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Purbeck Seabirds Survey 2025

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Summary

This report presents data from boat-based breeding seabird counts undertaken between Old Harry Rocks and Gad Cliff in 2025. Counts have been carried out on the Purbeck coast since the mid-1960s, and these data are presented in the context of both local trends over the last 50 years and national trends (up to 2023) for this stretch of the Dorset Coast (see figure overleaf).

Poor weather meant that it was not possible to carry out the count between Gad Cliff and White Nothe this year (usually carried out in May), with challenging weather since 2021 also making the consistent counts of Cormorant nests at Gad Cliff particularly difficult. Counts of individuals (as well as nests) were therefore carried out at the Ballard Down Cormorant colony in recent years to assist in the future estimation of nest numbers at Gad Cliff (using the ratio of birds to nests). There are however significant limitations to this approach due to fluctuating productivity between years and sites.

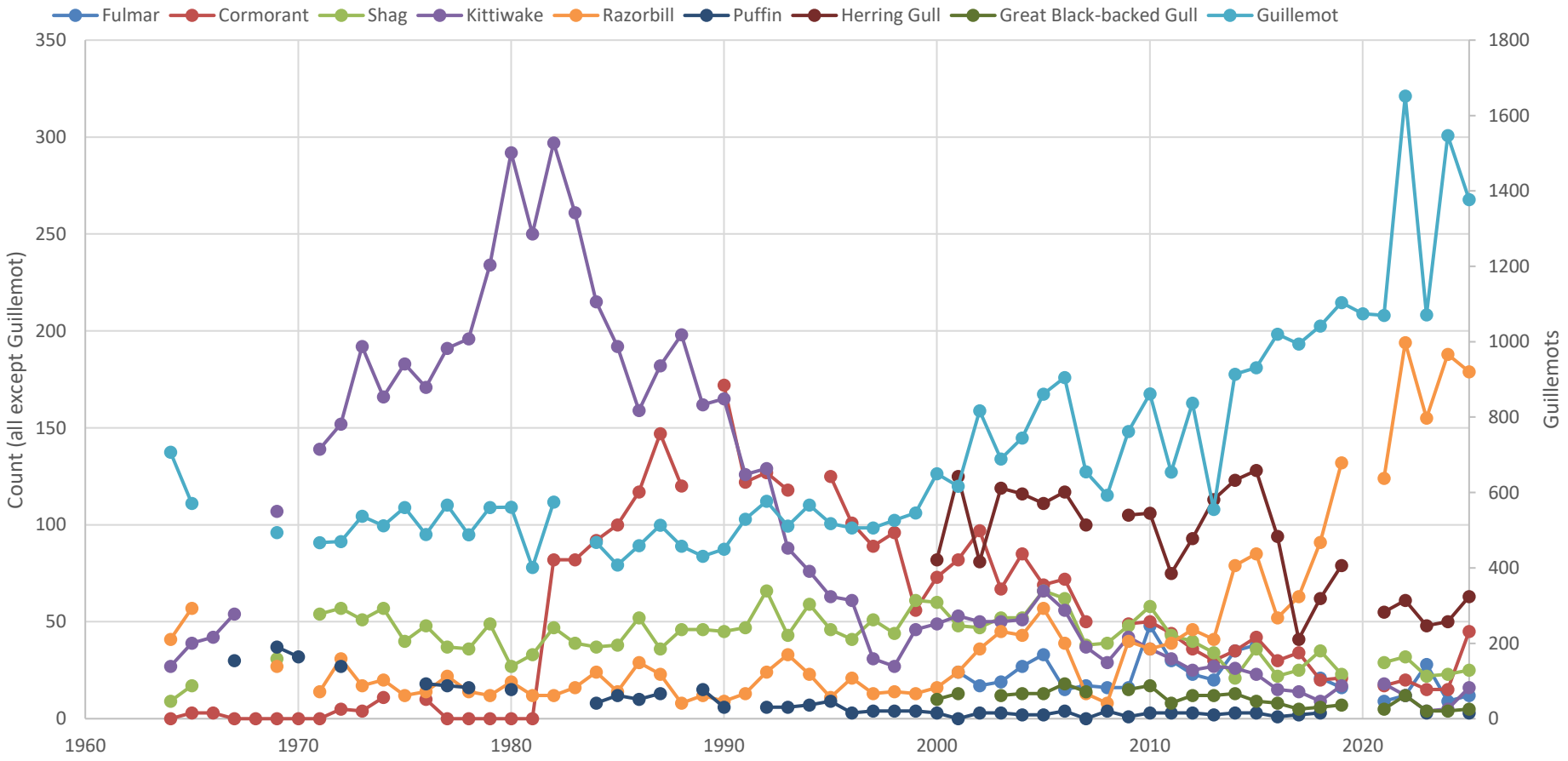
Seabirds breeding on the Purbeck coast include Fulmar, Cormorant, Shag, Herring Gull, Great Black-backed Gull, Kittiwake, Guillemot, Razorbill and Puffin. None of the populations are large. The Guillemot population remains the largest, with over 1,377 individuals counted on the breeding ledges in 2025, and the Puffin population the smallest, with no birds observed during the 2025 survey (although up to seven individuals were reported at one time outside of the survey dates, and three pairs may be breeding). Species such as Razorbill, Guillemot, and Puffin are thought to have been considerably more abundant in the first half of the 20th century, with Fulmar colonising, and Kittiwake increasing markedly, during the second half of the 20th century, before declining. For a full discussion of previous Purbeck trends please see Lake et al. (2011).

Results from the 2025 monitoring show that:

- The Guillemot population comprised of 1,377 individuals. This is smaller than the peak count made in 2022, but remains the third highest count recorded (despite decreasing by 170 individuals from 2024). Notable increases were observed at the two most westerly breeding ledges, with decreased numbers counted at all other sites.
- The Razorbill population likewise decreased compared to 2024, with 179 individuals counted on ledges, which was similar to the high counts observed in previous years. The largest colony was recorded at Funnel & Reforn, with the population increasing here as well as at Topmast and Blackers Hole. Crab Hole and Durlston both saw a decrease in Razorbill numbers in 2025.
- The Herring Gull population increased slightly from 50 apparently occupied nests (AONs) in 2024 to 63 in 2025, following a decline in recent years. The population is currently less than 50% of the peak count since systematic recording began in 2000, and 16% of the highest ever count in 1969.
- The very small Great Black-backed Gull population remained stable in 2025, with just five nests recorded (the second lowest count since systematic recording began in 2000). All

were located between Ballard Down and Old Harry Rocks, with last year's single nest site at Durlston unoccupied.

- For Fulmar, the total number of adults recorded on nests remained low, with 12 observed in 2025. This comprises just one additional nest, up from 11 in 2024, with the latter the lowest count made since systematic recording began. Numbers are now around 19% of the peak count in 2001, with Fulmar now present at just three of the six breeding sites used previously.
- The number of Cormorant nests counted has doubled this year, due to the addition of data from Gad Cliff for the first time in three years. The colony at Gad Cliff remains stable but fluctuating, with 21 adults on nesting ledges counted in 2025. At Ballard Down 24 nests were counted, with the colony increasing by 60% from the lowest counts recorded in 2023 and 2024 (both 15). Nesting was again concentrated in a single colony in 2025, in contrast to the notably scattered array of nests observed in 2024.
- In 2025, 25 Shag nests were counted, an increase of two on the previous year but still only comprising approximately 32% of the maximum count made in 2006.
- Following an historic decrease to their lowest count of only four nests in 2023, 16 Kittiwake nests were recorded in 2025. This follows slight previous increases observed in 2019 and 2021, respectively. The population remains in a precarious state however, and has declined overall by 95% since a high count of 297 made in 1982.
- Although no Puffin were observed during the boat-based survey, additional observations made from the clifftop above the breeding ledge suggest that their tiny population remains stable.



Summary of breeding seabird population changes between Old Harry and Gad Cliff in Dorset. Counts are of apparently occupied nests/sites for all species except Guillemot, Razorbill and Puffin, which comprise counts of all individuals on breeding ledges. (Note that both Fulmar and Shag counts carried out before 2000 may not be complete).

Contents

Acknowledgements

This work builds on the remarkable legacy of seabird counts undertaken since the 1960s by the late Trev Haysom. 2025 survey work was carried out by Phil Saunders, Manuela Naprta, Emily Rush and Debbie Welham. An estimate of Puffin pairs was kindly provided by Richard Caldow. We are also grateful to Sarah Harris for supplying updated UK trend data. The work was funded by the National Trust and Durlston Country Park. Our thanks as always to Tom Greasty at Swanage Sea Fishing and the volunteer surveyors.

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1. Introduction

1.1 This report summarises the latest in a series of surveys of the breeding seabirds of the Dorset Coast (see Haysom, 1993; Haysom, 1977; Haysom, 1967; Lake et al. 2011; Lake & Rush, 2023; Lake & Rush, 2024). Surveys have been carried out annually, with the exception of 2020 when the survey was cancelled due to the Covid-19 pandemic. A count was nevertheless still carried out between Durlston and St. Aldhelm's Head by Trev Haysom during this period (see Lake & Caals, 2022).

1.2 This notable stretch of the English south coast supports nine species of breeding seabird: Fulmar, Kittiwake, Cormorant, Shag, Great Black-backed Gull, Herring Gull, Guillemot, Razorbill, and Puffin. Eight of these species are Birds of Conservation Concern[1], the only exception being Cormorant. Kittiwake, Herring Gull, Puffin and Shag are all now Red Listed, whilst Guillemot, Razorbill, Great Black-backed Gull, and Fulmar are Amber Listed (Stanbury et al., 2021).

1.3 The South Dorset Coast is designated as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), and the Jurassic Coast World Heritage Site for its wildlife and environmental interest, although breeding seabirds are not a qualifying feature for any of the designations.

[1] https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf

2. Methods

2.1 A boat-based survey was carried out on Friday 13th June 2025, between Old Harry Rocks and Gad Cliff, including the Cormorant colony at the latter location, which had not been surveyed since 2022. This comprised of an extension to the survey area covered in each of the previous three years, where efforts were only possible as far west as St Aldhelm's Head. It was however unfortunately not possible to carry out the earlier planned survey visit in 2025 due to weather constraints during the survey period. Visibility was good and sea conditions were relatively calm, with some choppy intervals, during the 2025 survey.

2.2 It should be noted that due to the increasing frequency of adverse weather conditions, the window of opportunity to undertake boat-based surveys of seabirds in Purbeck has become increasingly small in recent years. The high winds and associated choppy seas experienced at the end of May/beginning of June this year made it difficult to identify appropriate survey timings and conditions, also avoiding times when the military Danger Area was in use and access was prohibited.

2.3 Methods generally followed those recommended by Walsh *et al.* (1995). All observations of apparently occupied sites (AOS) or apparently occupied nests (AON) of Fulmar, Cormorant, Shag, Kittiwake, Herring Gull and Great Black-backed Gull were marked on enlarged photographs of the coast. Numbers of Guillemot, Razorbill and Puffin were counted on nesting ledges, with colonies marked on enlarged photographs.

2.4 Any Puffins noted on the water were also counted during the survey. However, the survey was undertaken during the day, when Puffin numbers tend to be at their lowest, as birds are either out at sea or out of sight within their breeding crevices. The number of breeding pairs has in the past been therefore estimated by Trev Haysom, using a consistent methodology (see Lake et al. 2011) – this was not possible in 2021 or 2022, but was undertaken by Richard Caldow in 2023, 2024 and 2025.

3. Results

Results of boat surveys

3.1 The locations of all AOS/AON and colonies are marked on the series of photographs supplied in the accompanying Photo Annex, whilst summary results for each species are presented in Table 1. Survey sections follow those used historically and are given in Lake et al., 2011.

Estimate of number of breeding Puffins

3.2 No Puffins were observed on the breeding ledge or on the water during the boat-based survey. The maximum number seen simultaneously by volunteer observers at other times was seven in late June 2025, following (over 120 hours of survey effort accrued by Purbeck Natural History Forum volunteers, alongside regular Durlston Country Park and Birds of Poole Harbour boat trips).

3.3 This suggests that, as in previous years, three breeding pairs were present in 2025. Birds were observed carrying seaweed and eelgrass into the breeding ledge, and on two occasions stretching / preening at the end of the ledge. The latter behaviour suggests that the bird was taking a break from incubation. However, no further observations of breeding behaviour or birds carrying fish were made by the volunteers. It is therefore probable that eggs were laid in 2025, but breeding was unsuccessful for a third year running (R. Caldow, pers. comm).

Table 1: Breeding seabird records on the Dorset Coast in 2025. Counts are of apparently occupied nests or sites (AONs/AOSs) for all species except Guillemot and Razorbill (for which counts are of individuals at breeding sites) and Puffin (which is an estimate of pairs observed provisioning nest sites). Cormorant counts are for Ballard Down and Gad Cliff only – see discussion for further details.

Species	2025 total	Change since peak count	Change since last survey	Peak year	Peak count	Systematic surveys since:	Comments
Fulmar	12	-75 (-86.3%)	1 (9.1%)	1981	87	2001	Colonised in 1940s, peaking in 1980s. Despite a recent uptick in numbers, last year was the lowest count since systematic surveys began.
Cormorant[2]	45	-275 (-86%)	30 (200%)	1990	320	1964	Declined until 1960s, with a sharp increase in 1990s followed by a steady decline. This year comprises the highest total nest count (even discounting the White Nothe colony) since 2018.
Shag	25	-51 (-67.2%)	2 (8.7%)	2006	76	1964, partial	Population remained fairly steady despite fluctuations until 2011, with a subsequent apparent decline, particularly in the western sections.

[2] Total includes both Ballad Down and Gad Cliff counts. The Ballard Down colony increased from 15 nests in 2024 to 24 in 2025, the highest count since 2017.

Species	2025 total	Change since peak count	Change since last survey	Peak year	Peak count	Systematic surveys since:	Comments
Kittiwake	16	-281 (-94.7%)	11 (220%)	1982	297	1957	Rapidly increased throughout 1960s & 1970s, followed by an equally rapid decline, which slowed in the 2000s. This year's count was the highest in recent years.
Guillemot	1,377	-275 (-16.7%)	-170 (-11%)	2022	1,652	1964	Large declines up to mid C20th, then fluctuating and increasing notably from 2015 to a peak in 2022. Remained high in 2025 despite a decrease on the 2024 count.
Razorbill	179	-15 (-7.8%)	-9 (-4.8%)	2022	194	1964	Large declines up to mid C20th, followed by a sharp increase from 2008 to the currently higher and relatively stable point.
Puffin[3]	3	-34 (-91.9%)	0 (0%)	1969	37	1967	Large declines up to mid C20th, which then stabilised at the current level around 1990.

[3] Count from land supplied independently of boat-based survey.

Species	2025 total	Change since peak count	Change since last survey	Peak year	Peak count	Systematic surveys since:	Comments
Herring Gull	63	-126 (-66.7%)	13 (26%)	2015	189	2001	Considerable decline 1960s - 1980s to a low point in 2017. Considerable fluctuations since then, increasing this year to the highest count since 2022.
Great Black-backed Gull	5	-14 (-73.7%)	1 (25%)	2006	19	2001	Fluctuating decline since 2001 with a slight upturn of one AON per year in 2018 and 2019 followed by a decline to the lowest counts recorded in 2023 and 2024.

4. Discussion – comparison with previous years and UK trends

4.1 Data from 1965 onwards were compiled and discussed in Lake *et al.* 2011. Here we update the dataset with the results of the 2025 survey between Old Harry and Gad Cliff.

4.2 The UK indices of abundance (JNCC, 2021)[4] show the relative change in population size, assigning a score of 100 to the population at the start date of the monitoring. These data were extracted from the Seabird Monitoring Programme (SMP) Database[5]. Data and have been provided to the SMP by the generous contributions of nature conservation and research organisations, and many volunteers throughout Britain and Ireland. Further information can be found in the individual UK trend chapters of the online report, see S. J. Harris et al., 2024 for further details. These indices are used to compare with a similar Dorset-based index of change for each species, to examine whether local trends differ from the national picture.

4.3 Contextual information on UK declines has been retained for readers who have not seen reports from previous years and are indicated by the use of *grey italics*, enabling readers familiar with the text to skip information repeated between years. Please refer to Lake *et al.* 2011 for further context on each species and more information on historical records (including data constraints).

[4] The UK indices of abundance (JNCC, 2011) are compiled as part of the JNCC seabirds monitoring programme and earlier surveys in 1969-70 (Operation Seafarer), 1985-88 (Seabird Colony Register) and 1998-2002 (Seabird 2000).
[5] https://app.bto.org/seabirds

Fulmar

After colonising Dorset in the 1940s, the number of breeding Fulmar increased to a peak in the 1980s. Since then, numbers have declined overall, despite short-term increases, similar to those seen in the previous two years. As such, the number of breeding Fulmar recorded in 2025 remains stable at the previously recorded low numbers seen in 2021 and the lowest ever in 2024. As seen in 2024, just three of the six areas regularly used in the past were used in 2025. The decline in abundance broadly reflects that across the UK, although with wider fluctuations and a greater decline overall.

4.4 Fulmars breed between Ballard Down and St. Aldhelm's Head. Following the first record of Fulmars breeding on the Purbeck coast in 1943 (Haysom, 1977), numbers increased to a peak in the early 1980s. Comparable data are available from 2001, when the first complete surveys were undertaken (previous surveys did not include Ballard Down and counts prior to 1985 were of individuals rather than AONs). Since 2001, the overall trend appears to have been a decline, with peaks and troughs from year to year including a notable low point in 2021. Despite increasing in 2022 and 2023, the Fulmar population observed in 2025 matches the notably low counts previously seen in 2021 and 2024 (lowest recorded since systematic recording began).

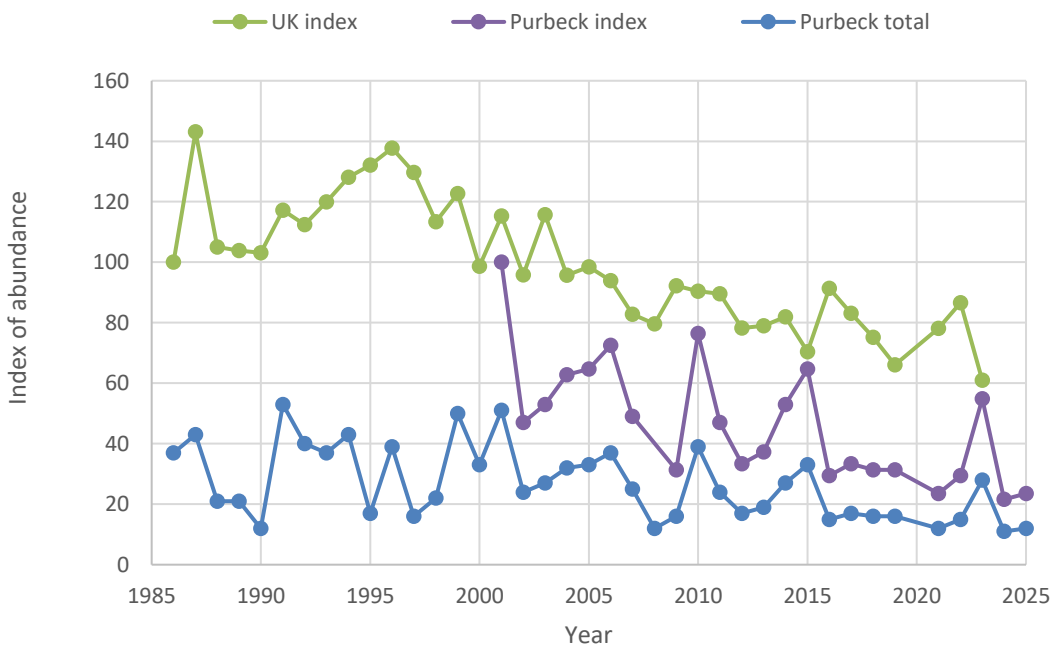

Figure 1: Changes in the numbers of apparently occupied breeding sites (AOS) for Fulmar, alongside Purbeck and UK indices of abundance (counts before 1985 were of individuals rather than AOS). Counts before 2001 were only made between Durlston and St Aldhelm's Head and have not been included in the Purbeck trend or in the minimum/maximum counts provided in the Table 1. Ballard Down has previously held between 2 and 23 nests.

4.5 *Considering the available data (up to 2019), the local trend is similar to that of the UK as a whole (see Figure 1), although more variable due to the low numbers. A spectacular increase in the number and distribution of Fulmars in the UK and north Atlantic throughout the 20th century (prior to the mid-18th century, they bred in only one or two colonies in Iceland and in St Kilda) ceased in the last 20 years, and numbers then declined. The decline in Purbeck has been steeper.*

4.6 *The increase in Fulmar numbers in Europe is thought to have been driven by changes in food availability due to changes in temperature in the seas and to commercial fisheries, and to a reduction in human predation (Thompson, 2004). Subsequent declines in the UK have been attributed to changes in the North Sea whitefish industry, resulting in a decrease in offal; and declines in sand eel populations in the North Sea and zooplankton in the Atlantic, likely due to climate change. Large numbers are also caught and accidentally killed by long-line fishing in the Norwegian Sea and North Atlantic. The Fulmar is Amber Listed due to the decline and degree of localisation of the breeding population.*

Cormorant

The Handfast Point - Ballard Down Cormorant population declined from a peak of 172 in 1990 to less than 10% of this figure in 2024, the lowest count recorded since the expansion in the 1980s. 2025 sees an uplift in the number of AONs, the highest recorded since 2017. Previous low counts were attributed to a relatively late survey date, by which time some nests may have disintegrated. However, with higher counts made this year, this may not be the case.

4.7 The number of Cormorants on the Dorset coast declined in the 1960's before increasing markedly in the 1980s. AONs at Ballard Down leapt from 10 in 1976 to 82 in 1982 and peaked at 172 in 1990. Since then, numbers have declined steadily, reaching their lowest point in 2023 and 2024 when only 15 individual nest sites were recorded. The number of nests at Ballard Down increased by 60% to 24 in 2025 and bucks the trend seen in recent years (see Figure 2). It is however worth noting that the Cormorant count in previous years has been recorded from the May survey data, which was not possible this year (as only the June survey visit took place). It is therefore still possible that the number seen this year may comprise an underestimate if some nests have already disintegrated and/or juveniles have dispersed.

4.8 Nest locations typically vary between years, although a number of specific areas are often used on a rotational basis. Despite a notably scattered array of nests seen in 2024, this year saw the return of a concentrated colony, with 20 nests recorded in a single location and four scattered nearby.

4.9 Difficulties experienced with visibility at Gad Cliff in previous years has made it difficult to accurately count AONs. Therefore, the number of individuals on ledges were counted in order to provide an approximate index of change over time. A count at Gad Cliff was possible this year, and a total of 21 adults were recorded, along with one chick. This population remains relatively stable, fluctuating between 11 and 26 AONs since 2012. Nevertheless, further insights into the trend of the Cormorant colony at Gad Cliff are hard to determine given that this is the first time in three years that the location has been surveyed.

4.10 The total number of Cormorants counted this year is therefore higher than in recent years, with 45 AONs counted between Ballard Down and Gad Cliff (see Figure 3).

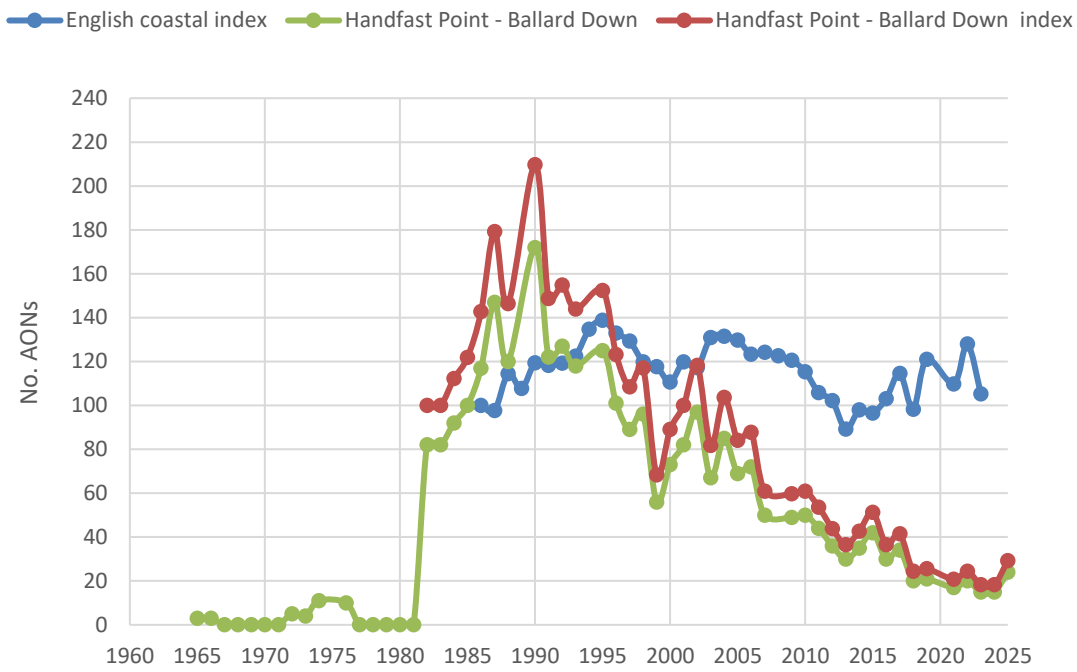

Figure 2: Cormorant AONs between Handfast Point and Ballard Down and the English indices of abundance (coastal populations only) and Purbeck indices of abundance.

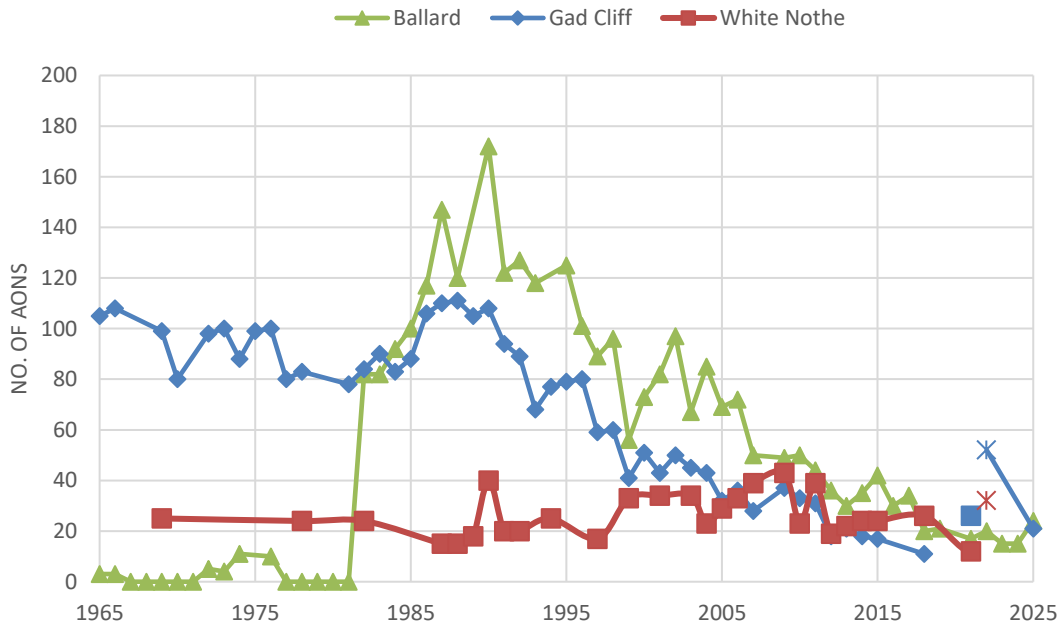

Figure 3: Cormorant AONs compared by nest site across Purbeck. Note that the 2025 surveys were only undertaken at Ballard Down and Gad Cliff.

4.11 *Because of significant regional variation in the abundance index (declines are particularly severe in northern Scotland), shows the trend for the Purbeck population for the years in which these data are available compared to the English index of abundance for coastal Cormorants. The Purbeck index decreased while the English index was still increasing, and the Purbeck population has also decreased further. The upturn in numbers nationally after 2011 was reflected in Purbeck in 2014-5, but Purbeck numbers then dropped again in contrast to the national trend, which appears more or less stable at the moment.*

4.12 *Nationally, increases in abundance up to 1995 are likely to have been facilitated by increased legal protection instigated under the Wildlife and Countryside Act 1981. Factors responsible for recent declines are likely to include increased mortality from licensed and unlicensed shooting, as well as possible changes in food availability (JNCC, 2011). Poor weather during the breeding season in 2012 and early in the breeding season in 2013 may have impacted on the Purbeck population, particularly at Ballard Down.*

Shag

The number of breeding Shags in Dorset is thought to have increased significantly from the early 20th century until the 1970s. Between the 1970s and 2010 the population remained fairly stable, although there were significant annual fluctuations. A clear, subsequent decline until 2014 was followed by a stable but fluctuating count at a low level. The 2025 count remains low, with nests scattered along the coast, with the exception of St Aldhelm's Head to Gad Cliff (where no nests were recorded). UK trends indicate a long-term decline.

4.13 Breeding Shags are generally scattered along the Purbeck coast. Records indicate an increase to a high point of 66 AONs in 2006. Since then, systematic recording has shown a rapid decline to a low point of 21 AONs in 2014. Numbers subsequently fluctuated between 21 and 35 nests, with 25 recorded in 2025 (see Figure 4).

4.14 This year nests were scattered along the Purbeck coast, with the return of two nests between Anvil Point and Ragged Rocks (where no nests were recorded in 2023 or 2024). In previous years, nest numbers have fluctuated at Gad Cliff, with none recorded in 2025.

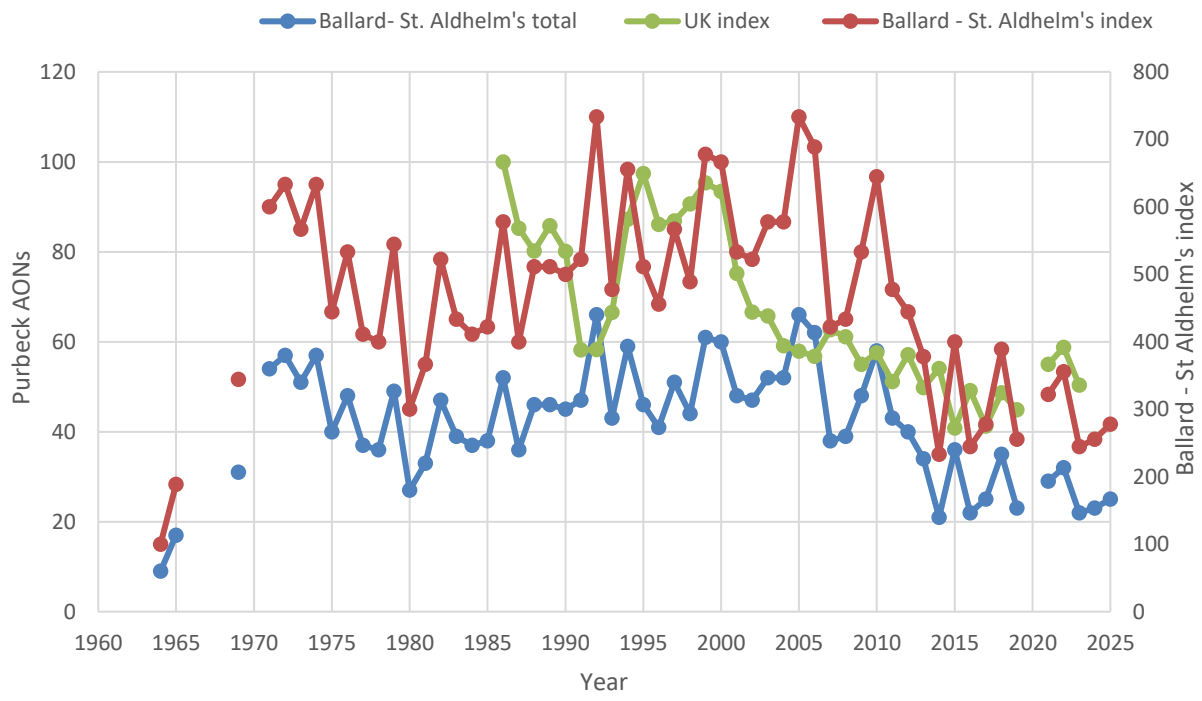

Figure 4: Changes in the numbers of AONs for Shag together with local and UK indices of abundance.

4.15 The change in numbers of nesting Shags in Dorset has not closely followed the national trend, although both show an overall decline with interannual fluctuations. The tendency for adults not to breed every year may be one reason for this variability. The Shag is Red Listed due to declines in the breeding population, and the international importance of both breeding and non-breeding populations in the UK (M. Eaton et al., 2015).

4.16 *In the UK overall, the Shag population increased slightly from the late 1960s to the mid-1980s (possibly due to increased legal protection, e.g. under the Wildlife and Countryside Act 1981, and reduced persecution (JNCC 2011)). It then gradually decreased, with an abrupt crash in 1994 and again in 2005 due to a wreck (mass mortality event) caused by food scarcity during a period of prolonged onshore gales on the east coast (M. P. Harris & Wanless, 1996). Note the initial steep rise in the index up to 1987 shown in Figure 4 is due to many adults choosing not to breed in 1986, resulting in low numbers at colonies that years.*

Herring Gull

Since systematic surveys began in 2000, the Herring Gull population has fluctuated, with a particularly steep decline observed since 2015. In recent years, 2022 saw a notable increase, with the return of nesting birds to stretches of the coast where they were absent in 2021. This was followed by notable low counts in 2024 and 2023 (lowest count since 2000). This year sees a 26% increase on last year, and the return of nests to Ballard Down and Anvil Point, where the species has declined in recent years. Overall, despite the increases this year, there is thought to have been a marked decline in the Herring Gull population in Dorset in the second half of the twentieth century, which appears to be steeper than the national decline.

4.17 Records for Old Harry to St. Aldhelm's Head are only available from 2000 (see Figure 5). The patchy records available for Purbeck before this date suggest a local decline (67% between 1965 and 1989) that is considerably more severe than the national decline (43% between the late-1960's and mid-1980's).

4.18 More systematic monitoring was introduced in 2000, by which time the population had recovered a little. However, a slow decline ensued, mirroring the overall UK trend until 2012, when numbers started increasing (see Figure 5). In 2015, 128 nests were recorded, the most since 2000. Note however that the total Dorset count in 2015 was still only around half of the number recorded in 1969. Numbers then reduced rapidly to a low of 55 AONs in 2021 and 49 in 2023, the lowest numbers ever recorded. This year sees a slight increase, with 63 nests counted between Old Harry Rocks and Gad Cliff, and with a particular increase observed at Ballard Down (from only four nests in 2024 to 17 recorded this year; the most recorded here since 2016).

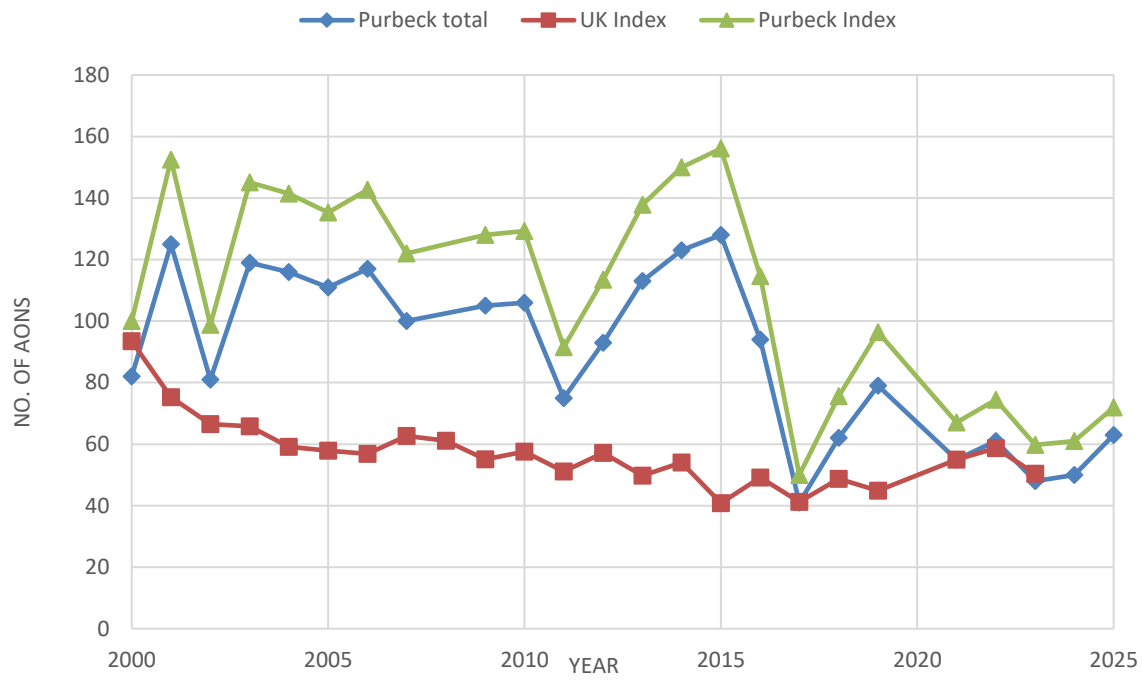

Figure 5: Number of AONs of Herring Gull and the Dorset and UK indices of abundance (UK monitoring started in 1986 and the UK index is based on coastal populations only).

4.19 *The Herring Gull is Red Listed in the UK due to a long-term decline in the population (M. Eaton et al., 2015). There has been a long-term decline in the coastal, natural-nesting, population within the UK. Factors implicated in the decline are botulism (thought to have been a major factor in the decline in the 1970's and 1980's), a decrease in the availability of food scavenged from refuse tips, and reductions in the availability of discards from fishing vessels, while ground predators have had an effect at some colonies.*

Great Black-backed Gull

The tiny Great Black-backed Gull population remained fairly steady between 2000 and 2011, with numbers generally fluctuating between about 10 and 18, before dipping to fluctuate between 5 and 12 until 2023, when the population reached its lowest level of four nests since recording began. In 2025, five nests were recorded (the same as in 2024).

4.20 Numbers of Great Black-backed Gull nests have fluctuated between 5 and 18 since 2000, with a steady decline observed between 2015 and 2022, when an upturn saw 11 nests recorded. The decline subsequently

continued, however, with only four nests recorded in 2023 (the lowest ever count). In both 2024 and 2025 five nests were recorded, with all records from Ballard Down in 2025.

4.21 The boat-based surveys provide comparable data each year, but it is not necessarily a complete count (for example, where not all areas are visible from the sea including overgrown vegetation at Old Harry).

4.22 The UK trend shows a decline between 2000 and 2006, with an upturn in 2022. This was reflected in Dorset (see Figure 6), where the decline had been steeper (but note that the tiny population size means that small changes result in a large proportional change).

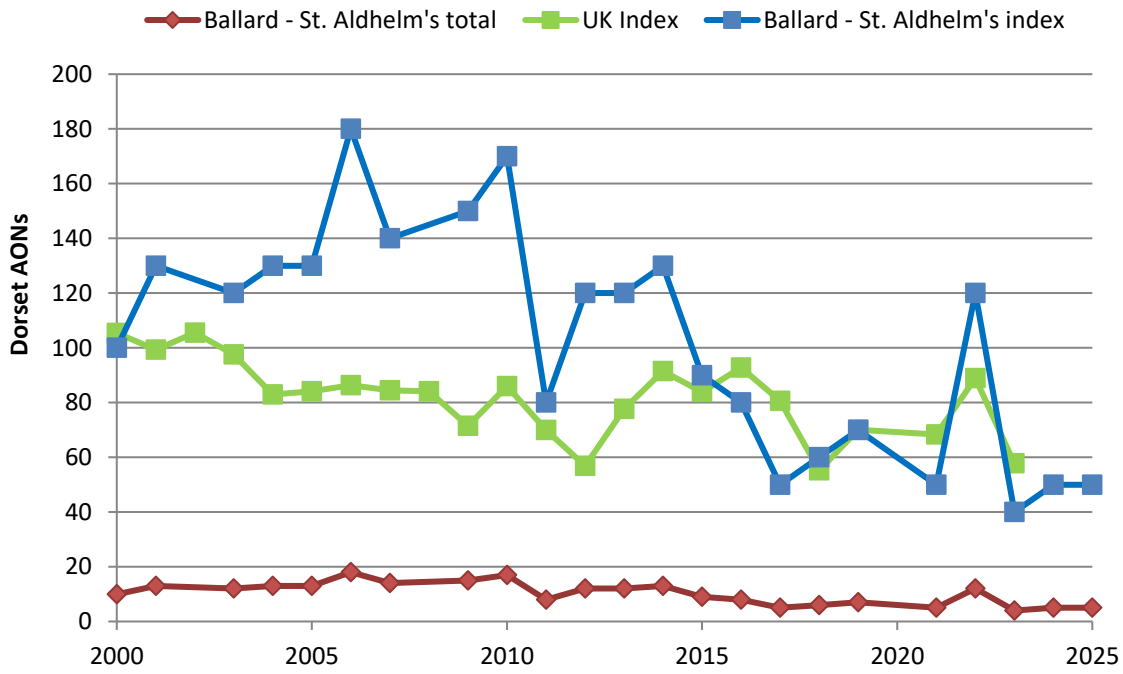

Figure 6: Change in numbers of Great Black-backed Gull AONs and the UK index of abundance.

4.23 *The 20th century saw both a widespread expansion of the Great Black-backed Gull breeding range and an increase in numbers. The abundance of Great Black-backed Gulls decreased a little between the first census in 1969/70 and 2000. Between 1986 and 2010, abundance peaked in 1999 at 115% of the 1986 reference level but has since decreased by around 20%. It is suggested that Great Black-backed Gulls have a competitive advantage over other scavenging seabirds, such as Fulmar and Herring Gull, and are more adaptable, also taking natural prey (such as Rabbits) and that this may explain why, until recently, they have not undergone the declines experienced by other scavengers.*

4.24 *Great Black-backed Gull is currently an Amber Listed Bird of Conservation Concern due to a non-breeding population decline (Eaton et al., 2015).*

Kittiwake

Following rapid expansion throughout the 1960s and 1970s, the Kittiwake population in Purbeck declined almost as rapidly, and in 2023 the only remaining colony (at Blackers Hole) was small, with just four nests. 2025 saw an increase to 16, the highest recorded there since 2021. There is some discussion as to whether the Blackers Hole birds may have moved to Portland Bill, where a colony has recently re-established itself after a 10-year gap. A such, the future of the breeding population in the Purbeck colony remains uncertain, despite the increase this year. Overall, the decline in Purbeck has been steeper than the UK trend.

4.25 Kittiwakes are known to have been present around Durlston in the 1880's (see Lake *et al.* 2011), but only two were recorded by 1957. This site remained the only colony until the late 1960s/early 1970s, when four more sites were colonised and by 1980 the overall population peaked at nearly 300 AONs. After this, all the colonies declined rapidly, and since the mid-1990's, only the Blackers Hole colony has persisted in Purbeck. Despite a brief increase in the mid-2000s, and slight upturn in 2019, 2021 and 2025, the Blackers Hole colony is declining.

4.26 Changes in the Purbeck population mirror the UK trend (see Figure 7), although the population may have peaked earlier, and the decline occurred more rapidly, until slowing in the 21st century. The 2019 slight national upturn was reflected in Purbeck, although numbers dropped again in 2022.

4.27 A colony of breeding Kittiwakes was also historically located on Portland Bill (about 33km west), but this similarly declined to the point where breeding ceased around 10 years ago, and birds were no longer seen in the vicinity. However, in 2023 pairs appeared to settle on the cliff ledges below the QinetiQ compound at the Bill (accurate counts are not possible as there is

no access to the area), and this behaviour was repeated in 2024 and 2025, however it is not yet understood whether breeding has been successful[6].

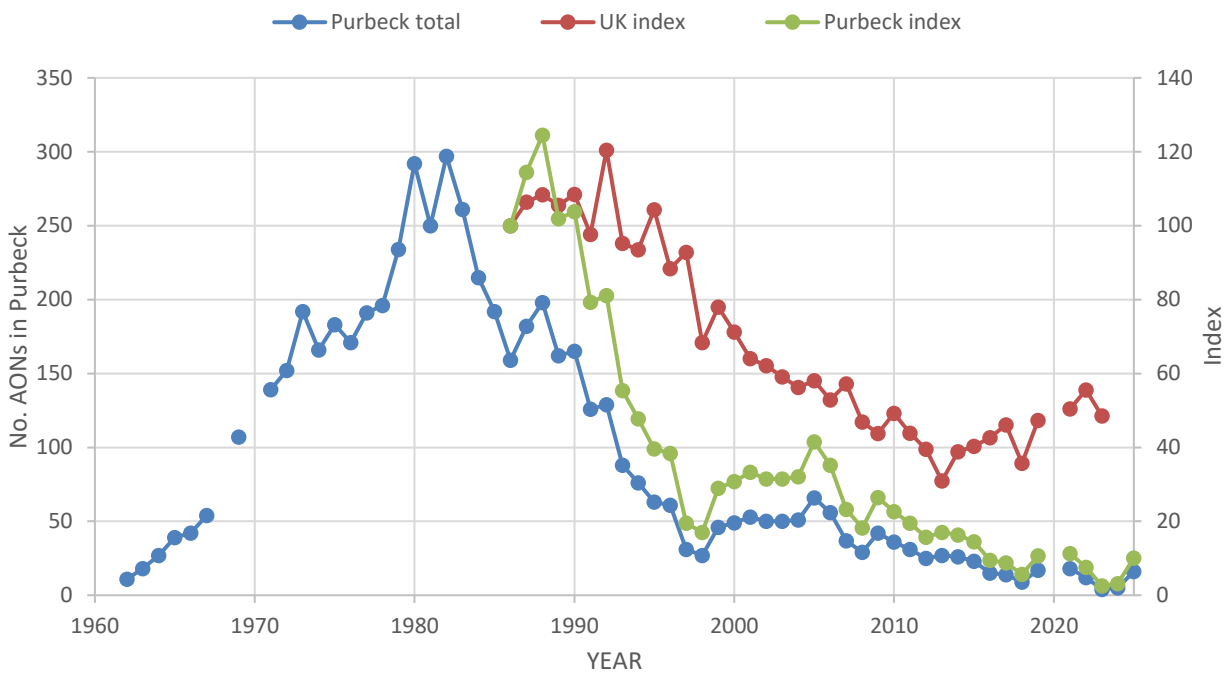

Figure 7: Change in numbers of AONs of Kittiwakes in Purbeck and the Purbeck and UK indices of abundance from 1985.

4.28 *Nationally, declines in productivity have been related to declines in Sand Eel abundance and are, in some regions, negatively correlated with surface sea temperature (Frederiksen et al., 2004). Kittiwakes are particularly vulnerable to food shortages, as they are surface feeders, and are only able to reach prey on or near the surface. Kittiwakes are Red Listed (Eaton et al., 2015) due to the decline and degree of localisation of the breeding population.*

[6] See photos of Kittiwake nests shared via Portland Bird Observatory on 26th June 2025: https://www.portlandbirdobs.com/2025/06/26th-june.html

Guillemot

After large declines up to the mid-20th century, Guillemot numbers in Purbeck stabilised in the 1970's and increased overall throughout the 1990's and 2000's, then more rapidly from 2014 onwards. In 2023, the population dropped to 65% of the peak count in 2022. The population recovered slightly in 2024, to a similar level, and the count in 2025 remained high, with 1,377 adults counted on the breeding ledges. This is the third highest count (behind 1,652 in 2022 and 1,547 in 2024) since the mid-1960's when systematic recording began. The Purbeck colonies have followed a similar trend to that shown by the UK index of abundance, although fluctuating more widely.

4.29 The Guillemot population is found between Durlston and St. Aldhelm's Head. The number of Guillemots in Purbeck declined from an estimated 2,500-3,500 in the 1930s to about one quarter of this (around 700) in the 1970s (see Lake *et al.* 2011 for more details). After this, the overall population began to increase, mainly at the Durlston colony, but also between Crab Rock and Sutton Rock from the early 2000s. In 2025, the colony had notably declined between Durlston and Reform Rocks but had increased at Sutton Rock and more than doubled at Crab Hole.

4.30 Historically there has been variation in the observed trends at different colonies (see Figure 8). In 2025, numbers varied between colonies, with small declines noted at Anvil Point and between Smokey Hole and Hedbury, in addition to those highlighted previously. In 2024, there was a re-emergence of individuals breeding at White Ware (a location not used since the mid-1970s) – this was not repeated this year however, with the previously utilised breeding ledges remaining empty.

4.31 Changes in the Purbeck population correlate broadly with changes in the national index of abundance, although with greater fluctuations (see Figure 9).

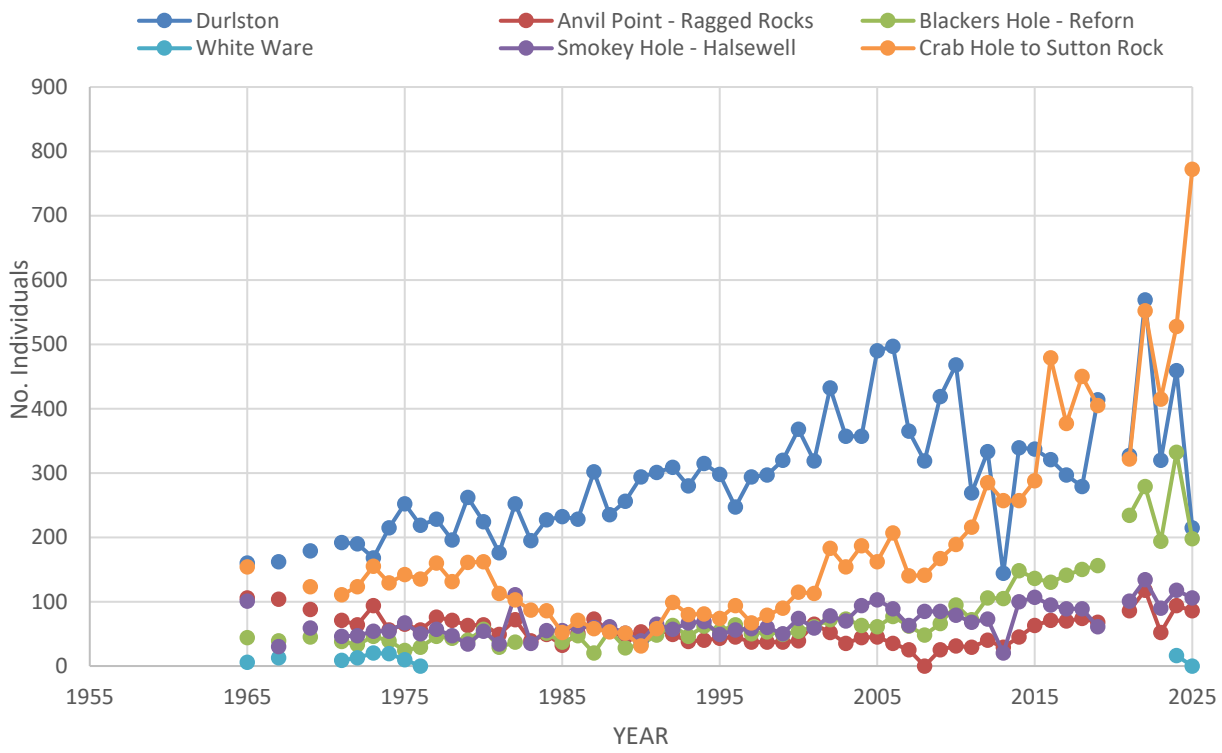

Figure 8: Changes in numbers of Guillemots at breeding colonies in Purbeck since 1965.

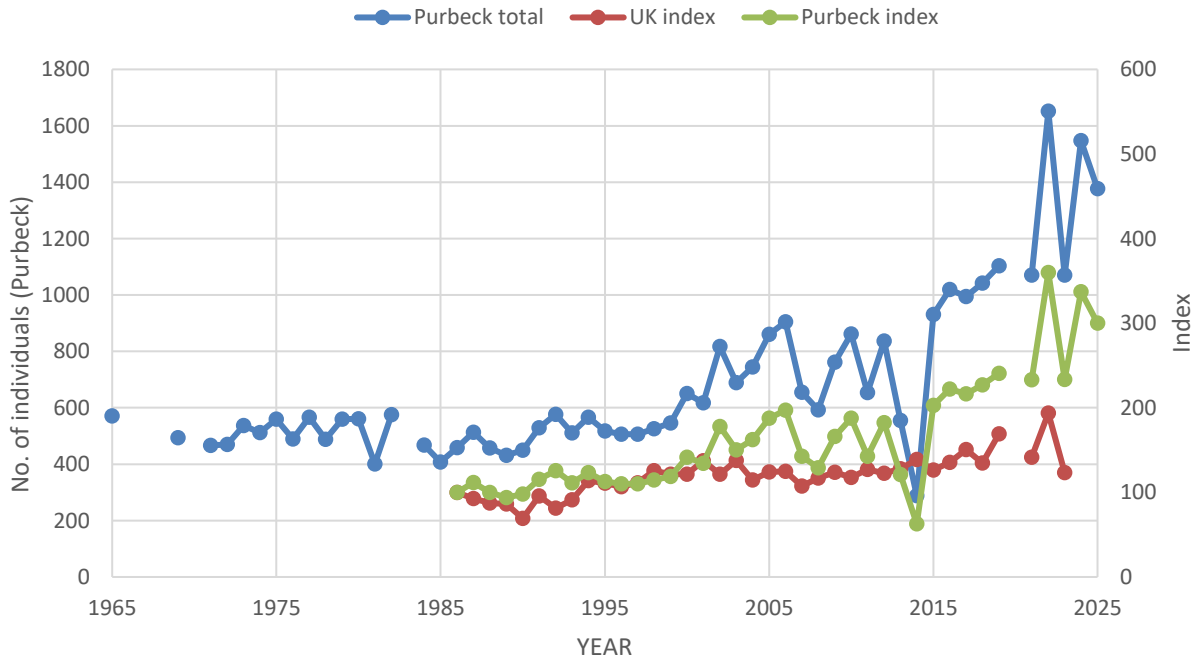

Figure 9: Changes in the total number of Guillemot individuals recorded at breeding ledges in Purbeck compared to the UK index of abundance.

Razorbill

Razorbills declined substantially in Purbeck between 1880 and the early 1960's (when systematic counts began). The population then continued to decline before stabilising in the 1970's. Subsequently, the population fluctuated widely before showing a steady increase after 2008. By 2022, the number of individual birds (194) was the highest since systematic recording began. Following a decrease in 2023, the population returned to similar levels in 2025, with the total of 179 birds comprising the third highest count ever. In 2025 the population varied notably between colonies, but overall the trend generally reflects that of the UK as a whole, albeit with larger fluctuations.

4.32 Razorbills breed between Durlston and St. Aldhelm's Head in Purbeck. Razorbill was considered to breed on the Purbeck Coast in greater numbers than Guillemot in the 1880's (see Lake *et al.* 2011 for more details). However, by 1932 only 130 birds were recorded, and this total fell further to 58 by 1967 and to just 14 by 1970, by which time many colonies had disappeared altogether. The population then fluctuated but remained steady until the late 1980s, after which three crashes, each roughly a decade apart, were followed by recoveries to higher peaks. Substantial increases in 2014, 2018, 2019, and 2022 followed, and although numbers declined by a quarter in 2023. The 2025 count of 179 is the third highest since systematic recording began in 1964.

4.33 In general, changes have been fairly consistent between the larger colonies (see Figure 10). In 2025, the largest colony was recorded at Funnel & Reform (compared to Crab Hole in 2024), with 49 individuals recorded at this location. Colonies at Crab Hole (38 individuals) and Durlston (27 individuals) had both declined, whilst both the Topmast and Blackers Hole colonies have increased. No birds were counted at Ragged Rocks or White Ware, or between Hedbury and Halswell.

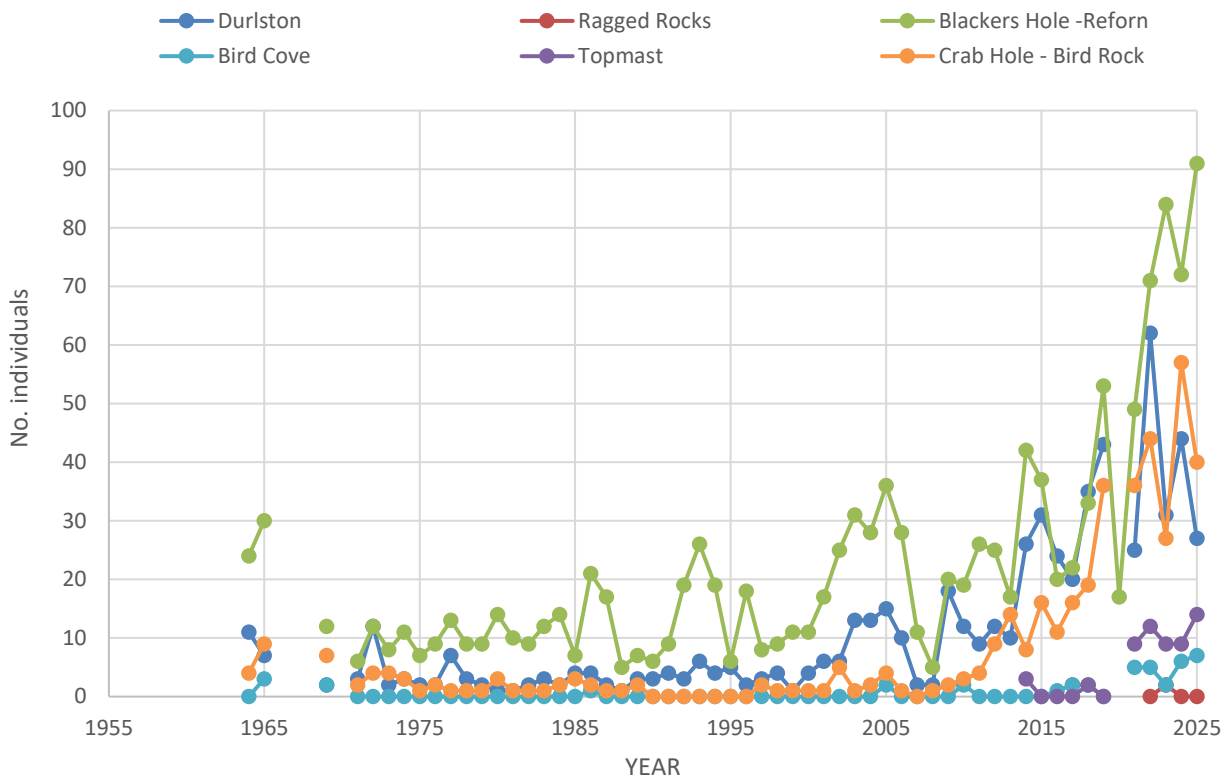

Figure 10: Changes in counts of Razorbills at main colonies between 1965 and 2025 (note that Durlston birds were not counted in 2020).

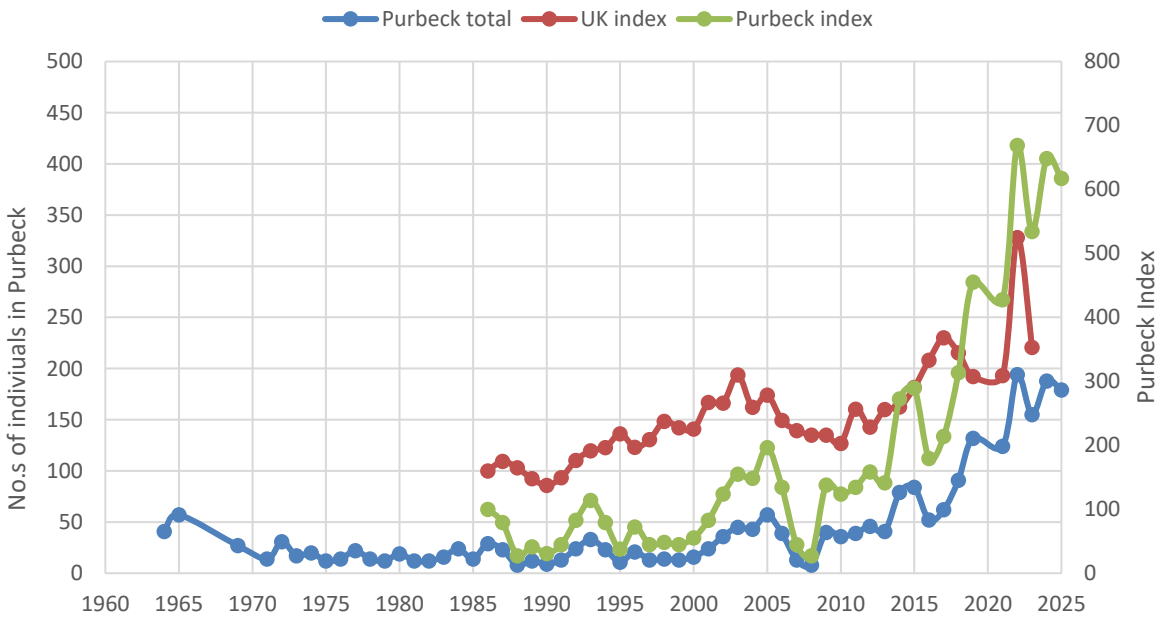

Figure 11: Changes in the counts of Razorbills and the UK and Purbeck indices of abundance.

4.34 *The Purbeck population has shown large fluctuations since the 1950s (although note that the small size of the population means a small change in numbers results in a large percentage change) (see Figure 11). These fluctuations can obscure overall trends, but since 2008 there has been a clear overall upward trend which is steeper than the fluctuating upward trend in the UK as a whole.*

4.35 *As with Guillemots, it has been suggested that the levelling out seen in the UK index in the 2000's may be due to density dependent mechanisms (JNCC 2011). UK Razorbill productivity has declined steadily since 1993 (possibly due to food shortages), and unless this trend reverses, a continuing overall decline is predicted (JNCC 2011). Razorbill remains an Amber Listed Bird of Conservation Concern due to its degree of localisation (Eaton et al. 2015).*

Puffin

The tiny Puffin population may be stable, although no birds were recorded during the boat-based survey. The Purbeck population declined severely in the 20th century. By the time the population steadied in the 1990s, the estimated number of breeding pairs was about three and is thought to have fluctuated between one and three since then. In contrast to Purbeck, the national trend is of a significant increase in the last quarter of the 20th century, but more recent monitoring at a small number of large colonies has shown declines in numbers, survival, and productivity.

4.36 Puffins were thought to be abundant in Purbeck until at least 1939 (see Lake et al., 2011) but by 1958 only 85 individuals were recorded, dropping to 23 in 1975. The population subsequently declined much more slowly until the mid-1990s, after which it stabilised at around two to three breeding pairs (see Figure 12) – a 92% decline since 1958.

4.37 No birds were recorded during the 2025 boat-based survey. Birds were however observed from the neighbouring clifftop at other times, and it was estimated that there were a total of three breeding pairs from the observations made of courting behaviour, mating, and birds carrying nesting material (R. Caldow, pers. comm.). However, no birds were observed carrying fish into the nest site and fewer birds were observed during most of June. This suggests that breeding was unsuccessful this year. The maximum count of individuals seen this year was seven (R. Caldow, pers. comm.).

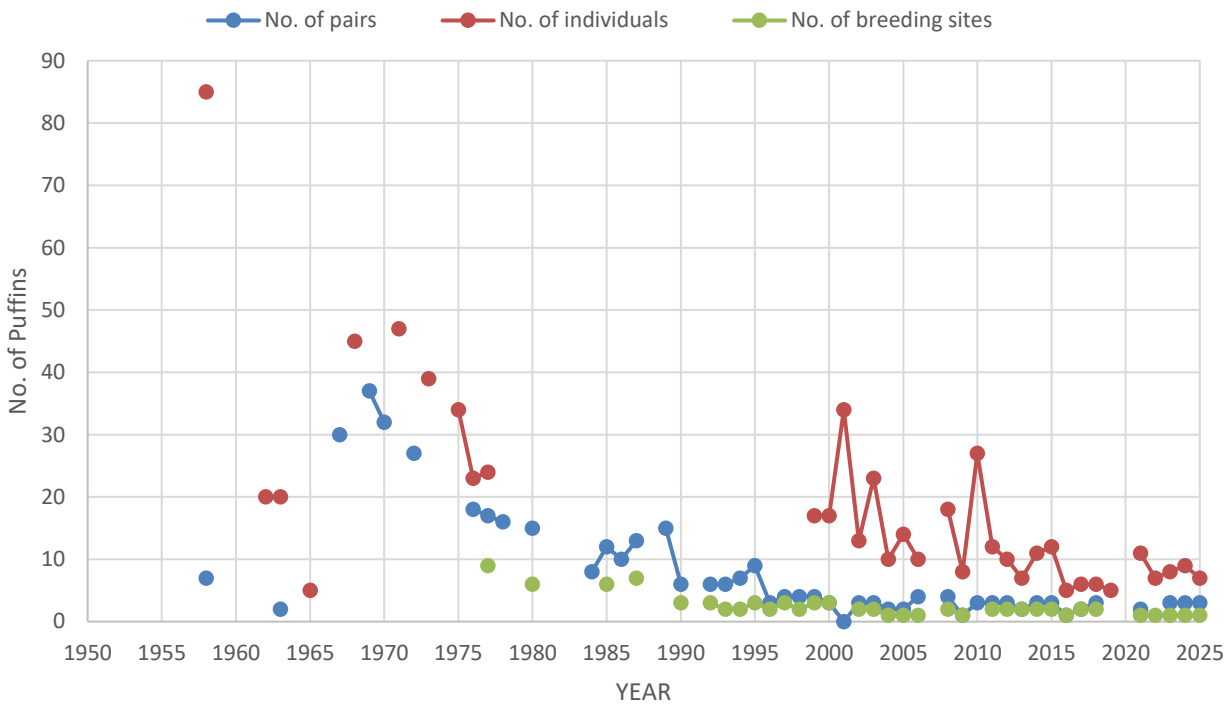

Figure 12: Numbers of individual Puffins recorded and estimated number of breeding pairs between 1958 and 2022 (no estimates of pairs were made in 2021 and 2022). Note that the 2023, 2024 and 2025 counts were not from the boat survey.

4.38 *The downward trend in Puffin numbers in Purbeck does not reflect the overall increase suggested by UK census returns between 1969 and 2002. However, although UK-wide data are not available for more recent years, monitoring results from two large colonies show subsequent declines. Productivity has fluctuated but appears to have been lower since the 1990s. Caution should be used in drawing wider geographical conclusions from these data. On Lundy Island, where conditions for Puffins have improved through the eradication of rats, numbers have increased from just five individuals in 2006 to over 300 in 2016. Puffins are now Red Listed due to their degree of localisation and categorisation as a species of European Conservation Concern (M. Eaton et al., 2015).*

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