

# THE STATE OF THE **UK'S BIRDS**



2020



Wigeons by Oliver Smart (rspb-images.com)

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NRW, Sandy, Bedfordshire.

Throughout this report, all bird species are shown in **bold** and colour-coded according to their conservation status, as published in *Birds of Conservation Concern 4 (BoCC4)*.

**Red – 67 species** identified as being of the greatest conservation concern.

**Amber – 96 species** of moderate concern.

**Green – 81 species** of least concern.

**Not assessed** – Non-native species and those that only occur as occasional visitors to the UK.





**Cuckoos are declining in England, but increasing in Scotland**



**32%**  
of albatross and petrel species in the UKOTs and CDs are at risk of global extinction



**19 million**  
fewer pairs of breeding birds in the UK compared to the late 1960s



**92%**  
increase in house sparrows in Wales from 1995 to 2018



**Buzzards are increasing in all UK countries except Wales**



- **Volunteers are vital for conservation**  
Volunteers play an essential role in bird monitoring in the UK, by donating their time and expertise. The data they collect are vital for conservation, advocacy and policy development. Thank you to all those involved.
- **19 million pairs of breeding birds lost since late 1960s**  
New figures from the Avian Population Estimates Panel (APEP) suggest that there are 83 million pairs of native breeding birds in the UK. This is 19 million pairs fewer than when widespread monitoring began in the late 1960s. This figure is similar to that presented in *The state of the UK's birds 2012*, based on the previous APEP report, suggesting that, in terms of total breeding bird numbers, the period of relative stability that began in the 1990s is continuing.
- **Albatrosses and petrels face global extinction**  
Despite significant conservation successes, around a third of all albatross and petrel species found in the UK Overseas Territories (UKOTs) and Crown Dependencies (CDs) are at risk of global extinction due to fisheries bycatch and predation by introduced mammalian predators such as mice.
- **Species' trends vary across the UK**  
This year, we present country sections in this report for the first time. These highlight variation in species' trends across the UK. For example, **cuckoos** are increasing in Scotland but declining in England, very likely due to the loss of food resources in more intensively managed lowland environments. **House sparrows** are increasing strongly in Wales but have declined in England, whereas the Welsh **buzzard** population hasn't seen the increases found in other countries.
- **57 million birds released for shooting**  
The size of the non-native bird population increases over 10-fold in the late summer, when an estimated 57 million captive-reared **pheasants** and **red-legged partridges** are released for shooting.



# Headlines





RSPB (rspb-images.com)

**Volunteers play  
a crucial role in  
monitoring the  
UK's birds**

# Introduction

*The state of the UK's birds (SUKB)* report is a comprehensive reference for bird trends in the UK, providing up-to-date results from annual, periodic and one-off avian surveys.

Since 1999, these reports have provided an overview of the status of bird populations in the UK and its Overseas Territories and Crown Dependencies. We present trends for as many of the UK's regularly occurring species as possible.

In *SUKB 2020*, our first report since 2017, we combine the latest population estimates (published in 2020 by the Avian Population Estimates Panel) with trend information, in order to examine how bird numbers have changed over time. We present results combined for all native breeding species, as well as individual species.

2020 was a critical year for biodiversity conservation, during which countries around the world assessed their progress towards the current set of conservation goals, the Aichi targets, and began developing new plans for the future. In the 2020 edition of *SUKB* we present 10-year trends for all species for which they are available, allowing us to examine how the UK's birds have fared during the period the UK has been attempting to meet the Aichi targets.

Given the devolved nature of conservation in the UK, for the first time in *SUKB* we present short sections about each of the four UK countries. These sections give space to explore the different patterns of species' change in each country and to show the variety of ways that species' monitoring data are being used to influence policy and conservation action.

## The critical role of volunteers

In each edition of *SUKB* we highlight the vital role expert volunteers play in bird monitoring and it is a great opportunity to thank everyone for their valued contributions. This year, many monitoring schemes have been affected by the global Covid-19 pandemic, and we want to say thank you to volunteers both for the fieldwork that was possible and for their patience and understanding when field visits could not be made. If you are interested in getting involved in monitoring, we highlight current opportunities on pages 76–77.

## The *SUKB* partnership

*SUKB 2020* is produced collaboratively by three NGOs, together with the UK's statutory conservation bodies:

- Royal Society for the Protection of Birds (RSPB)
- British Trust for Ornithology (BTO)
- Wildfowl & Wetlands Trust (WWT)
- Department of Agriculture, Environment and Rural Affairs, Northern Ireland (DAERA)
- Joint Nature Conservation Committee (JNCC)
- Natural England (NE)
- Natural Resources Wales (NRW)
- NatureScot

**If you're  
interested in  
getting involved  
in monitoring,  
see page 76**

David Woodfall (rspb-images.com)





# Wild bird indicators

The UK wild bird indicators are high-level measures of the state of bird populations, which show changes in the relative abundance of common and widespread native birds.

In conjunction with indicators for other well-monitored groups, such as butterflies and bats, they are used as a proxy for the overall state of biodiversity and to track progress towards targets for conserving the natural environment. Wild bird indicators are also published for Scotland and England: these are featured on pages 55 and 67 respectively.

The indicators are shown by broad habitat type. They present the average population trends for breeding bird species associated with farmland, woodland and wetland habitats, as well as for seabirds (pages 32–35) and wintering waterbirds (pages 36–39). The bar chart provided alongside each habitat graph shows the percentage of species within that indicator that have increased, decreased or shown little change over the long term (from the initial to the penultimate year of the indicator) or the short term (the most recent five years).

While the indicators communicate broad trends and are a good tool for summarising these changes, it is important to note that there is considerable variation in the individual species' trends that make up each indicator.

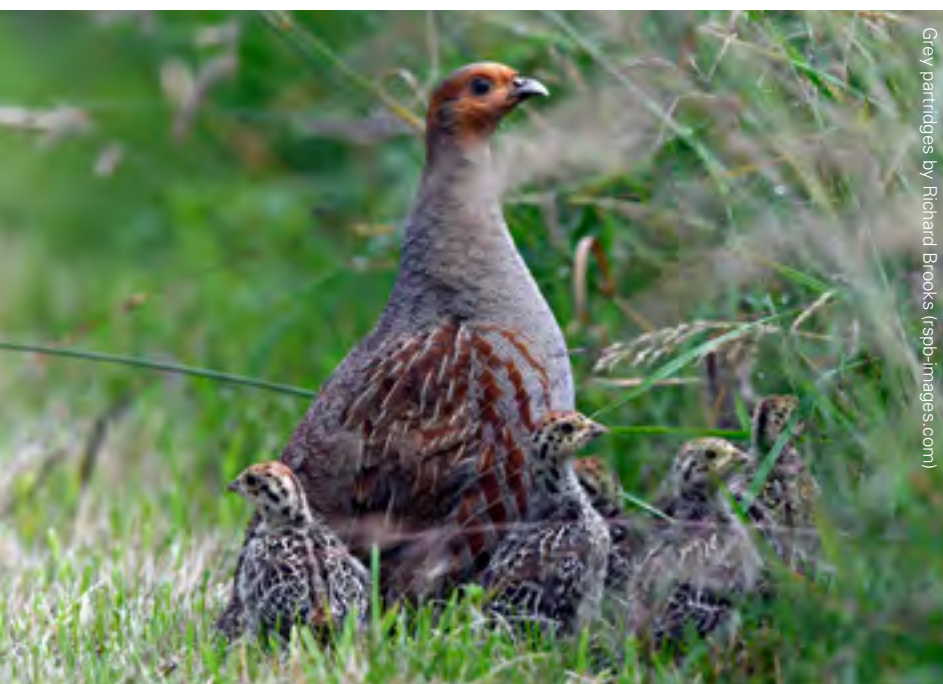
## Farmland, woodland and wetland indicators

The farmland indicator continues to decline, despite widespread uptake of agri-environment schemes and other bespoke conservation initiatives. In 2019, the indicator stood at 45% of its 1970 value, with a decline of 5% in the short term (2013 to 2018; see Figure 1a). Specialist farmland species within the farmland indicator include some of our fastest declining birds, such as **turtle doves** and **grey partridges**.

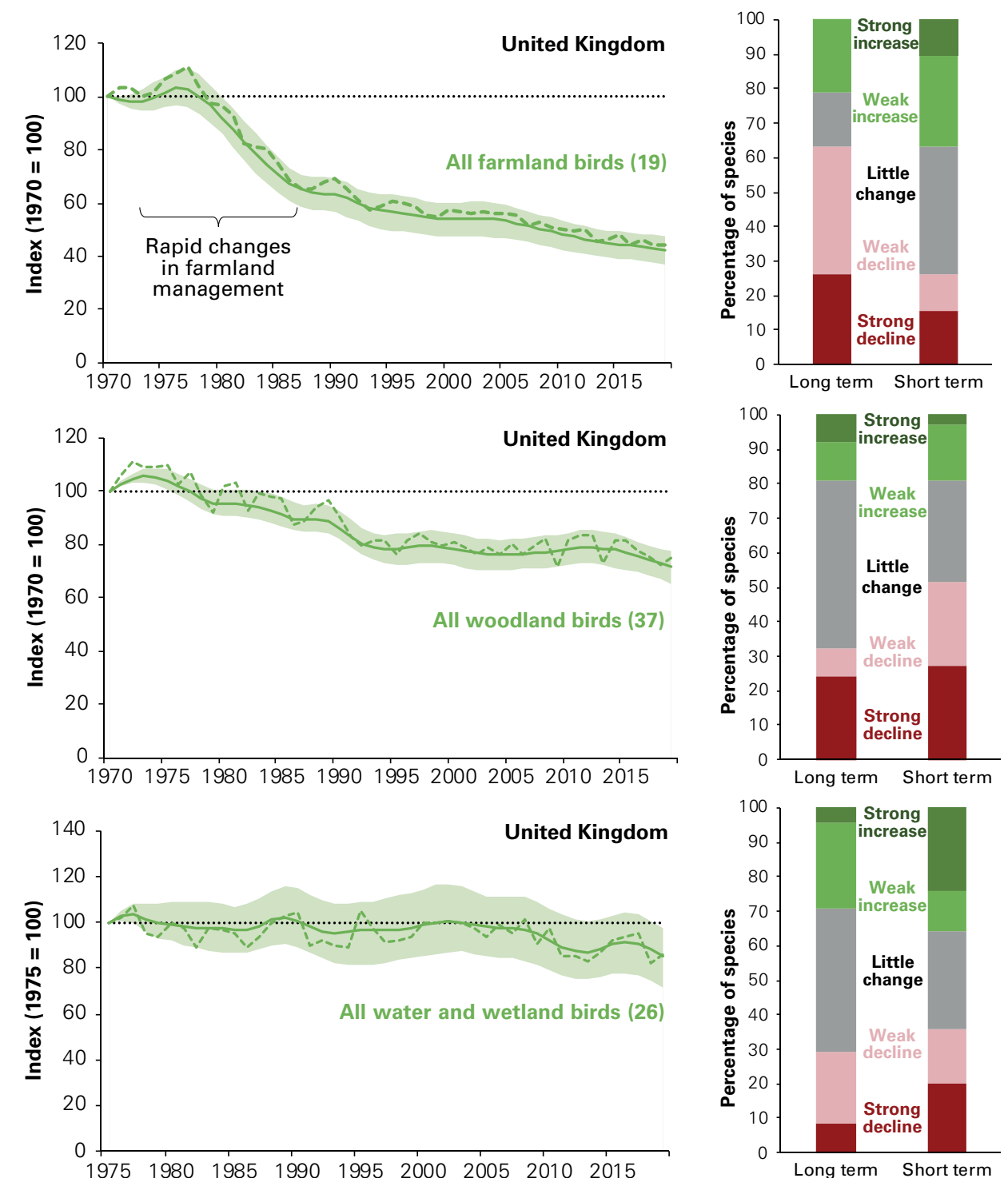
The woodland indicator shows a decline of 27% in the long term and 7% in the short term (see Figure 1b). Some specialist woodland birds within the indicator have declined dramatically since 1970, including **willows tits**, which have shown the second biggest decline of any UK bird. The numbers of five other species are now less than a quarter of what they once were.

Species in the wetland indicator show a mix of trends within a long-term average decline of 12% (see Figure 1c). When further split into wetland type, birds of wet grassland show strong declines (**lapwings**, **redshanks**, **snipe**), whereas birds of slow or standing water show an increase, driven by increased numbers of **mallards** and **tufted ducks**.

**27%**  
drop in woodland  
birds over  
the long term



Grey partridges by Richard Brooks (rspb-images.com)



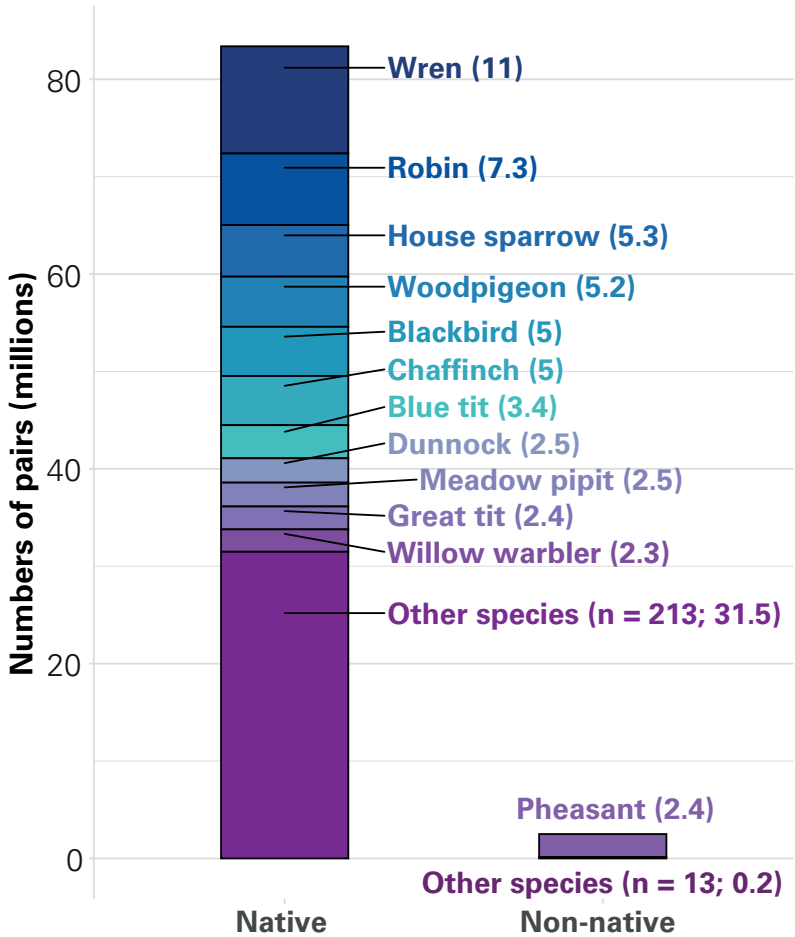
**Figure 1:** UK wild bird indicators for (a) breeding farmland birds, (b) breeding woodland birds and (c) breeding water and wetland birds.

### Footnotes

1. The figure in brackets shows the number of species used in the indicator. The line graph shows the year-to-year change (dashed line) and smoothed trend (solid line) with its 95% confidence interval (shaded).
2. The bar chart shows the percentage of species within the indicator that have increased, declined, or shown no change. The long-term period covers the timespan of each indicator, while the short-term period covers the most recent five years of assessment. If the rate of annual change would lead to a population decrease of between 25% and 49% over 25 years, the species is said to have shown a 'weak decline'. If the rate of annual change would lead to a population decrease of 50% or more over 25 years, the species is said to have shown a 'strong decline'. The corresponding values for increases are between a 33% and a 100% increase over 25 years (weak increase) or greater than 100% (strong increase).
3. For details of species' trends in each indicator, download the datasheet: [gov.uk/government/statistics/wild-bird-populations-in-the-uk](https://gov.uk/government/statistics/wild-bird-populations-in-the-uk)  
Source: BTO, Defra, JNCC and RSPB.

# UK breeding bird abundance

When assessing the conservation status of species, we are often most interested in how relative abundance has changed over time. However, it is also important to estimate the size of species' populations.



**Figure 2:** The total number of pairs of breeding birds in the UK, by species. Species are named where the number of pairs is greater than two million, other species are grouped together. Native and non-native species are shown separately and the number of million pairs of each named species is given in brackets.

For instance, population estimates show us which species' global populations are concentrated in the UK, and allow us to identify sites and regions of particular importance. They also enable us to assess the threat of extinction facing individual species.

The Avian Population Estimates Panel (APEP) periodically publishes collations of population estimates for all the UK's regularly occurring breeding and non-breeding birds. All our tables of trends (pages 23, 24, 30, 35 and 38) contain population estimates from the fourth of these reports, which was published in 2020 in the journal *British Birds*<sup>1</sup> (other estimates were published in 1997, 2006 and 2013).

## Total breeding bird population estimate

APEP 4 estimated that there were 83 million pairs of native breeding birds in the UK in 2016. The most numerous species in the UK remains the **wren**, with 11 million breeding pairs (Figure 2). This species has seen the largest increase in numbers since monitoring began, with 6.5 million more pairs now compared to fifty years ago.

The 11 native species with over two million pairs make up 60% of all the UK's breeding birds, totalling 50 million pairs. All of the 11 most abundant species are passerines. They mainly inhabit terrestrial environments and most are also common in garden-like habitats.

## Total bird biomass

Using each species' mass, we converted the estimated number of each breeding species to estimates of total biomass. The top 12 species by total biomass (Figure 3) are dominated by pigeons, corvids and seabirds. The top 10 native species taken together account for two-thirds of the native bird biomass of the UK.

## Non-native species

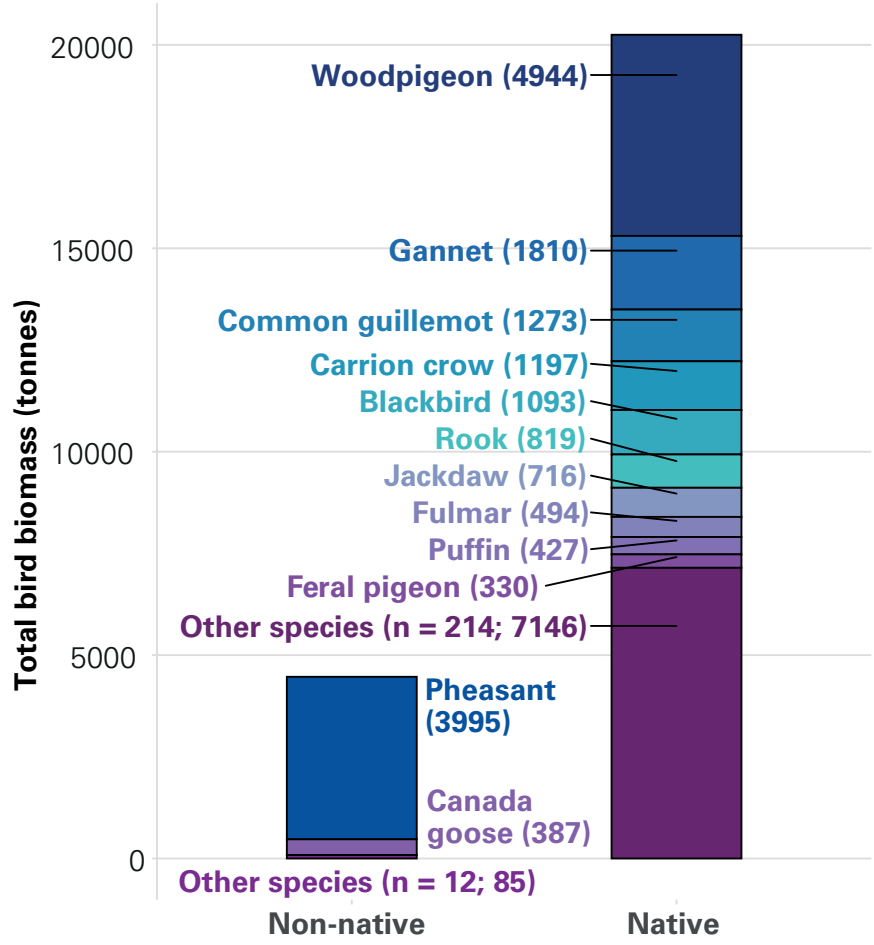
There are 14 non-native species that breed regularly in the UK, with a further eight which breed occasionally. Some of these may establish themselves in the future. APEP 4 estimated the number of breeding pairs of non-native birds to be 2.5 million (see Figure 2).

Non-native breeding population numbers and biomass are dominated by **pheasants**, with 2.35 million pairs. The next most common, **red-legged partridges**, have only 72,500 pairs. Since **pheasants** are heavy as well as numerous, they make the second biggest contribution to total bird biomass (Figure 3). This is before an estimated 47 million individual captive-reared **pheasants** and 10 million **red-legged partridges** are released for shooting in late summer<sup>2</sup>.

By September, over 50 million **pheasants** are present in the UK<sup>3</sup>. At this time of year, the biomass of post-breeding and released **pheasants** is estimated to be more than the post-breeding biomass of all native species combined<sup>4</sup>.

It is possible that this level of human manipulation of the environment may be having major impacts on other species and ecosystems. Recent reviews found evidence for both positive and negative impacts of the release of gamebirds<sup>5,6,7</sup>.

Positive impacts are indirect via associated habitat management, legal predator control and supplementary feeding. Negative effects include disease transfer to native species,



**Figure 3:** The total biomass of breeding birds in the UK, by species for the 12 largest values, with other species grouped together. Native and non-native species are shown separately, with the total biomass of each named species given in brackets.

the use of lead ammunition, habitat alteration and predation of invertebrates by gamebirds, and illegal persecution of protected species. These negative impacts are often greater where the density of gamebirds released is higher.

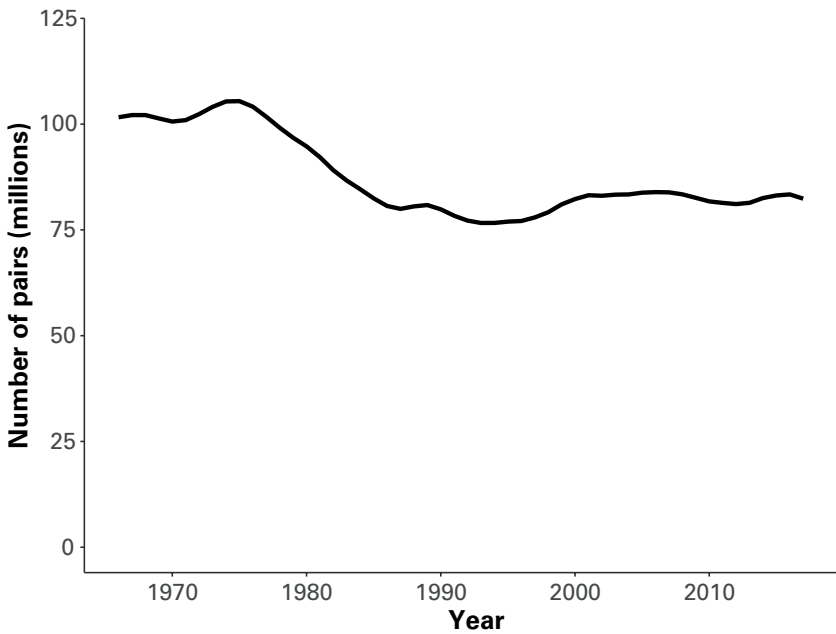
## Trends in total population size

By combining the new population estimates with annual population trends we can track how the number of breeding birds in the UK has changed over time, both overall and for each species or species group.

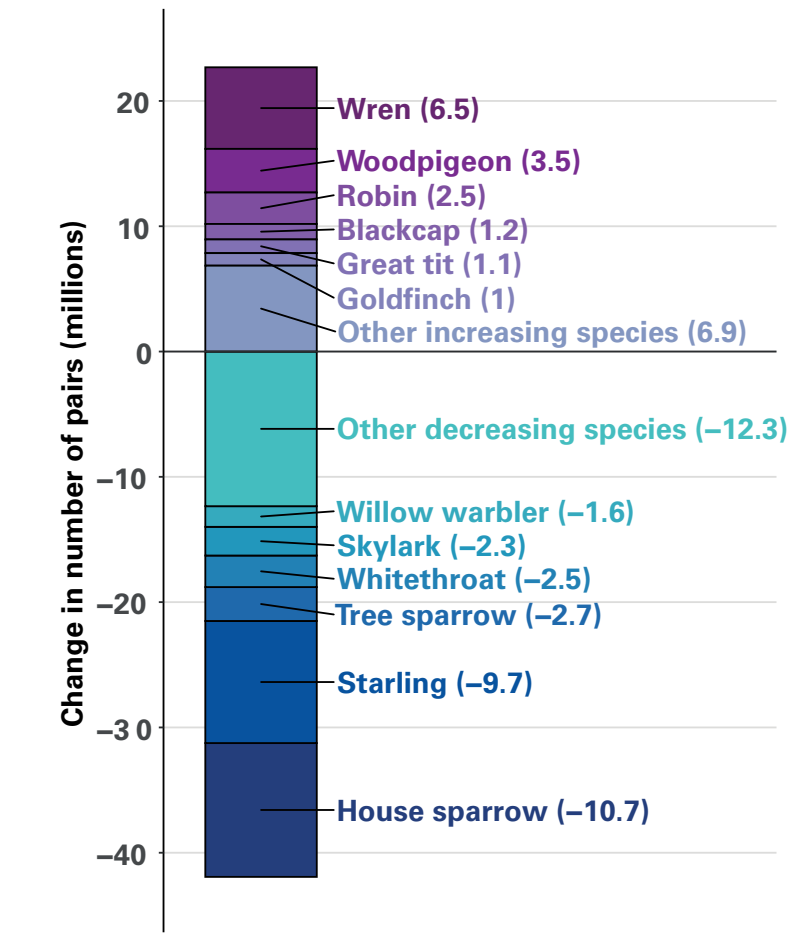
There were 19 million fewer pairs of native breeding birds in 2017 than in 1966 (Figure 4), an estimate similar to that presented in *SUKB 2012*, based on the third APEP report. This suggests

**19 million fewer pairs of native breeding birds in 2017 compared to 1966**





**Figure 4:** Change in the total number of pairs of native breeding bird species in the UK, 1966 to 2017.



**Figure 5:** Change in the number of breeding pairs of native bird species between 1966 and 2017. The top six declining and top six increasing species are shown, while other species are grouped as increasing or decreasing. The change in the number of million pairs is given in brackets.

that, in terms of total breeding bird numbers, the period of relative stability that started in the 1990s is continuing.

To understand the patterns of change more clearly, we can examine how the population sizes of different species have changed over time. Figure 5 quantifies the change in population size for those species showing the largest increases and decreases in numbers since 1966. The gross change in all those species that have increased between 1966 and 2017 is a gain of 23 million pairs, and the change in those that have decreased is a loss of 42 millions pairs. These changes are much larger than we might expect when looking at the net change, indicating apparent rapid and human-driven changes in bird populations in recent decades.

The **woodpigeon** is now the fourth most common breeding bird in the UK, with the **house sparrow** third (Figure 2). When monitoring schemes started in the late 1960s there were 10 times more **house sparrows** than **woodpigeons**. We have lost around 10.7 million pairs of **house sparrows** in that time, a loss greater than for any other species, and gained 3.5 million pairs of **woodpigeons** (Figure 5).

We understand the main reasons for the decline in many of the declining species in Figure 5. For example, there is good evidence that the primary driver of the decline in **whitethroats** was reduced survival on their wintering grounds in the Sahel. Nevertheless, for some species the reasons for their decline remain unclear. One of these is the **meadow pipit**, the UK population of which is around one million pairs lower now than in the late 1960s.

### Trends in total bird biomass

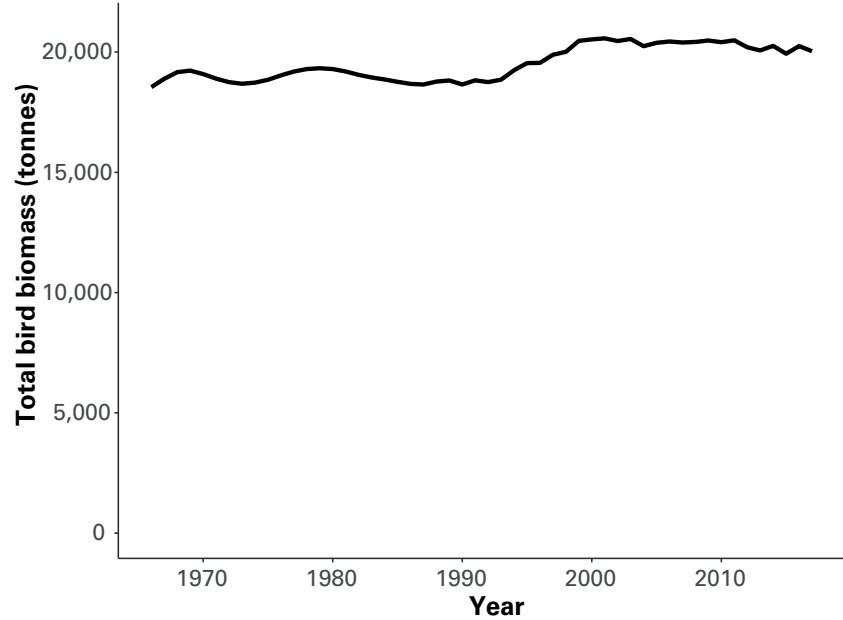
In contrast to the total number of native breeding birds in the UK, there has been a slight increase in the total biomass of native breeding birds in recent decades: from 18,500 tonnes total biomass in 1966 to 20,000 tonnes in 2017 (Figure 6).



**10.7**  
million pairs of  
house sparrows  
have been lost  
since 1966

The main period of change occurred during the 1990s with relative stability before and after this time.

The gross increase in the biomass of breeding populations of native species over time is 6,700 tonnes. This increase is caused largely by the rise in **woodpigeon** biomass, which accounts for an additional 3,300 tonnes across the UK – around 50% of the total increase. Whereas many farmland species have been negatively impacted by modern farm management, **woodpigeons** have benefited from the intensification of arable farming. The increase in oil seed rape production and the move from spring to winter sown crops have been particularly beneficial, leading to an increase in overwinter survival of **woodpigeons**.



**Figure 6:** Change in the total biomass of native breeding bird species in the UK, 1966 to 2017.

1. Woodward I *et al* (2020) *British Birds* 113: 69–104. A summary of the paper is available at: [bto.org/apep4](https://bto.org/apep4)
2. Aebischer (2019) *European Journal of Wildlife Research* 65: 64.
3. Blackburn and Gaston (2019) *Biological Invasions* 20: 3563.
4. Based on a post-breeding, post-release pheasant biomass of 47,940 tonnes (56.4 million birds at 850g) compared to a crude estimate of post-breeding native biomass of 40,498 tonnes (twice the 20,248 pre-breeding biomass, following Blackburn and Gaston 2018).
5. Madden and Sage (2020) Natural England Evidence Review NEER016. Available at: [publications.naturalengland.org.uk/publication/5078605686374400](https://publications.naturalengland.org.uk/publication/5078605686374400)
6. Mason *et al* (2020) RSPB Research Report No 66. RSPB Centre for Conservation Science. Available at: [rspb.org.uk/globalassets/mason-et-al-2020-rspb-gamebird-review-1-compressed.pdf](https://rspb.org.uk/globalassets/mason-et-al-2020-rspb-gamebird-review-1-compressed.pdf)
7. Sage *et al* (2020) *Wildlife Biology* 4. Available at: [doi.org/10.2981/wlb.00766](https://doi.org/10.2981/wlb.00766)



# Survey updates

## First UK survey increases concern for willow tits

The Rare Breeding Birds Panel (RBBP), the RSPB and the Welsh Ornithological Society have been conducting the first UK **willow tit** survey, with support from Natural England (NE), Natural Resources Wales (NRW) and the BTO.

The aim was for county-level surveys to be conducted across the **willow tit's** known range by study groups, county bird clubs and other organisations and individuals. It is hoped this work will also leave a legacy of increased volunteer monitoring on an annual basis, at least in core areas for the species.

Britain's endemic subspecies of **willow tit** is the fastest declining resident bird in the UK, and the second fastest declining species after the **turtle dove**. The RSPB, NE and others have conducted research into the causes of its decline and are trialling woodland management solutions. However, due to its declining numbers, monitoring this species is becoming increasingly difficult.

Although the Breeding Bird Survey (BBS) is still able to produce an annual UK trend, showing a decline of 82% between 1995 and 2018, **willow tits**

were recorded in just 32 BBS squares in 2019. Since 2010, collation of **willow tit** records by the RBBP has been increasingly useful, but it is currently insufficient to produce robust population estimates, measures of change or current distribution maps. Therefore, a UK-wide survey was needed in order for targeted conservation work to be properly underpinned by evidence.

### Survey suggests range contraction

Across the range, tetrads (2x2-km squares) were surveyed following a random stratified design. The surveys used a "playback" method, where recorded **willow tit** song was used to provoke a response from territorial individuals. The survey period covered the pre-breeding season, from mid-February to mid-April, with two visits per tetrad. Surveys were conducted on all suitable habitat within tetrads.

Over 2019 and 2020, nearly 1,500 tetrads were surveyed across the **willow tit's** range, despite fieldwork being curtailed due to the Covid-19 lockdown. A final field season is now planned for 2021.

A preliminary look at the data collated so far suggests that there are further signs of range contraction since the *Bird Atlas 2007–11*, particularly in the south and east of the range. However, there are some core areas where numbers seem to be holding up, such as north-east England.

**The willow tit is the UK's fastest declining resident bird**



Willow tit by Ray Kennedy (rspb-images.com)

## Project Owl

During 2018 and 2019, the BTO ran Project Owl, a set of interrelated, UK-wide research and engagement projects focused on owls.

Two of the major projects within Project Owl aimed to better understand the population status and calling behaviour of **tawny owls**. We chose **tawny owls** as the primary focus for several reasons: they're widespread in the UK (although absent from Northern Ireland and some islands); they have distinctive calls and so can be identified even by inexperienced volunteers; and, most importantly, they are thought to be undergoing a decline which has been detected in the daytime Breeding Bird Survey (BBS) that required investigation through a bespoke survey.

### Declines in occupancy

The Tawny Owl Point Survey was a survey to determine their presence or absence (occupancy) during autumn 2018. This was compared to past surveys in 1989 and 2005 to investigate changes in occupancy over time.

The survey followed a standardised methodology and was coordinated via the volunteers of the BTO Regional Network. The method involved carrying out multiple, 10-minute-long surveys in a set of pre-selected tetrads. Volunteers typically visited their tetrad twice and recorded the presence or absence of **tawny owls** during two consecutive 10-minute periods on each visit, although there was some flexibility in the visit structure.

Over 2,120 volunteers took part, with 2,900 tetrads surveyed. It is estimated that there was a 51% probability of hearing a **tawny owl** in any given survey period, assuming they were present. Taking detectability into account, there is evidence of a significant UK-wide decline in **tawny owl** occupancy, from an estimated occupancy of around 62% in

1989 and 65% in 2005, to 53% in 2018. Analysis is currently ongoing to identify potential causes.

### Tawny owl calling behaviour

The other survey carried out was the Tawny Owl Calling Survey, which was coordinated by the Garden BirdWatch (GBW). By allowing participants, many new to monitoring, to select their own sites, this survey proved highly popular. It ran from 30 September 2018 until 30 March 2019, with over 9,000 1-km squares surveyed.

Despite the unstructured nature of the design, the large dataset can be analysed to investigate changes in **tawny owl** calling behaviour over the winter, during the night and in relation to a range of environmental factors.

Analyses are still underway but patterns of calling behaviour will help design and interpret future surveys. There is evidence that owl presence is influenced positively by certain types of woodland and negatively by artificial light and urbanisation.

**Tawny owl occupancy dropped to 53% from 65% in 2005**



**Over 2,120 volunteers took part in the Tawny Owl Point Survey**



Tawny owl by Shutterstock



**Trichomonosis  
has caused  
greenfinches  
to decline**



Greenfinch by Ray Kennedy (rspb-images.com)

**Chaffinches  
were seen in  
60% of gardens,  
down from 80%**



Chaffinch by Paul Sawyer (rspb-images.com)

## 25 years of BTO Garden BirdWatch

The information collected by the weekly BTO Garden BirdWatch (GBW) helps us discover how, when and why wildlife uses the areas around our homes.

Nearly nine million lists of garden birds have been recorded for GBW over the past quarter-of-a-century, averaging out at around seven thousand lists every week. Records have been received from over 56,000 different gardens across the UK.

### A mixed picture for finches

One of the biggest changes we have seen is the rise in **goldfinches**; they were the 20th most commonly recorded birds back in 1995, but their numbers have been increasing dramatically and they are now ranked eighth. It's likely that their increase is due to changing garden feeding practices, an example of the kind of major impact that feeding is having on our wildlife.

A less positive story is the decline of **greenfinches**, due to the effects of the disease trichomonosis, which started affecting finches in 2005. The peak months for **greenfinch** records are March and April, but in recent years **greenfinch** reports have dropped from

around 80% of gardens to around 40%. This has led to an increased emphasis on the importance of hygiene and awareness of disease when feeding garden birds, as trichomonosis can be transmitted at feeders and bird baths.

GBW trends also reveal that **chaffinch** numbers in gardens have started to decline, perhaps also due to trichomonosis. Over the past eight years, **chaffinches** have gone from being seen in around 80% of GBW gardens (during their peak months of February/March) to only around 60%. This pattern is also reflected in a downturn in the breeding population (see page 24).

### Song thrush declines a mystery

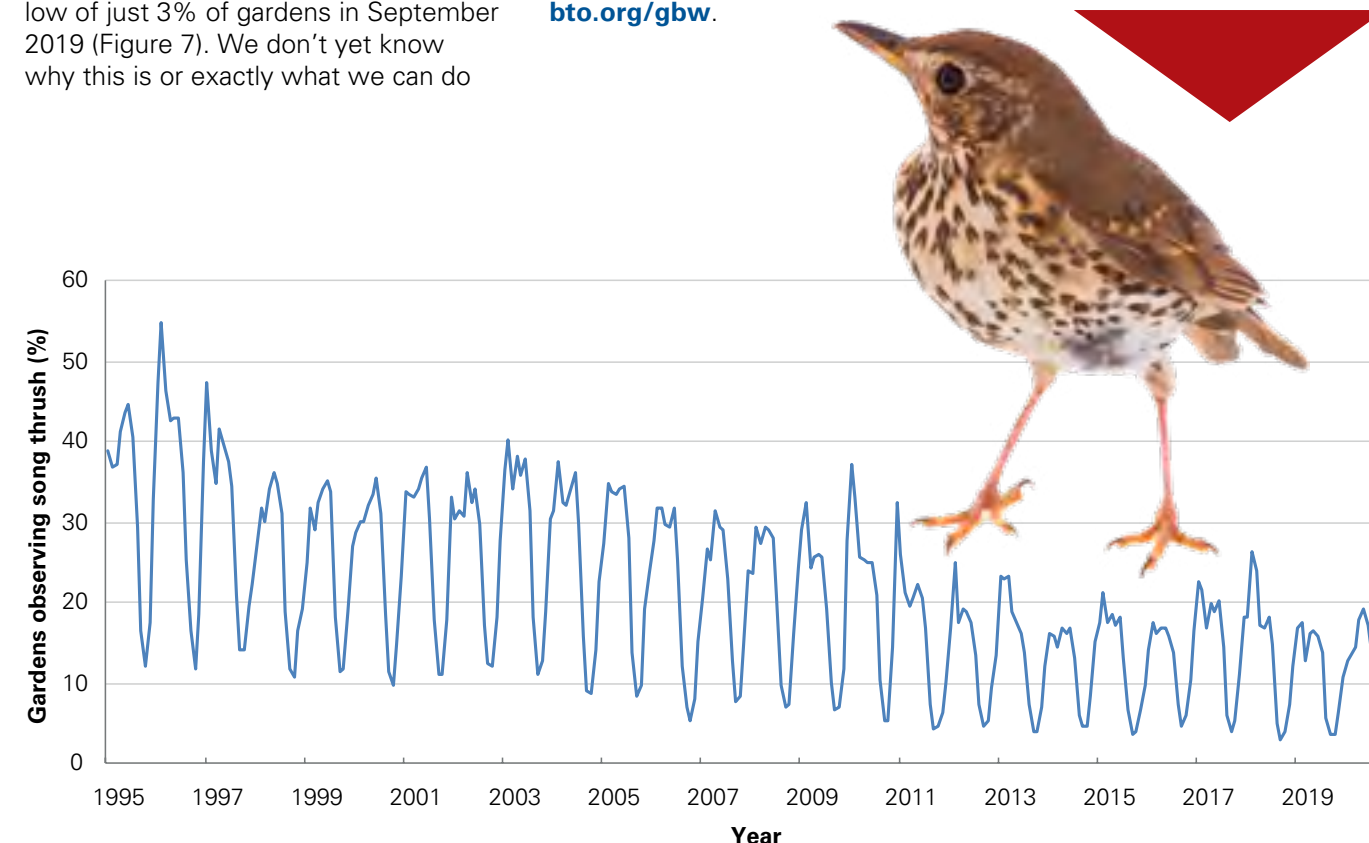
One of the more mysterious changes is the decline of **song thrushes**. In February 1996, **song thrushes** were recorded in over half of GBW gardens, but since then their numbers in

gardens have been gradually declining, despite remaining stable in the wider countryside according to the Breeding Bird Survey.

In 2020, they were recorded in under 15% of gardens in January, their peak month, and they were actually down to a low of just 3% of gardens in September 2019 (Figure 7). We don't yet know why this is or exactly what we can do

to provide what **song thrushes** need in gardens, but this pattern highlights the importance of garden-based surveys. We are very grateful to all the Garden BirdWatchers who have taken part in the survey over the last 25 years. If you would like to explore the full results, please visit the GBW website at: [bto.org/gbw](https://bto.org/gbw).

**Song thrushes  
were recorded  
in just 3% of  
gardens in  
September 2019**



**Figure 7:** The proportion of Garden BirdWatch weekly observations where **song thrushes** were recorded.

Goldfinch by Shutterstock



**Goldfinches  
are the 8th  
most commonly  
recorded garden  
birds, up  
from 20th**

Song thrush by Shutterstock





# New European breeding bird atlas

The European Bird Census Council (EBCC) published the *Breeding Bird Atlas 2: Distribution, Abundance and Change (EBBA2)* in late 2020.

This book is a landmark in European ornithology, and is the result of one of the most ambitious biodiversity mapping projects ever attempted. Fieldwork took place between 2013 and 2017, with 120,000 observers submitting records to coordination teams in 48 countries. The distribution and abundance of 596 breeding species has been mapped across over 5,000 50 x 50-km grid squares, and for 224 of Europe's more abundant species modelled probability of occurrence has been mapped at the scale of 10 x 10km.

and a massive distributional database to support research, will make *EBBA2* a pivotal tool for the conservation of European birds for years to come.

As well as informing research and conservation at a European scale, the maps in *EBBA2* provide valuable context to what we know about the status of birds in the UK. Here we share a few examples from the 1,352 maps featured in the book.

## The effects of climate change

Climate change is predicted to have significant and widespread impacts on biodiversity, and these impacts are already widely apparent in birds in the UK, as reviewed in *SUKB 2017*. Many of the change maps in *EBBA2* indicate that birds' ranges have been shifting northwards since the mid-1980s, which may be due to climate change.

In some cases, this has resulted in range expansion and population growth in the UK, such as for **Cetti's warblers**. However, for several large waterbirds, including **great white egrets**, **cattle egrets**, **little egrets**, **little bitterns** and **spoonbills**, this expansion may largely be due to better protection of both the birds themselves and the wetland habitats they require, rather than being purely down to climate change. **Cattle egrets** appear to be on the verge of a substantial colonisation of England, with 15 pairs reported to the Rare Breeding Birds Panel in 2017 (see page 30).

In addition, with birds in most of the continent being mapped for a second time, the new book enables us to look at change in the distribution of Europe's breeding birds over the last 30 years. During this period, there have been dramatic changes in land management, conservation efforts and, of course, the climate across the continent.

The up-to-date knowledge on the distribution of Europe's birds, combined with knowledge of change over 30 years

The range of Cetti's warblers has been shifting northwards



Cetti's warbler by David Tipling (rspb-images.com)

## Cattle egrets may be colonising England



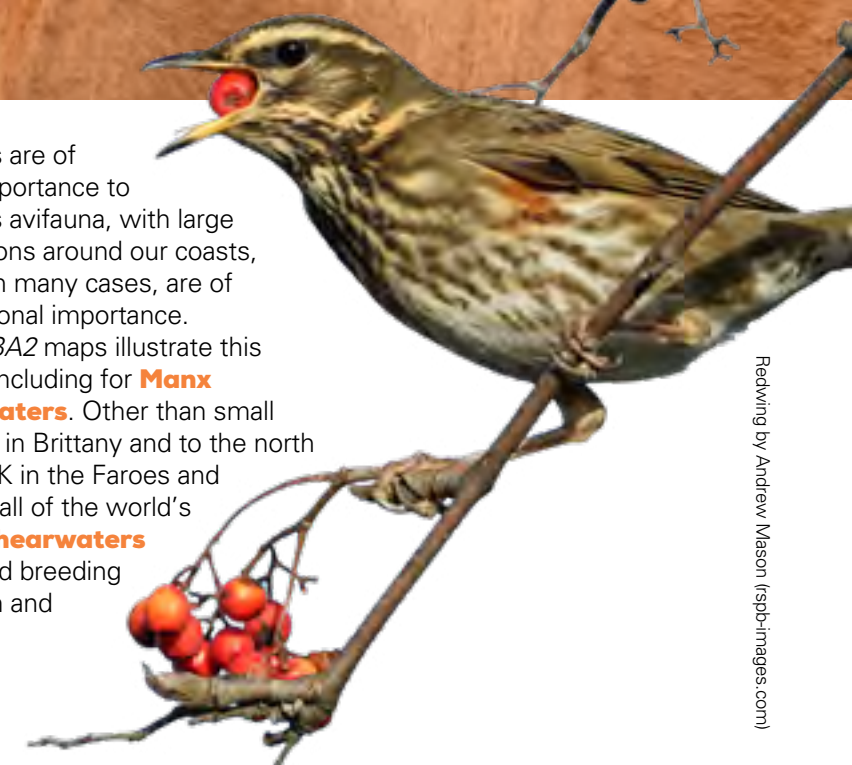
Cattle egret by Shutterstock

Of course, for some species the UK lies at the southern edge of their range, and climate-related northward shifts may see this range shrink or even disappear from the UK. One such example is the **redwing**, which is red-listed in the UK due to declines in its small breeding population here.

## Our coasts are vital for seabirds

Elsewhere in this report (pages 32–35) we review the current information on seabird trends, as we await the results from the Seabirds Count census (see page 77).

Seabirds are of great importance to the UK's avifauna, with large populations around our coasts, which, in many cases, are of international importance. The *EBBA2* maps illustrate this clearly, including for **Manx shearwaters**. Other than small colonies in Brittany and to the north of the UK in the Faroes and Iceland, all of the world's **Manx shearwaters** are found breeding in Britain and Ireland.



Redwing by Andrew Mason (rspb-images.com)



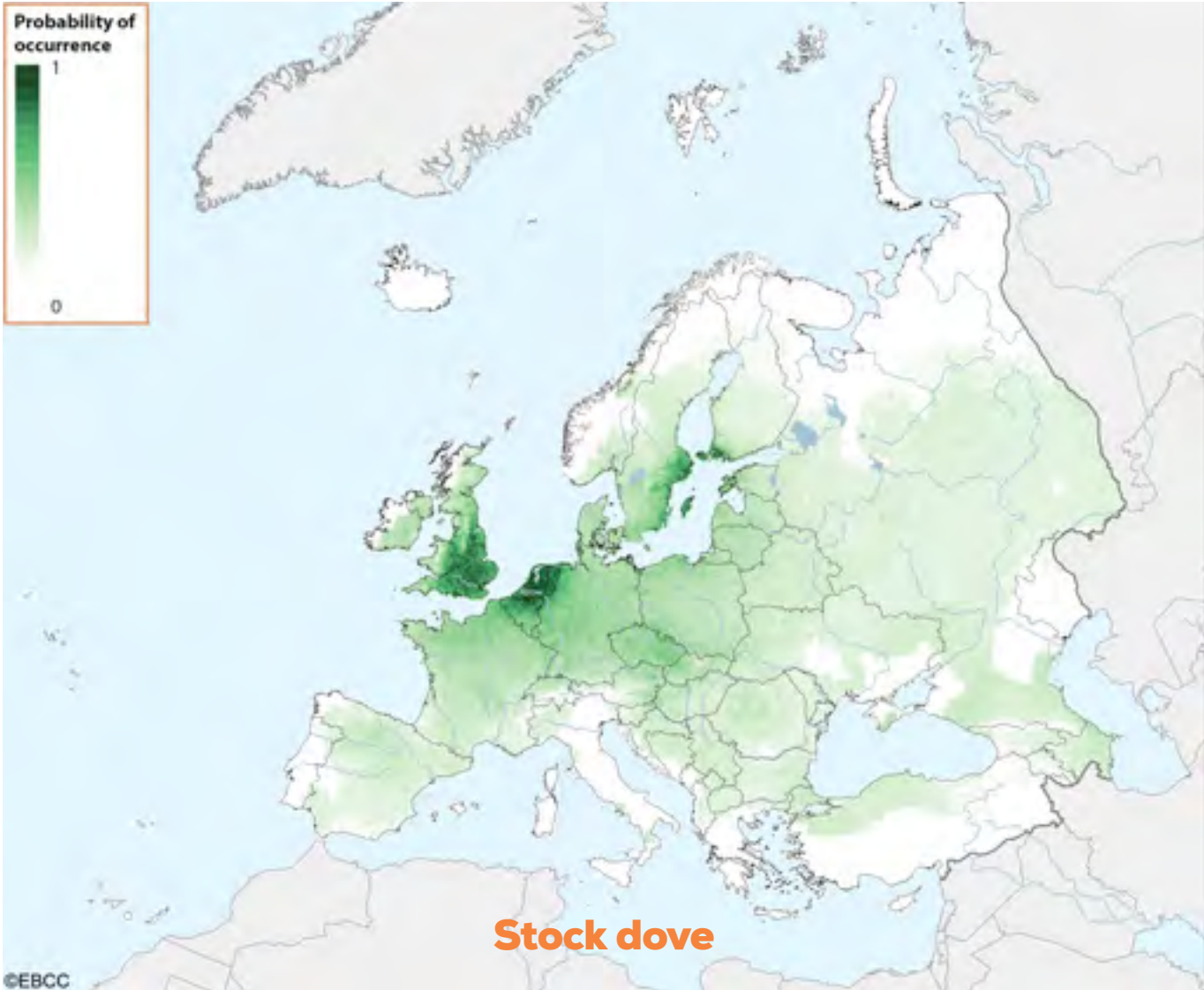


Figure 9: map showing stock dove occurrence.

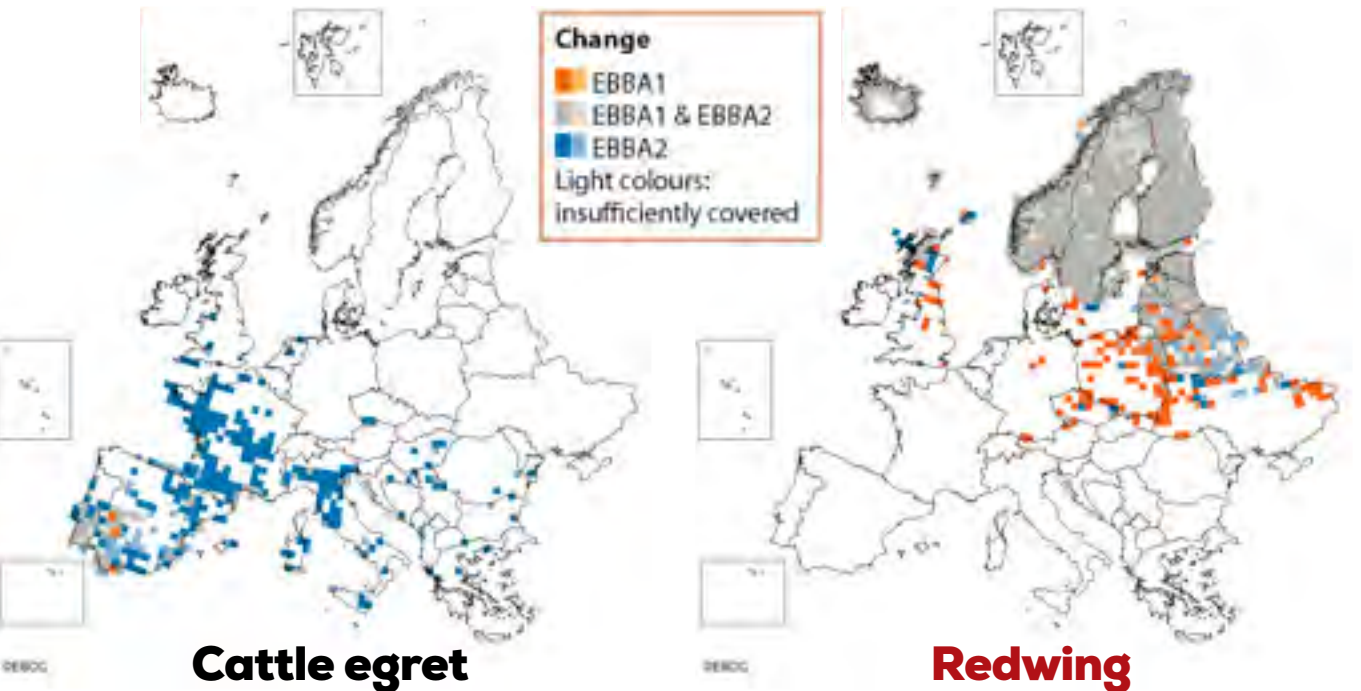


Figure 8: maps from EBBA2 illustrating the probable occurrence of various species.

### Maps of occurrence

By using structured counts from monitoring schemes, such as the UK's Breeding Bird Survey, combined with timed counts made in countries without such schemes, *EBBA2* has been able to produce modelled maps showing the probability of occurrence. While not strictly a measure of abundance, occurrence can be regarded as a good proxy, and provides fine-grain detail on variation across the continent. For example, it may surprise some readers to see how important the UK is for **stock doves**: relatively scarce across much of their range, they reach high densities in southern England, and the UK has at least a quarter of the world's population.

For more info on the *EBBA2*, please visit: [ebba2.info](http://ebba2.info). For the EBCC, see: [ebcc.info](http://ebcc.info).



Stock dove by Mike Lane (rspb-images.com)



# Common and widespread birds

2,766  
volunteers  
were involved  
in the Breeding  
Bird Survey

Grey wagtails  
are down  
43%  
since 1970



Long-term monitoring of our common and widespread breeding birds provides a gateway to understanding the overall health of the wider environment.

Building our knowledge of demographic parameters, such as productivity and survival, can help to reveal the mechanisms behind the changes our abundance monitoring reveals.

The latest Breeding Bird Survey (BBS) report provided UK population trends for 117 bird species. It drew on the experience of 2,766 volunteers, covering 4,005 1-km grid squares. By combining data from the BBS and its predecessor survey, the Common Bird Census (CBC), we are able to examine long-term UK population trends dating back to the 1960s.

Following the same approach we can also produce long-term trends going back to 1975 for birds of riparian habitats, such as **grey wagtails**, **dippers** and **common sandpipers**, using data from the Waterways Breeding Bird Survey (WBBS) and its predecessor survey, the Waterways Bird Survey (WBS).

Table 1 presents trends for 108 breeding bird species, along with notes about the sources of data. Where possible, trends are given for two periods: long-term (1970 to 2018) and 10-year (2008 to 2018).

### Monitoring survival

Ringers contribute survival data in three ways. Firstly, by catching and then re-catching birds at sites where mist-nets are used in a consistent

manner each year, as part of the Constant Effort Sites Scheme (CES). This method works best for common species, such as tits and warblers.

The second method focuses effort on a single species in a particular area as part of the Re-trapping Adults for Survival scheme (RAS). This method works best for birds that nest colonially or in boxes, such as **house sparrows** and **pied flycatchers**. In 2019, there were 190 RAS projects operating. Several schemes similar to RAS are run for wetland birds.

The final way of gathering data on survival is by members of the public reporting when they find dead ringed birds (on the [ring.ac](#) website). Where schemes use unique colour ring combinations, people can also report live re-sightings of the birds. This works best for larger species. The trends in survival rate presented in Table 1 use whichever of the data sources described above is most appropriate for that species.

The 687 registered nest recorders visited 38,222 nests of 183 species in 2018. They visited each nest more than once, and so were able to determine how many eggs or chicks were present and in many cases whether the nest was successful. By combining this information we can calculate trends in the number of fledglings per breeding attempt, giving us an insight into changing productivity. However, this does not incorporate knowledge of the number of breeding attempts made.

Grey wagtail by Steve Round (rsdp-images.com)

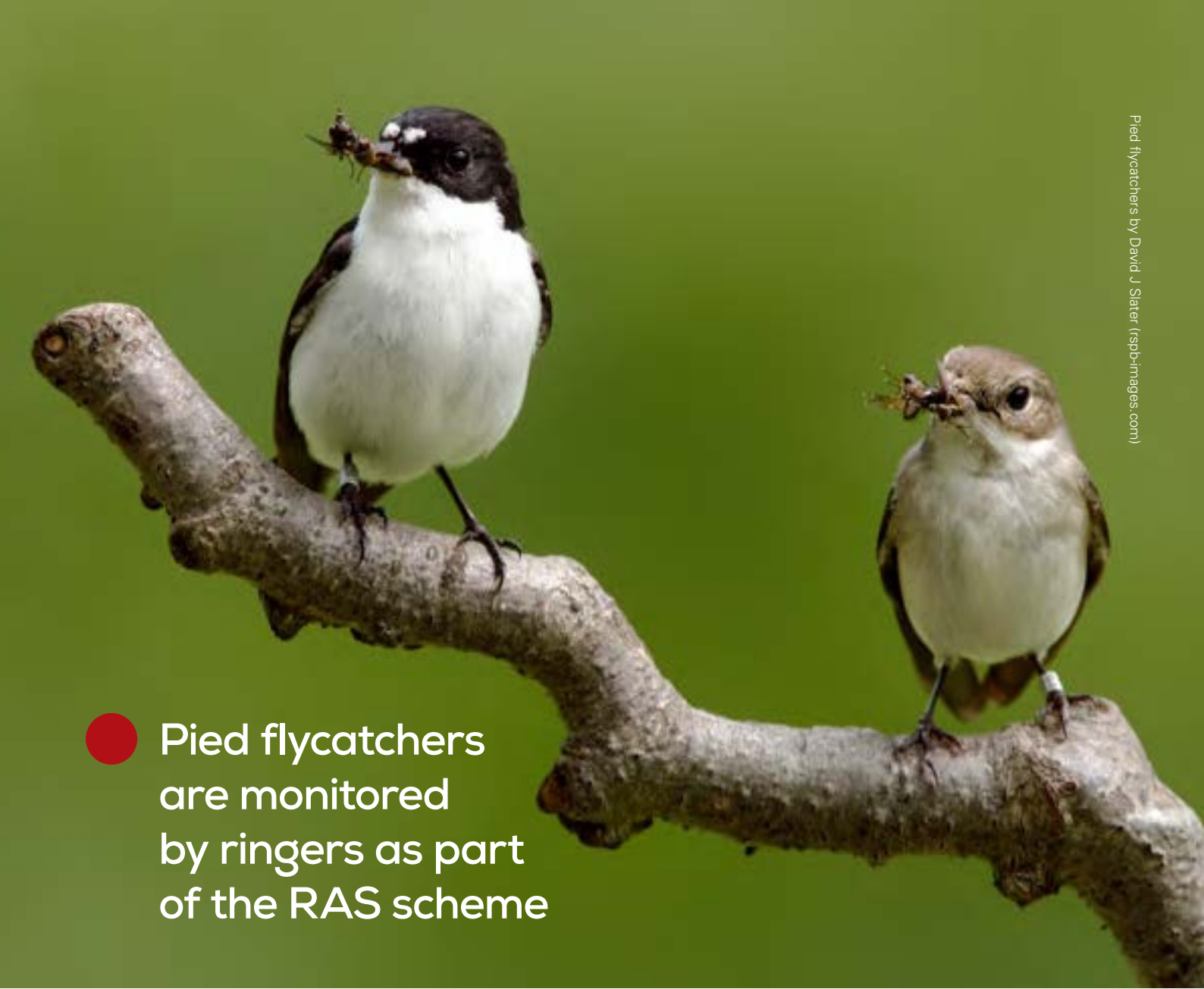
Table 1: numbers and trends in common and widespread breeding birds

Species (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend % (1970–2018) <sup>1</sup>	10-year trend % (2008–2018) <sup>1</sup>	Survival change % (2008–2018)	Productivity change % (2008–2018) <sup>1</sup>	Population estimate <sup>2</sup>
Red grouse		44			265,000
Red-legged partridge	-20	-7			72,500
Grey partridge	-93	-34			37,000
Pheasant <sup>3</sup>	78	1			2,350,000
Indian peafowl		-37			0
Canada goose		-9	2.1		54,500
Greylag goose		14			47,000
Mute swan	219	21	-1.7	-13.6	7,000
Egyptian goose		60			1,850
Shelduck <sup>3</sup>	110	-40			7,850
Mandarin duck		63			4,400
Gadwall		129			1,250–3,200
Mallard	86	-7	1.5		61,000–145,000
Teal		55			2,700–4,750
Tufted duck		-2			16,500–19,000
Goosander		12			4,800
Swift		-41	0.4		59,000
Cuckoo <sup>3</sup>	-53	13			18,000
Feral pigeon	0	-14			465,000
Stock dove <sup>3</sup>	127	39		5.4	320,000
Woodpigeon	121	-2	-2.3	-6.1	5,150,000
Turtle dove	-98	-82		87.5 <sup>8</sup>	3,600
Collared dove <sup>5</sup>	266	-22		30.4	810,000
Moorhen	-32	-28		-40.8	210,000
Coot	45	-19		-36.7	26,000
Little grebe		20		-9.4 <sup>8</sup>	3,650–7,300
Great crested grebe		-15		-42.6 <sup>8</sup>	4,900
Oystercatcher		-11	-0.4		95,500
Lapwing	-64	-33	-1.4		97,500
Golden plover		4			32,500–50,500
Curlew <sup>3</sup>	-64	-13	-1.3		58,500
Snipe	0	-9			66,500
Common sandpiper <sup>4</sup>	-51	-9			13,000
Redshank		-19			22,000
Common tern		80			11,000
Cormorant		-3	-0.2		8,900
Grey heron <sup>4</sup>	-12	-18	0.1	210.9 <sup>8</sup>	10,500
Little egret		64			1,100
Sparrowhawk <sup>5</sup>	52	-19	2.3	-2.3 <sup>8</sup>	30,500
Marsh harrier		36			590–695
Red kite		217			4,400
Buzzard <sup>3</sup>	509	18	0.5	-17	63,000–87,500
Barn owl		-31	-9.4	6.8	4,000–14,000
Tawny owl		-8	5.6	9.6	50,000
Little owl <sup>7</sup>	-69	-46	-9 <sup>8</sup>	42.6	3,600
Kingfisher <sup>4</sup>	-12	-8			3,850–6,400
Great spotted woodpecker	351	-1		10.6 <sup>8</sup>	130,000
Green woodpecker <sup>3</sup>	76	-21			45,500
Kestrel <sup>3</sup>	-48	-26	-3.1	-2.8	31,000
Hobby		-23		-15 <sup>8</sup>	2,050
Peregrine		-19		1.5	1,750
Ring-necked parakeet		114			12,000
Jay	10	7		-25.4 <sup>8</sup>	170,000
Magpie	93	0		-12.5 <sup>8</sup>	610,000
Jackdaw <sup>7</sup>	157	20	5.7 <sup>8</sup>	15.2	1,550,000
Rook		-13		62.5	980,000
Carriion crow <sup>3</sup>	96	1		-11.2	1,050,000
Hooded crow		6			285,000



Table 1 (continued): numbers and trends in common and widespread breeding birds

Species (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend % (1970–2018) <sup>1</sup>	10-year trend % (2008–2018) <sup>1</sup>	Survival change % (2008–2018)	Productivity change % (2008–2018) <sup>1</sup>	Population estimate <sup>2</sup>
Raven		21		-12	10,000
Coal tit	24	-5		10.5	660,000
Marsh tit	-75	-24		4.1	28,500
Willow tit	-94	-33		76.8 <sup>8</sup>	2,750
Blue tit <sup>6</sup>	21	-4	12.6	-7.7	3,400,000
Great tit <sup>6</sup>	79	-7	2.1	-4.4	2,350,000
Skylark <sup>3</sup>	-56	-7		-39.7	1,550,000
Sand martin <sup>4, 7</sup>	47	7	-4.1	52.8	70,500–225,000
Swallow <sup>7</sup>	-15	-31	-20.5 <sup>8</sup>	-10.7	705,000
House martin <sup>3, 7</sup>	-53	-21	-23.9 <sup>8</sup>		480,000
Cetti's warbler		101			3,450
Long-tailed tit <sup>3, 6</sup>	102	0	17.9	-33.7	380,000
Wood warbler		-22		-41.3	6,500
Willow warbler <sup>3, 6</sup>	-43	-3	-26.4	12.5	2,300,000
Chiffchaff <sup>6</sup>	104	39	-11.1	1.6	1,750,000
Sedge warbler <sup>6</sup>	-34	-24	-13.6	41	240,000
Reed warbler <sup>6</sup>	117	-4	-11.3	-18.9	130,000
Grasshopper warbler		-27			12,000
Blackcap <sup>5</sup>	335	69	-1.3	-5.7	1,650,000
Garden warbler <sup>6</sup>	-11	-12	-7.9	12.5	145,000
Lesser whitethroat <sup>6</sup>	28	11	-32.8 <sup>8</sup>		79,000
Whitethroat <sup>6</sup>	-13	1	-14.8	-6.7	1,100,000
Goldcrest <sup>3</sup>	-18	-8			790,000
Wren <sup>6</sup>	65	11	34.7	-0.6	11,000,000
Nuthatch	289	35		1.6	250,000
Treecreeper	-15	5		3.1	225,000
Starling <sup>3</sup>	-82	-24	-20.9 <sup>8</sup>	16.1	1,750,000
Ring ouzel		37		-23.7 <sup>8</sup>	7,300
Blackbird	-15	-2	-11.5	-4.4	5,050,000
Song thrush	-49	2	-0.5	-11.2	1,300,000
Mistle thrush	-57	-15		7.8	165,000
Spotted flycatcher	-88	-11		7.1	41,500
Robin <sup>6</sup>	51	0	0.6	-1.7	7,350,000
Nightingale		-11			5,550
Pied flycatcher <sup>7</sup>			2.6	-3.6	22,000–25,000
Redstart	24	8		-11.8	135,000
Whinchat		-14		-8.3	49,500
Stonechat <sup>7</sup>		-16	122.7 <sup>8</sup>	16.8	65,000
Wheatear <sup>7</sup>		-35	3.3 <sup>8</sup>	-29.1 <sup>8</sup>	170,000
Dipper <sup>4, 7</sup>	-23	-6	-5 <sup>8</sup>	-16.4	6,900–20,500
House sparrow <sup>5, 7</sup>	-65	8	-9.2	0	5,300,000
Tree sparrow <sup>3</sup>	-90	31		-2.6	245,000
Duncock <sup>6</sup>	-33	-4	-0.4	-0.4	2,500,000
Yellow wagtail	-68	24		0.3 <sup>8</sup>	19,500
Grey wagtail <sup>4</sup>	-43	-18		-15.3	37,000
Pied wagtail		-10		-6.6	505,000
Meadow pipit <sup>3</sup>	-37	8		-22.2	2,450,000
Tree pipit	-74	6		112.4	105,000
Chaffinch <sup>6</sup>	0	-27	-4.9	11.2	5,050,000
Bullfinch <sup>6</sup>	-38	21	-36	-3.5	265,000
Greenfinch	-64	-68	-4.9	62.4	785,000
Linnet <sup>3, 7</sup>	-56	6	-8.9 <sup>8</sup>	-2.3	560,000
Lesser redpoll <sup>3</sup>	-87	21			260,000
Crossbill		-28			26,000
Goldfinch <sup>3</sup>	197	58		-22.9	1,650,000
Siskin		-8			445,000
Corn bunting	-89	7		-13.9 <sup>8</sup>	11,000
Yellowhammer	-60	-11		-13.6	700,000
Reed bunting <sup>6</sup>	-28	5	28.7	-46.2	275,000



Pied flycatchers by David J Slater (rsph-images.com)

Pied flycatchers are monitored by ringers as part of the RAS scheme

Footnotes

- 1. Trends in **bold** are statistically significant at the 0.05 level.
  - 2. Population estimates are taken from the Avian Population Estimates Panel, Woodward *et al* (2020). Numbers are pairs, territories or units which are likely to be equivalent to breeding pairs.
  - 3. For most species, the long-term trends are based on the smoothed estimates of change between 1970 and 2018 in a combined CBC–BBS analysis, see [bto.org/birdtrends](https://bto.org/birdtrends). However, for species with evidence of marked differences in the populations monitored by the BBS and its predecessor the CBC, we use the CBC results to 1994 anchored to the BBS from 1994 to 2019. Hence, long-term trends for these species may not be representative of the UK population prior to 1994, due to the more limited geographical and habitat coverage of the CBC (mainly farmland and woodland sites in England).
  - 4. For five riverine species a smoothed trend for both time periods is calculated by combining the WBS and WBBS data as follows: 1975 to 2018 for **grey wagtails**, **dippers**, **kingfishers** and **common sandpipers**, and 1978 to 2018 for **sand martins**. For **grey herons**, the trend is based on the Heronries Census (1982 to 2018) (page 76).
  - 5. The long-term trends for three species cover shorter time periods, due to the later availability of reliable data. These are as follows: 1972 to 2018 for **collared doves**, 1975 to 2018 for **sparrowhawks**, and 1977 to 2018 for **house sparrows**.
- More details on the both BBS and WBBS can be seen in the latest *Breeding Bird Survey 2019* report, found at: [bto.org/bbs-report](https://bto.org/bbs-report).
- 6, 7. The ringing trends based on recoveries represent true survival. Those from CES and RAS include an element of movement away from the ringing sites, so are likely to be a little lower. Most trends for survival come from reports of birds found dead, but some come from recaptures on CES sites (6), or from recaptures in RAS projects (7). The trends from RAS are based on a small number of projects, so may not be entirely representative of the national trends.
  - 8. Trends based on a small sample size (<20 CES sites, <10 RAS projects, <20 NRS records per year).



● The recent decline of capercaillie means they still require active conservation work



Capercaillie by Ben Andrew (rspb-images.com)

# Scarce and rare breeding birds

Many of the UK's breeding bird species are too rare, or too restricted to small regions or patches of habitat, to be monitored adequately by the random sampling approach used by the Breeding Bird Survey (BBS). Instead, most of these species are monitored by the Rare Breeding Birds Panel (RBBP).

The RBBP is an independent body, established in 1972, for the purpose of maintaining a secure archive of data on the UK's rarest breeding birds. However, there are a few breeding species, such as the **ptarmigan**, **dunlin** and **rock pipit**, which fall into a gap between schemes and for which our knowledge is worryingly incomplete.

The RBBP collates information from a wide range of sources, but relies mainly on reports from birdwatchers submitted through the county bird recording network. Other data sources include reserves monitoring, returns from licenced activities such as bird ringing, and the work of dedicated experts such as those in raptor study groups.

For many species, particularly those found mainly in remote and upland areas away from well-populated areas with lots of birdwatchers, coverage by RBBP reporting is very incomplete and it is not possible to produce trends (eg for **greenshanks**). Other species have only recently been added to the list of species reported upon (eg the **turtle dove**), and so trends are not yet available through the RBBP. The RBBP also reports on populations of rare, non-native species. More information on this can be found at: [rbbp.org.uk](http://rbbp.org.uk).

## Species of high conservation concern

RBBP coverage is insufficient to direct conservation for some species of concern, such as the **capercaillie**, **hen harrier** and **dotterel**. As a result, these species receive periodic UK surveys, many under the umbrella of the Statutory Conservation Agency and RSPB Annual Breeding Bird Scheme (SCARABBS). **Willow tits** were surveyed for the first time in 2019–20 (see page 14), and we hope to run the first UK **turtle dove** survey in 2021. The increasing scarcity of both these rapidly declining species means that they are recorded on fewer BBS squares annually, and more robust data on their numbers and distribution are required.

## Rare birds on the up

In contrast to the large declines in some of the UK's most widespread birds, such as **skylarks**, **house sparrows** and **starlings**, that have led to the net loss

**13**  
species have  
colonised the UK  
since 1973



**814%**  
increase in cirl  
buntings thanks  
to targeted  
conservation



Cirl bunting by Andy Hay (rspb-images.com)



390% increase  
in bittern  
numbers  
since 1973

of around 19 million pairs of breeding birds since 1966 (see page 11), many of the UK's rarer breeding birds have increased over the same period. Thirteen species have colonised the UK. The expanding European ranges of some others already recorded by the RBBP, such as the **bee-eater**, indicate that they too may soon become established as regular breeders.

A further 24 RBBP species have shown population increases in excess of 50% over the long term. In some cases, increases can be attributed to targeted conservation efforts.

Wrynecks no  
longer breed  
in the UK

**Bitterns** have recovered from a low point of just 11 booming males in 1997, owing to research which then informed an ambitious programme of habitat restoration and creation, enabling the population to recover to a level not seen for over 200 years.

Similarly, increases in the number of **cranes**, **stone-curlews**, **corncrakes**, **red kites**, **white-tailed eagles** and **girl buntings** have resulted from targeted action, such as reintroduction projects, habitat creation and land management supported through agri-environment schemes.

It is worth noting, however, that despite these recoveries, most of these species remain dependent on ongoing conservation support and are found at levels far lower than before historic population declines.

Increases in both the long and short term are obvious for most of our birds of prey. A release from historic levels of persecution and the impacts of organochloride pesticides has allowed raptors such as **ospreys**, **peregrines** and **marsh harriers** to recover. However, **hen harriers** remain a notable exception, with a lack of recovery, and indeed a short-term decline, caused by illegal persecution.

Some species are likely to owe recent population increases to climate change. Alongside colonising species, such as the **black-winged stilt** and **spoonbill**, long-term increases in species that were historically confined to the south of the UK, such as the **Dartford warbler** and **hobby**, may be driven by a warming climate.

### Rare species at risk

However, these increases must be balanced against declines and high levels of threat for other rare breeding bird species. Eight species have shown declines in excess of 50% over the long-term period (and a further two RBBP species, the **turtle dove** and **willow tit**, for which BBS trends are still produced, can be added to this list; see pages 23–24).

In addition, some species not listed in the table have disappeared from the UK entirely as breeding species in recent years. **Wrynecks** were classified as 'former breeders' in the UK by the *Birds*

of Conservation Concern 4 assessment in 2015 (see *SUKB 2016*). **Fieldfares** and **golden orioles** are very close to going the same way, with no confirmed breeding of the latter species since 2009.

Just as climate change may be supporting colonisation and increases in rare breeding birds in southern parts of the UK, it has been identified as increasing the likelihood of extinction for breeding species with a northerly distribution, for which the UK lies at the trailing edge of the European breeding range. These include declining birds, such as **dotterels** and **Arctic skuas** (trends in the latter are presented in the seabird section on pages 32–35).

### 10-year trends

This report is the first time we have presented 10-year trends for rare breeding species. While in most cases these trends are consistent with those reported over the longer time period, there are some exceptions.

The apparent upturn in **common scoter** breeding numbers is very likely to be an artefact of better annual monitoring in recent years, due to the high conservation interest in this threatened species.

Other apparent trends may be just short-term fluctuations due to random chance, which can occur in extremely rare species for which the loss or gain of just a few pairs can lead to a proportionally large percentage change.

The recent downturn in **Montagu's harriers** is a worrying development for this, the rarest of our breeding raptors, while the fall in **Dartford warbler** numbers is likely related to hard winters earlier in the 2010s temporarily halting the increase and range expansion of this species.

In other instances, we've seen recent population increases level off for conservation successes such as **stone-curlews**, **marsh harriers** and **corncrakes** (recent **corncrake** trends are discussed further on page 56).

● Cranes have increased  
following concerted  
conservation action



Table 2: numbers and trends in rare breeding birds

Species¹ (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend² %	10-year trend² %	Population estimate²
Capercaillie	-49 1992/93/94–2015/16	-43 2003/04–2015/16	1,100 2015/16
Quail	-33 1986/90–2014/18	-32	350
Whooper swan	Colonisation	232	28
Garganey	75 1980/84–2014/18	41	105
Shoveler			1,100
Wigeon			200
Pintail	66	5	27
Pochard	183 1986/90–2014/18	35	720
Common scoter	-68	93	52 2007
Goldeneye	1,420		200 2006–10
Red-breasted merganser			1,650 2008–11
Corncrake	121 1993–2014/18	-8	1,100
Spotted crane	155	-12	27
Crane	Colonisation	240	31
Slavonian grebe	-55	-32	28
Black-necked grebe	232	2	55
Stone-curlew	379	7	365
Black-winged stilt	Colonisation	350	3
Avocet	1,295	41	1,950
Little ringed plover	1 1996/2000–2014/18	-20	1,250 2007
Dotterel	-57 1987/88–2011	-43 1999–2011	425 2011
Whimbrel	>-50 1995–2009		310 2009
Black-tailed godwit	-23	-23	53
Ruff	-55 1986/90–2014/18	15	13
Purple sandpiper	Colonisation	0	1
Red-necked phalarope	253	165	64
Green sandpiper	Colonisation	-25	2
Wood sandpiper	632	89	30
Greenshank			1,100 1995
Mediterranean gull	Colonisation	264	1,200
Red-throated diver		38 1994–2006	1,250 2006
Black-throated diver	16 1985–2006	16 1994–2006	215 2006
Spoonbill	Colonisation	1,817	29 2017
Bittern	390	213	191 2017
Little bittern	Colonisation	1,900	5
Cattle egret	Colonisation	Colonisation	10–15 2017
Great white egret	Colonisation	Colonisation	8–12 2017
Little egret	Colonisation	120	1,100
Osprey	1,451	34	240
Honey-buzzard	716	5	33–69 2000
Golden eagle	16 1982/83–2015	15 2003–2015	510 2015
Goshawk	2,450	64	620
Marsh harrier	3,975	3	590–695
Hen harrier	2 1988/89–2016	-27 2004–2016	545 2016
Montagu’s harrier	83	-54	8
White-tailed eagle	Reintroduction	196	122 2017
Long-eared owl			1,800–6,000 2007–11
Short-eared owl			620–2,200 2007–11
Lesser spotted woodpecker	-83 1970–2015		600–1,000 2015
Merlin	94 1983/84–2008	-14 1993/94–2008	1,150 2008
Hobby	568	-20	2,050 2016
Peregrine	262 1971–2014	38 2002–2014	1,750 2014
Red-backed shrike	-93	7	3
Chough	-1 1982–2014	3 2002–2014	335 2014–15
Bearded tit	33	18	695
Woodlark	264 1975/79–2016/18	-34 2004/08–2016/18	2,300 2016
Marsh warbler	-84	13	8
Savi’s warbler	-51	38	5
Dartford warbler	244	-29	2,200 2017
Redwing	11	83	24
Black redstart	-20	61	58
Hawfinch			500–1,000 2011
Common redpoll	Colonisation	133	12
Parrot crossbill			65 2008
Snow bunting			60 2011
Cirl bunting	814 1989–2016	55 2003–2016	1,100 2016

Hobby by Mark Sisson (rspb-images.com)



Footnotes:

1. We present population estimates and, where possible, trends for all species currently regarded as a scarce or rare breeding bird in the UK by the Rare Breeding Birds Panel with an average breeding population of at least one pair. The exceptions are **turtle doves** and **willow tits** which are included on pages 23–24, and three rare breeding seabirds – **Arctic skuas**, **roseate terns** and **little terns** – which are presented on page 35.
2. For species assessed as being well-monitored by the RBBP, trends are the change between five year means at the appropriate intervals eg 10-year trends are between the means for 2004–08 and (eg 2014–18). Long-term trends start in 1973 when the RBBP was formed (eg from the mean for 1973–77), but for many species the trend period is shorter as RBBP monitoring started later. Trend periods are given for species when they vary from the standard periods. For those species for which periodic surveys give better trend estimates, trend periods vary and are given in the table. RBBP trends for **common scoters**, **spotted crakes** and **Dartford warblers** have been given despite SCARABBS coverage, as they are believed to be robust and better fit the desired trend periods.

Species that have colonised or been reintroduced to the UK since the start of either trend period cannot have percentage figures calculated, so we have just noted that colonisation/reintroduction has occurred.

3. Population estimates are taken from the Avian Population Estimates Panel, Woodward *et al* (2020). Most estimates are based on the means of RBBP or annual survey totals from the five years 2013–17, or from single year surveys or other sources. For a few well-monitored species with increasing populations, Woodward *et al* used the most recently available year of data at the time of publication (2017) as five-year means would underestimate numbers. Numbers are pairs, territories or units which are likely to be equivalent to breeding pairs, but for the RBBP, numbers are based on possible breeding attempts and include, for example, single territorial male birds and so do not necessarily equate to successful breeding attempts. The estimate for **capercaillie** is individuals counted in the winter.



Dartford warbler by Andrew Mason (rspb-images.com)

Hobby numbers  
have increased

568%  
since 1973



Dartford  
warblers are up

244%  
since 1973 but  
hard winters  
have halted  
this increase





# Seabirds

A selection of breeding seabird colonies around the UK have been monitored annually since 1986 under the Seabird Monitoring Programme (SMP).

The seabird indicator declined by **28%** between 1999 and 2018

The SMP is co-ordinated by the JNCC, in partnership with 18 other organisations. Data on population numbers, breeding success, survival and diet are collected, mostly by volunteers, at 500 seabird colonies around the UK's coastline, providing insight into the state of Britain and Ireland's breeding seabirds.

This makes the SMP an extremely important tool for understanding the drivers of change in the internationally important breeding populations of seabirds found in the UK. Data collected from these annual surveys are also used for reporting on international conservation agreements. The latest SMP report can be found at [jncc.gov.uk/our-work/smp-report-1986-2018/](https://jncc.gov.uk/our-work/smp-report-1986-2018/).

In addition to the SMP, there are also periodic seabird censuses. The fourth of these, Seabirds Count, was due to complete survey work in 2020, but this has been delayed due to Covid-19.

As well as giving us UK-wide population estimates, these periodic censuses help test the accuracy of SMP trends and understand spatial variation in trends, in particular between inland and coastal populations of the same species.

## The UK seabird indicator

The seabird indicator uses data from the SMP to produce an average trend in abundance for 13 of the 25 seabird species breeding in the UK. The indicator shows that since the late 1990s, breeding numbers of seabird species have declined by 28%, on average. This decline appears to have stabilised during the last five years.

## Struggling seabirds

While the indicator shows an average downward trend of 28%, some species have declined more substantially. For example, the breeding abundance of **Arctic skuas** has decreased by 80% in the long term (1986 to 2018), and 30% in the last 10 years (see Table 3).

A long-term decline of 65% in **kittiwake** numbers could be partly responsible for the observed decline of **Arctic skuas**, as they are one of the birds these skuas steal food from.

Other notable declines have been seen in **lesser black-backed gulls**, **herring gulls** and **fulmars**, whose populations have all decreased by over a third in the long term. It is important to note the observed decrease in gull populations is for natural-nesting birds only, and roof-nesting populations may be faring better.

## Seabirds on the up

Although a number of the UK's breeding seabirds are in decline, some have shown long-term increases in their populations, including **black-headed gulls**, **razorbills** and **common guillemots**. **Common guillemots** are our most numerous seabirds, with an estimated population of 950,000 pairs breeding around the UK coastline.

**Northern gannets** also continue to increase, and new colonies are being formed, such as at Marwick Head in Orkney.

Several tern species have also shown short-term increases. This is particularly welcome for **roseate terns** as it indicates that conservation action is benefiting this species, which has seen extensive



Kittiwakes by Genevieve Leaper (rsph-images.com)

Herring gull by Mark Sisson (rsph-images.com)

**Kittiwakes have declined by 65%**



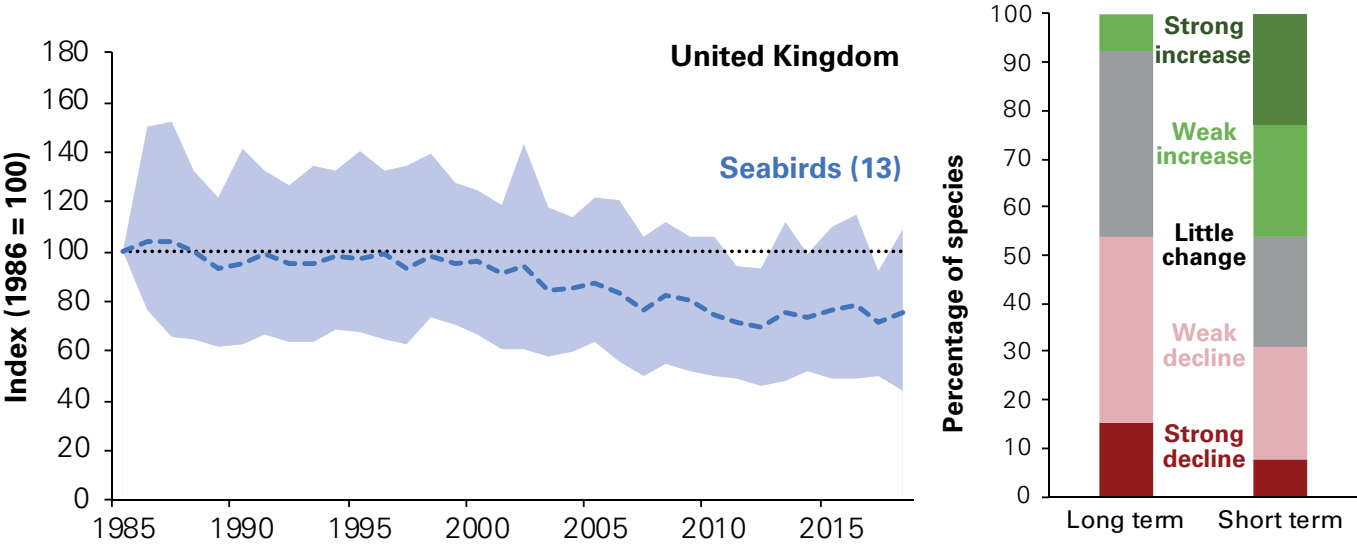


Figure 10: UK wild bird indicator for breeding seabirds in the UK, 1986 to 2019.

Footnotes

1. Figure 10 shows the unsmoothed (dashed) trend in the average annual abundance of 13 of the 25 seabird species breeding in the UK. The long-term assessment period is 1986 to 2018 and the short-term 2013 to 2018. Please see the notes on page 9 for a full explanation of the bar chart (above). For details of species' trends in each indicator, download the report: [gov.uk/government/statistics/wild-bird-populations-in-the-uk](https://gov.uk/government/statistics/wild-bird-populations-in-the-uk) Source: BTO, Defra, RSPB and the SMP (co-ordinated by JNCC).

declines over the long term, despite the overall increase in the Irish Sea population. Although there have been recent gains, the current UK population estimate of 120 pairs is just one-third of that in 1986, and just one-tenth of the number recorded in the first seabird census in 1970.



Roseate terns by Shutterstock

Gannets have formed a new colony at Marwick Head, in Orkney



Gannets by Ben Andrew (rspbimages.com)

Table 3: numbers and trends in breeding seabirds

Species <sup>1</sup> (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend % (1986–2018)	10-year trend % (2008–2018)	Population estimate <sup>1</sup>
<b>Fulmar</b>	-38	-18	350,000 <sup>2</sup>
<b>Gannet</b>	93 <sup>3</sup>	18 <sup>4</sup>	293,161 <sup>5</sup>
<b>Cormorant</b>	5	-16	8,900
<b>Shag</b>	-37	0	17,500 <sup>2</sup>
<b>Arctic skua</b>	-80	-32	785 <sup>2</sup>
<b>Kittiwake</b>	-65	-23	205,000 <sup>2</sup>
<b>Black-headed gull</b>	17	10	140,000
<b>Little tern</b>	-40	-25	1,450
<b>Sandwich tern</b>	4	35	14,000 <sup>2</sup>
<b>Common tern</b>	6	31	11,000 <sup>2</sup>
<b>Roseate tern</b>	-70	49	120 <sup>6</sup>
<b>Arctic tern</b>	-11	-9	53,500 <sup>2</sup>
<b>Common guillemot</b>	32	8	950,000
<b>Razorbill</b>	88	36	165,000 <sup>2</sup>

Since 2008 roseate terns have increased by **49%** showing that conservation action is working

Footnotes

- Population estimates are taken from the Avian Population Estimates Panel (APEP4; Woodward *et al* 2020). Population estimates are breeding pairs, territories or units which are likely to be equivalent to breeding pairs. Seabird population estimates were not updated for APEP4 as the latest census (Seabirds Count) results are not yet available. Seabirds Count 2015–2020 is the fourth national census, but the final survey year will now be 2021.
- Where the SMP produces robust trends, these were used to extrapolate Seabird 2000 estimates to 2016. For other species, population estimates are from APEP3 (Musgrove *et al* 2013). Exceptions are given below.
- Change between censuses in 1984–85 and 2013–15.
- Change between censuses in 2003–04 and 2013–15.
- Census 2013–2015 estimate.
- SMP report 2018: [jncc.gov.uk/our-work/smp-report-1986-2018/](https://jncc.gov.uk/our-work/smp-report-1986-2018/)



# Wintering waterbirds

Many of the UK's wintering waterbirds make long-distance migrations along the East Atlantic Flyway. During the last two decades, climate change has led to winter range shifts in a number of waterbird species, affecting wintering numbers in the UK.

**Greenland white-fronted geese winter exclusively in Britain and Ireland**

The BTO/RSPB/JNCC Wetland Bird Survey (WeBS), Non-estuarine Waterbird Survey (NEWS), and the WWT/JNCC/NatureScot Goose & Swan Monitoring Programme (GSMP) allow us to systematically monitor population changes across the UK's wintering waterbirds, for example, detecting climate-influenced range shifts. We can then use this information to support species, habitat and site conservation measures.

## The UK wintering waterbird indicator

The wintering waterbird indicator uses these monitoring data to assess the yearly change in the abundance of wintering waterbirds across the UK. The UK holds internationally important numbers of wintering waders, wildfowl and other waterbirds, and the indicator shows how their abundance in the UK has changed since 1975.

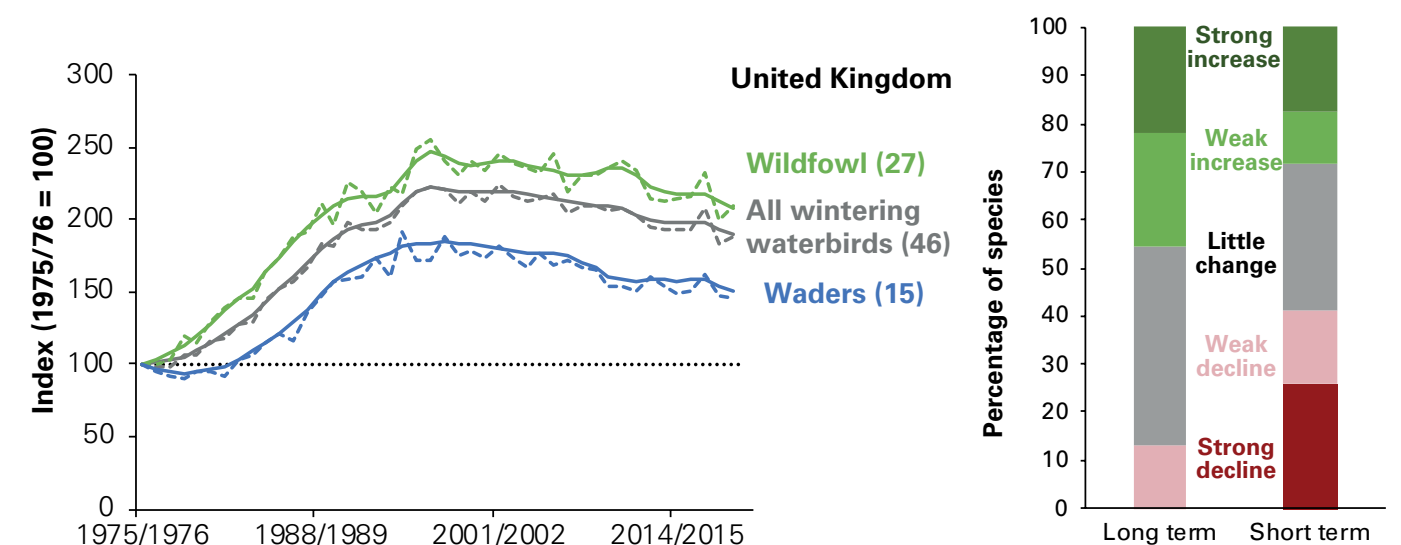


Figure 11: UK wild bird indicator for wintering waterbirds

### Footnotes

- Figure 11 shows the unsmoothed trend (dashed line) and smoothed trend (solid line). Data from surveys of wintering waterbirds are based on full counts on wetland and coastal sites of markedly varying size. This means that standard indicator bootstrapping methods cannot be applied and the trend is presented without confidence intervals.
- The long-term assessment period is 1975 to 2017 and the short-term period is 2012 to 2017. Please see the notes on page 9 for a full explanation of the bar chart (above).
- For details of species' trends in each indicator, download the report: [gov.uk/government/statistics/wild-bird-populations-in-the-uk](https://gov.uk/government/statistics/wild-bird-populations-in-the-uk). Source: BTO, DEFRA, JNCC, RSPB and WWT.

The indicator shows a gradual overall increase in numbers of all wintering waterbirds from the mid-1970s until the mid-90s, with a long-term increase of 94% (Figure 11). However, since the mid-90s there has been a gradual decline, which is particularly noticeable in wildfowl, with a short-term decrease of 6% between the 2012/13 and 2017/18 winters.

## Trends in wintering wetland birds in the UK

Wetland Bird Survey (WeBS) trends across 52 wintering waterbird populations indicate that 42% of these populations have declined over both the long-term (25-year) and short-term (10-year) periods, with 40% of populations increasing over the last 10 years.

Wildfowl of particular concern include **Greenland white-fronted geese** and **pochards**. **Greenland white-fronted**

**geese** winter exclusively in Britain and Ireland, and this restricted wintering range, along with the observed decline in their overwintering numbers, means this taxon is assessed as Critically Endangered in the UK. As a result, of all the UK's geese, they are of the highest conservation concern. Encouragingly, numbers seem to have stabilised recently.

**Pochards** are threatened with extinction globally (they are classed as Vulnerable by the IUCN), and the decrease in their UK overwintering numbers may be a symptom of a wider global population decline. In contrast, **goosander** populations have increased by 20% in the last 10 years, and this is thought to be related to an expansion of their breeding range in the UK, with most British birds wintering within 150km of their breeding sites.



Greenland white-fronted geese by Mark Hamblin (rspb-images.com)



Pochard by Shutterstock



Table 4: numbers and trends in wintering waterbirds

Species (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend % (1992/93–2017/18) <sup>2</sup>	10-year trend % (2007/08–2017/18) <sup>2</sup>	Population estimate <sup>1</sup>
Dark-bellied brent goose	-23	5	98,500
Svalbard light-bellied brent goose	61	-20	3,400
Canadian light bellied brent goose	61	7	31,000
Canada goose	64	13	165,000
Naturalised barnacle goose	407	129	4,700
Greenland barnacle goose	126	24	56,000
Svalbard barnacle goose	206	51	43,500
British/Irish greylag goose	163	27	140,000
Icelandic greylag goose	-6	1	91,000
Pink-footed goose	124	67	510,000
Greenland white-fronted goose	-29	-11	11,500
European white-fronted goose	-70	-14	2,100
Mute swan	31	-2	52,500
Bewick's swan	-83	-71	4,350
Whooper swan	210	43	19,500
Egyptian goose		122	5,600
Shelduck	-29	-13	51,000
Mandarin duck		54	13,500
Shoveler	68	13	19,500
Gadwall	130	16	31,000
Wigeon	12	-3	450,000
Mallard	-35	-12	675,000
Pintail	-24	-29	20,000
Teal	34	14	435,000
Pochard	-69	-42	29,000
Tufted duck	-4	0	140,000
Scaup	-37	-59	6,400
Eider <sup>3</sup>	-26	-11	81,000
Goldeneye	-62	-31	21,000
Goosander	-4	20	14,500
Red-breasted merganser	-42	-22	11,000
Little grebe	94	-1	15,500
Great crested grebe	-3	-15	18,000
Little egret		39	11,500
Cormorant	56	25	64,500
Moorhen		-26	305,000
Coot	-7	-20	205,000
Oystercatcher	-23	-12	305,000
Avocet	326	24	8,700
Lapwing	-34	-20	635,000
Golden plover	2	-31	410,000
Grey plover	-36	-20	33,500
Ringed plover	-52	-23	42,500
Curlew	-33	-21	125,000
Bar-tailed godwit	-17	8	53,500
Black-tailed godwit	228	31	41,000
Turnstone	-43	-25	43,000
Knot	-20	-10	265,000
Sanderling	36	-7	20,500
Dunlin	-41	0	350,000
Purple sandpiper	-50	-6	9,900
Redshank	-17	-9	100,000

**Footnotes**

1. Population estimates are of numbers of wintering individuals, taken from Avian Population Estimates Panel 4 (Woodward *et al* 2020).

2. Trends are percentage changes of smoothed population index values for the most abundant waterbirds in the UK. Note, it is customary to truncate the final year when reporting smoothed trends, so whilst data from 2018/19 have been used in creating the smoothed index values, the trend period assessed and reported is until 2017/18. Trends use WeBS data except for **pink-footed geese**, **Greenland white-fronted geese**, **Icelandic greylag geese**, **Greenland barnacle geese**, **Svalbard barnacle geese** and **Canadian light-bellied brent geese**, for which dedicated censuses are undertaken.

3. **Eider** trends exclude birds on Shetland (of the *faeroeensis* race).

## WeBS Alerts: waterbird population changes on protected sites

The Special Protection Area (SPA) network protects bird species throughout the UK. The *Wetland Bird Survey (WeBS) Alerts* report shows how waterbirds are doing at individual protected sites.

The SPA network is underpinned and augmented by Sites of Special Scientific Interest (SSSIs) in Great Britain and Areas of Special Scientific Interest (ASSIs) in Northern Ireland. Sites important for the non-breeding waterbirds that they support are monitored as part of WeBS, with annual data from these sites feeding into national waterbird totals and trends.

Annual WeBS results are useful for site management, but further information is helpful to give wider context when interpreting trends in local data. The *WeBS Alerts* report helps check on how waterbirds are doing at a protected site through a publicly accessible portal, part of the *WeBS Report Online*. This portal contains assessments of the smoothed trends of all waterbird species present on each of the 84 SPAs, 206 SSSIs and 18 ASSIs over five-year, 10-year and long-term (up to 25-year) periods, and since the baseline period (typically that at the time of designation) used for individual sites.

For the waterbirds for which a site is designated, these assessments can trigger an “Alert”, designed to draw attention to a local population decline in a species. Medium Alerts are triggered for declines of 25% or more and High Alerts for declines of 50% or more. Further assessments are also made at a country level and for a SPA suite (ie all the SPAs on which the species is a feature).

In the latest report, a total of 19,539 species assessments were made for the four time periods, triggering 2,530 Alerts at site, country or SPA suite levels.

The report also compares site trends to regional and national trends. If the decline at the site is in keeping with the

wider trend, it is likely due to broad-scale factors. If a decline at the site is not in keeping with patterns at greater spatial scales, the report identifies site-specific pressures, such as changes in habitat extent or quality due, for example, to built developments, recreational pressures or changes in water quality.

The *WeBS Alerts* provide an important tool for understanding whether our protected sites are effective at providing a safe haven for many of the 13.1 million waterbirds that use UK wetlands each winter.

13.1 million waterbirds use UK wetlands each winter



Shelduck by Ben Hall (rspb-images.com)





**Curlews could  
be extinct as  
breeding birds in  
Wales in  
13  
years**



**House sparrows  
are increasing  
in Wales in  
contrast to a  
long-term decline  
in England**



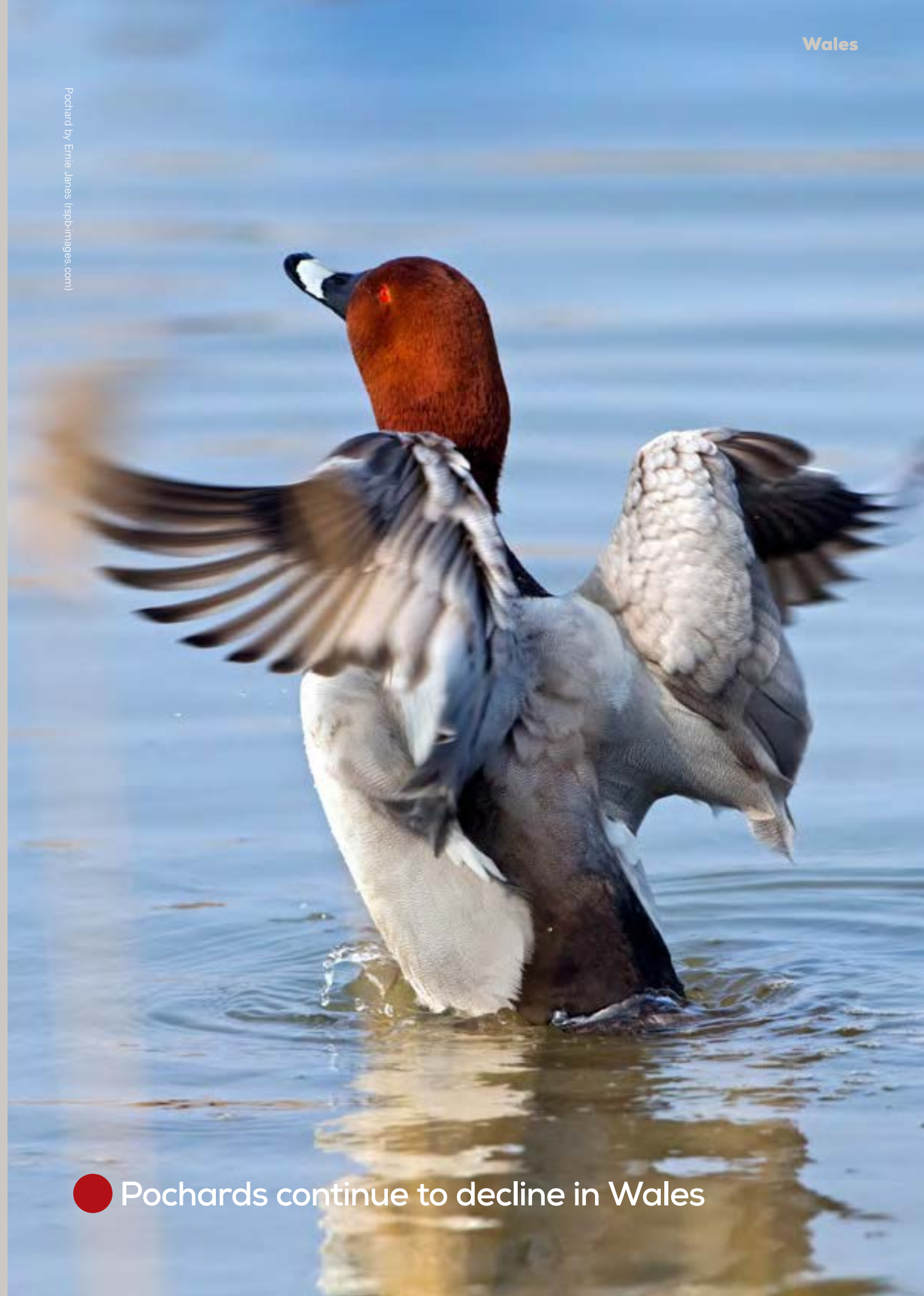
- Breeding trends derived from the Breeding Bird Survey (BBS) show increases in some common birds, including **goldfinches** and **house sparrows** in Wales.
- Half of the top 10 declining species are birds of farmed landscapes; both enclosed lowland farmland and extensive upland areas, which are primarily affected by changing agricultural practices.
- The wintering populations of **Bewick's swans** and **pochards** continue to decline in Wales, and **Greenland white-fronted goose** declines are more severe in Wales than the rest of the UK.
- Although 79% of UK **choughs** are found in Wales, a recent study showed that the existing SPA network is insufficient to safeguard the population. The study also showed that declines in productivity, first-breeder survival, and the recruitment of new adults, are driving overall declines in abundance.
- Poor breeding productivity is thought to be the main driver of population declines of breeding **curlews** across Wales. Modelled scenarios suggest **curlews** could become extinct as breeding birds in Wales within 13 years if effective conservation action is not taken.



House sparrow by Shutterstock, curlew by Richard Bedford (rspb-images.com)

# Wales Headlines

Pochard by Ernie James (rspb-images.com)



● Pochards continue to decline in Wales





Wales

1st  
-72%

Swift



2nd  
-71%

Greenfinch

Greenfinch and curlew by Shutterstock, swift by Dreamstime

## Trends in wild birds in Wales

The top 10 declining and increasing species in Wales over the long-term Breeding Bird Survey period are shown in Table 5, with the short-term (2008 to 2018) trends included where available.

The table also shows each species' *Birds of Conservation Concern 4 (BoCC4)* category and its *BoCC Wales* category.

The three species with the biggest increasing and decreasing long-term trends are also pictured here.

**Table 5:** selected trends in common and widespread breeding birds in Wales

Species (colour coded according to conservation status in <i>BoCC4</i> )	<i>BoCC Wales</i> <sup>2</sup>	Long-term trend % (1995–2018) <sup>1</sup>	10-year trend % (2008–2018) <sup>1</sup>
Swift		-72	-50
Greenfinch		-71	-78
Curlew		-69	-44
Starling		-65	-18
Yellowhammer		-64	
Rook		-58	-50
Goldcrest		-54	-12
Wheatear		-48	-41
Magpie		-43	-14
Chaffinch		-38	-28
Jay		52	5
Chiffchaff		54	22
Siskin		84	45
House sparrow		92	13
Goldfinch		104	27
Blackcap		143	58
Great spotted woodpecker		189	3
Stonechat		191	8
Canada goose		359	20
Red kite		413	120

### Footnotes

1. Long- and short-term trends are based on smoothed estimates of change in Wales. Although all data, including the most recent from 2019, are included in analyses, we report measures of change to the penultimate year (2018), to avoid unreliable effects due to smoothing at the endpoints of time series. Significant trends ( $P \leq 0.05$ ) are shown in **bold**. Trends are taken from the *Breeding Bird Survey 2019* report, found at: [bto.org/bbs-report](https://bto.org/bbs-report).
2. Johnstone I and Bladwell S (2016) Birds of Conservation Concern in Wales 3, *Birds in Wales*, 13 (1), 3–31.

3rd  
-69%

Curlew



Wales

1st  
+413%

Red kite

## Species doing well

Topping the list of species showing the biggest increases is the **red kite** – a huge conservation success story. The increase in **house sparrows** seen in Wales strongly bucks the decline seen in parts of England, and so it is not a conservation priority here, despite its UK Red List status. **Stonechats** have benefited from climate change, with milder winters allowing more birds to survive.

## Cause for concern

Five birds of farmland appear among the top 10 declining species. Of these, both **rooks** and **starlings** depend on invertebrates found in enclosed pasture for feeding their chicks and so these declines may reflect changes in grassland management. **Chaffinches**, **greenfinches** and **goldcrests** are three woodland birds among the top 10 in decline. As elsewhere in the UK, the recent decline of **greenfinches** is attributable to the parasitic disease trichomonosis. Why **chaffinches**, such common birds of woodland and farmland hedgerows, might be in worsening decline in Wales is unclear, but there are signs they too are susceptible to trichomonosis (see page 16).

Using the Wetland Bird Survey (WeBS) trend data for Wales, **Bewick's swans** and **pochards** show the greatest declines in both the short term (10 years) and the long term (25 years). **Bewick's swans** remain at historically low levels, having decreased sharply in Wales and across north-west Europe since the mid-1990s. Since the 1970s individuals

have been making shorter migrations (short-stopping), and as a result their wintering area has moved eastwards. Favourable climatic areas have also moved eastwards over time, suggesting that the changing climate may be contributing to the distributional changes of these swans. **Pochards** continue to decline across their European range and are now classed as globally Vulnerable by the IUCN.

**Greenland white-fronted geese** are declining at a faster rate in Wales than elsewhere in the UK. Wales holds only a small proportion of the UK wintering population of this subspecies, but it has declined by over 50% within the last decade, with current estimates of only 30 to 50 individuals. The reason for global declines is low productivity that may be related to poor weather, which in turn is likely to be a result of climatic shifts. However, why the Welsh population is declining faster than the rest of the UK is unclear.



2nd  
+359%

Canada goose

3rd  
+191%

Stonechat



Red kite and Canada goose by Shutterstock, stonechat by Oliver Smart (rsph-images.com)



## Concern grows for choughs

**72%**  
fall in occupancy  
of inland  
territories

The UK's **chough** population is green-listed. However, recent declines on Islay and localised declines in Wales, together with large historic declines, show this is not a species to take for granted.

An important aspect of the **chough's** ecology is a period of several years between fledging and first breeding, during which young **choughs** associate in 'pre-breeder' flocks, which can range widely. This means that information on these pre-breeders, as well as on adults holding breeding territories, is needed to fully explore drivers of change in population size.

existing network of European protected sites is sufficient to safeguard **choughs** and identifying any areas outside SPAs that are important for foraging choughs. In addition, we explored patterns in territory occupation rate, breeding success, survival and recruitment.

### Declines in occupancy and productivity

There was evidence that the occupation rate of coastal and inland territories fell by 12% and 72%, respectively, between 1994 and 2019, and the number of chicks fledged per occupied territory fell by 25% across the study area. This fall in occupation and fledged chicks was non-uniform, falling least in steeper places and where the breeding season temperature was warmer.

Survival was high and stable for older adults and for **choughs** in their first year of life, but decreased significantly for first time breeders. The rate at which young birds recruited to the breeding population had also fallen, and more so at inland territories. Although pre-breeder flocks may range widely, they tended to use favoured areas for feeding. Colour-ring re-sightings showed pre-breeders were often highly cosmopolitan in their use of feeding areas across mid and north Wales, but that flock sizes at inland feeding areas had declined. Overall, these results suggest a decline in the quality of some breeding territories, although further research is needed to understand the mechanisms behind this. The results also suggest that the existing **Welsh Chough** SPA network is insufficient to secure the population, based on JNCC criteria.

1. Cross *et al* (2020) NRW Evidence Report No 486.

Luckily, **choughs** have been the subject of a number of long-term studies, including several in Wales. With funding from NRW, the Cross and Stratford Welsh Chough Project has recently collaborated with RSPB Cymru to analyse a 25-year dataset on nest monitoring, chick colour-ringing and sightings of foraging **choughs** in mid and north Wales. These data represent hundreds of territories monitored, chicks colour-ringed and marked **choughs** re-sighted. The objective of this analysis<sup>1</sup> was to further inform the recommendations of the third review of the UK's network of Special Protection Areas (SPAs) by checking whether the



Chough by Martin Yelland (rspb-images.com)

## Curlews in Wales: on a countdown to extinction?

In common with much of Europe, the UK's breeding wader assemblage is in decline. The primary reasons appear to be a combination of habitat loss, unfavourable habitat management, and predation, although pressures during the non-breeding season may also play a role.

Owing to rapid national declines and the global importance of the UK's breeding population, **curlews** are now considered to be one of the most pressing bird conservation priorities in the UK and Wales.

### Worrying trends

Both the Breeding Bird Survey (see page 42) and bespoke local survey work, undertaken by RSPB Cymru or as part of local projects, have highlighted continuing declines in both the population and range of breeding **curlews** in Wales. Since 1995, the **curlew** population has declined by nearly 70%, and its range has contracted by more than 50%.

In response to the plight of breeding **curlews** in Wales, NRW commissioned the BTO to estimate the Welsh breeding population size, to predict time to extinction in Wales under different scenarios and to monitor non-breeding movements and space use during the breeding season<sup>1</sup>.

The estimated Welsh breeding population of **curlews** was between 1,101 to 1,578 pairs, 1 to 3% of the UK total. **Curlews** were not distributed equally across Wales, with around 90% of the breeding population found in north-east, north-west and mid-Wales, and nearly half in north-west Wales alone. Similar to studies elsewhere in the UK, poor breeding productivity was thought to be the main driver of the population decline. Based on the mean value across modelled scenarios, breeding **curlews**

could become extinct in Wales within the next 13 years, unless significant action is taken.

Habitat management and predator control trials were undertaken recently in Wales, some as part of the UK-wide **Curlew** Trial Management Project, but more of this work is needed.

### Curlews need landscape-scale conservation

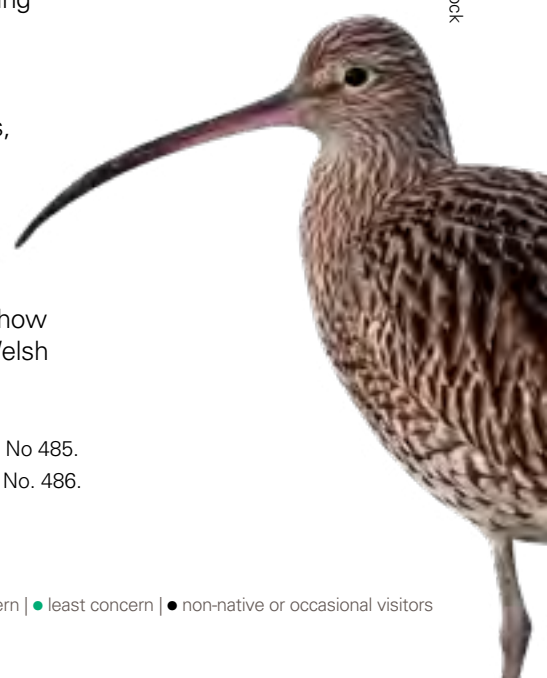
High temporal resolution GPS tracking of over 25 adult breeding **curlews** within both upland and farmed landscapes showed that individuals exhibit very different movement patterns through the breeding season. Current agri-environment approaches, delivered on a by-field (average size of 5 hectares [ha]), or even a by-farm (average size of 45ha) scale, are not compatible with the average size of a bird's breeding range. The average size of a **curlew's** core range over the breeding season is 521ha, with overall breeding ranges much greater.

These findings have significant conservation and policy implications, suggesting that land management decisions benefiting **curlews** need to be taken at a landscape scale. The tracking data will be used to better understand resource needs in different farmed landscapes and how to deliver these through the new Welsh Sustainable Farming Scheme.

1. Taylor *et al* (2020) NRW Evidence Report No 485.  
2. Cross *et al* (2020) NRW Evidence Report No. 486.

**69%**  
decline in Wales  
since 1995

**Curlews are now one of Wales' top conservation priorities**



Curlew by Shutterstock





**Gallai gylfinirod  
ddiflannu fel  
adar bridio yng  
Nghymru o fewn  
13  
mlynedd**

**Mae nifer adar y  
to yng Nghymru  
wedi cynyddu, yn  
groes i'r dirywiad  
hirdymor  
yn Lloegr**

- Mae tueddiadau bridio o'r Arolwg Adar Bridio (BBS) yn dangos cynnydd mewn rhai adar cyffredin, gan gynnwys y **nico** ac **aderyn y to** yng Nghymru.
- Adar tir amaethyddol yw hanner y 10 rhywogaeth sy'n dirywio fwyaf; tir amaeth caeedig ar dir isel ac ardaloedd o ucheldir helaeth. Newidiadau mewn arferion amaethyddol sy'n effeithio arnynt yn bennaf.
- Mae poblogaethau gaeafol **elyrch Bewick** a **hwyaid pengoch** yn parhau i ddirywio yng Nghymru, ac mae dirywiad **Gŵydd Dalcenwyn yr Ynys Las** yn fwy difrifol yng Nghymru na gweddill y Deyrnas Unedig.
- Er bod 79% o **frain coesgoch** y Deyrnas Unedig i'w cael yng Nghymru, dangosodd astudiaeth ddiweddar nad yw'r rhwydwaith presennol yn ddigonol i ddiogelu'r boblogaeth. Dangosodd yr astudiaeth hefyd fod dirywiad mewn cynhyrchiant, goroesiad bridwyr cyntaf, a recriwtio oedolion newydd, yn sbarduno dirywiad cyffredinol.
- Credir mai cynhyrchiant bridio gwael yw'r prif reswm dros ddirywiad poblogaeth **gylfinirod** bridio ledled Cymru. Mae gwaith ymchwil yn awgrymu y gallai'r **gylfinir** ddiflannu fel adar bridio yng Nghymru o fewn 13 mlynedd os na weithredir ar gadwraeth effeithiol.

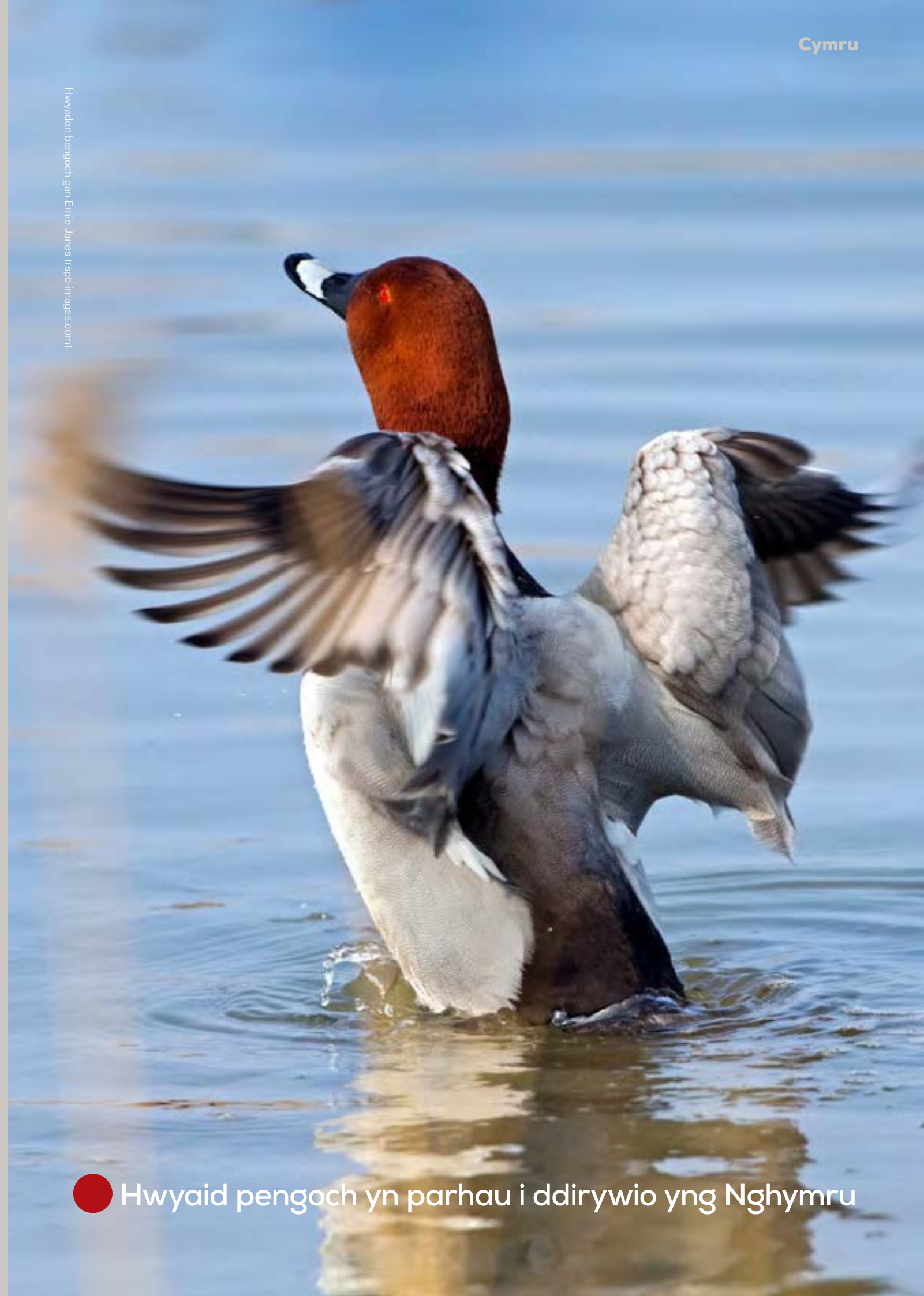


Aderyn y to gan Shutterstock, gylfinir gan Richard Bedford (rspb-images.com)

# Penawdau

Hwyaid pengoch gan Ernie Janes (rspb-images.com)

● **Hwyaid pengoch yn parhau i ddirywio yng Nghymru**







1af  
-72%

Gwennol ddu



2il  
-71%

Llinos werdd

Llinos werdd a gyflinir gan Shutterstock, gwennol ddu gan Dreamstime

## Tueddiadau mewn adar gwyllt yng Nghymru

Dangosir y deg rhywogaeth sy'n dirywio ac yn cynyddu fwyaf yng Nghymru dros gyfnod hirdymor yr Arolwg Adar Bridio yn Nhabl 5, gyda'r tueddiadau tymor byr (2008 i 2018) wedi'u cynnwys lle bo modd.

Mae'r tabl hefyd yn dangos categori Adar o Bryder Cadwraethol 4 (BoCC4) ar gyfer pob rhywogaeth a'i chategori

BoCC Cymru. Mae'r tair rhywogaeth sy'n cynyddu ac yn gostwng fwyaf yn yr hirdymor i'w gweld yma hefyd.

Tabl 5: tueddiadau dethol mewn adar bridio cyffredin ac eang yng Nghymru

Rhywogaethau (wedi'u lliwio yn ôl statws cadwraeth yn BoCC4)	BoCC Cymru <sup>2</sup>	Tuedd hirdymor % (1995–2018) <sup>1</sup>	Tuedd dros gyfnod o 10 mlynedd % (2008–2018) <sup>1</sup>
Gwennol ddu		-72	-50
Llinos werdd		-71	-78
Gylfinir		-69	-44
Drudwen		-65	-18
Bras melyn		-64	
Ydfran		-58	-50
Dryw eurban		-54	-12
Tinwen y garn		-48	-41
Pioden		-43	-14
Ji-binc		-38	-28
Sgrech y coed		52	5
Siff-saff		54	22
Pila gwyrdd		84	45
Aderyn y to		92	13
Nico		104	27
Telor penddu		143	58
Cnocell fraith fwyaf		189	3
Crec penddu'r eithin		191	8
Gŵydd Canada		359	20
Barcud coch		413	120

### Nodiadau

- Mae tueddiadau hirdymor a thymor byr yn seiliedig ar amcangyfrifon wedi'u llyfnhau o newid yng Nghymru. Er bod yr holl ddata, gan gynnwys y diweddraf o 2019, wedi'u cynnwys yn y dadansoddiadau, rydym yn adrodd am fesurau newid hyd at 2018, er mwyn osgoi effeithiau annibynadwy oherwydd llyfnhau ar ddiwedd y gyfres amser. Dangosir tueddiadau sylweddol ( $P \leq 0.05$ ) mewn print trymddu. Daw'r tueddiadau o adroddiad Arolwg Adar Bridio 2019, sydd ar gael yma: [bto.org/bbs-report](https://bto.org/bbs-report).
- Johnstone I a Bladwell S (2016) Birds of Conservation Concern in Wales 3, *Birds in Wales*, 13 (1), 3–31.

3ydd  
-69%

Gylfinir



1af  
+413%

Barcud coch



2il  
+359%

Gŵydd Canada

3ydd  
+191%

Crec penddu'r eithin



## Rhywogaethau sy'n gwneud yn dda

Ar ben y rhestr o rywogaethau sy'n dangos y cynnydd mwyaf mae'r **barcud coch** – llwyddiant cadwraethol enfawr. Mae'r cynnydd yn nifer **adar y to** a welir yng Nghymru yn mynd yn groes i'r dirywiad a welir mewn rhannau o Loegr, felly nid yw'n flaenoriaeth gadwraeth yma, er gwaethaf ei statws ar restr goch y Deyrnas Unedig. Mae **crec penddu'r eithin** wedi elwa o newid yn yr hinsawdd, gyda gaeafau mwynach yn caniatáu i fwy o adar oresi.

## Achos pryder

Mae pum aderyn tir amaeth ymhlith y 10 rhywogaeth sy'n dirywio fwyaf. O'r rhain, mae'r **ydfran** a'r **ddrudwen** yn dibynnu ar infertebratau sydd i'w cael mewn tir pori caeedig ar gyfer bwydo'u cywion, felly mae'n bosib bod y dirywiad hwn yn adlewyrchu newidiadau o ran rheoli glaswelltir. Mae'r **ji-binc**, y **llynos werdd** a'r **dryw eurban** yn dri aderyn coetir sydd ymhlith y 10 sy'n dirywio fwyaf. Fel mewn mannau eraill yn y Deyrnas Unedig, gellir priodoli dirywiad diweddar y **llynos werdd** i'r clefyd parasitig trichomonosis. Nid yw'n glir pam fod y **ji-binc**, aderyn mor gyffredin yng nghoetiroedd a gwrychoedd tir amaeth, yn dirywio yng Nghymru, ond mae arwyddion eu bod hwythau hefyd yn agored i'r trichomonosis (gweler tudalen 16).

Gan ddefnyddio data'r Arolwg Adar Gwlyptiroedd (WeBS) ar gyfer Cymru, **elyrch Bewick** a **hwyaid pengoch** sy'n dangos y gostyngiad mwyaf yn y

tymor byr (10 mlynedd) a'r tymor hir (25 mlynedd). Mae **elyrch Bewick** yn dal ar lefelau hanesyddol isel, a hynny ar ôl gostyngiad cyflym yng Nghymru ac ar draws gogledd-orllewin Ewrop ers canol y 1990au. Ers y 1970au, mae unigolion wedi bod yn mudo pellter byrrach (mudo byr), ac o ganlyniad mae eu hardal gaeafu wedi symud tua'r dwyrain. Hefyd, mae ardaloedd hinsoddol ffafriol wedi symud tua'r dwyrain dros amser, gan awgrymu y gallai'r newid yn yr hinsawdd fod yn cyfrannu at newidiadau o ran dosbarthiad yr elyrc'h hyn. Mae **hwyaid pengoch** yn dal i ddirywio ar draws eu hardal Ewropeidd ac mae'r IUCN yn barnu bellach eu bod yn agored i niwed yn fyd-eang.

Mae **Gŵydd Dalcenwyn yr Ynys Las** yn dirywio'n gyflymach yng Nghymru nag mewn mannau eraill yn y Deyrnas Unedig. Dim ond cyfran fach o boblogaeth aeafol y Deyrnas Unedig sydd gan Gymru, ond mae'r ffigwr wedi gostwng dros 50% yn y degawd diwethaf, gydag amcangyfrifon cyfredol o ddim ond 30 i 50 o unigolion. Y rheswm dros y dirywiad byd-eang yw cynhyrchiant isel a all fod yn gysylltiedig â thywydd gwael, sydd yn ei dro yn debygol o fod o ganlyniad i newidiadau hinsoddol. Fodd bynnag, nid yw'n glir pam mae poblogaeth Cymru'n gostwng yn gyflymach na gweddill y Deyrnas Unedig.



72%

o ostyngiad o  
ran anheddu  
tiriogaethau  
mewndirol

25%

o ostyngiad yn  
y cywion sy'n  
magu plu fesul  
tiriogaeth

## Pryder yn cynyddu am y frân goesgoch

Mae poblogaeth y **frân goesgoch** yn y Deyrnas Unedig wedi'i rhestru'n wyrdd. Fodd bynnag, mae gostyngiadau diweddar ar Ynys Islay a dirywiad mewn rhannau o Gymru, ynghyd â dirywiad hanesyddol mawr, yn dangos nad yw hon yn rhywogaeth i'w chymryd yn ganiataol.

Agwedd bwysig ar ecoleg y **frân goesgoch** yw cyfnod o sawl blwyddyn rhwng magu plu a'r bridio cyntaf. Yn ystod y cyfnod hwnnw, mae **brain coesgoch** ifanc yn cyfeillachu mewn heidiau 'rhag-fridio', sy'n gallu ymestyn yn eang. Mae hyn yn golygu bod angen gwybodaeth am y rhag-fridwyr hyn, yn ogystal ag oedolion sy'n dal tiriogaethau bridio, er mwyn archwilio'r ffactorau sy'n gyrru newid ym maint y boblogaeth.

Yn ffodus, mae'r **frân goesgoch** wedi bod yn destun nifer o astudiaethau hirdymor, gan gynnwys sawl un yng Nghymru. Gyda chyllid gan Cyfoeth Naturiol Cymru, mae Prosiect Brain Coesgoch Cymru Cross a Stratford wedi bod yn cydwethio'n ddiweddar gydag RSPB Cymru i ddadansoddi set ddata 25 mlynedd ar fonitro nythod, tagio cywion ac arsylwadau o **frân coesgoch** yn pori yn y canolbarth a'r gogledd.

Mae'r data hyn yn cynrychioli cannoedd o diriogaethau wedi'u monitro a chywion **brân goesgoch** wedi'u tagio sydd wedi'u harsylwi unwaith eto. Bwriad y dadansoddiad hwn oedd bod yn sail bellach i argymhellion trydydd adolygiad rhwydwaith Ardaloedd Gwarchodaeth Arbennig (SPAs) y Deyrnas Unedig drwy wirio a yw'r rhwydwaith presennol o safleoedd gwarchodedig Ewropeaidd yn ddigonol i ddiogelu'r **frân goesgoch** a nodi unrhyw ardaloedd y tu allan i'r Ardaloedd Gwarchodaeth Arbennig sy'n bwysig ar gyfer brain coesgoch sy'n pori. Yn ogystal, buom yn archwilio patrymau o ran cyfraddau anheddu tiriogaethau, llwyddiant bridio, goroesi a recriwtio.

### Dirywiad o ran anheddiad a chynhyrchiant

Roedd tystiolaeth bod y gyfradd anheddu mewn tiriogaethau arfordirol a mewndirol wedi cwympo 12% a 72% yn y drefn honno, rhwng 1994 a 2019, a bod nifer y cywion a fagodd blu ym mhob tiriogaeth a anheddwyd wedi disgyn 25% ar draws yr ardal astudio. Doedd y gostyngiad hwn o ran anheddu a chywion yn magu plu ddim yn unffurf, ac roedd y gostyngiad ar ei isaf mewn llefydd mwy serth a lle roedd tymheredd yn gynhesach yn ystod y tymor bridio.

Roedd lefel goroesi yn uchel ac yn sefydlog ar gyfer oedolion hyn ac ar gyfer **brain coesgoch** ym mlwyddyn gyntaf eu bywyd, ond roedd yn gostwng yn sylweddol ar gyfer bridwyr tro cyntaf. Roedd cyfradd recriwtio adar ifanc i'r boblogaeth fridio hefyd wedi disgyn, ac yn fwy felly mewn tiriogaethau mewndirol. Er y gall heidiau rhag-fridio ymestyn dros ardal eang, roeddent yn tueddu i ddefnyddio ardaloedd dethol ar gyfer bwydo. Wrth ail-arsylwi adar oedd wedi'u tagio, gwelwyd bod rhag-fridwyr yn aml yn gosmopolitan iawn yn eu defnydd o ardaloedd bwydo ar draws y canolbarth a'r gogledd, ond bod meintiau'r heidiau mewn ardaloedd bwydo mewndirol wedi gostwng. Ar y cyfan, mae'r canlyniadau hyn yn awgrymu gostyngiad yn ansawdd rhai tiriogaethau bridio, er bod angen rhagor o ymchwil er mwyn deall y mecanweithiau y tu ôl i hyn. Mae'r canlyniadau hefyd yn awgrymu bod rhwydwaith yr Ardaloedd Gwarchodaeth Arbennig yn annigonol i ddiogelu'r boblogaeth, yn seiliedig ar feini prawf JNCC.

1. Cross *et al* (2020) NRW Evidence Report No 486.

Brân goesgoch gan Martin Yelland (rspb-images.com)

## Gylfinirod yng Nghymru: ar eu ffordd i ddifodiant?

Fel sy'n wir ar draws y rhan fwyaf o Ewrop, mae adar hirgoes bridio'r Deyrnas Unedig yn gweld dirywiad. Mae'n ymddangos mai'r prif resymau yw cyfuniad o golli cynefin, rheoli cynefinoedd mewn ffyrdd sy'n anffafriol, ac ysglyfaethu, er ei bod yn bosib bod pwysau y tu allan i'r tymor bridio hefyd yn chwarae rhan.

Yn sgil cwymp cyflym a phwysigrwydd poblogaeth fridio'r Deyrnas Unedig, ystyrir erbyn hyn bod **gylfinirod** yn un o'r prif flaenoriaethau cadwraethol o ran adar yn y Deyrnas Unedig ac yng Nghymru.

### Tueddiadau pryderus

Mae'r Arolwg Adar Bridio (gweler tudalen 48) a gwaith arolygon lleol penodol, wedi'u cynnal gan RSPB Cymru neu fel rhan o brosiectau lleol, wedi tynnu sylw at ddirywiad parhaus ym mhoblogaeth ac yn ardaloedd bridio **gylfinirod** yng Nghymru. Ers 1995, mae poblogaeth y **gylfinir** wedi disgyn bron i 70%, a'i ardal wedi crebachu dros 50%.

Mewn ymateb i sefyllfa **gylfinirod** bridio yng Nghymru, comisiynwyd y BTO gan Cyfoeth Naturiol Cymru i amcangyfrif maint poblogaeth fridio Cymru, i ragfynegi'r amser hyd at ddifodiant yng Nghymru o dan wahanol sefyllfaoedd ac i fonitro symudiadau y tu hwnt i fridio yn ogystal â defnydd o ofod yn ystod y tymor bridio.

Amcangyfrifwyd bod poblogaeth fridio Cymru o **gylfinirod** rhwng 1,101 a 1,578 o barau, sydd rhwng 1 a 3% o gyfanswm y Deyrnas Unedig. Nid oedd **gylfinirod** wedi'u dosbarthu'n gydradd ledled Cymru, gyda rhyw 90% o'r boblogaeth fridio yn y gogledd-ddwyrain, y gogledd-orllewin a'r canolbarth, a bron i'w hanner yn y gogledd-orllewin. Yn debyg i astudiaethau mewn mannau eraill yn y Deyrnas Unedig, tybiwyd mai cynhyrchiant bridio gwael oedd prif yrrwr y dirywiad yn y boblogaeth. Yn seiliedig ar y gwerth cymedrig ar draws gwahanol sefyllfaoedd wedi'u modelu,

rhagfynegi'r bydd **gylfinirod** bridio yn diflannu o fewn 13 mlynedd, oni bai bod camau sylweddol yn cael eu cymryd.

Cynhaliwyd cynlluniau peilot rheoli cynefinoedd a rheoli ysglyfaethwyr yng Nghymru'n ddiweddar, rhai ohonynt fel rhan o Brosiect Peilot Rheoli **Gylfinirod** ledled y Deyrnas Unedig, ond mae angen rhagor o'r gwaith hwn.

### Mae angen cadwraeth ar raddfa tirwedd ar gylfinirod

Dangosodd gwaith tracio GPS cydraniad amser uchel dros 25 o **gylfinirod** bridio ar dirweddau amaeth ac ucheldirol fod unigolion yn arddangos patrymau symud gwahanol iawn drwy'r tymor bridio. Mae dulliau amaeth-amgylcheddol presennol, sy'n cael eu darparu ar raddfa cae (maint cyfartalog o 5 hectar [ha]) neu hyd yn oed fferm (maint cyfartalog o 45ha) yn anghydnaws â maint cyfartalog ardal fridio aderyn. Mae ardal graidd gyfartalog **gylfinir** dros y cyfnod bridio yn 521ha, gyda'r ardaloedd bridio cyffredinol yn llawer mwy na hynny.

Mae goblygiadau polisi a chadwraeth sylweddol i'r canfyddiadau hyn, sy'n awgrymu bod angen gwneud penderfyniadau rheoli tir sydd o fudd i **gylfinirod** ar raddfa tirweddau. Bydd y data tracio yn cael ei ddefnyddio i sicrhau gwell dealltwriaeth o anghenion adnoddau mewn gwahanol dirweddau amaethyddol a sut i'w cyflawni drwy Gynllun Ffermio Cynaliadwy newydd Cymru.

1. Taylor *et al* (2020) NRW Evidence Report No 485.  
2. Cross *et al* (2020) NRW Evidence Report No. 486.

69%

o ostyngiad  
yng Nghymru  
ers 1995

**Gylfinirod  
yw un o brif  
flaenoriaethau  
cadwraeth  
Cymru  
erbyn hyn**

Gylfinir gan Shutterstock



# Scotland

# Headlines

- Breeding Bird Survey (BBS) trends highlight welcome increases in some farmland birds of conservation concern, such as **tree sparrows**. There have also been rapid increases in short-distance migrants, including **chiffchaffs** and **blackcaps**, as well as in **great spotted woodpeckers**.
- Sadly, BBS trends also show the continued decline of many breeding waders, like **lapwings** and **curlews**, as well as birds associated with urban habitats, like **swifts** and **greenfinches**.
- Increases in **tree pipits** and **willow warblers** in Scotland are in contrast to marked declines in Wales and England.
- The upland bird indicator shows a long-term decline of 15%, with **dotterels** and **hooded crows** showing particularly strong declines.
- Seabirds continue to show mixed fortunes, with some, such as **fulmars**, **Arctic skuas** and **kittiwakes** showing long-term declines. **Gannets** continue to increase and expand their range. The 11 species in the seabird indicator have declined on average by 32%.
- Populations of some scarce birds such as **choughs**, **capercaillies**, **corncrakes**, **common scoters** and **corn buntings** remain fragile, and require specific, targeted management to maintain current population levels.

Gannets  
continue to  
increase



Capercaillie  
populations  
remain fragile



Capercaillie by Shutterstock, gannet by Drew Buckley (rspb-images.com)



- Tree pipits are increasing in Scotland, unlike in England and Wales



Tree pipit by David J Slater (rspb-images.com)



# Trends in wild birds in Scotland

During 2019, a total of 605 1-km Breeding Bird Survey (BBS) squares were surveyed in Scotland, generating trends for 69 of the most frequently encountered species.

1st  
-67%

Greenfinch

The top 10 declining and increasing species in Scotland over the long-term BBS 23-year period are shown in Table 6, with their associated short-term

trend (2008 to 2018) where available. The top three increasing and declining birds over the long term are also pictured here.

Table 6: selected trends in common and widespread breeding birds in Scotland

Species (colour coded according to conservation status in BoCC4)	Long-term trend % (1995–2018) <sup>1</sup>	10-year trend % (2008–2018) <sup>1</sup>
Greenfinch	-67	-68
Kestrel	-61	-44
Curlew	-59	-20
Lapwing	-56	-39
Swift	-52	-30
Hooded crow	-44	-30
Wheatear	-39	-38
Oystercatcher	-39	-19
Rook	-34	-12
Starling	-29	-18
Lesser redpoll	67	72
Tree pipit	80	35
Greylag goose	86	-9
Stonechat	99	-29
House martin	110	-2
Whitethroat	130	19
Goldfinch	224	53
Great spotted woodpecker	399	22
Tree sparrow	426	122
Blackcap	539	100
Chiffchaff	836	174

Footnotes

1. Long- and short-term trends are based on smoothed estimates of change in Scotland. Although all data, including the most recent from 2019, are included in analyses, we report measures of change to the penultimate year (2018), to avoid unreliable effects due to smoothing at the endpoints of time series. Significant trends (P <= 0.05) are shown in **bold**. Trends are taken from the *Breeding Bird Survey 2019* report, found at: [bto.org/bbs-report](https://bto.org/bbs-report).

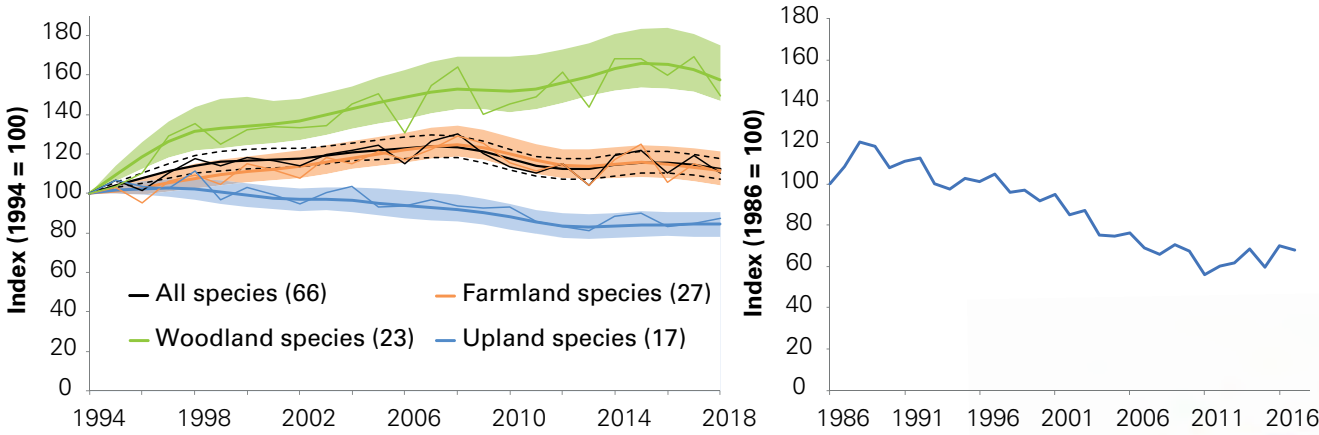


Figure 12: a) Index of abundance for Scottish Terrestrial Breeding Birds, 1994 to 2018 and b) Index of abundance for seabirds in Scotland.

Footnotes

a) Thick and thin lines are smoothed and unsmoothed trends, respectively. Dashed lines (for all-species trend) and shaded areas (for habitat-specific trends) illustrate 95% confidence intervals. Available at: [nature.scot/information-hub/official-statistics/official-statistics-terrestrial-breeding-birds](https://nature.scot/information-hub/official-statistics/official-statistics-terrestrial-breeding-birds).  
b) Available at: [nature.scot/scotlands-indicators-birds](https://nature.scot/scotlands-indicators-birds).

## Mixed fortunes for Scotland's birds

Scottish BBS results show mixed fortunes for Scotland's farmland birds with some, such as **tree sparrows** and **yellowhammers**, showing welcome increases. There have also been some marked increases in woodland birds, such as **tree pipits**, **blackcaps**, **chiffchaffs** and **great spotted woodpeckers**. Concerningly, the results also show that breeding waders, including **curlews** and **lapwings**, continue to show substantial declines.

The continued decline of **greenfinches** may be related to ongoing transmission of the disease trichomonosis between individuals using bird feeders. However, there is evidence that feeders may also be contributing to increases in the numbers of **goldfinches**.

Seabird populations continue to be monitored through the Seabird Monitoring Programme (SMP). The current seabird census, Seabirds Count, will complete its final count season in 2021 (see page 32). SMP results show long-term declines in some birds that feed on sand-eels, such as **kittiwakes**, **shags** and **Arctic terns**. Declines in **Arctic skua** numbers threaten the long-term survival of this as a breeding species in Scotland, with many previously well-occupied colonies either disappearing altogether or being reduced

to a handful of breeding pairs. In contrast, **gannets** continue to increase in both population size and range as new colonies establish and expand.

## Scottish wild bird indicators

In Scotland, the smoothed all-species terrestrial breeding bird indicator increased by 12% between 1994 and 2018. The all-species indicator covers 66 species and there are another 46 eligible species that cannot be included due to insufficient data.

The farmland bird indicator follows a very similar trajectory, also showing a 12% increase. However, woodland and upland birds show divergent trends; woodland birds have increased by 58%, but upland birds have decreased by 15%. The separate seabird indicator, covering 11 of the 24 seabird species in Scotland, fell 32% between 1986 and 2017.

A number of woodland birds have shown strong increases, but the populations of some species are declining – for example, the number of **capercaillie** has dropped by half since 1994.

Nine of the 17 species in the upland indicator are declining, including **dotterels**, **curlews** and **hooded crows**. However, **cuckoos** and **golden eagles** are increasing.

1st  
+836%

Chiffchaff

2nd  
+539%

Blackcap

3rd  
+426%

Tree sparrow

3rd  
-59%

Curlew

2nd  
-61%

Kestrel



## Corncrakes in Scotland: a reversal of fortunes

**Corncrakes** were once widespread in agricultural grasslands across the UK and Ireland. However, by the 1990s, they were absent as breeding birds, apart from a few hundred singing males in parts of western Scotland and Ireland.

Since 2015, corncrakes have begun to decline

This is when the Scottish **corncrake** conservation programme began. Research identified that mechanisation and the timing of grass and hay-crop mowing were key drivers of **corncrake** declines. As a result, the conservation programme involved developing and testing practical – and agriculturally viable – ways to improve breeding success and juvenile survival enough to reverse population declines. This testing and research formed the evidence base for co-designed,

dedicated agri-environment prescriptions, developed by an innovative partnership of officials, conservation organisations, scientists, farmers and crofters.

The initial results of the programme were encouraging, with populations increasing markedly and in line with model predictions, based on the uptake of the agri-environment scheme. Moreover, **corncrake** payments became a significant element of crofting incomes.

The programme became a noted example of species conservation succeeding through agri-environment mechanisms, to the benefit of the target species, agricultural communities and wider biodiversity. Fifteen years after the scheme began, the **corncrake** population in Scotland had more than doubled to over 1,200 singing males and stabilised at that level.

### A fragile success

However, since 2015, the Scottish **corncrake** population has begun to decline – though it is still larger than it was before the programme began. We don't fully understand the reasons for this, but it is likely that changes in the deployment of state-funded agri-environment prescriptions are involved.

When the recent decline began, there was a switch from the Scottish Government's Rural Priorities scheme (which ran from 2009 to 2014) to the Agri-Environment and Climate Scheme (2016 to 2020). This switch, which resulted in changes to the scheme prescriptions and payment rates, appears to have reduced both the area of land in the **corncrake's** range with delayed mowing, and the degree to which mowing was delayed.

The Scottish **corncrake** programme therefore illustrates the positive potential of agri-environment approaches to species recovery. But it also highlights the fragility of these biodiversity outcomes and the difficulties in sustaining them in the longer term for conservation-dependent species, against shifting socio-political contexts. The future of **corncrakes** in Scotland is now highly dependent on Scotland's approach to agri-environment policy and its implementation post-Brexit.

## Scotland's wintering waterbirds

Scotland's coasts and inland waters are of particular significance for wintering waterbirds, with more than 50 sites of international importance for wildfowl and wader species.

Wintering waterbirds have been monitored in Scotland since 1975 through the Wetland Bird Survey (WeBS). All of the major estuaries are surveyed, and sections of the rocky shore coastline are covered, as well as inland waterbodies. The Scottish wintering waterbird indicator shows that, on average, numbers of 14 species of wintering waders have declined by 50% since 1975 (see Figure 13). This is apparent in many individual species' trends, though the latest results show a slight upturn in the last three years.

Scotland is in an important position within the East Atlantic Flyway (the migration route used by visiting waders). The country's estuaries are internationally important as refuges for wintering waders, as well as those refuelling en route to other destinations.

### Declining waders

**Redshanks, dunlins, golden plovers** and **lapwings** have all shown marked declines during the period of the indicator,

and Scotland hosts internationally important numbers of each. Some species' wintering ranges may have shifted in response to climate change, with good evidence that **dunlins** have responded to changes in food availability.

We still lack the crucial evidence needed to understand the factors that are driving declines, particularly for non-estuarine waders. The latest Non-Estuarine Waterbird Survey (NEWS) showed that **turnstones, purple sandpipers** and **ringed plovers** had decreased whereas **sanderlings** had increased.

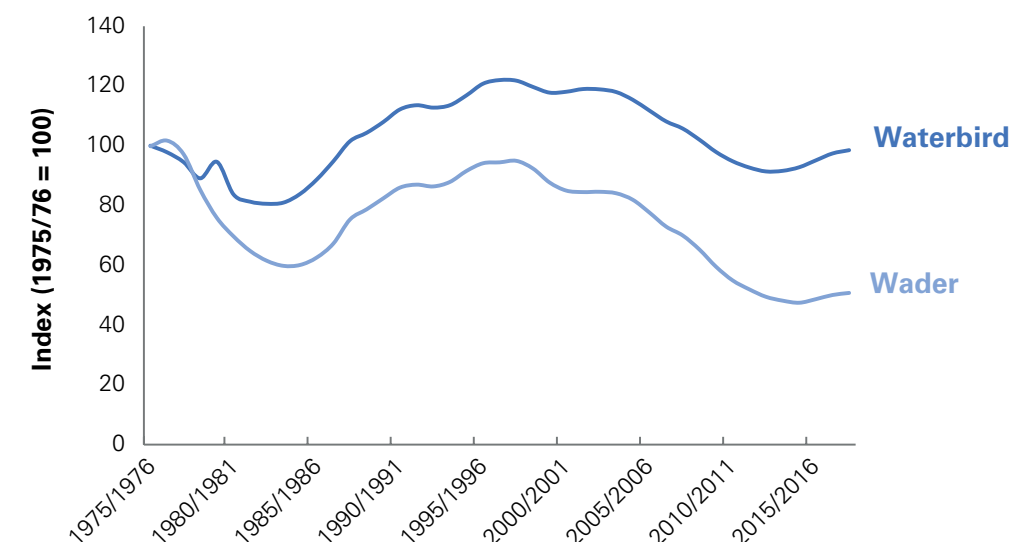
### Waders doing well

Since 1975, **black-tailed godwits** and **sanderlings** have increased. The **black-tailed godwits** wintering in Scotland are of the Icelandic subspecies which is increasing in response to agricultural and climatic change. However, the increases in Scotland are not at a scale that counterbalances the declines in the nominate continental subspecies.

On average, wintering waders have declined by

50% since 1975

50+ sites of international importance for wildfowl and waders in Scotland



**Figure 13:** Scottish wintering waterbird indicator. Abundance of wintering waterbirds in Scotland, 1975/76 to 2017/18, showing the combined trend for all waterbirds (waders, ducks, geese, swans, grebes, cormorant and coot) and for wader species separately.



# Northern Ireland



Curlews have declined by more than **80%**



Offshore islands support over **4,000** pairs of Manx shearwaters



- Both the UK and Ireland versions of *Birds of Conservation Concern (BoCC)* are used in Northern Ireland. A new *BoCC* list published in 2020 shows 13% of species moving to a higher level of concern and 7% whose future is now more secure.
- Despite the valued input of skilled volunteers, we know less about bird species' trends in Northern Ireland than we do in other parts of the UK, due to the lower coverage of Breeding Bird Survey (BBS) squares. Currently, our knowledge is biased towards species of lower conservation concern.
- Breeding waders, especially **curlews**, continue to decline in most areas and NIEA are consulting on proposed extensions to the protected sites network for these species.
- BBS trends show long-term increases in many commoner bird species, but several of these have slowed or reversed in the last 10 years. Currently declining species include a number of farmland seed-eaters, like **linnets**.
- A new East Coast Special Protection Area (SPA) and a marine extension to the Carlingford Lough SPA have been proposed to protect important foraging areas for **Sandwich, common** and **Arctic terns**. These sites will also provide additional protection for **Manx shearwaters** and several coastal wintering species.
- **Hen harriers** have declined in Northern Ireland, with fewer than 50 pairs remaining. A management plan to address environmental problems in the species' former stronghold of the Antrim Hills is being produced.

Curlew by Ray Kennedy, Manx shearwater by Chris Gomersall (rspb-images.com)

Marine SPAs protect feeding areas for Sandwich, common and Arctic terns



Sandwich tern by Graham Eaton (rspb-images.com)





# Trends in wild birds in Northern Ireland

Monitoring gaps across Northern Ireland mean it is only possible to produce accurate trends for 15% of UK breeding birds in Northern Ireland.

During 2019, 119 1-km Breeding Bird Survey (BBS) squares were surveyed, generating trends for 37 of the most frequently encountered species. The top 10 declining and increasing species in Northern Ireland over the long-term BBS period (23 years) are shown in Table 7 (with the top three of each also pictured), along with the

associated short-term trend (2008 to 2018) where available. The top five declining and increasing species over the short term are shown in the table if a long-term change is unavailable. The table also includes species' current *Birds of Conservation Concern* (BoCC) status and all-Ireland status (BoCC).

Table 7: selected trends in common and widespread breeding birds in Northern Ireland

Species (colour coded according to conservation status in BoCC4)	BoCC1	BBS trend % (1995–2018) <sup>1</sup>	BBS trend % (2008–2018) <sup>1</sup>
Greenfinch		-82	-86
Lesser redpoll			-53
Sedge warbler			-48
Skylark		-46	
Reed bunting		-28	-23
Rook		-21	-17
Swallow		-18	-33
Linnet		-15	-52
Mistle thrush		-13	-20
Magpie		-2	-14
House martin		83	33
Pheasant		104	-24
Woodpigeon		116	23
Collared dove		116	49
Great tit		135	-5
Hooded crow		179	51
Mallard		242	36
Goldfinch		485	22
Buzzard		1,305	33
Blackcap		1,540	151

Footnotes

1. Long- and short-term trends are based on smoothed estimates of change in Northern Ireland. Although all data, including the most recent from 2019, are included in analyses, we report measures of change to the penultimate year (2018), to avoid unreliable effects due to smoothing at the endpoints of time series. Significant trends ( $P \leq 0.05$  are shown in **bold**). Trends are taken from the *Breeding Bird Survey 2019* report, found at: [bto.org/bbs-report](https://bto.org/bbs-report).

The relatively small number of BBS squares surveyed in Northern Ireland means that it is not possible to measure trends in many less common species. This includes a number of once common and widespread birds such as **lapwings**,

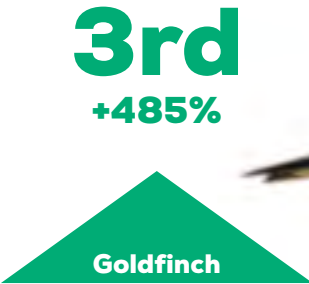
**yellowhammers** and **tree sparrows**; this bias may present an overly optimistic picture of how breeding bird species are faring. Additionally, the 37 species for which BBS trends are available over-represent those of lower conservation concern (birds green-listed in BoCC4).

## A varied picture

The long-term BBS trends in Northern Ireland that are available are generally encouraging, with only eight species showing a negative change over the 23-year period. Ten-year trends are more concerning, however, with half of all species analysed showing a decline. Although there are no particularly strong patterns amongst the trends, a number of the species doing particularly well are increasingly using urban gardens, while several of the species showing large declines are seed-eating farmland birds.

In most cases, the trends in Northern Ireland mirror those in the rest of the UK, though the relatively small number of squares surveyed increases the uncertainty around the reported changes. A small number of species show divergent trends, however. For example, **linnets**, **lesser redpolls** and **reed buntings** have all declined significantly in Northern Ireland during the last 10 years, while the UK trends have been positive, although not significantly so. The small and declining area of arable farmland in Northern Ireland, which provides food over winter, may have contributed to these declines.

Northern Irish BBS trends are generally in line with those from the equivalent Countryside Bird Survey (CBS) in the Republic of Ireland for periods of 18 years (1998 to 2016) and 10 years (2006 to 2016), especially among species with the greatest positive changes. However, a number of seed-eating birds appear to be doing much better south of the border. The trends for **lesser redpolls** are particularly different between countries: they have increased by 65% over 10 years in the Republic of Ireland, but declined by 53% over a similar period in Northern Ireland.

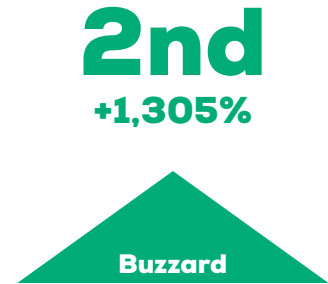


## Wintering geese and diving ducks decline

Results from the Wetland Bird Survey (WeBS) indicate that numbers of **light-bellied brent geese** from the Canadian Arctic population, for which Northern Ireland is a major wintering and staging area, have continued their recent decline. The long-term trend remains positive, however. The decline appears to be due to reduced breeding success.

Since 2000, there has also been a large decline in numbers of wintering diving ducks, principally at Lough Neagh. Changes in migratory patterns may play a role in these declines, however, the declines also coincide with a dramatic decrease in the macroinvertebrate community in Lough Neagh.

In contrast, the numbers of Icelandic-breeding **whooper swans** wintering in Northern Ireland have maintained their long-term increase. Over the last 10 years, numbers of wintering **lapwings**, **golden plovers**, **redshanks** and **turnstones** have declined, while **black-tailed godwits** have shown a sustained increase.





**36%**  
increase  
in common  
guillemots on  
Rathlin Island  
since 2000

## New offshore protection for seabirds

Northern Ireland supports a number of island seabird colonies which are significant in an Irish Sea context.

Rathlin Island supports one of the largest **common guillemot** colonies in the UK. In 2011 the island held around 130,000 **common guillemots**, representing an increase of 36% from the Seabird 2000 survey. The island also supports regionally important populations of **fulmars**, **black guillemots**, **kittiwakes** and **razorbills**.

The Copeland Islands are also important for seabirds, supporting a significant colony of around 4,000 pairs of **Manx shearwaters**, as well as **common gulls**, **Arctic terns** and breeding **eiders**. On Lighthouse Island in the Copeland group, members of the Copeland Bird Observatory have been using decoys and sound recordings to attract **puffins**. Thanks to their efforts, more than 100 **puffins** now visit the colony and pairs have bred for there for the last two years.

All significant seabird colonies in Northern Ireland have been designated as either Special Protection Areas (SPA) or Areas of Special Scientific Interest (ASSI). These designations protect nesting sites however, at present, Northern Ireland has no SPAs tailored to the needs of breeding seabirds at sea.

### Proposed marine SPAs

There are six important locations for breeding **Sandwich**, **common** and **Arctic terns** on the east coast of Northern Ireland (see Figure 14). Boat-based surveys of tern foraging trips were used to model the foraging range of each colony and to propose new marine SPA boundaries.

This process resulted in a proposed new East Coast (NI) Marine SPA covering the core areas of all the colonies north of Dundrum Bay, an area of approximately 970km<sup>2</sup>. The proposed SPA will also be important for other seabirds, particularly **Manx shearwaters** from the Copeland Islands colony. A marine extension to the existing Carlingford Lough SPA was also proposed.

The recent absence of a devolved Assembly in Northern Ireland has delayed the SPA designation process but, with a return to political normality, it is hoped that this process will be completed shortly and protection for seabirds in Northern Irish waters substantially improved.



**Figure 14:** Map of the coast of Northern Ireland showing the proposed marine SPAs and important seabird sites.

## The Antrim Hills: a key area for priority species

The Antrim Hills are recognised as one of the most important areas in Northern Ireland for upland priority species.

The area is characterised by extensive patches of blanket bog, wet heath and rough grassland. During the last 70 years, a large proportion of higher land has been given over to forestry plantations.

In 2006, the Antrim Hills Special Protection Area (SPA) was designated to safeguard Northern Ireland's largest populations of **hen harriers** and **merlins**; 25 and eight pairs respectively at the time of designation.

### Hen harriers under threat

The Northern Irish **hen harrier** population has declined by over 20% since the designation of the SPA, while losses in the Antrim Hills have approached 80%.

A number of factors are thought to have contributed to this decline, including overgrazing, inappropriate heather management, drainage, wildfires and predation. The most significant effect of current land management and extensive wildfires has been the decline in extensive stands of tall heather, which are the harriers' preferred nest sites. Drainage and overgrazing are also likely to be contributing to declines of important prey, such as **meadow pipits** and **skylarks**.

Urgent conservation action is required to restore **hen harrier** and **merlin** populations in the Antrim Hills. NIEA is collaborating with the Northern Ireland Raptor Study Group to produce a habitat management plan for the SPA. This aims to re-establish areas of suitable nesting habitat adjacent to good quality foraging areas that are managed to maintain high densities of prey species.

### Dramatic wader declines

Recent research has shown that all species of wader breeding in Northern Ireland have, in common with other parts of the UK, undergone a catastrophic decline over the last 30 years, with **curlew** numbers dropping by 82% between 1987 and 2013. In 2013, the Northern Irish population was estimated at 526 pairs, but is likely to have declined further since then.

The largest remaining **curlew** stronghold is the marginal and low-intensity agricultural lands of the southern Antrim Hills, with around 40 pairs of **curlew** in or close to the current SPA. Parts of this area are already subject to conservation action for **curlews** through the RSPB's **Curlew** Trial Management Project and the uptake of the Environmental Farming Scheme's breeding wader option by adjacent landowners.

NIEA is currently investigating the feasibility of including **curlews** and other breeding waders as selection features of the existing SPA and revising the boundary accordingly. In consultation with stakeholders, NIEA is assessing the likely conservation benefits of this and other approaches, such as locally targeted, intensified and long-lasting agri-environment measures.

**Nearly  
80%**  
of hen harriers in  
the Antrim Hills  
have been lost

Hen harrier by Laurie Campbell (rspb-images.com)





**Bitterns have responded well to wetland habitat creation**



**Linnets are recovering in England**



- Breeding Bird Survey (BBS) trends show that the populations of several birds that have declined over the long term, including **tree sparrows** and **linnets**, have recently recovered or stabilised.
- Birds showing the largest long-term increases include some raptors, colonising wetland birds and non-native species, as well as familiar conservation successes such as **bitterns**, **curl buntings** and **stone-curlews** that have responded to targeted efforts.
- **Turtle doves** declined by 98% between 1970 and 2018, so urgent conservation action is needed to prevent these farmland birds from becoming extinct in Great Britain.
- Thirteen new or newly extended marine Special Protection Areas (SPAs) have been designated in English waters in the last decade, with the potential to protect hundreds of thousands of breeding seabirds.
- The English Winter Bird Survey found that agri-environment options have a range of positive benefits for farmland birds, with results suggesting the greatest benefits occurred where existing resources were scarce.

Bittern by Richard Brooks (rsnb-images.com), linnets by Shutterstock

# Headlines

Stone-curlews have responded well to targeted conservation work





## Trends in wild birds in England

In 2019, 2,928 Breeding Bird Survey (BBS) squares were covered in England, generating trends for 113 species.

In England, the forerunner to the Breeding Bird Survey (BBS), the Common Birds Census (CBC), provided reliable population trends for many widespread farmland and woodland species in lowland England, dating back to the mid-1960s. The CBC was continued in tandem with the BBS from 1995 to 2000, to allow accurate long-term trends to be

produced using the combined data of the two schemes for species where there is good geographical representation.

The top 10 declining and increasing species in England over the whole CBC/BBS period (from 1970 to 2018), and their associated BBS 10-year (2008 to 2018) trends are shown in Table 8.

**Table 8:** selected trends in common and widespread breeding birds in England

Species (colour coded according to conservation status in <i>BoCC4</i> )	Long-term trend % (1970–2018) <sup>1</sup>	10-year trend % (2008–2018) <sup>1</sup>
<b>Turtle dove</b>	<b>-98</b>	<b>-81</b>
<b>Tree sparrow</b>	<b>-96</b>	14
<b>Lesser redpoll</b>	<b>-95</b>	7
<b>Willow tit</b>	<b>-94</b>	<b>-54</b>
<b>Grey partridge</b>	<b>-93</b>	<b>-36</b>
<b>Spotted flycatcher</b>	<b>-93</b>	<b>-36</b>
<b>Nightingale</b>	<b>-92</b>	-11
<b>Tree pipit</b>	<b>-90</b>	-27
<b>Corn bunting</b>	<b>-89</b>	-1
<b>Starling</b>	<b>-88</b>	<b>-29</b>
<b>Stock Dove</b>	<b>112</b>	<b>41</b>
<b>Woodpigeon</b>	<b>133</b>	<b>-4</b>
<b>Jackdaw</b>	<b>156</b>	<b>28</b>
<b>Goldfinch</b>	<b>175</b>	<b>67</b>
<b>Mute Swan</b>	<b>225</b>	<b>18</b>
<b>Collared dove<sup>2</sup></b>	<b>268</b>	<b>-27</b>
<b>Blackcap</b>	<b>292</b>	<b>62</b>
<b>Great spotted woodpecker</b>	<b>307</b>	<b>-8</b>
<b>Nuthatch</b>	<b>307</b>	<b>37</b>
<b>Buzzard</b>	<b>1,070</b>	<b>34</b>

### Footnotes

- Long- and short-term trends are based on smoothed estimates of change in England, see: [bto.org/birdtrends](https://bto.org/birdtrends). Although all data, including the most recent from 2019, are included in analyses, we report measures of change to the penultimate year (2018), to avoid unreliable effects due to smoothing at the endpoints of time series. Significant trends ( $P \leq 0.05$ ) are shown in **bold**. BBS trends are taken from the Breeding Bird Survey 2019 report, found at: [bto.org/bbs-report](https://bto.org/bbs-report). CBC/BBS trends are from the BTO.
- Shorter long-term period from 1972.

**1st**  
-98%

Turtle dove

**2nd**  
-96%

Tree sparrow

**3rd**  
-95%

Lesser redpoll

**1st**  
+1,070%

Buzzard

**2nd**  
+307%

Nuthatch

**3rd**  
+307%

Great spotted woodpecker

## Turtle dove numbers tumble

Since England makes up a large proportion of the UK's land area, species' trends here tend to mirror those in the UK as a whole, for both the CBC and the BBS. **Turtle dove** numbers have shown the largest decline of any species in both the long-term and the short-term, and there is now an urgent need to monitor whether targeted conservation action is effective at halting declines.

With a drop of 96% since 1970, **tree sparrows** have shown the second biggest decline. By contrast, the 10-year BBS trend shows an increase of 14%. However, these increases have occurred from an extremely low base; for every **tree sparrow** present today there were approximately 20 in the 1970s.

Eight of the 22 species that have declined by more than 50% since 1970, have shown small declines or increases in the last 10 years, suggesting that their populations are stabilising or beginning to recover. These include **yellow wagtails** and **linnets**. Thanks to a reprieve from past persecution, **buzzards** are recovering and a

nationwide reintroduction programme has allowed **red kites** to recolonise large areas of England.

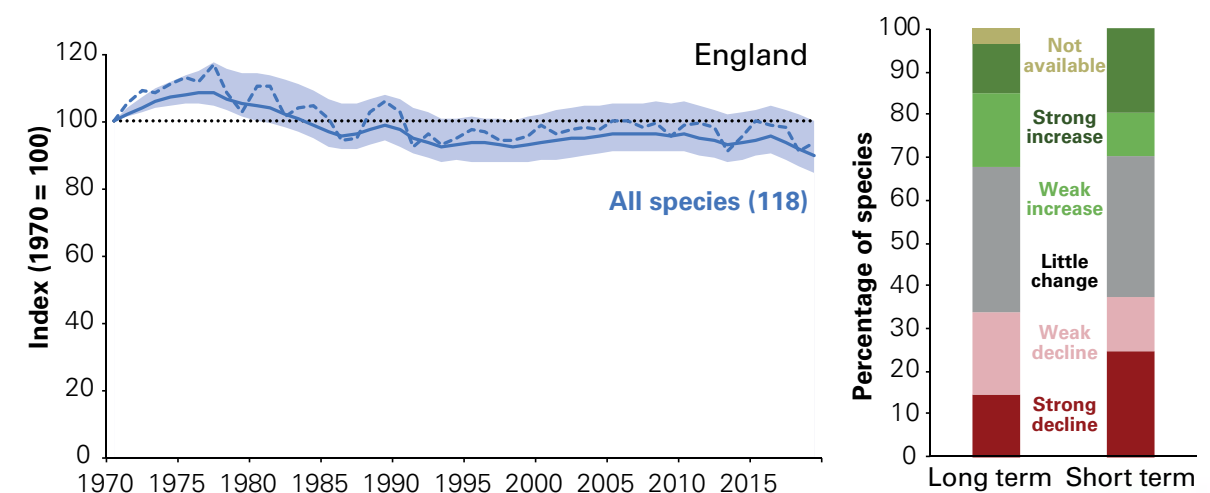
## English wild bird indicators

The unsmoothed all species indicator shows a small long-term decline of 8%, with similar proportions of species increasing (31%) and decreasing (32%).

There are large and ongoing declines in the farmland (59%) and woodland indicators (28%), with 11 of the 19 farmland species declining in the long-term compared to four increasing.

There is little change in the wetland breeding bird indicator. This masks divergent trends in species of slow flowing or standing water, which are, on average, increasing, and the declines seen in wet grassland birds, such as **lapwings** and **redshanks**.

There has been a small increase in the seabird indicator in the long term, in part driven by dramatic increases in England's only gannetry, at Bempton Cliffs.



**Figure 15:** English wild bird indicator showing trends in breeding wild birds in England, 1970 to 2019.

### Footnotes

- The graph shows the unsmoothed trend (dashed line) and smoothed trend (solid line) with its 95% confidence interval (shaded area). Figures in brackets show the number of species.



# English winter bird survey

An extensive survey of English farmland by the BTO, funded by NE and Defra, investigated the value of agri-environment (AES) options that deliver food and habitat for birds during winter.

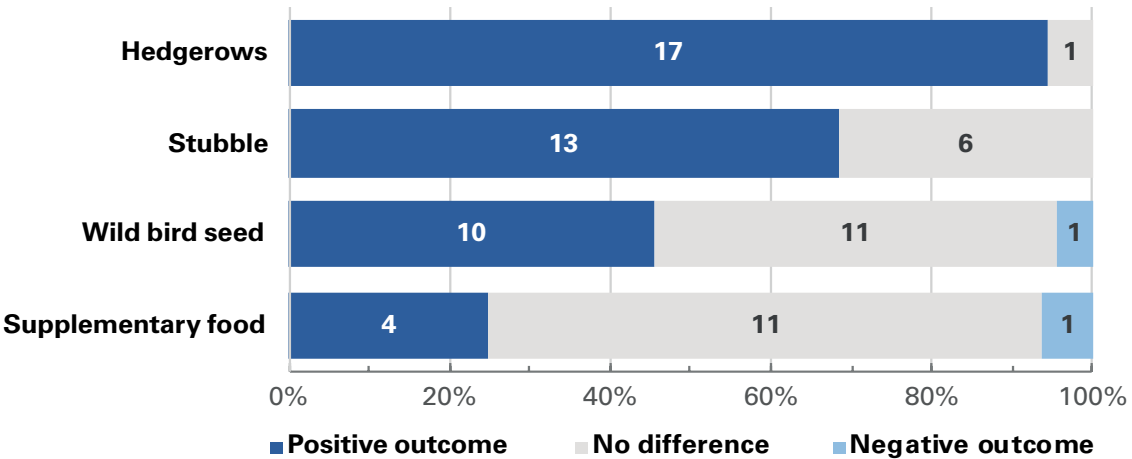
Thanks to a brilliant effort by BTO volunteers, over half of English Breeding Bird Survey (BBS) squares (1,485) were visited during the winter, and four-fifths of those received at least three visits. Bird count data were then compared to the amount of the key AES options at different scales, as many species are more mobile and flock more during the winter. These AES options were: stubbles, wild bird seed mixtures, hedgerow management and supplementary feeding in the landscape.

Associations between the abundance of individual bird species and AES option delivery were mixed at the smaller scales, but there were more positive relationships at the landscape scale

(see Figure 16). This suggests that birds are responding to AES management at larger scales during winter, due to their greater mobility. This was particularly true for stubble options and for hedgerow management.

The reasons for finding a mixture of responses to supplementary food and wild bird seed mixtures are not clear, but the relatively mild weather during the survey may have influenced the results. For all options, bird responses were generally greater when background populations were lower, suggesting that the provision of winter food or habitats has the greatest impact where such resources are scarce and therefore most limiting.

1,485  
BBS squares  
were surveyed by  
volunteers  
in winter



**Figure 16:** Percentage of positive, non-significant and negative results from models of associations between maximum count of a species in focal 1-km survey squares and the quantity of each AES option management type at 3 x 3-km scale. The number of species associations in each category is shown on each bar.

# Marine Special Protection Areas

The UK’s internationally important seabird colonies and inshore aggregations of non-breeding waterbirds have long been classified as SPAs. Yet, until recently, this was not the case for offshore marine sites.

At the outset of the marine SPA programme, the European Seabirds at Sea (ESAS) database was the primary source of at-sea bird distribution data. Over the last 20 years, additional bespoke surveys and novel analytical approaches applied to those data, in combination with ESAS data, have resulted in an enhanced evidence base. The information gained has allowed a network of fourteen marine SPAs to be proposed, publicly consulted on, and (with one exception) formally classified in English waters (see Figure 17).

Extensions are now in place around the three largest seabird colonies in England: the Flamborough and Filey Coast SPA, the Farne Islands SPA and the Coquet Island SPA. Breeding tern foraging areas are also now protected by a suite of sites (including the Solent and Dorset Coast SPA). The Falmouth Bay to St Austell Bay SPA protects the biggest known non-breeding aggregations of **black-throated divers** and **great northern divers** in English waters.

From a standing start in 2000, the existence today of a substantial marine SPA network in English waters is a significant achievement. But designation alone won’t safeguard seabirds. For each site, the management practices needed to secure the long-term health of our seas must be designed and implemented.

Already, the existence of these SPAs is making a tangible difference. The Crown Estate factored these SPAs into their planning for round four of offshore renewable energy leasing. Due to concerns over potential impacts on SPA features, and associated risks to development

consents being granted, some areas were removed from those opened up for leasing. This is a win-win outcome: identifying and classifying internationally important protected sites at sea for marine birds increases the likelihood that developments in the marine environment can be delivered sustainably.

230,000  
pairs of breeding  
seabirds are  
protected  
by English  
marine SPAs



**Figure 17:** Marine Special Protection Areas and proposed SPAs wholly or partly in English waters.



# UK Overseas Territories and Crown Dependencies

Black-browed albatrosses were down-listed from Endangered to Least Concern in 2018



The UK is responsible for helping to protect and conserve rare species and iconic landscapes across 14 UK Overseas Territories (UKOTs) and three Crown Dependencies (CDs).

During April 2020, the UK government tripled its Darwin Plus funding for environment projects across UKOTs to £40 million over four years. Existing Darwin Plus funding is supporting projects in Tristan da Cunha to help conserve the unique **golden Wilkins' bunting**, while in South Georgia and the South Sandwich Islands the funding is being used to initiate monitoring to support the management of Marine Protected Areas.

## Birds bouncing back

Conservation success stories in the UKOTs include the **black-browed albatross**, of which the Falklands holds 70% of the global breeding population. This species was down-listed from Endangered to Least Concern on the IUCN Red List in 2018, as it is now increasing. Similarly, the **Montserrat oriole** and **St Helena plover** were both down-listed from Critically Endangered to Vulnerable in 2016, and encouragingly their population increases have been maintained.

Back in 2006, feral cats were successfully eradicated from Ascension Island and almost immediately seabirds began to return to the mainland of Ascension. **Masked boobies** returned

in the first year and then in 2012 **Ascension frigatebirds** nested on the mainland for the first time in over 180 years. Amazingly, there are now more than 1,500 pairs of each species nesting on mainland Ascension.

Efforts to remove non-native rodents from South Georgia were also declared a success in 2018 and increases in the endemic **South Georgia pipit** have been seen already.

## Birds under threat

All of the 950 bird species found across the UKOTs and CDs have been assessed against IUCN global Red List criteria. Of these, 7% of extant species (69 birds) are Globally Threatened (assessed as Critically Endangered, Endangered or Vulnerable) and 15 species have gone extinct since 1500 (see Figure 18). The groups with the highest proportion of threatened species are the albatrosses, petrels and shearwaters (25 of 79 species: 32%), and the penguins (five of 12 species: 42%).

Introduced mammalian predators and by-catch from long-line fisheries remain the key threats to petrels and albatrosses, despite massive conservation efforts and considerable successes in both areas. Where

Black-browed albatross by David Tipling (rsph-images.com)



St Helena plover by Eddie Duff (St Helena National Trust)

conservation measures to reduce seabird by-catch are implemented, their effectiveness is almost unparalleled, with an 80–98% reduction in seabird mortality and little associated impact on fish landings. Fisheries in the territorial waters of the UKOTs have low by-catch rates because by-catch reduction measures are implemented. However, the regulation and

implementation of these measures is much lower in the high seas, where many seabirds forage and remain at risk.

The threats to penguin species are less clear, but it is likely that several species have been negatively impacted by changes in ocean productivity related to climate change.

**69** bird species in the UKOTs and CDs are Globally Threatened

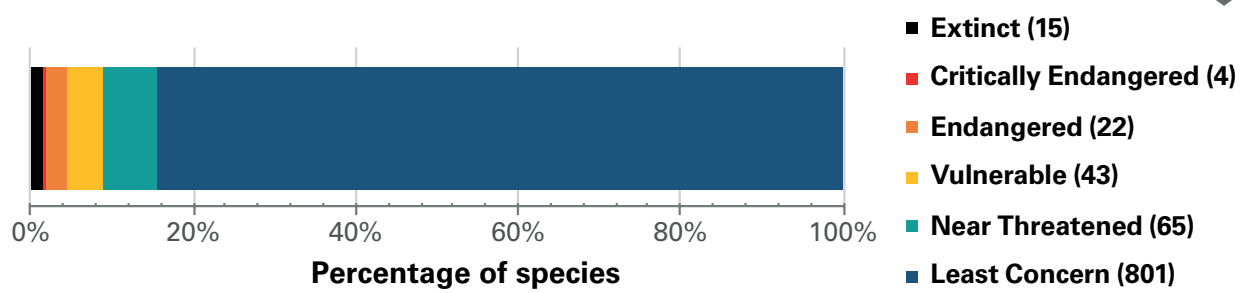


Figure 18: The percentage of species found across the UKOTs and CDs that have been allocated to each of the IUCN Red List categories.





## The Gough Island Restoration Programme

Gough Island World Heritage Site, part of the Tristan da Cunha group, is known for being one of the most important seabird nesting sites in the world.

This unique island is home to over eight million birds of 24 species. These include two island endemics, the **Gough finch** (Critically Endangered: CR) and **Gough moorhen** (Vulnerable), and three additional species of conservation concern for which Gough holds the vast majority of the world's population: the **Tristan albatross** (CR), **Atlantic petrel** (Endangered: EN) and **MacGillivray's prion** (EN).

### Non-native mice causing seabird declines

Seabird populations on the island are threatened by non-native house mice that were introduced accidentally during the 19th century. These mice feed on seabird eggs and chicks, and have recently also been observed feeding on adults, which is extremely worrying. Due to the absence of natural predators, the island's mouse population has flourished, while the seabirds they predate have no natural defences against them.

**MacGillivray's prions** were recognised on Gough less than 10 years ago, having previously been considered to be the same species as the similar-looking **broad-billed prions**. **MacGillivray's prions** have a broad distribution and used to be abundant on Amsterdam Island (a French Overseas Territory) in the Indian Ocean, but they went extinct on this island due to predation from introduced mammals. This fate now seems a distinct possibility on Gough as well; **MacGillivray's prions** produce almost no viable offspring each year, and the species is maintained solely by surviving adults. This finding is especially alarming as they are likely to be representative of many other small, burrow-nesting seabirds on Gough for which no monitoring data exist.

Overall, it is estimated that mice are responsible for the deaths of 1.7–2.1 million seabirds on Gough annually (mostly chicks). For a large proportion of the species affected it takes many years to reach breeding age (for example, **Tristan albatrosses** take at least 10 years), leaving them increasingly vulnerable to the impacts of mouse predation. Unfortunately, these cumulative factors have led to overall population declines across a wide range of the island's seabirds.

**Gough finch** populations have also been affected. Populations are estimated to have declined by 50% over three generations, and finches are also effectively absent from lowland fern bush habitat, where they were once abundant (see Figure 19). This decline led to the re-classification of the species from Endangered to Critically Endangered in 2008.

**Tristan albatrosses take 10 years to reach breeding age**



Tristan albatross by Tom Mosher (rspb-images.com)



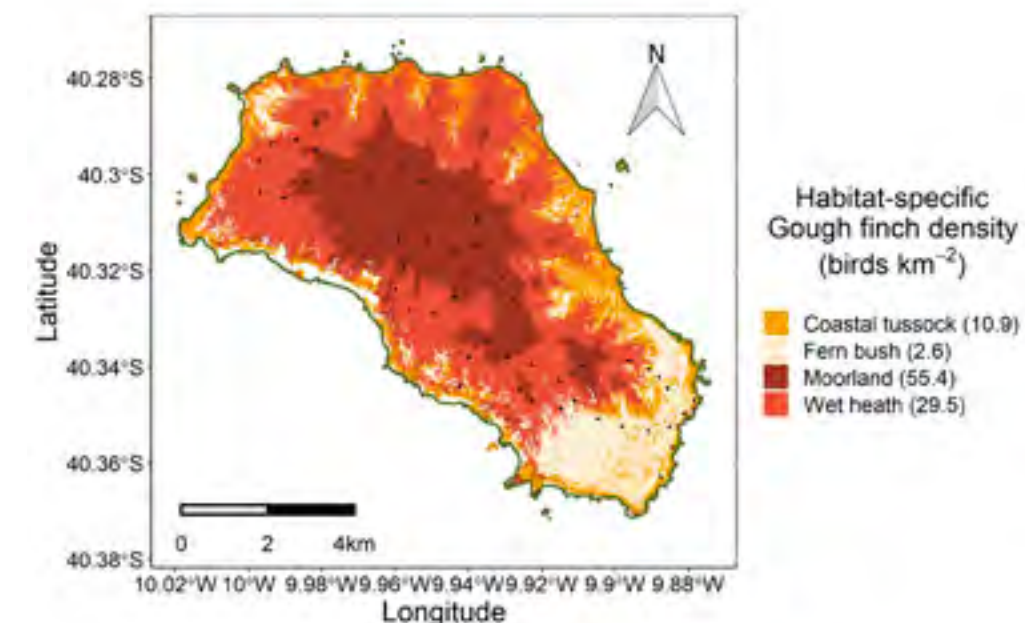
Scientist with Atlantic petrel by Kate Lawrence (rspb-images.com)

### Mouse eradication delayed

The RSPB, in conjunction with the Tristan da Cunha government and other key project partners, were due to implement the Gough Island Restoration Programme during the 2020 field season, hopefully leading to the

eradication of house mice on the island. Unfortunately, due to the Covid-19 pandemic, this programme was postponed. However, the team hopes to return to the field in 2021. For more information on the Gough Island Restoration Programme please visit: [goughisland.com](https://goughisland.com).

**Mice kill 1.7–2.1 million seabirds on Gough Island every year**



**Figure 19:** Map of Gough Island showing the estimated density of **Gough finches**, reproduced from Jones *et al* 2020.



## Bird trapping in Cyprus

Illegal bird-trapping in Cyprus has been a conservation issue for many years, and since 2002 the RSPB and BirdLife Cyprus have worked together to try to eradicate this practice.

Other NGOs such as Campaign Against Bird Slaughter (CABS), Terra Cypria and Friends of the Earth Cyprus also continue to actively campaign against the illegal trapping and consumption of wild birds.

Trappers will typically use lime sticks and mist nets (often now using playback lures) to catch migratory and wintering birds. This is a non-selective method which often results in many non-target species being caught, and surveys show that 157 bird species have been found trapped, 82 of which are considered conservation priority species.

The main target species are migratory warblers such as **blackcaps**, however, any small songbirds that are caught are served as ambelopoulia (pickled or grilled songbirds). Despite being made illegal in 1974 under national law, trapping and consuming wild songbirds in Cyprus is ongoing and widespread, and has an estimated value of over €15 million per year.

BirdLife Cyprus monitors trapping activity across the island, both in the Republic of Cyprus and in the eastern UK Sovereign Base Area (SBA). This monitoring is crucial as it gives BirdLife Cyprus an overall picture of the illegal bird trapping situation year on year.

### Trapping declines in UK SBA

Systematic field surveys are undertaken by BirdLife Cyprus each spring and autumn, and data from these are collated to produce yearly trapping trends. Encouragingly, the overall trend across the island has decreased (see Figure 20) following dramatic declines in trapping rates in the SBA from very high levels in 2016.

This reduction of trapping activity in the SBA can be attributed to the close co-operation of the SBA Administration and NGOs. This includes the joint monitoring of illegal trapping, and the

implementation of strict deterrents, such as confiscating vehicles and revoking land lease agreements. Since early 2019, the SBA has also adopted the use of on-the-spot fines, following their use in the Republic of Cyprus since 2017.

The success of deterrent measures enforced by the SBA Police and Administration can be seen in previous trapping hotspots like Cape Pyla, where no trapping activity was recorded during the 2019 autumn survey season.

Cape Pyla was designated as a Special Area of Conservation in 2016, conditional upon the continued removal of non-native acacia trees, which were illegally planted by trappers in order to attract birds. BirdLife Cyprus is working closely with the SBA to implement a habitat management plan for the area, including restarting the acacia removal programme to eradicate the trees entirely. More information is available at: [birdlifecyprus.org/campaign-against-illegal-bird-trapping](https://birdlifecyprus.org/campaign-against-illegal-bird-trapping)

**Blackcaps and other migrant warblers are targeted by trappers**

**157**  
bird species  
found trapped



Trapped warblers by Guy Shorrock (rspb-images.com)



Mike Lane (rspb-images.com)

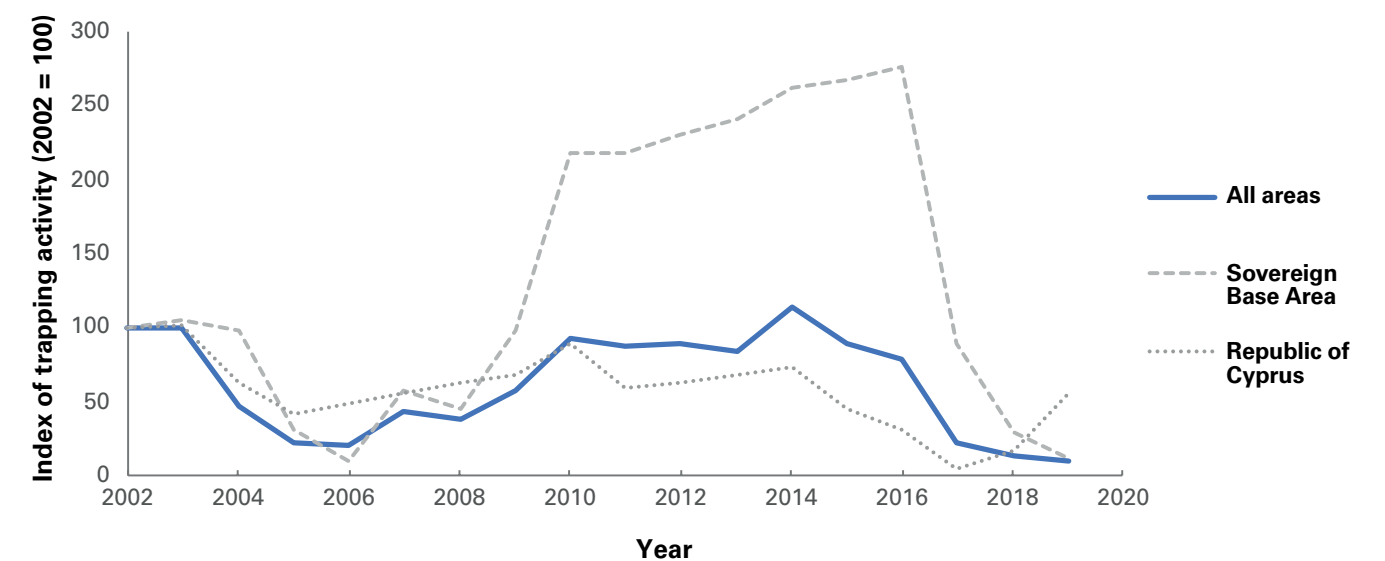


Figure 20: Index of trends in autumn mist-netting activity in Cyprus.



# Current and planned surveys

The information summarised in *The state of the UK's birds 2020* is drawn from the annual and periodic monitoring programmes described below, and from the work of individual ornithologists. Anyone interested in taking part in these surveys should contact the relevant organisations at the addresses given on page 79.

The **Breeding Bird Survey (BBS)** is the monitoring scheme for common and widespread breeding land birds throughout the UK. It aims to provide data on population trends to inform and direct conservation action. The BTO/JNCC/RSPB Breeding Bird Survey is a partnership jointly funded by the BTO, RSPB and JNCC, with fieldwork conducted by volunteers. **Contact the BTO.** [bto.org/bbs](https://bto.org/bbs) [@BBS\\_birds](https://twitter.com/BBS_birds)

The **Wetland Bird Survey (WeBS)** is a partnership between the BTO, the RSPB and the JNCC (the latter on behalf of the statutory nature conservation bodies: DAERA, NE, NRW and SNH) and in association with WWT. The BTO/RSPB/JNCC Wetland Bird Survey (WeBS) is a partnership jointly funded by the BTO, RSPB and JNCC, in association with WWT, with fieldwork conducted by volunteers. **Contact the BTO.** [bto.org/webs](https://bto.org/webs) [@WeBS\\_UK](https://twitter.com/WeBS_UK)

The **Waterways Breeding Bird Survey (WBBS)** has been running since 1998. This scheme, and its predecessor the Waterways Bird Survey (WBS) that ran from 1974 to 2007, aims to monitor riverside breeding birds, particularly waterway specialists, across the UK. The BTO/JNCC/RSPB Breeding Bird Survey is a partnership jointly funded by

the BTO, RSPB and JNCC, with fieldwork conducted by volunteers, and the WBBS is incorporated into this partnership. The Waterways Breeding Bird Survey received significant previous support from the Environment Agency. **Contact the BTO.** [bto.org/wbbs](https://bto.org/wbbs) [@BBS\\_birds](https://twitter.com/BBS_birds)

The **Goose & Swan Monitoring Programme (GSMP)** is a suite of surveys (funded under the WWT, JNCC and SNH partnership), designed to accurately assess the abundance and breeding success of the UK's native geese and migratory swans during the non-breeding season. **Contact the WWT.** [monitoring.wwt.org.uk/our-work/goose-swan-monitoring-programme/](https://monitoring.wwt.org.uk/our-work/goose-swan-monitoring-programme/) [@WWTworldwide](https://twitter.com/WWTworldwide)

The **BTO Heronries Census** collects counts of apparently occupied nests each year, from as many heronries as possible throughout the UK. It also aims to monitor populations of colonial waterbirds, especially **grey herons**, **little egrets** and **cormorants**. **Contact the BTO.** [www.bto.org/heronries](https://www.bto.org/heronries) [@\\_BTO](https://twitter.com/_BTO)

The **Seabird Monitoring Programme (SMP)** gathers information on breeding numbers, breeding success and other parameters to help us understand drivers

of change and to target conservation action. Co-ordinated by the JNCC, it is a partnership between the statutory nature conservation agencies, and research and conservation organisations.

**Contact the JNCC.** [jncc.defra.gov.uk/page-1550](https://jncc.defra.gov.uk/page-1550) [@JNCC\\_UKseabirds](https://twitter.com/JNCC_UKseabirds)

**Seabirds Count** is the fourth breeding seabird census to be conducted in the UK and Ireland. It is being coordinated by the JNCC and volunteers are currently being sought to assist with the final year of data collection in 2021. Please contact [seabirdscountcoordinator@jncc.gov.uk](mailto:seabirdscountcoordinator@jncc.gov.uk) if you can help. **Contact the JNCC.** [@JNCC\\_UKseabirds](https://twitter.com/JNCC_UKseabirds)

The **Rare Breeding Birds Panel (RBBP)** collates data on our rarest breeding birds from a wide variety of sources and works to encourage more and better coverage. Breeding records, with full details, should be submitted to county bird recorders who compile data for annual submissions to the RBBP. [rbbp.org.uk](https://rbbp.org.uk) [@ukrbbp](https://twitter.com/ukrbbp)

The **Big Garden Birdwatch** is the largest wildlife survey in the world. Its simple design (one hour watching birds in your garden or local park over one weekend in January) means around half a million people take part every year. The data provide an excellent snapshot of garden bird numbers across the UK.

**Contact the RSPB.** [rspb.org.uk/birdwatch](https://rspb.org.uk/birdwatch) [@RSPBScience](https://twitter.com/RSPBScience)

**Garden BirdWatch (GBW)** is a year-round scheme recording the weekly occurrence and numbers of birds in participants' gardens. The data collected provide valuable information on annual and seasonal changes in the way birds use rural and urban habitats. These can be related to population trends in the wider countryside. **Contact the BTO.** [bto.org/gbw](https://bto.org/gbw) [@BTO\\_GBW](https://twitter.com/BTO_GBW)

**BirdTrack** is a year-round bird recording system run by the BTO in partnership with the RSPB, BirdWatch Ireland, the Scottish Ornithologists' Club and the Welsh Ornithological Society. The collection of species' list data from a large number of observers helps a range of national research and monitoring objectives.

**Contact the BTO.** [birdtrack.net](https://birdtrack.net) [@BirdTrack](https://twitter.com/BirdTrack)

The **Ringling Scheme** is run by the BTO and covers Britain and Ireland. It is funded by a partnership of the BTO, the JNCC (on behalf of DAERA, NE, NRW and SNH), the National Parks and Wildlife Service (Ireland) and the ringers themselves. Volunteer bird ringers collect data on the survival, productivity, movements and condition of birds. Project ringling, such as the Constant Effort Sites Scheme, the Retrapping Adults for Survival project, and other targeted ringling, forms an important part of the Scheme.

**Contact the BTO.** [bto.org/ringing](https://bto.org/ringing) [@\\_BTO](https://twitter.com/_BTO)

The **BTO Nest Record Scheme (NRS)** gathers vital information on the breeding success of the UK's birds by asking volunteer nest recorders to find and follow the progress of individual birds' nests. The scheme is funded by a partnership of the BTO and the JNCC (on behalf of DAERA, NE, NRW and SNH). **Contact the BTO.** [bto.org/nrs](https://bto.org/nrs) [@\\_BTO](https://twitter.com/_BTO)

A programme of **UK-wide surveys** of priority breeding species is conducted under the Statutory Conservation Agencies and RSPB Breeding Bird Scheme (SCARABBS) Programme. 2021 will see a new national **turtle dove** survey as well as the last field season of the **willow tit** survey.

**Contact the RSPB.** [rspb.org.uk](https://rspb.org.uk) [@RSPBScience](https://twitter.com/RSPBScience)



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Monitoring of birds in the UK and its Overseas Territories, such as that covered in this report, involves a broad partnership of government agencies, NGOs, sponsors and independent ornithologists, including:

BirdLife International; BirdWatch Ireland; British Birds; British Trust for Ornithology; British Waterways; Centre for Ecology and Hydrology; Darwin Plus Initiative; Department of Agriculture, Environment and Rural Affairs, Northern Ireland; Department for Environment, Food and Rural Affairs; Department of Environment and Natural Resources; Government of Bermuda; Environment Agency; Environment Wales; European Bird Census Council; European Union Life Programme; Forestry Commission; Forest Enterprise; Game and Wildlife Conservation Trust; Greenland White-fronted Goose Study; Irish Brent Goose Research Group; Irish Whooper Swan Study Group; Isle of Man Department of Environment, Food and Agriculture; Joint Nature Conservation Committee; Manx BirdLife; Ministry of Defence; National Trust; National Trust for Scotland; Natural England; Natural Resources Wales; Northern England Raptor Forum; Northern Ireland Raptor Study Group; Raptor Study Groups; Rare Breeding Birds Panel; the Royal Society for the Protection of Birds; Scottish Government Environment and Forestry Directorate; NatureScot; Scottish Ornithologists' Club; Scottish Raptor Monitoring Scheme; Scottish Raptor Study Group; Seabird Group; Shetland Oil Terminal Environmental Advisory Group; Welsh Ornithological Society; the Wildfowl & Wetlands Trust; and the Wildlife Trusts.

**In particular, we thank the thousands of volunteers who have contributed their time, passion and expertise to the monitoring programmes and surveys included in this report. We also thank the landowners and their agents, tenants and employees who have allowed surveyors to visit their land to count and monitor birds.**

# Who we are

*The state of the UK's birds 2020* is available on the websites of the BTO, RSPB and WWT (see addresses below).

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