

# Seabird Monitoring & Research Project

## Isles of Scilly 2025

Hester Odgers, Vickie Heaney



# Summary of Seabird Monitoring and Research 2025

## **Annet (main annual sample site for the majority of species)**

- Great black-backed gull breeding pairs have remained stable since last year
- The shag population has risen to 113 pairs (its highest level since 2011)
- 18 common tern pairs nested and produced at least 19 fledglings
- Fulmars have continued to decline, now at 21 AOSs, their lowest level on record

## **St Agnes & Gugh**

- Have been rat-free since 2014.
- The lesser black backed gull colony has increased slightly to 491 pairs, its highest level since 2014.
- Manx shearwater now at 225 AOBs, the highest on record
- The kittiwake colony had had 32 AONs, more than last year, but with lower observed breeding success
- Signs of cat predation of storm petrels was recorded

## **Round Island**

- A slight increase in storm petrel AOSs since last year with 23 AOSs
- No sign of rat incursion after the 2023/24 eradication.

## **Bryher**

- A full Manx shearwater playback survey found an estimated 17 AOBs.

## **Other productivity**

- Fulmars on two sub-colonies (Menawethan and the Daymark) have declined and continue to show low productivity levels (29 and 34 AOSs respectively).
- Herring gull productivity in the Hugh Town remains fairly consistent with a slight increase since 2024 (1.45 chicks per pair across 20 pairs)

## Introduction

This year was the second year of our regular annual monitoring programme following the all islands SPA survey in 2023. Our core monitoring work was funded by the Seabird Recovery Project. The season was a reasonably successful breeding season for many of the populations surveyed around Scilly; the highest populations of several species recorded over the last 20 years were seen on our sample sites of Annet and St Agnes & Gugh. Most other populations remained stable with the notable exception of fulmars which have continued their steep decline.

As was the case in 2024 there were a number of partnership projects carried out across Scilly this summer including (details can be found in Appendix 2)

- o University of Exeter Forage Fish PhD: mapping the distribution and interactions of seabirds and fish species in the Isles of Scilly and the role of seabirds in local nutrient enrichment.
- o RSPB storm petrel tracking project, tracking the foraging trips of adult storm petrels nesting on Scilly.
- o OxNav Manx shearwater tracking feasibility study assessing the potential for tracking the foraging trips of adult Manx shearwaters nesting on Scilly.
- o The ongoing work of the Scillonia Seabird Ringing Group with help from the West Cornwall Ringing Group.

This season was also beginning of our looking ahead to the potential expansion of our monitoring programme in the future, with some additions to the core annual monitoring and trials of new equipment and survey techniques to provide a baseline as we move into the development phase of the Seabird Recovery Project.

## Results

### Monitoring of seabird numbers and productivity on St Agnes and Gugh

A full survey of all seabird species breeding on St Agnes and Gugh has been conducted annually since 2012 as part of the long-term monitoring to assess the response to the removal of rats in the winter of 2013/14. The results from this and the three previous SPA counts are included in Tables 1 and 2 below. Over this period the number of both herring and lesser black-backed gulls has decreased, with the main lesser black-backed gull colony on Gugh dropping from 1132 pairs in 2000 to 361 in 2012 before maintaining a relatively stable

population of around 400 ever since, rising to a relative high of 491 this year. Herring Gulls remain at a low level on both islands and Fulmars on St Agnes have increased slightly, returning to their 2022 level.

St Agnes & Gugh have been rat-free since the 2013/14 Seabird Recovery Project, which successfully eradicated rats from across the two islands. The islands to date have not experienced a reincursion of rats, with regular monitoring in place and repeated visits by a biosecurity detection dog (most recently in February 2025) confirming this. The islands have also not historically had mice, and a biosecurity response was triggered this past winter (November- December 2024) when probable sign was found of mouse presence in some chicken feed. Extensive monitoring was carried out in the area for four months by the IoSWT, RSPB and local and mainland biosecurity volunteers following the protocols laid out in the Biosecurity plan and no further sign was found, leading the team to conclude the mouse had likely either died or had left the probable sign prior to the chicken feed arriving on St Agnes. Table 1. Breeding numbers Gugh

	MX	SH	LBBG	HG	GBBG	KIT	SP	FUL
<b>2000</b>	22	0	1123	159	3	155	0	2
<b>2006</b>	9	0	875	69	4	131	0	3
<b>2012</b>	16	2	361	53	10	0	-	4
<b>2013</b>	17	0	418	51	7	0	0	1
<b>2014</b>	17	0	411	30	5	0	0	5
<b>2015</b>	45	0	419	30	6	0	2	1
<b>2016</b>	52	0	400	36	5	0	4	1
<b>2017</b>	36	2	296	20	2	30	5	3
<b>2018</b>	41	0	452	28	0	35	11	2
<b>2019</b>	42	1	422	14	3	20	11	2
<b>2020</b>	-	-	-	-	-	15	-	-
<b>2021</b>	46	0	397	22	2	0	7	3
<b>2022</b>	80	0	399	31	4	11	3	0
<b>2023</b>	84	0	464	40	7	21	20	1
<b>2024</b>	95	0	423	21	2	22	-	0
<b>2025</b>	156	0	491	13	2	32	3	0

**Table 1. Breeding seabirds (pairs) on Gugh** (FUL – fulmar; MX – Manx shearwater; SH – shag; LBBG – lesser black-backed gull; HG – herring gull; GBBG – great black-backed gull; KIT – kittiwake; COT – common tern; SP – storm petrel

Table 2. Breeding numbers St Agnes

	MX	SH	LBBG	HG	GBBG	KIT	COT	SP	FUL
<b>2000</b>	5	0	2	25	0	0	3	0	0

<b>2006</b>	8	0	0	15	1	0	0	0	0
<b>2012</b>	8	0	8	61	0	24	0	-	0
<b>2013</b>	5	0	8	32	0	38	0	0	2
<b>2014</b>	9	0	16	27	1	62	0	0	3
<b>2015</b>	12	0	14	11	1	75	0	6	4
<b>2016</b>	22	0	15	12	1	5	0	9	6
<b>2017</b>	23	0	1	7	0	0	0	11	8
<b>2018</b>	23	0	2	7	0	0	0	8	5
<b>2019</b>	27	0	1	8	0	0	0	2	6
<b>2020</b>	-	-	-	-	-	-	-	-	-
<b>2021</b>	36	0	0	6	0	0	0	6	9
<b>2022</b>	65	0	2	3	0	0	0	0	10
<b>2023</b>	115	0	0	1	0	0	0	40	3
<b>2024</b>	59	0	0	1	0	0	0	40	3
<b>2025</b>	69	0	4	3	1	0	0	-	9

**Table 1. Breeding seabirds (pairs) on St Agnes** (FUL – fulmar; MX – Manx shearwater; SH – shag; LBBG – lesser black-backed gull; HG – herring gull; GBBG – great black-backed gull; KIT – kittiwake; COT – common tern; SP – storm petrel)

## Kittiwakes

Kittiwakes first bred on St Agnes at the Turks Head in 2009 following the desertion of a number of sub-colonies elsewhere in the archipelago. After two years of breeding failure (2015, 2016), the birds abandoned this site and a small number returned to breed at their former site on the eastern side of Gugh 2017-2020. After the first year, 2021, when no breeding attempts were recorded in Scilly, 11 pairs nested at the Gugh site in 2022 and although relatively asynchronous raised 4 chicks to fledging. In 2023 21 pairs nested but due partially to high predation levels no chicks successfully fledged. In 2024, 22 pairs nested and out of these a minimum of 14 chicks were successfully fledged (fig. 1). In 2025 the number of AONs increased to 32- the highest since 2018- but only 3 fledglings were observed. This gives a productivity of just 0.1, well below the level required to support the colony.



Fig. 1a & 1b A young kittiwake chick and the Gugh kittiwake colony

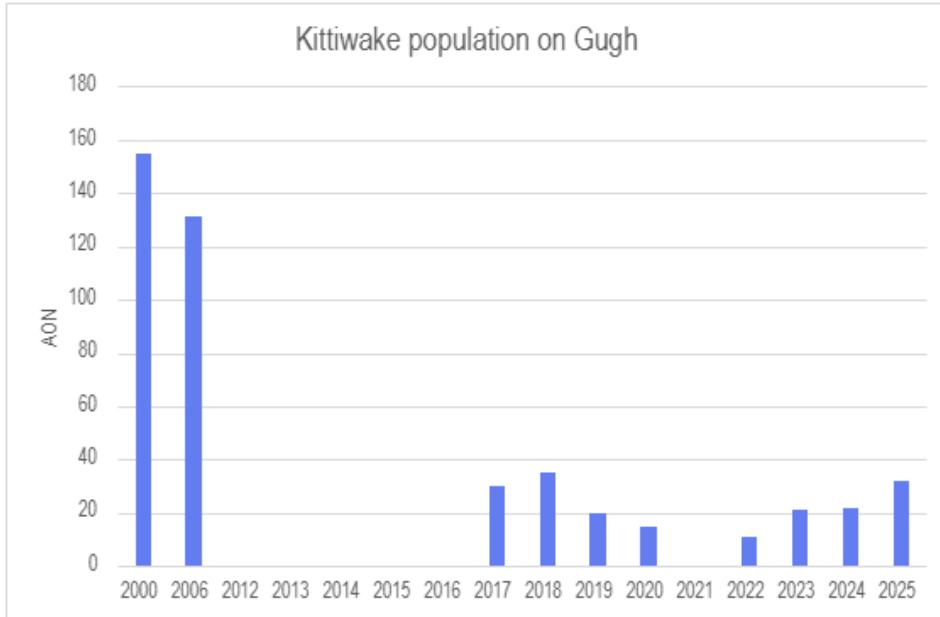


Figure. 2 Kittiwake numbers on Scilly

### Lesser Black Backed Gulls

The recorded number of breeding lesser black-backed gulls across the whole of Scilly peaked at 4,050 pairs in 1983. Since then, the species has been in steep decline and the 2023 SPA count indicated a loss of 58% of breeding pairs since 2015. Of the three main sub-colonies (Samson, St Helen's and Gugh), only Gugh has shown fairly consistent numbers, with the sub-colonies on St Helen's and Samson losing 93% and 84% of their breeding pairs respectively between 2015 and 2023. The numbers and productivity at the Gugh sub-colony have been recorded annually since 2012 and numbers have remained relatively consistent at approximately 400 pairs since 2013, with the exception of a drop to 296 in 2017 (fig. 4), rising to a high point of 491 AONs this year (see Fig. 4)



Fig. 3 Lesser Black Backed gull chick from coastal subcolony on Gugh

Until 2021, the traditional ‘walk-through’ method (a line of observers systematically covering all the ground within the colony) was used to count the active nests. As of 2021, drone counts have been used to estimate numbers, with ‘walk through’ counts also conducted in 2021-3 to assist in the methodology transition and assess any difference in the estimates obtained (No significant difference was recorded Heaney et al. 2024

Informed by the protocol detailed in Rush *et al.* (2018) using drones to produce high resolution images for later analysis of lesser black backed gull colonies on Skokholm, we again used a Mavic 2 Pro drone as follows:

- A smooth flyover at 40m above the sub-colony from a take-off site approximately 20m to the side of the sub-colony, allowing the birds to become acclimatised to the UAV.
- The altitude of the UAV was lowered to 30m whilst in motion to the side of the sub-colony – this elicited little to no reaction from the breeding birds.
- A transect was flown at a speed of 4mph providing image overlap of approximately 20% over the sub-colony with images captured at 2 second intervals to ensure a similar overlap between images. This resulted in approximately 780 high resolution images.

The high-resolution images collected in early June were then uploaded onto *Dronedeploy.com* which meshed them together to produce an orthomosaic of the sub-colony – effectively a large top-down image of the whole site for analysis. Using the online software to zoom in and click on apparently incubating birds produced an estimate of 417 breeding pairs in the main colony. Combined with the 68 pairs in the coastal sub-colony and 6 pairs around the rest of the coast this gives a total of 491 pairs across the whole of Gugh. This is the highest number recorded since 2006, but is still much lower than the count of 1123 pairs in 2000. Most of this growth occurred in the main inland colony which had only 352 pairs in 2024.

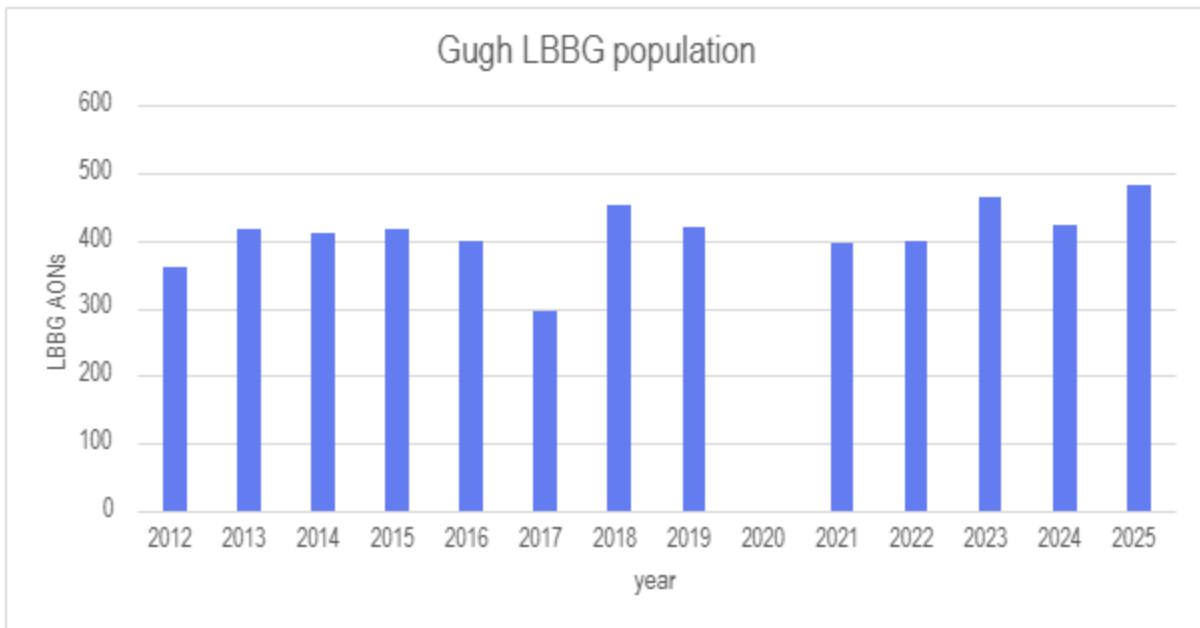


Figure 4. Number of lesser black-backed gull AON on Gugh

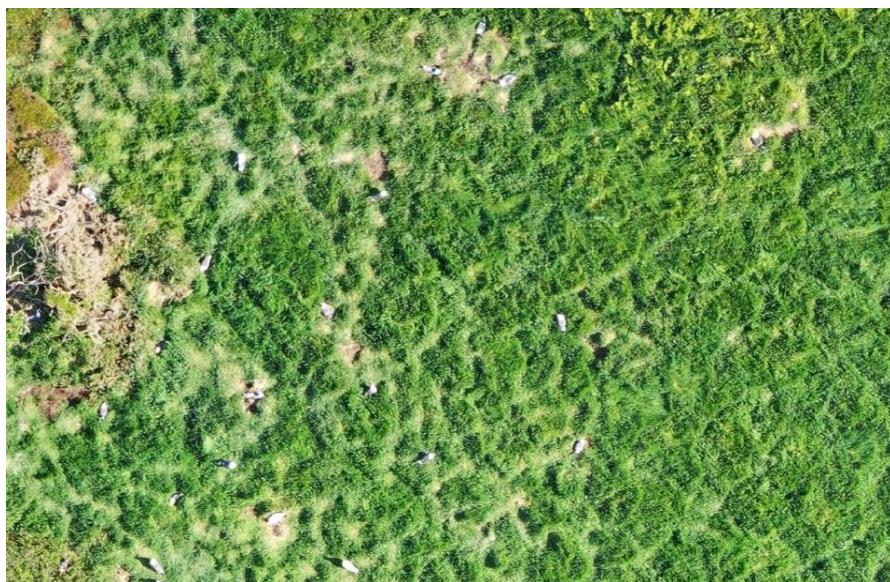


Figure 5. Example of an image from the drone survey

#### Manx shearwater



Fig. 6 Typical Manx shearwater burrows on St Agnes (left) & Gugh (right)

The numbers of Manx shearwaters nesting on St Agnes & Gugh have increased consistently since the rat eradication (fig. 7) - there was an estimated 22 AOBs in 2013, which has now increased roughly tenfold to 225 in 2025, the highest level on record. 156 of these AOBs were located on Gugh, compared to 69 on St Agnes. Gugh has also seen a more marked increase since 2022 (with the exception of the 2023 survey results), with field observations suggesting a greater increase of the colony into previously unused areas. This may reflect a greater availability of suitable habitat on Gugh, possibly due to the trampling action of the cattle on St Agnes restricting habitat to under large rocks and steep coastal areas.

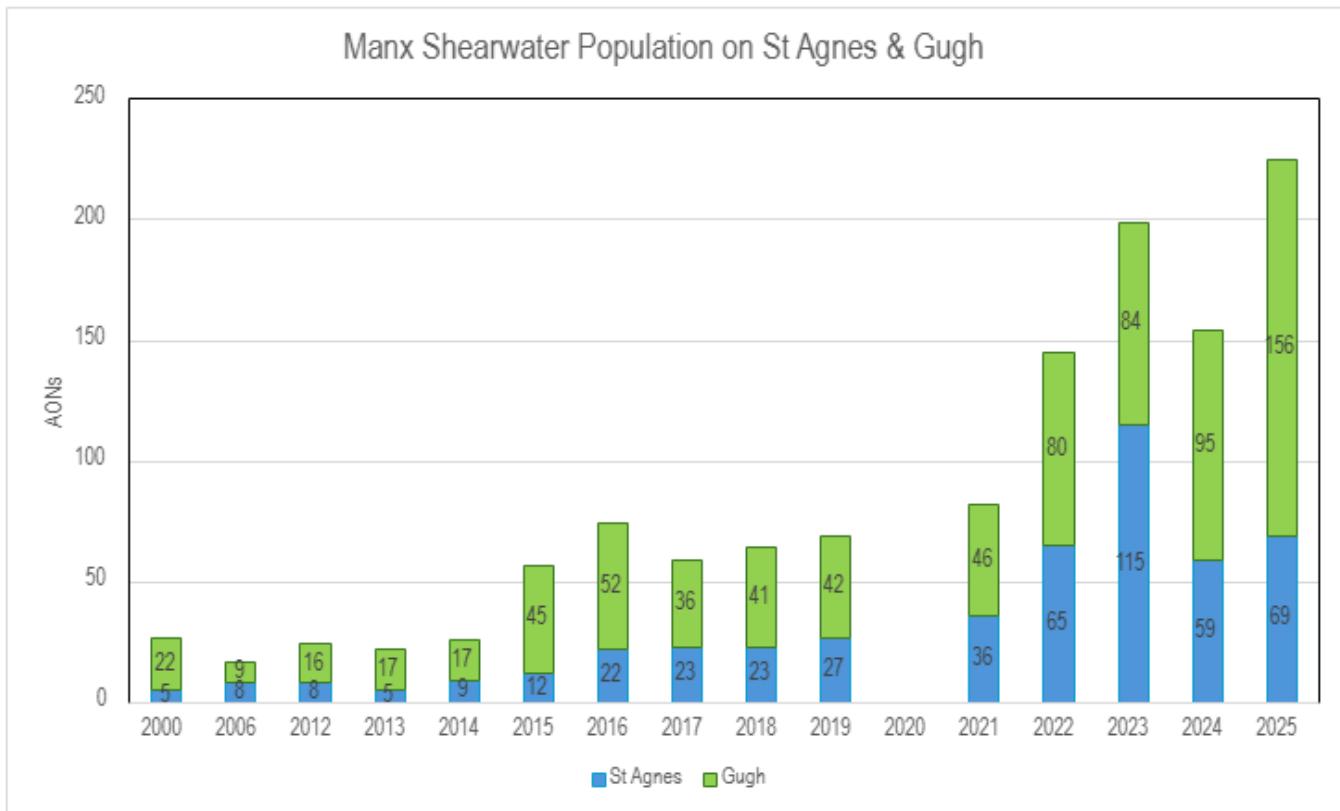


Fig 7. Manx Shearwater breeding population on St Agnes & Gugh

## Correction Factor

A major contributing factor in the estimate of Manx shearwater AOBs is the correction factor used; since the Seabird 2000 census in Scilly, breeding Manx shearwaters on Scilly have been surveyed using the diurnal tape playback census method, following the Seabird Monitoring Handbook (Walsh *et al.* 1995), to record the number of Apparently Occupied Burrows. This method uses a correction factor (ideally obtained from a site- and year-specific calibration survey) to take into account the number of birds that do not respond to the tape playback. In addition to inter-site variation, this response rate can show considerable annual variation.

Until 2019, a correction factor of 1.08 (based on a response rate of 0.93 as recommended in Newton 2004) was used in all Manx shearwater surveys on Scilly. As the Manx shearwater population increased over time since the removal of rats, it became possible to carry out a site-specific calibration survey on St Agnes. This was first done in 2021, in which a 5-day survey of 63 potentially occupied burrows (32 of which solicited at least 1 reply) gave an average response rate of 0.63. Subsequent surveys in 2022, 2023 and 2024 gave average response rates of 0.49, 0.32 and 0.63 respectively. The response rates were calculated by inputting response rate data into a *Shiny app* to implement a series of R scripts to calculate the average. This average then gave the correction factor to be applied to the raw response data gathered during the survey across the

full site. Due to limitations on both time and available burrows, the annual correction factor calculated for St Agnes has been applied to all Manx shearwater surveys carried out across Scilly during the year.

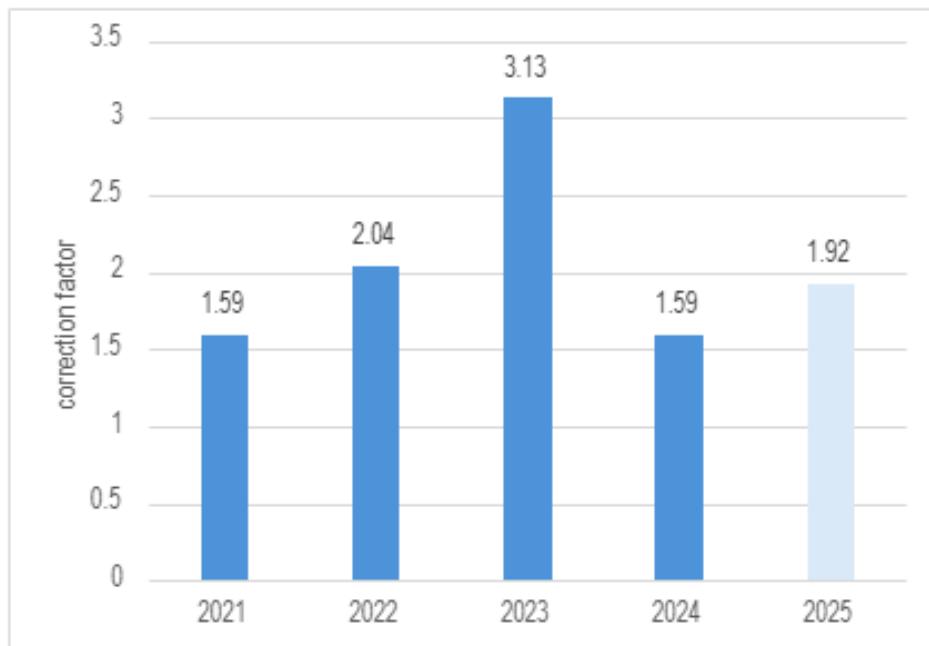


Fig. 8 Annual variation in correction factors used for Manx shearwater playback survey, calculated from response rate calibration survey carried out on St Agnes

Due to limited staff capacity, a full calibration survey was not carried out this year. Given the response rates obtained from previous years, rather than reverting to the pre-2019 1.08 correction factor we thought it was more appropriate to take the mean of all correction factors calculated from Scilly-specific data. This gave a correction factor of 1.92.

The wide range of average correction factors calculated from St Agnes response rate calibration studies in subsequent years (fig. 8) should be taken into account when reviewing the corrected Manx shearwater survey results from sites across Scilly. For example 2023 correction factor of 3.13, was significantly higher than any other year and resulted in a dramatic spike in estimated occupied burrows from 2022 and then a subsequent apparent drop in 2024. Despite these issues, figure 7 clearly demonstrates the sustained increase in numbers of AOBs on St Agnes and Gugh since rat eradication.

### Storm petrels

As with Manx shearwaters, storm petrels on Scilly are surveyed using the diurnal call playback method, with a correction applied to take into account non-responding birds. Although the response varies between years and colony sites, the type and location of storm petrel nesting sites (mostly on relatively inaccessible islands and at boulder beach sites with multiple possible access points) do not allow for a Scilly specific calibration survey. Therefore a correction factor of x2.86 (Ratcliffe *et al.* 1998 – response rate recorded by Robinson on Annet 1996 0.35 95% 0.252 LCI 0.448 UCI) is used for all storm petrel playback surveys across Scilly.

Storm petrels were first recorded as a breeding bird to St Agnes & Gugh in 2015 following rat removal. Between 2015 and 2019 the number of breeding birds increased to approximately 20 pairs (apparently occupied sites) within the study plots on St Agnes and Gugh. An issue with predation by a cat from 2019 to 2022 resulted in large numbers of adults being predated at the three main and relatively wide-ranging breeding sites - Kittern Hill on Gugh, Burnt Island and at Troytown on St Agnes (a minimum of 38 birds in 2019, 17 in 2021 and 4 in 2022 based on wings left behind). Following this, in 2022, the annual playback response survey elicited only one response on Gugh and none on St Agnes. The 2023 playback survey recorded 43 apparently occupied sites on St Agnes (40 on the Burnt Island colony) and 20 on Gugh. In 2024 surveys of the sample site at Burnt Island produced 14 responses, equating to an estimate of 40 apparently occupied sites, indicating a steady population at this site since 2023.



**Fig. 9 Location of storm petrel breeding colony on Burnt Island**

Unfortunately weather conditions and limited capacity meant that a survey of Storm Petrels was not carried out on Burnt Island this year, although field observations through a thermal scope and the successful capture and tagging tracking of 3 breeding adults suggests a reasonable number of individuals breeding at the site.

A survey of the sample site on Gugh solicited 3 responses, equating to an estimated 9 AONs.

The issue of cat predation of storm petrels on St Agnes unfortunately reemerged in the 2025 season, with the remains of at least 7 storm petrels found on St Agnes between 20<sup>th</sup> May and 14<sup>th</sup> July. Full details of this can be found in Appendix 1.

## Annual count of breeding seabirds on Annet

A count of the seabirds breeding on Annet has been made in most years since 2000 (see Table 3 – no counts were made in 2001, 2005 or 2020) through a land-based walkover survey, combined with boat-based surveys to count nesting fulmars and puffins. Counts provided by local boat operators are also used to produce the annual breeding puffin count and this year's fledgeling tern count.



Fig. 10 The IOSWT team carrying out the Annet walkover survey

**Shags** This year's count shows that shags have continued to recover from the low point of 88 nests they reached in 2023, with 118 nests counted. This is the highest number since 2011, although numbers are still far below the 209 recorded in 2000 (Fig. 13).

**Lesser black-backed gulls** have declined since a slight peak last year and are now back at just 4 pairs, similar to the numbers seen in 2021, 2022 and 2023. This has been reasonably consistent since the collapse of the 500 strong inland colony in the 3 years following 2000. The remaining nests are mainly individually scattered along the coastline.

**Great Black Backed Gulls** have remained consistent since last year, with the number of pairs still at 138, the lowest recorded total since 2008. The distribution of the nests has also shifted somewhat from the main colony site at the NW of the island to along the coastline at the Neck.

**Fulmars** fluctuated between mid-thirties and high 50s from 2003 to 2023 but have declined sharply in the last two years (Fig. 14) They are now at 21 AOSs, the lowest number on record since 2001. This decline reflects the trend seen at the two sample sites, Menawethan and the Daymark (see below)

**Herring Gulls** Have fluctuated between 4 and 20 pairs since 2007 with 9 pairs this year.

**Common Terns** have been inconsistent in their nesting attempts in Scilly in recent years and had 18 nests on Annet this summer, 6 more than last summer (Fig. 12). They also nested earlier in the season and successfully fledged at least 19 chicks.

**Puffins** Have remained fairly consistent on Annet since 2000, with an estimated 36 pairs this year.



Fig. 11 Common tern nests on Annet

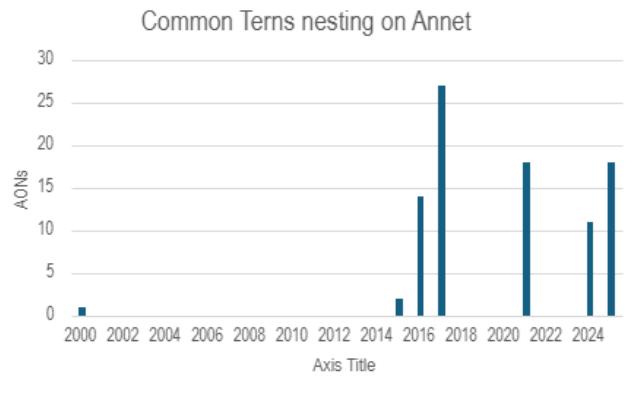


Figure 12. Annet common tern population

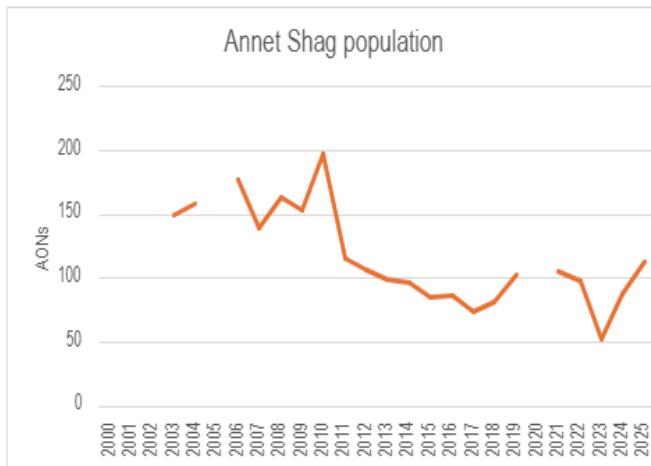


Figure 13. Annet shag population

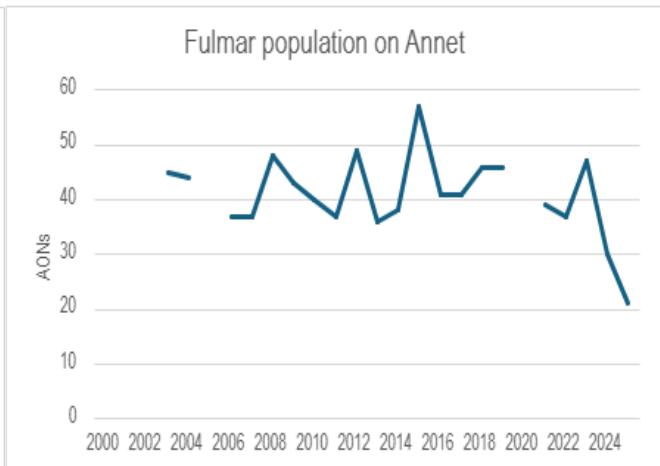


Figure 14. Annet fulmar population

Table 3. Breeding numbers on Annet

Year	SH	GBBG	LBBG	HG	RAZ	FUL	COT	PUF
2000	209	137	517	42	4	21	1	47
2001	-	-	-	-	-	-	-	-
2002	-	171	215	7	4	-	-	-
2003	150	164	18	17	0	45	0	-
2004	159	197	7	32	2	44	0	-
2005	-	-	-	-	-	-	-	-
2006	177	187	281	24	4	37	0	50
2007	140	88	0	5	1	37	0	-
2008	164	47	(5)	4	3	48	0	-

<b>2009</b>	154	168	54	7	7	43	0	-
<b>2010</b>	198	213	76	11	2	40	0	-
<b>2011</b>	115	180	27	5	4	37	0	-
<b>2012</b>	107	177	32	8	2	49	0	-
<b>2013</b>	99	208	6	4	1	36	0	-
<b>2014</b>	96	205	10	5	1	38	0	-
<b>2015</b>	85	235	1	20	5	57	2	31
<b>2016</b>	86	215	1	16	6	41	14	-
<b>2017</b>	74	222	7	12	5	41	27	-
<b>2018</b>	81	170	6	19	0	46	0	43
<b>2019</b>	103	199	19	10	2	46	0	42
<b>2020</b>	-	-	-	-	-	-	-	-
<b>2021</b>	106	184	7	8	1	39	18	45
<b>2022</b>	98	188	5	17	4	37	0	36
<b>2023</b>	53	151	5	5	3	47	0	38
<b>2024</b>	88	138	18	10	4	30	11	34
<b>2025</b>	113	138	4	9	5	21	18	36

**Table 3. Breeding seabirds (pairs) on Annet (SH – shag; GBBG – great black-backed gull; HG – herring gull; RAZ – razorbill; FUL – fulmar; COT – common tern; SP\* – storm petrel; MX\* – Manx shearwater; PUF – puffin; OYC – oystercatcher; RPL – ringed plover**

## Population monitoring work on Round Island

### Round Island

Following the detection and subsequent clearance of a population of rats on Round Island in early 2022 (Pearson 2022), rat presence was again detected in December 2023. A subsequent clearance effort over winter 2023/24 is thought to have succeeded, with no signs of rats detected on subsequent checks to date.

A full playback census of Manx shearwaters has been carried out in previous summers- finding 62 AONs in 2024- but poor weather and limited capacity this year prevented this survey from being carried out.

A full playback survey of storm petrels across the island on 12/07/2025 detected 23 apparently occupied sites (8 responses multiplied by the 2.86 correction factor). This represents a slight increase from the 17 detected in 2024. 2024 represented a significant decline compared to the 105 pairs detected in the 2023 survey, suggesting that the presence of rats during the later part of the 2023 breeding season and the winter of 2023/24 had adversely impacted the population. Rats were cleared during the winter of 2023/24, and no further sign of rats were found in either summer 2024 or 2025, and the slight increase in the storm petrel breeding population suggests that the island remains rat-free.

**Table 4. Number of apparently occupied Storm Petrel sites on Round Island**

Year	2000	2006	2015	2022*	2023	2024*	2025
------	------	------	------	-------	------	-------	------

AOSs	183	251	172	11	105	17	23
------	-----	-----	-----	----	-----	----	----

\*indicates a year rats are thought to have been present for at least part of the breeding season

## Manx Shearwater Population Survey on Bryher

The potential for future widescale rat eradication projects on Scilly provide an incentive to broaden the scope of the annual seabird monitoring programme. As a first step this season a full Manx shearwater population census was carried out on Bryher.

The island-wide playback survey solicited 9 replies from 249 burrows played at. Using the same average correction factor as was applied to Manx shearwater responses from St Agnes & Gugh this gives 17 AONs on Bryher. The presence of rats (likely at a fairly high population density) means that it is unlikely that many chicks are currently successfully fledging from this population.

## Productivity monitoring work across the archipelago

### Fulmar Productivity

Since 2006 two of the main discrete cliff-side fulmar sub-colonies, those on Menawethan and the Daymark, St Martin's, have been monitored from the sea. The numbers settling at the two sites were relatively consistent between 2010 and 2022, followed by a particularly high population count in 2023, and subsequent decline in 2024 and 2025 (see figure 15).

The fledging success on Menawethan and the Daymark has been reasonably variable (see Table 5), rising from 0.16 and 0.17 chicks per pair respectively in 2014 to a peak of 0.40 and 0.54 in 2021, then showing a decline across both sub-colonies, reaching 0.11 and 0.18 in 2024. This summer the productivity on Menawethan dropped to an all time low of 0.03, reflecting just one successfully fledged chick from 29 AOSs. The productivity at the Daymark by contrast rose slightly to 0.35 (see figure 16). The recent productivity levels at both sites have been significantly lower than the estimated average productivity of 0.5 chicks per pair per year that is needed for colony stability (Cook & Robinson 2010).

## Fulmar Population on Menawethan & the Daymark

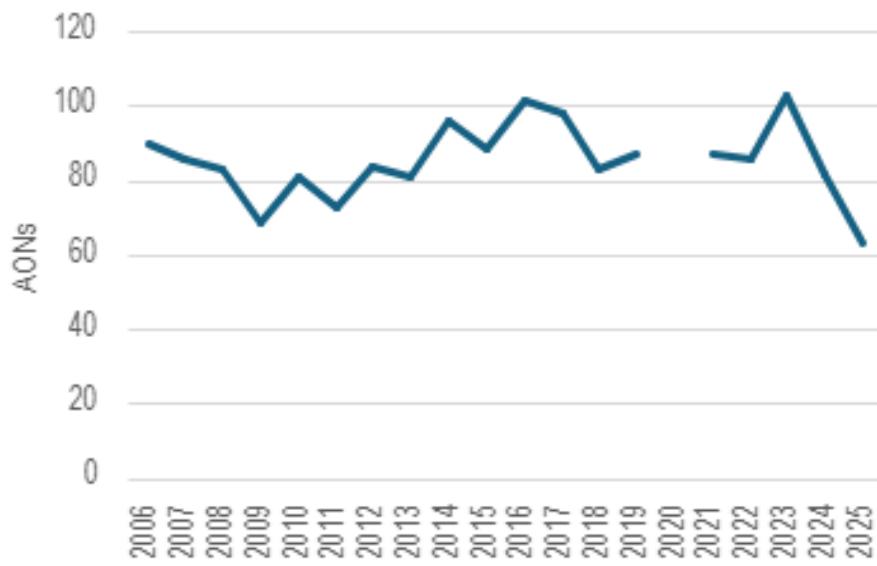


Fig 15. Combined fulmar population of Menawethan and the Daymark

## Fulmar Productivity on Menawethan & the Daymark

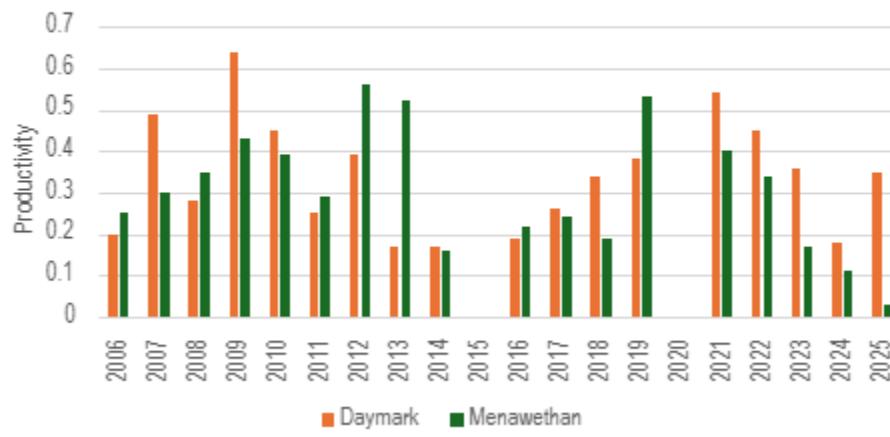


Fig 16. Annual productivity of fulmars nesting on Menawethan and the Daymark

**Table 5. Productivity of fulmars nesting on Menawethan and the Daymark**

	Menawethan	Daymark	Total
2006	<b>0.25 (n = 44)</b>	<b>0.20 (n = 46)</b>	<b>90</b>
2007	<b>0.30 (n = 41)</b>	<b>0.49 (n = 45)</b>	<b>86</b>
2008	<b>0.35 (n = 37)</b>	<b>0.28 (n = 46)</b>	<b>83</b>
2009	<b>0.43 (n = 33)</b>	<b>0.64 (n = 36)</b>	<b>69</b>
2010	<b>0.39 (n = 30)</b>	<b>0.45 (n = 51)</b>	<b>81</b>
2011	<b>0.29 (n = 24)</b>	<b>0.25 (n = 49)</b>	<b>73</b>
2012	<b>0.56 (n = 25)</b>	<b>0.39 (n = 59)</b>	<b>84</b>
2013	<b>0.52 (n = 27)</b>	<b>0.17 (n = 54)</b>	<b>81</b>
2014	<b>0.16 (n = 44)</b>	<b>0.17 (n = 52)</b>	<b>96</b>
2015*	<b>(n = 43)</b>	<b>(n = 46)</b>	<b>89</b>
2016	<b>0.22 (n = 45)</b>	<b>0.19 (n = 57)</b>	<b>102</b>
2017	<b>0.24 (n = 34)</b>	<b>0.26 (n = 54)</b>	<b>98</b>
2018	<b>0.19 (n = 33)</b>	<b>0.34 (n = 50)</b>	<b>83</b>
2019	<b>0.53 (n = 34)</b>	<b>0.38 (n = 53)</b>	<b>87</b>
2020*	-	-	-
2021	<b>0.40 (n = 43)</b>	<b>0.54 (n = 46)</b>	<b>87</b>
2022	<b>0.34 (n = 35)</b>	<b>0.45 (n = 51)</b>	<b>86</b>
2023	<b>0.17 (n=42)</b>	<b>0.36 (n=61)</b>	<b>103</b>
2024	<b>0.11 (n=55)</b>	<b>0.18 (n=27)</b>	<b>82</b>
2025	<b>0.03 (n=29)</b>	<b>0.34 (n=34)</b>	<b>63</b>

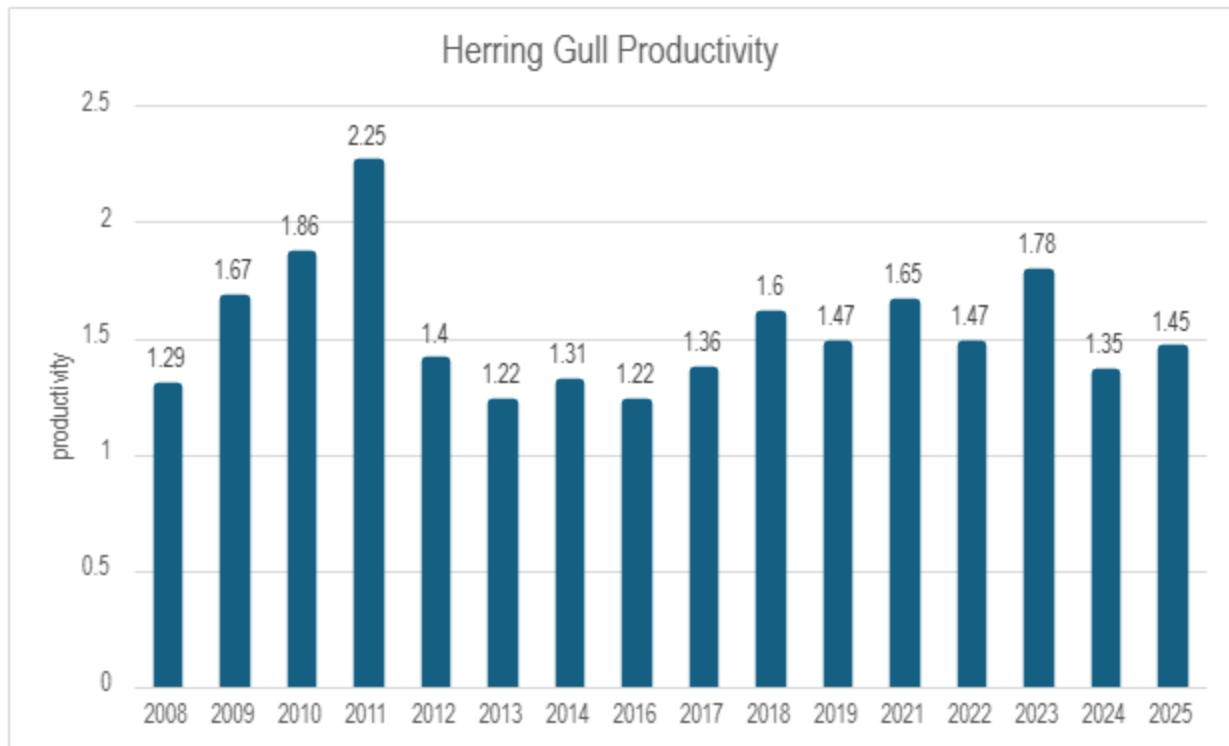
\*Productivity not recorded in 2015 or 2020

## Herring gull settlement and productivity in Hugh Town

In 2015 herring gulls were red-listed as a species of conservation concern due to recent declines in numbers nationally (estimated 47% loss of abundance, natural nesters only, 2000-2018, JNCC 2019). Breeding numbers of this species across Scilly have also been falling at a rapid rate with a decline of 40% between 2015 and 2023 to just 336 pairs. Starting in 2008 the productivity of herring gulls at three sub-colonies on St Mary's, Tresco and Samson was recorded by observing minimum fledging success at mapped nests. St Mary's is now the only colony monitored annually in this way due to the desertion of the Tresco colony in 2014 and the monitoring on Samson ceasing in 2022 due to difficulties in the terrain and the loss of the majority of the nesting pairs.

In 2025, the birds on St Mary's fledged a minimum of 29 chicks from 20 nests. Over the years of this study the small roof-top colony in Hugh Town, which presumably relies on more anthropogenic food sources, has fared consistently better than the birds in natural colonies. With fledging success well above that needed for colony stability. The fact that the Hugh Town sub-colony has not increased beyond 20 pairs presumably reflects the limited amount of suitable undisturbed roof space available.

Herring gull productivity in the Hugh Town colony remains reasonably stable, albeit with a slight increase to 1.45 chicks per nest in 2025 from 1.35 in 2024.



**Fig 17. Herring gull productivity in Hugh Town**

## Acknowledgements

This project was funded by the Development Phase of the Seabird Recovery Project with funding coming via the Royal Society of Wildlife Trusts (RSWT) from the Department for the Environment, Food and Rural Affairs (Defra) with additional funding from Natural England

RSWT

Natural England

West Cornwall Ringing Group

St Agnes Boating

Volunteers from Scilly including Maddie Kirby, Adam, Trish Payne

IOSWT staff – Helen Miller, Jacob Blackett, Sarita Whitehead, Meg Lloyd and the whole ranger team

RSPB staff including Jaclyn Pearson and Paul St Pierre, Leigh Lock, Karen Varnham and all staff who came out to Scilly on sabbaticals

RSWT staff including Lois Nippard, Ruth Williams, Joan Edwards

Troytown Campsite

Gareth Tibbs

Natural England staff including Justin Hart, Bart Donato and Becky Hodgkiss

## References

Bolton M, Padgett O & Wood M J. Review methods and guidance on survey design and data analysis to estimate population size for burrowing nocturnal seabirds.

Booker H, Price D, Slader P, Frayling T, Williams T & Bolton M (2019) Seabird recovery on Lundy: Population change in Manx shearwaters and other seabirds in response to the eradication of rats. *British Birds* 112: 217-230.

Brisson-Curadeau E, Bird D, Burke C, Fifield DA, Pace P, Sherley RB & Elliott KH (2017) Seabird species vary in behavioural response to drone census. *Scientific Reports*, 7, 17884.

Brooke M (1990) *The Manx shearwater*. Poyser, London.

Cook ASCP & Robinson RA (2010) How representative is the current monitoring of breeding success in the UK? BTO Research Report No.53, BTO, Thetford.

Heaney V & St Pierre P (2017) The status of seabirds breeding in the Isles of Scilly in 2015/16. Uppl. RSPB Report.

Furness, RW & Greenwood JJD (1993) Birds as monitors of environmental change. London, UK: Chapman & Hall.

Heaney V (2017) Seabird Technical Report 2017 – Seabird monitoring and research project Isles of Scilly 2013-2017. Unpubl. Seabird Recovery Project Report.

JNCC (2019) Seabird Population Trends and Causes of Change: 1986–2019 Report [<https://jncc.gov.uk/our-work/smp-report-1986-2019/>] Joint Nature Conservation Committee.

Newton, S.F., Thompson, K. & Mitchell, P.I. 2004. Manx Shearwater *Puffinus puffinus*. In Mitchell, P.I., Newton, S.F., Ratcliffe, N. & Dunn, T.E. (eds.), *Seabird Populations of Britain and Ireland*, 63–80. T & AD Poyser, London

Pearson J (2022) Biosecurity for Life - Rodent Presence/ absence Reporting January – March 2022. RSPB Report.

Ratcliffe N, Vaughan D, Whyte C & Shepherd M (1998) Development of playback census methods for Storm Petrels *Hydrobates pelagicus*. *Bird Study* 45:3, 302-312.

Rush GP, Clarke LE, Stone & Wood MJ (2018) Can drones count gulls? Minimal disturbance and semiautomated image processing with an unmanned aerial vehicle for colony-nesting seabirds. *Ecology and Evolution* 2018:1–13.

Seabird Group (2021) Newsletter 148, October 2021. The Seabird Group.

Walsh PM, Halley DJ, Harris MP, del Nevo A, Sim IMW & Tasker MC (1995) *Seabird monitoring handbook for Britain and Ireland*. JNCC / RSPB / ITE / Seabird Group, Peterborough.

**APPENDIX 1.** Details of cat predation of Storm Petrels 2025

## Cat Predation of storm petrels

First encountered July 2019. Pile of wings and a few feet found all at one site just along from the campsite hammock at Troytown – see pics. This predation continued through the next 4 years and was seen on Gugh and Burnt Island also. Some footage of a tabby cat was obtained – from all three sites – including footage of the cat actually catching and eating birds. The cat had no collar and despite all efforts was never positively identified.



Table 1. Record of Predation 2019-2023

Date	Location	Number of birds
2019	Troytown	Min 38 birds
2020	Troytown	Min 8 birds
2021	Troytown, Gugh & Burnt Island	Min 17 birds
2022	Troytown, Gugh & Burnt Island	Min 4 birds
2023	No predation recorded	0
2024	No predation recorded	0

## 2025 resumption of cat predation

On May 20<sup>th</sup> sadly 3 new storm petrel wings were found just beyond the maze at Troytown, the break of two years with no predation suggested this was a new cat. Again they were grouped on a flat area and just the wings and a bunch of tail feathers were present with 'chewed' ends. Camera footage revealed the cat in the area at night – a black cat with a collar.

Predated storm petrel remains were recorded at the main breeding colony on Burnt Island 25.11.95 in the form of a large number of wing, body and tail feathers. Tape lures to attract storm petrels to the nest boxes employed at this site in 2023 as part of a tracking study were immediately turned off. A humane cat trap baited with cat food was set nightly on Burnt Island between 29/05/25- 12/06/25, and two additional cameras were deployed and regularly checked. The remains that were found on Burnt Island did not consist of the typical signs of cat predation of Storm Petrels (i.e. dismembered wings) and since no cat was trapped and no further remains have been found there\_25.05.25, it is hoped that this was not the result of cat predation.

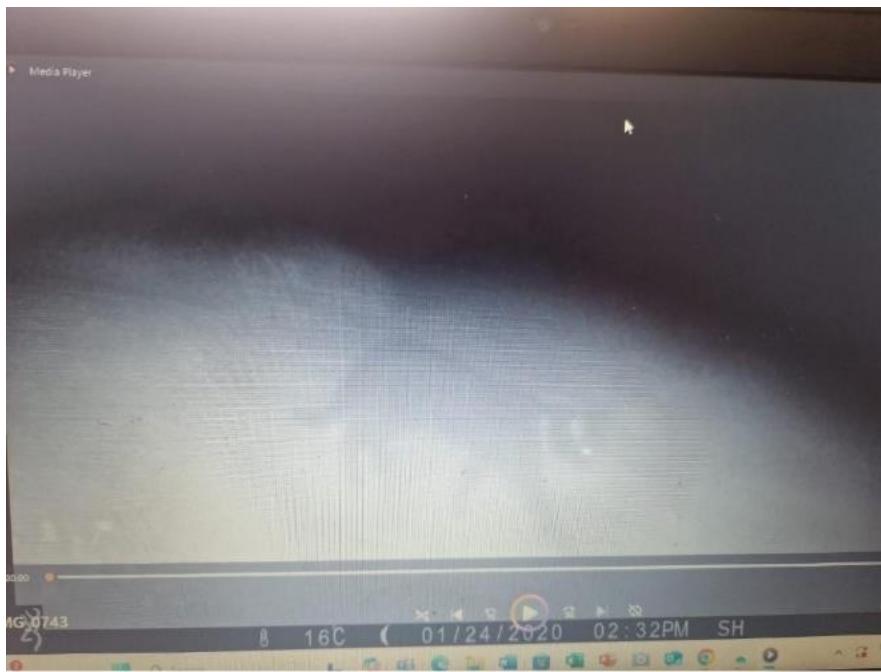
Table 2. Record of Predation 2025

Date	Location	What found
20.05.25 (VH)	Troytown	3 SP wings (all RHS)
21.05.25 (FD)	Troytown	1 SP wing LHS
22.05.25 (FD)	Wingletang	1 SP wing LHS
24.05.25 (FD)	Troytown	1 SP wing LHS
25.05.25 (HO)	Burnt Island	1 cluster of SP feathers

14.07.25 (VH)	Troytown	1 SP wing RHS
07.08.25 (FD)	Troytown	Decapitated Manx Shearwater chick



Footage obtained some time before 16.07.25 at Troytown predation site just beyond maze



Four additional camera traps were deployed to Wingletang to try and obtain more footage, and two Zopnor cat repellents were deployed before the causeway to Burnt Island for the remainder of the storm petrel breeding season to hopefully deter the cat venturing over there. These have been removed for the winter but will be redeployed in early spring.

**Cat roaming** – People find it hard to believe how far cats will roam and that they would cross to Gugh and Burnt Island but we have solid evidence of both.

## **Appendix 2: Isles of Scilly Seabird Ringing – 2025 Preliminary summary**



*Star-gazing Manx Shearwater chick on Annet*

Mark Grantham and Bart Donato

## Summary of activity

The core seabird ringing work in 2025 included:

- Early breeding season tracking work focusing on adult Shag, Lesser Black-backed Gull and Razorbill, between 2 May and 16 June (UoE – Annet, Gugh, Rosevear, Samson, Illiswilgig)
- Day trip to colour ring Shag chicks on Annet on 18 June, due to earlier than predicted breeding season (WCRG)

- Mid breeding season colour ringing of Shag, Lesser Black-backed and Great Black-backed Gull chicks on 28 June to 1 July (WCRG, IoSWT – Gugh, Annet, Ragged Island, Great Innisvouls)
- GPS tracking of four Manx Shearwaters over 16-22 July (Tim Birkhead)
- GPS tracking of four Storm Petrels in early August (RSPB - Burnt Island)
- Late breeding season mist-netting of Manx Shearwater and Storm Petrel on 23-25 August (WCRG, IoSWT - Annet, Gugh)

The initial work plan for the year was based on that of the pilot season on 2024, with opportunistic colour ringing associated with University of Exeter research, a bespoke visit to ring Shag and Lesser Black-backed Gull chicks and a tube-nose focused trip in August. This was adapted in-season in response to the breeding season timings this year. The most significant changes to the planned work were:

- the addition of a last-minute day trip to Annet, when it became apparent that Shags were more advanced than expected, hence would potentially be fledged by the time of the main planned trip
- the switch from Rosevear, which couldn't be accessed due to swell. Instead, we targeted islands in the Eastern Isles where access was easier, but with very limited numbers of Great Black-backed Gull chicks to ring.

As the ringing programme develops contingencies such as these will need to be factored into planning. However, the increasing on-island capacity, through permit endorsements, to carry out field work will ensure increase flexibility to adapt to variations between seasons.

We were able to progress two ringing group members to C-permit during the 2025 season:

- Scott Reid now holds a C-permit to ring adult Manx Shearwater and petrels, and also mist net Storm Petrel
- Hester Odgers now holds a C-permit to ring gull, Shag and Manx Shearwater chicks, and adult Manx Shearwater

The work this year was also supported by a grant from the BTO, which allowed us to invite two ringers from outside the project to join us for seabird ringing experience, and increase links with other English seabird ringers.

## Ringing Totals

Ringing effort broadly reflected that in 2024. Razorbill was added to the suite of study species as a result of University of Exeter tracking work and a location where this can be done safely without disturbance of other species is now established. An increase in mist-netting effort targeting Manx Shearwaters and Storm Petrels on Annet and Gugh, resulted in the much large numbers of Storm Petrel ringed, and generated a number of captures of birds ringed elsewhere. The lower numbers of

Manx Shearwaters ringed was due to less targeted dazzling of birds mid-season. Two fulmar chicks were also ringed on Annet.

Numbers of birds ringed over the course of the season, compared to 2024 totals in brackets, were:

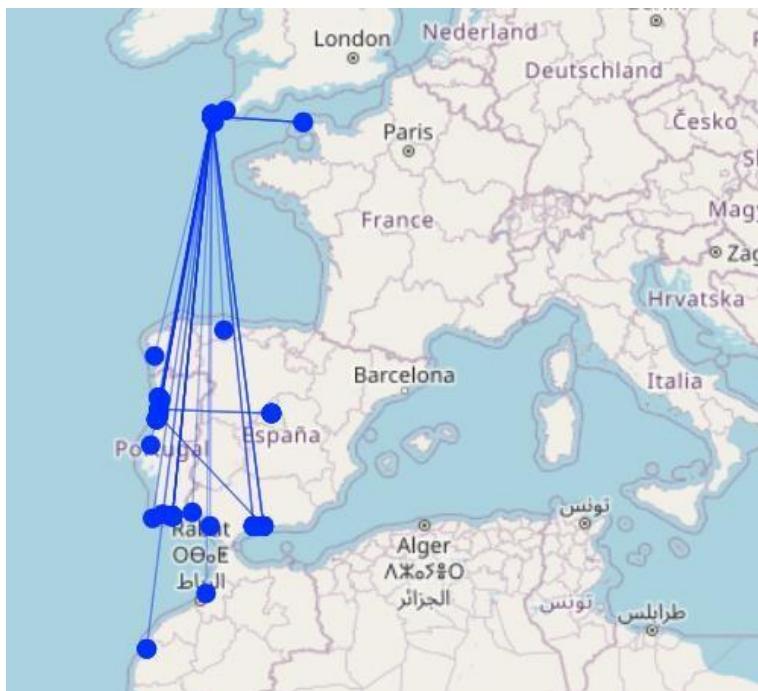
Species	Age class	Number ringed	Number colour ringed
Shag	Adult	17 (18)	17 (16)
	Chick	123 (107)	123 (107)
Great Black-backed Gull	Adult	0 (2)	0 (2)
	Chick	30 (41)	30 (38)
Lesser Black-backed Gull	Adult	17 (15)	17 (15)
	Chick	75 (49)	53 (47)
Herring Gull	Adult	0 (4)	0 (3)
	Chick	0 (-)	0 (-)
Manx Shearwater	Adult	19 (44)	0 (-)
	Chick	20 (55)	0 (-)
Storm Petrel	Adult	425 (113)	0 (-)
	Chick	3 (4)	0 (-)
Razorbill	Adult	5 (-)	0 (-)
	Chick	0 (-)	0 (-)
Fulmar	Adult	0 (-)	0 (-)
	Chick	2 (-)	0 (-)

## Recoveries

Recoveries and resightings of birds **since October 2024** are summarised below.

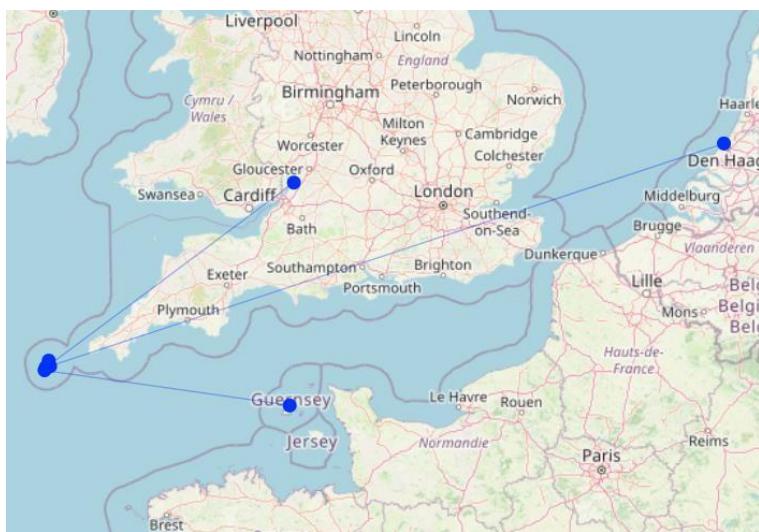
## Lesser Black-backed Gull

- Of the 15 adults ringed in 2024, one was recaptured in 2025 and just two colour rings were read, so increasing ring-reading effort should be a priority going forwards
- Two birds colour-ringed as chicks on the Channel Islands were resighted in colonies during fieldwork. One ringed in 2009 was seen on Gugh, also seen previously there in 2016 and 2018, and one ringed in 2019 was seen on Annet.
- Of the 2024 cohort, 13 were reported in Spain, eight in Portugal (and one in both countries), and two were reported in Morocco.



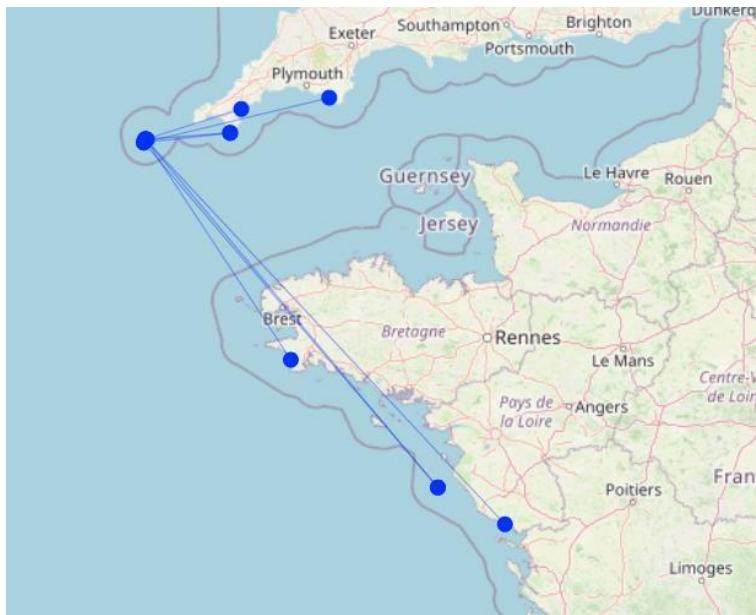
## Shag

There were two resightings of colour-ringed birds away from the islands, both 2025 chicks seen in early September 2025, one unusually far up the River Severn and one in The Netherlands. At the same time we also received reports of a bird picked up with Trichomoniasis (which is unusual for a seabird) in Dorset and one found dead in France (not mapped). The only other report was of a bird found dead on Tresco. Resightings on the islands included two adults ringed on Samson in 2024 resighted there in 2025, one chick ringed on Annet in 2024 seen on St Mary's in autumn 2024, and three chicks ringed on Annet in 2025 seen later in the summer on Annet.



## Great Black-backed Gull

Birds from the 2024 cohort were seen widely along the south coast, with four also seen in western France. The only 2024 bird reported from the islands was an adult, ringed on Annet, seen on St Agnes in autumn 2025. The only report of a dead bird was also reported from western France. Of the 2025 cohort, one bird has so far been seen, in Cornwall.



## Storm Petrel

Ringing on the night of the 24<sup>th</sup> August at the Annet colony produced a number of recaptures of ringed birds; while some of these birds may have been young prospectors, most are likely to be Annet breeders.

Recaptures of birds during 2025 mist-netting included:

- Two birds originally ringed on Annet in 2024
- Birds originally ringed at Deep Point, St Mary's in 2013 and 2014
- One bird ringed on Alderney, Channel Islands 28 days previously
- One bird ringed in Cornwall in 2020
- Birds ringed on Lundy in July 2024 and July 2025 (recaught on Annet 29 days later)
- Four French-ringed birds (no details yet received)

An adult ringed on Gugh in August 2024 was also recaptured on Skokholm Island in July 2025.



## Plans for 2026

With the relative paucity of local resightings, particularly of Shags and adult Lesser Black-backed Gulls, it will be important to encourage further resighting efforts. This may be by organisers of boat trips but also through dedicated trips by IoSWT or other ringing group members.

Related to this, the difficulty of access to Rosevear will limit any resighting efforts there, so should the focus of the colour-ringing effort switch to more accessible islands? Understanding better where wildlife-watching boats, which are most likely to generate resightings from the public, spend their time may help with targeting both ringing and resighting effort. The only issue with this approach may be the difficulty in ringing numbers of Great Black-backed Gulls on e.g. Eastern Isles, as productivity was extremely low in 2025. The general accessibility of the Eastern Isles opens up many more options for smaller ringing trips by local ringers though.

The 2026 fieldwork plan may reflect this in keeping a focus on one main spring trip to Annet to target Shag and Great Black-backed Gulls, with off-island ringers again invited for seabird experience. It would make more sense for this trip to operate from St Mary's where logistics are simpler, assuming we can still work out day-trip access to Gugh for Lesser Black-backed Gulls. This could then be tied in with smaller follow-up trips to three of the Eastern Isles, led by visiting and local ringers. A late season trip to mist net Manx Shearwaters and Storm Petrels would need to be based on St Agnes though to allow night working on Gugh. Any mid-season dazzling of adult Manx Shearwaters and ringing during chick-checks can then be carried out by local ringers.

Storm petrel ringing on Annet should focus on the now established netting areas as this will yield the best quality ringing data for demographic purposes. Given the numbers of birds that can be expected on a night with suitable conditions it will be important to ensure the team is appropriately skilled, in particular having an extraction team able to keep pace with catch rates. The number of birds captured on a single night with net coverage of only a limited proportion of the island suggests that the estimated island population of 1053 AON (Heaney *et al.* 2024) may be a conservative estimate.



Approximate net lines used on 24<sup>th</sup> Aug 2025, the southernmost line was also used in 2024

The ringing visit in 2025, timed to make use of the new moon, was probably about 10 days later than ideal for ringing Manx shearwater chicks with many chicks likely to have fledged already. Conversely it was probably slightly early to ring storm petrel chicks only a few of which were encountered above ground. In 2026 it would be worth considering separate ringing visits to coincide with the August and September new moons to ensure that ringing effort for these species includes chick with known natal sites wherever possible.

A plan to trial catching birds at sea, to increase sample size of species while not risking disturbance of nests did not happen in 2025 due to delays with securing licences. It is hoped that this will be in place for 2026, allowing trials to take place. Focal species potentially including lesser black-backed gull and fulmar.



*Moulting adult Great black-backed gull, Troytown St. Agnes 24<sup>th</sup> Aug 2025. One of two adults colour ringed in 2024.*