



Ymddiriedolaeth Natur
De a Gorllewin Cymru
Wildlife Trust of
South & West Wales

SKOMER ISLAND NNR

ANNUAL REPORT 2022

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1 Introduction

1.1 WEATHER

Weather data is collected from two sources. The first is the nightly island bird log where the day's weather is recorded in brief. The second is from the NRW weather station on Wooltack Point on the Marloes Peninsula (51.7367, -5.2474) which records a number of measurements every ten minutes.

Where figures are compared to an average, they are compared to the nearest weather station run by the Met Office which is in Milford Haven (51.708, -5.055) a distance of 8.48 miles from Wooltack Point, so some differences may occur.

There were a number of storms early in the season with eight days with gusts above F7 in April and 9 days in May and June. The maximum wind speed recorded during the seabird season was 71.71mph on 6th April. It was an exceptionally dry year with most months' rainfall records well below the historical average. The island's ponds were again dry for the majority of the season, not filling properly until November.

March – The month began with light winds from the north and east with much stronger winds starting on the 8th. The second half of the month was more settled with light easterly or variable winds for the remaining period. Mean temperatures were above average for the month. Rainfall was a third of the average for the month.

April – An unsettled start to the month with rain and showers most days and wind peaking at a season record of force 8 (71.71mph) on the 6th. From the 8th, wind remained calmer, and settled weather returned with only occasional periods of drizzle, showers, and wind above force 4. Temperatures were just below the average and rainfall was half of the historical average.

May – Winds in the first half of the month were mostly settled with occasional precipitation recorded. The second half of the month was mainly dominated by southerly and westerly winds peaking at 45.69mph on 25th May. There were also more persistent periods of rain from the 15th to the 26th. Average temperatures for the month were just below the historical average and rainfall was two thirds of the historical average.

June – Variable, light winds to start the month with stronger winds on the 8th and 9th and a return of south-westerly airflow. Following this, light winds and a settled period stretched until the 24th where rain and winds up to force 6 were recorded for five days. Mean monthly temperatures were 0.83°C below the historical average. Rainfall was just a third of the historical average and the maximum wind speed recorded was on 26th June – 59.61mph.

July – A windy start to the month peaking at force 7 on the 2nd. Winds turned either variable or northerly until the 17th when a period of very warm weather arrived with 29.54°C recorded on the 18th. This warm settled period remained for most of the rest of the month. Temperatures overall were just above the historical average and rainfall was under a fifth of the historical average.

August – Light winds throughout the month with very little precipitation recorded. There were very warm temperatures recorded from the 8th to the 16th with winds mostly variable during this period. The rest of the month remained warm and settled. Temperatures were 0.9°C above the long-term average, and rain was a tenth of the average.

September – A period of strong south-easterly winds from 3rd to 7th brought rain and showers but warm temperatures. Winds increased to force 7 and swung to the northwest on the 9th where they remained, albeit lighter, until the 19th. Winds then remained relatively settled until the end of the month, peaking at force 6 on 26th and 30th. Temperatures were 0.5°C above the average and rainfall was half the average.

October – A warm month with temperatures 2°C above the long-term average. Winds were variable through the month with no one direction dominant. There were 19 days of winds above force 4, peaking at force 7 on the 19th. Rainfall was half of the long-term average.

November – A very warm month with temperatures 2.4°C above the long-term average. Wind peaked at force 8 on the 2nd and remained high through the month with only three days at or below force 4 until the 19th when the staff left the island. Rainfall was half the long-term average.

December – A brief return to the island from 8th–13th. Winds were calm; force 3 on three days and force 4 on two days. Rainfall was less than half the long-term average for the month. Temperatures for the month were just below the historical average and during the period of occupancy were cold, peaking at 5°C with a minimum of -2°C.

Beaufort	0	1	2	3	4	5	6	7	8	9	10	11	12
Miles per hour	<1	1-3	4-7	8-12	13-18	19-24	25-31	32-38	39-46	47-54	55-63	64-72	>72

Table 1 Beaufort scale

Following the size of North Pond

Through what was an exceptionally dry year, regular photos of North Pond were taken from August to December to log the low points of the pond and the rate at which it refilled.



12/08/2022



24/08/2022



03/09/2022



08/09/2022



12/09/2022



01/10/2022



19/10/2022



23/10/2022



1 North Pond during the season, sequence – L. Newman

1.2 Map of Skomer

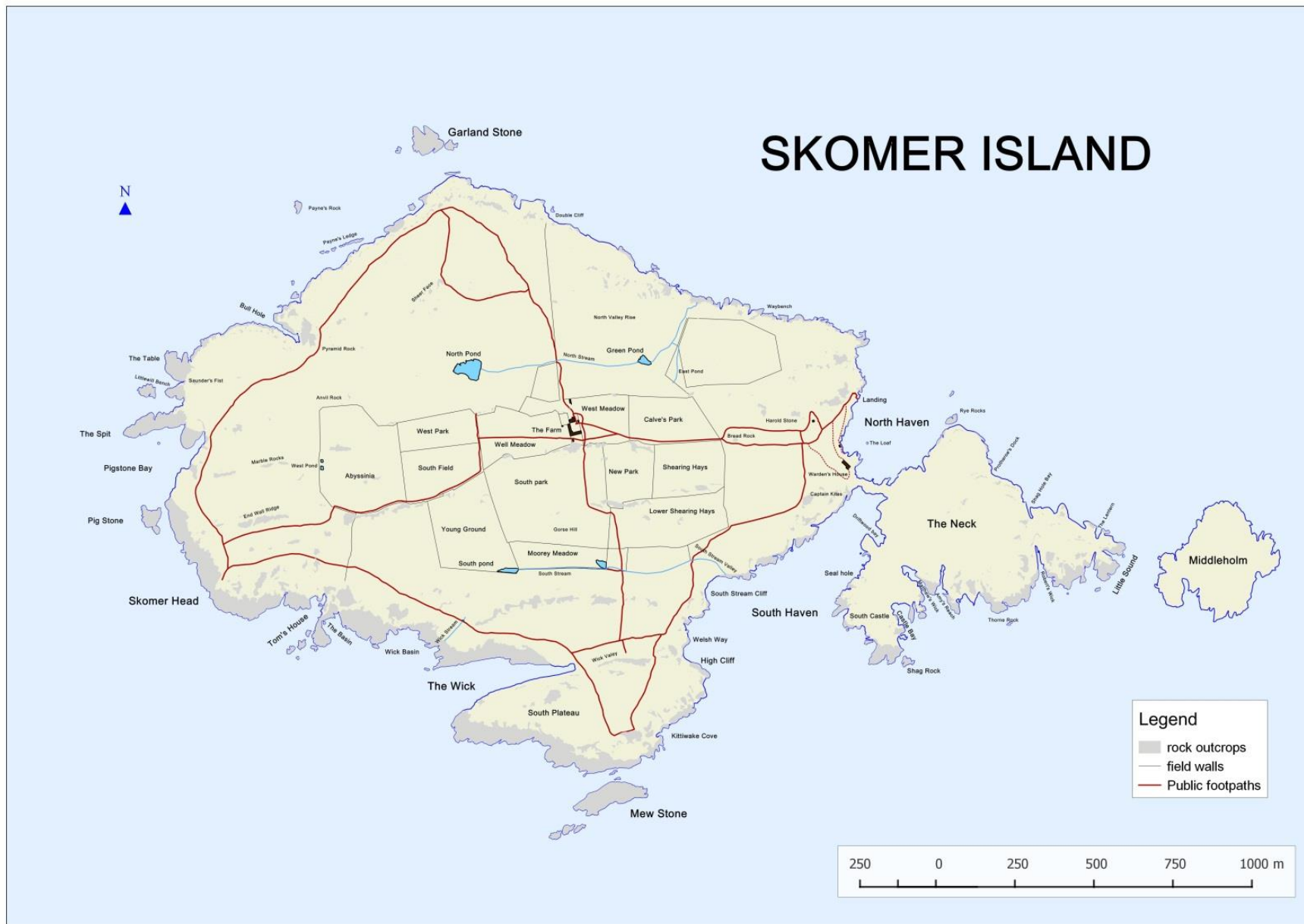


Figure 1 Map of Skomer

2 Monitoring and Recording

2.1 BIRDS

Feature: Seabirds

RA 10/09 Record any significant seabird burrow collapse

No significant seabird burrow collapse was recorded in the seabird season in 2022. During the biosecurity response in December, a minimum of 26 burrows were collapsed during the baiting and checking process.

Seabird Summary

The following is a summary of results from the seabird season on Skomer in 2022. The objectives reported here were completed by the Skomer team. A more detailed account, including results of adult survival studies carried out by others, can be found in the seabird report (Newman, L. *et al.* 2022).

Northern Fulmar:

RA11/29 The whole island population was 538 AOS. This is 38 fewer AOS than 2021.

RA11/31 Productivity in 2022 was 0.39 which is a decrease on 2021 (0.45).

Manx Shearwater:

RA11/02 Within the standard annual census plots, the number of responses (1,247) decreased from 2021 (1,410).

Lesser Black-backed Gull:

RA11/05 The whole island population estimate was 7,262 AON which is 2.02 % lower than 2021.

Herring Gull:

RA11/36 This year's whole island count of 266 AON is a decrease of five AON compared to 2021.

RA11/39 Productivity was 0.79 which is the highest since 2012.

Great Black-backed Gull:

RA11/40 114 AON were counted in 2022 which is 11 more than 2021 (103).

RA11/42 Productivity was 1.64, which is below the five-year average of 1.67.

Black-legged Kittiwake:

RA11/09 1,544 AON were counted in 2022, which is an increase on the previous year's 1,439.

RA11/12 Productivity was 0.63, a decrease compared to the previous year (0.79), and higher than the average productivity for the last five years (0.61).

Common Guillemot:

RA11/17 31,790 individuals were counted in 2022, which is a 16.58% increase on the previous count in 2021.

RA11/23 Productivity was 0.73 which is an increase of 0.13 on 2021.

Razorbill:

RA11/24 10,192 individuals were counted in 2022, this represents an increase of 24.78% since the previous whole island count in 2021.

RA11/28 Productivity was 0.47 fledglings per active and regular nest site which is a decrease on 2021 (0.5) and below the previous five-year average of 0.54.

Atlantic Puffin:

RA11/13 A total of 38,896 individual Puffins were counted in March. This represents an increase of 11.73% on 2021 (34,813).

Cormorant:

RA11/32 No Cormorants bred on Skomer this year.

RA11/33 No productivity data available.

Shag:

RA11/34 Four pairs bred on Skomer in 2022, all at Double Cliff.

RA11/35 Seven large chicks were seen whilst on seabird counts giving a productivity of 1.75.

RP/01 Record severe storm effects which affect seabirds

There were two storm events which occurred during the seabird season. The first was on the 6th April with winds peaking at 71mph. The second was on 25th May when winds peaked at 45mph.

Feature: Short-eared Owl**RA 11/43 Monitor Short-eared Owl population and distribution of nests**

In 2022 only one pair nested, in North Valley. One fledgling was seen.

Feature: Chough**RA 11/44 Monitor Chough population and location of nests**

In 2022, six pairs attempted to breed. These nests were at the Lantern, South Castle, Castle Bay, Payne's Ledge, Pigstone Bay and the Wick. They fledged 13 chicks between them. There was a seventh pair which started nest building halfway through the season – the nest progressed no further; however, the pair remained on territory through the season.

RA 11/45 Monitor Chough relationship with national trends

The following data is taken from the report 'Annual surveillance of Choughs in the Pembrokeshire Coast National Park – 2022' submitted by Jane Hodges.

Status	Skomer Island	Skokholm Island	SPA	% PCNP total
No. occupied territories	7	4 ¹	11	13
No. pairs attempting to breed ¹	7	4	11	14
No. nests with eggs	6	4	10	13
No. nests with young	6	3 ²	9	13
No. successful pairs	6	3	9	14
No. young known to have fledged	13	9	22	14
No. non-breeding choughs ³	17–20	18	17–20	17

Notes

1 A fifth pair apparently occupied a new territory in the Little Bay area during the spring and early summer 2022. The breeding status of this pair was unconfirmed.

2 Three pairs got as far as having young in the nest, however, there was uncertainty as to whether a fourth pair got this far.

3 It is likely that the non-breeding birds seen on the islands and on the Deer Park and south Marloes coast comprised the same birds that commuted between the islands and mainland

Table 2 General summary of data on the Chough population in the SPA – 2022

Productivity expressed as:	Skomer Island	Skokholm Island	SPA	PCNP
Mean no. young fledged/occupied territory	1.9	2.3	2	1.9
Mean no. young fledged/pair attempting to breed	1.9	2.3	2	2
Mean no. young fledged/successful pair	2.2	3	2.4	2.5

Table 3 Productivity in the SPA and National Park

Productivity expressed as:	Skomer, Skokholm & seas off Pems. SPA	Ramsey & St Davids Pen Coast SPA¹	Castlemartin Coast SPA¹
Mean no. young fledged/occupied territory	2	2	1.7
Mean no. young fledged/pair attempting to breed	2	2	2.1
Mean no. young fledged/successful pair	2.4	2.5	2.6

Table 4 Productivity in the three Chough SPAs in 2022

Feature: Peregrine

RA 11/46 Monitor Peregrine population and distribution of nests

In 2022, two pairs bred on Skomer. The territories were held at Protheroe's Dock and Garland Stone. Only one chick fledged.

RA11/47 Relationship with national trends

When compared to the Pembrokeshire population, the poor productivity and slight drop in the number of pairs correlates. Summarised figures for Pembrokeshire are as follows:

Minimum no. of occupied territories	Minimum no. of pairs attempting to breed	Minimum no. of young fledged
33 (33)	25 (17)	21 (25)

Table 5 Peregrine breeding summary (2021 figures in parentheses) – Pembrokeshire Bird Report 2022

Further information from the Pembrokeshire bird report states that the local population of Peregrines is declining with the number of occupied territories falling to 1993 levels and the number of chicks fledged falling to 1980s levels.

Feature: Bird assemblage not-qualifying

RA 10/05 Record bird populations which are not qualifying features

The annual Breeding Bird Survey was conducted in 2022. Bird migration is followed by the staff, volunteers, researchers, overnight guests and anyone with an interest in the subject and recorded in the daily bird log. Please see the bird report for a full systematic breakdown of every species recorded on Skomer in 2022.

Annual census of breeding Oystercatcher

In 2022, 73 pairs bred on Skomer.

Annual census of breeding Curlew

In 2022 four pairs were noted as breeding. Two chicks fledged.

Feature: Little Owl

RA10/06 Record/annual census

No individuals were seen, and no pairs of Little Owls nested this year.

Feature: Canada Goose

RA 10/07 Annual census of breeding Canada Goose

A total of 11 pairs nested on the island in 2022.

RA 10/08 Record Canada Goose in winter/non-breeding population

Canada Geese were recorded in the daily bird log throughout the season.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Max count	34	43	29	29	28	43	48	7	30

Table 6 Canada Goose counts

Constant Effort Site

The CES (Constant Effort Site) study (a scheme operated by the British Trust of Ornithology (BTO) ended in 2021 due to new staff not being ringers.

2.2 BIOSECURITY

A network of biosecurity monitoring stations was established in 2021 to actively monitor for incursions of invasive non-native species (INNS) (Figure 2). Together with this, a biosecurity plan was set up which will be integrated into the management plan.

Every month, surveillance stations are loaded with two wax chew blocks, an ink pad, and some peanut butter as a lure. They are then left for a week and checked for presence of INNS. Checks were started in August and ended in November when the team moved off the island. In total, 160 wax blocks and 80 ink pads were deployed. No signs of INNS were seen with all droppings, tracks and bite marks being attributed to Wood Mice, Skomer Voles, snails, and slugs.

Skomer Rodent Surveillance Stations 2021

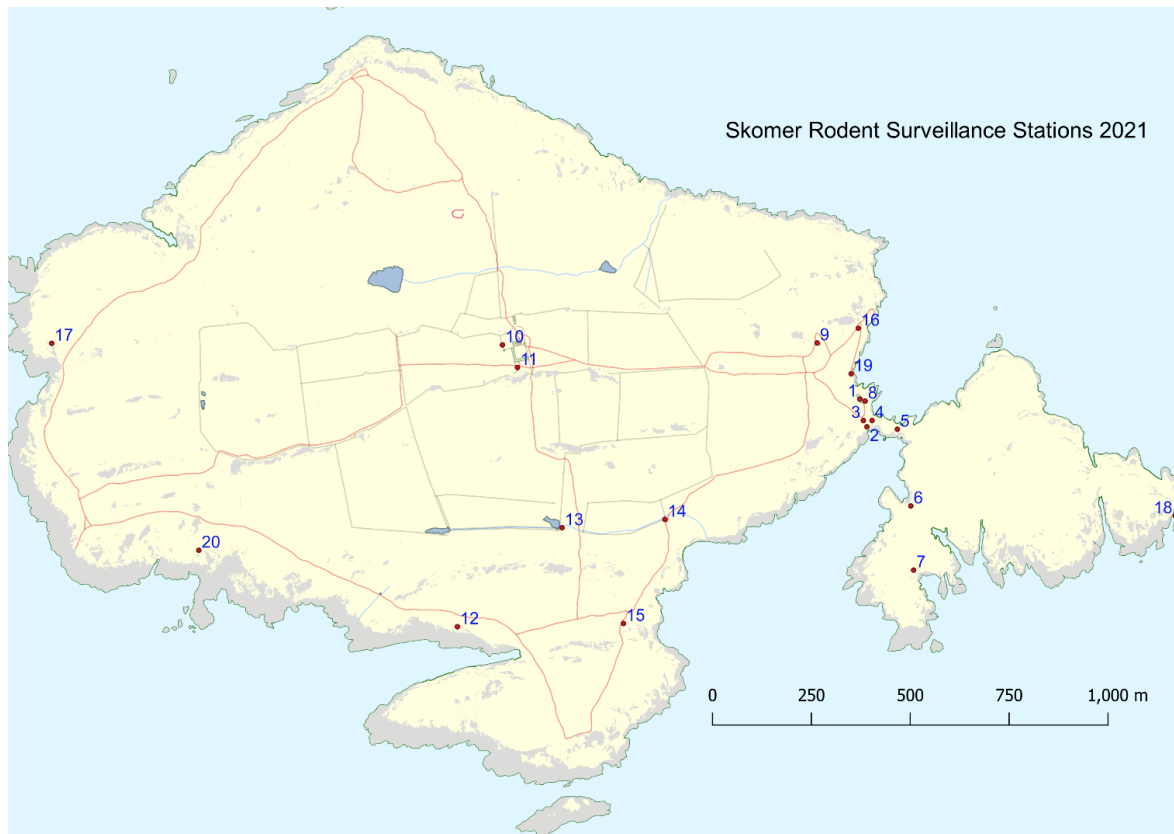


Figure 2 Map of rodent surveillance stations in 2021

Station number	Station Name	NGR	Station number	Station Name	NGR
1 (box 18)	NHV	SM7350709398	11 (box 8)	The Hut	SM7264109478
2 (box 12)	SHV	SM7352509328	12(new box 15)	The Wick (moved in 2021)	New grid ref: SM 72497 08812
3 (box 5)	NHV Track	SM7351609344	13 (new box 10)	Moorey Mere	SM7275609068
4 (box 2)	Isthmus West	SM7353809344	14(new box 11)	South Stream	SM7301409094
5 (box 19)	Isthmus	SM7360209322	15 (new box 14)	Wick Valley Ridge/High Cliff	New grid ref: SM 72909 08831
6 (box 7)	Driftwood Bay	SM7363609128	16 (New box 20)	Landing Lime Kiln	SM7350309577
7 (box 16)	Castle Bay	SM7364308966	17 (New box 13)	Pigstone Bay	SM 71463 09539
8 (box 4)	NHV - Balcony	SM7351409394	18 (New box 6)	Lantern	SM 74305 09103
9 (box 17)	Lime Kiln	SM7339909540	19 (New box 1)	Boat Shed	SM 73485 09462
10 (box 3)	Compost Bin	SM7260309535	20 (New box 9)	Tom's House	SM 71835 09016

Table 7 Locations of surveillance boxes on Skomer

2.2 Incursion response

The following is the executive summary from Incursion Response Review: Skomer Island NNR, Pembrokeshire (Morgan et al. 2023).

A fishing vessel ran aground on the south coast of Skomer Island on the night of 7 December 2022. Although removed intact some 12 hours later, her hull was breached and full of water.

In accordance with the island's biosecurity plan, a shipwreck is considered the highest threat level to the island's internationally important seabird populations with major concern of an incursion by Brown Rats:

"If the report was PROBABLE, DEFINITE or a SHIPWRECK then an incursion response should be implemented immediately by WTSWW staff on Skomer, with support from mainland staff and volunteers."

Ironically the boat hit rocks on one of the calmest nights of the winter. This did however allow staff the option of immediate boat access and an incursion response was delivered over the following six days.

An incursion response grid size was set out as per the best practice recommendations in the plan in a 50m grid of bait stations for 500m in all directions around the point where the shipwreck occurred. Due to the urgency and time restraints the grid was paced out and the lines run 'by eye'. Island staff were assisted by four mainland volunteers on Skomer for the initial set-up phase.

With no rodenticide immediately available locally, it was not until one hour before dark on 8th December that the poison was delivered to Skomer. However, the bait stations nearest the wreck were baited with poison within 37 hours of the incident occurring.

After five days no signs of rats had been detected via the poison stations, the wax block surveillance stations, trail cameras or the conservation detection dog.

With the weather deteriorating, the poison was removed, and bait stations stored indoors. The island was evacuated by staff on 13 December and local staff have been unable to conduct any follow up visits as of mid-January due to the strong winds and sustained swell.

This accident highlights:

The urgent need for the establishment of the Pembrokeshire Rapid Incursion Hub containing shared kit, but also for a network of local, trained volunteers to assist conservation staff. WTSWW will work as partners with the Biosecurity for LIFE team at RSPB and National Trust to make this a reality in 2023. A successful Nature Networks Fund grant secured by RSPB will ensure this is resourced and funded for the period 2023–2025.

The importance of Special Protected Area (SPA) stakeholder and land manager engagement and collaboration.

The need for a UK-wide conversation with the (Maritime and Coastguard Agency) MCA and island managers to ensure that maritime insurance companies consider the liability of vessels operating in close proximity to seabird SPA's. They must be prepared to cover the costs incurred by charities in the event of an incursion response.

We are grateful to all our friends and colleagues locally who came to our assistance at short notice.

2.3 MAMMALS

Feature: Skomer Vole

RA 00/04 Record population of Skomer Voles in study plot

No monitoring of Skomer voles was carried out in 2022.

Feature: Grey Seal

Grey Seal productivity was monitored by WTSWW under NRW contract as a Marine Conservation Zone (MCZ) project. B. Bueche carried out this work, assisted by F. Blockley who acted as Seal Assistant in September. Furthermore C. Aston, B. Thompson and long-term volunteers helped collect the data. The report was submitted to NRW.

The following summary is taken from the seal report; a comprehensive report can be found here. To find the full seal report, please see: Bueche, B. & Blockley, F. 2022. Grey Seal Breeding Census Skomer Island 2022. NRW Evidence Report number 653 The Wildlife Trust of South and West Wales.

255 pups were born on Skomer, which is ten fewer than 2021. On the Marloes Peninsula 192 pups were born, giving a total of 447 pups for the Skomer MCZ as a whole, which is one pup more than in the previous year.

The first pup of the season was born at Driftwood Bay on 4th August. In total, 28 pups were born in August, 147 in September, 50 in October and three in November. The most productive beaches were North Haven (52 pups), South Haven (47 pups) and Matthew's Wick (40 pups).

183 pups are known, or assumed, to have survived on Skomer. The fate of nine pups is unknown, giving a survival rate of 76%. On the mainland 168 pups are known, or assumed to have survived, giving a survival rate of 88%. The overall survival rate for the whole of the Skomer MCZ is 80%.

In 2022, the maximum haul-out of 388 seals was recorded on 12th November. North Haven and Driftwood Bay had their peak haul-out counts on 13th November (131 and 67 respectively), Matthew's Wick on 9th November (133) and Castle Bay on 18th October and 4th November (148). 174 seals with scars or tags were photographed in 2022, of which 64 (60 cows, one immature and three bulls) were re-identified from previous photos.

The two oldest returning cows are known from 2002. The oldest returning bull is known from 2015. Of the 255 cows which pupped on Skomer in 2022, 46 had scars. 21 of the scarred cows were identified, hence 33% of identifiable breeding cows were returning cows.

41 individual seals were photographed with obvious signs of being entangled in nets at some time in their lives, most commonly a deep scar around their necks, often with netting still embedded.

Cetaceans

Standardised hour-long cetacean watches were conducted on a weekly basis from the Garland Stone and Skomer Head. These were carried out to CBMWC methodology by weekly volunteers. The 2022 data was sent to CBMWC and the Marine Conservation Zone (MCZ) staff.

All cetacean sightings were also recorded in the daily wildlife log.

Rabbits

RA 00/05 Annual Rabbit census

Monthly Rabbit counts were carried out in the study plots on the central fields, the Wick grasslands and South Plateau. In 2022, the total number of Rabbits counted was 730. This is 140 less than were counted in the same period in 2021. It should be noted that as Bracken encroaches on the study plots year on year, the view of each area becomes increasingly obscured so that there could easily be many more Rabbits than counted.

	March	April	May	June	July	August	September
Plot							
Plot 1+2+3	47	37	17	30	11	13	36
Plot 4	6	22	9	0	2	3	7
Wick Grassland	18	18	19	2	28	47	58
South Plateau	66	53	18	28	33	28	74

Table 8 Rabbit numbers

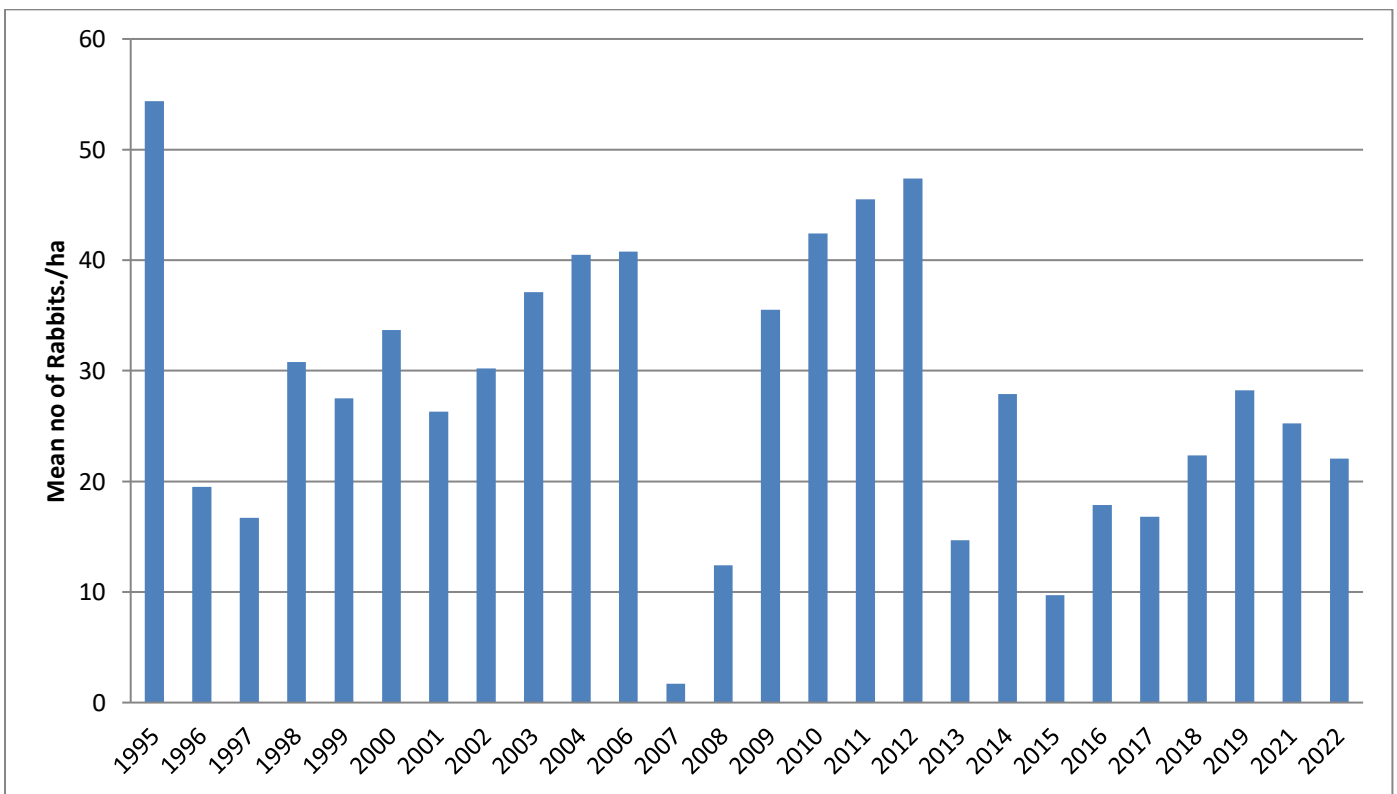


Figure 3 Mean number of Rabbits per hectare. Not counted in 2020

2.3 INVERTEBRATES

Feature: Lepidoptera

RA40/01 Annual butterfly transect

The island butterfly transect was carried out once a week between April and October. The butterfly transect data were submitted online to the UK Butterfly Monitoring Scheme. In total, 23 transects were carried out between 16th April and 11th October, with 235 individual butterflies of 11 species being recorded.

Moths

Moth trapping was carried out at the Farm and North Haven during the season. All moth records were saved on the Skomer Warden computer under Natural History/Invertebrates and were also sent to the county moth recorder. Highlights included a Striped Hawk-moth on 3rd June, *Convolvulus* Hawk-moth in September, Bordered Straw in August and several Vestal moths throughout the season.

2.4 HERPTILES

Slow Worms, Common Lizards, Common Frogs, Common Toads and Palmate Newts, as well as any small mammals found under the refugia, were recorded every week on two set transects. The Farm transect has been going for many years and the wider island transect was set up in 2013 and has been continued since. These were carried out by weekly volunteers and the data was sent to ARC (Amphibian and Reptile Conservation) Trust.



2 Common Lizard in North Valley – L. Newman

2.6 LICHENS

Feature: Lichen assemblage

RF50/01 Record rare lichens

The population of *Teloschistes flavicans* was present on the rocks at the top of the Amos.

2.7 VEGETATION

RF00/01 Commission low-level, high resolution aerial photography

Not required until 2027.

RF00/02 Record permanent vegetation quadrats

Not required until 2026.

RF00/03 Photographic vegetation surveillance

Not required until 2026.

RF00/04 Record of significant damage to vegetation

No significant damage to vegetation was recorded.

RF20/01 Map distribution of species

Tied to RF00/01 – Not required until 2027.

RF20/02 New potential invasive species

No new potential invasive species were identified in 2022.

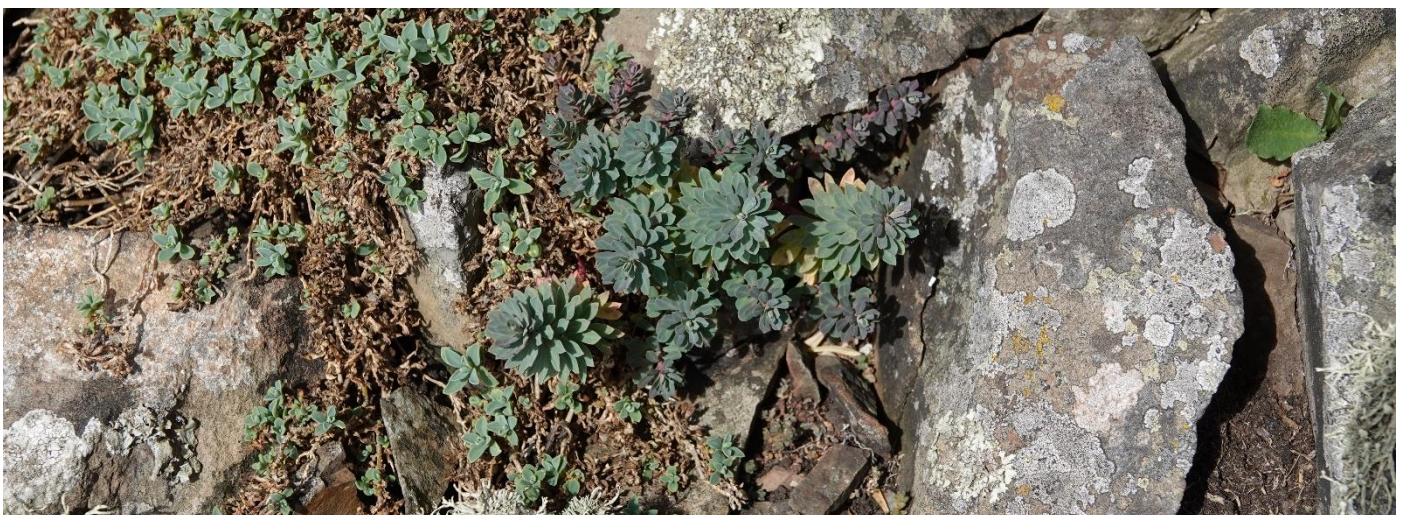
RF20/03 Surveillance – Rare higher plants and ferns (SSSI)

Ten, three-lobed water crowfoot (*Ranunculus tripartitus*) plants were found in Wick Stream on 22nd April 2022, after none were found the previous year.



3 Three-lobed water crowfoot at Wick Stream – C. Aston

Portland spurge (*Euphorbia portlandica*) was surveyed on 25th July and 19th August. Plants were noted as present at previously known sites of South Castle, North Haven and Robert's Wick.



4 Portland Spurge in North Haven – L. Newman

Rock Sea-lavender (*Limonium bineryosum*) was surveyed on 25th July and 237 'flowering clumps' were noted at two sites at South Castle.



5 Rock Sea-lavender on South Castle – L. Newman

RF20/04 Surveillance – Rare higher plants and ferns not SSSI features

Not completed in 2022.

RF20/03 Bracken invading colonies

Not fully completed in 2022 although no vulnerable areas were identified.

RF 20/04 Map Ragwort

Not completed in 2022.

RF20/05 Bramble

Bramble was removed from walls and buildings around the Farm to stop the encroachment onto the buildings, damaging historic features of the island. It was also removed within the Rabbit ex-closure at the back of the hostel to improve the habitat for the vegetation within this area, and an area was cleared outwith the ex-closure to allow access to underground cables in the autumn.

3 Research

In 2022, Tim Birkhead's long term study (40+ years) on the breeding success and adult survival of Guillemots on Skomer was continued. It is now coordinated by Steve Votier from Heriot-Watt University.

During 2022, OxNav continued to GPS track breeding shearwaters during both incubation and chick-rearing on Skomer. Chick-rearing tracking happened as part of a simultaneous multi colony tracking campaign, with birds simultaneously GPS tagged on Skomer, Ramsey, Skokholm and Copeland islands. TDR (time depth recorder) devices were deployed during pre-laying and incubation to assess the importance of pre-laying foraging behaviour in an analysis led by Katrina Davies. As part of that project, ~160 faecal samples were collected to compare inter-seasonal diet using a novel method for this species of DNA metabarcoding. The use of olfactory cues in navigation was also explored in work led by Joe Morford who displaced shearwaters in filtered air to Ogmores-by-Sea. Geolocators were changed over and breeding success was obtained as part of Annette Fayet's ongoing experiment, looking at carry-over effects in Manx Shearwater. Sound recorders were put out to monitor pre-laying burrows. OxNav also continued its puffin research which aims to understand at-sea behaviour and ecology of Atlantic Puffins. The field season was cut earlier than usual as a result of the threat of avian flu. Therefore, they were unable to collect peak mass measurements for chicks or complete chick-rearing tracking deployments.



6 Guillemot, Razorbill and Puffin – L. Newman

4. Visitors

4.1. DAY VISITORS

Skomer technically opened to the public on the 1st of April 2022. However, due to adverse weather conditions, the island remained closed until the 3rd of April, when we welcomed our first sixty-five visitors of the year.

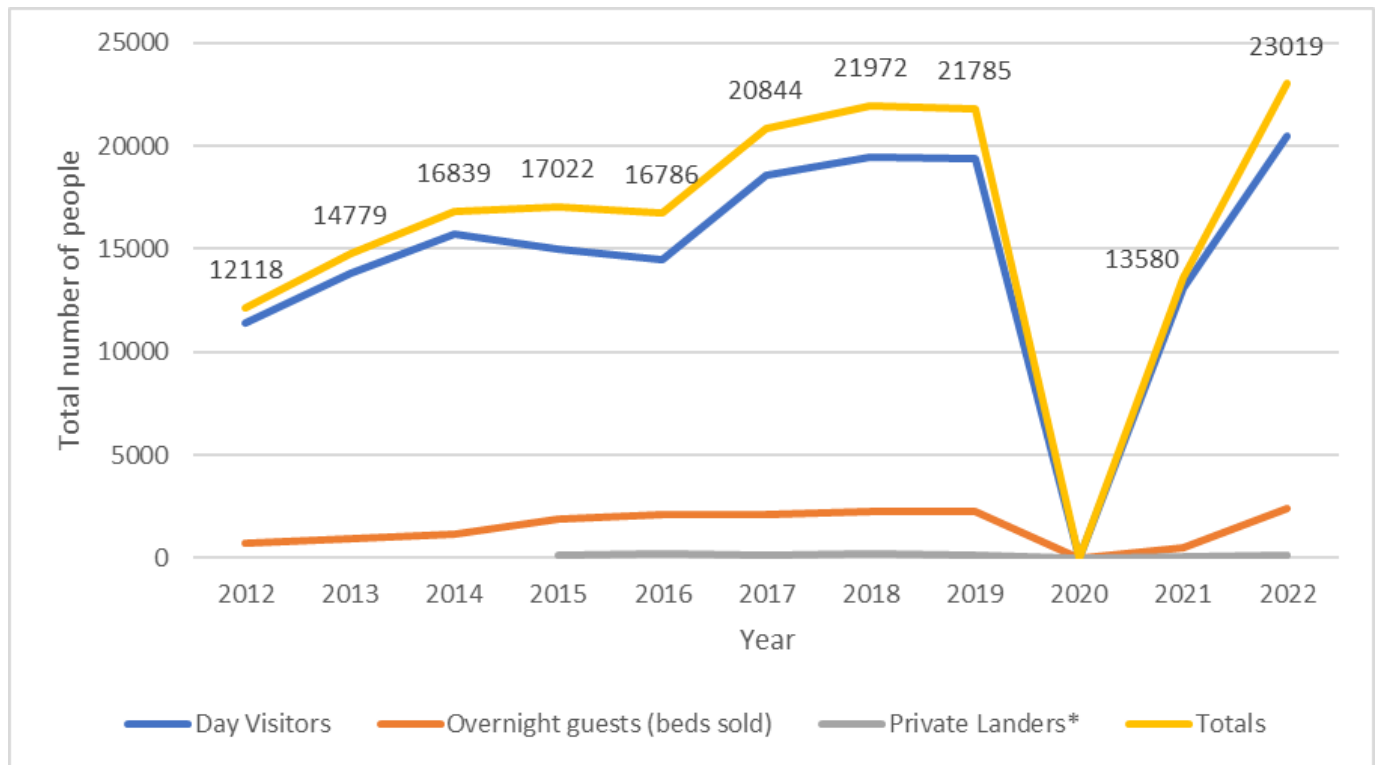


Figure 4 Visitors to Skomer over the past 10 years

Restrictions put in place on day visitor numbers as a result of COVID-19 were lifted at the beginning of the 2022 season. This meant we were once again able to welcome up to 250 visitors, across five boats, per day. This led to an increase in the number of day visitors (20,504) welcomed to the island compared with the previous year (13,059). This figure also surpassed all previous totals for day visitors during a season on Skomer, making 2022 a record-breaking year.

Because the potential number of day visitors to the island increased in 2022 (from 2021), we wanted to establish how these figures compare over time. By taking into account actual day ticket sales (20,504 in 2022) vs potential day ticket sales (25,350 in 2022) over the course of the year we are able to produce Figure 3. This shows that day ticket sales not only increased in number, but also in sales of potential tickets – with 81% of tickets sold over the course of the season.

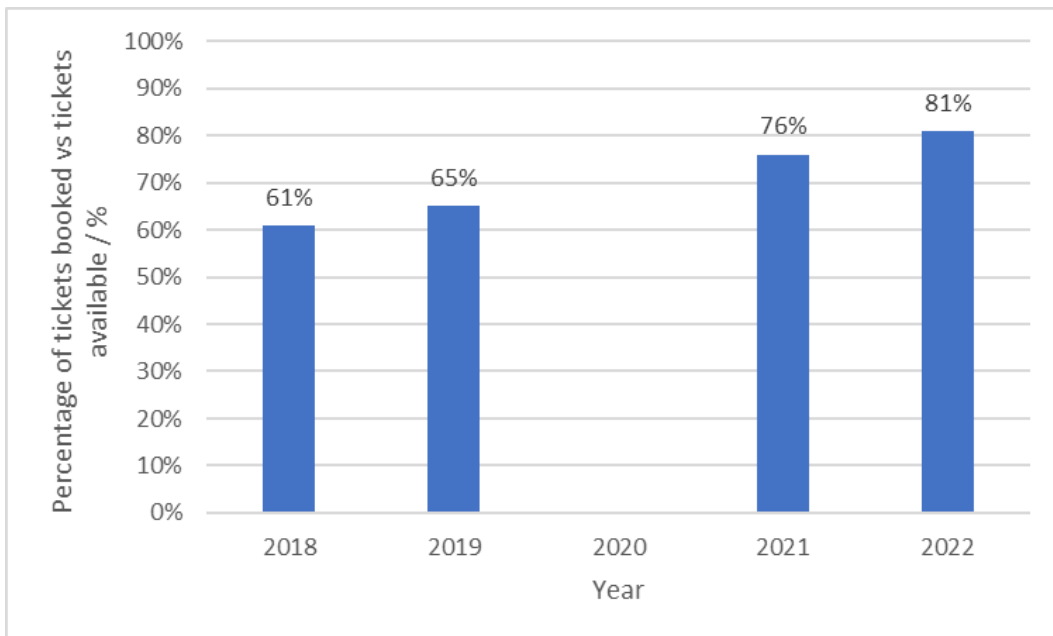


Figure 5 Tickets booked vs tickets available over the past five years

In total we welcomed 20,504 day visitors and 99 private landers to Skomer in 2022.

4.1.2. Cancellations

Unsettled weather conditions throughout the season resulted in boats being cancelled on a total of 35 days in 2022. Additionally, we were closed for two days in September for scheduled maintenance on the compost toilet steps.

	2018	2019	2020	2021	2022
Number of boat cancellations	36	39	NA	32	35

Table 9 Number of 'no boat days' over five years. This does not include Mondays.

This figure is comparable to those seen in the past five seasons. Around two thirds of the 'no boat days' in 2023 occurred in April (10) and September (11). This is what we would typically expect, with the weather generally being most unsettled at this time of year.

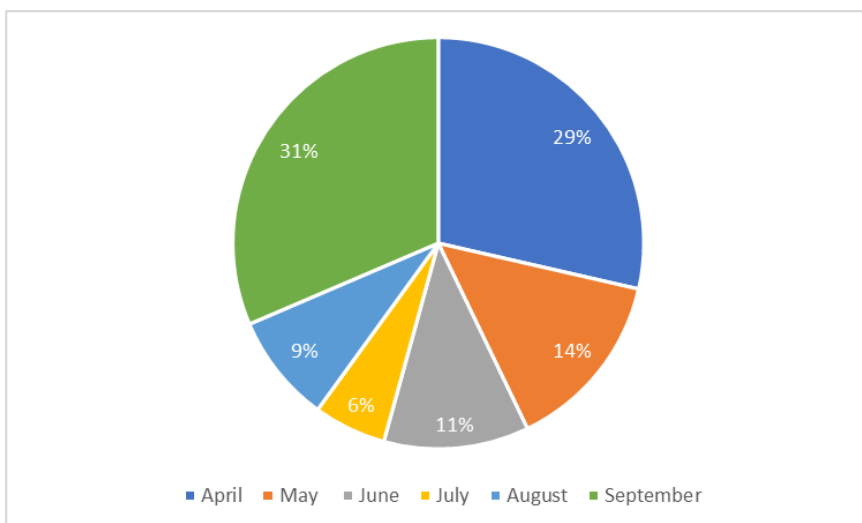


Figure 6 The proportion of 'no boat' days across the 2022 season

The unsettled weather meant that no boats ran from the 25th of September, effectively finishing the visitor season five days earlier than planned.

4.1.3. Shoulder Season

In 2022 we reduced the number of boats running per day in the shoulder season, running up to three boats in August (150 people maximum) and up to one boat in September (50 people maximum).

Shoulder season numbers saw a dip compared with figures from 2021. A total of 1583 and 292 day visitors arrived on Skomer in August and September respectively. The quietest day of the season was the 8th of September, with only four visitors making the crossing over to the island.

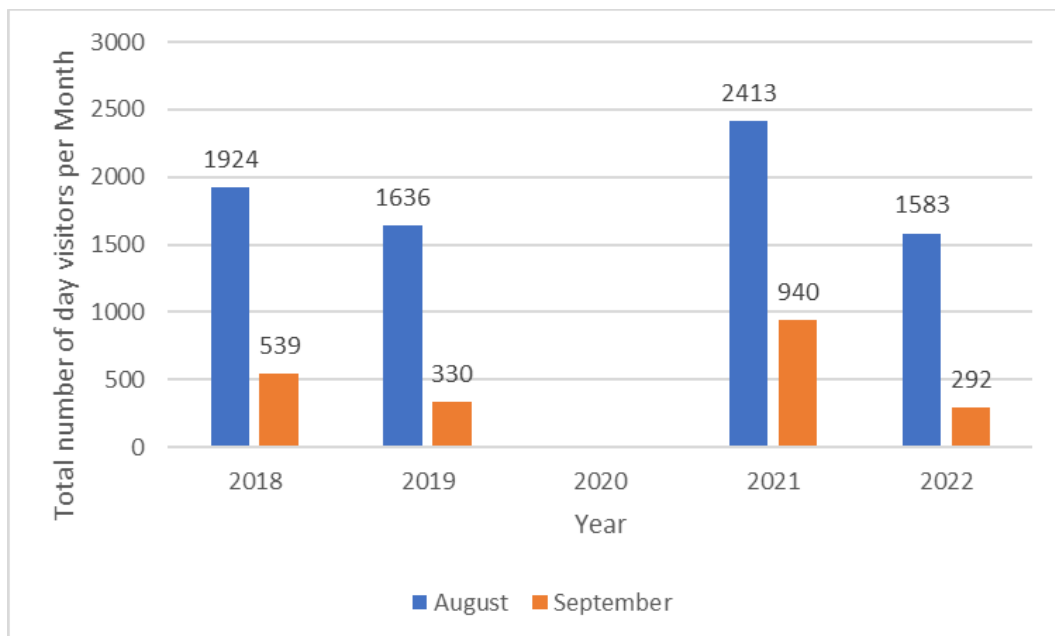


Figure 7 August and September day visitors over past five years

These numbers, particularly August's figures, are comparable with those of 2018 and 2019. There are a number of factors which should be mentioned which may have contributed to a drop in visitor numbers during the shoulder season compared to 2021, including:

- COVID-19 – with travel restrictions lifted, it may well be that people are choosing to holiday abroad once again. As such fewer people may have been staying the local area, or Wales more widely, compared with 2021. Vacancy rates in local holiday accommodation during this period would suggest this may well be the case.
- Cost of living crisis – towards the end of August and into September the UK was facing uncertainty over fuel and energy prices. It may be that people had to reallocate money that they would have otherwise spent on trips out (such as to Skomer) to essentials.

Comparing the number of tickets sold vs the number of tickets available to be booked in 2022 (Figure 7), we see comparable ticket sales to 2018 and 2019 for August. However, for September we see a marked increase to 45% of tickets sold. This is the result of reducing the number of boats running in this month – had we run five boats a day, as in previous Septembers, only 9% of the tickets available to be booked would have been sold. These figures suggest that reducing the number of boats during the shoulder season is a positive move, which has environmental and logistical benefits.

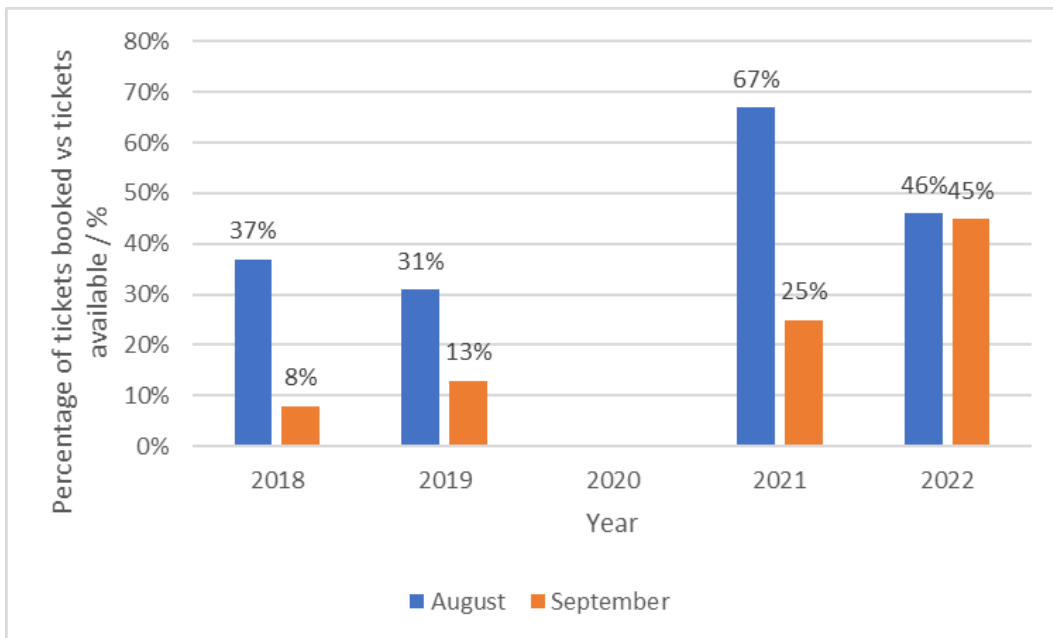


Figure 8 Tickets booked vs tickets available in August and September over past five years

4.2. Educational Visits

Educational bookings, and rates, were reintroduced in 2022. Education boats are available twice per week, on Thursdays and Sundays, except for the three-week period over Whitsun.

In total 589 students visited the island throughout the season in 2022, with only one cancellation of 11 students. This number is significantly lower to those seen in previous years (Figure 7). However, we should note that fewer education boats were available to be booked per week in 2022 (two) compared to previous years (five). This is likely to in part explain this drop.

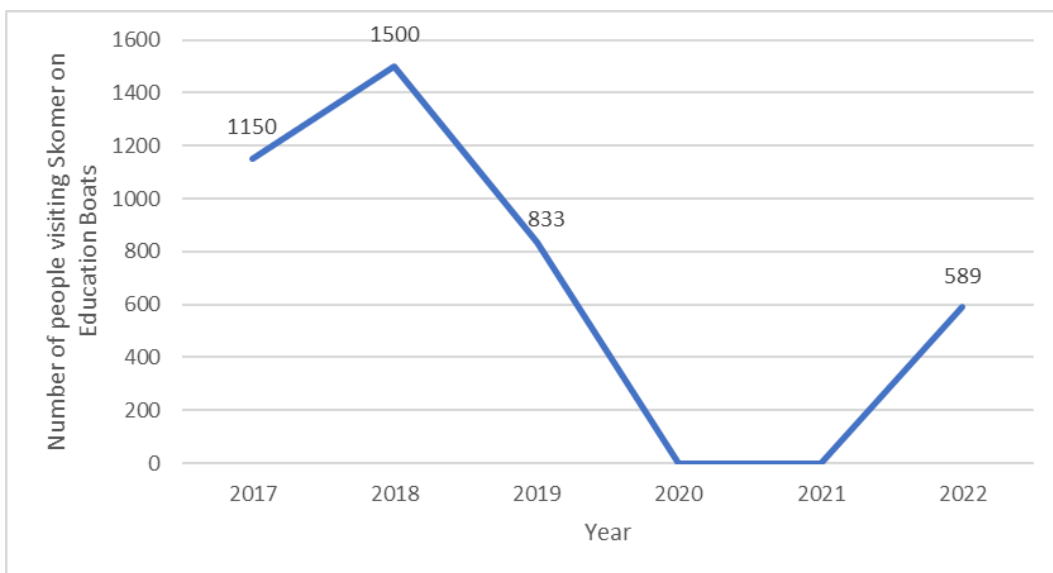


Figure 9 Education visits past 5 years

Numbers vary depending on the time of year, with the most students visiting in June (179) and the fewest in August (20). This is seen despite June having the least number of education boats available.

It is to be expected that late-July and August would see the lowest number of education bookings, as schools are broken up for the summer holiday during this period. This is reflected in our numbers, with 44% and 14% of available education boats booked in July and August respectively (Figure 8). Low bookings are also seen in May (40%) and September (50%). This suggests that outreach work should be increased, particularly to local schools, in the future to provide an opportunity for more young people to visit Skomer.

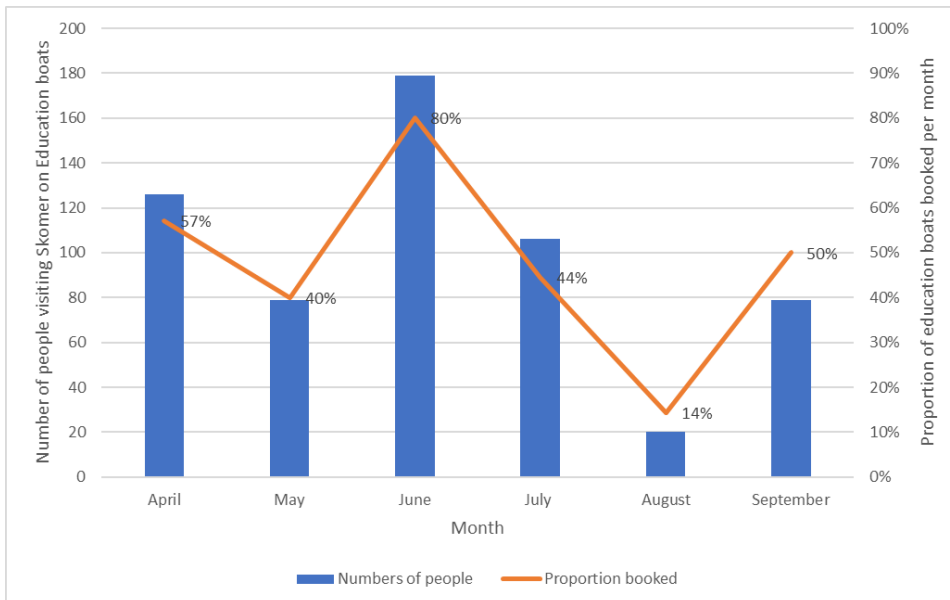


Figure 10 Education visits 2022

4.3. OVERNIGHT STAYS

4.3.1. Bookings

For the first time since 2019, bookings were able to be made in the Skomer hostel without carrying over cancellations from a previous year. As the 2022 season progressed, all restrictions put in place in the Skomer hostel to safeguard guests, volunteers and staff against COVID-19 were lifted:

- Bookings were initially made for four of the rooms in the hostel, with one room remaining vacant at all times. This restriction was lifted in May, with all five rooms available to be booked.
- Rooms could only be booked by one party (i.e. no dorm rooms). This restriction was lifted in August, with dorm rooms available to be booked on certain days as determined by the booking team.
- Face coverings were still recommended to hostel guests in communal areas, and to volunteers during cleaning duties, but not mandated.

Over the course of the 2022 season, 2,416 beds were sold in the hostel. This is the highest figure ever recorded, as can be seen in Figure 8. This increase is not hugely significant when compared with the previous high of 2,277 (2018).

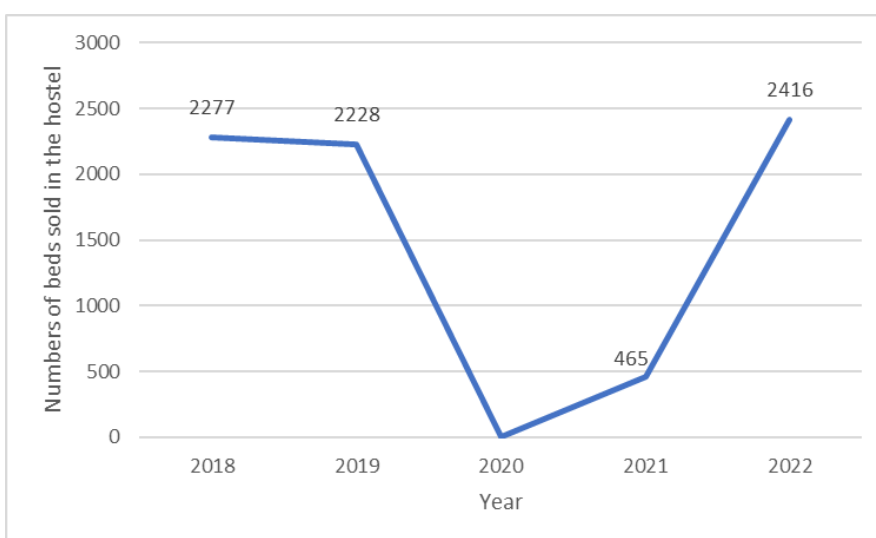


Figure 11 Hostel bookings over past five years

The majority of bookings in the hostel take place during peak season, which we would determine as between May and July. This period of time corresponds with the Puffin season. Outside of this time, in April, August and September, bookings are reduced (Figure 9). This has also been the trend in previous years.

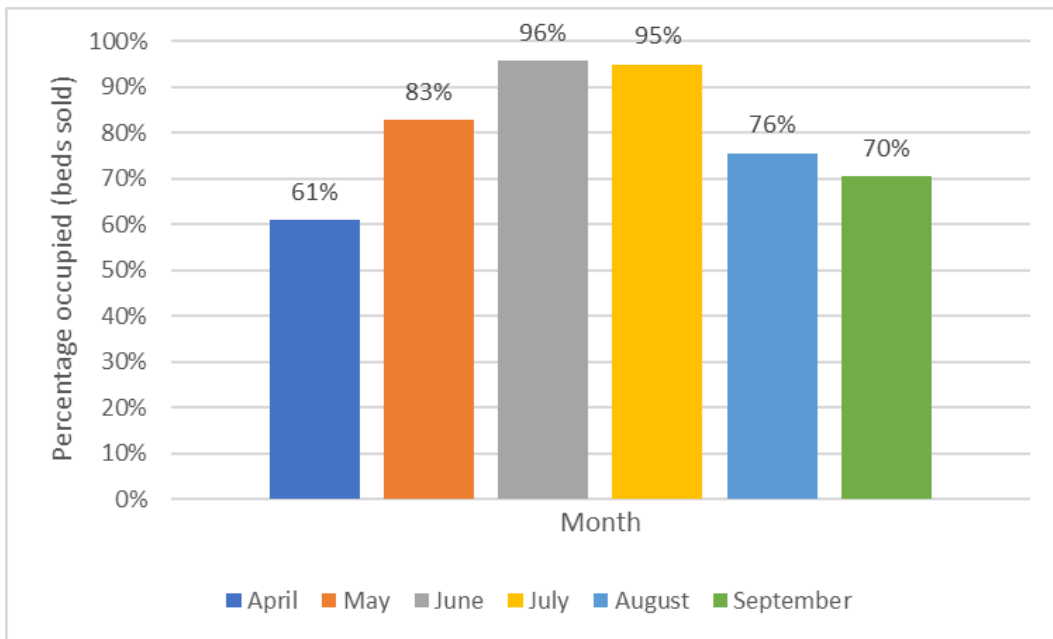


Figure 12 2022 hostel bookings by month

This dip in off-peak hostel bookings has historically prompted us to run events (see Section 7.4.) in the later months of the season. These events are important for education and public engagement and also assist in selling beds during this quieter period.

4.4. FEEDBACK

Hostel feedback moved to an online Google form in 2022, to reduce the amount of paper printed on the island. Those wishing to provide feedback using a more traditional paper questionnaire were provided with one. In total, 21 groups provided feedback on their hostel stay during the 2022 season.

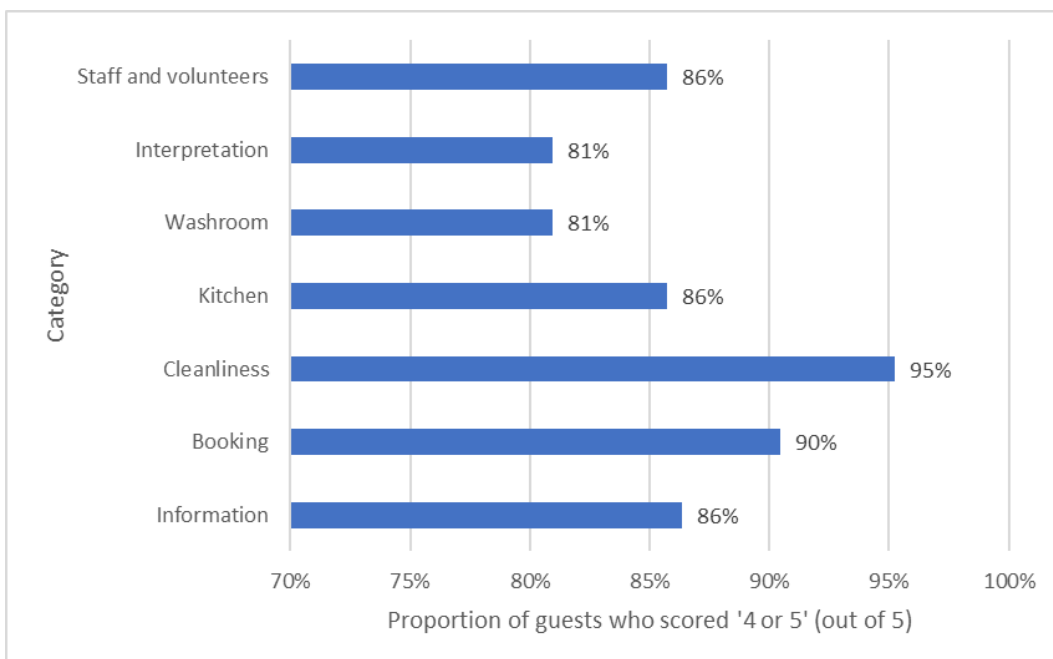


Figure 13 Hostel feedback 2022

Overall, as seen in Figure 11, every category received a rating of 4 or 5 (out of 5) by a minimum of 81% of guests. This is overwhelmingly positive feedback.

4.5. HUMAN IMPACT

4.5.1. Visitors

The island was regularly patrolled by volunteers and staff. All visitors received a welcome talk, emphasising 'dos and don'ts' with regards to safety and disturbance to wildlife. All welcome talks encouraged visitors to walk the island in an anticlockwise way, which reduced visitor pressure at the Wick. The Wick was staffed primarily by volunteers to prevent disturbance and provide information about seabirds to visitors.

Daily records of disturbance from anywhere on the island, including seaborne disturbance, are kept at evening log. The most common type of disruption was people off paths, collapsed burrows during monitoring work and collapsed burrows by visiting guests.

4.5.2. Seaborne disturbance

There were several incidents of seaborne disturbance noted in 2022. Boats, kayaks and tenders often came in too close to seabird cliffs and hauled-out seals in North Haven and Rye Rocks. Several people were spoken to by staff whilst out on the island boat. In particular, this included speaking to RIBs launched from a cruise ship which were too close to the cliffs. In autumn, boats occasionally enter the voluntary no entry zones in South and North Haven but no major disturbance was noted. All seaborne disturbance data is being made available to the NRW's Marine Conservation Zone team at Martin's Haven.

4.5.3. Pollution

No major pollution incidents were reported in 2022.

4.6. EQUALITY, DIVERSITY, INCLUSION, AND ACCESS

The Skomer team are pleased to have continued efforts to improve access to the island. We continue to work on a local level to tackle some of the barriers to inclusion and diversity which are often encountered across the conservation sector.

- **Long-term volunteers:** This year we introduced travel expenses (covering a journey to and from the island within the UK) for the long-term volunteers (LTVs) to increase the accessibility of this opportunity for early career conservationists for whom finance could be a barrier. Positive feedback showed that this was a key factor in making this opportunity affordable for several volunteers last season. Additionally, we collected information on how much LTVs spend on basic living costs when on Skomer to better understand financial barriers to volunteering. Four long-term volunteers benefitted from the £250 bursary from the Friends of Skokholm and Skomer on completion of a research project. We also supported applications for the £250 Seabird Group volunteer bursary, in which one volunteer was successful.



7 LTVs Anna and Lira on the boat – C. Aston

- **Duke of Edinburgh Award:** We created a framework for Duke of Edinburgh (DofE) participation on Skomer with the local Duke of Edinburgh group and the Pembrokeshire Coast National Park Authority (PCNPA) to help address barriers to access locally. In August, eight Bronze and Silver participants came to Skomer for a day's volunteering as part of the big island clear-up, supported by PCNPA rangers Chris Taylor and Vicky Sewell. One Duke of Edinburgh Gold participant completed weekly volunteering for the residential component of his award whilst two local residents who had previously completed their Gold award residential on Skomer returned as weekly volunteers. From 2023 onwards, six places per year have been set aside for DofE Gold participants undertaking the residential section of their award. Priority will be given to those from Pembrokeshire, particularly to those experiencing financial difficulties.

'Prior to volunteering on Skomer I had not previously visited the island before. Whilst doing my Gold DofE Award I was given the opportunity to volunteer and visit the island for the first time. Our gold residential was the last section other than the expedition that we needed to complete. At the time and maybe to this day there are not a lot of opportunities like what Skomer offered me locally.'

- **Weekly volunteers:** Through the Skalmey Bursary, we continued to cover the volunteer fee for weekly volunteers who might not otherwise be able to afford to come. We ensured clear communication about this via email and through the website.
- **Young Birders' Week:** Led by Visitor Officer (VO) Beth Thompson, the team ran a very successful Young Birders' Week for naturalists aged from 18 to 25 years. Accommodation costs were subsidised, allowing twenty-two young people the opportunity of a more affordable visit to the island. Ten participants have since applied to return as weekly volunteers in 2023, indicating the valuable role such events play in creating a longer-term relationship with the island (see Section 7.4).

'I'm a full-time university student, so the subsidised trips to Skomer island really do make a huge difference to whether someone like myself takes up the opportunity on offer. The experiences and skills gained from trips like this are invaluable for early-career conservationists and undoubtedly will be an important addition to CVs and skillsets of aspiring environmentalists.'



8 Young Birders' Week moth ID and group photo – C. Aston

- **Welsh language:** We continued efforts to improve and embed our use of the Welsh language on Skomer. Ceris Aston, Assistant Warden (AW) is continuing to learn Welsh and to incorporate some Welsh into welcome talks. Beth Thompson (VO) continued the #WelshWednesday social media feature and updated Welsh language signage at the landing weekly. A Welsh language guided walk organised by Beth Thompson and led by Mari Elin and Gruffydd Jones in August was well attended by Welsh speakers and learners and received excellent feedback (see Section 7.4). An effort was made to ensure new path signage was bilingual.
- **Education boats:** We continued to offer boats at subsidised rates for schools and education groups. These were available two days a week outwith the period from May 15th – June 16th (See Section 4.2).
- **Outreach:** We were really pleased to build relationships with organisations including Wildlife and Countryside Link, All the Elements and Black2Nature to help us better understand the barriers for people of colour in accessing the countryside, and particularly in engaging with conservation volunteering opportunities. These organisations kindly shared their knowledge and expertise to improve our understanding further, as well as helping us to share job and volunteering opportunities with broader audiences. We look forward to an ongoing continued relationship, informing practical actions to support inclusion and address barriers.
- **LGBTQ+ inclusion:** In an effort to make our inclusion more explicit, we reviewed job and volunteering application forms to ensure correct and inclusive terminology. Team members opted to add pronouns to their email signatures signalling an LGBTQ+ inclusive workplace.
- **Digital accessibility:** Alternative text (alt text) describing images and videos was added to live media across social media channels and to all images on Twitter to make content accessible for those using screen readers.

5 Staff and Volunteers

5.1 ISLAND STAFF

Warden Leighton Newman, Assistant Warden Ceris Aston, and Visitor Officer Beth Thompson, moved out to Skomer on 1st March. Field Worker, Freya Blockley, joined the team on April 24th. Freya's contract ended mid-August but she returned to the island in September to take up her role as Seal Assistant, finishing in early October. The Seal Field Worker contract was fulfilled by Birgitta Bueche, who arrived on August 12th.

Ceris, Leighton and Birgitta remained on the island until 20th November. Leighton and Lisa Morgan returned to the island on 8th December to carry out the biosecurity incursion response. They departed Skomer on 13th December.

5.2 LOCKLEY LODGE

Chrissy and Gary Eade ran Lockley Lodge in 2022. The Lockley Lodge team worked extremely hard throughout the season and the island could not have run so smoothly without their hard work. The transition to a new booking system was made all the easier by the work and support received by Lockley Lodge.

5.3 VOLUNTEERS

Weekly vols

We had a total of 147 volunteers over 28 weeks, carrying out public engagement, cleaning, maintenance, vegetation management, and wildlife monitoring throughout the season. Of these, one was completing their Duke of Edinburgh Gold award. We're incredibly grateful to the Skomer volunteers, whose hard work, humour and enthusiasm contribute not only to visitors' experience of the island but to the lives of all who live and work there.

Work parties

Island clean-up: On 28th August, we welcomed a group of local Duke of Edinburgh Silver and Gold participants and rangers Vicky Sewell and Chris Taylor from the Pembrokeshire Coast National Park Authority to the island for a mammoth island clean-up. Everything from old baths to roofing sheets was bundled into the dumper, which barely stopped all day. Huge thanks to everyone involved, including the weekly volunteers who loaded and unloaded the barge the following day. A tremendous effort by all. Thanks also to A&C Aggregates in Narberth for the donation of tonne bags.



9 A small selection of the rubbish leaving the island – C. Aston

Beach cleans: On 7th and 8th August, island staff, long-term volunteers and weekly volunteers joined the Skomer Marine Conservation Zone team to tackle the Wick and South Haven beaches, which were unpleasantly full of old fishing detritus, plastic bottles, shoes, tennis balls and all manner of rubbish. After hours of patiently filling bags and carrying them out to the boats, we left both beaches looking much clearer than when we'd reached them – just in time for seal pupping season.



10 MCZ RIB and Skomer RIB in the Wick with bags of rubbish collected from the beach – C. Aston

Library: We've been grateful throughout the season to have had the help of expert volunteers in clearing, sorting and re-cataloguing the island library in 2022. Particular thanks to Sarah Bruch and Jon Coen, Gruffydd and Mari Elin Jones, and to various patient peelers and stickers of labels. Also to the Friends of Skokholm and Skomer, who have kindly furnished the library with two new armchairs.

On the boardwalk: From 17th to 23rd September a team of volunteers replaced the boardwalk at South Stream and began a new replacement boardwalk to the Moorey Mere hide. Thanks go to everyone who helped (Dorothy Blatcher, Phil Blatcher, Martin Pratt, Nigel Saverton, Will Whittington).



11 The new boardwalk at South Stream – L. Newman

LTVs

In 2022 we were joined by four long-term volunteers; these were Eve Sharples and Kelda McChesney (April–July), and Lirayen Valencia and Anna Weir (July–September). In addition to a busy programme of public engagement, wildlife monitoring, and maintenance tasks, Skomer's long-term volunteers carry out individual research projects. These projects are supported by the Friends of Skokholm and Skomer bursary and add to our understanding of different aspects of the island.

Eve undertook a project on the presence or absence of the micromoth *Enteucha acetosae*. Of the 24 records of this moth in Pembrokeshire, 21 are from nearby Skokholm. She began by mapping the distribution of the micromoth's food plant sorrel. Through carrying out a transect and through opportunistic sightings, she then scrutinised the plants for the patterns and discolouration caused by the species' leaf mining behaviour. Eve also carried out frequent moth traps at the Farm, contributing to island and county records.

Pursuing an interest in the role of pollinators in ecosystems, Kelda conducted a project on Skomer's bees, reviewing historic records of bees on the island and setting up a transect to allow a standardised way of monitoring bees in the future. Eve and Kelda also shared a Razorbill productivity plot at Bull Hole, supported by Field Worker Freya Blockley.

Lirayen's project drew upon interviews with members of the public to allow us to better understand where visitors to the island come from, what their reasons for visiting are, and how they experience Skomer. This project aimed both to allow the organisation a better understanding of its visitors and to remove barriers to accessibility.

Anna carried out a BioBlitz in the Rabbit ex-closure at the Farm, recording the plants, birds, invertebrates, and other species making use of the ex-closure and seeking to understand some of the impacts of Rabbit grazing on the island.

We were also joined by seabird monitoring volunteer Becci Jewell from 28th May until 25th June. Becci quickly became a valued member of the team, not only conducting counts of cliff-nesting species from land and sea but also carrying out the Manx Shearwater census.

Many thanks to all five volunteers for their enthusiasm and commitment – we wish them the very best in the future.



12 Lira conducting a butterfly survey – C. Aston

6. Reserve Administration

6.1. FINANCE

6.1.1. Landing Fees

Landing fees for those visiting Skomer did not increase from 2021. Child fares for day trips and private landers were reintroduced in 2022. Fees were as follows:

Category	Adult (12+)	Child (2 – 12)	Baby (0 – 12)	Members
Landing fee	£20	£10	£20	£20

Table 10 Landing fees 2022

Please note that landing fees are the same for day visitors and private landers.

6.1.2. Overnight Accommodation Fees

Room type	Private Room	Dorm Room
April	£60	£50
May	£85	£55
June	£85	£55
July	£85	£55
August	£50	£45
September	£50	£40
Children (12 and under)	Half price	Half price

Table 11 Overnight accommodation fees 2022

Dorm room options were reintroduced in August of 2022, having been removed due to COVID restrictions in 2021. These rooms were available on certain days throughout the season, as determined by the booking team.

6.1.3. Gift Aid

Gift Aid from the 2022 season is still being calculated.

6.2. MEMBERSHIP

Active recruitment for WTSWW members did not take place on Skomer this year.

6.3. COMMERCIAL CODE OF CONDUCT

The Commercial Operator Register was updated in 2022. In total, ten businesses registered with the Wildlife Trust of South and West Wales for this season. Of these ten, three businesses registered with us for the first time.

As part of the agreement, businesses pay £100 per year to operate on Skomer. Any business operating overnight stays pay an additional £5 per person.

The decision was made to waive the registration fee of any businesses who were registered with us for the 2020 season, and subsequently could not operate trips because of the COVID-19 pandemic. Fees have been reintroduced as normal for the coming season.

6.4. TRAINING

Leighton, Ceris and Beth completed the following courses in 2022:

- Dumper Truck
- Brushcutter
- Real First Aid
- VHF (Leighton)
- Safeguarding (Beth)

6.5. HEALTH AND SAFETY

All accidents and incidents were reported using accident and incident forms. There were several First Aid incidents in 2022 which required staff time, the most serious of which required a coastguard helicopter.

H&S Advisor Keith Tompkins conducted an Independent Health and Safety Review during a site visit on 23rd August 2022. Keith looked at all aspects of island operations and visitor management with WTSWW staff.

7. Media, Interpretation, and Events

7.1. MEDIA AND FILMING ON SKOMER

7.1.1. Media and Filming

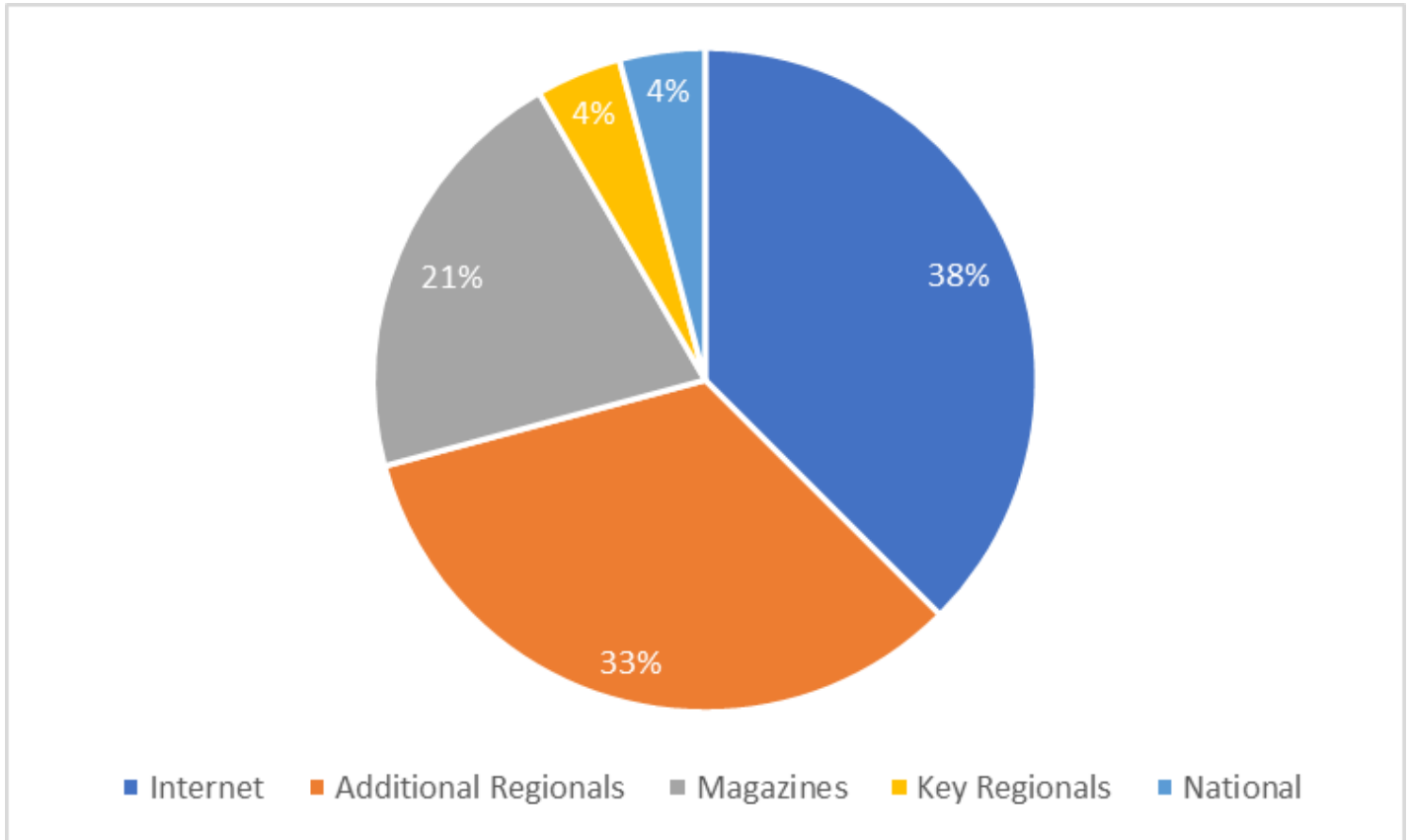


Figure 14 The split in media presence across different outlets



13 Sir David Attenborough with a fledgling Manx Shearwater © Alex Board/Silverback Films

7.1.2. SkomerLIVE

SkomerLIVE returned to our screens for the third year running in 2022. The decision was made to alter the running format for this season, with a total of four episodes being filmed and produced by WTWW’s Digital Fundraising and Communications Officer, Madison Bowden-Parry. These episodes were released weekly

between 11th July – 1st August, and covered topics ranging from our record-breaking Puffin count, to breeding Atlantic Grey Seals. Episodes were filmed in advance on Skomer, and included interviews to camera with WTSWW staff, researchers, and volunteers.

	YouTube	
	Views	Likes
Episode 1 – Island Life	2,040	27
Episode 2 – Let the count commence	725	17
Episode 3 – Silent cliffs	516	7
Episode 4 – September delights	211	7

Table 12 SkomerLIVE 2022.

Across the 4 episodes, SkomerLIVE was viewed just under 3,492 times.

7.2. MARKETING, PUBLICITY, AND SOCIAL MEDIA

Our social media platforms, blog, and webcams again provided to be hugely successful in 2022. These platforms allow us to engage with people from all over the world.

Key things to note include:

- Introduced in 2021, we continued with ‘Welsh Wednesdays’ throughout the 2022 season. In total producing posts about 24 species found on Skomer.

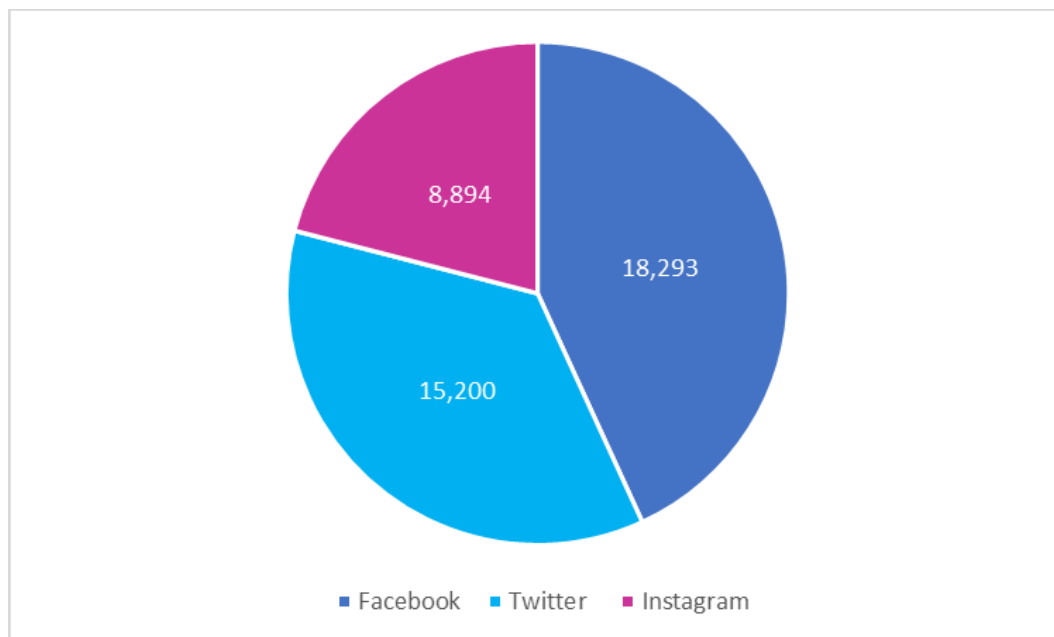


Figure 15 Social media following

7.2.1 Facebook



14 Northern Lights over Ramsey Island – L. Newman

Facebook remain our most popular platform. As of February 2023, our Facebook following stands at 18,293. This is an increase of 2,310 followers compared to the start of 2022. Our highest reaching post of 2022 was published on 14th March 2022, and showed a picture of the Northern Lights over Ramsey Island, taken from Bull Hole. This post reached 73,108 accounts, and accumulated 1,812 reactions, 177 comments, and 116 shares.

7.2.2. Twitter



15 Puffins on the isthmus – C. Aston

At the end of 2022, our Twitter following stood at 15.2K. This is an increase of around 600 followers compared to the start of 2022. Our 'top tweet' of 2022 was published on 26th March 2022, and consisted of a video of puffins on the Isthmus. This video accompanied the news that our puffin count for 2022 was the highest ever – reaching 38,896 individuals. The tweet accumulated 22,898 impressions, 217 likes, 41 retweets, and 10 replies.

7.2.3. Instagram



16 Drones are not permitted on Skomer – B. Thompson

As of February 2023, our Instagram following stands at 8,894. This is an increase of 1,641 followers compared to the start of 2022. Our highest reaching post of 2022 was published on 16th May 2022, and was a reminder to visitors that drones are not permitted on Skomer. The post reached 10,261 accounts, and accumulated 741 likes, and 18 comments.

7.2.4. Skomer Island Blog

We published a total of 14 blogs over the 2022 season. Frequency of blogs varied over the season, depending on staff/volunteer availability.

In total our blogs were read by 3,200 people. Our most popular blog of the 2022 season was published on 5th January 2022 and was titled: 'Long-Term Volunteering on Skomer Island'.

7.2.5. Skomer Webcams

The Skomer webcams went live on YouTube for the third year running. This year the webcams were sponsored by Leica.

7.3. INTERPRETATION

Signage relating to COVID-19 protocols were removed from the island as the 2022 season progressed. Exceptions to this were: hand sanitiser signs and pumps at the compost toilets and landing steps, and face covering signs in the hostel. We opted to keep the latter as we were aware that some guests would feel more comfortable wearing a face covering – although this was a personal choice and not enforced. The History Trail Garland Stone loop remains closed due to burrows and nesting gulls.

The following interpretation was added:

- New A1 maps were purchased and put up at the North Haven sales point, and Farm.
- A sign for the North Pond Research Hide was put up in the spring of 2022.

Over the summer period, staff from National Resources Wales visited Skomer with WTSWW's Head of Islands and Marine, Lisa Morgan. Discussions were had about improving and updating signage and interpretation across the island, including in the Visitor Centre.

7.4. EVENTS

7.4.1. Overnight Events

The following overnight events were organised for 2022:

- Yoga Retreat – this event ran between 14th and 16th August and was led by Catrin Norris. The event was fully booked, with 15 individuals attending the two-night event.
- Shearwater Week was scheduled to run between 28th August – 3rd September, as three two-night stays. The event was to be run by staff on Skomer in collaboration with researchers from OxNav, and with the support of FOSAS. Shearwater Week was fully booked, however had to be cancelled because of the threat of avian flu and nationally imposed bird handling restrictions. Attendees were given the option of visiting Skomer as a ‘normal’ hostel guest or cancelling their trip.
- Young Birders’ Week – this new event ran from 4th to 10th September, as two three-night stays. We are very aware of the financial barriers to visiting Skomer, particularly as an overnight guest. Aimed at those aged 18 – 25 years old, Young Birders’ Week aimed to provide an opportunity for young people to access Skomer, many for the first time. Individuals booked into the hostel at a reduced rate of £20 per night, and attended activities organised by staff on the island over the course of their stay. We welcomed 22 people to Skomer as part of Young Birders’ Week, which received overwhelmingly positive feedback.
- Autumn Migration Week – this event ran between 10th and 13th September and was led by Dave Astins. A total of seven people attended the event.

In total 47 individuals stayed in the hostel as part of overnight events organised on Skomer this year.

7.4.2. Day Events

Monday guided walks returned in 2022, with eight walks planned from May to July. These walks are planned in collaboration with Dave Astins from West Coast Birdwatching. With kind weather, all eight guided walks went ahead as planned. All guided walks were fully booked. This gave a total of 122 individuals attending these events.

Additionally, we ran a Welsh Language guided walk in August. This event was run by Mari Elin and Gruffydd Jones, who are long-standing supporters and weekly volunteers on the island. This event attracted ten individuals to the island.

In total, 132 individuals visited the island in 2022 as part of organised day trips.

7.4.3. Event feedback

Emails were sent to participants of all events on Skomer this year, asking them to complete a google feedback form about their stay. A total of 35 responses were recorded.

When asked how much they enjoyed their event, 100% of participants across all events rated their experience as a 4/5 or 5/5.

When asked if they would consider attending that same event on Skomer again in the future, 100% of attendees at overnight events responded with a 5/5. Whilst 95.5% of attendees at day events responded with a 4/5 or 5/5.

Monday Guided Walk

Nineteen responses were recorded. From which we can infer the following:

- 26.3% of attendees had not visited Skomer beforehand.
- 100% of attendees rated the event as a 4 or 5 (out of 5) when asked how much they enjoyed their stay.

- 94.8% of attendees rated a 4 or 5 (out of 5) when asked if they would consider attending a guided walk on Skomer again in the future.

Feedback included:

- *“Knowledgeable guide, amazing variety of birds on one small island, thoroughly enjoyed it Thank you.”*
- *“It’s wonderful to visit the island on a day when it is closed and you feel like you have it all to your small group. Having heard how busy it can be felt very lucky to have made my first visit on a Monday.”*
- *“Just to say that Dave Astin is wonderful. My friends and I think he is perfect for the job and we hope to join one of his guided walks again in the future.”*

Welsh Guided Walk

Three responses were recorded. From which we can infer the following:

- 33.3% of attendees had not visited Skomer beforehand.
- 100% of attendees rated the event as a 4 or 5 (out of 5) when asked how much they enjoyed their stay.
- 100% of attendees would consider attending a Welsh language guided walk on Skomer again in the future.

Feedback included:

- *“Thank you to the team for organising. More Welsh related events would be excellent.”*
- *“Mari Elin and Gruffydd were wonderful. They had lots of interesting info that was put across in an interesting and accessible way for all learners. I came with my family with varying Welsh language experience. It was great to be able to share the day together.”*

Yoga Retreat

Three responses were recorded. From which we can infer the following:

- 33.3% of attendees had not visited Skomer beforehand.
- 100% of attendees rated the event as a 4 or 5 (out of 5) when asked how much they enjoyed their stay.
- 100% of attendees would consider attending a yoga retreat on Skomer in the future.

Feedback included:

- *“A perfect mix of yoga and free time to explore the island. A really good formula”*
- *“I’m looking forward to the opportunity to come again”.*



17 Yoga retreat – C. Aston

Young Birders' Week

Seven responses were recorded. From which we can infer the following:

- 57.1% of attendees had not visited Skomer beforehand.
- 100% of attendees rated the event as a 5 (out of 5) when asked how much they had enjoyed their stay.
- 100% of attendees would consider attending Young Birders' Week again in the future.
- 100% of attendees would recommend Young Birders' Week to others.

Feedback included:

- *"It was fantastic! From the subsidies to get young people involved, to the warm welcome we all received and the fantastic three days of activities!"*
- *"The best few days, so brilliant to get so close to the Manxies and I learnt so much from the other young birders and the awesome staff. Thank you!"*
- *"I had a really great time and can't thank everyone involved enough!"*
- *"I just wanted to say a heartfelt thank you again to everyone on Skomer for making it such a special place and for organising such a fun event for the first time! It was definitely very inspiring and I can't wait to come back now and see my first Puffins!"*

Excitingly, several of those who attended Young Birders' Week later submitted applications to visit Skomer as weekly volunteers. We look forward to seeing them again in 2023.

Autumn Migration Week

Three responses were recorded. From which we can infer the following:

- 33.3% of attendees had not visited Skomer beforehand.
- 100% of attendees rated the event as a 5 (out of 5) when asked how much they had enjoyed their stay.
- 100% of attendees would consider attending Young Birders' Week again in the future.

Feedback included:

- *"Amazing time... everyone so friendly and welcoming, very knowledgeable. Dave is simply brilliant!"*
- *"Fantastic time. Dave is very knowledgeable and we had so much time out looking for birds - it was an amazing experience on this magical little island. Thanks and recommending this trip to friends."*

8 Reserve Management

8.1 MANAGEMENT PLAN

Species monitoring was carried out according to the management plan. Any adjustments to the management plan were checked in accordance with WTSWW and NRW and through the Island Conservation Advisory Committee (ICAC) advisory system.

8.2 SPECIES AND HABITAT MANAGEMENT

Apart from work on the footpaths and clearance of Rosebay Willowherb, no other habitat management was carried out. No species management other than controlling the productivity of Canada Geese was carried out.

MS01/01 Control Rosebay Willowherb *Chamerion Angustifolium*

Rosebay Willowherb control started on 29th June. The four controlled patches from 2021 were much reduced in 2022. Each patch was cut once during the late summer with any plants left after the last cut being hand pulled. All patches were cut before going to seed. There were no extra patches identified in 2022.

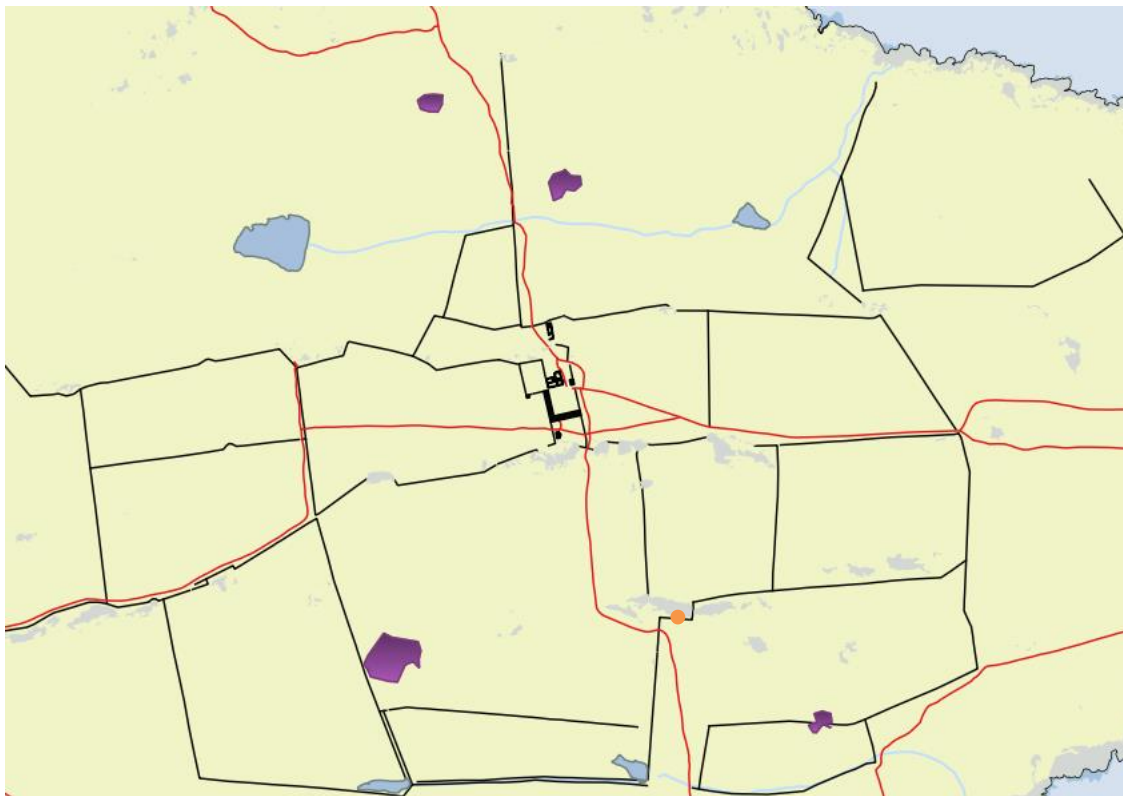


Figure 16 Map of four main Rosebay Willowherb sites (purple).

MS01/02 Licence to Control Canada Geese (*Branta Canadensis*)

A licence (Ref: S090161/2), provided by NRW, is held to control the breeding success of Canada Geese on Skomer. In total, nine nests were treated.

MH1/01 Bracken Control along the history trail

To comply with our glastir contract, bracken was cut back along the history trail twice during the season, the first cut on 18th June and the second cut on 1st August.

8.3 BUILDINGS AND INFRASTRUCTURE

All buildings were cleaned and decorated as required in March and at the end of the season.

	North Haven	Farm
External infrastructure	Some rot on house and handrails. External condition of the building was assessed by Chris Ward in 2021 and it was noted that the exposed side of North Haven is in poor condition with horizontal cladding held loosely in place as wood beneath is rotten. Windows and sills are also in poor condition and need replacing. Vertical cladding planks are also in poor condition and have started to be replaced.	Guttering needs repair spring 2023. Window in hostel kitchen and in volunteer block need replacing spring 2023. New glass door required for AW/VO block. Fridge room roof in need of repair – spring work party 2023. Door to AW/VO Block leaking when rain comes from the east.
Internal infrastructure	OK. Library infrastructure upgraded and de-cluttered to allow for a better workspace for staff, researchers and volunteers. Library books catalogued.	Several slats replaced on beds in the hostel. Beds in Chough treated for woodworm spring 2022. Woodworm in hut on one of the desks – treated autumn 2022. Mattresses, pillows, and bedding replaced in hostel/volunteer block as necessary. New mattresses for AW+VO. Regouted and siliconed volunteer bathroom, hostel downstairs. Replaced rotten skirting board volunteer bathroom. Plastered visitor centre ceiling. Painted AW/VO block, volunteer kitchen and bedrooms, hostel. Attempted mouse-proofing AW/VO kitchen, cupboards in hostel kitchen and research kitchen.
Broadband/Webcam infrastructure	OK	No internet at Farm from arrival until mid-April due to satellite dish blowing off and parts being damaged. Satellite dish blew off at beginning of November – no internet for rest of season.
Water supply	OK – ran very low in autumn. Water transported from the Farm.	Hostel kitchen plumbing altered in spring to go through UV treatment system.
Water	OK – Water treatment serviced by Penstar on 4 th May.	Water testing was not carried out due to poor weather affecting boats. Water shortages throughout the season.
Plumbing	OK	Bar on volunteer shower replaced. Water tank burst in downstairs hostel Sep 2022
Septic tank	OK	OK

Compost toilets	n/a	Strong smell noted in the hostel dining room on several occasions, despite extractor fans being on for most of the day. Otherwise, OK. Chutes cleaned, and Bracken added weekly by VO and AW.
Solar hot water	Not working – Pump broken	OK in hostel/researchers. Still non-functional in AW/VO/volunteer Blocks.
Chlorine drip	n/a	OK
Gas boilers	Serviced in summer	New boiler installed in spring 2022, worked well. AW/VO boiler regularly showing error messages (01) and failing to light. Technicians came out several times but with no success. Worked very occasionally but erratically throughout season; hot water mostly provided by immersion heater relying upon solar power. Clearly not long-term solution. New boiler required.
Immersion Heaters	OK	Immersion heaters in all buildings worked well. Immersion heater usage should be reduced in the autumn, to prevent draining the batteries.
Gas fridges	Now replaced with electric fridge/freezer combinations in research accommodation and Warden House	Faulty AW/VO fridge replaced by Warden's old fridge. Faulty volunteer fridge replaced by Warden's old freezer.
Gas cookers	OK – Research cooker replaced	Faulty gas cooker replaced in AW/VO accommodation. Minor faults with volunteer oven and hostel oven fixed by team throughout year.
Photo-voltaic	OK	OK
Batteries	In very poor condition, need replacing. Two power cuts a day. Have been kept topped up throughout year	OK
Electrics	OK	Main light in compost toilets (right) not working. Have checked this is not an issue with the bulbs. To be raised upon next service.
Fire alarm	OK. Serviced on 19th May.	Serviced. Several parts replaced, including sounders and beacons. Faults showing throughout the season. Technicians visited several times but were unable to fix the issue. Ongoing fault code (and loud beeping) in Zone 3 (AW/VO block) and Zone 2 (visitor centre). New system with battery operated detectors set up in AW/VO block and zone disabled on main system. Faults also showed in researcher block intermittently. General fire alarm sounded

		three times during the season when no fire present with 'General fire' showing in Zone 5 (researcher block) – both false alarms. Concern about faulty system/ that false alarms will lessen response if a genuine alarm sounds.
Internal fireplaces	Replaced in April. Upgrading work included boxing in flue in library and installing fire guard behind fire.	Serviced. New fans fitted which increase efficiency.
Landing	OK – maintenance carried out to the handrails with some uprights replaced.	
Boat Shed	OK – door replaced in autumn as well as internal storage renewed.	

Table 13 Overview of maintenance work done in 2022



18 The new steps up to the Compost Toilets - L. Newman



19 New Moorey Mere boardwalk on a frosty December morning – L. Newman

8.4 MACHINERY AND EQUIPMENT

	North Haven	Farm
Generator	OK, serviced. Getting a lot of use because of battery situation	Serviced. Hardly used during the spring/summer, because of the new solar panels/batteries. Coolant leak still an issue – requires topping up before every use. Generator shed sealed using silicone to reduce water ingress and risk of rust to the generator. Moderately successful – some parts will require redoing in spring.
Dumper Truck	OK. Weekly checks carried out by VO.	
Mule	OK	
Boat engines	OK – new main engine fitted in June. Serviced by Dale Sailing in the winter of 22/23	
Boat	OK – Needs gluing and self-draining bungs replacing. Work booked in for March 2023.	
Mainland boat trailer	In Dale Sailing's yard. Unsure of wheel bearing situation but seems to roll ok. Jockey wheel unusable as wheel has disintegrated. Replaced Feb 2023.	
Boat trailer	OK	
Generators	Serviced	

Table 14 Overview of machine maintenance

9. External groups and liaison

ICAC

The Islands Conservation Advisory Committee (ICAC) meetings were held on 21/2/22 (VC), 28/4/22 (VC), 11/8/22 (VC) and 29/11/22 (VC). The seabird monitoring subcommittee was delayed until March 2023. Minutes were taken and are kept in the island files.

Friends of Skokholm and Skomer

The Friends of Skokholm and Skomer reunion was again held in February, the first in-person reunion since 2020. Warden Leighton Newman attended, presenting a riveting island update, and also pre-recorded a talk for online viewing.

Marine Conservation Zone MCZ

Especially strong links are maintained with NRW staff at the MCZ office at Martin's Haven. The MCZ team are extremely generous and helpful to the island and we would not be able to run so smoothly without them. The MCZ team were instrumental in facilitating our autumn beach cleans of the Wick and South Haven.

Natural Resources Wales (NRW)

The island has obvious and important links with NRW and Paul Culyer has helped source items of equipment and kit funded by NRW.

Dale Sailing

Another good year working with Dale Sailing. Good communication was maintained with all skippers and boat staff and especially with Gareth Reynolds.

Others

Links were maintained with a wide range of external groups including NRW, the National Trust, Pembrokeshire Coast National Park Authority, the RSPB (especially Greg Morgan on Ramsey) and H.M. Coastguards.

10. Grants and Donations

Grants

WTSSWW continued to deliver on the Nature Networks Fund grants in 2022, with Skomer having items in the main WTSSWW grant and the marine grant. The Nature Networks Fund is funded by the Welsh Government and administered by The National Lottery Heritage Fund in Wales.

Items covered by the grant funding in 2022 included:

- New exterior wooden steps providing access to the visitor toilets at the Farm
- Staff and volunteer training
- Barge hire for delivery of building materials and removal of rubbish
- Pre-season works to island boat, servicing and winter storage
- UHF and VHF radios
- Boat kit – waterproof boat clothing for staff and volunteers
- Life jackets and PPE

BERF funding – NRW directly purchased several items to facilitate reserve management and help us to improve H&S on site including removal and replacement of the damaged asbestos roof on the lower lime kiln in North Haven.

We also received a grant from The Friends of Pembrokeshire Coast National Park (FPCNP) Project Fund in January for blackout blinds in North Haven to reduce nocturnal bird impacts on the building.

Wild-fundraisers

Trust supporters and members groups continue to raise money for Skomer projects.

David Astins and Amanda Love raised over £3.5k during for their round-Skomer swim on 3 August. Young fundraiser Imogen, ably assisted by her Mum Elin, continued to raise money for Skomer for the 3rd consecutive year, raising over £1k for the island.

The Friends of Skomer and Skokholm continue to consider specific items for Skomer when requested, purchasing two new chairs for the island library in 2022.

Research and Monitoring contracts

Skomer also receives annual funding contributions for the following research and monitoring projects:

BTO/JNCC – a contribution to help cover costs of our seabird field assistant role.

NRW – funding received to deliver Grey Seal pup production monitoring project.

11. Acknowledgements

Thanks go to many parties and individuals that helped with the successful running of Skomer Island in 2022. Apologies to anyone left off this inevitably incomplete list.

Many thanks go to all staff and volunteers (long-term, work party and weekly volunteers and anyone drafted in at last minute to help us); staff at the MCZ and Dale Sailing; Chrissy and Gary at Lockley Lodge; Lisa Morgan (Head of Islands and Marine for WTSSWW), all staff at Cilgerran and Tondy; Lucy and Sash Tusa; Anna and Steve Sutcliffe; The Friends of Skokholm and Skomer; HM Coastguard and the R.N.L.I.; all contractors; all members of the ICAC and other helpful wildlife consultants; Dave Astins; staff and students at Oxford, Sheffield and Gloucestershire Universities; and finally to all of the visitors that came and enjoyed the island.

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