



The Breeding Bird Survey 2025 *incorporating the Waterways Breeding Bird Survey*

Population abundance trends of the UK's breeding birds



THE 2025 BBS REPORT

THE BBS PARTNERSHIP

The BTO/JNCC/RSPB Breeding Bird Survey is a partnership jointly funded by the BTO, JNCC and RSPB, with fieldwork conducted by volunteers. The Breeding Bird Survey (BBS) now incorporates the Waterways Breeding Bird Survey (WBBS).

The members of the BBS Steering Committee in 2025 were James Pearce-Higgins (Chair), Dawn Balmer, Dario Massimino, David Noble (all BTO), Simon Wotton, Leah Kelly (both RSPB), Ethan Workman and Lucy Baker (both JNCC).

British Trust for Ornithology



The Nunnery
Thetford
Norfolk
IP24 2PU
www.bto.org

BTO is a Registered Charity, Number 216652 (England & Wales), SC039193 (Scotland).

Joint Nature Conservation Committee



Quay House
2 East Station Road
Fletton Quays
Peterborough
PE2 8YY
www.jncc.gov.uk

Royal Society for the Protection of Birds



The Lodge
Sandy
Bedfordshire
SG19 2DL
www.rspb.org.uk

RSPB is a Registered Charity, Number 207076 (England & Wales), SC037654 (Scotland).

THE BBS TEAM AT BTO

James Heywood is the BBS National Organiser and first point of contact for BBS or WBBS queries. James is responsible for the day-to-day running of these surveys, liaising with BTO Regional Organisers (ROs) and volunteers, maintaining the databases, promoting the schemes, and producing the annual report. David White, Engagement & Surveys Officer for England, supports the National Organiser, primarily with the volunteer coordination of these surveys.

Caroline Brighton, Research Ecologist and Dario Massimino, Senior Data Scientist, both in the Bioacoustics and Data Science Team, produced the bird and mammal population trends for 2025. David Noble is the Principal Ecologist for Monitoring, responsible for strategic developments in biodiversity monitoring. Dawn Balmer is Head of Surveys, which includes both BBS and WBBS among other surveys. Maria Knight, Secretary in the Science Department, works closely with James and David White assisting with the running of the surveys. James Pearce-Higgins is the Director of Science.

Contact the BBS National Organiser:

James Heywood, British Trust for Ornithology
Email: bbs@bto.org Tel: 01842 750050

ONLINE RESOURCES

The Official Statistics for BBS are formally published at: <https://jncc.gov.uk/our-work/bbs-official-statistics>

Further information, including graphs of population change, can be found at www.bto.org/bbs and www.bto.org/wbbs. A full species-by-species discussion of these results, and those from other surveys, can be found on the BirdFacts website at: www.bto.org/birdfacts.

This report can be downloaded from: www.bto.org/bbs-report

ACKNOWLEDGEMENTS

We would firstly like to thank all the volunteers who spend many hours in the field collecting the data for this report. Without their efforts, this scheme would not be possible. We are also grateful to the following people for their help in 2025: Ewan Baxter, Lee Carnihan, Jon Carter, Ben Darvill, Jen Donelan, Rob Jacques, Gethin Jenkins-Jones, Alice Johnson, Andrew Joys, Miriam Lord, Sorrel Lyall, Drew Lyness, Nick Moran, Viola Ross-Smith, Justin Walker and Steve Willis.

Many people have contributed to both the BBS and WBBS schemes' development and organisation, including Nicholas Aebischer, Mark Avery, Stephen Baillie, Ian Bainbridge, Helen Baker, Richard Bashford, Jessa Battersby, George Boobyer, Andy Brown, Steve Buckland, Nick Carter, Steve Carter, Dan Chamberlain, Rachel Coombes, Humphrey Crick, Sarah Davis, Iain Downie, Mark Eaton, Sarah Eglington, Steve Freeman, Colin Galbraith, David Gibbons, Simon Gillings, John Goss-Custard, Rhys Green, Jeremy Greenwood, Richard Gregory, Sarah Harris, Rob Keen, John Marchant, Ian

McLean, Mike Meharg, Richard Minter, Ian Mitchell, David Morris, Dorian Moss, Stuart Newson, Nancy Ockendon, Will Peach, Ken Perry, Mike Raven, Brenda Read, Warren Read, Kate Risely, Anna Robinson, William Skellorn, Ken Smith, Sandra Sparkes, David Stroud, Pierre Tellier, Chris Thaxter, Richard Thewlis, Derek Thomas, Mike Toms, Lawrence Way, Richard Weyl, Andy Wilson (BBS and WBBS logos), Mark Wilson, Paul Woodcock, Karen Wright and Lucy Wright.

We acknowledge the support of the Northern Ireland Environment Agency, who fund professional fieldworkers to cover squares in Northern Ireland. Natural England, NatureScot and Forestry Commission Scotland (now Scottish Forestry) have contributed to additional surveys on Upland BBS and Scottish Woodland BBS squares in previous years. We are very grateful to the RSPB for funding the initial development of BBS Online, and to the BTO Information Systems Team who have continued to develop the system and provide technical support.

The founder sponsors of the 1998 WBBS pilot year were Thames Water, British Waterways, Severn Trent, Hyder (Welsh Water) and Anglian Water. Since then surveys have been funded by the Environment Agency, BTO, JNCC and RSPB, and sponsored by Severn Trent, Anglian Water and by Essex & Suffolk Water. The WBBS was adopted into the BBS Partnership in 2017.

The report was produced by James Heywood. The cover photo of a Green Woodpecker was kindly supplied by Edmund Fellowes/BTO images and the report was printed by Page Bros, Norwich, using carbon-balanced paper from responsible sources.



INSIDE ...

This is the 31st annual report of the BTO/JNCC/RSPB Breeding Bird Survey (BBS) and Waterways Breeding Bird Survey (WBBS), documenting the population abundance trends of widespread UK breeding bird species during the periods 1994–2025 and 1998–2025 respectively. These are the main schemes for monitoring the population changes of the UK's widespread breeding birds, providing an important indicator of the health of the countryside. Trends are produced each year for 119 species based on BBS data, and for 28 waterway specialist species based on WBBS data. Population trends are published as Official Statistics and have been produced to the high professional standards set out in the Code of Practice for Statistics. The results are used widely to set priorities and to inform conservation action.

- 4 LATEST NEWS
- 6 COVERAGE & SIGHTINGS IN 2025
- 8 50 YEARS OF THE UKBMS
- 10 TRACKING THE IMPACT
- 12 BBS AND RENEWABLES
- 15 SPECIES FOCUS: SPOTTED FLYCATCHER
- 16 BACKGROUND AND METHODS
- 17 INTERPRETING THE RESULTS
- 18 UK TRENDS
- 20 ENGLAND TRENDS
- 22 SCOTLAND TRENDS
- 24 WALES TRENDS
- 26 NORTHERN IRELAND TRENDS
- 27 CHANNEL ISLANDS AND ISLE OF MAN
- 28 ENGLISH REGION TRENDS
- 30 MAMMAL MONITORING
- 32 PUBLISHED PAPERS
- 33 WBBS NEWS AND COVERAGE
- 34 WBBS TRENDS
- Back cover: SPECIAL THANKS



CITATION

Heywood, J.J.N., Massimino, D., Baker, L., Balmer, D.E., Brighton, C.H., Kelly, L.A., Noble, D.G., Pearce-Higgins, J.W., White, D.M., Workman, E. & Wotton, S. 2026. *The Breeding Bird Survey 2025*. BTO Research Report **802**. British Trust for Ornithology, Thetford.

Published by the British Trust for Ornithology, the Joint Nature Conservation Committee and the Royal Society for the Protection of Birds, April 2026.

© British Trust for Ornithology, Joint Nature Conservation Committee and Royal Society for the Protection of Birds, 2026.

BTO Research Report 802
 ISSN 1368-9932 (print), ISSN 2756-0864 (online)
 ISBN 978-1-918170-02-3

Latest news

As well as being a terrific year for the survey – read pages 6 and 7 to find out more – a lot has been going on behind the scenes to make the most of BBS data, BBS volunteers' enthusiasm for collecting it, and new technologies, all to better understand bird population changes.

BIRDFACTS PLACES

In November 2025, BTO launched a new arm to the well-established BirdFacts, the one-stop-shop for information on the UK's birds. The existing resource, BirdFacts Species, brings together data collected from extensive national surveys, like BBS, and combines it with expert opinion and commentary to give information on each UK bird species, presenting trends in population abundance, productivity and several other measures. This new product takes a different view of these data; instead of looking at individual species, it provides a view on all the birds in a given region. **BirdFacts Places** presents data for county-based Local Nature Recovery Strategy (LNRS) and Bird Recording Areas. Data from BirdTrack, Bird Atlas, WeBS and BBS contribute to the assessments in this first iteration, with plans to expand the number of surveys (including demographic information) as well as allowing user-defined geographical areas.

BTO has long been able to supply BBS trends at smaller geographical areas – usually counties – but this has always been on request and requiring extra analytical work. Now, 10-year BBS trends using the same analytical methods as described here (p16) are presented in BirdFacts Places for those species with sufficient sample sizes. The trends not only capture whether an increase or decrease has been measured, but also how certain those changes are likely to be. Other regions to benefit from looking at the data in this way include the Channel Islands (p27). It is expected that this work will be especially useful for LNRS reporting authorities and county bird club report editors.

This work was funded by the Natural Capital and Ecosystem Assessment (NCEA) programme.

BBS IN VIDEO

In March, we launched a new set of video tutorials. The three videos, expertly produced by the BTO Training Team of Rob Jacques, Jen Donelan and Nick Moran, cover the basics of how to do BBS, from the preparatory work beforehand, the field method and the extra recording options. We hope this provides a really valuable additional resource to help those doing BBS, both old and new. We will be adding more content in the coming year.

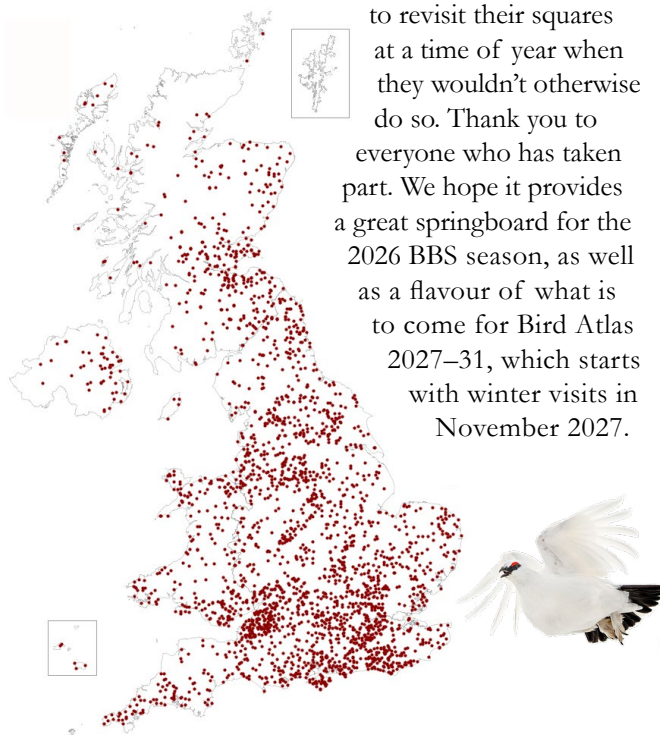
www.bto.org/bbs-taking-part

WINTER BIRD SURVEY

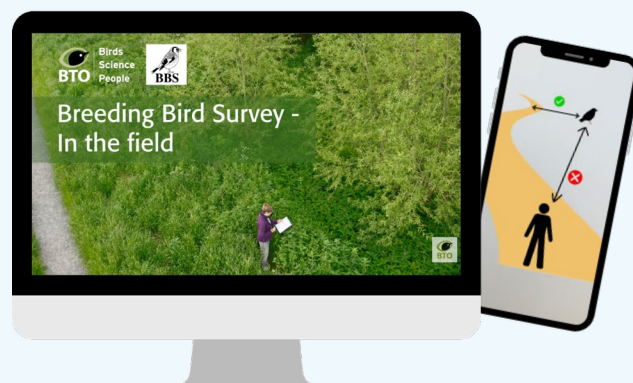
February of this year saw the end of data collection for the second instalment of the Winter Bird Survey. Following on from the 2018/19 survey, this autumn and winter saw a new round of fieldwork to help build our understanding of how land-management practices at this important time of year affect birds numbers. The survey was undertaken almost entirely on BBS squares and with the help of over 1,600 BBS volunteers – that's well over half – plus another 230 who are new to the fold.

The Winter Bird Survey involved four visits to a square between September 2025 and February 2026 using more or less the same field method as BBS. So far, 240 species have been recorded from over 7,600 visits on 2,280 squares, with still plenty of survey visits to enter. Whilst the 2018/19 edition was focused in England, this was a UK-wide endeavour and we are delighted with the coverage from all four countries of the UK. A common theme has been how keen BBS volunteers have been

to revisit their squares at a time of year when they wouldn't otherwise do so. Thank you to everyone who has taken part. We hope it provides a great springboard for the 2026 BBS season, as well as a flavour of what is to come for Bird Atlas 2027–31, which starts with winter visits in November 2027.



▲ Winter Bird Survey volunteers have taken on squares across the UK. Ptarmigan is one of the 240 species reported so far.



CHECK 1, 2, 3

In August of last year, we updated BBS online to improve the validation and verification workflow. The changes that BBS surveyors will see are:

1. On a transect-section summary review, one can **leave a comment** against any observation. These are optional but are recommended on those counts that trigger a validation warning. You can add any information you feel is useful, but we encourage the addition of any contextual information that will allow a reviewer to decide if the record is likely to be correct. The addition of a comment at this early stage is really helpful for ROs and is expected to hugely reduce the number of queries sent.
2. ROs and reviewers can now **send queries to surveyors** directly from within BBS online. So if you receive an email from what might appear to be the BBS team, please don't be alarmed as it will be your friendly RO just checking whether you really meant a Golden Pheasant (GF) and not a Greenfinch (GR).
3. We have made some long-awaited **adjustments to the rules** that dictate which species, counts or dates trigger a validation warning. BirdTrack has been used to get more accurate 'first arrival' dates and we have updated rules for some of the fast-spreading colonists.



▲ Whilst Ring-necked Parakeet remains a relatively rare bird outside of London, it is now recorded regularly in other urban centres. Validation rules have been updated to reflect this.

Overall, however, the rules remain generally conservative. So, if you are on the receiving end of a 'yellow warning', don't be alarmed or put off. It is not us telling you that you are wrong, merely that we'd just like to check. The vast majority of changes that are made following these are to correct common typos.

SOUND IN SCOTLAND

BTO scientists in Scotland, led by Mark Wilson, coordinated a second round of Passive Acoustic Monitoring (PAM) in 2025, with recorders deployed on the squares of 21 fantastic BBS volunteers. In the 2023 BBS report we summarised the first year of this study, which – amongst other things – aims to compare measures of bird activity derived from PAM with counts from BBS volunteers. The first year's analytical work was mainly focused on the performance of the automated classifiers but also found an encouraging correspondence between spatial variation in bird counts of many species and PAM-based measures of their vocal activity.



▲ An example of one of the PAM deployments from 2025, the second year of the project.

With a second year of data collection, we can now start to look at how variation in vocal activity between years compares with annual variation in BBS counts. The fact that annual PAM metrics can be informed by activity of birds at all times of day and across the whole breeding season may enable them to better reflect changes in abundance than 'snapshot' counts from two, relatively brief, visits. This work will inform decisions about when and how traditional monitoring can be enhanced with PAM, especially in harder-to-reach areas such as our uplands.

◀ Could Dunlin be incorporated into future BBS reports on the basis of acoustic monitoring?



Coverage and sightings in 2025

David White, Engagement & Surveys Officer, BTO

The 2024 BBS report celebrated some really impressive coverage records. With all the data in, we can reveal that 2025 was a truly record-breaking year.

RECORD BREAKER

The year 2025 was a very significant year indeed for BBS. It was the best year for square coverage across the UK, Channel Islands and Isle of Man, with 4,058 squares! This beats the previous record of 4,048, set in 2018. However, 2018 is still the best for visits; 7,819 were completed in 2018, compared with 7,761 in 2025, the second highest. 2018 also continues to hold the record for the greatest number of squares with both visits – the ‘gold standard’ – with 3,771.

Nevertheless, it can't be escaped that 2025 was a tremendous year. Thank you so much to all of the BBS volunteers who contributed to this. Your continued time and effort are very much appreciated.

A significant contributing factor to breaking this record was the best year on record for BBS coverage in Wales, breaking the previous record that was set in 2015. A special mention here must go to BTO Cymru Development & Engagement Coordinator Gethin Jenkins-Jones, whose programme of face-to-face training sessions focusing on BBS definitely helped significantly to achieve this. In total, Gethin led face-to-face BBS sessions at nine venues across Wales during early spring 2025, and one online session. A total of 99 people attended these sessions, and 31 took on a BBS square for the 2025 survey season.

The challenge for 2026 across Wales (and indeed across the UK as a whole) will be to build on the success of 2025. How many of those new volunteers that were recruited in 2025 will continue to survey their BBS squares in 2026 and beyond? We hope it is very many indeed.

ELSEWHERE IN THE UK...

- Scotland and Northern Ireland both had their second-best years on record.
- England had its third best year on record, with 2018 and 2017 holding the two top spots.

At the regional level, 14 BTO regions broke or equalled their all-time coverage records. Merseyside – which featured in last year's report – once again came to the fore and equalled its previous record of 20 squares, not seen since 2004. With the exception of Merseyside, the remaining 13 regions all have an RO coordinating the

Table 1: The number of BBS squares with data received to date and the number of volunteers participating by year.

	England	Scotland	Wales	Northern Ireland	Channel Islands	Isle of Man	UK total	No. of volunteers
1994	1,172	245	122	25	1	4	1,569	838
1995	1,321	283	121	17	1	4	1,747	1,014
1996	1,420	308	116	65	7	4	1,920	1,199
1997	1,657	313	138	75	6	6	2,195	1,523
1998	1,712	309	192	85	7	6	2,311	1,830
1999	1,791	275	223	95	7	5	2,396	1,918
2000	1,749	246	213	83	7	3	2,301	1,858
2001*	532	78	22	0	7	0	639	542
2002	1,652	231	215	97	7	3	2,205	1,778
2003	1,738	255	214	109	7	4	2,327	1,872
2004	1,884	273	253	102	11	6	2,529	2,022
2005	2,180	305	271	120	13	3	2,892	2,332
2006	2,569	336	272	107	19	5	3,308	2,661
2007	2,822	486	269	129	16	4	3,726	2,959
2008	2,556	404	242	121	15	1	3,339	2,639
2009	2,569	396	235	116	17	0	3,333	2,570
2010	2,566	331	246	115	16	0	3,274	2,553
2011	2,538	358	223	110	15	0	3,244	2,489
2012	2,671	383	275	117	21	4	3,471	2,628
2013	2,729	471	332	127	26	0	3,685	2,775
2014	2,734	482	340	120	27	0	3,703	2,734
2015	2,832	476	343	78	23	3	3,755	2,793
2016	2,875	490	334	127	24	2	3,852	2,797
2017	2,948	523	340	131	28	3	3,973	2,836
2018	2,992	581	332	119	20	4	4,048	2,835
2019	2,939	608	325	119	21	8	4,020	2,774
2020 [†]	1,762	157	61	28	17	9	2,034	1,453
2021	2,841	628	301	152	19	10	3,951	2,714
2022	2,836	633	315	126	16	10	3,936	2,749
2023	2,855	624	300	129	19	10	3,937	2,756
2024	2,866	626	309	140	22	8	3,971	2,783
2025	2,890	629	359	150	22	8	4,058	2,823

* 2001: foot-and-mouth disease, † 2020: COVID-19

survey locally. These dedicated people play an absolutely crucial role in co-ordinating BBS and WBBS at a local level and keeping volunteers motivated. Thank you so much to all of the ROs for their hard work, the BBS Team at BTO Headquarters wouldn't be able to function without them!

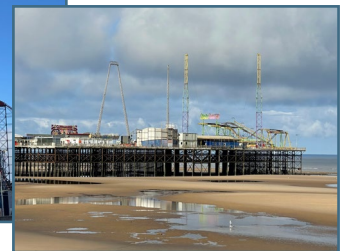
If you are interested in taking on the role of BBS RO in your local area, the regions that are currently vacant are listed on the back page of this report.

SIGHTINGS

A total of bird **226** species was seen across all squares in 2025. The square with the highest number of species recorded on it in 2025 (69) was in north Wiltshire. Whilst this is indeed rather impressive, credit must also go to all of those volunteers who only record a small number of different species on their square each year, with eight squares yielding just two. They are all equally important! These squares are often in upland areas and therefore challenging to access and shows the dedication of BBS volunteers.

ONE SQUARE WONDERS

There were 16 species recorded on a single square during 2025. Notable amongst these were two species that have bred in the UK in the past but may well colonise in the future: **Hoopoe** and **Glossy Ibis**. It will be especially interesting to see what happens with the latter species, given a large influx in autumn 2025.



SPECIAL MENTIONS

This year, BBS volunteer **Heather Coats** (below) won the Jubilee Medal at the BTO Marsh Awards for her contribution to ornithology. As well as her being a co-founding member of the Gower Ringing Group, she is also one of only four people to have surveyed a BBS square in Wales (Heather's square is in West Glamorgan) each year since the survey began in 1994. The time and effort she has contributed over the years are very impressive and greatly appreciated. ▶



Another mention must also go to **Stephen Dunstan**, who has surveyed a BBS square partly within Blackpool Pleasure Beach Fun Fair in Lancashire for the last 23 years. A square like this one highlights the fact that the randomly selected squares can appear anywhere! The BBS Team at BTO Headquarters always looks forward to seeing Stephen's 'landmark' photos each year. ▼

Carrying on the Lancastrian theme, we say a 'farewell' and thank you to **Judith Smith**. Like Heather, Judith has surveyed the same square – in this case Wigan town centre – for every year of the survey and has just retired. Judith completed 174 visits on six squares, along with the most visits by anyone to survey for WBBS (104), not to mention surveying for CBC and WBS, the forerunners to BBS and WBBS. And if that wasn't enough, Judith was the BTO Regional Representative for Manchester in the 1990s and 2000s. We thank Judith for her passion and commitment.

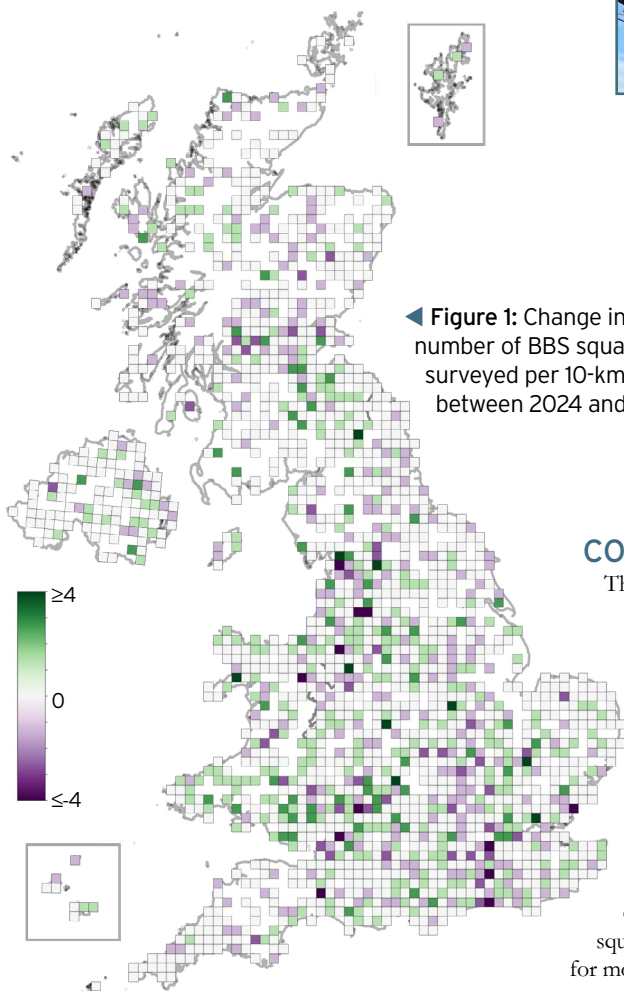
COVERAGE CHANGE MAP

The map (Figure 1) illustrates where coverage changed between 2024 and 2025 within 10-km squares. The most notable gains were across Wales and southern Scotland, with new squares being released to both the Lothian and Borders regions in 2025.

It was also a good year for Gloucestershire and Derbyshire. Overall, there were **3,839 'core' BBS** squares, **98 Upland Adjacent** squares, **32 Scottish Woodland (SWBBS)** squares and **89 Upland Rover** squares.

Other squares from separate 'add-on' schemes (Upland BBS and SWBBS-Adjacent) no longer included in BBS coverage (having been surveyed from 2006 to 2013 by professional fieldworkers) are not included in Table 1. However, data from these squares in the years covered are included in the data analysis and trend calculations for the years they were surveyed. Ongoing, professional coverage of squares in Northern Ireland is included in the map and table. Please see pages 16 and 17 for more information on these surveys and square types.

◀ **Figure 1:** Change in the number of BBS squares surveyed per 10-km grid between 2024 and 2025.



Celebrating 50 years of the UKBMS

Last year was the 50th survey season for the UK Butterfly Monitoring Scheme. This is a survey which is supported by BBS volunteers who help to monitor butterflies on their squares across the UK by taking part in the Wider Countryside Butterfly Survey.

Jo Millborrow, Butterfly Monitoring Officer, Butterfly Conservation

In 2025, the UK Butterfly Monitoring Scheme (UKBMS) celebrated its 50th anniversary. This article recognises five decades of volunteer-led butterfly transects that contribute to one of the world's longest running invertebrate monitoring schemes.

The scheme officially began in 1976 when 39 transects were set up on nature reserves in England and Wales, and has now grown into a nationally coordinated network with more than 3,500 sites monitored for butterflies each year throughout the UK, Channel Islands and Isle of Man. The scheme produces robust annual population trends for 58 of our 59 regularly occurring species, with Mountain Ringlet being the one species without sufficient data to currently produce a trend. You can view the population trends for each butterfly species (e.g., Figure 2a) by visiting the UKBMS website: <https://ukbms.org/species>

THE WIDER COUNTRYSIDE BUTTERFLY SURVEY

As we mark this milestone, we also celebrate the impact of the Wider Countryside Butterfly Survey (WCBS), which feeds valuable data into the UKBMS. Introduced in 2009, the WCBS helps fill a crucial gap. The traditional fixed-route transects or 'Pollard Walks' (named after Ernie Pollard who devised the method) that form much of the UKBMS data are hugely valuable, but they are mostly walked in locations that are already good for butterflies such as nature reserves, local wildlife sites, or areas of particular interest to volunteers. As a result, coverage of the wider landscape was more limited.

The WCBS addressed this by providing a structured, randomly selected sample of 1-km squares, extending butterfly monitoring into the wider landscape beyond protected sites – to include ordinary farmland, urban areas and other less productive habitats. Volunteers are encouraged to survey these squares by carrying out at least two visits a year during July and August, when they record the butterflies they see along two 1-km transects through the square.

BBS volunteers have been involved since the start with many of them carrying out additional visits to their BBS squares in the summer to record butterflies. Many

hundreds of additional squares are covered in this way and we are keen to encourage more BBS volunteers to get involved by carrying out these additional visits, which happen between 10.45 and 15.45 on a warm day to ensure butterflies are active (Box 1).

WHAT DOES WCBS ADD?

The impact of the WCBS and the surveys carried out by BBS participants on the UKBMS dataset has been important. By incorporating data from the BBS squares which receive additional visits for butterflies each year, the scheme has a much-improved spatial spread. WCBS data have strengthened population trend estimates, enhanced species distribution mapping and supported the development of key biodiversity indicators. With this extensive dataset, the scheme is able to detect subtle changes among widespread species. Without the WCBS volunteers collecting data in squares that rarely receive dedicated butterfly visits, these patterns would be far harder to detect. The survey also generates new records for under-recorded areas that help produce more representative species distribution maps.

DATA USE – INDICATORS AND RESEARCH

Like BBS, data from the scheme are also used to produce official Government biodiversity indicators, by combining data across different species groups. These are updated annually with the latest data. The current indicators show that habitat specialist butterfly species are faring worse – showing significant long-term decreases across the UK – while figures for habitat generalists are stable (Figure 2b).

Box 1: Get involved.

Anyone with an interest in butterflies and who can identify the species they are likely to see on their square can take part. Existing BBS volunteers can contribute to the WCBS with just two additional summer visits to their square. New volunteers are always welcome, and training materials, guidance, and identification resources are available online.

- **Sign up to monitor butterflies on your BBS square:** <https://www.bto.org/wcbs>
- **Explore a map of all the UKBMS sites near you:** <https://ukbms.org/sites>
- **Learn about the method:** www.bto.org/bbs-forms
- **Follow UKBMS updates:**
Bluesky – [@ukbms.bsky.social](https://bsky.app/profile/ukbms.bsky.social) X – [@UKBMSLive](https://twitter.com/UKBMSLive)

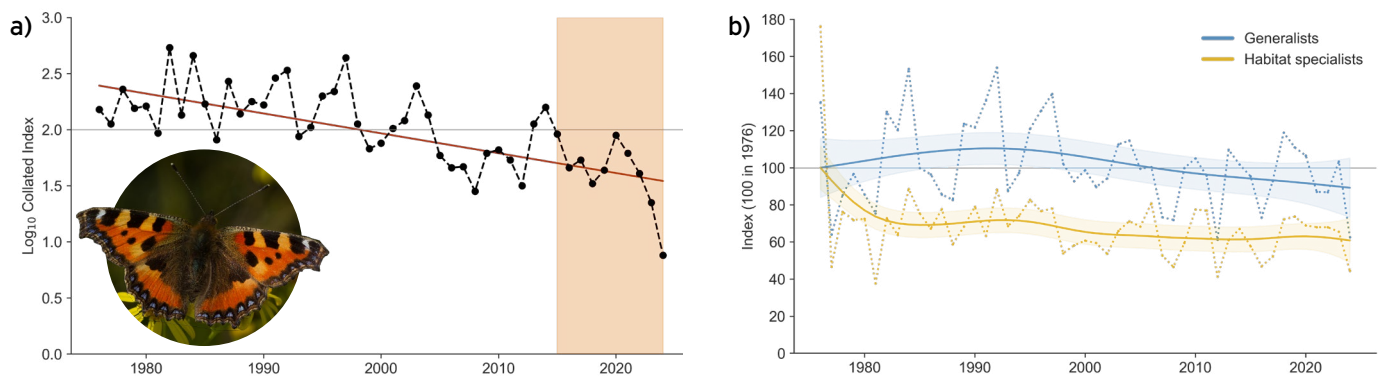


Figure 2: (a) Population trend for **Small Tortoiseshell** from 1976 to 2024, including trendline in red and the short-term trend (10 years) highlighted by orange shading. (b) Trends for the abundance of habitat specialist (26 species) and generalist butterfly species (24 species) in the UK, 1976 to 2024. Annual indices (dotted) are plotted alongside smoothed trends (solid line) and 95% confidence interval (shaded area).

Further analyses also show significant declines for butterflies on farmland and woodland sites since 1990. To view the latest set of butterfly indicators please visit the Defra website (Defra 2024).

WCBS IN 2025

Thanks to the commitment of BBS participants and Butterfly Conservation volunteers, 2025 was another strong year for WCBS participation. Based on provisional data, a total of 795 WCBS squares were visited to monitor butterflies throughout the UK, with 311 of these being on BBS squares. This has boosted the coverage by 39% and added just over 15,000 butterfly records from places that may otherwise be under-sampled. Across the scheme as a whole, over 48,000 butterfly records were submitted by WCBS volunteers. Many squares also added useful records of day-flying moths and dragonflies.

The geographic spread of WCBS squares continues to ensure that monitoring reflects the true diversity of UK landscapes – from intensively farmed areas to upland fringes, urban areas, and pockets of semi-natural habitat.

LOOKING AHEAD: THE NEXT 50 YEARS

As we look beyond the UKBMS's first half-century, the value of long-term structured monitoring is clearer than ever. Many butterfly species remain in decline due to habitat loss, agricultural intensification and climate-driven changes. Other species are expanding their range northwards or being squeezed into ever smaller fragments of suitable habitat. Detecting these patterns requires consistent, reliable data gathered across all habitats. Each BBS volunteer who carries out two butterfly visits to their BBS square between July and August contributes vital information to the national picture. Every square – no matter how ordinary – adds to a dataset that scientists and conservationists depend upon.

A HUGE THANK YOU

The UKBMS has always been a volunteer-led triumph. To all BBS and WCBS recorders, county coordinators, regional organisers, BTO staff and everyone who contributes time, expertise, and enthusiasm: thank you. Your efforts are the backbone of 50 years of monitoring, and the reason we can celebrate this anniversary with such confidence in the scientific and conservation value of the data.



FURTHER READING

Defra 2025. Butterflies in the United Kingdom and in England, 1976 to 2024. Available at: <https://www.gov.uk/government/statistics/butterflies-in-the-wider-countryside-uk>

The UKBMS is a partnership between Butterfly Conservation, JNCC, UKCEH and BTO

Tracking the Impact

Tracking the Impact (TTI) is an example of landscape-scale conservation impact monitoring across the Chilterns National Landscape. We hear about the six years of the scheme's operation and what the 'Impact' in TTI really means.

Nick Marriner, Nature Recovery Manager, Chilterns National Landscape

WHY DOES TRACKING THE IMPACT EXIST?

Nature recovery at landscape scale is core to the recently published Nature Recovery Plan for the Chilterns National Landscape and forms the foundation of our work with 100 farmers covering over 25,000 hectares through five farmer cluster groups. Over the last five years these farmers have delivered large scale projects creating and better managing networks of hedgerows, chalk grassland and wildflower-rich habitats as well as an extensive programme of supplementary bird seed provision. Each project is aimed at supporting chalk loving species of bird, butterfly and plant such as Corn Bunting, Chalkhill Blue and Horseshoe Vetch. The TTI programme has been put in place to identify if these landscape-scale interventions work for wildlife.

HOW CAN WE TELL?

National recording schemes such as BBS are world leading examples of long-term datasets helping our understanding of species trends on a national scale and increasingly at regional scales, (p4 & 27). However, they weren't designed to work at smaller scales, such as what might be termed a landscape, in areas such as the Chilterns National Landscape – the density of sampled 1-km squares just isn't high enough. As part of the National Lottery Heritage Funded 'Chalk, Cherries and Chairs' Landscape Partnership Scheme, TTI was established and recorded its first species – a Blue Tit – in April 2020.

The project was designed in partnership with BTO and a wide range of other organisations, and aims to provide a long-term, systematic and robust dataset to chart bird, butterfly and plant population trends in the Chilterns.

WHAT DOES THE PROJECT DELIVER?

The 72 randomly-generated 1-km squares cover around 20% of our project area. We have an ambitious long-term goal to recruit, train and support skilled volunteers to survey these squares using the same field protocols as national monitoring schemes, namely: BBS, WCBS (see p6) and the National Plant Monitoring Scheme (NPMS).

Our longstanding partnership with BTO and focus on BBS as the basis for our monitoring of bird populations

offers a proven and robust methodology; expertise to aid the analysis of our records and consistent methodology to benchmark local against national trends.

As well as this, we have been able – as part of our funding package – to fund the development of BBS Online to cater for TTI and allow us to make use of the simple and easy to use online data entry system to help store and report data. This is something that several other local/landscape scale projects would love to have access to and BTO is looking to develop this further to make tools for survey set up, management and data collection available for any local application of BBS (or indeed any type of project).

We marked the completion of the sixth survey year at the end of June 2025 and our amazing team of over 50 local volunteer bird surveyors have:

- covered all 72 of the 1-km squares.
- completed 325 survey visits.
- recorded 99 species (fingers crossed for 100 in 2026!)
- generated 13,777 records.

This is an impressive species list and a huge dataset that sits alongside similarly impressive numbers for butterfly and plant surveys.



HOW HAS THIS BEEN POSSIBLE?

TTI is as much a people-based project as it is about data. Key to its success has been a focus on growing the pool of local volunteers keen to get involved in citizen science.

BTO – led by Nick Moran and David White – have delivered BBS training to over 60 experienced local birders, helping them understand and apply the BBS method. For a growing team of over 100 volunteers we have also run a series of annual bird ID training courses, taking volunteers to a wide range of Chilterns habitats (supported by an online sessions), helping them develop their skills so they may pick up BBS squares in the future.

It is on this team of brilliant and dedicated local volunteers that the success of the project has been built and it's great to hear volunteers say how much they have valued being involved:

"... I have learnt masses about wildlife and new farming practices ..."

"It has helped me recognise the importance and value of local landscapes".

"I feel like I am part of something bigger and something that matters to me".

In some cases, volunteers who have started their citizen science and bird monitoring journey with TTI have subsequently gone on to take part in BBS elsewhere in Buckinghamshire and Hertfordshire, showing that local initiatives can benefit the national schemes in more ways than just data – they provide an additional way to broaden the volunteer pool.

WHAT ARE THE DATA SHOWING?

TTI was set up to show trends over time and in the long-term. Six years into the project and we are starting to analyse our data. BTO have run the same analyses on TTI data as they do for BBS to help chart change over the six years and benchmark against national trends.

This is starting to show the power of the project. Take Yellowhammer, an iconic bird of the farmed Chilterns landscape and key focus for our Nature Recovery Plan. BBS shows a long-term decline in the Yellowhammer population in England and the south-east. Without TTI data we would have assumed that national trends are playing out across the Chilterns too, but the data collected from TTI show a different picture (Figure 3).

Despite the fact that it is relatively early days, the data collected to date at least shows Yellowhammer numbers to be stable, if not increasing, and is a key insight to help

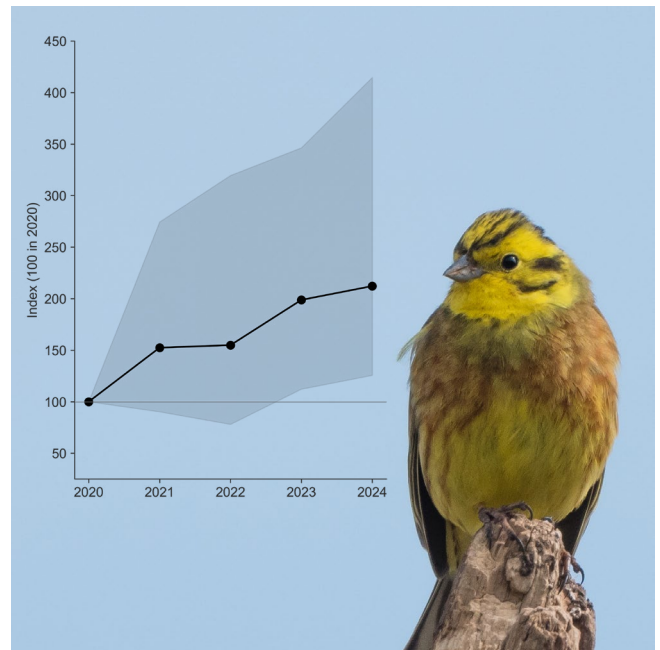


Figure 3: TTI-derived indices for Yellowhammer. In the TTI monitoring area, Yellowhammer numbers are at least stable, if not increasing. Meanwhile, in the wider region of south-east England, Yellowhammer has declined by 18% in a similar timeframe. Points are unsmoothed population indices (baseline year=2020) and 95% CIs (shaded).

shape our Nature Recovery work with farmers. While we can't prove cause and effect, these data have motivated them to increase their efforts to provide more, better, bigger and better-connected habitat for our farmland bird species.

WHAT NEXT?

There is much more to be done on the analyses of individual species and assemblages typical of Chilterns habitats to give a foundation for an annual reporting cycle which charts change and compares to national datasets – not just for birds but for butterflies and plants too. In a wider context, we are working with the Buckinghamshire and Milton Keynes Natural Environment Partnership and Natural England to look at ways in which we might scale the project up across the whole of Buckinghamshire as part of a monitoring package for the recently published Local Nature Recovery Strategy. Watch this space as we approach the 2026 survey season which is only possible with the generous support of Rebel Restoration and the River Chess Smarter Water Catchment project.

We are grateful as always, for the energy, commitment, advice and support from our core partners: Berks, Bucks & Oxon Wildlife Trust, BTO, Buckinghamshire & Milton Keynes Natural Environment Partnership, Butterfly Conservation, Plantlife and UK Centre for Ecology and Hydrology.

But above all, we are indebted to the volunteers who give up their time to make this all happen; thank you.

BBS and renewables

As solar and wind farms continue to pop up in our countryside one obvious question is “what will this do to our birds?”. Recent RSPB research aimed to tackle this very issue.

Dr Joshua Copping, Conservation Scientist, RSPB

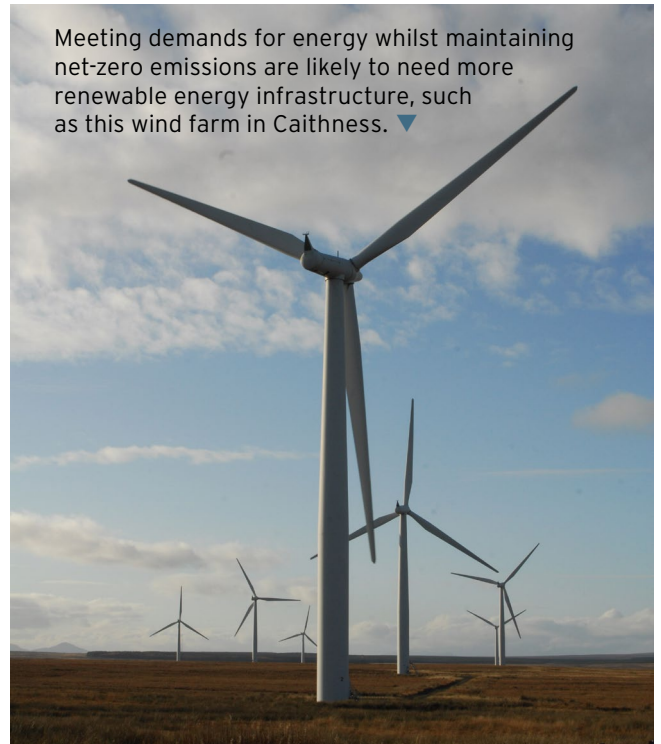
As the UK aims for net-zero emissions, the push for renewable energy is intensifying. Yet, onshore, these installations occupy landscapes that also support the UK’s bird populations. The challenge is clear: how can renewable energy expansion proceed without compromising natural habitats and the birds that depend on them?

BBS data and methodology sit at the heart of two recent studies addressing this question. The first used the UK BBS dataset to model how large-scale renewable energy deployment and nature-based solutions might influence land use, agricultural productivity, and bird populations across the UK. The second applied BBS methods to solar farms, assessing how different management practices at those sites affect breeding bird communities. Together, these studies showcase how BBS data and the methodology can link national-scale modelling with finer-scale ecological insights, informing both policy and practical habitat management.

The first study, by Copping *et al.* (2024), addressed a pressing question for policymakers and conservationists alike. With ambitious onshore renewable energy targets, would large-scale deployment of wind turbines and solar farms intensify land use conflicts, threatening our food producing farmland and valuable bird habitats?

To answer this, we integrated the UK BBS dataset into spatially explicit land-use scenario models, which simulated how different future energy and land-management pathways might reshape the UK’s landscape. In practice, this meant testing scenarios with high and low renewable energy demand and comparing versions with and without ‘Nature-Based Solutions’ (NbS) such as peatland restoration and woodland creation. The long-term survey data provided a detailed baseline of bird distributions and population trends across a range of habitats, which was crucial for understanding potential impacts of different land-use decisions on bird species. We simulated a range of renewable energy expansion scenarios, deploying wind turbines and solar farms in the least ecologically sensitive areas. These deployment scenarios were then modelled to assess impacts to food production, greenhouse gas

Meeting demands for energy whilst maintaining net-zero emissions are likely to need more renewable energy infrastructure, such as this wind farm in Caithness. ▼



emissions, and breeding bird populations. Using baseline abundances for 109 native bird species allowed us to estimate how species’ populations are likely to change at the national scale.

The BBS dataset was particularly well suited for this work because it provides comprehensive, long-term coverage across the UK under a range of environmental conditions. The quality and breadth of the data allow us to generate robust predictions of bird abundances across different land-uses. By incorporating local and landscape-level effects, these data allow us to indicate how bird populations are likely to respond under future land-use changes, such as woodland creation or wetland restoration. Drawing on multiple years of surveys, the dataset gives a thorough representation of species abundances across a range of habitats, which can be used to explore the potential consequences of renewable energy expansion and other land-use interventions. By modelling how bird populations might shift under combinations of wind, solar, and NbS, the analysis provides a nuanced assessment of potential impacts, showing how development choices could influence bird populations at a national scale.

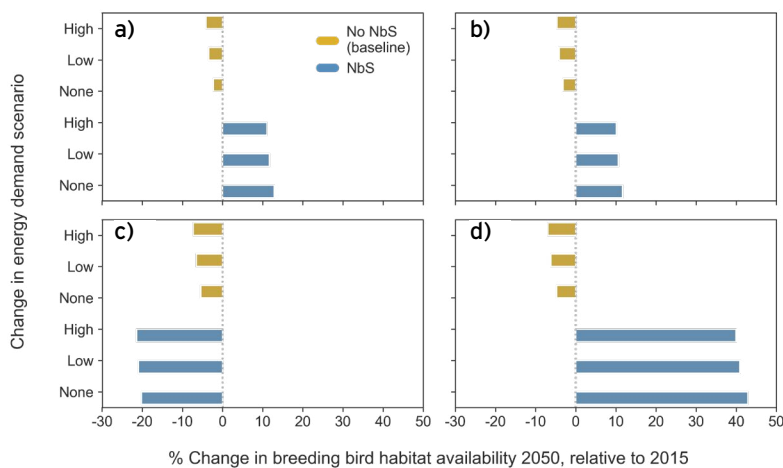


Figure 4: Bird habitat availability changes according to whether renewable demand is high or low, or when Nature Based Solutions (NbS) are applied. Generally, under baseline conditions (no NbS) and regardless of energy demand, there is only a minor reduction in habitat availability (orange bars, all panels). However, this is not the same for all birds. Whilst there are only small reductions in habitat availability overall (a) and for Red-/Amber-listed species (b) under all energy-use scenarios and increases when NbS are applied. The same is not true for farmland specialists (c), as habitat would generally be lost, instead favouring woodland species (d) which would have more habitat availability under NbS, which often takes the form of woodland creation.

The results were reassuring. Even with ambitious renewable energy deployment – projected in our 2050 scenarios to reach 35 GW of onshore wind and 90 GW of solar, representing roughly a doubling and five-fold increase, respectively – the models indicated that land-use pressures do not necessarily increase when developments are carefully sited. In other words, renewable energy infrastructure can be expanded and occupy less than 1% of UK land, without further compromising bird populations or agricultural productivity at the UK scale, provided that local ecological data guide spatial planning. When the application of NbS is taken into account, the pattern is more nuanced; whilst there is greater bird habitat availability overall and for Red- and Amber-listed species (Figure 4a,b), it is reduced by 20% for farmland specialists (Figure 4c), due to the use of farmland for these NbS. Woodland specialists, by contrast and unsurprisingly, would benefit (Figure 4d) as many of the NbS options involve woodland creation.

That still means that good ecological survey data at a local scale are needed to inform the precise siting of renewable energy infrastructure. To borrow a phrase from the recent dialogue around tree planting, it is “right renewables, right place”. This finding challenges the perception that renewable energy and nature conservation are inherently at odds, suggesting instead that careful, evidence-informed planning can reconcile the two.

INFLUENCE OF SOLAR FARMS ON BIRDS

While the UK-scale research offered a broad perspective, local-scale studies are vital to understand the direct ecological impacts of renewable energy installations. The second study, published in *Bird Study* (Copping *et al.* 2025), focused on solar farms within arable-dominated landscapes, exploring how management practices affect breeding bird communities. Using BBS methodology, we conducted counts of all

bird species across solar farms (which were categorised as having either ‘simple’ or ‘mixed’ habitat), and surrounding farmland in East Anglia (Figure 5). Surveys were carried out along 200 m transect sections, allowing us to record all species by sight and sound effectively and calculate bird densities within each solar farm (Figure 6). Employing the standardised BBS methods also enables comparison with the wider national dataset, facilitates the integration of these data into future research, and provides a straightforward approach that can be adopted in any subsequent studies.

Our findings highlighted the importance of local management. Solar farms with diverse vegetation, including wildflower-rich patches and small trees or hedgerows along boundaries, supported higher abundances and greater diversity of birds than those with minimal floral diversity, often grazed by sheep, which had bird communities similar to the surrounding intensively managed arable farmland (Figure 6). Species such as Corn Bunting, Greenfinch, and Linnet were more abundant in these more nature-friendly solar sites, demonstrating that considered habitat management within solar farms can provide tangible benefits. This shows that solar farms need not be detrimental to bird populations and that well-designed solar farms have the potential to provide valuable habitat for a range of breeding birds.

One of the study sites and an example of a solar farm with ‘simple habitat’. ▼



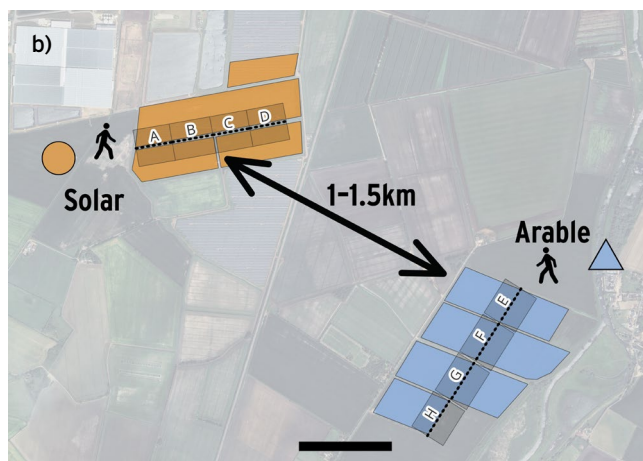
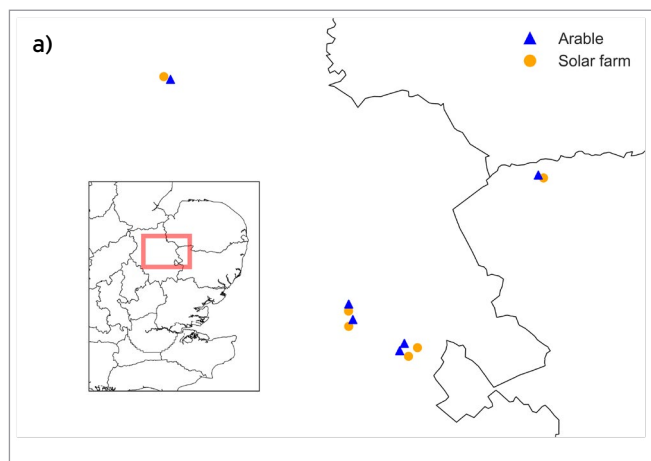


Figure 5: a) Locations of paired solar farm (orange circles) and arable sites (blue triangles) in East Anglia. b) An example of a matched solar farm/arable pairing. Two-hundred metre transect sections (labelled A to H) were walked through each site and birds up to 100 m away and not flying over were recorded (shading, equivalent to BBS surveyors Distance Bands 1 and 2). Paired arable sites were between 1–1.5 km of the solar farm. Bar represents 500 m.

IMPLICATIONS OF RENEWABLE ENERGY FOR BIRDS

Together, these two studies demonstrate the value and versatility of BBS data and methodology in understanding the ecological consequences of renewable energy developments at multiple scales. At the UK level, integrating long-term BBS abundance data with land-use scenarios shows that ambitious onshore renewable energy deployment does not necessarily increase land-use pressures or threaten bird populations, provided that infrastructure is carefully sited and guided by ecological evidence. At a local level, using the standardised BBS methodology demonstrates how management decisions directly influence bird communities within solar farms. This highlights that renewable energy infrastructure can provide tangible ecological value if designed and managed thoughtfully.

Taken together, the studies reinforce a key message: renewable energy expansion and bird conservation can be compatible objectives. BBS data provide a robust,

adaptable framework for linking national-scale scenario modelling with finer-scale ecological monitoring, enabling evidence-based planning, targeted habitat management, and informed policy decisions. By harnessing this combination of large-scale data and on-the-ground observation, the UK can progress towards net zero while ensuring that renewable energy expansion does not exacerbate existing pressures on UK bird populations.

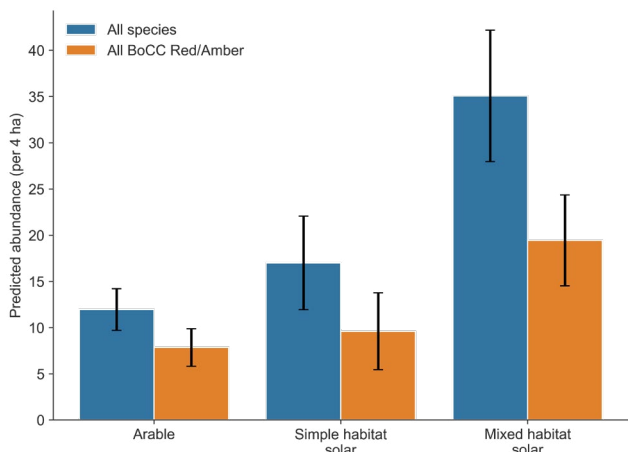


Figure 6: Predicted bird abundance \pm SE per four hectares for all, and BoCC Red- or Amber-listed species of bird across the three different land-use classifications.

FIND OUT MORE

Copping, J.P. *et al.* 2024. Ambitious onshore renewable energy deployment does not exacerbate future UK land-use challenges. *Cell Reports Sustainability* **1**: 100122. doi.org/10.1016/j.crsus.2024.100122

Copping, J.P. *et al.* 2025. Solar farm management influences breeding bird responses in an arable-dominated landscape. *Bird Study* **72**: 217–222. doi.org/10.1080/00063657.2025.2450392

Species focus: Spotted Flycatcher

As with last year's focus on Cuckoo, recent research from RSPB and BTO shed further light on the population pressures and conservation of another long-distance migrant.

POPULATION TRENDS

BBS data show that Spotted Flycatcher populations have declined by 61% in the UK (1995–2024) and 31% in the last decade (p19). The combined Common Birds Census (CBC)/BBS indices show a decline of 92% 1970–2023. Following increased coverage from Upland Rovers, a 10-year trend was first published for the species in Scotland in the 2022 report. North of the border, they have declined by 54% since 2014 (p23), though Bird Atlas data showed an increase in range and abundance in the far north. Whilst regional-level analysis identifies widespread declines, a study of UK woodlands conducted by RSPB and BTO showed that Spotted Flycatcher populations in this habitat increased in the south-west of England between the 1960s and 1970s, and early 2000s (Hewson *et al.* 2007). In Europe, Spotted Flycatchers have declined by 56% since 1980 (PECBMS, 2025).



REPRODUCTIVE SUCCESS

A new RSPB-led study (Burgess *et al.* 2025) identified that low levels of reproductive success is a potential cause of population decline of Spotted Flycatcher, at least in England where the study was conducted. Reanalysing nest monitoring data collected in south-west and eastern England between 2004 and 2006, the authors estimated whole-season productivity across farmland, gardens and woodland habitats. Following this, BBS data was used to estimate regional level productivity estimates. The authors found that productivity was below levels required to sustain populations in all habitats surveyed, with particularly low nest survival during the egg stage emerging as a key driver of inadequate reproductive output. Only in gardens was whole-season productivity seen to be at or approaching the level needed to maintain a stable population.

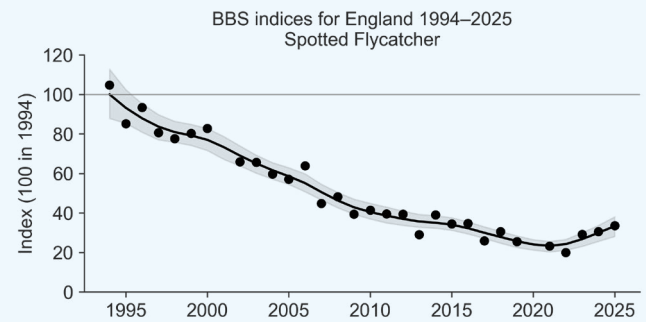


Figure 7: Spotted Flycatcher numbers declined by 68% in England between 1995 and 2024.

RIVERS

Complementary research involving BTO, led by Catrin Eden of Lancaster University (Eden *et al.* 2026) and using Bird Atlas data from 1988–91 and 2007–11, looked at the landscape scale conditions favouring colonisation and loss of this species. Spotted Flycatchers were more likely to colonise and persist in areas with higher densities of rivers. There was also a strong effect of urbanisation, with colonisation and persistence less likely in more urban areas. Complimentary research conducted by the same authors (Eden *et al.* 2025), has also shown that Spotted Flycatcher breeding success at a study site in the Yorkshire Dales was positively correlated with freshwater insect availability and body condition positively correlated with particular fatty-acids associated with freshwater insects. These studies highlight the role of rivers in the protection and conservation of insectivorous species like Spotted Flycatcher, especially given the abundance of insects that freshwater habitats can support.

FURTHER READING

Burgess, M.D. *et al.* 2025. *Ibis* 168: doi.org/10.1111/ibi.13460

Eden, C.F. *et al.* 2025. *Oecologia* 207: doi.org/10.1007/s00442-025-05827-9

Eden, C.F. *et al.* 2026. *Conservation Biology* e70219: doi.org/10.1111/cobi.70219

Hewson, C.M. *et al.* 2007. *Ibis* 149: doi.org/10.1111/j.1474-919X.2007.00745.x

PECBMS. 2025. *Species trends* <https://pecbms.info/trends-and-indicators/species-trends/all/yes/species/muscicapa-striata>

Background and methods

BBS was launched in 1994 to provide more representative habitat and geographical coverage than the main survey running at the time, the Common Birds Census (CBC). The CBC ended in 2000, and the overlap period between 1994 and 2000 allowed BTO to develop methods for calculating long-term trends (from the 1960s to the present) using data from both schemes. The BBS National Organiser, based at BTO HQ, is responsible for the overall running of the scheme, and is the main point of contact for the network of volunteer Regional Organisers (ROs). ROs are responsible for finding new volunteers and allocating squares to observers in their region. At the end of the season, they validate submissions made online.

The BBS is a line-transect survey based on randomly located 1-km squares. Squares are chosen through stratified random sampling, with more squares in areas with more potential volunteers. The difference in sampling densities is taken into account when calculating trends. BBS volunteers make two early-morning visits to their square during the April–June survey period, recording all adult birds encountered while walking two 1-km transects across their square. Each transect is divided into five 200-m sections for ease of recording. Birds are recorded in three distance categories, or as ‘in flight’, in order to assess detectability and estimate species density. To further assess the detectability of species, the option of recording how birds were first detected (by song, call or visually) was introduced in 2014. Observers also record the habitat along the transects and may record any mammals seen during the survey. Surveying a BBS square involves around six hours of fieldwork per year, and the aim is for each volunteer to survey the same square (or squares) every year.

As BBS squares are selected randomly, they can contain any kind of habitat. Some squares can never be surveyed, and these truly ‘uncoverable’ sites are removed from the system. However, squares that are temporarily inaccessible, or which are not taken up due to their remote location, are retained in order to maintain the integrity of the sampling design.

The BBS provides reliable population trends for a large proportion of our breeding species. Trends can also be produced for specific countries, regions or habitats. For these analyses, we take the higher count from the two visits for each species, summed over all four distance categories and 10 transect sections. Only squares that have been surveyed in at least two years are included in the analyses. Population changes are estimated using a log-linear model with Poisson error terms. Counts are modelled as a function of year and site effects, weighted to account for differences in sampling densities across the UK.

Since 2009, data from additional randomly selected 1-km squares surveyed as part of the Scottish Woodland BBS and the Upland BBS have been included in the BBS sample. These squares were surveyed by professional fieldworkers using the same methodology as standard BBS squares, and results were incorporated into the trends, accounting for additional sampling effort. Scottish Woodland squares are now surveyed by volunteers. Since 2010, the option of adding an Upland Adjacent square to an existing ‘eligible’ upland BBS square has been encouraged, with the aim of increasing coverage in upland areas. These data are treated separately during analysis.

The ‘Upland Rovers’ initiative was introduced in 2017 with the aim of further increasing coverage in remote areas. Carefully selected squares are available to be surveyed just once by ‘roving’ volunteers. These are ‘core’ BBS squares with poor to no previous coverage, upland in habitat type and remote as identified by a combination of distance from road and local human population.

Work has been carried out to assess the reliability of BBS trends, to ensure that reported trends are based on reliable data and sufficient sample sizes. This work has resulted in the following exclusions and caveats:

- Population abundance trends for six species of gull (Black-headed, Mediterranean, Common, Great Black-backed, Herring and Lesser Black-backed), are not reported as a large proportion of the records are of non-breeding, wintering or migratory individuals.
- Trends for rare breeding species with substantial wintering populations (e.g. Fieldfare) are excluded.
- Trends for Common Tern, Cormorant, Grey Heron and Little Egret are reported with the caveat that counts may contain a high proportion of birds away from breeding sites.
- Trends for Barn Owl and Tawny Owl are reported with the caveat that the BBS monitors nocturnal species poorly.
- Counts for six wader species (Oystercatcher, Lapwing, Golden Plover, Curlew, Snipe and Redshank) are corrected to exclude transient and other non-breeding individuals or flocks. Spatial filters (based on Bird Atlas distributions) are also applied to observations of Golden Plover to exclude birds outside of suitable breeding areas.

As for reports since 2021, we use the standard methods and omit all data from 2001 and 2020 to prevent the coverage biases in those years from affecting the trends we produce. Although we omit the underlying data, we can estimate indices for 2001 and 2020 by interpolating the smoothed trend line over the remaining years. For more details on all aspects of BBS, see [Massimino *et al.* 2025](#).

Interpreting the results

Pages 18–31 contain the annual bird and mammal population trend statistics for BBS, and pages 34–35 cover WBBS results. Some guidance on reading and interpreting these tables and graphs is provided below.

THRESHOLDS FOR TRENDS

To ensure robust results, we produce trends only for species with sufficient data. To judge this, we look at the average number of squares on which a species has been recorded per year during the trend period. For UK BBS trends, we consider species above a reporting threshold of 40 squares. For countries within the UK, English regions and UK WBBS trends, the threshold is an average of 30 squares. The one-year change for 2024–25 is shown where the sample size reaches the reporting threshold for one of the longer trend periods. Therefore, if there is a 10-year or ‘all-time’ (29-year) trend, a one-year change is presented.

SPECIES LIST

This report uses the taxonomy and order of the International Ornithological Congress (IOC) version 14.2, and will be the last report to do so. As of January 2026, BTO has adopted the taxonomy and order of AviList (AviList Core Team 2025). However, as BBS population trends were analysed and calculated prior to this, the 2025 Report retains the IOC 14.2 order and taxonomy. In future, this may mean that – initially – Carrion Crow and Hooded Crow are reported together under one species (Carrion Crow). However, BBS surveyors should continue to record Carrion Crow and Hooded Crow separately.

TRENDS AND TABLES EXPLAINED

Species	Min. sample	1-year (24–25)	10-year (14–24)	29-year (95–24)	LCL UCL
(Little Egret)	78	-3	55 * 2,748 *	1,111 inf	
Sparrowhawk	352	-18 *	-21 *	-31 *	-40 -21

- Trends for species in brackets are reported with caveats (explanation on pages 16, 31 and 34).
- For bird trends, **Red-listed** and **Amber-listed** species from *Birds of Conservation Concern 5* (BoCC5) are shown in the relevant colour. The exception to this is in the Wales population trends, where *Birds of Conservation Concern 4 Wales* (BoCC4 Wales) assessments are used.
- The sample size refers to the mean number of squares per year on which the species was recorded during BBS or WBBS. The figure shown in the tables, ‘Min. Sample’, is the smaller of these sample size figures for the 10-year and all-time trends, per species, per region. Where a sample size of less than 40 (UK) or 30 is present, this will typically be for fast-declining species, e.g. Turtle Dove, where the 10-year trend is below the formal threshold, but the all-time trends remains above it.
- Trends are presented as percentage changes over three periods: one-year, 10-year and all-time. Five-year changes are available online.
- The short-term change covers the most recent years of the survey, i.e. for BBS and WBBS: 2024 to 2025.

- The long-term changes for both BBS and WBBS cover the lifetime of the survey (BBS birds: 1994–2025, BBS mammals: 1995–2025, WBBS: 1998–2025). The 10-year trends cover 2014–24 for both surveys. All-time and 10-year periods have been smoothed, and the end years truncated.
- An exception to this is found in Northern Ireland where a baseline year of 1996 is used, so aligning the trends with data used in national indicators (p26).
- Trends with statistically significant changes are marked with an asterisk (*), where the 95% confidence limits of the change do not overlap zero.
- LCL and UCL are the lower and upper 95% confidence limits for the longest BBS bird trend: 1995/1997–2024, BBS mammal trend: 1996–2024 and WBBS bird trend 1999–2024. Any confidence limit greater than 10,000 is displayed as ‘inf’.

Period	▲ Greatest increases	▼ Greatest decreases
All time (95–24)	17 Canada Goose 753%	13 Swift -76%
Ten-year (14–24)	12 Stonechat 160%	15 Swift -51%

- For all country pages, summary tables are presented for all four time periods, each with the total number of species with statistically significant increases ▲ and decreases ▼ alongside the species with the greatest increase or decrease over that period.

INTERPRETING GRAPHS

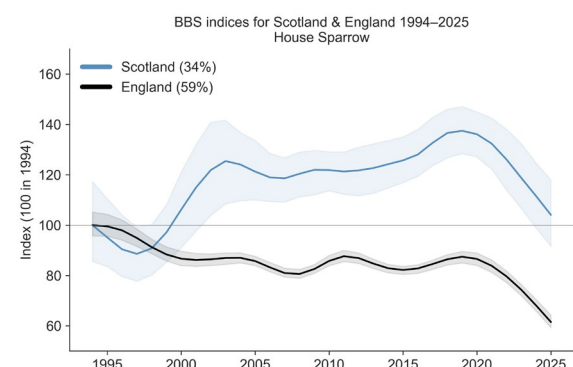
All BBS and WBBS graphs are displayed in the same way throughout the report. Beware, however, that the index and time period axes do vary in scale.

Single region BBS and WBBS index graphs show the:

- smoothed trend – dark line.
- confidence interval (85%) – pale shading.
- annual index values – dots.

In addition to these, we produce plots of multiple countries or regions and/or species on the same graph. This is used to illustrate where trends differ among geographical areas or species, either in their direction, or in the timing of particular changes. Care should be taken interpreting these; higher or lower indices for one region compared to another do not necessarily mean higher or lower abundance or prevalence.

In the example below, House Sparrow has – until recently – been increasing in Scotland and decreasing in England. However, occupancy (number of squares observed as a percentage of the number surveyed) is still higher in England (59%) compared with Scotland (34%). For comparisons of countries and some regions, occupancy rates from 2025 are presented in the figure legend for reference. For clarity, annual index values are not shown in multi-region plots.



United Kingdom: population trends

This report and online tables document the population trends of 119 UK species, and are calculated from BBS squares in England, Scotland, Wales, Northern Ireland, the Channel Islands and the Isle of Man.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (95–24)	34 (Little Egret) 2,748%	43 Turtle Dove -98%
Ten-year (14–24)	24 Cetti's Warbler 369%	49 Turtle Dove -72%
Five-year (19–24)	27 Firecrest 272%	40 Turtle Dove -53%
One-year (24–25)	18 Crossbill 60%	18 Willow Tit -77%

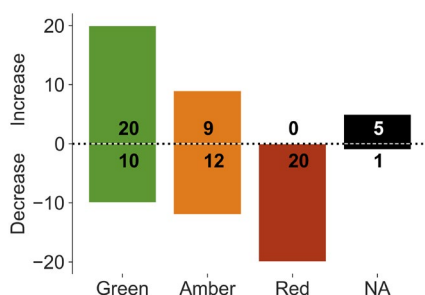


Figure 8: The number of birds with significant long-term declines and increases by BoCC5 assessment status (NA=Not assessed).

DOVETAILING

The use of BBS data to help inform **Turtle Dove** conservation in Europe has been featured before in these pages (2023 BBS report). Hunting moratoria were imposed in France, Spain and Portugal (the Western Flyway) in the years 2021 to 2024, with the result being a 40% increase in the Western Flyway in that time. In 2025, the moratoria were lifted and replaced with a 1.5% harvest rate quota, as part of an adaptive harvest management system. BBS and European-wide monitoring data will continue to be important for ongoing evaluation of this system. The increase is good news for Turtle Dove, though it might be some time before the UK sees a benefit, with Turtle Dove being at the northern edge of the species' range. There is an ambition to run another national Turtle Dove survey in 2027, following that conducted in 2021.

Within the dove family, it is not just Turtle Dove in trouble. After a dramatic increase in numbers following colonisation of the UK in the 1950s, **Collared Dove** has declined by 45% from a peak in 2005, most of this (30%) occurring within the last decade. This decline is likely to be linked to the spread of finch *Trichomonosis*. Conversely, numbers of **Stock Dove**, a species of farmland, have risen steadily since the late 2000s, increasing by 57% (1995–2024). The **Woodpigeon** population grew steadily from the 1960s to 2010 and have since remained relatively unchanged (Figure 9).

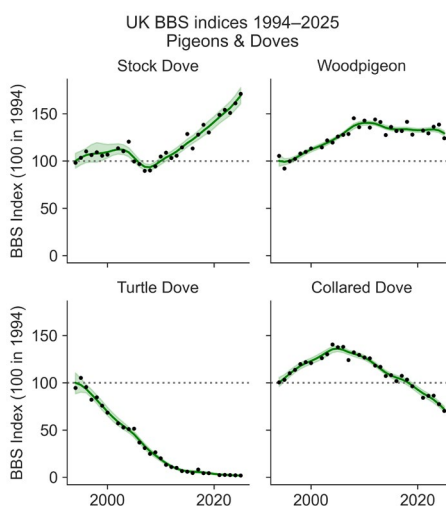


Figure 9: Population indices for four of the UK's four species of non-feral Columbids 1995–2024.



THE GREAT AND THE NOT SO GOOD

The declines of **Willow Tit** (92% 1995–2024) and **Marsh Tit** (53%) are well reported. But it is also apparent that their more widespread cousins, **Blue Tit** and **Great Tit**, have also undergone more recent declines of their own. The 10-year declines of Blue Tit (8%) and Great Tit (17%; Figure 10a) are relatively modest, especially when considering they are still well up compared with the 1960s (23% and 77% respectively), but worthy of note. Recent research involving the RSPB shows that years with increased population growth for Blue Tits correlates strongly with high moth abundances (Evans *et al.* 2024).

For Great Tit, these 10-year declines are in all parts of the UK and habitat types. This recent decline in Great Tit is also reflected in data gathered from the BTO Garden BirdWatch (GBW) which celebrated its 30th anniversary in 2025 (Figure 10b).

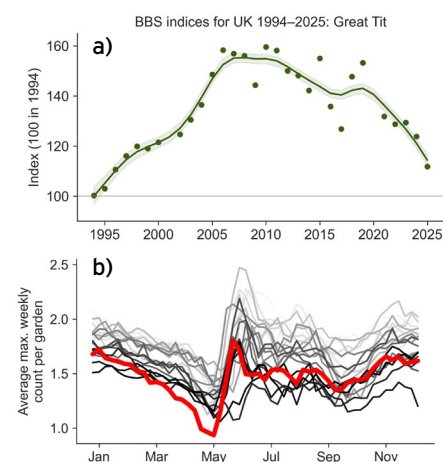


Figure 10: (a) Great Tit numbers have declined by 17% in the UK (2014–2024). (b) Their reporting rate in UK gardens has also fallen in the last 10 years. Red line = 2025, black/grey lines are previous years, with lighter shades representing earlier years in the time series.

FIND OUT MORE ...

Evans, L.C. *et al.* 2024. Population links between an insectivorous bird and moths disentangled through national-scale monitoring data. *Ecology Letters* 27: e14362. doi.org/10.1111/ele.14362

Table 2: UK population trends during 2024–25, 2014–24 and 1995–2024.

Species	Min. sample	1-year (24–25)	10-year (14–24)	29-year (95–24)	LCL	UCL
Canada Goose	599	1	26 *	128 *	74	195
Greylag Goose	334	-28	18	221 *	42	654
Mute Swan	281	-11	-3	22	-11	77
Egyptian Goose	44	6	61	1,964 *	564	inf
Shelduck	160	-6	-22 *	-27	-55	7
Mandarin Duck	43	39 *	76 *	663 *	322	1,735
Gadwall	55	30	73 *	233 *	108	556
Mallard	1,470	-2	-9 *	2	-7	13
Teal	51	61	30	-	-	-
Tufted Duck	165	5	-18 *	9	-20	52
Goosander	48	-7	-4	-22	-54	44
Red Grouse	160	-32 *	-36 *	-27 *	-39	-9
Grey Partridge	190	-10	-20 *	-66 *	-71	-61
Pheasant	2,111	10 *	-9 *	18 *	9	28
Indian Peafowl	46	-16	-41 *	-	-	-
Red-legged Partridge	610	5	-14 *	-7	-19	4
Swift	983	-7	-44 *	-70 *	-74	-64
Cuckoo	674	-3	16 *	-33 *	-40	-26
Feral Pigeon	772	2	13 *	-10	-23	4
Stock Dove	999	6	42 *	57 *	39	76
Woodpigeon	2,886	-10 *	-2	33 *	26	42
Turtle Dove	20	-12	-72 *	-98 *	-99	-97
Collared Dove	1,481	-9 *	-30 *	-26 *	-33	-20
Moorhen	671	-6	-15 *	-27 *	-35	-18
Coot	285	27 *	-27 *	-15	-34	13
Little Grebe	77	10	-9	13	-23	70
Great Crested Grebe	76	16	-24 *	-21	-45	10
Oystercatcher	401	-5	-3	-23 *	-32	-9
Lapwing	609	-6	-20 *	-56 *	-61	-49
Golden Plover	107	11	-14	-23 *	-41	-2
Curlew	528	5	-9	-51 *	-58	-43
Snipe	186	26	6	19	-2	43
Common Sandpiper	80	-4	-5	-21	-36	1
Redshank	89	0	3	-42 *	-60	-13
(Common Tern)	66	8	-36 *	-6	-53	56
(Cormorant)	282	-29	6	28	-1	73
(Grey Heron)	704	4	-2	-13	-25	1
(Little Egret)	78	-3	55 *	2,748 *	1,111	inf
Sparrowhawk	352	-18 *	-21 *	-31 *	-40	-21
Marsh Harrier	34	13	-2	271 *	143	533
Red Kite	298	8	128 *	2,613 *	1,521	4,505
Buzzard	1,344	-3	-4	76 *	59	96
(Barn Owl)	57	-10	5	223 *	111	419
Little Owl	56	25	-59 *	-82 *	-87	-76
(Tawny Owl)	95	-4	-26	-44 *	-60	-25
Kingfisher	58	14	9	-7	-38	38
Gt Spotted Woodpecker	1,309	2	-4	124 *	107	145
Green Woodpecker	883	7	-34 *	-13 *	-22	-5
Kestrel	681	-22 *	-5	-39 *	-45	-32
Hobby	46	46	-3	-15	-41	23
Peregrine	56	-35 *	-49 *	-57 *	-70	-31
Ring-necked Parakeet	114	2	92 *	2,696 *	1,001	inf
Jay	900	-9	-14 *	8	-4	21
Magpie	2,176	-6 *	1	0	-6	4
Jackdaw	2,098	2	6 *	61 *	50	75
Rook	1,470	1	-5	-26 *	-33	-16
Carrion Crow	2,744	-3	-4 *	15 *	7	23
Hooded Crow	155	1	7	23	-4	62
Raven	436	5	24	42	-13	111
Coal Tit	982	11 *	-1	5	-6	19
Marsh Tit	148	-13	-28 *	-53 *	-62	-40
Willow Tit	23	-77 *	-61 *	-92 *	-95	-87
Blue Tit	2,671	-4 *	-8 *	-6 *	-9	-2
Great Tit	2,555	-10 *	-17 *	15 *	10	21
Woodlark	31	-20	87 *	-	-	-
Skylark	1,953	-2	18 *	-9 *	-14	-3
Sand Martin	156	24 *	5	26	-28	133
Swallow	2,175	7 *	-39 *	-23 *	-28	-17
House Martin	968	2	-32 *	-40 *	-46	-31
Cetti's Warbler	55	5	369 *	1,230 *	572	9,808
Long-tailed Tit	1,142	17 *	1	16 *	4	28
Wood Warbler	41	-24	-60 *	-82 *	-89	-71
Willow Warbler	1,467	-2	3	-6	-14	3
Chiffchaff	1,974	18 *	59 *	227 *	205	252
Sedge Warbler	324	30 *	-1	-6	-21	15
Reed Warbler	154	18	33 *	53 *	24	83
Grasshopper Warbler	93	-15	25 *	6	-27	58
Blackcap	2,029	-1	22 *	195 *	176	219
Garden Warbler	473	20 *	-8	-27 *	-35	-18
Lesser Whitethroat	313	-26 *	1	-2	-15	15
Whitethroat	1,569	12 *	-15 *	15 *	6	26
Firecrest	58	30 *	334 *	-	-	-
Goldcrest	960	10 *	9	16	0	34
Wren	2,856	0	17 *	41 *	35	47
Nuthatch	656	-13 *	6	103 *	81	126
Treecreeper	420	13	4	17 *	2	40
Starling	1,844	-14 *	-23 *	-61 *	-64	-57
Song Thrush	2,347	-1	18 *	37 *	30	43
Mistle Thrush	1,206	-2	-17 *	-40 *	-46	-34
Blackbird	2,856	-6 *	-6 *	15 *	11	19
Ring Ouzel	43	-1	-25	-	-	-
Spotted Flycatcher	174	27 *	-31 *	-61 *	-69	-52
Robin	2,757	-5 *	10 *	31 *	26	35
Nightingale	34	21	9	-34	-60	11
Pied Flycatcher	39	1	-	-52 *	-73	-16
Redstart	204	0	-22 *	10	-7	31
Whinchat	75	-17	-27 *	-64 *	-74	-51
Stonechat	219	17 *	156 *	281 *	192	406
Wheatear	371	-12	-27 *	-37 *	-47	-26
Dipper	67	14	-40 *	-52 *	-66	-32
Tree Sparrow	205	-14	-47 *	18	-10	60
House Sparrow	1,833	-10 *	-13 *	-18 *	-25	-12
Dunnock	2,389	4	-14 *	5	-1	11
Yellow Wagtail	170	28 *	-24 *	-55 *	-64	-44
Grey Wagtail	247	13	-1	-11	-26	6
Pied Wagtail	1,390	-11 *	-23 *	-26 *	-31	-21
Meadow Pipit	892	-2	-11 *	-19 *	-25	-11
Tree Pipit	158	-13	-15	-6	-28	25
Chaffinch	2,803	-1	-38 *	-36 *	-39	-33
Bullfinch	704	-12 *	-27 *	-21 *	-30	-12
Greenfinch	1,712	-1	-42 *	-65 *	-67	-62
Linnet	1,347	1	6	-20 *	-26	-12
Redpoll	189	51 *	-7	25	-10	74
Common Crossbill	67	60 *	14	33	-13	106
Goldfinch	2,098	-4	14 *	148 *	131	163
Siskin	248	5	-1	55 *	24	92
Corn Bunting	154	24	48 *	-8	-29	17
Yellowhammer	1,257	1	-26 *	-38 *	-43	-33
Reed Bunting	571	2	-11 *	16 *	0	35

INTERPRETING THE RESULTS: see [page 17](#)TREND TABLES ONLINE: www.bto.org/bbs-tables

England: population trends

Population abundance trends are reported for 116 species. Following Woodlark's addition to the list of species for which we report five-year BBS trends in the 2023 report, we now report on its 10-year trend.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (95–24)	36 Red Kite 24,950%	44 Turtle Dove -98%
Ten-year (14–24)	24 Cetti's Warbler 385%	53 Turtle Dove -72%
Five-year (19–24)	24 Firecrest 272%	47 Tree Sparrow -54%
One-year (24–25)	13 Garden Warbler 40%	18 Willow Tit -66%

INTO THE RED AND GREEN

Green Woodpecker has undergone substantial changes in population distribution and abundance in the last five decades. As measured in the last Bird Atlas, between 1988–91 and 2007–11 the range contracted in parts of Wales but expanded in eastern England, coupled with similar changes in relative abundance. Since around 2007, however, the population in England has declined again, with an overall 35% reduction in the last 10 years, back to the same level as 1994. Only in the East Midlands has there been no significant change in the last decade (Figure 11). The causes of these changes in the UK are largely unknown.

SPARROWS

The 2003 BBS report featured **Tree Sparrow** on its front cover, following a 52% increase from 1994 to 2002 in the UK. By 2013, the increase continued to 128% in the UK and 81% in England (Figure 12a). In Scotland, where Tree Sparrow first featured in the BBS report in 2016, the relative increase was even greater, peaking at 485% 1995–2020. This period of good news came on the back of a staggering decline in the late 1970s and early 1980s. Unfortunately, in England, the gains seen in the 1990s and 2000s have been reversed, and the overall change between 1994 and the present is now a decline of 26% with a 54% decline alone in the last five years. Overall, this places the decline in England at 98% between 1967 and 2023 (Figure 12b).

Whilst the increase in Scotland remains high (354%, 1995–2024) and Tree Sparrow is one of a handful of species doing well in Scotland compared with England (see p22), there are early signs that a similar fate may await them there too, where a 25% decline was observed between 2023 and 2024 (Figure 12a).

House Sparrow has also shown a recent sharp decline in England and Scotland. House Sparrow are discussed in more detail on p26 (Northern Ireland population trends). But in England – and like Tree Sparrow – the 2025 unsmoothed index for House Sparrow is as low as it has ever been recorded over 46 years across both CBC and BBS.

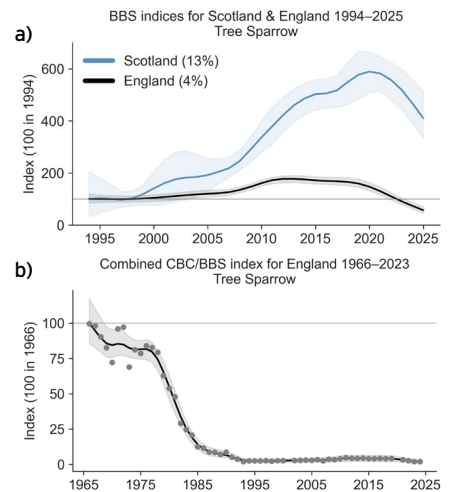


Figure 12: (a) Tree Sparrow BBS population indices in Scotland and England 1994–2025 and (b) joint CBC/BBS indices for England between 1967 and 2024.

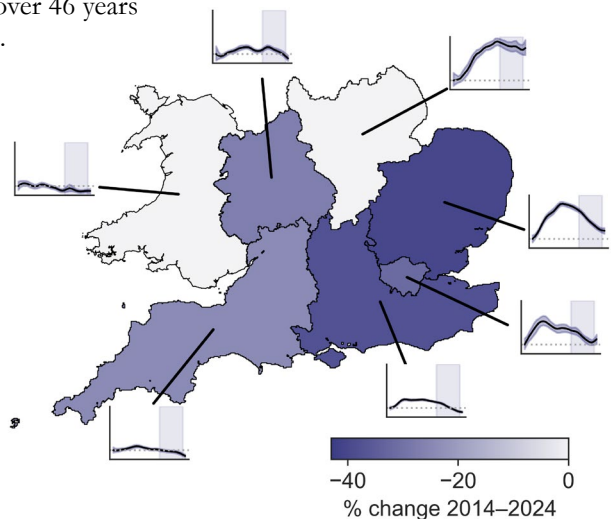


Figure 11: Ten-year population trends (2014–2024) for Green Woodpecker in southern English Regions and Wales. Darker colours represent greater 10-year declines. Insets are the 1995–2024 smoothed population indices with 85% CIs for each region. The last 10 years are highlighted in the shaded bars.

FIND OUT MORE ...

Massimino, D. *et al.* 2013. Maps of population density and trends. www.bto.org/bbs-maps Accessed 28/01/2026

Table 3: Trends in England during 2024–25, 2014–24 and 1995–2024.

Species	Min. sample	1-year (24–25)	10-year (14–24)	29-year (95–24)	LCL	UCL
Canada Goose	539	-2	18 *	90 *	49	152
Greylag Goose	268	-12	20 *	330 *	187	664
Mute Swan	238	-14	10	23	-16	99
Egyptian Goose	44	6	61	1,962 *	543	inf
Shelduck	128	9	-22 *	-6	-46	22
Mandarin Duck	41	41	69 *	647 *	269	2,378
Gadwall	51	23	68 *	206 *	69	499
Mallard	1,216	-7	-12 *	7	-3	17
Teal	29	46	94 *	-	-	-
Tufted Duck	141	2	-20 *	-2	-30	43
Red Grouse	88	-19	-25 *	-11	-40	23
Grey Partridge	161	-19	-24 *	-66 *	-72	-57
Pheasant	1,756	10 *	-8 *	19 *	9	28
Indian Peafowl	43	0	-32	-	-	-
Red-legged Partridge	587	2	-13 *	-11	-22	0
Swift	834	-7	-46 *	-71 *	-76	-65
Cuckoo	414	5	-4	-70 *	-74	-66
Feral Pigeon	622	6	21 *	-14 *	-25	0
Stock Dove	920	7	47 *	58 *	42	81
Woodpigeon	2,282	-10 *	-4 *	34 *	27	41
Turtle Dove	20	-12	-72 *	-98 *	-99	-97
Collared Dove	1,273	-8 *	-36 *	-34 *	-40	-28
Moorhen	617	-5	-17 *	-30 *	-38	-20
Coot	257	23 *	-24 *	-12	-33	27
Little Grebe	59	-7	-9	-5	-36	54
Great Crested Grebe	68	16	-27 *	-32 *	-50	-8
Oystercatcher	228	-2	10	66 *	36	99
Lapwing	508	-6	-27 *	-47 *	-54	-39
Golden Plover	61	13	-41 *	-25 *	-46	-1
Curllew	342	-8	-4	-33 *	-44	-22
Snipe	95	11	-2	-3	-28	26
Common Sandpiper	33	-6	16	-28	-54	12
Redshank	62	-4	-14	-42 *	-61	-15
(Common Tern)	61	-5	-37 *	-17	-58	16
(Cormorant)	236	1	10	27 *	2	67
(Grey Heron)	572	-4	-3	-22 *	-32	-10
(Little Egret)	71	-4	49 *	2,492 *	986	inf
Sparrowhawk	280	-18	-26 *	-39 *	-45	-29
Marsh Harrier	30	19	-6	255 *	130	581
Red Kite	241	12 *	162 *	24,950 *	inf	inf
Buzzard	956	-5	4	198 *	151	252
(Barn Owl)	54	-13	1	226 *	113	457
Little Owl	55	25	-57 *	-81 *	-86	-74
(Tawny Owl)	82	-31	-32 *	-46 *	-58	-35
Kingfisher	52	0	-19 *	-21	-43	10
Gt Spotted Woodpecker	1,119	5	-11 *	84 *	69	101
Green Woodpecker	828	7	-35 *	-8	-16	2
Kestrel	604	-23 *	-7 *	-27 *	-35	-21
Hobby	44	57	-5	-14	-37	18
Peregrine	36	-26	-31 *	3	-36	87
Ring-necked Parakeet	114	3	91 *	2,683 *	1,156	inf
Jay	765	-7	-20 *	-11 *	-19	-2
Magpie	1,807	-2	3	2	-4	8
Jackdaw	1,687	3	10 *	79 *	64	90
Rook	1,172	5	-4	-16 *	-27	-7
Carrion Crow	2,235	-5 *	-1	25 *	16	36
Raven	222	10	4	24	-44	328
Coal Tit	654	14 *	-2	17 *	1	38
Marsh Tit	136	-12	-26 *	-53 *	-63	-42
Willow Tit	20	-66 *	-64 *	-93 *	-96	-88
Blue Tit	2,152	-3	-7 *	-6 *	-10	-2
Great Tit	2,049	-8 *	-17 *	8 *	4	13
Woodlark	31	-20	87 *	-	-	-
Skylark	1,541	-3	14 *	-12 *	-17	-6
Sand Martin	91	34	-1	-3	-37	47
Swallow	1,648	5	-45 *	-33 *	-38	-28
House Martin	722	3	-40 *	-58 *	-62	-53
Cetti's Warbler	51	5	385 *	1,035 *	539	7068
Long-tailed Tit	1,001	9	-6	5	-3	16
Willow Warbler	892	3	-11 *	-47 *	-53	-40
Chiffchaff	1,632	18 *	53 *	217 *	198	237
Sedge Warbler	201	21 *	8	-11	-31	16
Reed Warbler	145	20 *	34 *	51 *	25	92
Grasshopper Warbler	42	-9	12	-27	-50	18
Blackcap	1,693	2	16 *	149 *	134	167
Garden Warbler	380	40 *	-9 *	-37 *	-44	-27
Lesser Whitethroat	299	-22 *	1	-2	-17	12
Whitethroat	1,335	14 *	-18 *	8 *	1	15
Firecrest	54	31 *	320 *	-	-	-
Goldcrest	690	5	7	39 *	18	63
Wren	2,207	-3 *	16 *	33 *	27	40
Nuthatch	559	-12 *	4	102 *	80	128
Treecreeper	311	3	0	2	-16	22
Starling	1,481	-17 *	-24 *	-70 *	-72	-67
Song Thrush	1,817	0	10 *	26 *	18	35
Mistle Thrush	930	0	-26 *	-55 *	-58	-51
Blackbird	2,254	-4 *	-12 *	4 *	1	8
Ring Ouzel	23	-10	3	-	-	-
Spotted Flycatcher	108	10	-15	-68 *	-75	-61
Robin	2,162	-3 *	12 *	38 *	34	42
Nightingale	34	24	8	-33	-60	5
Redstart	113	10	-12	6	-17	36
Whinchat	22	42	-55 *	-71 *	-84	-56
Stonechat	91	23 *	216 *	358 *	219	623
Wheatear	195	-18	-38 *	-38 *	-55	-13
Dipper	31	5	-42 *	-61 *	-78	-18
Tree Sparrow	151	-23 *	-58 *	-26 *	-47	0
House Sparrow	1,468	-9 *	-18 *	-32 *	-37	-25
Dunnock	1,927	2	-17 *	-5	-10	1
Yellow Wagtail	166	26 *	-24 *	-55 *	-63	-44
Grey Wagtail	166	26 *	11	12	-9	41
Pied Wagtail	1,035	-8	-17 *	-24 *	-30	-18
Meadow Pipit	449	-11 *	-21 *	-29 *	-38	-21
Tree Pipit	68	11	-28 *	-62 *	-75	-38
Chaffinch	2,157	-5 *	-48 *	-48 *	-50	-45
Bullfinch	528	-17 *	-45 *	-43 *	-49	-36
Greenfinch	1,466	-3	-40 *	-62 *	-65	-59
Linnet	1,082	8	-1	-26 *	-34	-18
Redpoll	65	-31	-34	-32	-61	9
Common Crossbill	31	-1	-18	-	-	-
Goldfinch	1,710	-8 *	10 *	135 *	118	151
Siskin	95	-8	20	87 *	9	301
Corn Bunting	146	6	42 *	-9	-33	16
Yellowhammer	1,084	1	-26 *	-45 *	-50	-41
Reed Bunting	425	8	-17 *	17 *	2	36

Scotland: population trends

Population abundance trends are reported for 77 species in Scotland. Grasshopper Warbler now has a 10-year trend to go alongside several other species that have benefited from increased coverage in Scotland.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (95–24)	23 Chiffchaff 1,443%	17 Greenfinch -69%
Ten-year (14–24)	14 Chiffchaff 157%	12 Spotted Flycatcher -54%
Five-year (19–24)	14 Nuthatch 103%	7 Red Grouse -42%
One-year (24–25)	9 Common Crossbill 98%	4 Red Grouse -37%

UP NORTH, DOWN SOUTH

It has been notable for several years now that multiple species are showing opposing abundance trends in England and Scotland. For most of these species, populations are on the increase in Scotland but declining in England. For the 1995–2024 trend, these are **Cuckoo, Jay, House Martin, Willow Warbler, Tree Sparrow, Tree Pipit** and **Bullfinch** (Figure 13). Even **Chaffinch**, which has seen a major population crash across the UK as a result of *Trichomonosis*, has not fared anywhere near as badly in Scotland, showing a decline of 10% between 1995–2024 and 21% in the last decade. This contrasts with declines of 48% over both time periods in England (Figure 14).

The combination of climate change (Martay *et al.* 2023) and afforestation in Scotland are likely to be major drivers behind these differences, particularly for woodland species. With plans to further increase woodland cover from 18% (early 2000s) to 21% in Scotland by 2032 (Scottish Government 2017), several of these species are likely to experience additional increases. However, as highlighted overleaf in the context of Welsh waders, woodland planting does not suit every species. BBS data were used to test predictive models of breeding wader abundance to produce sensitivity maps to guide decisions about future land use in Britain (Calladine *et al.*, 2022).

UPLANDS

The most recent set of Scottish Terrestrial Bird Indicators (NatureScot 2025) once again show that Scotland's

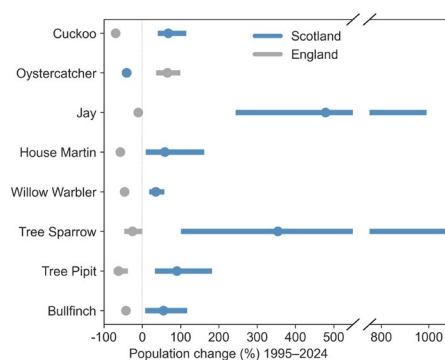


Figure 13: Population trends 1995–2024 for species whose direction of change differs between Scotland and England. Dots=change; lines=95% Confidence limits. Of these, only Oystercatcher is increasing in England.

upland bird community is in decline. The indicators, derived largely from BBS and particularly indebted to Upland Rovers, give an overall decrease of 19% since 1994. BBS trends for several species that contribute to this indicator, including **Whinchat** (-68%), **Wheatear** (-36%) and **Curlew** (-62%), have declined significantly over this period.

BTO surveys over a period of two decades along 130 km of montane transects in 21 high elevation Scottish sites confirmed worrying declines in iconic montane specialists like **Ptarmigan, Dotterel** and **Snow Bunting**. High mountain landscapes are insufficiently represented among BBS squares to be able to generate BBS trends for these species. However, over the same period, the abundance of more generalist upland species like **Golden Plover, Meadow Pipit**, and **Wheatear** increased in the same, montane sites, in contrast to the BBS trends of these species which are predominantly drawn from lower altitudes. These findings suggest that, as our climate warms, bird communities in Scottish mountains may be shifting away from montane specialists towards species that are more widespread at lower altitudes.

Wheatear and Whinchat are long-distance migrants. BTO and collaborators recently published work showing the variation with which migrant species occupy European protected areas throughout their lifecycles, as measured by weekly distributions taken from EuroBirdPortal. Nearly half of the 30 covered species were inadequately covered by protected areas (Border *et al.* 2025). Whilst conditions within UK uplands are important in these species' trends, they serve as a reminder that conditions at all stages of a species' life cycle are important to consider.

FIND OUT MORE ...

Border, J. *et al.* 2025. Evaluating protected area coverage for migratory bird species across space and time. *Nature Communications* **16**: 1813. [doi:10.1038/s41467-025-57019-x](https://doi.org/10.1038/s41467-025-57019-x)

Calladine, J. *et al.* 2022. Modelling important areas for breeding waders as a tool to target conservation and minimise conflict with land use change. *Journal for Nature Conservation* **70**: 126267. doi.org/10.1016/j.jnc.2022.126267

Martay, B. *et al.* 2023. Breeding ground temperature rises, more than habitat change, are associated with spatially variable population trends in two species of migratory bird. *Ibis* **165**: 34–54. doi.org/10.1111/ibi.13101

Scottish Government 2017. Draft climate change plan: draft third report on policies and proposals 2017–2032. <https://www.gov.scot/publications/draft-climate-change-plan-draft-third-report-policies-proposals-2017> Accessed 27/01/2026

Table 4: Trends in Scotland during 2024–25, 2014–24 and 1995–2024.

Species	Min. sample	1-year (24–25)	10-year (14–24)	29-year (95–24)	LCL	UCL
Canada Goose	33	19	64	–	–	–
Greylag Goose	47	-40	13	145	-36	977
Mute Swan	32	-10	-43 *	–	–	–
Mallard	130	15	-8	-22 *	-34	-3
Red Grouse	66	-37 *	-41 *	-35 *	-49	-18
Pheasant	179	14	-10	9	-14	35
Swift	58	-9	-26	-67 *	-77	-48
Cuckoo	104	-8	28 *	68 *	41	115
Feral Pigeon	81	-7	-3	9	-28	68
Stock Dove	36	-36	-20	–	–	–
Woodpigeon	269	-11 *	-4	10	-8	37
Collared Dove	66	-36 *	-6	7	-41	82
Oystercatcher	150	-4	-9	-41 *	-53	-30
Lapwing	83	-2	-7	-63 *	-72	-53
Golden Plover	44	8	6	-20	-42	7
Curlew	135	25	-12	-62 *	-70	-51
Snipe	73	29	10	26	-2	61
Common Sandpiper	41	-4	-6	-21 *	-37	0
(Grey Heron)	61	14	5	13	-17	53
Sparrowhawk	32	3	-13	–	–	–
Red Kite	32	-20	128 *	–	–	–
Buzzard	182	10	-11	9	-8	36
Gt Spotted Woodpecker	80	-2	10	454 *	306	719
Kestrel	39	-24	9	-59 *	-73	-26
Jay	34	2	9	479 *	243	990
Magpie	77	-16	46 *	98 *	47	171
Jackdaw	158	-7	25 *	61 *	23	132
Rook	133	5	-5	-42 *	-57	-23
Carrion Crow	250	1	-10	-12	-29	7
Hooded Crow	59	-12	0	-25	-47	6
Raven	74	-2	70	61	-3	156
Coal Tit	170	4	5	1	-17	24
Blue Tit	212	-6	-6	0	-13	17
Great Tit	205	-12 *	-15 *	41 *	20	73
Skylark	262	-1	26 *	-3	-18	12
Sand Martin	45	11	10	64	-31	430
Swallow	223	3	-31 *	-2	-19	17
House Martin	88	-4	-20	59 *	9	161
Long-tailed Tit	47	72 *	84 *	122 *	42	247
Willow Warbler	270	-1	11	35 *	18	58
Chiffchaff	111	32 *	157 *	1,443 *	899	2,461
Sedge Warbler	69	43 *	-6	22	-20	86
Grasshopper Warbler	31	-7	50 *	–	–	–
Blackcap	109	6	66 *	778 *	519	1,270
Garden Warbler	40	-26	6	–	–	–
Whitethroat	114	-1	4	141 *	74	219
Goldcrest	114	69 *	-7	6	-21	42
Wren	296	15 *	20 *	82 *	57	108
Treecreeper	49	4	20	43	-3	119
Starling	178	-16	-22 *	-40 *	-53	-29
Song Thrush	234	12 *	16 *	40 *	19	65
Mistle Thrush	96	28	-10	1	-26	41
Blackbird	256	-4	-5	29 *	10	51
Spotted Flycatcher	33	52	-54 *	–	–	–
Robin	254	2	-12 *	12	-4	25
Whinchat	27	-23	-14	-68 *	-82	-47
Stonechat	57	14	123 *	196 *	103	399
Wheatear	97	-8	-17	-36 *	-49	-20
Tree Sparrow	42	-5	-4	354 *	101	1,083
House Sparrow	133	-11	-10	17	-12	53
Dunnock	181	16	-16 *	37 *	19	61
Grey Wagtail	36	-30	-21	-34 *	-57	-7
Pied Wagtail	163	-15	-33 *	-37 *	-49	-23
Meadow Pipit	266	-2	-6	-18 *	-30	-7
Tree Pipit	47	-17	-7	90 *	33	182
Chaffinch	303	3	-21 *	-11 *	-19	-1
Bullfinch	63	16	12	55 *	7	117
Greenfinch	108	10	-39 *	-69 *	-78	-56
Linnet	110	-10	44 *	2	-23	28
Redpoll	67	71 *	11	54	-12	146
Common Crossbill	38	98 *	23	–	–	–
Goldfinch	147	18 *	38 *	252 *	170	385
Siskin	102	12	-12	41 *	7	80
Yellowhammer	135	-1	-25 *	4	-15	27
Reed Bunting	82	-2	14	50 *	16	89

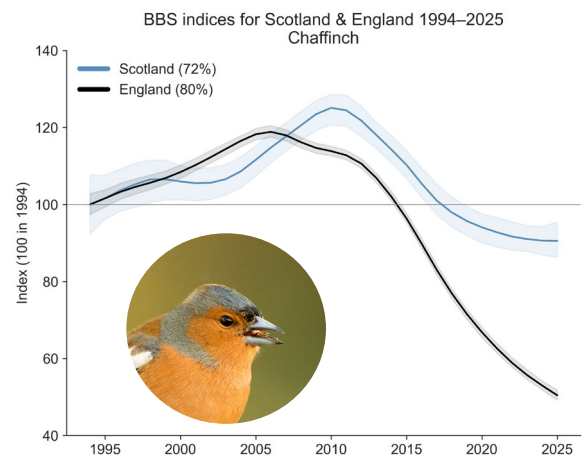
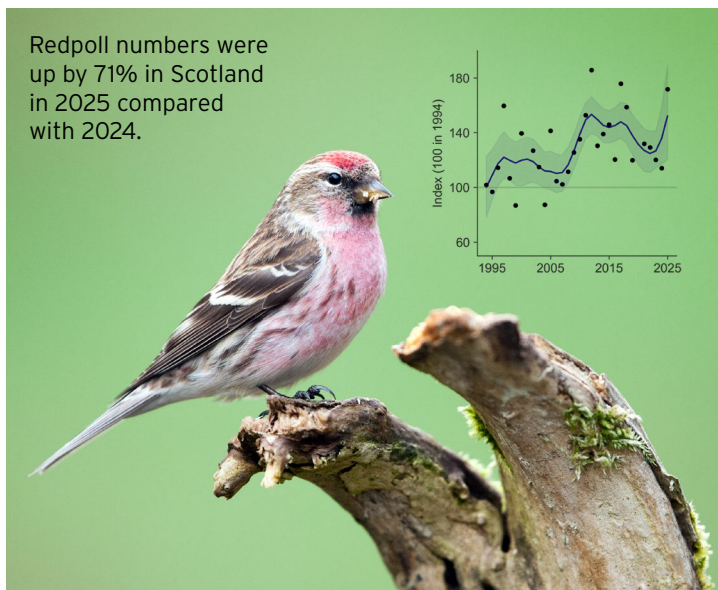


Figure 14: Chaffinch population change 1994 to 2025. Whilst a decline has been observed in Scotland, it appears to have started later and has been relatively less severe than in England.

REDPOLL: SARAH KELMAN/BTO; CHAFFINCH: TOM STREETER/BTO

Wales: population trends

We report trends for 60 species in Wales. The decline in iconic farmland species, as seen across the UK, is of major concern.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (95–24)	17 Canada Goose 753%	13 Swift -76%
Ten-year (14–24)	12 Stonechat 160%	15 Swift -51%
Five-year (19–24)	11 Canada Goose 71%	8 Pheasant -26%
One-year (24–25)	2 (Grey Heron) 68%	6 Rook -44%

COVERAGE

Whilst normally reserved for the 'News and coverage' section, it is certainly worthy to highlight a record year of BBS coverage in Wales, where 359 squares were covered by 253 volunteers. Of those, 46 volunteers were new to BBS and represent nearly 20% of all volunteers taking part in Wales.

TAKING A HAMMERING

Of the 60 species monitored by BBS, **Swift** shows the largest decline in Wales with a reduction of 76% between 1995 and 2024. This is true across the UK, where Swift has declined by 70% over the same period. North Wales Wildlife Trust invited BTO Cymru to collaborate on research to better understand Swift declines in North Wales. Chick feeding rates are used as a proxy for food availability, this being monitored via in-nest cameras and external audio recorders (Hereward *et al.* 2025).

Yellowhammer has declined by a similar proportion, with the current population in Wales now only 25% of what it was in the mid 1990s.

Yellowhammer is included in Table 5 and online on account of being included in historical reports, but now falls below the sample-size thresholds for reporting. Even with sustained levels of increased coverage in Wales, in the absence of a recovery, Yellowhammer would not meet the sample size thresholds for five- or 10-year trends as these are now between 14 and 18 squares.

The fate of Yellowhammer in Wales highlights the importance of the success of agri-environment schemes in Wales and across the UK. The Sustainable Farming Scheme was launched in Wales in January 2026. It will be particularly important to monitor the impact that this – and other UK schemes – has on wildlife. The recently published reports from the Environment and Rural Affairs Monitoring & Modelling Programme (ERAMMP; Emmett *et al.* 2019) is one example of an approach for testing the effectiveness of land management on a national scale. As well as analysing data from specifically designed surveys, it also

used BBS data, so highlighting the ongoing importance of the scheme to monitoring land-use change.

Another species in long-term decline in Wales (and elsewhere) is of course **Curlew**, which has declined by 74% in Wales since 1995. Cyfoeth Naturiol Cymru/Natural Resources Wales (NRW) are coordinating The Wales Breeding Wader Survey, which is taking place in March and April 2026. This survey – funded by Welsh Government – will focus on Curlew, as well as recording breeding **Lapwing**, **Snipe**, **Golden Plover**, **Dunlin** and **Redshank**. The survey will take place on a stratified sample of 1-km squares, predominantly in Mid and North Wales and will, amongst other things, inform decision-making of new woodland creation proposals to minimise impacts on breeding Curlew, as well as providing support for future habitat management decisions through schemes like the Sustainable Farming Scheme (NRW 2026). BTO and RSPB Cymru will provide professional fieldwork for the highest priority areas.

INTO THE WOODS

Whilst woodland planting can be harmful to some species, it will benefit others. **Nuthatch** has increased by 55% between 1995 and 2024, to go alongside a doubling in England over the same period (Figure 15) and a doubling in Scotland in just the last five years where it is quickly expanding its distribution. There are similarities to another woodland specialist, where **Great Spotted Woodpecker** (up 246% in Wales 1995–2024) has also increased across Great Britain. **Chiffchaff** (139%), **Blackcap** (189%) and **Siskin** (96%) have all increased in Wales in the last three decades too.

FIND OUT MORE ...

Emmett, B.A. *et al.* 2025. ERAMMP Report-105: Wales National Trends and Glastir Evaluation. Report to Welsh Government (Contract C208/2021/2022) (UK Centre for Ecology & Hydrology Project 08435). Available at: <https://erammp.wales/en/nationaltrends> Accessed 24/11/2025

Hereward, H.F.R. *et al.* 2025. Research in progress: testing the use of PAM devices to measure visit rates in breeding Swift. *Milvus: the Journal of the Welsh Ornithological Society* 4: 12–17.

NRW 2026. Can you hear the curlew? Help us find where they still call home. Cyfoeth Naturiol Cymru/Natural Resources Wales (NRW). Available at: <https://naturalresources.wales/about-us/news-and-blogs/blogs/can-you-hear-the-curlew-help-us-find-where-they-still-call-home> Accessed 24/11/2025



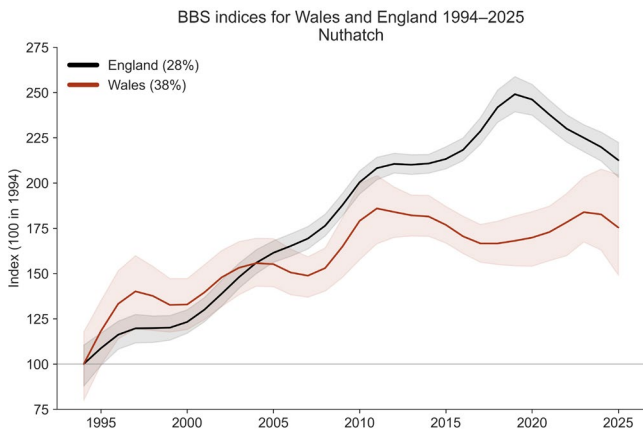


Figure 15: Nuthatch numbers have increased across Great Britain, including in Scotland (not shown). Whilst there is a long-term increase in England of 102%, this has been followed by a 12% decline in the last five years. In Wales, there is no change over the last five and 10 years.

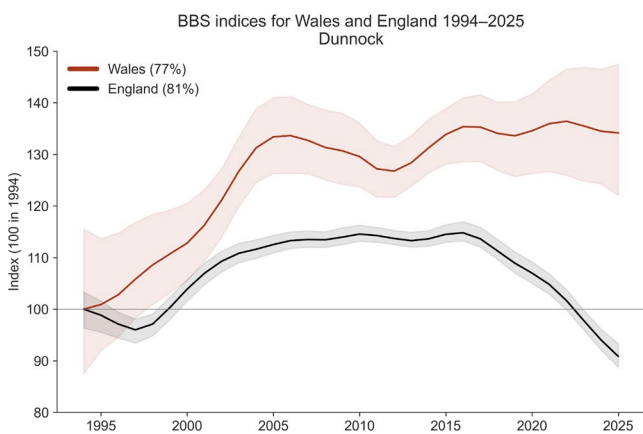


Figure 16: In Wales, the Dunnock population has remained relatively unchanged in the last 10 years. This compares with England, where it has declined 17% (2014–2024). Prior to that, Dunnock had decreased by 50% between 1965 and 1995, before increasing in the late 1990s and 2000s.

Table 5: Trends in Wales during 2024–25, 2014–23 and 1995–2024.

Species†	Min. sample	1-year (24–25)	10-year (14–24)	29-year (95–24)	LCL	UCL
Canada Goose	41	26	100 *	753 *	313	1,988
Mallard	79	2	10	-3	-49	63
Pheasant	113	1	-17	11	-20	56
Swift	62	-16	-51 *	-76 *	-84	-62
Cuckoo	67	16	8	-12	-33	20
Feral Pigeon	41	-16	-2	26	-13	109
Stock Dove	41	21	8	112 *	40	209
Woodpigeon	220	-7	17 *	46 *	23	73
Collared Dove	86	-3	-1	17	-22	76
Curlew	30	5	-38 *	-74 *	-84	-59
(Grey Heron)	46	68 *	12	3	-44	73
Red Kite	41	16	50 *	538 *	252	1,258
Buzzard	161	-16	-20 *	-20	-35	1
Gt Spotted Woodpecker	107	0	20 *	246 *	162	360
Green Woodpecker	48	3	-5	-33 *	-53	-9
Jay	87	-13	-10	28	-17	97
Magpie	184	-21 *	-6	-25 *	-36	-12
Jackdaw	162	-5	-12	-3	-30	48
Rook	81	-44 *	-22	-51 *	-69	-24
Carrion Crow	237	7	-9 *	5	-10	22
Raven	110	11	-19 *	5	-28	69
Coal Tit	88	38	3	-19	-41	15
Blue Tit	206	0	-22 *	-12	-21	0
Great Tit	198	-14 *	-21 *	9	-6	25
Skylark	118	14	-1	-2	-22	19
Swallow	194	9	-40 *	-20 *	-35	-6
House Martin	92	7	-37 *	-36 *	-54	-8
Long-tailed Tit	73	21	-10	16	-12	63
Willow Warbler	177	-2	-6	-17	-34	6
Chiffchaff	176	8	43 *	139 *	97	183
Blackcap	160	-3	16 *	189 *	124	275
Garden Warbler	62	15	-13	-26	-51	14
Whitethroat	97	28	-22 *	-33 *	-49	-12
Goldcrest	99	-9	10	-29	-50	5
Wren	232	1	13 *	36 *	22	55
Nuthatch	87	-17	1	55 *	20	121
Treecreeper	47	53	6	24	-9	77
Starling	86	-29 *	21	-63 *	-74	-46
Song Thrush	196	3	35 *	59 *	39	83
Mistle Thrush	117	-22	15	9	-16	35
Blackbird	231	2	15 *	59 *	45	74
Robin	225	-3	22 *	22 *	11	36
Redstart	73	0	-22 *	6	-13	28
Stonechat	56	5	160 *	411 *	238	777
Wheatear	60	-34 *	-30 *	-43 *	-57	-18
House Sparrow	150	-12	8	86 *	49	120
Dunnock	185	5	2	33 *	8	60
Grey Wagtail	30	41	-17	-25	-54	21
Pied Wagtail	135	-18	-10	-4	-27	18
Meadow Pipit	104	22 *	-23 *	-19	-38	0
Tree Pipit	38	-7	-19	-25	-52	20
Chaffinch	225	5	-42 *	-48 *	-54	-40
Bullfinch	74	-38 *	-10	-7	-28	23
Greenfinch	92	6	-50 *	-73 *	-82	-62
Linnet	106	-7	1	-9	-30	20
Redpoll	34	-33	-30	-	-	-
Goldfinch	163	-7	20 *	110 *	68	158
Siskin	39	-25	21	96 *	26	257
Yellowhammer	29	0	-	-75 *	-86	-63
Reed Bunting	31	-37	1	34	-34	178

† Species are colour coded by BoCC4 Wales assessment.

Northern Ireland: population trends

The 2025 report is the first to align itself with the Northern Ireland bird indicators and report long-term trends from a baseline year of 1996. There are 39 species, with one – Raven – published online only.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (97–24)	14 Blackcap 725%	10 Greenfinch -89%
Ten-year (14–24)	9 Goldcrest 72%	10 Greenfinch -69%
Five-year (19–24)	8 Goldcrest 58%	4 Bullfinch -22%
One-year (24–25)	2 Redpoll 273%	8 Goldcrest -31%

NEW BASELINE

The results published here represent the first time that the long-term BBS trends align with the Northern Ireland Bird Indicators, where the baseline for data used in calculating trends is set at 1996 and not 1994 as elsewhere. Consequently, the long-term trend is reported between the years 1997 and 2024. By removing the first two years of data collection, which had very low coverage compared with what followed (Table 1), it increases the certainty around some estimates of the long-term change.

A result of this is that the status of some species' long-term trends – increasing, decreasing or no change – has changed. Sixteen of the 36 species for which we traditionally report long-term trends –

including **Mistle Thrush** (Figure 17) – see an overall change in status (Table 6).

For example, in the 2024 BBS report we reported that one of the 36 species had decreased in the long-term, now there are 10 species. However, whilst the long-term picture might appear to change for some species, it doesn't change for the 10-year trend. In the 2024 report, 11 species were reported as in decline, whereas now that figure is 10. Whilst we tend to think of the 'shifting baseline syndrome' as something that masks declines, in this case changing the baseline survey year from 1994 to 1996 serves to highlight them.

All the while, it is important to realise that BBS does not provide the whole picture in Northern Ireland. The



species reported are the more common and widespread birds. Several rarer and often declining species, particularly those of farmland landscapes such as **Curlew**, **Yellowhammer** and **Kestrel**, are not within the scope of BBS in Northern Ireland. BTO, RSPB and NIEA are looking at ways of expanding monitoring in Northern Ireland's farmland.

HOUSE SPARROW

House Sparrow population abundance in Northern Ireland increased by 62% over the 27 years 1997–2024 and appears currently stable (Figure 18). This contrasts with England and Scotland, which are experiencing significant five-year declines (22% in England, 19% in Scotland). In England, these contribute to an overall long-term decline of 32%. In Wales there has been an 86% increase (1995–2024), though there have been two successive one-year declines in 2023–24 and 2024–25.

Table 6: Trends in Northern Ireland during 2024–25, 2014–24 and 1997–2024.

Species	Min. sample	1-year (24–25)	10-year (14–24)	27-year (97–24)	LCL		UCL		Status change [†]
					LCL	UCL	LCL	UCL	
Mallard	34	-11	8	112 *	38	218			▷▲
Pheasant	49	-7	-16	11	-25	60			▲▷
Feral Pigeon	30	8	23	-	-	-			- -
Woodpigeon	101	-12 *	26 *	84 *	52	122			▲▲
Collared Dove	46	12	-1	96 *	37	207			▷▲
Buzzard	42	-2	-6	312 *	172	594			▲▲
Magpie	97	-7	-20 *	-30 *	-39	-22			▷▼
Jackdaw	92	17	-16 *	42 *	13	74			▲▲
Rook	85	-2	-4	-33 *	-49	-11			▷▼
Hooded Crow	98	9	13 *	104 *	67	159			▲▲
Coal Tit	73	14	-18 *	-14	-36	14			▷▷
Blue Tit	91	-21 *	5	-2	-21	16			▷▷
Great Tit	89	-15 *	-17 *	40 *	20	63			▲▲
Skylark	28	-26	59 *	-33 *	-52	-15			▷▼
Swallow	97	28 *	-11	-19 *	-38	0			▷▼
House Martin	55	1	-12	72 *	19	137			▷▲
Willow Warbler	94	-12	4	7	-9	22			▲▷
Chiffchaff	44	-8	15	4	-21	36			▷▷
Sedge Warbler	28	22	-11	-48 *	-68	-19			-▼
Blackcap	58	-30 *	38 *	725 *	476	1,353			▲▲
Goldcrest	56	-30 *	72 *	11	-14	45			▲▷
Wren	108	-9	21 *	25 *	9	40			▲▲
Starling	93	8	-24 *	-18	-36	2			▷▷
Song Thrush	93	-25 *	61 *	75 *	52	99			▲▲
Mistle Thrush	65	-18	-16	-35 *	-49	-16			▷▼
Blackbird	102	-28 *	36 *	31 *	16	47			▲▲
Robin	104	-26 *	16 *	4	-8	16			▲▷
House Sparrow	71	-3	7	62 *	19	104			▲▲
Duncock	84	-4	1	10	-11	34			▲▷
Pied Wagtail	56	-4	-35 *	-6	-26	22			▷▷
Meadow Pipit	70	1	-3	-3	-20	19			▷▷
Chaffinch	106	-6	-20 *	-17 *	-27	-5			▷▼
Bullfinch	39	-17	-26 *	-28 *	-42	-4			▷▼
Greenfinch	26	-9	-69 *	-89 *	-92	-83			▼▼
Linnet	41	-19	3	-12	-42	44			▷▷
Redpoll	23	273 *	-22	-15	-55	40			▷▷
Goldfinch	67	9	12	401 *	238	693			▲▲
Reed Bunting	33	-5	-35 *	-50 *	-68	-14			▷▼

[†]Change in long-term status. left = change 1995–2023; right = change 1997–2024. Increase = ▲/red arrow; no change = ▷/open arrow; decrease = ▼/blue arrow

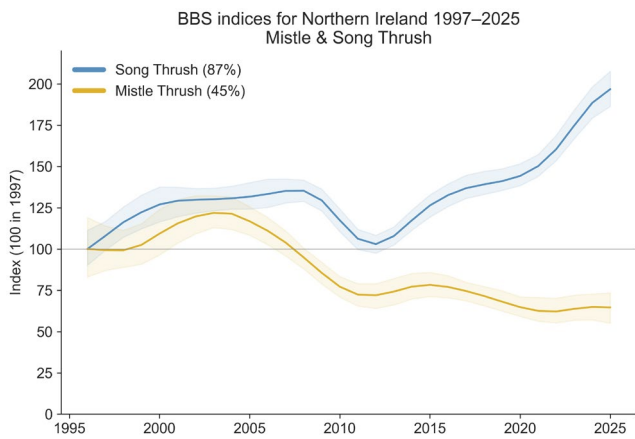


Figure 17: Following the change in baseline, Mistle Thrush (yellow) is now reported as having a long-term decline in Northern Ireland (35%). **Song Thrush** (blue) is on the increase (75%). This pattern is similar to the rest of the UK.

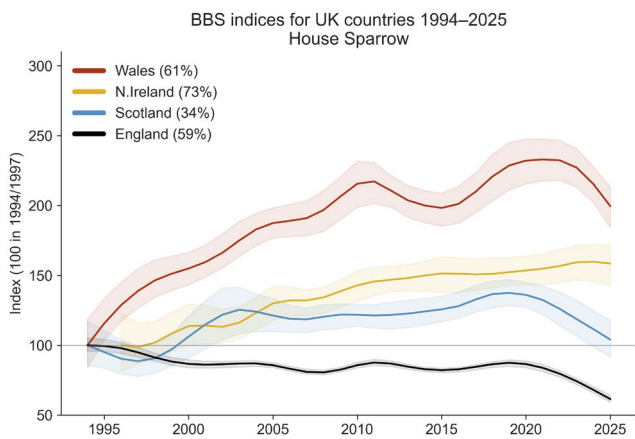


Figure 18: Smoothed population indices for House Sparrow in all four UK countries.

Isle of Man

Eight squares were surveyed by seven volunteers in 2025, contributing 16 visits and recording 69 species.

In keeping with the growing population of **Chiffchaff** being seen in virtually all parts of the UK and Crown Dependencies, 2025 saw the highest number counted on the Isle of Man in the survey’s history, even with the slight reduction in coverage compared to the records of 2022 and 2023. **Swift** was observed for the first time on a BBS visit since 2020 and the first **Cuckoo** since 2019 was also recorded. Only **Wren** was seen on all eight squares.

By contrast, there were many fewer **Rooks** counted on the Isle of Man in 2025; 26 counted from just three squares, compared with over 120 in the last two years from nearly all squares surveyed. Similarly, **Skylark**, **Great Tit** and **Blue Tit** were not as widely observed compared with the previous five years.

Channel Islands

Twenty-two squares were surveyed by 17 volunteers in 2025, recording 76 species. These squares, along with those in the Isle of Man, contribute to the overall population abundance trends on p18.

Following the development of **BirdFacts Places** (see p4), we can now report 10-year BBS trends for some species in the Channel Islands. To account for the lower level of sampling at these smaller geographical scales, the changes are described in terms of different levels of certainty, rather than a particular value. Six species are categorised as having a ‘Probable Increase’, including **Chiffchaff** and **House Sparrow**. For these species, the 95% confidence limits for the abundance change are greater than zero (Figure 19). Eighteen species are classified as ‘Uncertain’. Six species are rated as having a ‘Probable Decrease’, including **Swallow** and **House Martin**.

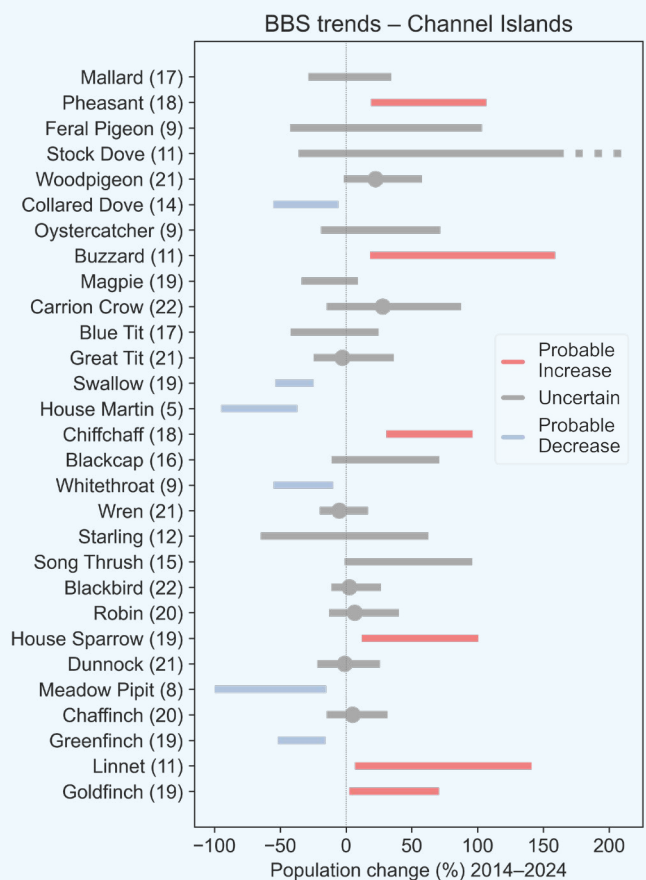


Figure 19: Ten-year BBS trends for 29 species where they have been reported on at least five squares. Species which have been seen on fewer than 20 squares should be treated with caution and come only with a 95% confidence limit (horizontal lines). Those species observed on an average of 20 squares or more also have the abundance change statistic plotted (dots).

English regions: population trends

Eight new species-region trends are published, including five-year trends for Cetti's Warbler in South West and East of England, highlighting the rapid increase across the country. These, along with all other five-year trends from the UK, constituent countries and English regions are published online.

GOLDEN WONDER

In England, as indeed across the UK, **Goldfinch** has been one of the most successful species over the course of BBS monitoring, having increased by 148% in the UK, and doubling in all four UK countries. They have benefited from garden feeding (Plummer *et al.* 2019) and continued to increase whilst **Greenfinch** and **Chaffinch** have declined. However, in certain regions of England there has been a recent small decline. In the last five years, there have been declines of 13% in South East and 11% in East Midlands. But the most notable five-year decline is 34% in London, though this comes on the back of the greatest regional increase anywhere in England, reported at 463% between 1995 and 2017.

Whether these declines in England represent stabilisation following a rapid population increase that dates to the mid 1980s, or something more troubling, remains to be seen. Meanwhile, Greenfinch – which has suffered declines due to Trichomonosis – appears to have stabilised in England. In South West and Yorkshire/Humberside, there is even a hint of an increase, both with positive five-year trends of 28%.



BIRDFACTS PLACES

As highlighted in the 'News and coverage' section, we now publish 10-year BBS trends at a finer geographical scale. Whilst the regional trends presented in Table 8 and online highlight how species' trends vary within English regions, these county or Local Nature Recovery Strategy area trends can provide some finer scale detail. For example, and as noted on p23 (Scotland population trends), the decline of Chaffinch in Scotland has been less severe than in England. Even within England, that pattern can be seen at a finer scale, with the 10-year declines greater in and around

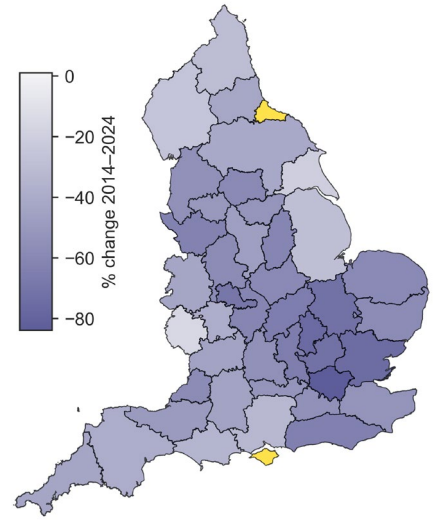
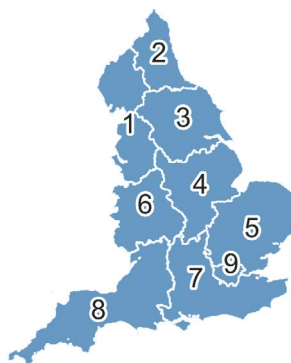


Figure 20: Ten-year Chaffinch declines in individual English counties or LNRS areas. Areas in yellow do not have sufficient sample sizes.

London and other centres of human population, but less severe in the north-east and south-west (Figure 20).



Table 7: Coverage, the number of trends and the number of statistically significant changes (1995–2024) in each English region.



Region	Squares	No. of trends	Significant increases	Significant declines
1 North West	232	63	17	23
2 North East	142	42	9	14
3 Yorkshire & Humber	261	59	20	17
4 East Midlands	287	64	18	20
5 East of England	380	72	20	28
6 West Midlands	206	59	18	20
7 South East	731	75	17	37
8 South West	550	69	19	24
9 London	101	30	13	11

FIND OUT MORE ...

Plummer, K. *et al.* 2019. The composition of British bird communities is associated with long-term garden bird feeding. *Nature Communications* 10: 2088. [doi:10.1038/s41467-019-10111-5](https://doi.org/10.1038/s41467-019-10111-5)

Table 8: Trends in English regions during 1995–2024†.

Species	North West		North East		Yorkshire & Humber		East Midlands		East of England		West Midlands		South East		South West		London	
	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample	95-23	Sample
Canada Goose	110*	76	-	-	222*	38	41	48	46	62	37	73	43	143	235*	62	-	-
Greylag Goose	-	-	-	-	1,222*	52	540*	39	136*	58	-	-	125*	51	-	-	-	-
Mute Swan	-	-	-	-	-	-	-	-	214*	43	-	-	-37	59	6	40	-	-
Shelduck	-	-	-	-	-	-	-	-	-9	37	-	-	-	-	-	-	-	-
Mallard	5	155	91*	40	12	114	-1	115	-5	197	30*	119	-1	260	20	172	-30	43
Tufted Duck	-	-	-	-	-	-	-	-	-	-	-	-	5	31	-	-	-	-
Red Grouse	-	-	-	-	-14	52	-	-	-	-	-	-	-	-	-	-	-	-
Grey Partridge	-78*	22	-	-	-55*	30	-50*	31	-74*	41	-	-	-82*	27	-	-	-	-
Pheasant	150*	143	22	81	57*	167	11	171	-24*	289	67*	146	-1	434	38*	317	-	-
Red-legged Partridge	-	-	-	-	6	57	-39*	77	-42*	180	36	36	67*	134	109*	68	-	-
Swift	-72*	96	-80*	33	-64*	84	-77*	78	-59*	144	-69*	68	-72*	169	-76*	145	-71*	57
Cuckoo	-44*	30	-	-	-68*	45	-71*	45	-65*	98	-78*	46	-76*	152	-83*	68	-	-
Feral Pigeon	-27	75	-	-	-40*	67	-5	53	-1	80	-21	43	21	125	-12	75	-9	76
Stock Dove	42	60	-	-	118*	65	7	88	45*	161	122*	93	81*	254	53*	155	-	-
Woodpigeon	87*	216	39*	97	100*	193	34*	212	18*	340	27*	187	8	550	50*	402	33*	86
Turtle Dove	-	-	-	-	-	-	-	-	-97*	47	-	-	-99*	33	-	-	-	-
Collared Dove	-23*	130	-37	37	-50*	88	-40*	114	-7	209	-50*	114	-37*	316	-31*	213	-37*	52
Moorhen	-35*	67	-	-	7	41	-35*	60	-42*	121	-25	58	-42*	149	-32*	75	-	-
Coot	-55	30	-	-	-	-	-24	29	-21	38	53	30	-2	69	-	-	-	-
Oystercatcher	21	62	35	34	321*	57	-	-	54*	37	-	-	-	-	-	-	-	-
Lapwing	-44*	110	-31	51	-17	112	-77*	57	-54*	69	-53*	35	-75*	92	-80*	23	-	-
Golden Plover	-	-	-	-	-16	40	-	-	-	-	-	-	-	-	-	-	-	-
Curlew	-50*	84	-33*	54	4	119	-	-	-	-	-71*	23	-	-	-	-	-	-
Snipe	-	-	-	-	32	40	-	-	-	-	-	-	-	-	-	-	-	-
(Cormorant)	-	-	-	-	-	-	-	-	-9	50	-	-	40	59	5	37	-	-
(Grey Heron)	-31*	74	-	-	53*	40	-20	53	-41*	81	-11	55	-23	135	-36*	90	-	-
Sparrowhawk	-52*	31	-	-	-	-	-	-	-31*	45	-	-	-44*	65	-27*	50	-	-
Red Kite	-	-	-	-	-	-	-	-	101k*	46	-	-	15k*	122	-	-	-	-
Buzzard	74*	81	5,877*	38	3,246*	60	7,833*	80	25k*	104	132*	107	1,062*	225	-4	259	-	-
Gt Spotted Woodpecker	88*	88	48	32	59*	58	157*	72	82*	159	76*	112	63*	355	121*	202	92*	41
Green Woodpecker	-	-	-	-	-	-	162*	54	30*	170	-4	62	-23*	324	-23*	145	-5	30
Kestrel	-40*	66	-	-	-18	65	1	67	-10	112	-35*	39	-40*	138	-51*	79	-	-
Ring-necked Parakeet	-	-	-	-	-	-	-	-	-	-	-	-	661*	43	-	-	35k*	55
Jay	5	69	-	-	-	-	21	38	19	127	-28*	63	-31*	259	-3	124	-43*	40
Magpie	-16*	182	-4	43	-7	114	12	164	46*	259	-6	165	6	466	-12*	329	57*	84
Jackdaw	100*	150	5	74	69*	138	112*	146	161*	248	140*	147	76*	435	32*	323	-	-
Rook	-15	85	-41*	53	-28	120	-4	107	6	187	9	88	-23*	282	-23	247	-	-
Carrion Crow	22	224	-12	94	28*	196	48*	202	113*	319	11	186	17*	533	7	397	53*	85
Raven	-	-	-	-	-	-	-	-	-	-	137*	35	504k*	30	-26	98	-	-
Coal Tit	93*	74	-1	47	60*	53	18	43	-23*	69	23	52	-3	176	14	122	-	-
Marsh Tit	-	-	-	-	-	-	-	-	-	-	-	-	-50*	54	-24	32	-	-
Blue Tit	-22*	202	-23*	75	-11	168	22*	198	23*	320	-10*	185	-9*	535	-19*	383	-7	84
Great Tit	2	190	21	68	5	150	33*	185	3	302	-4	180	0	522	21*	373	107*	80
Skylark	-10	114	-19*	81	1	163	-3	171	-19*	290	-5	119	-10*	345	-20*	247	-	-
Swallow	-45*	187	-34*	85	-49*	167	-21	159	-38*	226	-35*	143	-29*	339	-10	327	-	-
House Martin	-35	91	-38	32	-46*	69	-45*	59	-70*	93	-58*	77	-75*	141	-61*	155	-	-
Long-tailed Tit	45*	88	-	-	34	60	47*	90	6	163	-10	92	-32*	275	31*	176	-9	33
Willow Warbler	5	141	-30	78	-39*	125	-48*	94	-89*	100	-52*	86	-88*	144	-68*	150	-	-
Chiffchaff	648*	119	568*	59	547*	103	765*	130	275*	240	311*	154	128*	443	73*	346	319*	38
Sedge Warbler	-	-	-	-	-	-	-	-	1	46	-	-	-16	36	-2	35	-	-
Reed Warbler	-	-	-	-	-	-	-	-	41	43	-	-	6	38	60*	30	-	-
Blackcap	282*	126	97*	54	127*	110	183*	146	136*	267	170*	148	147*	458	129*	331	211*	53
Garden Warbler	-51*	27	-	-	-	-	-21	35	-29*	60	-15	45	-37*	104	-53*	64	-	-
Lesser Whitethroat	-	-	-	-	-	-	-5	39	32	85	4	30	-24	63	-43*	43	-	-
Whitethroat	-16	87	41*	49	-4	93	15	151	7	265	16	109	31*	331	-17	231	-	-
Goldcrest	139*	52	-10	31	49	32	87*	38	34*	84	154*	52	17	229	0	152	-	-
Wren	75*	215	37*	91	39*	196	47*	203	49*	316	46*	183	16*	529	10*	394	43*	80
Nuthatch	236*	50	-	-	-	-	-	-	232*	40	125*	57	54*	224	93*	107	-	-
Treecreeper	-	-	-	-	-	-	-	-	27	32	-	-	3	107	-21	57	-	-
Starling	-65*	167	-62*	67	-69*	129	-73*	136	-59*	228	-74*	123	-73*	352	-76*	199	-71*	80
Song Thrush	88*	168	9	75	60*	134	64*	156	3	255	107*	160	-8	477	13	339	-47*	51
Mistle Thrush	-43*	112	-34*	43	-59*	84	-56*	82	-72*	125	-32*	86	-62*	234	-49*	134	-81*	31
Blackbird	35*	214	15	86	19*	187	6	210	-13*	332	16*	188	-12*	550	12*	403	-68*	85
Spotted Flycatcher	-	-	-	-	-	-	-	-	-89*	16	-	-	-64*	29	-50*	29	-	-
Robin	52*	206	25*	82	60*	168	53*	199	49*	314	58*	186	22*	534	17*	390	94*	83
Wheatear	-62*	48	-	-	6	49	-	-	-	-	-	-	-	-	-	-	-	-
Tree Sparrow	-5	29	-	-	-3	44	-54	29	-	-	-	-	-	-	-	-	-	-
House Sparrow	-24*	158	-45*	51	-38*	109	-35*	131	-43*	198	-24*	144	-42*	338	4	269	-66*	71
Duncock	1	178	-2	69	-19*	145	-10	185	-6	286	26*	171	-17*	474	-2	357	-18	64
Yellow Wagtail	-	-	-	-	-	-	-54*	38	-48*	48	-	-	-	-	-	-	-	-
Grey Wagtail	-	-	-	-	-	-	-	-	-	-	-	-	8	31	-13	34	-	-
Pied Wagtail	-33*	126	-24*	54	-36*	112	-21	102	-12	152	-17	87	-30*	215	-17	164	-	-
Meadow Pipit	-24	86	-24*	59	-13	107	-54*	40	-74*	39	-	-	-51*	50	-15	51	-	-
Chaffinch	-36*	209	-25	95	-25*	191	-36*	205	-58*	322	-61*	181	-59*	515	-50*	387	-68*	52
Bullfinch	0	43	-	-	25	35	-17	53	-80*	60	-37*	53	-67*	138	-47*	118	-	-
Greenfinch	-52*	143	-67*	44	-56*	102	-52*	137	-55*	242	-52*	133	-79*	371	-64*	273	-70*	53
Linnet	-5	86	-40*	54	-29*	102	-33*	125	-7	185	-27	77	-42*	242	-20*	202	-	-
Goldfinch	167*	172	178*	66	124*	144	161*	161	116*	244	219*	139	98*	404	114*	322	295*	58
Corn Bunting	-	-	-	-	-	-	-	-	-1	40	-	-	-28	33	189*	31	-	-
Yellowhammer	-55*	48	-56*	48	-29*	95	-32*	143	-33*	223	-78*	95	-53*	256	-55*	173	-	-
Reed Bunting	24	64	51	30	80*	52	39*	70	10	85	-	-	-54*	63	6	37	-	-

†Changes greater than 9,999% are given in thousands (k), with the change rounded down to the nearest thousand.

Mammal monitoring and population trends

BBS mammal data are used to produce population trends for nine mammal species for the UK as a whole, its constituent countries and English regions.

Recording mammals is an optional part of BBS. Here, we present the population trends of nine species of mammal.

ROUND UP

Deer numbers across the UK continue to increase, with the **Muntjac** 2025 unsmoothed index being the highest ever recorded and continuing a trend of unabated growth since 2015. **Roe Deer** numbers are also 1.5 times greater in England compared with the mid-nineties and have increased by 60% in the last decade. Meanwhile, **Red Fox** numbers continue to decline with UK numbers now just over half that of 1995 levels and with a 32% decline in the last 10 years (Figure 21). **Rabbit** numbers too continue to decline, particularly in England and Wales where the fall in numbers came 10 to 12 years after that observed in Scotland (Figure 22).

SQUIRRELING AWAY

Grey Squirrel indices fluctuate considerably year on year and there has been a 9% increase since 1995 across the UK, mostly restricted to England, which has seen a 22% increase in the last 10 years. Mammal abundance between 2011 and 2015 was modelled using BBS data (Massimino *et al.* 2018), highlighting the lower densities of Grey Squirrel in northern and eastern England compared with the rest of the country. However, numbers appeared to have increased in these areas since, with increases of 32%, 31% and 16% seen in the North West, East Midlands and East of England regions in the last 10 years respectively (Table 15). Meanwhile, progress appears to have been made in the development of a non-lethal control method for Grey

Squirrel. Researchers at the Animal and Plant Health Agency (APHA), supported by the UK Squirrel Accord, are developing a vaccine-based contraceptive, delivered by bait using a species-specific feeder (UKSA 2025).



ENGLAND DEER CULLING

In February 2026, Defra (Defra 2026) announced a new 10-year plan to reduce the impact of deer browsing on woodland and farmland. Increasing deer numbers are a regular feature of BBS mammal results and the impact of deer on woodlands and their bird communities has been the subject of previous BTO research. The new plans will include legislation to make it easier for landowners to cull deer, so reducing their impacts – particularly on woodlands – but also reducing the spread of invasive, non-native species, especially Muntjac, **Sika** and **Chinese Water Deer**.

Table 9: All mammal species recorded in 2025.

Species	Squares recorded
Red-necked Wallaby	1
Rabbit	1,441
Brown Hare	1,107
Mountain/Irish Hare	68
European Beaver	3
Grey Squirrel	1,102
Red Squirrel	24
Bank Vole	11
Water Vole	1
Field Vole	26
Wood Mouse	23
House Mouse	3
Harvest Mouse	1
Brown Rat	50
Hedgehog	35
Common Shrew	33
Pygmy Shrew	5
Water Shrew	2
Lesser White-toothed Shrew	1
Mole	468
Bat – var. sp.	8
Domestic Cat	281
Red Fox	389
Grey Seal	15
Common Seal	4
Badger	212
Pine Marten	12
Otter	18
Stoat	25
Weasel	9
Polecat	2
American Mink	7
Wild Boar	3
Reeves's Muntjac	359
Fallow Deer	151
Red Deer	142
Sika Deer	16
Chinese Water Deer	38
Roe Deer	971
Park Cattle	2
Feral Goat	10
Common Dolphin	1
Risso's Dolphin	1
Harbour Porpoise	1

'Squares recorded' include counts of live mammals, field signs, dead mammals and local knowledge.

FIND OUT MORE ...

Defra 2026. *Deer impacts policy statement: managing the impacts of wild deer in England*. Defra. <https://www.gov.uk/government/publications/deer-impacts-policy-statement-for-england> Accessed 18/03/2026

Massimino, D. *et al.* 2018. Evaluating spatiotemporal trends in terrestrial mammal abundance using data collected during bird surveys. *Biological Conservation* **226**: 153-167. doi.org/10.1016/j.biocon.2018.07.026

UKSA 2025. *Celebrating progress & world first for fertility control research*. UK Squirrel Accord (UKSA). <https://squirrelaccord.uk/fertility-control-2025> Accessed 21/01/2026

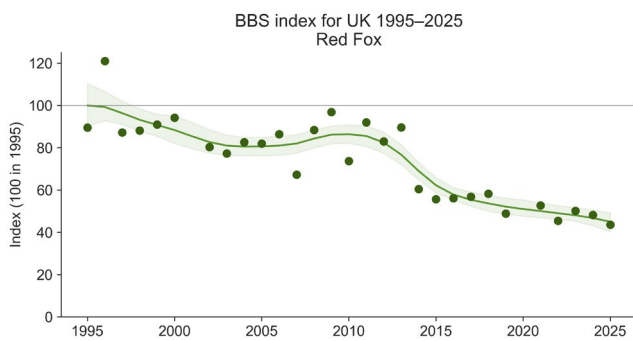


Figure 21: Red Fox population index for UK 1995–2025.

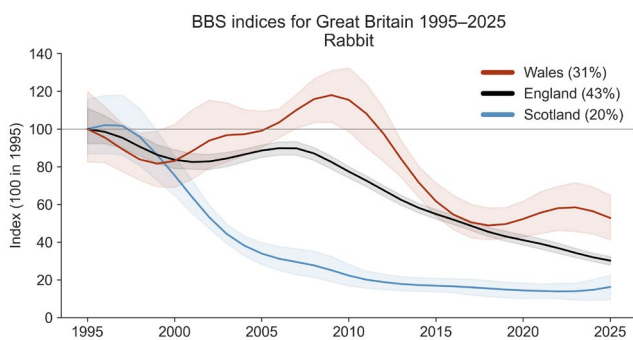


Figure 22: Rabbit population indices for Wales, Scotland and England 1995–2025.

Table 15: Mammal trends in English regions.

Species	North West		North East		Yorkshire & Humber		East Midlands		East of England		West Midlands		South East		South West		London	
	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample	96-24	Sample
Rabbit	-74 *	99	-72 *	45	-49 *	124	-77 *	111	-67 *	206	-70 *	108	-78 *	299	-49 *	192	-	-
Brown Hare	9	62	70 *	37	71 *	86	101 *	100	50 *	156	-9	43	3	110	64 *	82	-	-
Grey Squirrel	87 *	62	-	-	-16	42	77 *	53	-5	112	-6	79	-4	236	33 *	126	5	54
Red Fox	-	-	-	-	-	-	-	-	-42 *	31	-	-	-44 *	64	-64 *	45	-	-
Reeves's Muntjac	-	-	-	-	-	-	-	-	390 *	65	-	-	152 *	43	-	-	-	-
Roe Deer	-	-	-	-	417 *	43	-	-	276 *	36	-	-	121 *	142	53 *	119	-	-

Table 10: Mammal trends in UK.

Species	Min. sample	1-year (24-25)	10-year (14-24)	28-year (96-24)	LCL	UCL
Rabbit	1,455	25 *	-36 *	-73 *	-78	-67
Brown Hare	798	6	45 *	37 *	24	53
Mountain/Irish Hare	56	-23	-58 *	-68 *	-78	-51
Grey Squirrel	866	-12 *	20 *	9 *	0	20
Red Fox	264	-10	-32 *	-53 *	-59	-46
Reeves's Muntjac	142	10	144 *	360 *	210	658
(Fallow Deer)	75	-37	201 *	241 *	3	715
(Red Deer)	79	-10	25	82 *	17	190
Roe Deer	540	-3	33 *	111 *	83	147

Table 11: Mammal trends in England.

Species	Min. sample	1-year (24-25)	10-year (14-24)	28-year (96-24)	LCL	UCL
Rabbit	1,193	18 *	-45 *	-68 *	-73	-62
Brown Hare	674	5	55 *	49 *	34	65
Grey Squirrel	773	-16 *	22 *	10	-3	23
Red Fox	214	-13	-34 *	-56 *	-62	-49
Reeves's Muntjac	142	10	143 *	354 *	217	562
(Fallow Deer)	71	-33	244 *	389 *	188	689
Roe Deer	416	-1	60 *	161 *	117	213

Table 12: Mammal trends in Scotland.

Species	Min. sample	1-year (24-25)	10-year (14-24)	28-year (96-24)	LCL	UCL
Rabbit	113	76 *	-15	-86 *	-93	-75
Brown Hare	94	15	25 *	13	-8	48
Grey Squirrel	33	-39	2	-	-	-
(Red Deer)	57	-17	6	36	-14	106
Roe Deer	122	-10	4	64 *	29	110

Table 13: Mammal trends in Wales.

Species	Min. sample	1-year (24-25)	10-year (14-24)	28-year (96-24)	LCL	UCL
Rabbit	96	-16	-21	-41 *	-60	-15
Brown Hare	33	-43 *	0	-	-	-
Grey Squirrel	64	33	20	1	-25	25

Table 14: Mammal trends in Northern Ireland.

Species	Min. sample	1-year (24-25)	10-year (14-24)	27-year (97-24)	LCL	UCL
Rabbit	47	-4	-20	-62 *	-73	-32
Mountain/Irish Hare	27	101 *	-45 *	-	-	-

NOTE: Trends are displayed in the same way as they are for the birds. Page 17 covers interpreting trends. Trends for Red and Fallow Deer are reported with caveats. These are herding species and trends should be interpreted with caution, the presence or absence of a herd on a given BBS visit could influence the overall trend.

MAMMAL TREND GRAPHS ONLINE: www.bto.org/bbs-mammals

Published Papers 2025/2026

- Burgess, M.D., Sheehan, D.K., White, P.J.C., Anderson, G.Q.A., Fisher, G., Grice, P.V., Peach, W.J. & Norris, K. 2025. Inadequate reproductive success is a potential cause of Spotted Flycatcher (*Muscicapa striata*) population decline in England. *Ibis* **168**: 479–491 doi.org/10.1111/ibi.13460
- Copping, J. P., Waite, C. E., Balmford, A., Bradbury, R. B., Field, R. H., Morris, I., & Finch, T. 2025 Solar farm management influences breeding bird responses in an arable-dominated landscape. *Bird Study* **72**: 217–222. doi.org/10.1080/00063657.2025.2450392
- Couet, J., Marjakangas, E.-L., Santangeli, A., Niittynen, P., Fontaine, B., Herrando, S., Kålås, J.A., Lindström, Å., Massimino, D., Moosmann, M., Seaman, B., Silva, L., Stokke, B.G., Teufelbauer, N. & Lehikoinen, A. 2025. Solar Radiation Affects Bird Distributions but Not Elevational Shifts in European Mountains. *Global Ecology and Biogeography* **34**: e70143. doi.org/10.1111/geb.70143
- Martin, E.C., Hansen, B.B., Lee, A.M. & Herfindal, I. 2025. Life history traits influence environmental impacts on spatial population synchrony in European birds and butterflies. *Ecological Monographs* **95**: e70029. doi.org/10.1002/ecm.70029
- Mascia, R., Smith, A., Crockatt, M. & Malhi, Y. 2025. Community (citizen) science for assessing nature's benefits: A systematic review and survey. *People & Nature* **8**: 165–180. doi.org/10.1002/pan3.70209
- Massimino, D., Baillie, S.R., Balmer, D.E., Bashford, R.I., Gregory, R.D., Harris, S.J., Heywood, J.J.N., Kelly, L.A., Noble, D.G., Pearce-Higgins, J.W., Raven, M.J., Risely, K., Woodcock, P., Wotton, S.R. & Gillings, S. 2025. The Breeding Bird Survey of the United Kingdom. *Global Ecology and Biogeography* **34**: e13943. doi.org/10.1111/geb.13943
- Minter, M., Baker, S., Bowditch, E., Carlisle, S., Constant, N., Syder, A. & Finch, T. 2025. Using participatory scenario planning to explore the synergies and trade-offs from upland treescape expansion. *People & Nature* **00**: 1–15. doi.org/10.1002/pan3.70025
- Pigot, A.L., Dee, L., Richardson, A.J., Cooper, D., Eisenhauer, N., Gregory, R.D., Lewis, S., Macgregor, C.J., Massimino, D., Maynard, D., Phillips, H.R.P., Rillo, M., Loreau, M. & Haegeman, B. 2025. Macroecological rules predict how biomass scales with species richness in nature. *Science* **87**: 1272–1276. [doi: 10.1126/science.adq3278](https://doi.org/10.1126/science.adq3278)

FURTHER READING

- Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. 2013. *Bird Atlas 2007–11: The Breeding and Wintering Birds of Britain and Ireland*. BTO Books, Thetford.
- BTO 2026. *BirdFacts: profiles of birds occurring in the United Kingdom*. BTO, Thetford www.bto.org/birdfacts
- Defra 2025. Wild bird populations in the UK and England, 1970 to 2024. *Department for Environment and Rural Affairs*. Available at: www.gov.uk/government/statistics/wild-bird-populations-in-the-uk
- Johnstone, I.G., Hughes, J., Balmer, D.E. *et al.* 2022. Birds of Conservation Concern Wales 4: the population status of birds in Wales. *Milvus: the Journal of the Welsh Ornithological Society* **2**: 1–34. Available at: tinyurl.com/BoCCW4
- NatureScot 2025. Official Statistics – Scottish Terrestrial Breeding Birds 1994 – 2024. Available at: www.nature.scot/doc/official-statistics-scottish-terrestrial-breeding-birds-1994-2024
- PECBMS 2025. *Trends of wild birds in Europe, 2025 update*. Pan-European Common Bird Monitoring Scheme pcbms.info/trends-of-wild-birds-in-europe-2025-update
- Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. & Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* **114**: 723–747. britishbirds.co.uk/content/status-our-bird-populations
- Sullivan, M.J.P., Newson, S.E. & Pearce-Higgins, J.W. 2015. Using habitat-specific population trends to evaluate the consistency of the effect of species traits on bird population change. *Biological Conservation* **192**: 343–353. doi.org/10.1016/j.biocon.2015.10.009



Waterways Breeding Bird Survey: news and coverage

The Waterways Breeding Bird Survey forms part of the BTO/JNCC/RSPB Breeding Bird Survey partnership agreement and uses BBS-style transects along waterways – targeting the population monitoring of waterway specialists.

James Heywood, BBS National Organiser, BTO

A total of 277 WBBS stretches were surveyed by 248 volunteers in 2025. Two-hundred and sixty-one of these were surveyed for both visits, which is the highest number this decade and a mark of the dedication of WBBS volunteers. That resulted in 1,735 km of transects being surveyed which, as the crow flies, is approximately the distance between London and Gibraltar. On those transects, WBBS surveyors recorded 170 species of bird. The species with the highest total number of birds counted is very similar between WBBS and BBS, with one exception: **Sand Martin**. In WBBS, Sand Martin comes ninth in the list, with a total (the sum of maximum counts from each stretch) of 2,520 birds over the season, despite only being seen on 29% of WBBS stretches. This contrasts with **Wren**, which is seen on nearly all of them.

At the other end of the scale – and matching BBS – was **Glossy Ibis**. This species was joined by **Bittern**, **Black Grouse** and **Red Throated-Diver**, showing the range of different landscapes and waterways types that WBBS covers, from

wide, slow moving lowland rivers and canals, to the faster moving upland streams and burns.

Table 16: The number of WBBS stretches with data received to date and the total number of volunteers participating, by year.

	England	Scotland	Wales	Northern Ireland	UK total	No. of vols.
1998	133	27	8	0	168	132
1999	133	36	14	3	186	170
2000	129	32	14	1	176	159
2001*	38	12	1	0	51	49
2002	151	49	26	2	228	203
2003	178	53	30	1	262	236
2004	191	59	37	0	287	258
2005	210	52	39	0	301	269
2006	202	57	32	4	295	257
2007	190	48	32	0	270	239
2008	200	48	27	1	276	241
2009	212	47	25	1	285	248
2010	204	43	23	1	271	238
2011	207	44	19	3	273	240
2012	204	57	21	3	285	244
2013	206	52	23	2	283	246
2014	203	53	26	2	284	248
2015	214	61	28	2	305	269
2016	215	57	30	2	304	266
2017	222	55	26	3	306	269
2018	219	49	24	2	294	261
2019	210	50	23	2	285	249
2020†	125	21	3	3	152	135
2021	190	63	23	3	279	243
2022	196	62	20	3	281	250
2023	198	54	19	3	274	244
2024	197	60	18	3	278	250
2025	197	56	21	3	277	248

*2001: foot-and-mouth disease, † 2020: COVID-19

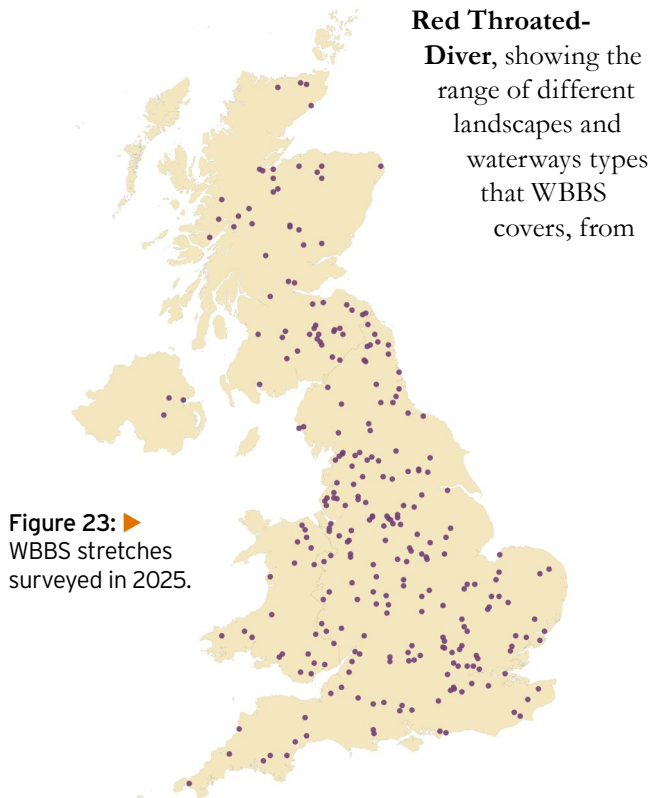


Figure 23: WBBS stretches surveyed in 2025.

United Kingdom: WBBS population trends

The WBBS continues to produce population trends for 28 species associated with waterways where the reporting threshold of being recorded on an average of 30 stretches or more since the survey began in 1998 is met. Gadwall is the latest to have a 10-year trend.

STATISTICALLY SIGNIFICANT RESULTS

Period	▲ Greatest increases	▼ Greatest decreases
All time (99–24)	2 Greylag Goose 110%	15 Lapwing -69%
Ten-year (14–24)	4 Cetti's Warbler 272%	12 (Common Tern) -59%
Five-year (19–24)	4 Cetti's Warbler 136%	7 (Common Tern) -40%
One-year (24–25)	3 Sedge Warbler 45%	1 Lapwing -30%

GOOSANDER

Of the 28 species monitored in WBBS, **Goosander** is one of the two to have increased during the lifetime of WBBS, with a 25-year increase of 46%. When WBBS data are combined with the Waterways Breeding Survey (WBS, the forerunner to WBBS), Goosander numbers have increased by 239% on waterways since 1981.

Data collected by WBBS volunteers on Goosander, along with **Common Sandpiper**, **Dipper**, and **Grey Wagtail**, and when combined with WBS, contribute to the 'Breeding Water and Wetland birds – Fast Flowing Water' habitat indicator. Unlike Goosander, which expanded its UK range significantly between the late 1960s and early 2010s (Balmer *et al.* 2013), the other three habitat specific indicators species have all declined in the last 25 years.

TAILING AWAY

All of the UK's three wagtail species are associated to a greater or lesser extent with waterways. Grey Wagtail is the one most associated, particularly with faster-flowing systems. On waterways and adjacent habitat, Grey Wagtail has declined by 27% in the last 25 years and 47% between 1975 and 2023. BBS data show that **Pied Wagtail** numbers have declined across all habitats.

Along waterways, this species has declined by 73% since 1975 and 55% since 1998 on WBBS stretches (Figure 24). Elsewhere, the largest BBS declines are seen in urban environments, which have seen a decrease of 46% across the UK (1995–2024).

Finally, **Yellow Wagtail**, a bird associated with wet grassland and farmland, has declined by 94% along waterways since 1975, as determined by joint WBS/WBBS data, compared with the still substantial 78% decrease since 1967 in the wider countryside generally. The loss of meadows and wet grassland, which has had a big impact on breeding wader abundance, will have affected Yellow Wagtails too.

DOWN TERN

Common Tern is a colonially breeding species and reported trends come with the caveat that birds recorded maybe some distance from breeding areas. The trends show

some interesting, if unexplained, differences. The 29-year BBS trend in England shows relatively little change from the late 1990s to 2020 (though with much uncertainty around the estimates) but then a sharp decrease from 2022 to 2023 as High Pathogenicity Avian Influenza (HPAI) took a heavy toll on colonies (Figure 25a). For WBBS, the trend for Common Tern – the data for which come entirely from sites in England – is one of steady decline since a high in 2002–03 (Figure 25b). Meanwhile, the trend at colonies in England, as measured by the Seabird Monitoring Programme (SMP) was largely stable until the huge losses between the 2022 and 2023 breeding season, leading to a 47% decline (2000–23; Harris *et al.* 2024), similar to that seen in BBS.

Why the trend and pattern of change over time should be different for WBBS isn't known. WBBS data for Common Tern mostly represent birds inland, whereas SMP and BBS cover both inland and coastal locations. In which case, WBBS is likely to represent a signal of steady decline in abundance inland, perhaps driven by disturbance, loss of sites from flooding and/or competition with gulls (including on artificial rafts), or predation (Burnell *et al.* 2023), to go alongside the threat of HPAI. This signal from WBBS, whether an artefact of the survey or a real change, is worthy of further investigation but certainly serves to highlight the multiple threats posed to birds on and near waterways.

FIND OUT MORE ...

Burnell, D. *et al.* (eds) 2023. *Seabirds Count: a census of breeding seabirds in Britain and Ireland (2015–2021)*. Lynx Nature Book, Barcelona

Harris, S.J. *et al.* 2024. *Seabird Population Trends and Causes of Change: 1986–2023, the annual report of the Seabird Monitoring Programme*. BTO Research Report 771. British Trust for Ornithology, Thetford.

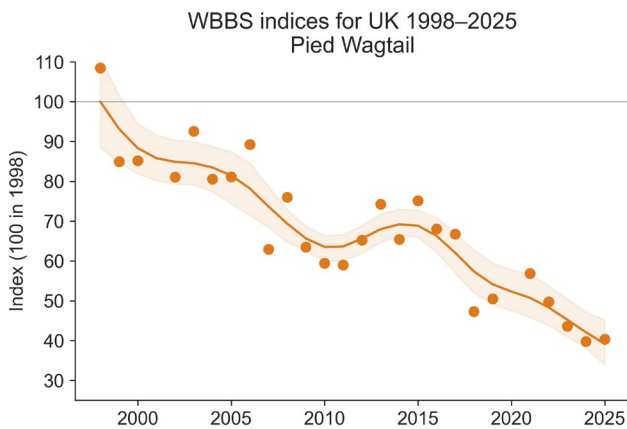


Figure 24: WBBS indices for Pied Wagtail in the UK.

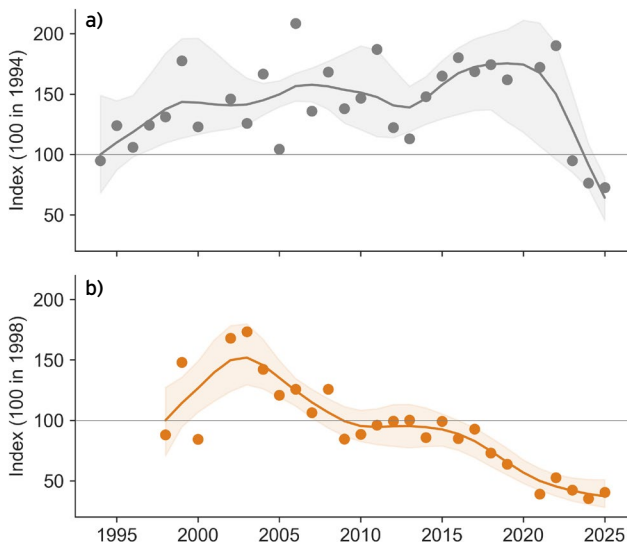


Figure 25: BBS (a, 1994–2025) and WBBS (b, 1998–2025) indices for Common Tern in England.

Table 17: UK population trends during 2024–25, 2014–24 and 1999–2024.

Species	Min. sample	1-year (24–25)	10-year (14–24)	25-year (99–24)	LCL	UCL
Canada Goose	105	14	4	83	-4	203
Greylag Goose	63	46	21	110 *	35	291
Mute Swan	115	-5	-6	-21 *	-40	0
Mandarin Duck	43	13	69 *	-	-	-
Gadwall	30	16	10	-	-	-
Mallard	240	22 *	-14 *	-12	-23	1
Tufted Duck	42	-14	-47 *	-65 *	-79	-22
Goosander	57	-7	22	46 *	4	120
Moorhen	148	0	-11 *	-34 *	-46	-19
Coot	66	-10	-37 *	-51 *	-74	-27
Oystercatcher	81	-8	-24 *	-51 *	-63	-36
Lapwing	64	-30 *	-31 *	-69 *	-79	-55
Curlew	54	-15	-35 *	-67 *	-78	-51
Common Sandpiper	69	9	-14	-37 *	-48	-24
(Common Tern)	30	15	-59 *	-66 *	-80	-46
(Cormorant)	74	0	0	-8	-25	13
(Grey Heron)	179	14	2	-27 *	-37	-17
(Little Egret)	38	-7	193 *	-	-	-
Kingfisher	71	26	-2	-17	-37	12
Sand Martin	78	44 *	71 *	69	-3	161
Cetti's Warbler	40	7	272 *	-	-	-
Sedge Warbler	92	45 *	2	-45 *	-60	-28
Reed Warbler	61	9	7	-5	-28	25
Whitethroat	132	13	-24 *	-6	-23	17
Dipper	89	16	-25 *	-35 *	-53	-6
Grey Wagtail	132	13	-11	-27 *	-42	-5
Pied Wagtail	152	2	-39 *	-55 *	-64	-44
Reed Bunting	113	12	-17 *	-18 *	-32	-1

INTERPRETING THE RESULTS: see page 17
 RESULTS ONLINE: www.bto.org/wbbs-results



MALE AND FEMALE GOOSANDER: EDMUND FELLOWES/BTO

SPECIAL THANKS: BBS REGIONAL ORGANISERS

We would like to thank all surveyors and ROs for making the BBS and WBBS the success they are today. Space does not permit all observers to be acknowledged individually, but we would especially like to thank the ROs for their efforts.

BBS Regional Organisers in 2025:

ENGLAND

Avon	Peter Bryant
Bedfordshire	Phil Cannings
Berkshire	Sean Murphy
Birmingham & West Midlands	Steve Davies
Buckinghamshire	VACANT
Cambridgeshire	VACANT
Cheshire (Mid)	Paul Miller
Cheshire (North-East, South)	Hugh Pulsford
Cleveland	Michael Leakey
Cornwall	Michael Williams
Cumbria	Colin Gay (now VACANT)
Derbyshire (North, South)	Simon Roddis
Devon	VACANT
Dorset	Pete Cadogan
Durham	David Sowerbutts
Essex (North-East)	Rod Bleach
Essex (North-West)	VACANT
Essex (South)	Sean Murphy
Gloucestershire	Gordon Kirk
Hampshire	George Batho
Herefordshire	Chris Robinson
Hertfordshire	Martin Ketcher
Huntingdon & Peterborough	Mick Twinn
Isle of Wight	Teresa Tearle
Isles of Scilly	Will Wagstaff
Kent	Bob Knight
Lancashire (East)	VACANT
Lancashire (North-West, South)	Mark & Heather Walsh
Leicestershire & Rutland	Dave Wright
Lincolnshire (East)	Phil Espin
Lincolnshire (North)	Chris Gunn
Lincolnshire (South)	VACANT
Lincolnshire (West)	Howard Gannaway (now VACANT)
London (North)	Ben Hillier
London (South)	Richard Arnold
Manchester	Nick Hilton
Merseyside	VACANT
Norfolk (North-East)	Chris Hudson
Norfolk (North-West)	Jonathan Martin (now VACANT)
Norfolk (South-East)	Rachel Warren
Norfolk (South-West)	Vince Matthews
Northamptonshire	Alan Sheffield
Northumberland	Muriel Cadwallender
Nottinghamshire	Jo Cawtheray (now VACANT)
Oxfordshire (North)	Frances Buckel
Oxfordshire (South)	John Melling
Shropshire	Jonathan Groom
Somerset	Eve Tigwell
Staffordshire* (North, South, West)	Gerald Gittens
Suffolk	Mick Wright
Surrey	Penny Williams
Sussex	Helen Crabtree
The Wirral	Paul Miller
Warwickshire	Annette Jarratt-Knock
Wiltshire (North, South)	Polly Marino
Worcestershire	Steve Davies
Yorkshire (Bradford)	Mike Denton
Yorkshire (Central)	Mike Brown
Yorkshire (East, Hull)	Brian Walker (now VACANT)
Yorkshire (Leeds & Wakefield)	VACANT
Yorkshire (North-East)	Nicholas Gibbons
Yorkshire (North-West)	Richard Candeland
Yorkshire (Richmond)	VACANT
Yorkshire (South-East, South-West)	Grant Bigg
Yorkshire (York)	Rob Chapman

SCOTLAND

Aberdeen	David Gregory
Angus	Ron Lawie
Argyll (Mull, Coll, Tiree & Morven)	Ewan Miles
Argyll (mainland & Gigha) & Bute	Nigel Scriven
Arran	James Cassels
Ayrshire	Dave McGarvie
Benbecula & The Uists	VACANT
Borders	Neil Stratton
Caitness	Donald Omand
Central	Neil Bielby
Dumfries	Andy Riches
Fife & Kinross	Paul Blackburn
Inverness (East & Speyside, West)	Hugh Inasley
Islay, Jura & Colonsay	David Wood
Kincardine & Deeside	Claire Marsden

Kirkcudbright	Andrew Bielinski
Lanark, Renfrew & Dunbarton	Gordon Brady
Lewis & Harris	Emma Niederberger
Lothian	Stephen Metcalfe
Moray & Nairn	Melvin Morrison
Orkney	Joseph Gilman (now VACANT)
Perthshire	Mike Bell
Rhum, Eigg, Canna & Muck	Bob Swann
Ross-shire	Simon Cohen
Shetland	VACANT
Skye	Carol Hawley
Sutherland	Bob Swann
Wigtown	Andrew Bielinski

WALES

Anglesey	Ian Hawkins
Brecknock	Andrew King
Caernarfon	Rhion Pritchard
Cardigan	Naomi Davis
Carmarthen	VACANT
Clwyd (East)	Anne Brenchley
Clwyd (West)	Mel ab Owain
Glamorgan (Mid, South)	Daniel Jenkins-Jones
Glamorgan (West)	Lyndon Jeffery
Gwent	Richard Clarke
Merioneth	Dave Anning
Montgomery*	Margaret Town
Pembrokeshire	Annie Haycock
Radnorshire	VACANT

NORTHERN IRELAND

Antrim & Belfast	Kevin Mawhinney
Armagh	Stephen Hewitt
Down	Alastair McIlwain
Fermanagh	Michael Stinson
Londonderry	Claire Hassan (now VACANT)
Tyrone	Steven Fyffe

CHANNEL ISLANDS

Channel Islands (excl. Jersey)	Chris Mourant
Jersey	Tony Paintin

ISLE OF MAN

Isle of Man	David Kennett
-------------	---------------

* Staffordshire and Montgomery are also VACANT for WBBS

We would be grateful for help organising the BBS and WBBS in regions currently without a Regional Organiser (marked VACANT). If you live in one of these regions and would be interested in taking on the role, please let us know.

The BBS Partnership offers its sincere thanks to the following ROs who retired during the past year, having supported the BBS in their regions: Jo Cawtheray, Howard Gannaway, Colin Gay, Nicholas Gibbons, Joseph Gilman, Claire Hassan, Lyndon Jeffery and Brian Walker.

It is with great sadness that we report the deaths of Jim Baldwin, Yvonne Benting and Jonathan Martin. Jim, Yvonne and Jonathan fulfilled the roles of BBS RO in Isle of Wight, Benbecula & The Uists and Norfolk (North-West) respectively over many years. We are very grateful for their service to BBS and several other projects.

We would like to thank and welcome Alan Burnham – Yorkshire (North-East) and Andrew Lucas – Glamorgan (West), who have taken over as ROs during the past year.

Finally, we would like to thank all the landowners who kindly allow volunteers to walk BBS and WBBS transects on their land.

Post to
@bbs-birds.bsky.social

BTO Research Report 802
ISSN 1368-9932 (print)
ISSN 2756-0864 (online)
ISSN 978-1-918170-02-3



British Trust for Ornithology
The Nunnery
Thetford
Norfolk
IP24 2PU

01842 750050
bbs@bto.org
www.bto.org/bbs