remarkable for the fact that the previous peak in breeding numbers was the 19 territories located in 1994, six years after breeding was first recorded, and the most recent survey prior to the renovation period located only ten territories in 2007. The reason for the substantial increase in the number of territorial males is unclear. The breeding season was seemingly a few days later this year than in 2016, with the collection of nest material observed from 23rd April, the provisioning of food from 21st May and the first fledglings near Spy Rock on 4th June, two days later than the first of last year. Prior to the establishment of Wren as a Skokholm breeding bird, the species was considered a common winter visitor with a substantial arrival noted each October; such an arrival was perhaps again evident in the daily census figures this year (see table below), although it is possible that birds are also more active during this post-moult period. Of 11 retrapped in 2017 which had been ringed in previous years, six ringed as juveniles in 2016 had survived their first winter, two ringed as youngsters in 2015 had survived their second winters, one ringed as an adult in April 2015 had survived at least three winters and one ringed as an adult in October 2014 had survived at least four winters. Additionally ELH901, ringed as a juvenile in the September of 2012 and retrapped for a 24th time on 5th September, had survived its fifth winter; this, our oldest known Wren, has been ringed for five years, three days, this compared with the oldest known in Britain which wore a ring for at least seven years, three months and six days.

The total number of Wren logged each month 2017-2015. Note that the March and November recording periods are different each year.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	768	1322	1090	910	818	1047	860	1111	293
2016	1012	1074	1081	961	758	729	758	1177	627
2015	475	759	714	657	515	522	513	882	465

Starling *Sturnus vulgaris*

Drudwy

Very Abundant bred from 1946, peaking at 53 pairs in the 1960s but last confirmed breeding in 2006

6 trapped

1936-1976: 1082 trapped, 2013-2016: 49 trapped

It proved the quietest March on record, with a single on the 12th, two on the 17th, a single on the 23rd

and the same female on the 26th and 27th the only birds logged; a March bird-days totals of six was massively down on the 590 of 2016, the 117 of 2015, the 260 of 2014 and the 699 of 2013. There was no April record for the first time in the history of recording on Skokholm. A single was at the Well on 4th May, whilst in June a male sang from the garage on the 19th and an adult flew over on the 22nd. A single on the 1st and 2nd July was the first juvenile-plumaged bird to be logged since 2015, a sad reflection of the Pembrokeshire breeding population which saw a 90% decline in numbers between 1988 and 2007 (Rees, 2012b). There followed records on all but one date from the 6th to the end of the month, with peaks of nine on four dates, 11 on the 19th and 29th and 12 on four dates between the 18th and 31st which took the July bird-days total to 201; this was the highest July total since 2006 but well down on peaks of at least 3612 in 1995 and 4516 in 1989. Sightings on all but three August dates, including high counts of 14 on the 7th and 8th and 11 on the 10th and 14th, totalled 217 birds, again the highest total since 2007 but well down on the 4095 of 1991 or the 4833 of 1987. As has become the case in recent years, September proved quiet, with a single on the 1st, three on the 24th and one the following day the only birds logged. Following singles on the 16th and 18th, there were records on all but three dates between 25th October and the staff departure on 9th November, with highs of 48 on the 27th, 113 on the 30th and 96 on the 3rd. An October total of 231 birds was the lowest since 2014, well down on the 1987-2003 mean of 1806, and the curtailed November total of 155 was over 4500 down on each of the previous four years. Although a winter presence would see more logged, the drop in numbers of this red-listed species has been dramatic.

Ring Ouzel *Turdus torquatus*

Mwyalchen y Mynydd

Scarce although sometimes Uncommon and more regular in spring

Earliest 15th March 1955 (16th March 2017) **Latest** 21st November 1989 (26th October 2017)

1936-1976: 51 trapped, 2015: 2 trapped, 3 retrapped

One at the Well on 16th March was the second earliest record for Skokholm, only one day later than a single in 1955. It came on the same date as the first arrivals to the southwest of Britain, with additional singles logged at Portland, Dorset and Newport Wetlands, Gwent. There were no further spring records; a lone spring individual is the poorest showing since 2013, when the only sighting was of one on 22nd March, and was well down on the nine bird-days logged in 2016 and the 18 of 2015. Autumn was similarly quiet with one near the Pig Sty on 26th October the only observation; low autumn counts are typical of late, with two singles logged in 2016, lone birds in 2014 and 2012 and no sightings at all in 2015 and 2013. There have been 21 later bird-days on Skokholm, including eight in November.

Blackbird *Turdus merula*

Mwyalchen

Common Visitor and Scarce Breeder peaking at nine pairs in 1990 but recently seven pairs or fewer
47 trapped (including 3 pulli), 39 retrapped

1936-1976: 1718 trapped, 2011-2016: 311 trapped (including 10 pulli), 211 retrapped, 1 control

Although early spring counts again failed to exceed the total number of Skokholm breeders, there was evidence that migrants were passing through; given that the majority of the Skokholm breeders and young were already ringed, five birds ringed before 27th March and not encountered again were perhaps passage birds. Of eight individuals known to have survived from previous years, three males and a female had survived their first winter, a male and a female had survived a second winter, one male around the Cottage had survived four winters and female LH16008, ringed as a first-winter in March 2013 and subsequently retrapped ten times, had survived five winters and worn a ring for four years, 220 days; the longevity record for a ringed Blackbird is 14 years, 285 days. There were six breeding territories mapped this year, one fewer than in 2016 and 2015, the same as in 2014 and one more than in 2013. Pairs bred near the Wheelhouse, the Cottage, the Well, Isthmian Heath, East Bog and the Hills; although the female of the Well pair was taken by a Peregrine on 27th April, the

male repaired, perhaps with the female ringed in the Well Heligoland on 1st May. Three pulli ringed in the Garage Wood Store had fledged by 7th May, three days before the first fledglings of 2016 and 13 days earlier than in 2015. Productivity again proved difficult to calculate due to overlapping territories, second broods and potentially the arrival of youngsters from elsewhere, however fledglings were seen in five territories, 11 were trapped before 1st September (nine in 2016, seven in 2015, 12 in 2014 and 14 in 2013) and six further unringed juveniles were logged in the same period; productivity was thus a minimum of 2.83 fledglings per pair, up on minimums of 2.29 in 2016, 1.29 in 2015, 2.17 in 2014 and 2.80 in 2013.

As was noted by Betts, Thompson and in recent reports, the number of records declined steeply during the period of adult post-breeding moult in August and September; there were monthly totals of 53 and 88 respectively. Daily sightings in October included the first bigger, ring-less, presumed northern birds logged from the 8th and larger arrivals of 72 on the 26th, 32 on the 27th and 25 on the 30th; the former total was the highest October daycount since the 29th in 1993 and one of only 17 post-1965 daycounts in excess of 70 individuals (although a huge arrival in October 1964 resulted in five daycounts in excess of 100, including approximately 1000 on the 18th). The October bird-days total of 301, although 26 down on last year, was otherwise the highest since 1994 and the 18th highest to date. Daily November sightings until the departure of staff on the 9th included a peak of 39 on the 3rd, two more than the November 2016 peak. There were 27 new birds ringed during the last five weeks of the season.

Fieldfare *Turdus pilaris*

Socan Eira

Uncommon Winter Visitor listed as Fairly Common by both Betts and Thompson

Earliest 14th September 1977 (28th October 2017) **Latest** 13th June 1980

1936-1976: 7 trapped, 2016: 1 trapped

There was no spring record for the first time since 2014 and for only the 18th time since 1928. Three on 28th October were the first of the autumn, eight days later than the first of last year, 13 days later than the first of 2015 and 17 days later than the first of 2014 and 2013. The only other records were three on the 30th and two on 31st October and two on the 2nd, six on the 3rd and two on 4th November. Both the October and November totals were the second lowest of the last five years; the October total of eight was down on the 44 of last year and the 1971 record of 330, whilst the November total of ten, although no doubt impacted by an earlier than average staff departure, was well down on highs of 146 in 2015 and 332 in 1967.

Redwing *Turdus iliacus*

Coch Dan-aden

Common Winter Visitor

Earliest 20th September 2001 (18th October 2017) **Latest** 18th June 1979 (8th May 2017)

19 trapped

1936-1976: 157 trapped, 2013-2016: 82 trapped, 5 retrapped

In March there were two on the 12th, three on the 20th and two on the 26th; a March bird-days total of just seven was well down on the 87 of last year and the lowest since 2014 when just two were noted. A single at Anne's Knoll on the 20th was a typical April total and the last of the spring was ringed on 8th May; there have only been four later spring records, with May singles on the 23rd in 1933 and the 28th in 2014 and June birds on the 13th in 1929 and the 18th in 1979. Three on 18th October were the first of the autumn, 11 days later than the first of last year, seven later than the first of 2015 and 2013 and nine later than the first of 2014. Three were also logged the following day, five were noted on the 25th and an unprecedented arrival on the 26th saw at least 1124 birds grounded in thick fog; this was by far the highest daycount in the history of recording on Skokholm, more than doubling previous highs of at least 350 on 2nd October 1973, 400 on 4th March 1965 and 19th October 1958 and of 500 on 16th February 1929. The majority departed as the fog lifted, with

only 34 logged the following day and a further 45 noted over the next four days; the October bird-days total was thus 1214, the second highest monthly total on record behind the 1781 of October 1973. The November total was disappointing by comparison, with daily records to the 9th, including highs of 26 on the 2nd and 13 on the 3rd and 4th, totalling 75 bird-days; this was the lowest November total of the last five years, although this was in part due to an earlier staff departure.



Song Thrush *Turdus philomelos*

Bronfraith

Common Visitor but breeding has not been recorded

49 trapped, 1 retrapped

1936-1976: 465 trapped, 2013-2016: 169 trapped, 14 retrapped

A typically quiet spring saw March singles on the 12th and 14th, two on the 27th, three on the 28th, two on the 29th and one on the 31st, the latter of which was probably the single logged on the 1st and 2nd April. Two on 19th April were the last of the spring, two days earlier than the last of 2016 and 2015. A single on 24th August was the first of the autumn and was perhaps the same bird also noted on the 25th, 27th and 28th, although it seemingly departed as there was no September sighting for only the second time in five years. In October there were three on the 7th, six on the 8th and five on the 9th before records on all but one date from the 18th which included highs of 142 on the 26th, 69 on the 27th and 44 on the 30th. Thick fog on the 26th, which grounded record numbers of Redwing (see above), also led to this record autumn daycount of Song Thrush, with the total exceeding the previous autumn maximum of 110 logged on 4th November 1967; although a new autumn record, there have been higher daycounts, with up to 350 in March 1965, up to 400 in January 1940, 150 in the December of 1939 and a remarkable 1000 on 16th February 1929. Interestingly at least one of the birds trapped during the 26th October fall had been to Skokholm before; RL33156 was ringed as a first-winter on 2nd November 2015, one year and 358 days previously. Despite the record October daycount, the monthly bird-days tally of 376 was only the seventh highest October total to date, well down on a record 962 logged in 1993. Daily November sightings until the departure of staff on the 9th included highs of 54 on the 2nd, 58 on the 3rd and 41 on the 4th; there have been higher daycounts in ten previous Novembers, most recently including 62 in the Novembers of 2014 and 2013.

Spotted Flycatcher *Muscicapa striata*

Gwybedog Mannog

Fairly Common Passage Migrant

Earliest 19th April 1966 (5th May 2017) **Latest** 23rd October 1968 and 2001 (29th September 2017)

16 trapped, 1 retrapped

1936-1976: 1613 trapped, 2011-2016: 156 trapped, 11 retrapped

The first of the year was logged on 5th May, two days earlier than the first six of last year but six days

later than the first of 2015 and 16 days later than the earliest Skokholm record. There were a further 42 logged over 17 further dates during the month, including highs of ten on the 13th and eight on the 16th; there have been higher May daycounts in 20 previous years, most recently with 12 last year and with a high of 40 on the 10th in 1958. The May bird-days total of 43, although down on totals of up to 72 in the previous two years, was almost identical to the post-War May average of 43.55. Singles on the 2nd and 13th were the only June sightings; although only four bird-days down on last year, this was the lowest June total since 2009 and was well down on the recent high of 35 in 2015. A juvenile ringed on 19th August was the first of the autumn, ten days later than the first of autumn 2016 and six later than the first of 2015. There were further August singles on the 22nd, 23rd and 28th, with two logged on the 29th and 30th. The only September sightings were of one on the 18th, five on the 24th, three on the 25th and two on the 28th and 29th, the latter observation being ten days later than the last of 2016 but two days earlier than the last of 2015 and 25 earlier than the two latest Island records. Although up on the eight of 2012, an autumn bird-days total of 21 was the lowest of the last five years, down on the 38, 77, 61 and 95 logged between 2016 and 2013 respectively.

Robin *Erithacus rubecula*

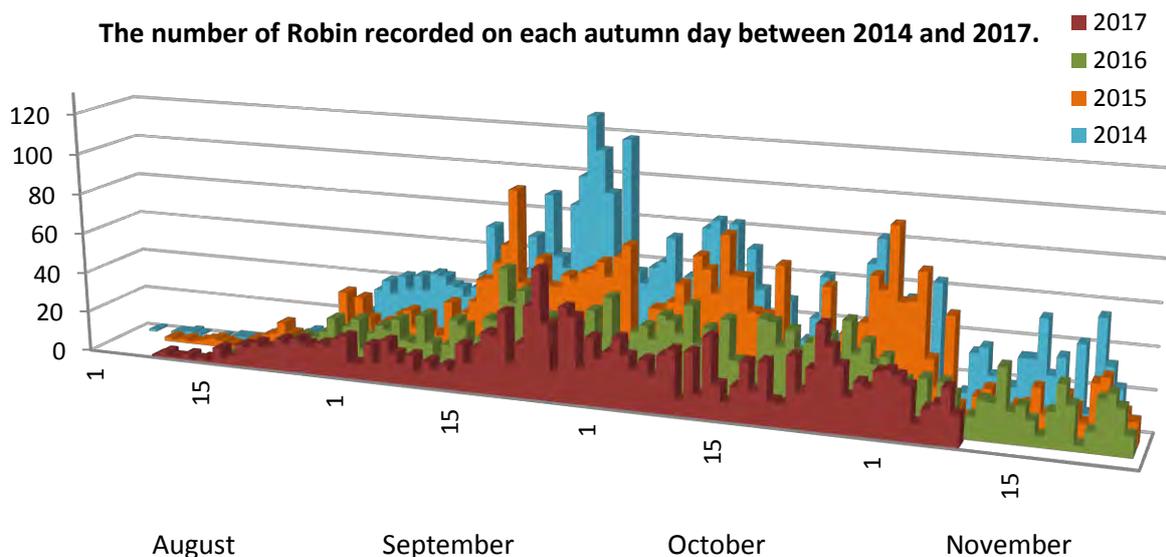
Robin Goch

Abundant Winter Visitor and Passage Migrant bred in 1939, 1940 and 1980

74 trapped, 58 retrapped

1936-1976: 717 trapped, 2011-2016: 476 trapped, 399 retrapped, 1 control

Mid-March saw three birds encountered which had been ringed in previous years, with Z006790 ringed as a juvenile in November 2016 having survived its first winter, D296636 ringed as a first-winter in March 2015 having survived a third winter and D296472 ringed as a juvenile in September 2014 having also survived a third winter. Three spring retraps matched 2015 and 2014 but was five down on last year. There were daily records from 12th March totalling 79 birds, highs of nine on the 28th and eight on the 31st and three strikingly grey continental-type birds on the 28th; although down on the 15 of last year, the peak count equalled the second highest March daycount since 2003. There were daily April records of up to six birds to the 5th, a single for three days from the 9th which in 24 hours put on 1.5g, one on the 14th which had been present since the 4th and three different singles trapped on the 19th, 20th and 30th; both the bird-days total and peak count were up on the post-War April average, but well down on the record year of 2015 when 132 bird-days included a daycount of 17. There was again no indication of a breeding attempt, with at least five different individuals accounting for the seven singles logged in May and the last of the spring on 1st June.



The first of autumn arrived on 9th August, 18 days later than the first of last year, two later than the

first of 2015 and six later than in 2014. There followed daily records to the end of the month, totalling 193 birds and with numbers steadily increasing to highs of 16 on the 25th and 30th and 17 on the 27th; although the maximum daycount was down on the last three years, the bird-days total was, equal with 2015, the third highest to date and only down on the 197 of 1993 and the 198 of 1992. Despite a productive August, the September total of 663, which included highs of 45 on the 24th, 63 on the 25th and 46 on the 28th, was the lowest of the last five years, 153 bird-days down on last year, 535 down on 2015 and 986 down on 2014. As is typically the case, the bird-days total peaked in October, however peak daycounts of 50 on the 26th and 40 the following day were down on the previous month. An October total of 764 was also down on the previous four years, 359 down on last year, 721 down on 2015 and 874 down on 2014. There were daily November records until the departure of staff on the 9th, including a high of 32 on the 2nd. Retrap data showed that at least three autumn birds had been to Skokholm before, with one also seen in spring back for a second winter and two birds ringed in the autumn of 2016 but not seen in spring also back for second winters.

Bluethroat *Luscinia svecica*

Bronlas

Rare 12 previous records, four of which have occurred in spring
 1 trapped
 1936-1976: 6 trapped

A stunning male mist netted at the Well on 27th May was the first Skokholm record since 29th June 1995, only the 13th record for the Island and the 18th for Pembrokeshire (RD, WJ *et al.*). A lack of red feathering amongst its blue throat feathers and a relatively short wing chord of 73mm both suggested that it was not a Red-spotted *L. s. svecica* of northern Europe and Asia, however deducing its origins based on appearance alone becomes more problematic as White-spotted *L. s. cyanecula* of south and central Europe do not always have a white spot, meaning that they closely resemble Blue-throated, Spanish breeding *L. s. azuricollis* and the larger Turkish breeding *L. s. luristanica*. It is perhaps thus no surprise that there is limited genetic variation between all these forms and that this is very much a single species. Nevertheless it is hoped that a retained feather held by Professor Martin Collinson at the University of Aberdeen will provide a sufficiently distinctive genetic signature so as to allow this bird to be linked to a particular breeding area in the future.



Of the 12 previous Skokholm records, the first seven between 1955 and 1968 were all in autumn, whilst four of the latter five were in spring. Following the first for Skokholm, a first winter male *L. s. svecica* on 10th October 1955, there was a first-winter *L. s. svecica* between the 12th and 15th September 1956, a first-winter male on 15th September 1964, a female-type bird on 24th September 1964, another first-winter male *L. s. svecica* on 29th September 1964 (taking the year total to an unprecedented three individuals), one logged on 11 dates between 16th September and 1st October 1967, the only Skokholm record of *L. s. cyanecula* on 20th October 1968, males of *L. s. svecica* on 21st May 1975, 15th May 1982 and 14th May 1985, an unraced male on 27th September 1992 and most recently a male *L. s. svecica* on 29th June 1995.

Pied Flycatcher *Ficedula hypoleuca*

Gwybedog Brith

Uncommon Migrant more frequent in autumn and sometimes absent in spring

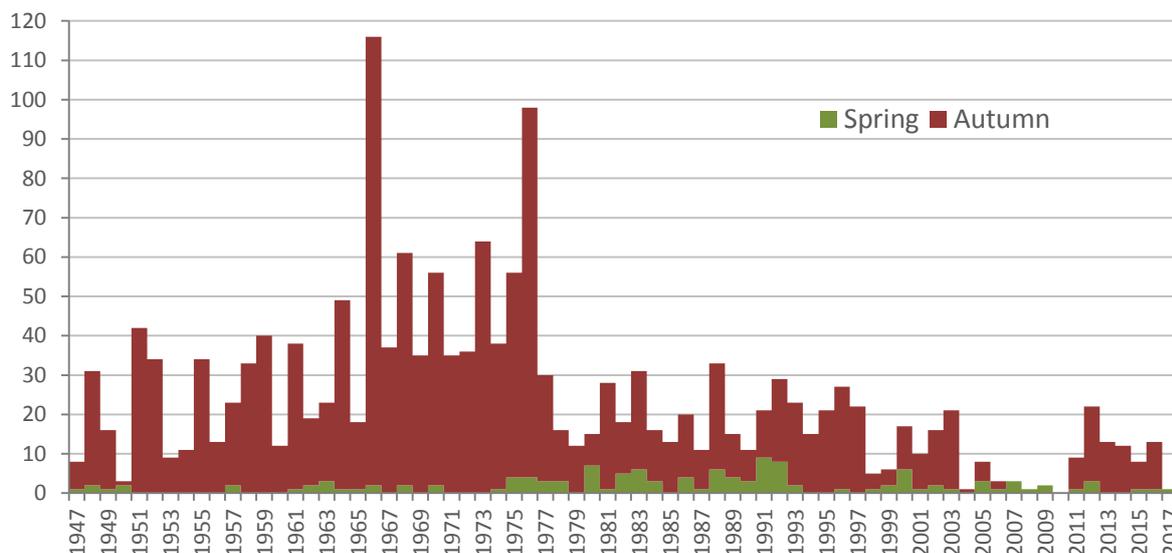
Earliest 10th April 1993 (5th May 2017) **Latest** 17th October 1988

1 trapped

1936-1976: 393 trapped, 2011-2016: 28 trapped, 3 retrapped

A female ringed on 5th May was the only record of the year and, following a female ringed on 8th May last year and a male on 15th April 2015, only the third spring individual since 2012; there have now been records in 50 of 85 springs. Of the 86 autumns with a recording presence, there are only ten previous years without a record. A single 2017 bird-day was down on the 13 of last year and the 2012-2016 mean of 13.6, whilst being considerably down on historical year totals of up to 116 which included regular double-figure counts and a peak daycount of 30 on 30th August 1952.

The total number of spring and autumn Pied Flycatcher bird-days logged between 1947 and 2017.



Black Redstart *Phoenicurus ochruros*

Tingoch Ddu

Uncommon Migrant has probably overwintered on occasion

1 trapped

1936-1976: 100 trapped, 2013-2016: 11 trapped, 2 retrapped

The only March birds were different female-types at the Sugarloaf and the Farm on the 16th. Another female near the Sugarloaf on 15th April was perhaps the same bird found between the Table and the Bluffs on the 18th and between the Quarry and the Lighthouse on the 23rd. A female in Peter's Bay on 14th May was the last of what was a quiet spring by recent standards; six spring bird-days was down on the 14 of 2016, the 19 of 2015, the eight of 2014 and the 23 of 2013. One around the Bird Observatory buildings on 14th October was the first of the autumn, one day earlier than the first of

last year and 12 days earlier than the first autumn records of 2015 and 2014. There followed four on the 19th and a single in South Haven on the 23rd and 24th before numbers increased to two on the 25th, three on the 26th and five on the 27th; the latter count, which included four birds in the vicinity of the Lighthouse, was the highest daycount since six were logged on 30th March 2002, but well down on historical peaks of 37 on 25th October 1968 and a remarkable 50 on 14th March 1948. Following a single in Dumbell Bay on 29th October, there were two on 1st November, singles at the Lighthouse on the 3rd and in South Haven on the 6th and 7th and two on the 8th saw birds at the Observatory and the Lighthouse. Although the propensity for this species to frequent rarely accessed cliffs and the possibility that the same individuals wander widely on Skokholm both make an accurate assessment of numbers difficult, it seems likely that there were at least 18 different birds this autumn, eight more than noted last year and in 2015.



Redstart *Phoenicurus phoenicurus*

Tingoch

Uncommon Migrant

Earliest 1st April 1991 (22nd April 2017) **Latest** 2nd November 1968 (15th October 2017)

7 trapped

1936-1976: 394 trapped, 2013-2016: 21 trapped, 2 retrapped

Females ringed on the 22nd and 30th April were the only sightings during the month; the first was the latest spring arrival of the last five years, ten days later than the first of last year and 14 days later than the first of 2015, whilst the monthly bird-days total was the lowest since 2013. In May a female was at the Well on the 4th, at least two males were around the trapping area on the 6th, a different adult male was ringed on the 7th, a female was trapped on the 10th and a male was in Crab Bay on the 12th. Eight spring individuals was twice the number noted in 2016, one up on 2015 and two up on 2014. Two on 28th September were the first of the autumn, 14 days later than the sole autumn record of 2016. Three birds the following day included at least two different individuals and one was logged on the 30th. One around the Observatory on 15th October was the last of the year and the latest Island record since one on the 17th in 2002. Although never common on Skokholm, this species was, as noted for that other denizen of Welsh woodland the Pied Flycatcher, previously more regular with monthly totals of up to 51 and a maximum daycount of 20 noted on 21st September 1988.

Whinchat *Saxicola rubetra*

Crec yr Eithin

Uncommon previously Fairly Common

Earliest 8th April 1997 (24th April 2017) **Latest** 2nd November 2014 (14th October 2017)

4 trapped

1936-1976: 326 trapped, 2013-2016: 11 trapped, 4 retrapped

A first-summer male ringed on 24th April was 11 days earlier than the first of 2016 but two days later than the first of 2015; the same ringed male was seen on each date to the 30th. A female on Home Meadow on 4th May was perhaps the same bird joined by a male the following day. One of the two males logged on the 6th was trapped and ringed and a lone male logged on the 7th was the last of a typical spring; a minimum of four spring individuals matched 2016 and 2015, was one more than in 2014 and two more than in 2013. Previously double-figure spring totals were the norm, with 43 in May 1989 the most logged in a month and seven in the Mays of 1960 and 1989 the highest daycounts. One near the Lime Kiln on 12th August was the earliest autumn record since one on 30th July 1995, 15 days earlier than the first of last year and two earlier than in 2015. A juvenile in the vicinity of Sugar's Delight on the 13th and 15th was the only other August record. Sugar's Delight again proved attractive to this species on 14th September, when two birds were logged, and a single was on the Neck on the 21st. What was perhaps the same first-winter female between Orchid and East Bogs from the 24th to the 26th was ringed on the 25th, a lone bird was on North Plain on the 28th, three were at the Pig Sty on the 29th and two were present the following day. Following a single on 1st October, there were three on the 2nd, four on the 3rd, one on the 4th and two on the 5th and 6th before what may have been the same mobile bird between the 12th and 14th which was the last of the year; there have been later records in 16 previous seasons, including most recently a bird which lingered until 2nd November in 2014. The autumn total was up on three of the previous four years but well down on historical counts which peaked at 128 in the autumn of 1968, a total which included a record daycount of 40 on 10th September.



Stonechat *Saxicola rubicola*

Clochdar y Cerrig

Fairly Common bred in 1928 and 1932

22 trapped, 2 retrapped

1936-1976: 336 trapped, 2013-2016: 50 trapped

The only March records were of two on the 12th, four the following day and singles on the 14th and 16th; eight March bird-days was the lowest total since 2014 and well down on the 52 of last year. April proved typically quiet with lone females on the 1st and 23rd the only birds logged, whilst a ringed male on 2nd May was one of only 37 bird-days noted in this month since 1933 (the year after Stonechat last bred). An earlier than usual influx from 16th June saw daily records to the 25th, highs

of five on the 19th and four on five dates and a monthly bird-days total of 32; the peak count matched the record Junes of 2008 and 1931, the bird-days total was only down on the 53 of 1931 and two juveniles on the 16th were nine days earlier than the first of last year. A second arrival in July saw daily records between the 5th and 9th, including a high of four on the 6th, before further singles on the 13th, 15th, 18th and 24th; the only other July counts of four were on the 2nd and 3rd in 1990, the same year which produced the only higher July total. There were no August sightings for the first time since 2014. Records on all but one September date from the 16th included highs of seven on the 23rd and six on the 25th; a September bird-days total of 45 was well down on a record 87 logged last year but, equal with 2015, the seventh highest total to be made in this month. There were birds noted on all but four dates in October, including peak daycounts of six on the 3rd and seven on the 20th, however the bird-days total of 65 was considerably down on the 163 of 2014, the 148 of 2015 and the 185 of 2016, the latter of which is the highest count in any month to date. Singles on the 1st and 3rd were the only birds logged during a quiet November.

Wheatear *Oenanthe oenanthe*

Tinwen y Garn

Abundant Migrant and Uncommon Breeder

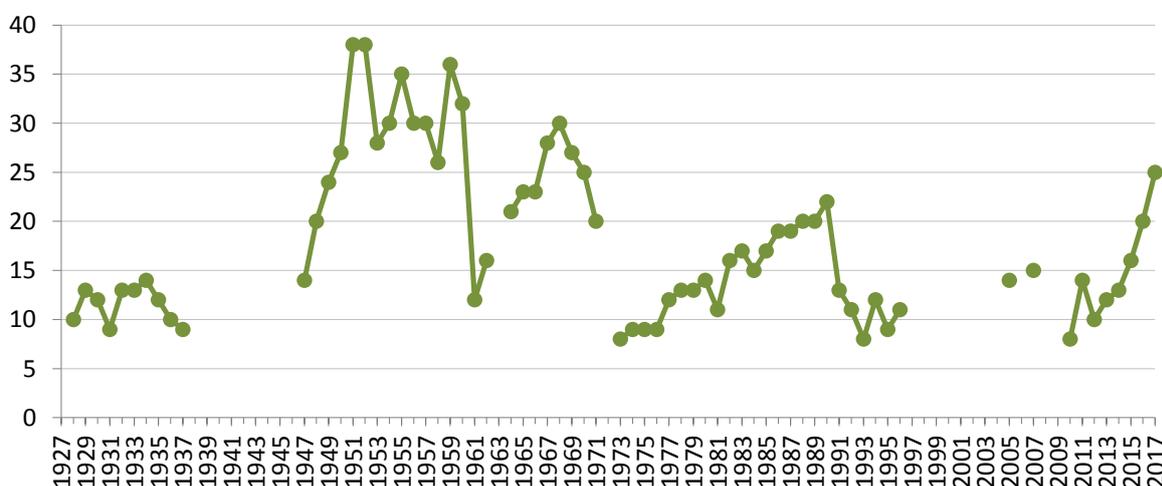
Earliest 2nd March 2003 (12th March 2017) **Latest** 13th November 1999 (29th October 2017)

80 trapped (including 6 pulli), 37 retrapped

1936-1976: 3578 trapped, 2011-2016: 156 trapped, 35 retrapped

Given the relatively late return of staff in 2017, it cannot be assumed that a male around the Dip on 12th March was the first of the year, although it was still five days earlier than the first of last year and only four later than the first of 2015. There followed daily March records totalling 205 birds and highs of 21 on the 25th and 26th and 23 on the 27th, this the highest March total since the 221 of 1967 and the latter daycount one of the three highest in March since 1992. There were 882 bird-days logged during April, 157 fewer than in 2016, but with highs of 108 on the 18th, 61 on the 19th and 46 on the 20th; the former was the ninth highest April daycount to date, down on recent peaks of 151 last year and 127 in 2015 and considerably down on the April record of 1200 logged on the 18th and 28th in 1938. The majority of early migrants were definitely nominate, with the first Greenland-type bird noted on 12th April, six days later than the first of 2016 and two days later than the first of 2015. There followed almost daily April records of *O. o. leucorhoa*, with daycounts peaking at 25 on the 18th and ten on the 19th, whilst in May there were regular records to the 16th (one day later than the last of 2016), including highs of at least 16 on the 4th and ten on the 5th. Ten birds ringed in previous years were encountered during the period, with three males and a female having survived their first winter, two males and two females having survived their second winters and a male and a female ringed as adults in the July of 2015 having both survived a minimum of three winters.

The number of Wheatear breeding territories located each year 1928-2017 (where data exists).



Survey work during the spring revealed 25 breeding pairs, five more than last year and a total seven up on the 1928-2017 mean ($17.97 \pm \text{sd } 8.17$); it was the highest total since 25 were also mapped in 1970, but down on 14 previous years including 1951 and 1952 when a record 38 were noted. There were 37 adults colour ringed during the breeding season, 31 of which were definitely attributable to the mapped pairs; this new colour ringing project sees the birds marked with a green ring inscribed with a unique white alpha-numeric code. The first birds seen with nest material were logged on 15th April, chick provisioning was first noted at the Sugarloaf on 15th May and the first fledglings were logged in three different territories on 29th May; the first fledglings were observed on the 26th last year, the 29th in 2015 and the 23rd in 2014. There were fledglings in the majority of territories, although the increase in territory density, the mobile nature of the young and multiple second broods made productivity monitoring difficult. A minimum of 53 different juveniles were recorded, 32 of which were colour ringed; this equates to minimum productivity of 2.12 chicks per pair, a value down on the 2.65 of 2016 and on each of the previous three years. First brood juveniles were shown to be exceedingly mobile, with several colour ringed birds spending time at the opposite end of the Island to their natal territory, with the short sward around the Lighthouse and North Plain proving particularly attractive. Juvenile A69, ringed on Western Plain on 3rd July, had reached Samphire Hoe, Kent, by 26th July (a 238km easterly journey).



It again proved difficult to detect early autumn migrants, primarily due to the number of breeding birds and their mobile offspring, although August peaks of 40 on the 10th, 36 on the 15th and 43 on the 23rd included passage birds and counts of 25 on the 25th and 36 on the 31st both included only one colour ringed individual. With the exception of 39 on the 1st and 26 the following day, daily counts in September were all of 14 or less, with lows of one on three dates, two on four dates and three on six dates; a monthly bird-days total of 208 was the lowest of the last five years, down on a peak of 612 in 2013. There were daily counts of up to seven birds on all but one October date to the 20th, followed by a single on the 27th and two at the Dip on the 29th which were the last of the year; although 13 days later than the last of 2016, there have been 21 later bird-days including one along the Lighthouse Track on 6th November 2015 and the latest Island record on 13th November 1999. Obvious *O. o. leucorhoa* were only noted on three autumn dates, with two on 2nd September the maximum. This was the third year in a row without a large autumn daycount, the high of 43 being

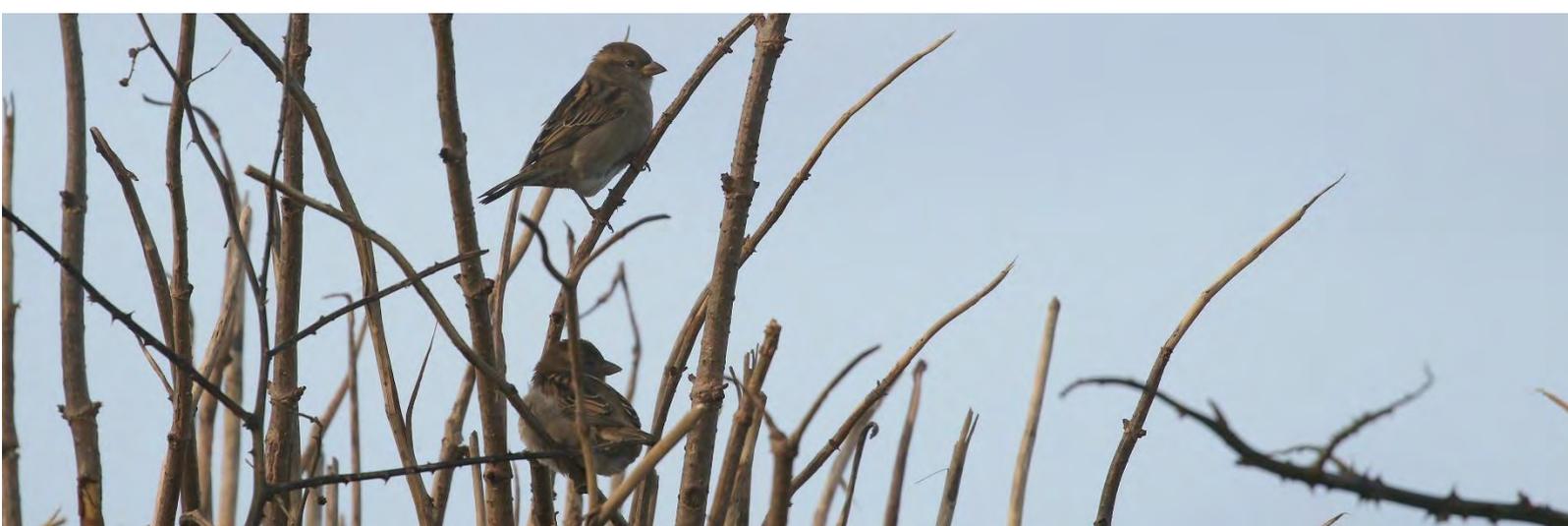
well down on the 123 of 6th September 2014, the 121 of 6th September 2013 and the Island record 207 counted on 9th September 1951.

House Sparrow *Passer domesticus*

Aderyn y To

Scarce although not recorded every year, most recently absent in 2016 and 2010
1936-1976: 20 trapped, 2013-2015: 5 trapped

Two on 17th October were the first since singles on the 19th and 21st April 2015 and the first autumn birds since two on 12th October 2014. There were only eight Skokholm records prior to 1957, then sightings in all but two years until 1978, birds in ten of the years between 1979 and 2004 and most recently 13 records of up to three birds in nine post-2004 years.



Dunnock *Prunella modularis*

Llwyd y Gwrych

Fairly Common Winter Visitor previously a Scarce or Uncommon Breeder with up to 12 pairs
3 trapped, 8 retrapped, 1 control
1936-1976: 304 trapped, 2011-2016: 33 trapped, 50 retrapped

It proved a quiet spring, with March singles on the 12th and 14th and records on all but one date between the 26th and 31st, again singles bar two on the 28th. The only April sighting, and the last of the spring, was a single on the 19th. Although nine spring bird-days was almost identical to the eight logged in the spring of 2014, numbers were well down on the 110 of last year and the 109 of 2015. Unsurprisingly there was no indication of a breeding attempt; breeding was last observed in 2012 when three pairs were mapped and at least two young fledged. One at the Well on 16th September was the first of the autumn, four days earlier than the first of last year. There was a further single on the 26th before an arrival of four on the 28th which was the first of an almost unbroken run of records until the departure of staff on 9th November; there were only two dates in October without a sighting and highs of six on 30th October and the 2nd and 8th November. The autumn bird-days total and the peak counts were the lowest since 2013; there were 119 autumn bird-days and a peak of six this year, compared with 157 bird-days and a high of seven in 2016, 268 bird-days and a high of 14 in 2015, 169 bird-days and a high of 11 in 2014 and 71 bird-days and a high of five in 2013. Dunnock TX22013, ringed as a juvenile in October 2014 and encountered in each subsequent year, was retrapped on 30th October and 3rd November having survived three breeding seasons and worn a ring for three years, 22 days; although birds ringed in autumn are regularly present the following spring, this is only the second individual since 2011 shown to have returned after a summer away (following one ringed in the October of 2013 which returned in September 2014). Additionally one ringed as a juvenile on Skomer Island in August had reached Skokholm by November.

Ringing recovery TS42750

Originally ringed as a juvenile, SKOMER ISLAND, PEMBROKESHIRE 17th August 2017

Recovered unaged, WHEELHOUSE HELIGOLAND, SKOKHOLM 8th November 2017

Distance travelled 4km at 163 degrees (SSE)

Days since ringed 83

Yellow Wagtail *Motacilla flava*

Siglen Felen

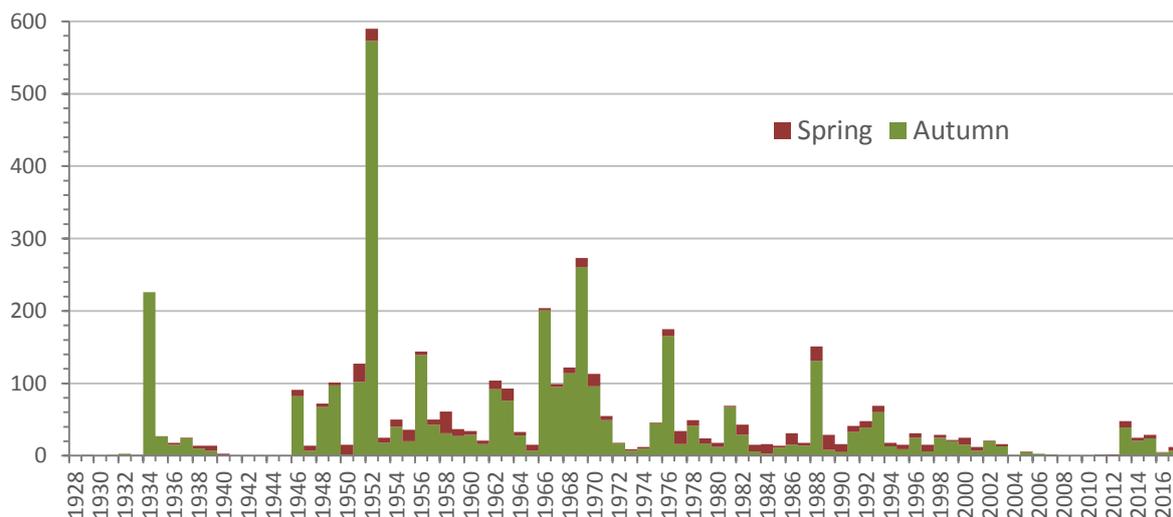
Uncommon previously Fairly Common or Common on occasion and more regular in autumn

Earliest 10th March 1966 (28th April 2017) **Latest** 18th November 1967 (15th October 2017)

1936-1976: 79 trapped, 2013-2015: 2 trapped

A flyover on the morning of 28th April was the first of the year, 12 days earlier than the sole spring record of 2016 but 14 days later than the first of 2015 and 18 later than in 2014. A male *M. f. flavissima* was logged on 2nd May and a fine male blue-headed *M. f. flava* frequented Winter Pond on the 25th and 26th (RDB *et al.*); the latter was the first nominate bird since a male on 19th May 2014 and one of only 16 spring records of this race on Skokholm. A flyover *M. f. flavissima* on 14th June was the last of spring; four spring birds was three up on 2016, one down on 2015 and the same as in 2014, whilst a bird-days total of five was down on the nine of 2013 and a record 30 in spring 1958.

The cumulative number of Yellow Wagtail logged in each spring and autumn since 1928.



Two around Home Meadow and North Plain on 1st September were 12 days earlier than the first autumn bird of 2016, but later than arrivals on the 18th, 20th and 25th August noted in the previous three years. Two, again around North Plain, on 24th September were probably not British birds and at least one mobile single was noted on the 26th and 27th. The last of the year, a single at the Well on 15th October, was taken by a Merlin; this was four days later than the last of 2016, the latest since one on 5th November 1992 and the 15th latest bird-day to be logged on Skokholm. Although up on the four of last year, seven autumn bird-days was down on the 24 of 2015, the 21 of 2014, the 39 of 2013 and the Skokholm record of 573 logged in 1952. Although numbers fluctuate markedly between years and historical highs were probably in part due to the presence of livestock tempting passage birds down to feed, there are seemingly far fewer Yellow Wagtails passing Skokholm than there were 50 years ago.

Grey Wagtail *Motacilla cinerea*

Siglen Lwyd

Uncommon Visitor only 11 birds between 2005 and 2012 but 62 in 2013
1936-1976: 8 trapped, 2013-2016: 1 trapped, 1 control

One over Twinlet on 11th April was 24 days later than the sole spring bird of 2016 and only the 16th individual to be logged in this month. Even more unusual were three west over the Lighthouse on 26th June; only six June birds had been logged previously, with records in five years prior to 2017. This was an above average spring showing for a species described in 1939 as a ‘curiously rare visitor’ and by Thompson (2007) as usually providing only ‘a handful of autumn records each year’; indeed there are only records in 34 previous springs, with highs of five in 2013 and 1973 and six in 1991. One at the Lighthouse on the morning of 13th July was the first July record since 2013 and one of only 15 bird-days to be logged in this month. Following a flyover on 26th August and three over the following day, there were records on 16 September dates to the 26th, totalling 56 bird-days and with highs of seven on the 2nd and 19th and eight on the 25th; although there have been ten higher September daycounts, including a peak of 25 on the 8th in 1960, there have only been two higher totals in this month, with 110 in 2014 and 63 in 1960. In October there were singles on four dates and two on the 25th and 30th, the latter of which were the last of the year; the October total was thus the lowest of the last five years, 31 bird-days down on 2016, however given the productive September, an autumn 2017 total of 69 was only six birds down on 2016 and one down on 2015 (albeit well down on the 2014 record of 123).



Pied Wagtail *Motacilla alba*

Siglen Fraith

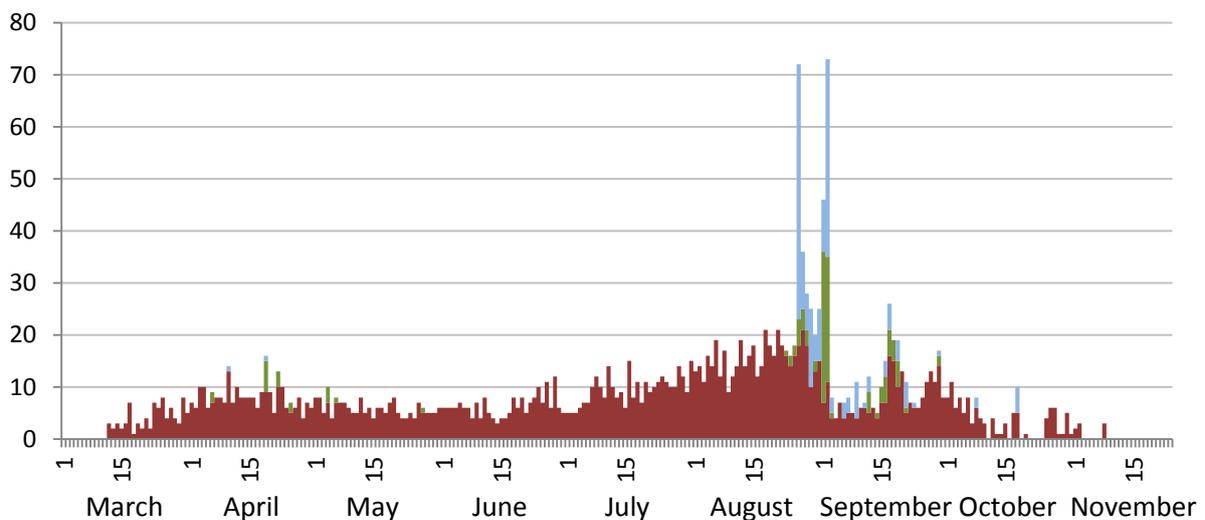
***M. a. yarrellii* Scarce Breeder and Fairly Common Visitor**

***M. a. alba* Common Migrant** flyovers unassigned to race are also Common

***M. a. alba* Earliest** 11th March 1997 (6th April 2017) **Latest** 29th October 1988 (29th September 2017)
 17 trapped (including 2 pulli), 11 retrapped
 1936-1976: 349 trapped, 2011-2016: 118 trapped (including 21 pulli), 46 retrapped, 3 controls

There were daily records from the arrival of staff on 12th March until 11th October; if the Skokholm breeders made their customary winter departure, then they certainly returned before the Island Wardens. The five breeding pairs mapped this year equalled the Skokholm record, was one more than last year and two more than in each year between 2015 and 2013. Three returning birds were encountered during the breeding season, with a male ringed as an adult in August 2015 having survived at least three winters and worn a ring for one year, 244 days (this the first retrapping since it was ringed), a male ringed as an adult in July 2014 having survived at least four winters and worn a ring for two years, 284 days (which was also around the Wheelhouse in 2015 and 2016) and a female ringed as a first-summer in June 2012 having survived six winters and worn a ring for five years, 11 days (which was also at the Well in 2013 and around the Wheelhouse in 2016); the longevity record for a British ringed Pied Wagtail is eight years, nine months and one day. A daycount of 13 on 10th April was the only indication that any *M. a. yarrellii* were present other than the Skokholm breeders. Two White Wagtail at the Lighthouse on 6th April were 21 days later than the first of last year. There were a further six nominate birds logged on 19th April, along with three on the 22nd and two on the 25th, whilst in May there were three on the 4th and singles on the 6th and 27th; a spring total of 18 was down on the 49 of last year but otherwise the highest total since the 75 of spring 2013. Pied Wagtails were first observed nest building at the Cottage on 17th April, two days before the first of last year; food deliveries were first noted at this site on 23rd May and three young fledged, whilst a second nest was constructed in early July and a further two fledged on 11th August. Nearby the Courtyard pair were chick provisioning from 1st June and fledged two from each of two nest attempts. The Lighthouse pair were also successful with two broods, fledging three on 22nd June and a further two in early August. A pair in North Haven fledged two on 11th June but a second nest, which contained five eggs on 2nd July, was later found predated. The Crab Bay pair were first seen provisioning chicks on 31st May and fledged two, however there was no evidence of a second brood. A total of 18 fledglings was three down on the number produced by four pairs in 2016 and a productivity figure of 3.60 fledglings per pair was down on the 5.25 of 2016, the 4.33 of 2015, the 3.67 of 2014 and the 5.00 of 2013.

The number of Pied Wagtail *M. a. yarrellii* (maroon), White Wagtail *M. a. alba* (green) and unraced *M. alba* wagtail (blue) logged during the 2017 season.



Although the peak 2017 count of *M. a. yarrellii*, the 21 logged on 27th August, was below the total number of Skokholm breeders and their offspring, there was still evidence of an autumn passage,

with flyovers occasionally seen well enough to assign them to the British race. Additionally there were 22 dates during the autumn when unraced *alba* wagtails were noted, the majority vocal flyovers, with highs of 49 on 26th August, 15 on 29th August and 38 on 2nd September. The first White Wagtail of autumn was a single at North Pond on 23rd August, five days later than the first of last year but nine days earlier than the first of 2015. There were a further 102 *M. a. alba* logged during the autumn, including September highs of 29 on the 1st and 24 on the 2nd; although up on the 41 of autumn 2016, numbers were thus down on totals of 262 in 2015, 106 in 2014 and 197 in 2013. Two on 29th September were the last White Wagtails of the year, four days earlier than the last of 2016 and 2015 and on the same date as the last of 2014. Following September highs of 16 on the 17th, 15 on the 18th and 14 on the 29th, Pied Wagtail numbers declined during October, with single figure counts from the 3rd and seven dates without a record after the first blank day on the 11th. Up to six arrived in late October but there were only records on three November dates, with up to three birds present before the staff departure on the 9th.

Ringing recovery Z006136

Originally ringed as a first-summer male *M. a. yarrellii*, WELL 9 MIST NET, SKOKHOLM 5th June 2016

Previously recovered as an adult male, HEVILLIERS, MEUSE, FRANCE 5th December 2016

Recovered as an adult male, HEVILLIERS, MEUSE, FRANCE 19th January 2017

Finding condition Ring read in field

Distance travelled 830km at 115 degrees (ESE)

Days since ringed 228

Approximately the 137th British ringed *alba* wagtail to be found in France. British breeding *yarrellii* typically winter within their breeding range or migrate to western France, western Spain and Portugal (with a few reaching Morocco). This resighting is perhaps thus to the east of their normal wintering area, although there are two ringing recoveries from the Mediterranean coast of France and vagrant *yarrellii* have been found in Cyprus, the Czech Republic, Estonia, Finland and Hungary.

Richard's Pipit *Anthus richardi*

Corhedydd Richard

Rare logged in 17 previous autumns and two springs, with peak daycounts of four in 1968 and 1970

A typically vocal and rather skittish bird which dropped into Home Meadow on a drizzly 2nd November also perched in an Elder to the south of the meadow and briefly visited the Knoll before heading off high in a northeasterly direction (RDB, GE); this was the third Skokholm record in four years following singles on 21st October 2016 and 15th September 2014. The only other records this century were on the 4th and 5th October and 10th November 2001 and on 2nd May 2000. There has now been a total of 66 Skokholm bird-days, including four records later than this year's bird, the latest of which was logged on 16th November 1967.

Meadow Pipit *Anthus pratensis*

Corhedydd y Waun

Very Abundant Visitor and Uncommon Breeder

155 trapped, 37 retrapped

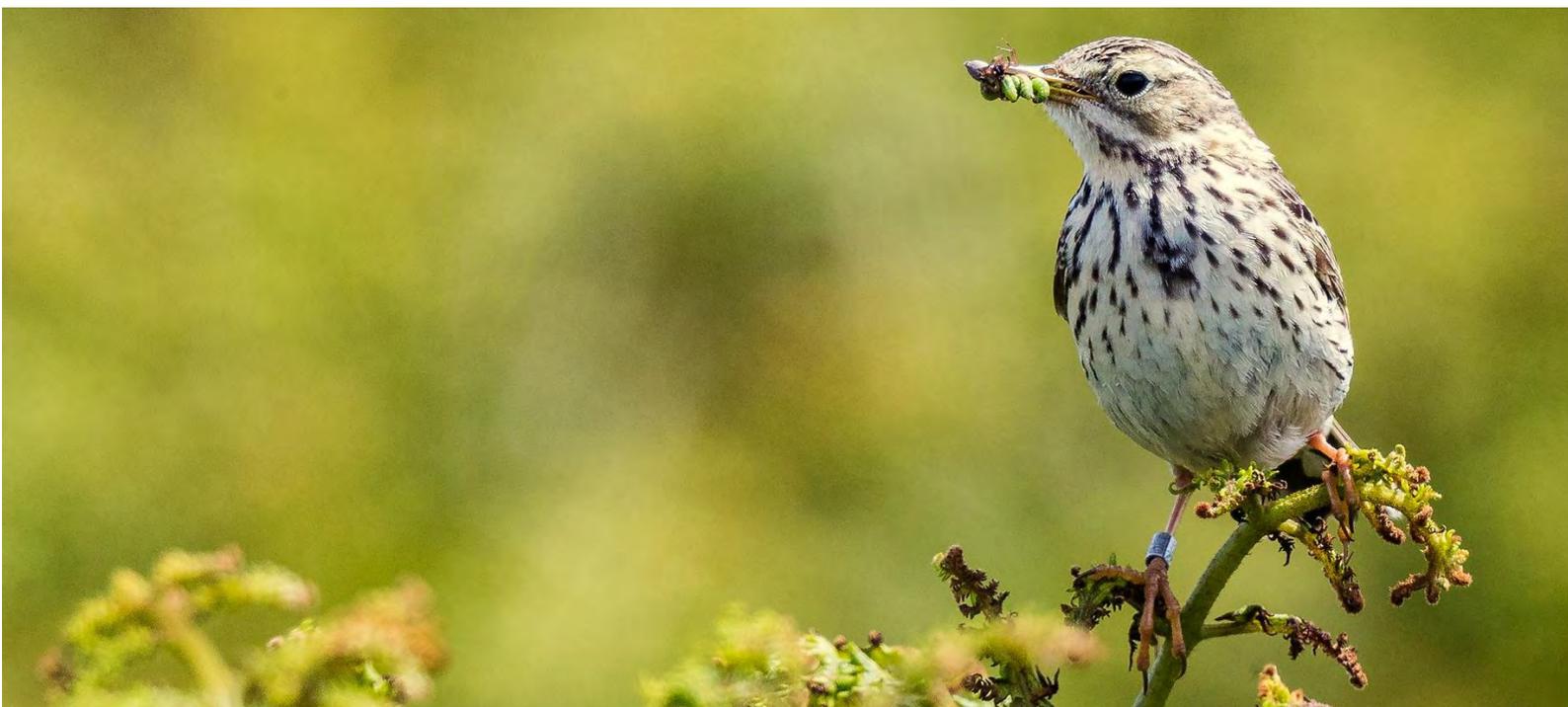
1936-1976: 4102 trapped, 2011-2016: 706 trapped (including 5 pulli), 233 retrapped

The majority of birds were back on territory upon the return of staff, however there were still several small flocks of up to 13 birds frequenting open areas such as the Helipad and Home Meadow. April counts were considerably down on last year, probably reflecting a reduced number of passage birds, however May totals were comparable, as might be expected given the larger number of breeding birds logged during the last two years; survey work during the spring revealed 38 breeding territories and two singing males encountered on only a single visit, the total being just two down on the 40 territories mapped in 2016 and well up on the 30 of 2015 and the 28 of 2014 and 2013. Adults were first seen carrying food on 13th May, two days before the first of last year, however the first fledgling was not noted until 10th June, ten days later than the first of 2016.

Although no attempt was made to monitor productivity, it was apparent that many pairs fledged young; a good breeding season was probably reflected in the July and August counts which were the highest of the last five years. There were 15 birds retrapped which had been ringed on Skokholm in previous seasons, one fewer than reencountered in 2016 and 2015; seven birds had survived their first winter, five birds had survived two winters, two had survived three winters and one, D295059, had survived a minimum of five winters and worn a ring for four years, 35 days.

The total number of Meadow Pipit logged each month, along with the monthly maximum and the date on which the 2017 peak was recorded. Counts from 2016 to 2014 are included for comparison.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017	1046	1380	1230	1007	1772	2636	3559	1261	17
2016	1251	1919	1373	1410	1631	1676	2985	1191	89
2015	1097	1396	874	990	1544	2138	2548	1469	165
2014	821	989	766	879	1148	1548	4184	1340	190
2017	93	73	79	57	107	179	305	160	6
2016	98	109	81	87	78	121	198	203	15
2015	82	89	45	52	81	160	181	161	28
2014	87	47	42	44	73	100	634	113	22
	24 th	6 th	4 th	28 th	18 th	25 th	25 th	18 th	3 rd



Although youngsters were still being fed until at least 22nd August, Meadow Pipits became more gregarious during the month, with flocks of up to 24 birds contributing to nine counts in excess of 100 individuals before a conspicuous exodus on the 27th. Daycounts increased from 16th September with highs of 224 on the 16th, 236 on the 17th, 305 on the 25th and 227 on the 29th; the majority of the totals were made up of large lingering flocks rather than of obvious passage birds. Both the September bird-days total and the peak count were up on the previous two years but down on 2014 and 2013; a daycount of 1353 on 27th September 2013 was the second highest on record, only down on the 2000 of 3rd October 1972. October counts were similar to recent years; following early highs of 128 on the 1st and 114 on the 3rd, number dropped markedly, with fewer than 77 noted on each date to the 18th, when a steady southerly passage saw the daytotal reach 160, and fewer than 26

noted on each date to the end of the month bar 40 on the 25th and 69 on the 27th when there was again a light passage. There were records on only five November dates before the departure of staff on the 9th, with no more than six birds logged.

Tree Pipit *Anthus trivialis*

Corhedydd y Coed

Uncommon although Scarce between 2004 and 2012 and more regular in autumn
Earliest 16th March 1966 (1st April 2017) **Latest** 13th October 1959 (10th October 2017)
 2 trapped
 1936-1976: 122 trapped, 2013-2015: 3 trapped, 1 retrapped

One at East Bog on 1st April was the first to be seen in Pembrokeshire and, equal with a single in 1976, the second earliest Skokholm sighting; one on the 16th in 1966 is the only March record. There followed singles on the 15th, 18th and 19th, two on the 20th and singles on the 21st, 22nd and 30th, the first of which was trapped and ringed. Further singles on the 5th, 8th and 10th May were the last of the spring; although down on the 17 of 2015, a total of 12 spring bird-days was otherwise the highest since the 14 of 1991, albeit somewhat down on the Skokholm record of 34 logged in 1964. One over the Observatory on 20th August was the first of the autumn, three days later than the first of last year, two later than the first of 2015 and three earlier than the first of 2014 and 2013. A single was along North Pond Wall on the 22nd, four on the 26th included the second to be ringed, one went east on the 29th, ten on the 30th included a group of five and one which briefly sang from the Bracken and three were noted on the 31st; the 30th August count of ten was, equal with that of 8th September 1953, the third highest daytotal on record behind the 12 of 7th September 1966 and 25th August 1973. In September there were two on the 1st, a single the following day, two on the 24th and again a single the following day. One which spent the day in the vicinity of the Farm on 10th October was the last of the year and the last to be logged in Pembrokeshire; there have only been three later Island records, with singles on the 11th in 1997 and 1988 and on the 13th in 1959. A total of 27 autumn bird-days was the highest since the 31 of 1991, down on peaks of 62 in 1971, 63 in 1966 and 79 in 1959.



Rock Pipit *Anthus petrosus*

Corhedydd y Graig

Scarce Visitor and Uncommon Breeder with a high of 67 pairs (1959) and a low of 17 pairs (1983)
 47 trapped, 7 retrapped
 1936-1976: 2593 trapped, 2011-2016: 206 trapped (including 2 pulli), 81 retrapped

There were no spring birds resembling Nordic breeding *A. p. littoralis* for a third consecutive year, indeed there was no indication that birds logged were anything other than the Skokholm breeders;

there are records of *A. p. littoralis* logged in seven previous years, most recently with one on 22nd March 2014. The breeding population continued its rapid growth, with 61 territories mapped during spring survey work; there were 53 singing males mapped in 2016, 44 in 2015 and 34 in 2014. There was an increase in the number of birds nesting on the plateau of the Island, perhaps due to crowding around the coastal reaches; there were four more inland pairs this year, with territories at the Table, the Sugarloaf, West Garden Rocks, the Tabernacle, Wheatear Rock, Bread Rock and Boundary Hill. Adults were first seen provisioning chicks on 3rd May, 11 days earlier than the first of last year, and the first fledgling was seen at Peter's Bay on 28th May, three days before the first of last year but nine days later than the first of 2015. Second broods were seemingly attempted in some territories, with nest building around the Neck on 12th June the latest observed. Daycounts increased from mid-August as birds made their customary move up onto the plateau, with ten three-figure counts from 23rd August including highs of 137 on 25th September and 122 on 26th September; despite the increase in the number of breeding pairs, the peak daycount was thus one down on that of last year and eight down on 2015.

Chaffinch *Fringilla coelebs*

Ji-binc

Fairly Common to Abundant listed by both Betts and Thompson as Common to Very Abundant

16 trapped, 1 retrapped

1936-1976: 255 trapped, 2013-2016: 37 trapped, 2 retrapped

Although the number of Chaffinches logged each spring has always fluctuated, it again proved one of the poorer springs on record for a species which at one time overwintered in small numbers. Indeed the only spring records were of a single at the Well on 25th March and an adult male on 18th May. Four at Spy Rock on 26th September were the first of the autumn, 13 days earlier than the first of last year; perhaps surprisingly there have only been records in 26 previous Septembers, including three of the last four. Following a mobile single on the 6th and two on both the 9th and 10th, there were records on all but one October date from the 18th, including highs of 21 on the 18th, 248 on the 26th, 62 on the 27th, 85 on the 30th and 29 on the 31st; the 26th October count, which included a single flock of at least 170 birds, was the highest in this month since 900 were logged on the 29th in 1993 but well down on the daycount record of 3200 logged on the 22nd in 1966. In November there were daily sightings until the departure of staff on the 9th, totalling 804 bird-days and with highs of 56 on the 1st, 51 on the 2nd and 622 on the 3rd; the latter daycount, which included east bound flocks of 240, 113, 102 and 66, was the highest in November since a minimum of 2700 on the 2nd in 1968 and the third highest count to be made in this month, also down on the 1200 logged on 4th November 1967.

Brambling *Fringilla montifringilla*

Pinc y Mynydd

Uncommon although Scarce on occasion and with records in only 15 springs

Earliest 25th September 1976 (10th October 2017) **Latest** 27th April 1949

2 trapped

1936-1976: 5 trapped, 2013-2016: 2 trapped

There was again no spring record, with a female on 17th April 1997 remaining the most recent. A flyover on 10th October was thus the first of the year, ten days earlier than the first of last year and the earliest autumn record since two on 7th October 1992. Following a further single on the 17th, there were four on the 26th, two the following day which included only the eighth to be ringed on Skokholm, nine on the 30th which included one eaten by a Merlin and five on the 31st; a total of 22 bird-days was the highest in any month since the 27 of October 1993 and the 14th highest monthly total to date, albeit massively down on record highs of 223 in October 1973 and 1382 in October 1966. In November there were three on the 1st, ten on the 2nd, a single on the 3rd, three on the 6th including the second bird to be ringed in 2017 and three on the 8th which were the last to be logged before the staff departure; the 2nd November daycount was the highest since an impressive 70 were

logged on 27th October 1975, but well down on the record October 1966 highs of 375 on the 24th and a quite remarkable 800 on the 22nd.



Hawfinch *Coccothraustes coccothraustes*

Gylfinbraff

Vagrant only four previous records

1 trapped

1936-1976: 1 trapped

The easterly airflow brought about by Storm Ophelia transported remarkable numbers of Hawfinch into Britain and produced an unprecedented sequence of records on Skokholm. The first was a female found late on the evening of 15th October at the Well; it was still present the following morning (RDB, GE). A first-winter female in Crab Bay on 23rd October later moved to the Cottage Garden where it was trapped and ringed (RDB, GE). A third bird briefly alighted in the Courtyard on 31st October (GE, RDB) and the last of the year headed east over Crab Bay and South Haven on 7th November (GE). The only previous Island records were singles on 4th June 1949, 22nd May 1952, the 15th and 16th October 1957 and, most recently, 7th May 1989.



Bullfinch *Pyrrhula pyrrhula*

Coch y Berllan

Vagrant only three previous records

1 trapped

1936-1976: 2 trapped

A first-winter female which spent the day around the Farm on 3rd November was trapped in the Cottage Heligoland (GE, RDB). The only other Skokholm records are of a male and female ringed on 25th July 1972 and singles on 30th October and 30th November 1997.



Greenfinch *Chloris chloris*

Llinos Werdd

Uncommon but recorded by both Betts and Thomson as Fairly Common or Common

1936-1976: 93 trapped, 2011: 4 trapped, 1 retrapped

There was no spring record for a second consecutive year and for only the ninth time since 1946. Three on 18th October were the first of the year, seven days earlier than the first of last year. The only other records were of two on the 25th and four on the 31st. Nine bird-days was up on the five of last year and the two of 2014 and 2013, but down on the 11 of 2015, the 19 of 2012 and the 25 of 2011. Although historical counts have fluctuated, there have been 12 autumn totals in excess of 200, most recently the 251 of 2003, and highs of 422 in 1976, 525 in 1966 and 581 in 1939. Since the eight birds logged in 2005, there have now been records in nine years totalling only 82 birds.

Linnet *Carduelis cannabina*

Llinos

Common bred in 1929, 1997 and 1998

1 trapped

1936-1976: 63 trapped, 2011-2016: 37 trapped

Following a lone flyover on the 14th, there were records on seven further March dates, with highs of three on three dates taking the monthly total to a typical 14, nine more than noted last year and five more than in 2015. The usual April increase in numbers saw records on every date, with four or fewer on 22 dates but highs of 14 on the 9th and 19 on the 19th contributing to a monthly total of 135 bird-days, the lowest of the last three years but the ninth highest April total since records began (the April record being the 333 of 1960). In May there were singles on four dates to the 5th, three on the 7th, singles on the 10th and 17th, a male singing on Home Meadow on the 23rd, one at the Lighthouse on the 25th and finally a singing bird at the Farm on the last day of the month; a May bird-days total

of 12 was the second lowest of the last five years, down on a 1927-2017 mean of 33.94. There was no June sighting for the first time since 2012, July singles over on the 7th and 19th led to the lowest July total since 2013 and two on 24th August was the only record of a typically quiet month. Linnets were only noted on two September dates, fewer dates than in any year since 2010, however a passage of 46 on the 25th and 63 on the 26th led to a monthly bird-days total of 109; there have only been four higher September totals and one higher daycount in this month, with both records set in 2015 when there were 270 in the month and a high of 137 on the 30th. There were records on 16 October dates, including peaks of 40 on the 3rd, 38 on the 6th and 42 on the 8th which took the total to 225; there have been 26 higher October totals including the 779 of last year which was the fourth highest count to be logged in any month, down on October maxima of 939 in 1975, 849 in 1966 and 911 in 1959. Following 12 on the 1st, there were three birds logged on each of three November dates and a single on the 6th which was the last before the departure of staff; of the November record 188 bird-days logged in 2016, 182 occurred after the 2017 departure date, including the 113 of the 24th which is the November daycount record.

Lesser Redpoll *Carduelis cabaret*

Llinos Bengoch Leiaf

Uncommon recorded by both Betts and Thompson as Scarce

4 trapped

1936-1976: 16 trapped, 2013-2016: 6 trapped

A flyover on 15th April was one day later than the first of last year. Two went over on 22nd April and there were further flyover singles on the 23rd and 24th; although down on the ten of last year, five bird-days equalled the second most productive Aprils of 2004 and 1960. There were no May records for only the second time in six years and no June record for the third time in five years, however one in the Courtyard on 11th July, which was later trapped and ringed, was only the 22nd to be logged in July. What was perhaps surprisingly the third best September to date saw only three on the 25th, an adult male the following day and a flyover on the 28th, whilst in October there were records of flyovers on six dates including highs of eight on the 25th and 16 on the 27th; an October bird-days total of 29 was the second highest to date, only down on the 43 of 1959, and the peak count was the fourth highest to be made in any month, only down on the 17 logged on 12th October 1959 and 28th September 1972 and the 21 of 14th May 2016. In November there were three on the 1st, four the following day including one trapped at the Well, two on the 3rd which included a bird with a ring (assumed to be the individual from the 2nd) and flyover singles on the 4th and 6th; despite the earlier than normal staff departure, 11 November bird-days was a new Skokholm record.

Goldfinch *Carduelis carduelis*

Nico

Common but recorded by both Betts and Thomson as Fairly Common

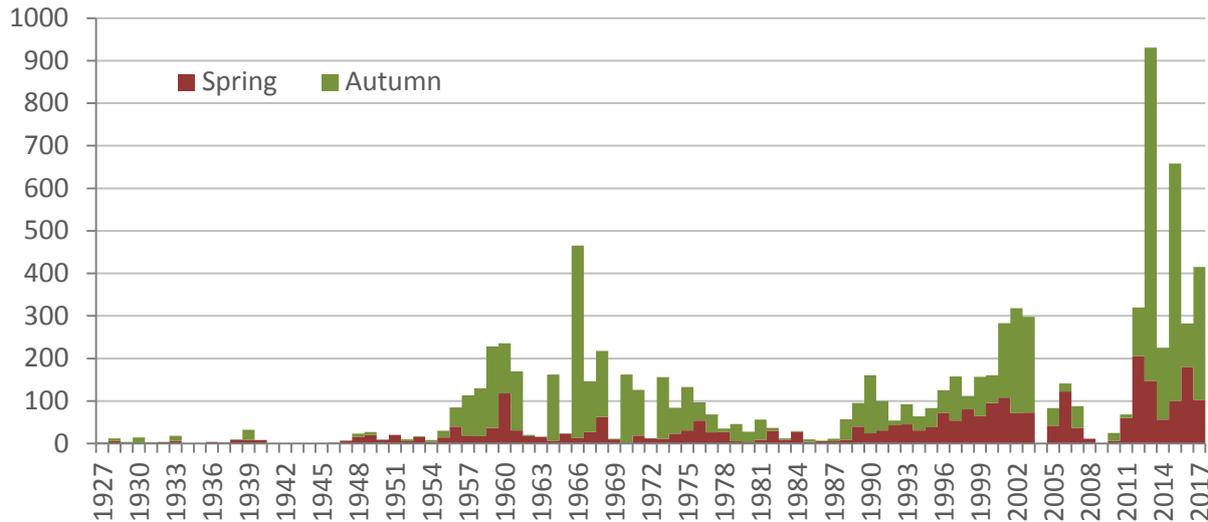
9 trapped, 2 controls

1936-1976: 65 trapped, 2011-2016: 91 trapped, 3 retrapped

March singles on the 24th, 26th and 31st were the first in what was to be a notable year for this species; it proved to be the first year on record with a sighting in every calendar month between March and November inclusive. There were birds on 22 April dates, with a male holding territory on the 14th, one or two logged on 15 dates and highs of eight on the 9th and 20th; an April bird-days total of 59 was eight up on last year and the second highest to date behind the 112 of 2012. May proved quiet by comparison with up to three noted on 16 dates, totalling 32 birds; there have been 12 higher May totals including a record 113 last year. Following a single on the 1st, there were sightings of a pair on four June dates, however there was no indication of a breeding attempt. In July there was a single on the 2nd and 3rd and the first two juveniles of the year were logged on each date between the 27th and 29th; there were unaged flyovers in July 2016, although the first definite youngster was not logged until September, whereas the first juveniles of 2015 occurred one day earlier than in 2017. Records of what may have been the same mobile juvenile on seven dates from

15th August made 2017 only the fifth year with an August sighting. There were Goldfinch on seven September dates from the 15th, including highs of 40 on the 15th, 21 on the 19th and 43 on the 25th; a total of 120 birds was the highest to be recorded in this month and the peak count was the second highest, only down on the 63 logged on the 30th in 2015. Autumn counts again peaked in October, with 159 bird-days logged over 23 dates including highs of 15 on three dates, 20 on the 12th and 23 on the 29th; although up on the 73 birds of October last year, the total was down on five previous years including highs of 449 in 1966 and 746 in 2013 (which included 138 on the 10th and 285 on the 14th, the two highest daycounts on record). In November there were six on the 1st and 2nd, three on the 4th and singles on each date between the 7th and the departure of staff on the 9th.

The cumulative number of Goldfinch logged in each spring and autumn since 1927.



Ringling recovery S190115

Originally ringed as a first-summer male, SKOMER ISLAND, PEMBROKESHIRE 7th May 2017

Recovered as a first-summer male, STREAM NET, SKOKHOLM 27th May 2017

Distance travelled 4km at 163 degrees (SSE)

Days since ringed 20

Ringling recovery S190156

Originally ringed as one of five chicks, SKOMER ISLAND, PEMBROKESHIRE 8th July 2017

Recovered as a juvenile male, WHEELHOUSE NET, SKOKHOLM 27th October 2017

Distance travelled 4km at 163 degrees (SSE)

Days since ringed 111

Siskin *Carduelis spinus*

Pila Gwyrdd

Uncommon sometimes Scarce and with records in just ten springs

1 trapped

1936-1976: 37 trapped

There was no spring record for the fourth time in six years; Siskin numbers vary considerably between seasons, with birds only logged in 38 previous years including ten previous springs. An east bound flyover on 3rd October was the first of the year, 13 days later than the first of 2016. There were sightings on a further 11 October dates from the 7th, including highs of 31 on the 18th and 24 on the 27th which took the monthly total to 111; there were also 111 birds logged in the September of 2015, with the only higher monthly totals being the 171 of October 1959, the 210 of October 1975, the 405 of October 1993 and the 2156 of October 1988, the latter of which included remarkable daycounts of at least 1200 grounded by fog on the 26th and 800 the following day. Surprisingly, given

that staff left the Island on the 9th, a November total of ten, with five on the 1st, a single on the 2nd and four on the 3rd, was the fifth highest in this month to date. A first-winter male trapped in the Library Net on 3rd November was the first to be ringed since the Bird Observatory was reaccredited.



Myrtle Warbler *Setophaga coronata*
Vagrant no previous records
 1 trapped

Telor Myrtle

A singing first-summer male found in the Courtyard on the morning of a glorious 18th June was subsequently trapped and ringed (GE, RDB, *et al.*). This was the first for Skokholm, the 22nd for Britain and the second for Wales and Pembrokeshire following a first-winter bird present on Ramsey Island between 31st October and 4th November 1994.



In the hand the bird was aged as a first-summer due to retained median and outer greater coverts, indistinct primary covert fringing and tail shape. Although the pectoral muscles were much reduced, reasonable fat reserves suggested that it had been feeding well and was not fresh in from a trans-Atlantic crossing. A hastily organised twitch allowed nine extra people to see the bird that afternoon, although it had seemingly departed by the following day; a June twitch to the Skokholm Courtyard was reminiscent of 2015 when another North American vagrant, the first spring Swainson's Thrush for Britain, lingered in the very same bushes. Of the 21 previous British records of Myrtle Warbler, four have occurred in spring, with birds on North Ronaldsay and then Unst in May 2014, on the Isle of Man in May 1985 and on Fair Isle in May 1977 and June 1999 (Holt *et al.*, 2018).

Reed Bunting *Emberiza schoeniclus*

Bras y Cyrs

Uncommon Breeder and Scarce Visitor bred in 1960, in most years 1967-1980 and since 2005

11 trapped, 24 retrapped

1936-1976: 174 trapped, 2011-2016: 63 trapped, 114 retrapped

Although observations in previous years have suggested that the majority, if not all, of the Skokholm breeding population depart the Island for the winter months, there was no evidence of such behaviour in spring 2017; birds were already on territory when the staff returned on 12th March. There was also no indication that the birds logged during the spring and summer were anything other than the Skokholm breeders, with all daycounts being below the total number of breeding birds and with no obvious flyovers. There were again seven territories mapped, with pairs at Bread Rock, Isthmian Heath, the Well, the Pig Sty, East Bog, South Pond and near Sugar's Delight. Seven pairs matched the highest total on record logged in 2016 and 2015 and was two up on the previous high recorded in 2014, 2013 and 1977. Ringing showed that seven birds had returned to the trapping area; two males and a female had survived their first winter, a male and a female had survived their second winter, a female had survived at least two winters and male D296004 had survived its third winter and worn a ring for two years, 278 days. Nest building was first observed on 2nd May and chick provisioning on 5th June, however it was not until 3rd July that the first fledglings were seen, eight days later than the first of last year but five days earlier than the first of 2015.



Fledglings were located in five territories, with six youngsters seen away from the trapping area and seven ringed around the Farm and Well before the end of August; there were six young ringed in

2016 and eight in both 2015 and 2014. Productivity was thus a minimum of 1.86 fledglings per pair, a value up on the 1.43 of last year and the 1.80 of 2014 but down on the 2.00 of 2015 and the 2.40 of 2013; a total of at least 13 fledged young was the second highest on Skokholm to date, only down on the 14 of 2015 but only one up on 2013 when two fewer pairs nested. In the years that Reed Bunting did not breed on Skokholm they were considered a scarce visitor, with a small number of birds noted in October; such small scale arrivals are difficult to detect now that a breeding population has again established, however a daycount of 14 on 3rd October was a spike in numbers perhaps indicative of passage and two new birds ringed on 27th October (following five out of six days without a record) were perhaps also from elsewhere. Counts again dwindled towards the end of the season and no birds were logged at all between 30th October and 9th November.

Lapland Bunting *Calcarius lapponicus*

Bras y Gogledd

Scarce but only recorded in 44 years since 1946 and with just four spring records

Earliest 30th July 1957 (29th September 2017) **Latest** 8th June 1963 (26th March 2017)

1 trapped

1936-1976: 1 trapped

Two around North Plain and then south on 23rd March were the first spring birds since a male on 18th May 1995 and the first to be logged in March (RDB, GE). What were presumably the same two birds flew into the Bog from Purple Cove on the 24th and a single was seen near the Sugarloaf that afternoon. The same bird fed along the Lighthouse Track on the 25th and 26th, although there was no sign of the second individual. The only other spring records are of singles on 14th May 1981, 8th June 1963 and 10th May 1948. The first of the autumn was at the Top Tank on 29th September before relocating to the Cottage Garden where it was trapped and ringed; this was the first September sighting since one on the 25th in 2014 and only the second to be ringed at the Bird Observatory. One on Home Meadow on the 18th was the only October record and in November there were at least two flyovers on the 3rd. An autumn total of four was down on the 13 of last year but otherwise the highest since five were logged in 1994; the only autumn counts higher than that of 2016 are the 45 of 1993 (which included a record daycount of 11 on 20th October), the 14 of 1973, the 17 of 1960, the 15 of 1957 and a record 56 in 1956.



The Non-avian Report

The previous four years have each produced several unique and noteworthy non-avian observations, along with a substantial amount of data covering the resident and regular migrant species, all of which can now be compared to an eight decade record following the digitisation of the paper logs. The 2017 season also proved a diverse and exciting one for records of non-avian species, with both targeted surveying and more ad-hoc observations made during the daily census providing some fascinating records. These are listed systematically below and, where appropriate, compared with the historical database, Thompson (2007) and observations made since 2012. There were two new species of dragonfly, 19 species of moth, one species of plant, one species of hydrozoan and one species of seaweed added to the Skokholm list.

Invertebrates

Dragonflies and Damselflies

Banded Demoiselle *Calopteryx splendens* (Harris, 1780)

During a warm period of light southeasterly winds a stunning male was found resting amongst the lush vegetation of Well Stream on 18th July. Although a fairly common Pembrokeshire species, this was the first record of this unmistakable *Calopteryx* for Skokholm.



Migrant Hawker *Aeshna mixta* (Latreille, 1805)

The first of the season, a single at the Lighthouse on 13th August, was 13 days later than the first of 2016, although an unidentified hawkler had been observed along the South Coast Path the previous day. A further 13 were found at widespread locations during the remainder of the month, with maximum daily counts of three on the 26th and four on the 27th. Unidentified hawkers reported on the 5th and 6th September were followed by a Migrant Hawker at Frank's Point on the 11th and an additional six on three dates between the 17th and 23rd. Further probables were observed flying high over the Top Tank on 26th October and distantly at South Pond the following day. Disregarding the five probable records, a year total of 21 still represents a good showing for this species which has undergone a significant range expansion on the mainland in recent years; there were 13 noted in 2016, 36 in 2015 and 15 in 2014 but surprisingly no records in 2013.

Emperor Dragonfly *Anax imperator* (Leach, 1815)

One on the Lighthouse Track on 17th July was the first of the year and over a month earlier than the first of 2016. Records thereafter were few; there was a probable on 20th July, one on the Neck on the 24th and singles at South Haven and at the Lighthouse the following day. There were no observations of ovipositing in the Wheelhouse Pond this year, as has been the case during the previous three, and

there were no August or September sightings. An annual total of just four was a poor tally following ten in 2016, 18 in 2015 and six in 2014, although there were no Emperors noted in a dry 2013.

Lesser Emperor *Anax parthenope* (Sélys, 1839)

Rain then drizzle on 2nd June cleared mid-morning to reveal a Marsh Warbler at the Well. A hot and calm afternoon saw the discovery of the first dragonfly of the year, a male Lesser Emperor which was watched performing aerial acrobatics as it patrolled the tracks around the Well and towards East Bog for insects. Views were brief but frequent, allowing the bright blue saddle of S2 and S3, the yellow ring at the base of S2, the brown abdomen and the vivid green eyes to be seen. Although photographs proved challenging, they captured the features necessary to prove this first for Skokholm. This is still a rare European vagrant to Britain, although they have become more than annual since the first (found in Gloucestershire in 1996) and have bred in Cornwall.



Red-veined Darter *Sympetrum fonscolombii* (Sélys, 1840)

A male at the Top Tank on 3rd June was the first of what was to become the second best year for records of this species on Skokholm. Following a male near the Red Hut on the 18th, the 20th saw an impressive 13 logged; there were three pairs in copula at North Pond along with an additional three males, a male and two females at Garden Rocks and a female on the Neck. The following day there were females at both the Bluffs and Garden Rocks whilst a male was at North Pond. On the 22nd there were two males along the Lighthouse Track and a further two males were observed three days later. In September there was a female at the Red Hut on the 12th and another on Home Meadow on 3rd October was the last of the year; these latter two records were the first September and October sightings for Skokholm.



Red-veined Darter were first recorded on Skokholm in 2013 when a male was found near the Bluffs. There was a single female at North Pond in June 2014, an influx in 2015 which saw a total of 31 insects logged including five pairs in copula at North Pond and one in 2016, a male at the Red Hut on 15th May. Although most, if not all, of these records are probably of migrants from the Continent, Red-veined Darter breed almost annually in southern England, although these populations are not thought to be stable (British Dragonfly Society, 2017). Thompson (2007) reported Common Darter *S. striolatum* to be the second most frequently encountered species of Odonata on the Island, however there were no records this year of a species which has proven rarer than Red-veined Darter during the last five years (although there were three unidentified *Sympetrum* noted on three June dates this season).

Beetles

Western Conifer Seed Bug *Leptoglossus occidentalis* (Heidemann, 1910)

An adult caught in an open Well 6 Mist Net on 25th August was the only record of the year. This is the third consecutive year that this non-native Coreid beetle has been recorded on Skokholm following three at the Lighthouse in October 2015 (the first of which was the first Island record) and one resting on the outside of the Home Meadow moth trap in September 2016. This species, although native to western North America, has recently expanded its range across Europe after being accidentally introduced to Italy on imported timber in 1999. It was first observed in the UK in Dorset in 2007 and has since been reported from widespread locations as far north as Cumbria. An influx to the UK from breeding populations on the Continent was documented in 2008 and 2009 (DEFRA, 2018), and perhaps resulted in the first record on Bardsey Island, Gwynedd, in 2010. Individuals are attracted to light and regularly enter buildings in search of hibernation sites in autumn (DEFRA, 2018). The 2015 and 2016 individuals were likely attracted to light (the lights of the Lighthouse in 2015 and the Skinner Trap in 2016); this year's record thus represents the first occasion that this species has been found on the Island without any obvious attractions. Feeding primarily on the flowers, developing cones and seeds of approximately 40 species of conifer tree, it is unlikely that this species will establish on Skokholm.



Moths

The 2017 moth records are the result of both active trapping and ad-hoc recording in the field. A superb variety of species were logged, with 19 additions to the Island list (including **Large Pale Clothes Moth** which was a first for Pembrokeshire) and 26 scarce species noted (moths with fewer

than five previous records). Most trapping was carried out using a mains powered Skinner Trap, bought with monies raised by the Dave Astins swim of 2014. Additionally a Lucent Trap was used in spring by visiting moth recorders Mike Creighton and Jan Schubert. In late July, County Moth Recorder Robin Taylor visited with a group of Pembrokeshire moth enthusiasts who set up nine traps at various locations around the Island; trapping in some of Skokholm's different habitats allowed for a greater diversity of species to be logged including several micro moths which were later confirmed through dissection and genital examination. It was a comparatively quiet year for regular migrants, particularly **Diamond-back Moth**, **Rush Veneer**, **Vestal** and **Silver Y**, although the appearance of less-frequently recorded immigrants such as **Olive-tree Pearl**, **The Gem**, **White Speck**, **Small Mottled Willow** and **Bordered Straw** made up for the shortfall. Long-term Volunteers Victoria Hope and Maddy Rawlings collected much of the data in the spring and early summer, whilst Holly Pickett and Jacob Peterken provided late summer and autumn records. Within the following text 'Nationally Rare' refers to a species which occurs in 15 or fewer hectads (10x10km squares) in Great Britain, whilst a 'Nationally Scarce' species occurs in between 16 and 100 hectads.

15 **Orange Swift** *Hepialus sylvina* (Linnaeus, 1761)

One eaten by a Pied Flycatcher at the Farm on 20th August was the first record of the year; a further six were noted along the Lighthouse Track at dusk on the same date. A total of 16 were along the same section of the Lighthouse Track on the 26th and the first to come to light was trapped that night. Singles were then attracted to the light trap on the 27th and 28th, with the final record of the season caught on 1st September.



17 **Common Swift** *Hepialus lupulinus* (Linnaeus, 1758)

There were fewer records of this species in 2017, with a total of 20 attracted to the moth trap between 19th May and 21st July including a peak count of five on 30th May. This is the most regularly documented of the four *Hepialus* species to have occurred on Skokholm although, perhaps due to an extended cycle which sees the larva overwinter twice before maturation, numbers logged tend to fluctuate markedly.

18 **Map-winged Swift** *Korscheltellus fusconebulosa* (De Geer, 1778)

The first record of the year was taken from the light trap on 30th May. A further 16 were trapped between the 13th and 21st June, with a peak of six on the 20th. This species is regularly encountered on Skokholm but, considering the abundance of its larval foodplant Bracken *Pteridium aquilinum*, it is perhaps surprising that double-figure counts are so scarce.

68 **Sallow Pygmy** *Stigmella salicis* (Stainton, 1854)

A vacated mine of this common mainland species was found on a Grey Willow *Salix cinerea* leaf in the Well Heligoland by Robin Taylor on 24th July. This species has not previously been documented however, given the presence of a larval foodplant, it may well have been overlooked.

118 **Pygmy Sorrel Moth** *Enteucha acetosae* (Stainton, 1854)

The distinctive larval leaf mines of this Nationally Rare Nepticulid were found on 12 separate Common Sorrel *Rumex acetosa* leaves adjacent to North Pond on 1st June and again on 24th July. This species was first documented on the Island in 2014 and has since been recorded annually, although all records have originated from the same locale.



170 **Five-spot Burnet** *Zygaena trifolii* (Esper, 1783)

Following a quiet year in 2016, an abundance of Five-spot Burnet around many areas of the Island was a welcome sight this season. The first caterpillars were observed on 1st June when 12 were noted to the south of North Pond and a further 15 were found on the 12th during seabird census work along Little Bay Wall. The first adult was on the wing on 17th June (1st July in 2016) and low counts during the remainder of the month, including a maximum daycount of six at North Pond on the 20th, produced a June total of 17. An impressive 1436 were recorded in July (389 in 2016 and 932 in 2015), with three-figure counts made on six dates and a high of 180 on the 13th. As is normally the case, numbers plummeted in August; a peak of eight on the 2nd contributed to a monthly total of just 31 adults (14 in 2016 and 146 in 2015), whilst four on the 10th were the last of the year.

186 **Common Sweep** *Psyche casta* (Pallas, 1767)

Four adult males and 25 larval cases were noted around the Lighthouse Garage on 25th June. The only other records this year were of an adult male at the Farm on 26th June and of larvae within cases, again at the Lighthouse but also at the Quarry, on 24th July.



Although first discovered on Skokholm in 2013, it is likely that this species has historically been overlooked and is far more abundant than the ad-hoc records suggest; during a whole Island Storm Petrel census in 2016 a minimum of 100 larval cases were found with a concentrated population along the western coast.

227 **Skin Moth** *Monopis laevigella* ([Denis & Schiffermüller], 1775)

One trapped on 13th May was the first to be documented on Skokholm. Skin Moth have a widespread distribution across the British Isles, the larvae feeding on a wide variety of substances of animal origin such as bird pellets, nest detritus and dead animals.



245 **Large Pale Clothes Moth** *Tinea pallescentella* (Stainton, 1851)

A singleton found in the Lighthouse bathroom on 5th November was later dissected by Robin Taylor and confirmed as this species; this was the first record for Pembrokeshire. The absence of previous observations in the county is perhaps surprising; adults of this widespread species can be found on the wing throughout the year and the larvae feed on keratinous animal matter.



321 **Garden Midget** *Phyllonorycter messaniella* (Zeller, 1846)

This stunning little leaf miner was found on the catching box of the Cottage Heligoland Trap on 10th October. Although abundant in the county, this represents the first ever Skokholm record. A general lack of larval foodplant (Oak *Quercus* spp. and Beech *Fagus* spp.) suggests that this individual was

probably blown over from the mainland; one Oak sapling does exist in the Cottage Garden, however the leaves were not inspected for mines.



383 Thrift Clearwing *Synansphecchia muscaeformis* (Esper, 1783)

One along the North Coast on 13th June was the first of the year, seven days later than the first of 2016 but two days earlier than in 2015; these dates perhaps in part reflect suitable recording and flying conditions rather than first emergence. Calm weather during much of the remainder of June saw three logged on the 18th, two on the 19th, 14 on the 20th, 11 on the 21st, four on the 22nd and 25th and three on the 26th. Sightings were all from the North Coast where the densest areas of Thrift *Armeria maritima* are found. There was a single at Purple Cove on 1st July but, despite ad-hoc searches during the remainder of the month, there were no further records (the last of 2016 was on 25th July). The 2017 total was thus an impressive 43; there were just nine in 2016 and seven in 2015.

385 Common Nettle-tap *Anthophila fabriciana* (Linnaeus, 1767)

Although an under-recorded species on the Island, it appeared to be a quiet year for this diminutive nettle specialist. One in Billy's Dyke on 17th May was the first of the season and another 12 were noted during the remainder of the month, including 11 at the same site on the 30th. A further 14 were logged in June, one in July and one in August. Although these records were collected on an ad-hoc basis, numbers such as those observed in September 2016 (when the monthly total was 411) were seemingly not present; not a single moth was reported during September this year.

464 Diamond-back Moth *Plutella xylostella* (Linnaeus, 1758)

Following a huge eruption of this little immigrant in 2016, when an impressive 4425 were logged between June and August, this year proved extremely disappointing. One on the Neck on 28th May was the first of the season, with two more the following day the only other sightings during the month. There were no diurnal records in June, although one came to the light trap on the 15th; a June total of one was somewhat down on an almost unimaginable minimum of 4421 recorded in June 2016. Three at North Pond on 29th July was the only record of the month and the last of a season which could hardly have been more different to that experienced last year.

472 Fleabane Smudge *Digitivalva pulicariae* (Klimesch, 1956)

One trapped on 24th July represents only the second Skokholm record of this species and the first since 20th July 2014.

565 Orache Case-bearer *Coleophora saxicolella* (Duponchel, 1843)

An adult caught on 24th July and dissected by Robin Taylor became the first confirmed record of Orache Case-bearer for the Island. This species lays its eggs on a range of Goosefoots *Chenopodium*

spp., of which there is an abundance on Skokholm, with the larvae living and feeding in a moveable case.

607 **Little Dwarf** *Elachista canapennella* (Hübner, 1786)

An individual trapped on 24th July and dissected by Robin Taylor was confirmed as Little Dwarf. This was the first Island record of what is a common and widespread mainland species.

672 **Parsnip Moth** *Depressaria heraclei* (Goeze, 1783)

One trapped on 9th May was the first to be documented this season, whilst pupa were first observed in a Common Hogweed *Heracleum sphondylium* stem on 19th July. As was the case last year, further adult records were not logged until August when 14 were trapped over six dates. This is undoubtedly an under-recorded Skokholm breeder.

688 **Common Flat-body** *Agonopterix heracliana* (Linnaeus, 1758)

Although common and widespread, the nondescript Common Flat-body is likely overlooked on Skokholm. Two came to the light trap on 25th May and one trapped on 13th August was the only other record of the season.

728 **Bracken Neb** *Monochroa cytisella* (Curtis, 1837)

A single caught on 24th July was dissected by Robin Taylor, this the only confirmed record of the year. New to the Island in 2014, this unassuming and easily overlooked Gelechid has a propensity for large swathes of dense Bracken, which in part explains the paucity of records.

776 **Large Groundling** *Teleiopsis diffinis* (Haworth, 1828)

A Sheep Sorrel *Rumex acetosella* specialist, this species was first recorded on Skokholm in 2014. Some authors recommend an examination of genitalia as the best means of eliminating similar confusion species, however records made in 2014, 2015 and 2016 were based on appearance and presence in suitable habitat alone. A single caught by Robin Taylor on 24th July this season becomes the first to be confirmed following dissection.

787 **Cinereous Groundling** *Bryotropha terrella* ([Denis & Schiffermüller], 1775)

A single, collected by Robin Taylor on 24th July, was confirmed as this species following genital dissection. This was the only record of the season and makes 2017 only the second year with a sighting following the multiple day-flying individuals logged in 2014.

789 **House Groundling** *Bryotropha domestica* (Haworth, 1828)

A single trapped on 24th July was surprisingly a first for the Island. This species, which is common and widespread on the mainland, is highly likely to have been overlooked on Skokholm in the past.

814 **Beet Moth** *Scrobipalpa ocellatella* (Boyd, 1858)

A Gelechid trapped by Robin Taylor on 24th July was later dissected and confirmed as the first Beet Moth for Skokholm. A Nationally Scarce coastal species which has a local distribution along the southern coasts of England and Wales, its larvae feed on Beet *Beta vulgaris* and Sea Beet *B. maritima*, the latter of which grows here in isolated patches along steep cliff areas inaccessible to grazing Rabbits.

826 **Coast Groundling** *Caryocolum vicinella* (Douglas, 1851)

This stunning but diminutive Nationally Rare Gelechid, with its tendency to crawl under dense patches of Sea Campion *Silene maritima*, is without doubt under-recorded on Skokholm. Following its discovery in 2014, there have been records from widespread locations including South Haven, North Gully, Twinlet, the Quarry, the Lighthouse and Crab Bay. The first of this season was logged by

Robin Taylor on 24th July; its identity was later confirmed via dissection. There was one at Crab Bay Hide the following day, whilst singles at South Haven Hide on the 11th and 18th August were the only other records this year.



828 Champion Groundling *Caryocolum viscariaella* (Stainton, 1855)

One trapped and subsequently dissected by Robin Taylor on 24th July was another first for the Island. This Nationally Scarce species is widely distributed across Wales and a reasonable amount of the larval foodplant, Red Champion *Silene dioica*, grows on Skokholm.

868 Orange Crest *Helcystogramma rufescens* (Haworth, 1828)

Another species trapped on 24th July and later dissected by the County Moth Recorder. This was the first confirmed record for Skokholm of a moth whose larvae overwinter on a variety of grasses.

873 Dingy Dowd *Blastobasis adustella* (Walsingham, 1894).

A common and active mid-summer visitor to the trap, many of which escape before being logged. Dingy Dowd was only noted during one trapping session this year, with a minimum of 51 counted on 13th August. This species was introduced into Britain and is now well established throughout.

898 Bulrush Cosmet *Limnaecia phragmitella* (Stainton, 1851)

One taken on 24th July by Mark Burton was another addition to the Skokholm moth list. Although it is a widespread and common micro in Pembrokeshire, a lack of Bulrush *Typha* spp., the larval foodplant, suggests that this individual was blown over from the mainland.

937 Common Yellow Conch *Agapeta hamana* (Linnaeus, 1758)

A total of five came to the light trap over four dates between 13th June and 24th July. The larvae of this vibrant Tortricid feed within the roots of thistles *Carduus* spp., several of which are widespread across the Island; it thus seems likely that a paucity of trapped adults does not reflect abundance.



966 **Black-headed Conch** *Cochylis atricapitana* (Stephens, 1852)

This is a regular visitor to the moth trap, with a total of 33 logged during the months of June and August. Numbers of this attractive species vary from season to season, perhaps due to fluctuations in the abundances of the foodplant, Common Ragwort *Jacobaea vulgaris*.

970 **Barred Fruit-tree Tortrix** *Pandemis cerasana* (Hübner, 1786)

Two at the light trap on 13th June was the first record of the year. A single was caught on 21st June and a further two were taken on 2nd September. This species, common in woodlands, was new to the Island in 2016 and believed to be a wanderer from the mainland. However, given that the larvae feed on deciduous trees, it is plausible that this could now be a low-density breeder.

1019 **Coast Shade** *Cnephasia conspersana* (Douglas, 1846)

Moths of the genus *Cnephasia* must typically be dissected in order to determine their identity. Following the dissection of an individual caught in 2016, Coast Shade was added to the Island moth list. This year, several *Cnephasia* specimens were taken on 24th July by Robin Taylor. Subsequent dissection confirmed the presence of Coast Shade for a second year. This is a Nationally Scarce species with a predominantly coastal distribution whose larvae feed on plants in the families Rosaceae and Compositae; several members of the latter exist on Skokholm.



1020 **Grey Tortrix** *Cnephasia stephensiana* (Doubleday, [1849])

A single was caught by visiting moth enthusiast Mark Burton on 24th July. This marks only the second year that this species has been recorded on the Island, with one identified (following dissection) in 2016. This is a widespread mainland species whose larvae feed on a range of herbaceous plants.

1029 **Dotted Shade** *Eana osseana* (Scopoli, 1763)

This species was new to the Island list in 2014 when 318 were logged. There have since been single records in 2015 and 2016, whilst one on 24th July was the only individual of 2017. This nondescript species is widely distributed on the mainland but easily overlooked; it is likely that recent records do not reflect its abundance on Skokholm.

1043 **Ginger Button** *Acleris aspersana* (Hübner, 1817)

Two taken by Robin Taylor's group on 24th July were the first to be identified on the Island. This is a common mainland moth which feeds on a range of herbaceous plants; it has perhaps been overlooked on Skokholm in the past.

1063 **Barred Marble** *Celypha striana* ([Denis & Schiffermüller], 1775)

One trapped by Mark Burton on 24th July was another addition to the Island list. This moth, whose larvae bore into the roots of Dandelion *Taraxacum officinale*, is fairly common in the south of Britain.

1067 **Thyme Marble** *Celypha cespitana* (Hübner, 1817)

There was just one confirmed record of Thyme Marble this season, with a single on 24th July later dissected by Robin Taylor. Three adults were noted in 2016 however, given the abundance of the larval foodplants Thrift and, to a lesser extent, Wild Thyme *Thymus serpyllum*, it is likely that this species is commoner than these records suggest.

1076 **Common Marble** *Celypha lacunana* ([Denis & Schiffermüller], 1775)

A minimum of 50 recorded on 22nd July were the only individuals to be documented this year. This was an improvement on 2016 when just five were noted between June and August. This is one of the commonest members of the family Tortricidae to be found on Skokholm and is easily disturbed from Bracken during the day.

1111 **Rush Marble** *Bactra lancealana* (Hübner, 1799)

Following the discovery of one on 28th June last year, an individual caught by Robin Taylor on 24th July this season was, after dissection, found to be the second for Skokholm. As the common name suggests, the larvae feed on a variety of rushes; it is thus a fairly common mainland species, particularly in areas of marsh and heathland.

1175 **Bramble Shoot Moth** *Notocelia uddmanniana* (Linnaeus, 1758)

This species was first logged on 27th June 2016 when one was attracted to the light trap at the Well. A single trapped on 24th July this season was thus only the second Island record of this easily identified Bramble eating micro.

1184 **Thistle Bell** *Epiblema scutulana* ([Denis & Schiffermüller], 1775)

This is likely an under-recorded moth on the Island, with singles trapped on 13th June and 24th July the only individuals to be documented this season. Although there were no 2016 records, 11 were noted in 2015, whilst five seen in 2014 were the first to be knowingly observed on Skokholm.



1197 **Marbled Bell** *Eucosma campoliliana* ([Denis & Schiffermüller], 1775)

This beautiful Tortrix feeds on the seeds and stems of Common Ragwort. Although new to the Island in 2014, this may well have been the result of improved literature and field guides rather than a recent colonisation. A single during Robin Taylor's visit on 24th July was the only moth of the year. There were two logged in 2016 but none in 2015.

1201 **Hoary Bell** *Eucosma cana* (Haworth, 1811)

This species was only recorded during Robin Taylor's moth group visit on 24th July, but given that 22 were logged last year (over two generations), the lack of records is perhaps more a reflection of recording effort than of abundance.

1293 **Garden Grass-veneer** *Chrysoteuchia culmella* (Linnaeus, 1758)

One of the most commonly observed Crambids on Skokholm, a minimum of 37 came to the light trap between 17th June and 24th July. This is without doubt unrepresentative of the Skokholm population; previous years with larger numbers logged have almost certainly seen the light trapping totals supplemented by day-time sweeping.

1302 **Satin Grass-veneer** *Crambus perlella* (Scopoli, 1763)

Both the common and heavily streaked *warringtonellus* (below) forms were found by Robin Taylor's group on 24th July; this was only the second time that this species has been documented on the Island following the first in 2014. Satin Grass-veneer is often overlooked as one of several common grass-moths, including Garden Grass-veneer and Straw Grass-veneer, and as a result it may well be more common than records suggest.



1304 **Straw Grass-veneer** *Agriphila straminella* ([Denis & Schiffermüller], 1775)

One on 24th July was the only individual to be logged this year. Although this species is seemingly the scarcer of the *Agriphila* regularly recorded on Skokholm, the paucity of records is in part due to low levels of sweep netting (although this species is also readily attracted to light). A single was trapped in 2016, there were three in 2015 and 24 in 2014; the latter season saw more effort put into diurnal moth observations. Prior to these recent records, Straw Grass-veneer were only logged in the summers of 1998 and 2000.

1305 **Common Grass-veneer** *Agriphila tristella* ([Denis & Schiffermüller], 1775)

In what was a typical season for this species on Skokholm, records of adults at light were logged between 24th July and 13th August. The larvae feed in the bases of grass stems.

1309 **Elbow-stripe Grass-veneer** *Agriphila geniculea* (Haworth, 1811)

This is seemingly the most abundant Grass-veneer on Skokholm; it is certainly the species which comes to light the most. A total of 39 were logged between 13th August and 19th September (the latter being the only record of the month), with peaks of seven and nine trapped on the 26th and 28th August.

1333 **Meadow Grey** *Scoparia pyraella* ([Denis & Schiffermüller], 1775)

This is an abundant species regularly encountered during spring seabird monitoring, however the first of the year was taken at light on 25th May. There were 158 logged diurnally during the remainder of the month, with maximum daycounts of 50 noted on the 28th and 29th. A total of 84 came to the light trap between the 3rd and 21st June and an additional 186 were logged during the day, including a minimum of 100 on the 4th. An annual total to 442 was similar to the 425 of 2016.

1341 White-line Grey *Eudonia lineola* (Curtis, 1827)

The only two records of this Nationally Scarce lichen feeding species were made on 24th July and 1st September. This coastal speciality is likely under-recorded on the Island as, unlike other members of the genus *Eudonia* which can be readily flushed from grassland during the day, White-line Grey has a tendency to keep a low profile and can be difficult to observe unless attracted to light.

1342 Narrow-winged Grey *Eudonia angustea* (Linnaeus, 1758)

Another species which is likely to be more abundant on Skokholm than observations suggest. One found in the trap on 28th August was the only record of the year and the first since 2014 when singles were trapped over five nights in late September. The most recent record prior to this was in 1998, with 1996 the only other year with a sighting. The larvae feed on mosses.

1348 Ringed China-mark *Parapoynx stratiotata* (Linnaeus, 1758)

The first record of this species for Skokholm was in 2015 when two were taken from the light trap next to the Wheelhouse Pond. One trapped on 28th August this season was only the third Ringed China-mark to be logged. The aquatic larvae feed on a variety of pond-weeds and submerged plants; the 2015 adults taken adjacent to a permanent water source gave rise to the theory that this species may be a low density Skokholm breeder.

1375 European Corn-borer *Ostrinia nubilalis* (Hübner, 1796)

This was once a rare migrant to British shores, however the European Corn-borer began to colonise the southeast of England during the 1930s and it has since spread along much of the south coast of Britain. One trapped on 25th August was nevertheless the first Skokholm record.



1376 Small Magpie *Eurrhpara hortulata* (Linnaeus, 1758)

It was seemingly another poor year for this stunning micro. One found in the Ringing Hut on 16th June was the first of the year and four more were logged during the remainder of the month, only one of which was attracted to light. Nine seen in July brought the year total to 14, a slight improvement on the eight of 2016 but well down on the 50 of 2015 and the 79 of 2014.

1395 Rusty Dot Pearl *Udea ferrugalis* (Hübner, 1796)

The first two of the season were trapped on 31st May, however there were no further observations of this distinctive immigrant until 13th August when seven came to the light trap. A further 14 were logged during the remainder of August, there were ten in September, 19 in October and 37 in November. A minimum of 14 attracted to the Lighthouse living room windows on 3rd November were the last of the year. This regular Skokholm immigrant has appeared in significant numbers in

the past, for example an influx following southerly winds on the 7th and 8th August 2014 saw a minimum of 150 individuals recorded in North Gully alone.

1398 Rush Veneer *Nomophila noctuella* ([Denis & Schiffermüller], 1775)

It was a comparatively poor season for this common immigrant, with a year total of just 31 (this compared with 235 in 2016, 179 in 2015 and seven in 2014). A singleton on 12th March was the first of the year and two months earlier than the first of 2016. There were two diurnal sightings in May and one in July, but the majority of records, 19 in all, were of moths attracted to the light trap during August and September. A single on the Neck was the only October record and one trapped on 2nd November was the last of the season.

1399 Long-legged China-mark *Dolicharthria punctalis* ([Denis & Schiffermüller], 1775)

Adults on the 24th and 25th July made 2017 only the sixth year that this species has been noted on Skokholm; with the exception of 1998, all records have occurred in the last five years. In Britain this Nationally Scarce Crambidae is restricted to the cliffs and beaches of the southwest coast. The increase in observations on Skokholm since 2013 may be attributable to the spread of Bird's-foot Trefoil *Lotus corniculatus*, a plant which is benefitting from the current low Rabbit numbers and which is one of the preferred larval foodplants of the Long-legged China-mark.



1405 Mother of Pearl *Pleuroptya ruralis* (Scopoli, 1763)

This distinctive micro moth occurs infrequently on Skokholm. The only records this season were of a diurnal singleton on 12th August and of three taken in the light trap that evening. There were no records in 2016, a single in 2015, three in 2014 and one in 2013. Prior to this Mother of Pearl had only been logged in 1996, 1997 and 1999.

1408 Olive-tree Pearl *Palpita vitrealis* (Rossi, 1794)

One was flushed from the wall on Isthmian Heath on 28th August, marking only the second occasion that this stunning immigrant has been recorded on Skokholm; the first was disturbed from long grass in the Wheelhouse Heligoland on 25th October 2013. This is a widespread species in southern Europe where its larvae feed on jasmine *Jasminium* spp. and on both the leaves and fruit of olive *Olea* spp.

1424 Rosy Tabby *Endotricha flammealis* ([Denis & Schiffermüller], 1775)

It was a relatively quiet year for records of this distinctive species on Skokholm. Following the first of the season on 5th July, there were a further 31 logged during the remainder of the month, with the bulk of the records, including a peak count of 12 along the Lighthouse Track on the 23rd, coming diurnally. Three August singles brought the year total to 35; there were 56 in 2016 and ten in 2015.

1428 **Bee Moth** *Aphomia sociella* (Linnaeus, 1758)

The surprise appearance of a female in the light trap on 21st June saw another new species added to the list. This is a fairly common mainland moth whose larvae feed on old cells in bumblebee and wasp nests. A lack of previous records perhaps suggests that this was a wanderer from the mainland.



1484 **Small Clouded Knot-horn** *Phycitodes saxicola* (Vaughan, 1870)

A single trapped on 24th July and dissected by Robin Taylor was confirmed as the first for Skokholm. This widely distributed species is found more commonly in coastal habitats and, given that the larvae feed on a variety of Compositae flower heads, it has the potential to be a Skokholm breeder.

1513 **White Plume Moth** *Pterophorus pentadactyla* (Linnaeus, 1758)

One of the largest and most distinctive of the plumes, an adult trapped by Mark Burton on 24th July was the first for the Island. Although this species is widespread and fairly common in Britain, on Skokholm a lack of bindweed *Convolvulus* spp., the leaves of which the caterpillars feed and overwinter upon, suggests that this individual was a drifter from the mainland.

1523 **Dusky Plume** *Oidaematophorus lithodactyla* (Treitschke, 1833)

Following its discovery in Billy's Dyke last year, a gully where the larval foodplant Common Fleabane *Pulicaria dysenterica* is flourishing, this stunning plume was again located this season. The first record of the year came from Orchid Bog on 21st July; a minimum of seven were resting on Common Fleabane at what is a new site for this moth. A further five were noted over three dates during the remainder of the month, two of which were attracted to the light trap. In contrast to last year, there were no records in August or September.

1651 **Chinese Character** *Cilix glaucata* (Scopoli, 1763)

Following its addition to the Skokholm list on 14th August 2016, a single trapped on 24th July this year was only the second Island record; both moths have been second generation individuals. Although Blackthorn *Prunus spinosa*, one of the main larval foodplants, grows in North Haven and the Cottage Garden, it is possible that both moths simply drifted from the mainland.

1689 **Mullein Wave** *Scopula marginepunctata* (Goeze, 1781)

One trapped on 28th August was the only 2017 record of a species encountered irregularly on Skokholm. Five were observed in 2016, none in 2015, six in 2014 and one in 2013. This species is perhaps responsible for several reports of the much rarer and locally-extinct Weaver's Wave *Idaea contiguaria* which exist in the Skokholm moth database.

1702 **Small Fan-footed Wave** *Idaea biselata* (Hufnagel, 1767)

One on 24th July was the only record of the year. Further singles trapped near the Wheelhouse Pond on 16th August 2015 and at Peter's Bay on 29th July 2014 are the only others to have been logged since 1990.

1708 **Single-dotted Wave** *Idaea dimidiata* (Hufnagel, 1767)

A total of three were trapped this year, with singles on 21st June, 24th July and 25th July. This is seemingly a scarce Skokholm species; there were three in 2016, nine in 2015 and six in 2014. Prior to these recent observations, Single-dotted Wave were only logged in 1937 and 1960.

1713 **Riband Wave** *Idaea aversata* (Linnaeus, 1758)

This is another rarely encountered *Idaea* on Skokholm, with one trapped on 24th July the only record of the year. There was one in 2016, none in 2015, five in 2014 and one in 2013, whilst the moth database shows records in only six other years.

1713 **Vestal** *Rhodometra sacraria* (Linnaeus, 1767)

A stunning individual showing a striking pink cross-bar was attracted to the light trap outside the Cottage on 26th September. The temperature at which the larva develops influences the colouration of the adult, with higher temperatures increasing the intensity of the pink pigmentation. Following a phenomenal year for this gem of a migrant in 2016, when a total of 18 were logged, just one appears comparatively poor, however in actual fact the Vestal is a scarce Skokholm species; there were no records in 2015 or 2014, only three in 2013 and prior to this it had only been documented in five years, the most recent of which was 2000.



1720 **The Gem** *Nycterosea obstipata* (Fabricius, 1794)

Although a regular autumn immigrant from the Continent to the UK mainland, a worn individual found in the moth trap on 3rd November was only the fourth record for Skokholm and the first since 1937; the other two occurred in 1910 and 1912.



1724 Red Twin-spot Carpet *Xanthorhoe spadicearia* ([Denis & Schiffermüller], 1775)

The first of the year was a first generation individual trapped on 13th June. There were then records of second generation singles on 24th July and on the 13th and 26th August. This is a much rarer species on Skokholm than Dark-barred Twin-spot Carpet; these were the first moths since 2013, when one was trapped at the Well on 4th August, and otherwise the first to be documented for 45 years.

1725 Dark-barred Twin-spot Carpet *Xanthorhoe ferrugata* (Clerck, 1759)

A total of 58 were attracted to light traps between 25th May and 25th September, this compared with 57 in 2016 and 11 in 2015. Most counts were in low single figures, with the exception of 25th July when 14 were logged.

1742 Yellow Shell *Camptogramma bilineata* (Linnaeus, 1758)

Easily flushed from Bracken during the summer months, Yellow Shell is one of Skokholm's most abundant and recognisable diurnal macro moths. The first of the season was recorded on 31st May, five days earlier than the first of 2016 and two weeks earlier than the first of 2015. There followed 89 in June (149 in 2016, 229 in 2015), 373 in July (381 in 2016, 415 in 2015) and 71 in August (101 in 2016, 70 in 2015). Unsurprisingly peak daycounts came in July, with a high of 84 logged on the 6th.

1764 Common Marbled Carpet *Dysstroma truncata* (Hufnagel, 1767)

A first generation individual found resting outside the Library on 2nd June and a second generation moth trapped on 25th September were the only two records this year. Although nationally common, this species is a rare Skokholm sight; the only other Island records concern single first and second generation individuals in 2016 and three second generation moths in 2015.

1823 Netted Pug *Eupithecia venosata* (Fabricius, 1787)

Singles on 26th May and 3rd June were the only records of the season; both were attracted to the light trap at the Farm. Given that a further 11 were trapped last year, it seems likely that this Nationally Scarce pug, whose larvae feed on Sea Campion, is a Skokholm resident.

1825 Lime-speck Pug *Eupithecia centaureata* ([Denis & Schiffermüller], 1775)

One of the most instantly recognisable pugs, with a total of 33 coming to the light trap between 25th May and 2nd September and a peak count of eight on 27th August.

1830 Wormwood Pug *Eupithecia absinthiata* (Clerck, 1759)

Since 2014, when an impressive 50 were noted, there have been comparatively few records of Wormwood Pug. They proved to be rare this season, with one on 24th July the only moth logged. Like many of Skokholm's invertebrates whose breeding ecology relies on the presence of Common Ragwort, numbers seemingly fluctuate in accordance with plant density.

1834 Common Pug *Eupithecia vulgata* (Haworth, 1809)

Although common and widespread throughout Britain, the tree loving Common Pug is a rare Island find. Singles trapped on the 18th and 21st June and on 25th July constituted an exceptional year for this species on Skokholm; there have now been records in three years, with these the first to be documented since 1960.

1837 Grey Pug *Eupithecia subfuscata* (Haworth, 1809)

Individuals trapped on 29th June and 26th August were the only records of the year. As with the preceding species, this was only the third year with a sighting following moths in 2014 and 2016.

1862 Double-striped Pug *Gymnoscelis rufifasciata* (Haworth, 1809)

This is a seldom observed pug on Skokholm, with the only record of the year coming on 25th September when one was attracted to the light trap at the Farm. A single was taken in 2016, there

were three in 2014 and one in 2013, whilst prior to this Double-stripe Pug had only been recorded in three years, the most recent of which was 2000.

1902 Brown Silver-line *Petrophora chlorosata* (Scopoli, 1763)

It was seemingly a poor year for this common Skokholm moth which is regularly flushed from Bracken in the early summer months. The first of the season came to the light on 3rd May, 11 days later than the first of 2016. Just 30 were subsequently trapped during May and June, whilst diurnal observations during the same period added just nine and six to each monthly total respectively (with a peak count of eight on 24th May). This compares poorly to last season when 203 were logged between late April and late June, although only 55 were recorded in 2015.

1964 The Annulet *Charissa obscurata* ([Denis & Schiffermüller], 1775)

A single trapped on 24th July was the first record since 2014 when three were documented. This predominantly coastal species is very much a Skokholm scarcity, with records in only six years prior to 2014, the most recent of which was in 1996.

1972 Convolvulus Hawk-moth *Agrius convolvuli* (Linnaeus, 1758)

The first 2017 record of this impressive immigrant was unfortunately of a dead individual found on Home Meadow on 23rd August. A live moth was attracted to the light trap on the 27th and a third was found resting on the wooden catching ramp of the Well Heligoland on the morning of 8th September (this was not the first individual of this species to be found at this site). Although Convolvulus Hawk-moth is a regular immigrant to the UK, prior to a remarkable nine different individuals documented last season there were just two Island records, with singles in 1940 and 2014. The three 2017 individuals thus take the Island total to 14 moths over four years.



1984 Hummingbird Hawk-moth *Macroglossum stellatarum* (Linnaeus, 1758)

One at Migration Rocks on 27th May was six weeks earlier than the first of 2016 and the start of a good season for records of this splendid immigrant. There was one on the Lighthouse Track on the 29th and records of a single in the same location the following day and on 1st June were probably the same moth. The remainder of June saw 11 individuals logged at widespread locations over nine dates, including highs of two at the Red Hut on the 2nd and on the Neck on the 9th. One at North

Haven on 2nd July was the first of the month, with further singles recorded on the 8th, 9th, 12th and 22nd and two noted on the 24th. There were singles on three dates in August and, in September, one on the Neck on the 1st, one at the Red Hut on the 21st, three on the 24th (at the Top Tank, the Well and the Little Neck) and a further six over three dates which took the monthly total to 11. In October there were two on the 5th, one on the 9th and one at the Well on the 15th which was the last of the year, taking the 2017 moth-days total to 40.

2026 Vapourer *Orgyia antiqua* (Linnaeus, 1758)

There have been several observations of larvae during the previous four years, but records of adult male Vapourers on the wing have been rare, indeed there had only ever been three seen (singles in 1998, 2014 and 2015). This year they were seemingly more plentiful; there was one attracted to the light trap on 26th August and in October there was one at Orchid Bog on the 10th, two on the 14th, two on the 17th and three on the 25th. A larva found on the Cottage Wall on 29th September was the only evidence of breeding this season. It was nevertheless the most productive year for sightings of this species on Skokholm; given a general lack of previous records, the 2017 observations suggest that this species may be on the increase.



2037 Rosy Footman *Miltochrista miniata* (Forster, 1771)

One trapped on 24th July was the only record of the year, the first since one was taken at the Well on 25th July 2014 and just the second ever occasion that this stunning Footman has been documented on Skokholm. This is a woodland species whose larvae feed on tree lichens; a dearth of records is far from surprising.

2044 Dingy Footman *Eilema griseola* (Hübner, 1803)

As was the case for Rosy Footman, one trapped on 24th July became only the second record of this species for the Island; coincidentally the first was also taken on 25th July 2014. It is more surprising that this moth is not encountered more frequently on Skokholm; this is a fairly common species in the south of Wales and England and Skokholm holds a range of the lichens on which its larvae feed.

2045 Hoary Footman *Eilema caniola* (Hübner, 1808)

A single on 24th July and two trapped on 26th August were the only records in what was the most productive year since 1968; singles in 2016 and 2015 and two in 2014 are the only other sightings since the 1960s. Away from the home counties of England, this Nationally Scarce species is found chiefly in maritime habitats where it utilises cliff-top lichens as larval food.

2047 **Scarce Footman** *Eilema complana* (Linnaeus, 1758)

Remarkably this species has never, until this year, been recorded on Skokholm; one trapped on 24th July was thus another addition to the Island list. This is a coastal species in Wales, whose larvae feed on a variety of lichens and mosses.

2050 **Common Footman** *Eilema lurideola* (Zincken, 1817)

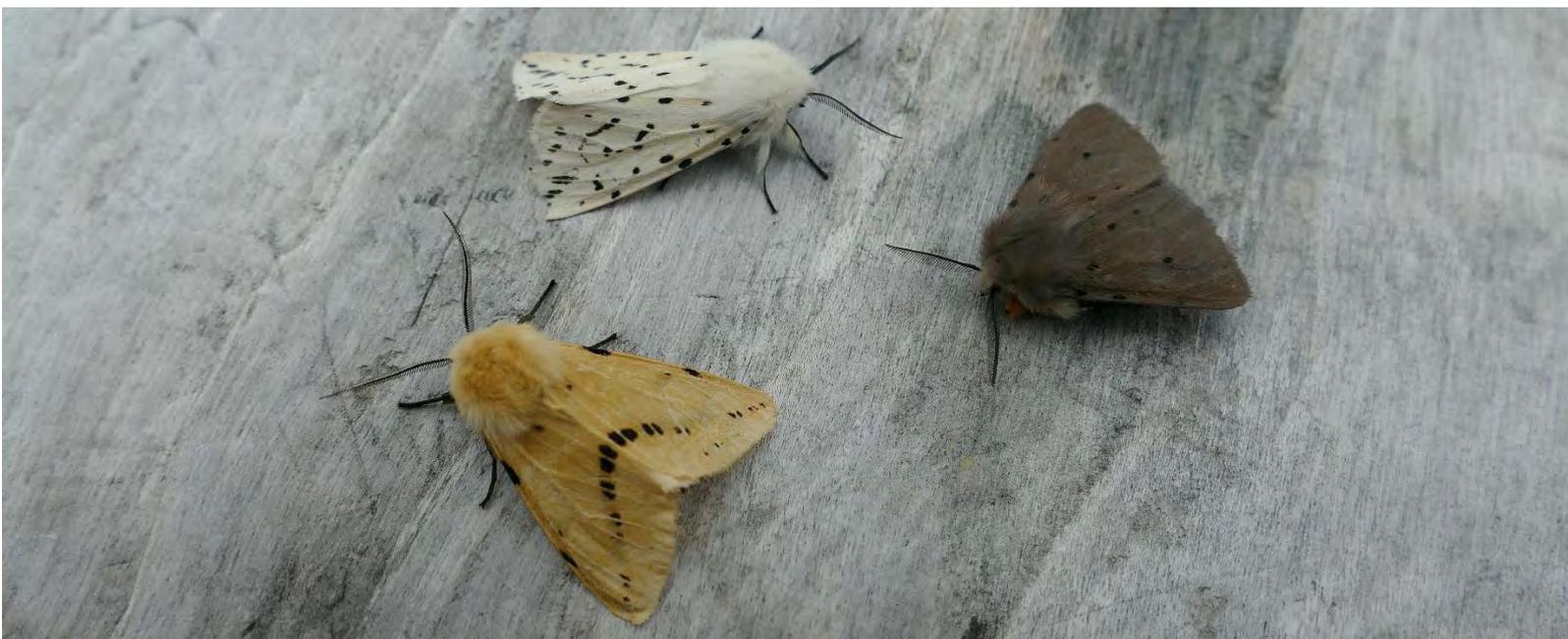
One trapped on 24th July was the only record of the year, the first since 2014 and only the fourth for the Island following further singles in 1998 and 1999.

2057 **Garden Tiger** *Arctia caja* (Linnaeus, 1758)

Given that Common Nettle *Urtica dioica* is a regular foodplant, this is a surprisingly scarce species on Skokholm; the historical database suggests that there were only 16 records between 1910 and 2000, whilst the only observation last year was of a dead adult found near North Pond on 18th August. Four trapped on 25th July this season, with a further single on the 29th, was thus a welcome improvement, the total being more akin to 2014 and 2015 when five and nine were recorded respectively.

2060 **White Ermine** *Spilosoma lubricipeda* (Linnaeus, 1758)

A total of 53 individuals came to the light trap this year, the first of which was on 24th May (top in photo). Catches were generally low, with the exception of 25th May, when ten were trapped, and 28th May and 16th June when eight were trapped. One on the 29th was the only July record and a late second generation individual trapped on 26th August was the last of the season.



2061 **Buff Ermine** *Spilosoma luteum* (Hufnagel, 1766)

Seemingly more abundant than its close relative the White Ermine, two trapped on 24th May were the first of the season (left in photo). A further 21 came to the light trap in the last week of May, 53 in June, 19 in July (all on the 25th), 35 in August and seven in September (with one on the 26th the last of the year). A cumulative total of 137 was similar to the 117 of 2016 and the 191 of 2015.

2063 **Muslin Moth** *Diaphora mendica* (Clerck, 1759)

Following a good year for this species on Skokholm in 2016, when 54 were logged, a total of 22 came to the light trap between the 3rd and 28th May, all of which were male (right in photo). Although a comparatively low count by last year's standards, this was only the 11th year that this species has been documented on Skokholm and just the third run of records since 2000.

2064 Ruby Tiger *Phragmatobia fuliginosa* (Linnaeus, 1758)

The first record of the year was a daytime single on 21st May. As with last year, June drew a blank and there was only one July sighting in a month which produced no records in 2016. A total of 18 second generation individuals were trapped in August (nine in 2016), with peaks of seven and five noted on the 26th and 27th. Singles were found diurnally on the 5th and 13th August and one trapped on 1st September was the last of the season, taking the year total to 23; there were 13 in 2016 and 49 in 2015.

2069 Cinnabar *Tyria jacobaeae* (Linnaeus, 1758)

The first adult was discovered on the Neck on 22nd April, 13 days earlier than the first of 2016, 18 days earlier than in 2015, 22 days earlier than in 2014 and over a month earlier than in the bitter spring of 2013. A total of 125 adults were trapped at night during the season (258 in 2016), with peak totals of 24 on 13th June and 29 on 21st June. As is always the case, the bulk of the overall total was made up of daytime observations; there were 482 logged in May (76 in 2016), including a peak count of 60 on the 31st, 1037 in June (743 in 2016), with impressive highs of 103, 120 and 150 on the 2nd, 4th and 18th and 124 in July (60 in 2016), when counts peaked at 55 on the 13th. The last adult was noted on 18th July. The first caterpillars were found on 15th June when 150 were on the Neck; these were ten days earlier than the first of 2016. Counts increased sharply towards the end of the month when three one square metre areas surveyed on the Neck were found to contain 96, 112 and 94 caterpillars. Numbers continued to rise in July when ad hoc estimates from the Neck totalled in the thousands. Unlike last year, when Ragwort was bountiful across the Island, there were comparatively few plants this season; those plants which were available were quickly decimated.

2080 Square-spot Dart *Euxoa obelisca grisea* (Tutt, 1902)

This Nationally Scarce coastal Noctuid is often the most commonly encountered species during early-autumn trapping sessions on the Island. The first three of the season were taken on 13th August, whilst a further 68 were logged over six dates during the remainder of the month, including highs of 23 attracted to light on both the 27th and 28th. There were 24 trapped over three dates in September, with a high of 19 on the 2nd, and a single on the 19th was the last of the season. An annual total of 95 was very similar to the 92 of last year and up on the 50 of 2015.

2087 Turnip Moth *Agrotis segetum* ([Denis & Schiffermüller], 1775)

A first generation moth trapped on 24th May was the first of the year. One was found resting in the Officer's Mess on the 29th and three second brood individuals were trapped over three dates between 13th August and 26th September. Turnip Moth remains a surprisingly scarce species on Skokholm; there was just one logged in both 2016 and 2015, five noted in 2014 and records in only six earlier years.

2089 Heart & Dart *Agrotis exclamationis* (Linnaeus, 1758)

Despite being common on the mainland, this too has proven a scarce Skokholm species of late. Only four were trapped between 28th May and 24th July, this compared with ten last year. Although the digitised logs suggest this to be a common resident, there have now been just 22 individuals noted over the last five years.

2090 Crescent Dart *Agrotis trux* (Stephens, 1829)

Present in the moth trap on only three dates this year, but with a total of 32 taken which included a peak of 30 on 25th July. This was down on both the 41 of 2016 and the 76 of 2015.

2091 Dark Sword-grass *Agrotis ipsilon* (Hufnagel, 1766)

It was a good year for this almost annual immigrant, with some early season trapping producing 37 moths between the 14th and 17th March; this early influx was also noted in many other areas of Britain. A further 48 were trapped at light between 4th May and 3rd November, with the majority of

records occurring in August, and an additional four were found resting in the buildings during the day. A year total of 89 is an excellent Skokholm tally, this compared with just ten in 2016, four in 2015 and none in 2014.



2098 The Flame *Axylia putris* (Linnaeus, 1761)

Five were taken between 28th May and 21st June; although down on the 15 of last year, the total was identical to that of both 2015 and 2014. This species seemingly occurred in much greater numbers in the past; the historical database shows catches of 108 on 10th July 1996 and 65 on 4th June 1997.

2102 Flame Shoulder *Ochropleura plecta* (Linnaeus, 1761)

One attracted to the light trap at the Farm on 20th May was the first of the year. There followed a further two on the 25th, nine over four dates in June, three over two dates in July, 25 over seven dates in August and eight over three dates in September, with one on the 20th the last of the season. A total of 48 was up on the 31 of 2016 and the three of 2015, but very similar to the 49 of 2014.

2107 Large Yellow Underwing *Noctua pronuba* (Linnaeus, 1758)

Five found in the trap on 13th June were the first of the year and a further three were caught during the remainder of the month. There followed three in July, 76 in August, 29 in September, one in October and three in November, with two on the 3rd the last of the year. Traditionally this is one of the most frequently encountered Noctuids on Skokholm; an annual total of 120 was in line with this and an improvement on the 53 trapped last year.

2109 Lesser Yellow Underwing *Noctua comes* (Hübner, 1813)

Singles trapped on 24th July and on the 8th and 9th October where the only records this season, the latter two becoming the first ever October observations of a species which is much less frequently encountered than its close relative the Large Yellow Underwing. A year total of three was similar to the two of 2016, the four of both 2015 and 2014 and the single of 2013.

2117 Autumnal Rustic *Eugnorisma glareosa* (Esper, 1788)

Following its discovery on the Island in 1990, this attractive late autumn Noctuid has only been logged in six years. Three singles caught over three dates between the 19th and 26th September was a good showing; there were two in 2016 and 2014, with one in 2000 the most recent prior to these.

2119 Pearly Underwing *Peridroma saucia* (Hübner, 1808)

Two trapped on 25th September and six the following day were the only records this year. Despite this being a regular immigrant to the UK from mainland Europe, eight in a season is a good total for Skokholm; only one was logged in both 2016 and 2014, the latter of which was the first since 6th October 2000.



2123 Small Square-spot *Diarsia rubi* (Vieweg, 1790)

A total of 33 were recorded between 25th May and 20th September, with a peak of six trapped on 28th May and the majority of records falling in the months of May and August. There were 49 in 2016 and only 20 in 2015.

2126 Setaceous Hebrew Character *Xestia c-nigrum* (Linnaeus, 1758)

It was a much improved year for this Nettle eater on Skokholm, with 23 recorded in total, all of which came in August and September bar the last of the season, a single on 4th October. There were just four last year, eight in 2015, ten in 2014 and one in 2013.

2134 Square-spot Rustic *Xestia xanthographa* ([Denis & Schiffermüller], 1775)

The first of the season was trapped on 19th August and a further six were recorded during the remainder of the month. There followed 19 caught over four dates in September, with a peak of seven noted on the 19th. An annual total of 26 is more than twice that of 2016 and marks 2017 as only the fourth year in which this species has been documented since 2000.

2139 Red Chestnut *Cerastis rubricosa* ([Denis & Schiffermüller], 1775)

Early spring trapping produced nine moths over five dates between the 16th and 27th March. Following a blank April, there were singles on the 3rd and 9th May, the latter of which was heavily worn. A total of 11 is a good Skokholm count, up on the four of 2016; these are the only years with a record since 2000. A lack of recent observations may well reflect unsuitable early season trapping conditions and the need to conserve battery power at this time of year.

2160 Bright-line Brown-eye *Lacanobia oleracea* (Linnaeus, 1758)

This common Skokholm breeder is a regular find in the moth trap throughout the visitor season. This year there were 16 in May, 110 in June (including 52 on the 13th which was the biggest catch of the

year), six in July, 35 in August and 16 in September. An annual total of 183 was similar to the 206 of 2016 and well up on the ten of 2015 and the 58 of 2014.

2163 Broom Moth *Melanchra pisi* (Linnaeus, 1758)

It was a comparatively quiet year for this common Bracken eating Skokholm breeder. One on 3rd May was the first of the season and there were a further 194 recorded during the remainder of May and June, with peaks of 31, 32 and 34 logged on the 26th, 28th and 30th May respectively. Large caterpillars were noted on Bracken in late July, August and September, whilst two late adults on 25th August were the last of the year.

2166 The Champion *Hadena rivularis* (Fabricius, 1775)

Despite regular use of the moth trap during the peak flight season, an annual total of 90 was well down on the 256 of last year, albeit an improvement on the 42 trapped in 2015. The first two of the season came to light on 3rd May, with a further 24 trapped during the month. There were only records during two June trapping sessions, with a monthly total of just three being massively down on the 122 of 2016. An impressive 40 individuals were taken from the light trap on 25th July; this was the only day of the month with a record but the best count of the year. There were a further 19 in August and two trapped on 2nd September were the last of the season.

2167 Pod Lover *Hadena perplexa capsophila* ([Denis & Schiffermüller], 1775)

This coastal subspecies of Tawny Shears *H. perplexa* was first recorded on 3rd May when a single was taken from the moth trap at the Farm. As with the preceding *Hadena*, it proved to be a poor year on Skokholm with a total of 25 coming to the light trap and a peak catch of three; there were 174 in 2016, including 40 logged in a single June night, and 33 in 2015.

2171 Marbled Coronet *Hadena confusa* (Hufnagel, 1766)

One found in the Lighthouse bathroom on 24th April was an early first for the year, but sightings of this coastal Noctuid thereafter were few; there were 20 taken at light during May, including a high count of seven on the 28th, and the last of the season was a single on 13th June. A cumulative total of 22 was well down on the 196 of last year but up on the four of 2015 and the five of 2014. Counts in 2016 also peaked in May, with a catch of 34 on the 9th contributing to a monthly total of 107.

2173 The Lychnis *Hadena bicruris* (Hufnagel, 1766)

Only documented in four years prior to 2013, however this species may have previously been overlooked amongst larger catches of The Champion, a potential confusion species when worn. Ten were taken from the moth trap over six dates between 26th May and 2nd September, this an improvement on the two of 2016, the four of 2015 and the two of 2014.

2176 Antler Moth *Ceraapteryx graminis* (Linnaeus, 1758)

Prior to 2014 this scarce Skokholm resident had only been logged in ten years. The seven trapped between 25th July and 26th August constituted the best recent year total for this species; there were three in 2016, one in 2015 and two in 2014.

2190 Hebrew Character *Orthosia gothica* (Linnaeus, 1758)

A total of seven were logged on well-spaced dates between 9th May and 18th June; all records were of singles attracted to the light trap at the Farm. This marks only the ninth season that this species has been found on Skokholm.

2195 The Delicate *Mythimna vitellina* (Hübner, 1808)

One was attracted to the light trap on 25th August, with two the following night and a further two on 26th September. Despite historically only being documented in 1937, 1960 and 1992, this species has

subsequently proven a scarce but regular autumn immigrant, with October singles recorded in three of the four years between 2013 and 2016.



2198 Smoky Wainscot *Mythimna impura* (Hübner, 1808)

A total of seven were trapped this season, with the first on 25th July and the last on 27th August. There were only three in 2016 and five in both 2015 and 2014. This is a common mainland species whose larvae feed on a range of grasses.

2199 Common Wainscot *Mythimna pallens* (Linnaeus, 1758)

This is another grass eating species with a wide UK distribution, however historical records suggest it to be much less common on Skokholm than its close relative the Smoky Wainscot. Singles trapped on the 19th, 20th and 26th September equalled the highest year total of recent times; the only other records since 2000 totalled two in 2016 and three in 2014.

2203 White Speck *Mythimna unipuncta* (Haworth, 1809)

A stunningly fresh individual taken from the moth trap on 1st September was the only record of the year. There have been eight logged on the Island previously, with four in both 1996 and 2000; the 2017 record thus marks only the third year with a Skokholm sighting of this immigrant species which is currently unable to overwinter in the UK in significant numbers.



2214 **Chamomile Shark** *Cucullia chamomillae* ([Denis & Schiffermüller], 1775)

One attracted to the moth trap at the Farm on 10th May became only the third to be documented since 1996 and the eighth Skokholm record. The larvae feed on a range of Compositae, with Sea Mayweed *Tripleurospermum maritimum* perhaps being the most likely foodplant on Skokholm.

2216 **The Shark** *Cucullia umbratica* (Linnaeus, 1758)

A single trapped on 30th May was only the second ever individual of this sow-thistle eating species to be seen on Skokholm and the first since 1997.



2217 **Star-wort** *Cucullia asteris* ([Denis & Schiffermüller], 1775)

It proved a marginally quieter year for records of this attractive Nationally Scarce coastal speciality. One trapped on 28th May was the first of the season, a week earlier than the first of 2016 and over a month earlier than the first of 2015. A further 18 were logged in June, with a peak catch of six on the 18th and five trapped on the 21st which were the last of the season (taking the year total to 19). An increase in the distribution of Goldenrod *Solidago virgaurea* is presumably responsible for the recent upsurge in observations of this species; a single in July 1999 was the only Island record until 2013 when two were logged, whilst there have since been six in 2014, two in 2015 (including a female laying eggs) and 25 in 2016.



2232 **Black Rustic** *Aporophyla nigra* (Haworth, 1809)

This stunning late autumn species was present in the moth trap on three occasions during October; there were singles on the 4th and 8th and two on the 9th. There have been very few Skokholm records of this common mainland species, perhaps due to its late flight season; the digitised logs list sightings in only four years between 1937 and 1996, with three in the latter autumn being the most recent prior to the three trapped last year.

2252 Large Ranunculus *Polymixis flavicincta* ([Denis & Schiffermüller], 1775)

Although absent from the traps in 2016, a total of four individuals came to light this season; there were two on both the 20th and 26th September. Four were also logged in 2015 and there were 21 in 2014, although prior to this there were records in only four years (1992, 1994, 1997 and 2000).

2255 Feathered Ranunculus *Polymixis lichenea* (Hübner, 1813)

One trapped on 31st August was the first of the year, 12 were caught over four dates in September and 49 over five dates in October included peak catches of 11 on the 4th and 9th and of 24 on the 8th. An annual total of 62 was up on the 40 of last year and the singles logged in both 2015 and 2014; lower numbers in previous years were perhaps due to less frequent trapping during the latter part of autumn. This is primarily a coastal species which on Skokholm probably uses Thrift as a foodplant.

2263 Red-line Quaker *Agrochola lota* (Clerck, 1759)

A single taken from the trap on 8th October, with what was possibly the same moth the following night, was the first record for Skokholm of this common and widespread species. Despite the presence of suitable larval foodplants on the Island, the total lack of previous records points to this individual being a wanderer from the mainland.



2270 Lunar Underwing *Omphaloscelis lunosa* (Haworth, 1809)

A total of 26 were trapped between 25th September and 9th October this season. There were 30 in 2016 and four in both 2015 and 2014.

2289 Knot Grass *Acronicta rumicis* (Linnaeus, 1758)

One trapped on 4th May was the first of the year. There were a further 15 in May, three in June, eight in July, ten in August and two in September which took the year total to 39; there were 16 in 2016 and 11 in 2015. One of the distinctive caterpillars was noted on 9th October.

2295 Marbled Green *Cryphia muralis* (Forster, 1771)

Although a reasonably common maritime moth, this species is an unusual find in the Skokholm moth trap. This season saw two caught on 25th July, one on 29th July and one on 13th August. Only singles were logged in 2016, 2015 and 2013, whilst four were also taken in 2014.

2305 Small Angle Shades *Euplexia lucipara* (Linnaeus, 1758)

A catch of three on 20th June and a single the following night were the first records of the year. One on 24th July was the only sighting during the month and a further six were caught over three dates in August. This species has never been recorded in large numbers on the Island, indeed an annual total of 11 was a better than average showing; although 24 were taken from the moth trap in 2016, there were none in 2015, five in 2014 and four in 2013.

2306 Angle Shades *Phlogophora meticulosa* (Linnaeus, 1758)

A recently emerged adult found in the Courtyard on 8th April was still in the process of extending its wings (below photograph); this was almost a month earlier than the first of 2016. There followed a further single in April, four in May, one in June, six in August, 13 in September and four in October which included the last of the year on the 30th; all but five of the records were from the light trap.



2321 Dark Arches *Apamea monoglypha* (Hufnagel, 1766)

Although the first record of the year was over five weeks later than the first of 2016, the 159 attracted to a single light trap on 25th July was one of the most impressive catches of this common Skokholm moth to date. Following a further July single, a total of 162 were taken over seven dates in August, whilst 29 over six September dates included the last three of the year on the 26th. A year total of 351 was the highest of the last five; there were 211 in 2016, 257 in 2015 and 84 in 2014.

2350 Small Wainscot *Chortodes pygmina* (Haworth, 1809)

The first two of the year were trapped on 25th July, a total of six individuals came to light between the 19th and 28th August and the final record of the year was of one on 2nd September. Given that the larvae of this species feed in the stems of sedges *Carex* spp., plants which grow abundantly in the wetter areas of Skokholm, it would seem likely that this is a low density breeding species.

2353 Flounced Rustic *Luperina testacea* ([Denis & Schiffermüller], 1775)

Although typically a regular late-summer moth on Skokholm, there were just two trapped this year with singles on 28th August and 2nd September. There were 13 in 2016, 11 in 2015 and four in 2014.

2361 Rosy Rustic *Hydraecia micacea* (Esper, 1789)

There were singles trapped on four dates between 19th August and 1st September this year. These follow totals of five last year, zero in 2015 and one in 2014. Whilst the larvae feed on a range of plants, they have a preference for docks *Rumex* spp.

2364 Frosted Orange *Gortyna flavago* ([Denis & Schiffermüller], 1775)

A stunning specimen was taken from the trap on 1st September in what was a rare Skokholm encounter; this species has only been logged in three previous years, with this the first since 29th September 2013. What was perhaps the same individual was in the light trap the following morning.

The most recent record prior to 2013 was 105 years ago, in the autumn of 1912. Although plants present on the Island, including thistles and burdocks *Arctium* spp., provide the larval food, the paucity of previous records suggests that this is an occasional immigrant rather than a Skokholm breeder.



2385 Small Mottled Willow *Spodoptera exigua* (Hübner, 1808)

Although a fairly regular immigrant to the UK from continental Europe, this species was only recorded on Skokholm for the first time in 2015 when two singles were found at rest. Two in the light trap on 25th July this year was thus the first count of multiple moths, whilst a single on the 29th took the year total to a new high. There have now been records in three years, with the only other sighting a single trapped on 28th August last year.

2403 Bordered Straw *Heliopsis peltigera* ([Denis & Schiffermüller], 1775)

A day-flyer found near the Wheelhouse Heligoland on 29th May made 2017 just the sixth year with a record of this migrant species. This moth was also documented in 1910, 1912, 1937 and 1992, whilst its most recent appearance was in 2015 when an impressive seven were logged between 10th June and 22nd August.



2434 Burnished Brass *Diachrysis chrysitis* (Linnaeus, 1758)

This stunning moth is only recorded irregularly on Skokholm; singles on 24th July and 19th September were the only individuals to be trapped during what was thus a typical season. Most recently there was one in 2016 and 15 in 2014 which included 11 taken in a single trapping session at North Haven. The larvae feed on a variety of herbaceous vegetation, particularly Common Nettle.

2441 Silver Y *Autographa gamma* (Linnaeus, 1758)

Unsurprisingly this is one of the most common and conspicuous migrants to be found on Skokholm, although it proved a quiet year by recent standards. One found on the Neck on 2nd May was the first of the season, four days earlier than the first of 2016. Another 18 were logged diurnally during the remainder of the month and one on the 25th was the first to be taken from the light trap. There were just ten logged in June (24 in 2016), 14 in July (37 in 2016), 33 in August (66 in 2016), 17 in September (291 in 2016), four in October (37 in 2016) and a single on 1st November was the last of the year. An annual total of 99 was the poorest of the last five years; there were 458 recorded in 2016, 627 in 2015, 142 in 2014 and 542 in 2013.

2450 The Spectacle *Abrostola tripartita* (Hufnagel, 1766)

The first of the year was taken from the trap on 4th May and a further five were recorded during the remainder of the month. Four were trapped in both June and July, whilst there were seven in August including one on the 25th which was the last of the year. A total of 21 in a season was similar to the 18 logged last year, totals up on the two of 2015, the 11 of 2014 and the single of 2013.

2469 The Herald *Scoliopteryx libatrix* (Linnaeus, 1758)

One trapped on 25th September was the first since one appeared in the Lighthouse kitchen on 22nd March 2014. This spectacular moth is a rare Skokholm species, with the only other sightings logged in 1990 and 1992; despite the presence of a *Salix* spp., a potential larval foodplant, it seems unlikely that this is a regular Island breeder given such a lack of records.

2474 Straw-dot *Rivula sericealis* (Scopoli, 1763)

The first since 1968 was a second generation individual attracted to the light trap on 27th August. Although a relatively common mainland species with a mainly southern distribution, 2017 was just the sixth year that this grass eating species has been documented on Skokholm.



Aggregates and species groups

2343x Common Rustic agg. *Mesapamea secalis* agg. (Esper, 1788)

A total of 19 in the trap on 25th July was the first record of what was a good year for *Mesapamea* on Skokholm. A further 160 were taken in August, with peak catches of 62 on the 13th and 39 on the 26th; there were just 33 taken in the same month of 2016. Six in September included five trapped on the 2nd which were the last of the season.

2381x **The Uncertain/Rustic** *Hoplodrina* agg. (Brahm, 1791)

For the sake of consistency, records of both The Rustic *H. blanda* and The Uncertain *H. alsines* were lumped. The first of the year came on 25th July when a respectable 140 were in the moth trap. A further 51 were logged over six dates in August, with one on the 28th the last of the year. A total of 191 was an improvement on last season when just 76 were documented.

Butterflies

It again proved to be a year of mixed fortunes and interesting observations, beginning with a milder spring which resulted in an earlier season for many of Skokholm's butterflies. The unseasonably warm spring temperatures saw the early appearance of all three common Skokholm 'whites'; most notable was the first **Small White** which occurred over ten weeks earlier than in 2016, whilst an April record of **Large White** was the first to occur in that month since 1997. Early appearances were also made by **Green-veined White** (eight days earlier than in 2016), **Small Copper** (12 days), **Painted Lady** (14 days) and **Small Tortoiseshell** (26 days). Sadly the early start did not equate to a plentiful year for some of these species; it proved a third consecutive poor season for **Green-veined White**, the worst of the last five years for **Small White** (which declined by 88%), and although up on the 2016 total, **Small Tortoiseshell** numbers were 78% down on the 2013-2016 mean. Following the unexpected appearance of **Brown Argus** in 2016 (the first for 55 years), the excitement that they may have overwintered successfully was quashed this year following many fruitless searches. The first **Speckled Wood** since 2015 added some late season diversity and, following a dearth of **Clouded Yellow** records last year, it was pleasing to see this continental gem back on the year list. **Meadow Brown** again topped the tables as the most abundant species of butterfly on Skokholm, with a near constant three-figure presence in June contributing to the third best year total on record. It was also an excellent year for **Painted Lady**; although no big arrivals from the Continent were experienced, their presence into October resulted in the highest October day-count since 2003.



Skokholm butterfly observations were again noted in the daily Log and an account of each species recorded is listed systematically below. The Maximum Daily Count refers to the highest number of individuals seen on any one day in a particular month and Butterfly-days are the cumulative number of butterflies seen in a defined period of time. The totals for the period 2013 to 2017 are listed in each table to allow for a comparison to be made.

Clouded Yellow *Colias croceus* (Geoffroy, 1785)

A single in North Haven on 22nd August was the first of the season and the first sighting of this species since 2015. There were two further records this year; one was outside the Library on 18th September and one was at North Pond six days later. Whilst a welcome sight following last year's absence, a total of just three butterfly-days was disappointing by recent standards; the 2013 total of ten was the fourth highest Skokholm count and the 13 of 2014 equalled the record set in 1998.

Large White *Pieris brassicae* (Linnaeus, 1758)

A single watched in South Haven on 23rd April was the first of the year, the only April record of the last five years and a month earlier than the first of 2016. It also proved the most productive May of the last five years, with more than twice the number of butterflies logged than seen cumulatively between 2013 and 2016; the increase in numbers was relished by the Pied Wagtails resident at the Farm who were observed eating several individuals. June too was a better than average month, although a total of 12 was far from impressive. The highest daily count and the highest butterfly-days total once again came in July and again included immigrants; there were three watched at sea from the Neck on the 12th, two were observed arriving from the sea on the 13th, the 20 logged on the 17th were widespread around the Neck and the North Coast and five were seen heading east at Crab Bay on the 23rd. August and September were again quiet, indeed the combined total was the lowest of the last five years, however the year total was up on the previous two years, with 169 butterfly-days being an 11% increase on last year. Although this was thus the most abundant of the 'whites' seen in 2017, the total was still 6% down on 2014 and 39% down on 2013.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	1	4	5	20	5	4	0	0
2016	0	0	2	1	18	5	9	0	0
2015	0	0	2	1	1	9	7	0	0
2014	0	0	0	1	25	3	34	0	0
2013	0	0	1	0	14	14	2	0	0
2017 Butterfly-days Total	0	1	27	12	96	19	14	0	0
2016	0	0	6	2	97	34	14	0	0
2015	0	0	3	1	6	43	22	0	0
2014	0	0	0	2	64	9	105	0	0
2013	0	0	1	2	145	119	10	0	0

Small White *Pieris rapae* (Linnaeus, 1758)

The first of the season, a single on the Neck on 4th May, was an exceptionally early observation; this was 76 days earlier than the first of 2016 and the only May record of the last five years. An early start did not result in a good year; with maximum daycounts failing to exceed two individuals, it proved the worst year of the last five for this species. An annual total of just 11 butterfly-days was 88% down on last season and the lowest of the last five years.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	0	1	0	1	2	1	0	0
2016	0	0	0	0	2	4	16	3	0
2015	0	0	0	1	0	3	2	7	0
2014	0	0	0	0	2	5	14	0	0
2013	0	0	0	0	14	8	40	1	0
2017 Butterfly-days Total	0	0	1	0	1	4	5	0	0
2016	0	0	0	0	11	27	49	8	0
2015	0	0	0	1	0	8	3	12	0
2014	0	0	0	0	3	30	57	0	0
2013	0	0	0	0	65	49	194	1	0

September is frequently the most productive month for records of Small White on Skokholm, however just five butterfly-days were logged this year, 90% fewer than last year. The last of the year, found at South Pond on 18th September, was over three weeks earlier than the last of 2016. This very poor year sadly mirrored observations on the mainland where a decline of 37% was recorded nationally (Butterfly Conservation, 2017).

Green-veined White *Pieris napi* (Linnaeus, 1758)

It was, for a third consecutive year, a poor season for Green-veined White on Skokholm. Two on 5th May were the first of the year, eight days earlier than the first of 2016. As with the preceding species, this was not a positive sign; there were no further records in May or June and maximum daycounts in July and August failed to exceed four. Although numbers remained low, September proved to be the best month of the year with 17 butterfly-days logged; the total, although well up on last year, was 79% down on a more productive 2014. An annual total of 41 butterfly-days was 49% down on the 2013-2016 mean (80.3 ±sd 55.0) and the second worst of the last five, only being up on the 35 logged in 2015. This species was nevertheless more abundant than Small White.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	0	2	0	4	3	6	0	0
2016	0	0	1	0	7	7	2	0	0
2015	0	0	2	2	1	6	2	1	0
2014	0	1	3	1	20	5	14	0	0
2013	0	0	1	5	24	5	1	0	0
2017 Butterfly-days Total	0	0	2	0	16	6	17	0	0
2016	0	0	3	0	18	24	4	0	0
2015	0	0	2	4	4	16	8	1	0
2014	0	2	11	1	82	25	37	0	0
2013	0	0	3	7	53	15	1	0	0

Small Copper *Lycaena phlaeas* (Linnaeus, 1761)

One at the Lighthouse on 22nd April was 12 days earlier than the first of 2016 and marked the beginning of an improved season for this vibrant butterfly. Sightings became much more regular in May, with numbers increasing from the 10th and a peak of 74 on the 21st; both the maximum daycount and the monthly total were the highest of the last five Mays and both were the highest totals to be logged in any month this year. Numbers remained high in June, with a maximum daycount of 57 also the highest of the last five years and well up on the six of last season. Although down on a remarkable 2013, the July butterfly-days total was the highest of the last four years, despite the peak daycount being 30% down on that of last year.



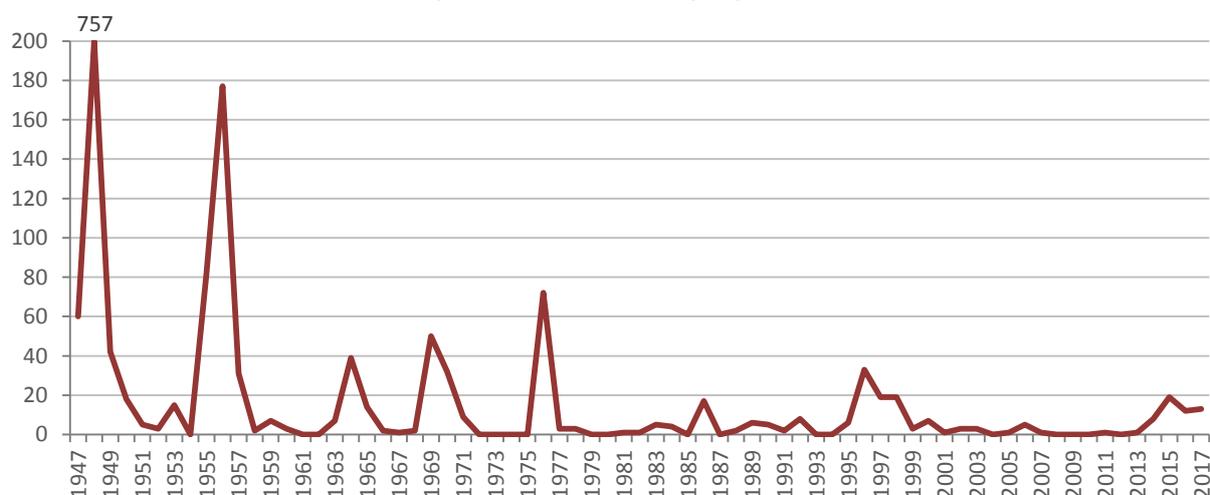
Later generation totals were less impressive in 2017, indeed the combined butterfly-days total for the last three months of the flight season was by far the lowest of the last five years. Nevertheless the annual butterfly-days total of 1576 was 40% up on last season, albeit 38% down on the 2013-2016 mean and considerably down on 2013 when three-figure observations made on several dates between July and September contributed to a remarkable year total of 5775 butterfly-days.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	1	74	57	42	47	19	11	0
2016	0	0	8	6	60	30	39	38	0
2015	0	12	47	18	18	98	15	10	0
2014	0	0	6	5	35	16	166	9	0
2013	0	0	20	26	232	300	100	80	0
2017 Butterfly-days Total	0	5	419	205	360	400	154	33	0
2016	0	0	48	31	289	295	360	101	0
2015	0	22	401	176	166	822	103	47	0
2014	0	0	45	13	250	94	1155	44	0
2013	0	0	95	245	814	3302	969	350	0

Common Blue *Polyommatus icarus* (Rottemburg, 1775)

A single at the Well on 2nd June was the first of the year, five days later than the first of 2016. There were a further seven butterflies in June, two in July, two in August and one in September. An annual total of 13 was similar to the 12 of 2016, the 19 of 2015 and the eight of 2014, whilst only a single was logged in 2013. Recent counts, together with an increase in the extent of Greater Birds-foot-trefoil *Lotus corniculatus* over the past four years, suggest that this species may be breeding on Skokholm, albeit in low numbers; the theory of low density breeding is perhaps supported by the fact that adults were again observed on the wing during both flight periods. However there are no recent records of mating, caterpillars are yet to be found on the larval foodplant and 85% of sightings this year were of males. Although this species has been logged more regularly in the last five years than in the previous 15, the database shows that it has occurred in much larger numbers than we are familiar with today; there were 259 butterfly-days noted in 1956 and an Island record 757 butterfly-days in 1948.

The total number of Common Blue butterfly-days logged in each year between 1947 and 2017. Note that the 1948 peak is not accurately represented on this chart.



Painted Lady *Vanessa cardui* (Linnaeus, 1758)

For a third consecutive year, it proved to be a productive season for this migrant butterfly on Skokholm. Four at the Lighthouse and one at the Farm on 22nd April were the first of 2017 and two

weeks earlier than the first of 2016; the only other April sightings of the last five years were in 2015. An early influx took the May butterfly-days total to 46, the highest of the last five years, although June proved quiet, with a maximum daycount of 13 on the 2nd contributing to a monthly total of just 56 (77% fewer than last year). Following three on 2nd July, there were no further records until the 20th when 16 were recorded at widespread locations. With a total of 209 butterfly-days, August was the best month for this species in 2017, however the biggest daycount was not logged until September when 26 were recorded on the 6th; the peak count was 49% down on 2016 (a high of 51 which was logged almost three months earlier than that of 2017). There were 22 October butterfly-days, all noted in a four day period between the 3rd and 6th; this was the second highest October total of the last five years. The year total of 549 was 13% down on last season and 22% down on 2015 (the last year with a major influx), but 28% higher than the 2013-2016 mean (430.3 ±sd 275.8).

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	5	8	13	16	18	26	12	0
2016	0	0	3	51	3	20	27	3	0
2015	0	5	4	29	11	19	13	6	0
2014	0	0	1	4	5	8	8	2	4
2013	0	0	0	5	4	9	7	5	0
2017 Butterfly-days Total	0	5	46	56	65	209	146	22	0
2016	0	0	11	247	10	190	166	6	0
2015	0	13	27	227	125	154	127	32	0
2014	0	0	3	20	41	69	61	2	6
2013	0	0	0	17	31	93	30	13	0

Small Tortoiseshell *Aglais urticae* (Linnaeus, 1758)

With just a 31% increase on the disappointing counts of last year, the 76 butterfly-days logged in 2017 was the second worst total of the last five years, 78% down on the 2013-2016 mean (339.6 ±sd 199.5). Singles near the Red Hut on 23rd March and at the Farm the following day were the first of the year, the former 26 days earlier than the first of 2016; this was the only species of butterfly to be logged in March this year. Seemingly absent in April and May, the next sighting was not until 21st June when two were observed at the Hills. There was only one further single during June and eight July butterfly-days (95% fewer than in 2015 and 2013). August proved the most productive month for a second successive year, with 40 butterfly-days logged between the 7th and 31st and a peak daycount of five noted on both the 25th and 26th; the peak daycount was thus equal to that of last year but fell short of the 2013-2016 mean by 83% (29 ±sd 27.1). There were 22 September butterfly-days and a single on 3rd October was the last of the year. The UK population is known to fluctuate and this pattern is also evident on the Island (for example 1412 butterfly-days were logged in 1990 following only 60 during the previous year), however two poor years in succession may reflect declines recently observed on the mainland which have been linked to the arrival of the parasitic fly *Sturmia bella* from the Continent (see the Skokholm Annual Report 2016 for further details).

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	1	0	0	2	2	5	3	1	0
2016	0	1	2	1	1	5	4	0	0
2015	4	3	1	15	22	11	15	1	1
2014	2	1	1	12	8	68	5	0	0
2013	1	1	1	2	21	14	9	1	0
2017 Butterfly-days Total	2	0	0	3	8	40	22	1	0
2016	0	2	4	2	2	30	18	0	0
2015	1	9	1	68	166	63	124	3	1
2014	9	3	1	68	75	327	32	0	0
2013	1	3	3	4	171	67	93	6	0

Red Admiral *Vanessa atalanta* (Linnaeus, 1758)

The first record of this distinctive and common Skokholm butterfly was logged on 2nd May, two weeks later than the first of 2016 and 53 days later than the early records of 2014. Despite this late start, a May total of 43 butterfly-days was 110% up on the 2013-2016 mean (20.5 ±sd 25.8) and a June total of 145 was 72% up (84.3 ±sd 62.3). Whilst the maximum July daycount only reached 24 (37 in 2016), butterflies were logged on all but one date including an arrival in the early part of the month which took the total to 236 butterfly-days, the highest of the last five years. As noted last year, a sizable influx of second generation butterflies saw numbers peak in late August and early September; although the peak August and September daycounts were down 33% and 77% on the 2013-2016 means respectively, the butterfly-days totals were only fractionally down on 2016 and up on two of the three years prior to that (albeit eclipsed by the remarkable September of 2014). In the previous three years counts have remained high into October, however 2017 saw records on just 16 dates and a maximum daycount of only five on the 3rd (70 on the 8th in 2016) which contributed to a monthly total of 37 (89% down on last year). A single on Home Meadow on 3rd November was the only record of any species of butterfly during the month and the last of the year. A grand total of 1288 butterfly-days, although 13% down on 2016 and 25% down on the 2013-2016 mean (1715.3 ±sd 1285.3), was the third best of the last five years.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	0	14	21	24	29	44	5	1
2016	0	1	23	7	37	56	204	70	0
2015	0	5	0	41	12	22	120	26	3
2014	4	1	1	36	20	45	409	42	0
2013	0	1	7	6	12	50	40	15	3
2017 Butterfly-days Total	0	0	43	145	236	369	457	37	1
2016	0	1	56	44	163	406	473	336	0
2015	0	9	0	127	104	188	318	134	10
2014	6	1	3	147	178	415	2705	143	0
2013	0	1	23	19	111	293	349	92	6



Peacock *Inachis io* (Linnaeus, 1758)

A single at the Sugarloaf on 7th April was a week later than the first of 2016 and marked the beginning of what was to be a poor year for Peacock sightings. There were singles logged on just two

further April dates, resulting in a butterfly-days total 85% down on 2016 and 89% lower than the 2013-2016 mean (26.0 ±sd 36.3). Following typically low May and June totals, a dip in numbers due to the demise of the overwintering generation, there was the usual July peak. The maximum July daycount of 12, made up of observations from widespread locations on the 24th, was 26% down on the 2013-2016 mean and fell short of the 2016 high by 70%; despite this lower than average peak count and a monthly total down on the previous two years, a total of 95 July butterfly-days was in fact 29% up on the 2013-2016 mean (73.5 ±sd 58.4). A further 25 butterfly-days were noted in August, 20 in September and three in October which included the highest October daycount of the past five years. The annual butterfly-days total of 148 was 34% down on last year and 19% down on the four year mean (183.0 ±sd 161.9).

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	1	1	0	12	5	4	2	0
2016	1	3	2	0	40	11	2	1	0
2015	2	22	3	1	16	13	3	1	3
2014	1	1	1	1	7	4	1	1	0
2013	0	0	1	0	2	4	1	1	0
2017 Butterfly-days Total	0	3	2	0	95	25	20	3	0
2016	2	20	3	0	112	79	6	1	0
2015	2	79	5	1	130	148	23	3	3
2014	1	5	3	1	49	18	2	1	0
2013	0	0	1	0	3	29	1	1	0

Speckled Wood *Pararge aegeria* (Linnaeus, 1758)

One in the Wheelhouse Heligoland on 23rd August and one at the Top Tank the following day may well have been the same individual. Speckled Wood remains a scarce species on Skokholm, with this the first record since 6th October 2015 when a single was at North Haven. There have now been seven records during the last five years, with sightings logged in four of the five, whilst the digitised Log includes records made in a further ten years between 1936 and 2012.



Meadow Brown *Maniola jurtina* (Linnaeus, 1758)

It was another impressive showing for this plentiful summer species which proved to be the most abundant butterfly on the Island for a fourth consecutive year. One at the Well on 16th June was the first to be logged, six days later than the first of 2016 but six days earlier than the first of 2015. The June total was 141% up on last year and the second best June of the last five. The peak count of 381 logged on 25th July, which included an impressive 120 along the Lighthouse Track, 200 between the Farm and the Well, 40 on the North Coast and 21 on the Neck, was no doubt an undercount.

Although this peak was 26% down on the 2016 maximum, three-figure counts made on 23 dates took the monthly total to 5179 butterfly-days; this impressive tally was the highest total in any month on Skokholm since the 7503 logged in July 1989, whilst the only bigger total was in July 1984 when a remarkable 10323 were documented. Numbers dropped off quickly in August, with a peak count of 80 on the 4th contributing to a monthly total of 461 butterfly-days (33% fewer than last year and 31% fewer than the 2013-2016 mean). A single at the Well on 2nd September was the only record during the month and the last of the year, falling on the same date as the last of 2016. The year total of 5848 butterfly-days was the highest of the last five years and 57% higher than the 2013-2016 mean (3717.3 \pm sd 1050.1).

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Maximum Daily Count	0	0	0	60	381	80	1	0	0
2016	0	0	0	22	516	120	2	0	0
2015	0	0	0	80	220	140	10	0	0
2014	0	0	0	100	181	59	2	0	0
2013	0	0	0	0	171	40	3	0	0
2017 Butterfly-days Total	0	0	0	207	5179	461	1	0	0
2016	0	0	0	86	3510	687	3	0	0
2015	0	0	0	159	3265	1102	34	0	0
2014	0	0	0	281	3115	412	3	0	0
2013	0	0	0	0	1753	455	4	0	0

Amphibians

Common Frog *Rana temporaria*

A later than normal return of staff may well have resulted in early spawn patches being missed (recent observations were on 3rd March in 2016 and 6th March in 2015); indeed a thorough search of South Pond on 17th March and of North Pond on the 25th drew a blank. The number of spawn patches found over the past few years in both North and South Ponds has been worryingly low; seven clumps and many newly hatched tadpoles were found in 2014, there were 24 clumps in 2015 and only four in 2016. It was, however, a comparatively better year for observations of adult frogs on Skokholm. One along the Lighthouse Track, adjacent to South Pond, during a period of prolonged and heavy rain on the night of 17th August was the first of the year, a second was found near the Red Hut on the 25th and a third was again on the Lighthouse Track during heavy rain on the night of 16th September. Recent adult records have been few; in each of the years between 2013 and 2016 there was just a single sighting and in 2015 this was of a dead individual. It is thought that the exceptionally cold spring of 2013, which resulted in the rare sight of frozen ponds on Skokholm, increased both adult and spawn mortality; that they have seemingly struggled to recover may make this species vulnerable to extinction should freezes occur in future winters. The historical database, although incomplete, suggests that this species has struggled previously; there were 111 logged in 1948 but only three in 1979.

Mammals

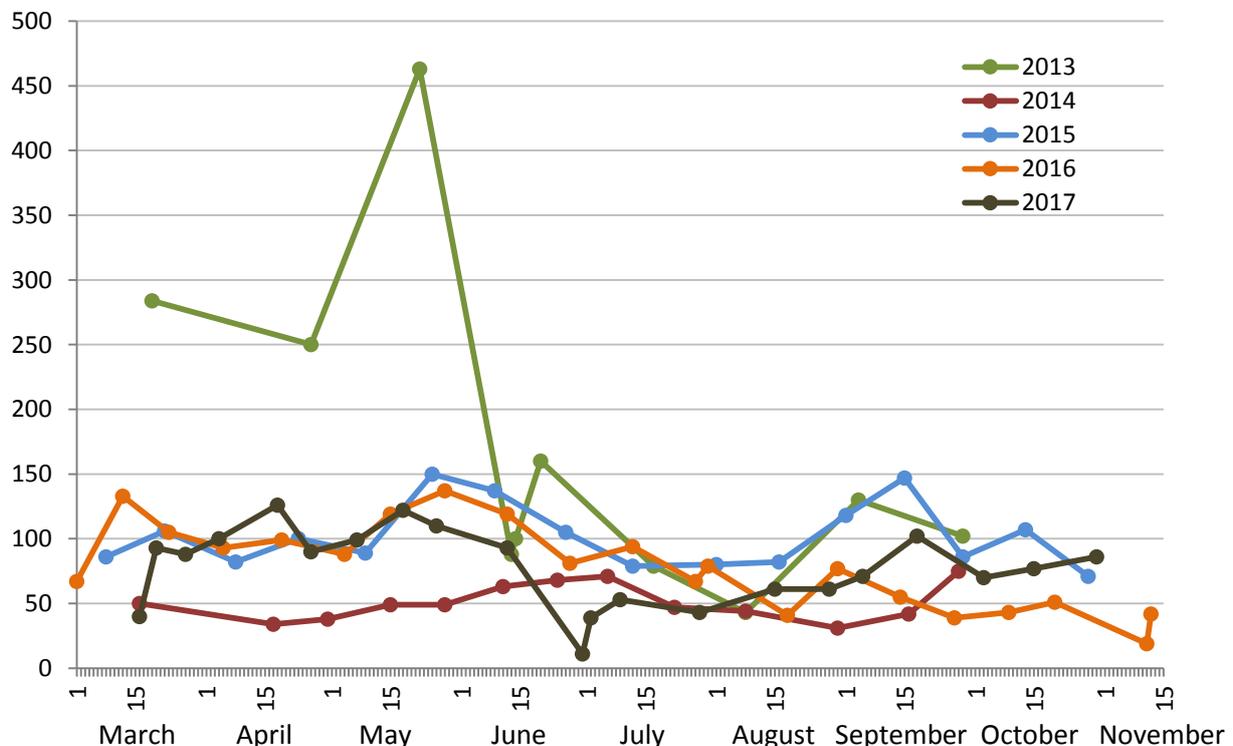
European Rabbit *Oryctolagus cuniculus*

Rabbits within a 7ha plot were first monitored from a fixed point on the Knoll in the mid-1990s when an outbreak of Rabbit Viral Haemorrhagic Disease (RVHD) caused a significant decline in the Skokholm population. Monitoring has occurred within the same area ever since, although with varying degrees of regularity. Following the massive decline in numbers noted in 2013, due at least in part to an outbreak of a new strain of RVHD (Westcott and Choudhury, 2015), a decision was made to census the plots every two weeks in order to gain more information on how numbers were changing during the year (rather than once a month).

Disease was again evident at locations across the entire Island, with a similar number of incidences of sick and dead animals as logged in 2016. The first was a partially paralysed adult at the Well on 17th March, with further March records coming from the Red Hut on the 23rd and the Well on the 31st. In April two showing signs of sickness were on Home Meadow on the 4th, there was one in the Courtyard on the 12th and the first to be found dead was near South Haven on the 13th. Sick animals were recorded at various locations on eight further dates during the remainder of the month. A dead pregnant female was found outside the Workshop on 4th May, the first sick youngster was in the Well Heligoland on the 9th and five further ill animals were observed between the 13th and 24th; additionally eight dead animals were noted between the 17th and 31st, including three youngsters on the 30th. In June sick animals were encountered on seven dates, including one on the 19th which was taken by a Great Black-backed Gull but immediately dropped. There were eight found over seven dates in July and a dead animal on the 3rd. In August five ill rabbits were reported, including one on the 5th which was observed having a seizure before expiring, and a dead juvenile was found on the 29th. An ill Rabbit found in Crab Bay on 5th September was still there the following morning but dead by that afternoon and another, ill in the Courtyard on the 27th, was dead the following day. Two sick and one dead Rabbit were found in October, however none were encountered in November.

Sick Rabbits exhibited symptoms similar to those logged in the previous four years; approachable animals had matted coats, a general lack of coordination, swollen faces with fur loss, audible breathing difficulties and watery red eyes (symptoms commonly associated with Myxomatosis), however several freshly dead animals showed no visible signs. That death often came within 24 hours of showing illness is more suggestive of an RVHD outbreak. It is plausible that both diseases currently exist in the Skokholm Rabbit population; although it was once suggested that the absence of the European Rabbit Flea *Spilopsyllus cuniculi* would prevent the spread of Myxomatosis on Skokholm (Thompson, 2007), the disease can be transmitted via several other arthropod vectors.

The total number of Rabbits logged during evening counts of the North Plain study area between 2013 and 2017.



Rabbits were censused in two adjacent zones across North Plain on 21 calm and dry evenings between 16th March and 30th October, with the count commencing 90 minutes before sunset when

animals are typically more active (as stipulated by Thompson, 2007). The counts discussed below are the total number of animals recorded across both zones.

The first survey of the season on 16th March recorded just 40 animals, however conditions were suboptimal and a count on the 20th produced a total of 93; the 20th March total was 121% up on the last survey of 2016 (there was a drop of 6% between the last count of 2015 and the first of 2016). Numbers increased in April with 100 on the 6th and 126 on the 18th, the latter of which proved to be the highest count of the season, albeit the second lowest peak of the last five years (annual maxima were 137 in 2016, 150 in 2015, 75 in 2014 and 463 in 2013). Counts remained relatively stable until June when numbers crashed from 93 on the 12th to just 11 on the 30th; this was an 88% decline ending in the lowest single count of the last five years. The population recovered slowly during July and by 15th August the census total was 61. Despite ill animals still being observed across the Island, counts in the plots continued to rise, reaching an autumn peak of 102 on 18th September. The last survey of the season on 30th October tallied 86 animals, a total 69% higher than the late October count of 2016. There was a noticeable increase in the number of kits on the surface this season; there were already many young around the Island upon the return of staff in March and these ad hoc observations were confirmed in the census plots. There were 29 kits in March, 65 in April (including the peak daycount of 28), 63 in May, 14 in June and one in July. It thus proved the second best year of the last five for kits; the 2017 total of 172 juveniles was up on the 75 of 2016, the 149 of 2015 and the 57 of 2014, whilst only being marginally down on the 191 of 2013 (when there were fewer surveys).

Bats

Bats were again surveyed using an SM2, an automated bat detector which is left in situ to record echo-locating bats which pass within its range. To maintain consistency with the previous three years, it was located at the Well, housed in the Well Hide with the microphone facing due east. The detector was first deployed on 6th April and remained in place until 30th September however, due to a faulty microphone and a delay in its replacement, it was not in nightly use until 1st May.



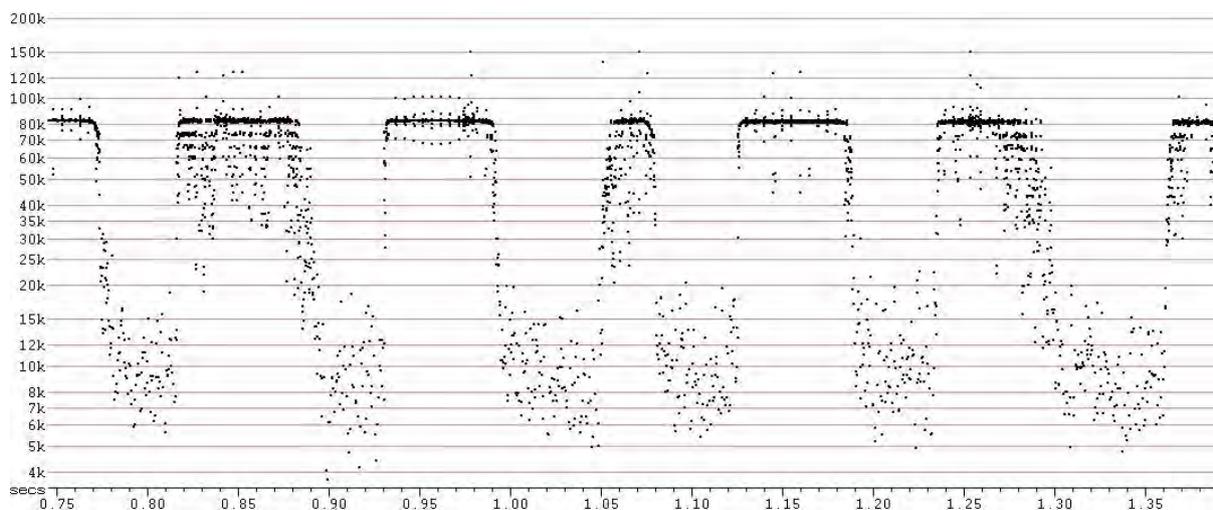
This year we were visited by Northumberland bat expert Tina Wiffen from the 16th to 26th September who, following observations that migratory bat species were being recorded here during peak migration months, proposed a project to catch and tag *Nyctalus* and *Pipistrellus* (using numbered rings supplied by the Mammal Society). Single strand mist-nets were erected at the Well,

above South Haven Stream and below the Lime Kiln whilst ultrasonic lures were played in the same areas in an attempt to attract bats towards the nets. Unfortunately bat activity during this period was unusually low and a light breeze present on most evenings no doubt made the nets more detectable. Sadly no bats were trapped, although a Storm Petrel was extracted from the top shelf of a triple-high mist net at the Well on the 24th. Tagging individuals that visit Skokholm is an exciting concept, particularly given the growth of bat tagging in the UK and the already established long-term practice of trapping and tagging bats on the Continent.

Three species were recorded this year, the highlight being Greater Horseshoe which was logged for the first time since 2014. There were again no records of smaller bats; all three Pipistrelles have been logged here recently, although only in very low numbers. In the following text a ‘pass’ refers to each occasion that the detector was triggered into recording.

Greater Horseshoe *Rhinolophus ferrumequinum*

Three passes, recorded at 2117, 2118 and 2119hrs on 6th April, were probably the same animal. The detector was again triggered on 19th May at 0234hrs. Unfortunately the period between these two dates was largely unmonitored due to microphone failure. A fifth record came on 3rd September at 2241hrs, this the only record of the autumn and the last of the year. This was only the second year that Greater Horseshoe has been detected on the Island, the total number of passes was the most ever logged and 2017 became the first year with a spring record (there were two passes on 2nd September 2014). Although the 2014 record was the first confirmation that this species was visiting the Island, droppings found in a Purple Cove sea cave in 1993 were thought to be from this species.



Noctule *Nyctalus noctula*

The first Noctule pass was logged on 2nd May, however there were no further records until 25th July. A further seven passes were recorded during the remainder of July and a total of 91 was logged in August (65 in 2016). September proved a comparatively poor month, with Noctules triggering the detector on only 31 occasions (there were 121 passes in 2016). The 2017 total of 131 passes was well down on the 396 of 2016 and the 621 of 2014, however this species remained the most frequently recorded bat on Skokholm for a fourth consecutive year. Prior to the establishment of passive bat monitoring on the Island in 2014 (since when there have been regular records of this species), the only documented Noctule was a single in 1968. In the years between 2014 and 2016 peak Noctule activity at the Well was in September and October, the same period in which Continental animals from northeast European populations migrate southwest (UNEP, 2015). That the Noctules logged over the Island could be long-distance migrants is an exciting idea, however no solid evidence exists at present to suggest that this is the case; the autumnal increase in numbers may just reflect the dispersal of juvenile and adult bats from the nearby mainland.

Leisler's Bat *Nyctalus leisleri*

This season there were two recordings of a Leisler's Bat. Both were single passes, with the first logged at 2147hrs on 27th August and the second at 2109hrs on 1st September. These were the sixth and seventh records for Skokholm and mark 2017 as only the third year that this species has been identified here. There were two records in 2016 (one in August and one in September) and three in September 2014. Although a sizeable population exists in Ireland, Leisler's is very much rarer on the mainland than Noctule and it remains by far the rarer of the two *Nyctalus* on Skokholm.

Noctule/Leisler's Bat

A total of ten passes were recorded (one in July, eight in August and one in September) where it could not be determined if the call had been made by a Noctule or a Leisler's Bat; in 2016 there were 49 such passes.

Seals

Atlantic Grey Seal *Halichoerus grypus*

Although Grey Seals are a familiar sight in the waters around Skokholm throughout the year, pups are only recorded in very small numbers each autumn; this is primarily due to a lack of suitable pupping beaches, areas which are plentiful around the other Pembrokeshire Islands and the nearby mainland where much larger breeding colonies are established. There are two main low tide haul outs on Skokholm; the rocks around South Haven and in Crab Bay hold the majority of non-breeding adults. Most counts come from these two sites, although they are regularly supplemented by totals from around the coast, primarily from around the Neck. The pattern of attendance in 2017 was typical of recent seasons; counts were lowest in March and peaked during July when a cumulative 747 were logged. The total number of Grey Seals counted around Skokholm each year has been steadily increasing, with the 2017 total being 40% up on that of 2013; there was an increase of 5% between 2013 and 2014, 19% between 2014 and 2015, 4% between 2015 and 2016 and 7% between 2016 and 2017. Maximum daycounts also continue to rise; the 60 logged on 12th July this year was the highest Skokholm daycount for many years. That daily maxima are also increasing suggests that there has been a genuine rise in numbers rather than an increase in recording effort.

The total number of Grey Seals logged during each recording month between 2013 and 2017, along with the maximum daycount recorded during each month.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Monthly Total	15	290	336	629	747	697	386	217	28
2016	25	254	507	514	724	503	428	151	14
2015	21	114	414	511	682	513	458	233	36
2014	10	85	284	486	658	458	357	132	31
2013	22	51	278	382	454	511	422	252	9
2017 Maximum Daily Count	2	22	29	42	60	32	32	18	11
2016	5	28	28	39	47	41	56	16	2
2015	7	16	36	38	45	35	43	17	6
2014	2	11	30	39	46	32	28	10	5
2013	3	6	25	28	32	33	36	25	5

The first record of a pup this year was of a dead new-born being eaten by a gull off South Haven on 22nd September. A new-born found in the traditional North Haven site on the 23rd was the first live record, whilst what may have been the same dead pup was washed up in Peter's Bay. On the 28th another dead pup was found in North Haven, in a cove to the east of the healthy youngster; the dead pup was joined by what was presumably its mother the following day, an animal which was seemingly trying to nurse the corpse. On 5th October the live North Haven pup was joined by a subadult bearing an orange flipper-tag number 80204 (photograph below); it had previously been

taken in by the RSPCA in Cornwall, given treatment for minor wounds and an eye injury and released back into the wild at Combe Martin, North Devon on 23rd March 2016. A new pup in Dumbbell Bay on 8th October was seemingly alone; a female appeared offshore the following day, however both had disappeared by the 10th. The North Haven pup continued to fatten and survived the rigours of Storm Ophelia which smashed Skokholm on the 16th. Another dead pup, still trailing an umbilical cord, was found in North Haven on the 28th, three days after a female was showing signs of having recently given birth. Two live pups this autumn equalled 2016 and 2014, but was down on the five of 2015 and the three of 2013. A minimum of three dead pups was above average.



Ophelia clearly had an impact on Pembrokeshire's Grey Seals. On Skokholm an increase in the number of moulted pups was evident, animals presumably displaced from elsewhere. Eight moulted or nearly moulted pups appeared in North Haven the day before the storm, whilst the overall number of moulters present around the Neck was at above average levels until the end of the month; there were 14 on 25th October, nine on the 26th, six on the 27th along with a casualty being eaten by a Raven, seven on the 28th, five on the 29th, six on the 30th and five on the 31st. In 2016 the maximum number of moulted pups logged in the same area did not exceed four. The provenance of these youngsters can never be known; although there are suitable caves around Skokholm where pups may be born without being recorded, the close proximity of much larger breeding colonies to our north no doubt results in the arrival of independent youngsters to our shores.

Cetaceans

Harbour Porpoise *Phocoena phocoena*

This species is seemingly present around the Island throughout the season, although the number recorded is largely determined by the suitability of sea conditions for viewing their infrequent low-key surfacings. The first two of the year were observed on 11th April, marking 2017 as the only year of the last five without a March record. Porpoise were encountered on a further 70 dates, with the majority of sightings coming in April, July and August, however the peak daycount was not logged until 17th September when 23 were off the Lighthouse; this was the highest daycount of the past five

years. Just two calves were noted this year, the first among a pod of five off the Quarry on 18th April and the second with 13 off the Lighthouse on 7th May. An adult off Howard’s End on the morning of 16th October was the last of the season. Compared with 2016, there was an 8% increase in the number of days on which Porpoise were recorded and a 14% increase in the cumulative year total.

The total number of Harbour Porpoise logged during each recording month between 2013 and 2017, along with the maximum daycount recorded each month and the number of days during each month on which there was a record.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Monthly Total	0	47	31	14	57	49	51	3	0
2016	2	21	41	13	42	55	40	8	0
2015	4	21	21	11	23	82	58	26	1
2014	16	39	35	46	86	66	91	12	0
2013	13	4	42	30	17	23	29	3	1
2017 Maximum Daily Count	0	10	14	7	11	13	23	2	0
2016	2	10	11	6	10	13	8	8	0
2015	3	5	5	3	8	16	20	15	1
2014	4	9	8	7	10	10	15	3	0
2013	3	3	6	9	5	13	7	2	1
2017 No. of Days Recorded	0	12	8	5	21	14	9	2	0
2016	1	8	15	4	10	13	14	1	0
2015	2	8	10	6	10	21	13	5	1
2014	7	12	12	15	21	17	20	8	0
2013	5	2	15	13	8	6	10	2	1

Bottlenose Dolphin *Tursiops truncatus*

A distant pod of at least 30 animals heading east off the South Coast on 4th August and six observed heading west past the Lighthouse on the same day resulted in the biggest daycount since 21st August 1950 when a minimum of 50 Bottlenose Dolphins were logged. Four were watched the following day, again distantly from the Lighthouse. This is the scarcest of the four cetacean species regularly observed around Skokholm, with records in only 20 years between 1950 and 2017 including three of the past five; there were single animals logged in August 2013 and July 2016.

Risso’s Dolphin *Grampus griseus*

A lone adult off South Haven on 9th April was the first of the season. Two animals were feeding close in off Crab Bay on 1st September, two were off the Lighthouse on the 16th and an adult and calf at the same site on the 21st were the last of the year. Sightings of this species around Skokholm have previously proven somewhat erratic, with records in just 30 years between 1958 and 2017 and no sightings at all in the 14 years between 1999 and 2012. However Risso’s Dolphins are seemingly becoming more regular, with this the fifth consecutive year that they have made an appearance close to the Island. Pods of five, four and six were logged in 2016.

Short-beaked Common Dolphin *Delphinus delphis*

It was an excellent year for sightings of Common Dolphin in the waters around Skokholm. Pods of nine off the Lighthouse and ten in Broad Sound on 13th April were the first of the season, four days later than the first of 2016 but 13 days earlier than in 2015 and over two months earlier than in 2014 and 2013. Although this was the only record of the month, it was the highest April daycount of the last five years. Numbers typically remain low during May and June, as was the case this year; there were no sightings in May and in June a single pod of 25 were off South Haven on the 28th. Numbers increased in July, with sightings logged on ten dates (the second best July tally since 2013), contributing to a monthly total of 111; this was the second highest July total and an increase of 22% on the same month last year. Pods lingered off the Lighthouse on a majority of August dates,

allowing for excellent views as they energetically fed below the cliffs; a total of 222 animals were sighted during the month, with a high of 45 on the 10th. As was the case in three of the previous four years, numbers peaked in September; there were 379 dolphins logged over 15 dates including a minimum of 120 off the Lighthouse on the 18th which was both the highest daycount in any month of the last five years and the last record of the season. A grand total of 756 animals logged over 46 dates between April and September was a pleasing 99% increase on the 380 of 2016 (a total logged over 39% fewer dates) and the second best total of the last five years, only 2% down on 2015.



It was also a fantastic year for sightings of calves, with the first two on 13th April being the earliest record of the last five years by almost three months. There were eight logged over four dates between the 6th and 29th July, 19 over five August dates (including a high count of seven in a pod of 38 adults on the 10th) and numerous youngsters were among the 120 recorded on 14th September.

The total number of Short-beaked Common Dolphin logged during each recording month between 2013 and 2017, along with the maximum daycount recorded each month and the number of days during each month on which there was a record.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
2017 Monthly Total	0	19	0	25	111	222	379	0	0
2016	0	10	3	40	91	114	122	0	0
2015	0	10	3	6	156	407	192	0	0
2014	0	0	0	3	101	134	359	6	0
2013	0	0	0	10	21	113	161	15	0
2017 Maximum Daily Count	0	19	0	25	24	45	120	0	0
2016	0	6	3	32	20	42	40	0	0
2015	0	10	3	6	80	86	13	0	0
2014	0	0	0	2	29	30	50+	6	0
2013	0	0	0	10	16	26	50+	6	0
2017 No. of Days Recorded	0	1	0	1	10	19	15	0	0
2016	0	4	1	3	7	7	11	0	0
2015	0	1	1	1	8	24	35	0	0
2014	0	0	0	2	11	16	15	1	0
2013	0	0	0	1	2	12	13	3	0

Fish

Common Thresher Shark *Alopias vulpinus*

On 7th August the Dale Nelson was hired by staff and guests with the primary aim of approaching the Celtic Deep, where it was hoped that the scarcer shearwaters and petrels which were being logged in good numbers off Cornwall may have been found. Although sadly these were not chanced upon, the steady release of a bucketful of chum at approximately 20 miles west-southwest of Skokholm was probably responsible for the appearance of a large Thresher Shark which fully breached twice in quick succession. Although this species has never been seen from the Island, in 2015 a member of the Dale Sailing Crew witnessed a breaching individual just half a mile to the west of the Lighthouse.

Common Ocean Sunfish *Mola mola*

Following an excellent year in 2016, when a total of seven sightings included both the second earliest and latest Skokholm records, it proved a quieter season for encounters with this unusual pelagic fish. The only August record was of one watched off the Lighthouse on the 9th. There were three logged in September, with one off the Quarry on the 1st, one off the Lighthouse on the 13th and one off Howard's End on the 23rd which was also the last of the year. Although down on 2016, a total of four was still the second best of the last five years; there were two sightings in 2015 but none in either 2014 or 2013, indeed there have only now been records in 11 years since 1992.

European Eel *Anguilla anguilla*

On 18th April a mature individual measuring approximately 45cm in length was found in the Well reedbed. One of a similar size was in the same place on 31st July and in August a single, thought on each occasion to be the same fish, was observed on the 1st, 3rd (when it was joined by a second, similarly sized, Eel), 4th, 5th, 8th, 21st and 24th. In September there were singles on the 4th and 5th and three on the 25th. A total of 15 Eel-days was excellent by recent standards; the only records since 2013 concern an elver (measuring approximately 15cm) in South Haven Stream in 2016, a similarly sized single in Well Stream in 2015, a mature fish logged in 2014 and three sightings of what was probably the same fish in 2013. Whether the 2017 total reflects a genuine increase in the number of mature individuals present on Skokholm or is a product of increased observer effort is not clear, however several of these records were by nocturnal seabird ringers specifically searching for Eels.



Lockley reported elvers wriggling up the cliffs at freshwater outfalls around the Island and mature adults have been recorded in several ponds historically (Thompson, 2007). The digitised Log suggests that this species previously occurred, or at least was observed, in much larger numbers; high counts include 74 logged in 1954 and an impressive 190 in 1955. Sadly the European Eel has undergone catastrophic declines due to a range of threats faced at multiple stages of its life history. Over the last century recruitment has fluctuated, but in the last 45 years it has declined by 90-95%, whilst the number of mature Silver Eels departing for the Sargasso Sea has declined by 50-60% in the same

period; unsurprisingly this species is now Critically Endangered (SEG, 2018). The huge drop in recruitment is no doubt in part due to the food trade; despite it now being illegal to sell European caught fish outside of Europe, it is still legal within the EU and each year approximately 15 to 17 tonnes of young Eels are caught as they enter rivers before being sent to aquaculture farms to grow on before sale. Furthermore illegal international trading is rampant; around 20 tonnes of young Eels were illegally transported to Asia between 2015 and 2016 (SEG, 2018).

Plants

Following an outbreak of Rabbit Viral Haemorrhagic Disease, Rabbit numbers crashed in 2013 and have since failed to reach the levels observed in the first half of that year. Rabbits form an important part of Skokholm's ecology, however high numbers have a detrimental effect on the diversity and spread of flora on the Island. A reduced presence during the past four years has thus had a beneficial impact, with a drop in grazing pressure resulting in the appearance of plant species infrequently encountered on Skokholm. A single, flowering **Corn Marigold** *Chrysanthemum segetum* was found on the Neck in June, close to the Turquoise Seagull Hut (left photograph). Partly a legacy of the early small coastal field potato industry, Pembrokeshire is known for its fine stands of this species (Stephen Evans, *pers. comm.*), however the only previous Island records were logged in 1950, when it was noted on the cliff face at Peter's Bay and south of Spy Rock, and in 1946 when it was found growing in the 'Garden'. Four **Bittersweet** *Solanum dulcamara* plants were found at the top of Windmill Gully on 23rd July; this was a new site for this species. The only previous records concern a single example near South Pond in 1993, a few in the Bog and between the Well and South Haven in 1991 and plants on a cliff at Hog Bay until at least 1956 (Thompson, 2007).



Six small **Yarrow** *Achillea millefolium* were found in full flower on the lower part of Home Meadow; Thompson (2017) described the presence of dwarf plants that rarely flowered unless they were within Rabbit exclosures. Several examples of **Lesser Water-plantain** *Baldellia ranunculoides* were found in flower on the exposed mud to the east of North Pond's easterly Iris bed (centre photograph); Thompson noted this species as once occasional to frequent in temporary ponds and depression pans but absent in recent years. Two small **Trailing St. Johns Wort** *Hypericum humifusum* were found at the bottom of Home Meadow, just before the Well. What were thought to be three flowering spikes of **Southern Marsh Orchid** *Dactylorhiza praetermissa* were at East Bog (right photograph); whilst records from 2016 and 2015 were also thought to be this species, the literature suggests that Southern Marsh Orchid x Common Spotted Orchid *D. grandis* hybrids have been logged here in the past. A single *D. grandis* found at Orchid Bog in the 1930s was the first before a rapid expansion which saw several hundred noted during the 1950s (Thompson, 2007).

Rosebay Willowherb *Chamaenerion angustifolium*

A potential issue this year was the appearance of Rosebay Willowherb in the Bog, adjacent to South Pond. Presumably grown from wind-blown seed, two patches containing 15 and six flowering spikes found on 23rd July were the first record of this species on the Island. Concerns have been raised by the Islands Conservation Advisory Committee about the impact, should it spread, of dense patches of woody stalks on Manx Shearwaters, birds which at present move with little hindrance through the malleable stems of Bracken. A decision was thus made to pull out any future growth of this, potentially invasive, species.



Other Species

Portuguese Man O' War *Physalia physalis*

The extreme weather systems which hit the Atlantic during early October lead to the stranding of record numbers of Portuguese Man O' War hydrozoans on south coast beaches, particularly along the coastlines of north Devon and Cornwall (Cornwall Wildlife Trust, 2017). Four were found in the shallow waters of Crab Bay on 4th October and, following Storm Ophelia which produced a phenomenal sea on the 16th, a desiccated individual was found lodged in the Bracken above Crab Bay on the 19th. These were seemingly the first to be logged around Skokholm.



Japanese Wireweed *Sargassum muticum*

One individual, approximately two years old, was found in South Haven on 23rd July and removed by Mark Burton, NRW Marine Conservation Officer for the Skomer Marine Conservation Zone. This species, which is native to Chinese and Japanese waters, was first found in the English Channel in the mid-1960s before it spread rapidly along the south coast. When established it can impact natives via over-growing and the subsequent shading of any underlying species (JNCC, 2017).

Observers, Photographers and Literature Cited in the Text

Observers cited in the text. Many other people provided records at the evening log, far more than can be listed here. We are hugely grateful to everybody who contributed during the 2017 season.

AS	Anna Sutcliffe	JHI	John Hickerton	RJ	Rhodri Jones
CB	Chris Brown	JP	Jacob Peterken	RL	Rhodri Llewellyn
CF	Colin Fieldgate	JR	James Robson	SW	Stephen Westerberg
EW	Eric Wood	ME	Mark Edgeller	SWO	Steve Woolfenden
GE	Giselle Eagle	MH	Mark Hipkin	TB	Ted Bell
HD	Howard Driver	MR	Maddy Rawlings	TW	Tina Wiffen
HP	Holly Pickett	PB	Phil Blatcher	VH	Victoria Hope
IB	Ian Beggs	RD	Richard Dobbins	WJ	Wendy James
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