



The Breeding Bird Survey 2010

The population trends of the UK's breeding birds



The BBS Partnership

British Trust for Ornithology



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

Joint Nature Conservation Committee



Monkstone House
City Road
Peterborough
PE1 1JY
www.jncc.defra.gov.uk

Royal Society for the Protection of Birds



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

The Breeding Bird Survey is run by the British Trust for Ornithology (BTO) and is jointly funded by BTO, the Joint Nature Conservation Committee (JNCC) (on behalf of the statutory nature conservation agencies: Council for Nature Conservation and the Countryside, the Countryside Council for Wales, Natural England and Scottish Natural Heritage), and the Royal Society for the Protection of Birds (RSPB).

The members of the BBS Steering Committee in 2010 were Dr Stephen Baillie (Chair, BTO), Dr Ian Mitchell (JNCC), Dr Mark Eaton (RSPB), Dr Andy Musgrove (BTO) and Dr James Pearce-Higgins (BTO).

BBS National Organiser:

Kate Risely, British Trust for Ornithology

Email: bbs@bto.org

Tel: 01842 750050

BBS website: www.bto.org/bbs

Citation

Risely, K., Renwick, A.R., Dadam, D., Eaton, M.A., Johnston, A., Baillie, S.R., Musgrove, A.J. & Noble, D.G. (2011) *The Breeding Bird Survey 2010*. BTO Research Report 597. 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, July 2011.

© British Trust for Ornithology, Joint Nature Conservation Committee and Royal Society for the Protection of Birds, 2011.

BTO Research Report 597
ISSN 1368-9932
ISBN 978-1-906204-96-9

Acknowledgements

We are grateful to the following people for their help in 2010: Mandy Andrews, Dr Iain Downie, Dr Sarah Eglington, Mark Hammond, Dr Andrew Joys, John Marchant, Dr Stuart Newson, Dr James Pearce-Higgins, Brenda Read, Laura Smith, Richard Thewlis, Mike Toms and Karen Wright.

Many people have supported the scheme in the past, including: Dr Nicholas Aebischer, Dr Mark Avery, Dr Helen Baker, Dr Ian Bainbridge, Richard Bashford, Dr Jessa Battersby, George Boobyer, Dr Bryony Braschi, Dr Andy Brown, Prof. Steve Buckland, Dr Nick Carter, the late Dr Steve Carter, Dr Dan Chamberlain, Rachel Coombes, Dr Humphrey Crick, Dr Sarah Davis, Anita Donaghy, Dr Steve Freeman, Prof. Colin Galbraith, Dr David Gibbons, Dr John Goss-Custard, Prof. Rhys Green, Prof. Jeremy Greenwood, Dr Richard Gregory, James Hall, Rob Keen, James Mackinnon, Stuart McHugh, Dr Ian McLean, Mike Meharg, Dr Ian Mitchell, David Morris, Dr Dorian Moss, Dr Nancy Ockendon, Dr Will Peach, Dr Ken Perry, Mike Raven, Angela Rickard, Dr Ken Smith, David Stroud, Pierre Tellier, Dr Chris Thaxter, Dr Derek Thomas, Dr Lawrence Way, Richard Weyl and Dr Lucy Wright.

We acknowledge the support of the Northern Ireland Environment Agency who funded professional fieldworkers to cover 52 squares in Northern Ireland, and the help of Shane Wolsey, the BTO Ireland Officer, who organised the fieldwork in 2010. Natural England, Scottish Natural Heritage and Forestry Commission Scotland contributed to the additional surveys on Upland BBS and Scottish Woodland BBS squares.

We are very grateful to the RSPB for generously 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 cover photograph of a Whitethroat is by David Tipling (www.davidtipling.com) and the BBS logo is by Andy Wilson.

Report production and design were by Kate Risely. We are grateful to John Marchant for proofreading the report. The report was printed by Reflex, Thetford, using paper from responsible sources.



The BBS Team at the BTO

Kate Risely is the BBS National Organiser, responsible for the day-to-day running of the BBS, liaising with BTO Regional Organisers and volunteers, maintaining the database, promoting the scheme, and producing the annual report.

Dr Anna Renwick, Research Ecologist in the Population Ecology and Modelling Team, produced the bird population trends in 2010, and Dr Daria Dadam produced the mammal population trends. Dr Alison Johnston is the BTO's Ecological Statistician. Dr David Noble is the Principal Ecologist for Monitoring at the BTO, responsible for strategic developments in biodiversity monitoring. Dr Andy Musgrove is the Head of the Monitoring Team, which includes the BBS and a number of other surveys. Dr Stephen Baillie is the Director of the Modelling and Demography Group at the BTO, and has overseen the BBS since its inception in 1994.

The 2010 BBS Report

This is the sixteenth annual report of the BTO/JNCC/RSPB Breeding Bird Survey (BBS), containing the population trends of widespread UK bird species during the period 1994–2010.

The BBS is the main scheme for monitoring the population changes of the UK's common and widespread breeding birds, providing an important indicator of the health of the countryside. BBS trends are produced each year for over 100 species, and the results are widely used to set conservation priorities.

BBS news and research	4
Background and methods	7
Coverage and online recording	8
List of all species recorded	10
UK population trends	12
England population trends	14
Scotland population trends	16
Population trends in Wales and Northern Ireland, and coverage in Isle of Man and Channel Islands	18
Population trends in English regions	20
Mammal monitoring	22
Special thanks	back cover

Online Resources

Further information, including population trend graphs, can be found at www.bto.org/bbs, and a full species-by-species discussion of these results, and those from other surveys, can be found on the BirdTrends web pages, available at www.bto.org/birdtrends.

This report can be downloaded at www.bto.org/bbs/results/bbsreport.htm.



The BBS and Climate Change Research

Two recent BTO research projects are helping to shed light on how species diversity is changing with our changing climate. Read about how your BBS results make this possible...

By Dr Alison Johnston Ecological Statistician, BTO

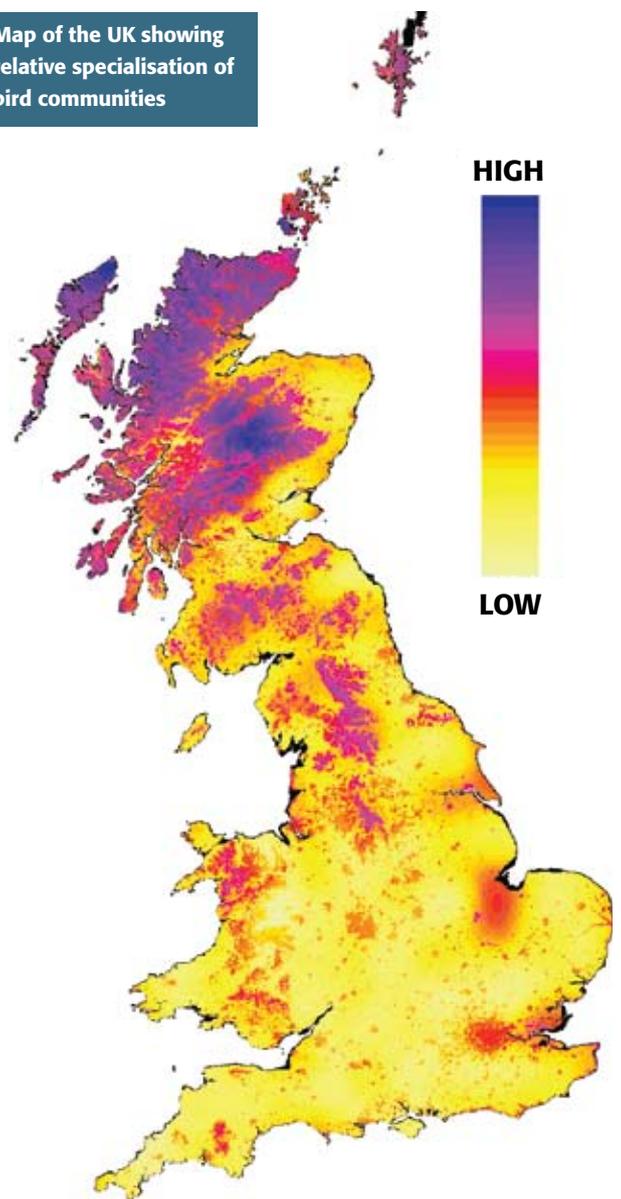
There are increasing numbers of studies finding evidence of a changing climate affecting birds; documented impacts include changing range limits, earlier nesting, and varying breeding success. Two recent BTO research projects have used BBS data to shed some more light on the impacts of our changing climate, and to predict what some future impacts on UK birds might be.

One study examined how bird communities in the UK are changing in response to a warming climate. BBS data were used to relate the number of species present in a square to temperature. Unsurprisingly, there was a statistically significant positive relationship – warmer parts of the UK (such as East Anglia) had on average a greater number of species per square km than colder parts of the UK (such as the Scottish Highlands). But, in addition to this, the increasing temperatures which have been experienced across the country in the last couple of decades have led to a general increase in number of species recorded, relative to their baseline.

These results may at first seem like good news for birds in the UK, but mask a more troubling part of the story. BTO researchers also examined how specialised these communities are. A more specialised community was composed of a higher proportion of those species which need a more specific environment or food source to survive, for example Corncrake and Osprey. Community specialisation was estimated in each BBS square as the average specialisation of the species observed in that square.

The results of the specialisation analyses were very revealing: as average species numbers have been increasing, the increasing temperatures have also led to a decrease in community specialisation. The bird communities are therefore becoming composed of more generalists and/or fewer specialists (on average) than they were a couple of decades ago. This may be a reflection of population declines in already more localised and specialised species, or range expansion of generalist species. The decrease in community specialisation was greatest in farmland habitats, which hold avian communities which underwent major changes in the second half of the 20th century.

Map of the UK showing relative specialisation of bird communities



REPRODUCED WITH PERMISSION FROM DAVEY ET AL. (2011)

The joint CBC/BBS indicator for farmland birds shows that specialists are on average declining more than generalists, supporting the observed decreases in community specialisation from this research. Many of the impacts we can already observe may be the tip of the iceberg, and as the climate continues to change, these

BBS NEWS AND RESEARCH



Wider Countryside Butterfly Survey

This 'BBS for butterflies', carried out by BBS recorders on their normal squares, is set to continue for at least another three years. The survey, run in partnership with Butterfly Conservation, is designed to monitor changes in the abundance of butterflies in the wider countryside through random sampling.

The survey was a great success in 2010, with 686 squares surveyed for butterflies by BBS and BC volunteers.

To find out more, please see the 2010 newsletter, available on the BBS website: www.bto.org/bbs.

impacts are likely to worsen. In order to assess the potential effects, BBS data were used to relate the abundance and distribution of four breeding bird species in the UK to local climate. These relationships were used, in combination with UK climate projections to 2080, to estimate how the abundance of these species might change in the future.

The abundance of two northerly distributed species, Meadow Pipit and Curlew, were projected to decrease, as the climate in the UK becomes less suitable for these northerly species. Projected declines were particularly severe for Curlew. Conversely, the abundance of two southerly distributed species, Nuthatch and Green Woodpecker, may be likely to increase. The recent increase in range and abundance of Nuthatch in the north of England and southern Scotland, increases in Green Woodpecker in northern England, and declines in Curlew are consistent with these predictions, and suggest that effects of climate change may already be evident.

These analyses of impacts of climate on community specialisation and the abundance of breeding birds were made possible at such a fine resolution by the BBS data set. BBS data are currently being used to examine how the abundance of birds is changing at the edge of their ranges – does it lag behind a changing climate, or keep pace with it? And there are many more questions which these data can yet help us answer.

Find out more...

Davey, C.M., Chamberlain, D.E., Newson, S.E., Noble, D.G. & Johnston, A. (2011) Rise of the generalists: evidence for climate driven homogenization in avian communities. *Global Ecology and Biogeography*. doi: 10.1111/j.1466-8238.2011.00693.x (online early)

Renwick, A.R., Massimino, D., Newson, S.E., Chamberlain, D.E., Pearce-Higgins, J.W. & Johnston, A. (in press) Modelling changes in species abundance in response to projected climate change. *Diversity and Distributions*.

Adjacent Upland Squares

This modification to the survey is designed to encourage volunteers who may spend a considerable amount of time travelling to their squares to maximise their efforts by surveying an adjacent 1-km square during the same trip. The aim is to boost data collection while not increasing the total amount of travelling time.

This scheme was launched in 2010, when 52 adjacent squares were surveyed, boosting the coverage of upland habitats.

More volunteers have signed up for adjacent squares in 2011, and we hope this will enable us to produce improved trends for upland species in future.

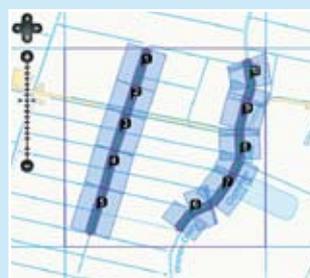
Online Mapping

The BTO's web team have developed a new system to enable volunteers to map their transect routes online. This will allow observers to easily follow

the route taken by previous volunteers, and enable us to record the locations of birds with much greater accuracy.

This system is still under development; work is planned to develop a 'help' page and to input maps that volunteers are not able to enter themselves.

Click 'Please Map Me' in BBS-Online.



Bird Trends beyond the UK

BBS trends aren't just important within the UK – they are combined with trends from other European countries within the Pan-European Common Bird Monitoring Scheme to produce European bird trends.

By Dr Mark Eaton Principal Conservation Scientist in Species Monitoring and Research at the RSPB

The BBS trends are an extremely important tool for the conservation of birds in the UK. Further to this, they contribute to the monitoring of common breeding birds across Europe, from Portugal to Finland, as part of the innovative Pan-European Common Bird Monitoring Scheme (PECBMS). A collaboration between the European Bird Census Council, the RSPB, BirdLife International, Statistics Netherlands and many country partners including those in the UK's BBS, PECBMS brings together data from monitoring schemes in 25 countries in order to produce European species trends for 145 species. The number of countries partaking, and species covered, is increasing annually, with new schemes initiated recently in Slovenia, Romania, Greece and Cyprus.

All the contributing national schemes depend on volunteers to conduct annual counts, although a variety of different methods are employed: some use line transects in a similar way to our BBS, but others survey using

point counts or territory mapping. All, however, produce indices tracking changes in species abundance, such as those for the UK that are presented in this report. PECBMS, coordinated by staff based at the Czech Society for Ornithology (CSO) in Prague, collates and then combines these national trends to produce trends for Europe, as well as for four regions within Europe. For each species, national indices are combined using a weighting process that reflects the relative importance of each country for the species in question.

For the UK, BBS data are combined with those from the Common Birds Census, giving trends from 1962 onwards. This is the longest time sequence of any country contributing to PECBMS, and many countries have started monitoring common breeding birds only relatively recently; as a consequence, PECBMS reports from 1980 onwards.

The latest PECBMS trends were published in July 2011, and here we

present a small selection of species trends – the full range can be found at www.ebcc.info/pecbm.html along with further information about the scheme.

In many cases there is a striking similarity between the trends of species in the UK and in Europe, and certainly broad patterns in bird abundance are mirrored in many other countries; most notably farmland birds have declined right across Europe since the 1970s, and in recent years continent-wide declines have been noted in many migrant species, reflecting how environmental pressures do not stop at national borders.

As well as being vital for prioritising conservation action across Europe, the PECBMS trends are valuable for providing context for national conservation efforts; for example, given the decline of Dartford Warblers in Spain and France (-34% since 1990), the relatively small English population can be regarded as increasingly important for this species.

Species	Long-term trend 1980–2009	Short-term trend 1990–2009
Lapwing	-52	-38
Turtle Dove	-69	-22
Wryneck	-49	-30
Green Woodpecker	43	42
Woodlark	-3	43
Yellow Wagtail	-53	-2
Wheatear	-66	-69
Cetti's Warbler	n/a	466
Spotted Flycatcher	-43	-19
Willow Tit	-64	-45
Tree Sparrow	-53	9
Linnet	-62	-49



How important is the UK for Dartford Warblers?

BBS BACKGROUND AND METHODS

The BBS was launched, in 1994, to provide more representative habitat 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 the BTO to develop methods for calculating long-term trends (from the 1960s to the present) using information from both schemes.

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 effort 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 birds encountered while walking two 1-km transects across their square. Each 1-km 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 work out species density. Observers also record the habitat along the transects, and 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 randomly selected, they can turn up on 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, although we recognise that some will seldom be surveyed.

The BBS National Organiser, based at BTO, 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 collect paper submissions and return them to BTO, and validate submissions made online. We are very grateful for the assistance of the ROs and the BTO Wales and Ireland Officers.

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 ten 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 effort across the UK, with standard errors adjusted for overdispersion.

In 2009 and 2010 data from additional randomly selected 1-km squares surveyed as part of the Scottish Woodland BBS and the Upland BBS were added to BBS sample. These squares were surveyed using the same methodology as standard BBS squares, and results were incorporated into trends accounting for additional sampling effort.

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:

- We do not report population trends for five species of gull (Black-headed, Common, Lesser Black-backed, Herring and Great Black-backed), 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 Cormorant, Grey Heron and Common Tern are reported with the caveat that counts may contain a high proportion of birds away from breeding sites.
- Trends for Tawny Owl and Barn Owl are reported with the caveat that the BBS monitors nocturnal species poorly.
- Counts for six wader species (Oystercatcher, Golden Plover, Lapwing, Snipe, Curlew and Redshank) are corrected to exclude counts from non-breeding flocks, and observations of Golden Plover in unsuitable breeding habitat are also excluded.

Studies using BBS data

Davey, C.M., Vickery, J.A., Boatman, N.D., Chamberlain, D.E., Parry, H.R. & Siriwardena, G.M. (2010) Assessing the impact of Entry Level Stewardship on lowland farmland birds in England. *Ibis* **152**: 459–474.

Eglington, S.M., Davis, S.E., Joys, A.C., Chamberlain, D.E. & Noble, D.G. (2010) The effect of observer experience on English Breeding Bird Survey population trends. *Bird Study* **57**: 129–141.

Magurran, A.E., Baillie, S.R., Buckland, S.T., Dick, J. McP., Elston, D.A., Scott, E.M., Smith, R.I., Somerfield, P.J. & Watt, A.D. (2010) Long-term datasets in biodiversity research and monitoring: assessing change in ecological communities through time. *Trends in Ecology and Evolution* **25**: 574–582.

Newson, S.E., Johnston, A., Parrott, D. & Leech, D.I. (2011) Evaluating the population-level impact of an invasive species, Ring-necked Parakeet *Psittacula krameri*, on native avifauna. *Ibis* **113**: 509–516.

Pickett, S.R.A. & Siriwardena, G.M. (2011) The relationship between multi-scale habitat heterogeneity and farmland bird abundance. *Ecography*. doi: 10.1111/j.1600-0587.2011.06608.x (online early)

Thaxter, C.B., Joys, A.C., Gregory, R.D., Baillie, S.R. & Noble, D.G. (2010) Hypotheses to explain patterns of population change among breeding bird species in England. *Biological Conservation* **143**: 2006–2019.

Further reading

Baillie, S.R., Marchant, J.H., Leech, D.I., Renwick, A.R., Joys, A.C., Noble, D.G., Barimore, C., Conway, G.J., Downie, I.S., Risely, K. & Robinson, R.A. (2010) *Breeding Birds in the Wider Countryside: their conservation status 2010*. BTO Research Report 565. BTO, Thetford. (www.bto.org/birdtrends)

Eaton, M.A., Brown, A.F., Noble, D.G., Musgrove, A.J., Hearn, R.D., Aebischer, N.J., Gibbons, D.W., Evans, A. & Gregory, R.D. (2009) Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* **102**: 296–341. (booklet at www.bto.org/sites/default/files/u12/bocc3.pdf)

Eaton, M.A., Appleton, G.F., Ausden, M.A., Balmer, D.E., Grantham, M.J., Grice, P.V., Hearn, R.D., Holt, C.A., Musgrove, A.J., Noble, D.G., Parsons, M., Risely, K., Stroud, D.A. & Wotton, S. (2010) *The state of the UK's birds 2010*. RSPB, BTO, WWF, CCW, JNCC, NE, NIEA and SNH, Sandy, Bedfordshire. (www.bto.org/sites/default/files/u12/stateofukbirds10.pdf)

Harris, S. & Yalden, D.W. (2008) *Mammals of the British Isles: Handbook, 4th edition*. The Mammal Society, Southampton.

JNCC (2011) *Seabird Population Trends and Causes of Change: 2011 Report*. Joint Nature Conservation Committee. (www.jncc.defra.gov.uk/page-3201)

PECBMS (2010) *Population Trends of European Common Birds 2010*. European Bird Census Council, Prague, Czech Republic. (www.ebcc.info/wpimages/video/Leaflet2010.pdf)

Risely, K., Baillie, S.R., Eaton, M.A., Joys, A.C., Musgrove, A.J., Noble, D.G., Renwick, A.R. & Wright, L.J. (2010) *The Breeding Bird Survey 2009*. BTO Research Report 559. BTO, Thetford. (www.bto.org/bbs/results/BBSreport09.pdf)

Tracking Mammals Partnership (2009) *Tracking Mammals Partnership Update 2009*. JNCC. (www.trackingmammals.org)

SURVEY COVERAGE

3,239
BBS squares
surveyed in
2010

Increased Volunteer Coverage

In 2010, 3,239 BBS squares were surveyed, a very similar number to the two preceding years. It is encouraging to see consistent BBS coverage during fieldwork for the 2007–11 Bird Atlas, and we are very grateful to all volunteers for their efforts. This total includes 52 'Adjacent Upland squares' (see p5).

As in previous years, 52 squares in Northern Ireland were surveyed by professional fieldworkers. The total number of squares surveyed by volunteers in 2010 was 3,187, an increase on 2009 (when more squares were surveyed by professional fieldworkers). In total, 2,519 volunteers took part in the survey in 2010.

In addition to the core squares surveyed by volunteers, counts from professional 'add-on' surveys have been incorporated into the BBS trends. In 2010, professional add-on surveys comprised 308 squares (in 154 pairs) in upland areas of England. These squares are not included in Table 1 or Figure 1.

Figure 1 Number of BBS squares surveyed

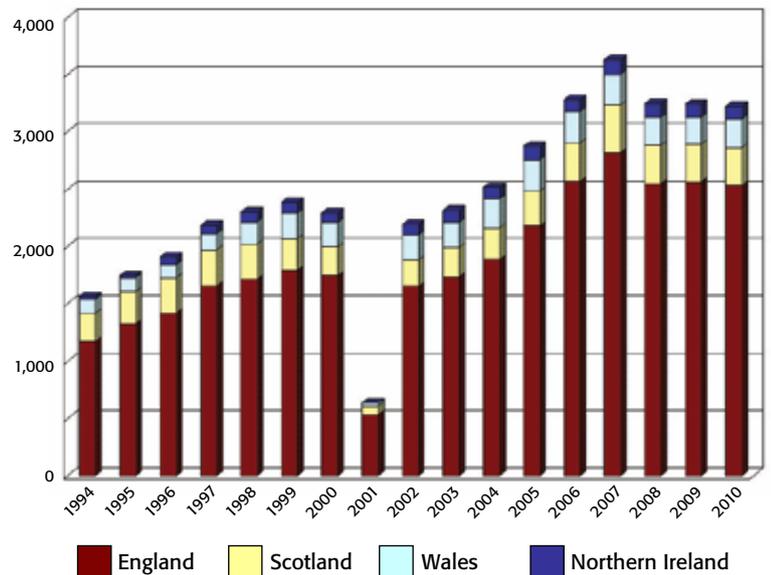


Table 1 Number of BBS squares surveyed

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
England	1,173	1,325	1,420	1,657	1,713	1,792	1,749	533	1,652	1,738	1,885	2,179	2,569	2,819	2,549	2,565	2,535
Scotland	245	283	308	313	309	275	246	78	231	255	275	306	336	413	333	329	329
Wales	122	121	116	138	192	223	213	22	215	214	254	271	271	269	242	232	245
Northern Ireland	25	17	65	75	85	95	83	0	97	109	102	120	107	129	121	116	114
Channel Islands	1	1	7	6	7	7	7	7	7	7	11	13	19	16	15	16	16
Isle of Man	4	4	4	6	6	5	3	0	3	4	6	3	5	4	1	0	0
UK Total	1,570	1,751	1,920	2,195	2,312	2,397	2,301	640	2,205	2,327	2,533	2,892	3,307	3,650	3,261	3,258	3,239

BBS-Online

In 2010, results from 2,657 squares were submitted online – 82% of the total; we are very pleased with the continuing increase in online submissions.

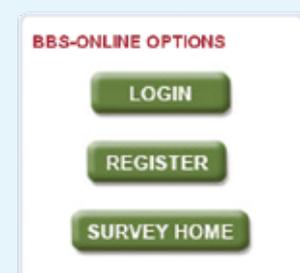
Data submitted online can be processed more efficiently than paper forms, and the application allows volunteers to enter and edit bird, habitat, mammal and colony data online, and to view all historical records from their squares (including those submitted by previous observers).

To reduce the amount of paper we use, we now issue reduced packs of forms to online users, with the paper summary sheets omitted.

BBS-Online is designed for counts to be entered directly from the field recording sheets. Therefore, counts should not be transcribed to the paper summary sheets beforehand. The system will add together counts where necessary, so individual records can be entered exactly as recorded on the field sheets.

Online users can view an Ordnance Survey map of their square, and map their transect route online.

The online recording system can be accessed via www.bto.org/bbs.



Scotland

Volunteer coverage in Scotland in 2010 was exactly the same as in 2009, at 329 squares, which was the joint fourth-highest annual total. The regions of Borders and Lothian saw their highest-ever coverage, but we need more volunteers in Kirkcudbright and Shetland.

The total number of squares covered by volunteers in 2010 includes ten Scottish Woodland squares, and 11 Adjacent Upland squares. No BBS squares in Scotland were covered by professional fieldworkers in 2010.

Core and Adjacent Upland BBS squares covered in 2010 shown in red.

England

In 2010, 2,535 BBS squares were surveyed in England. Record levels of volunteer coverage were achieved in 20 regions, with the highest being Sussex, Avon and Hampshire (over 100 squares in each).

The total number of squares covered by volunteers in 2010 includes 26 Adjacent Upland squares.

In addition to the core squares shown here, 308 upland squares were surveyed by professionals for the Upland Breeding Bird Survey, the results of which have been incorporated into the BBS trends.

Northern Ireland

In 2010, 114 squares were surveyed in Northern Ireland. Of these, 52 squares were surveyed by professional fieldworkers, funded by the Northern Ireland Environment Agency. Record volunteer coverage was achieved in County Down.

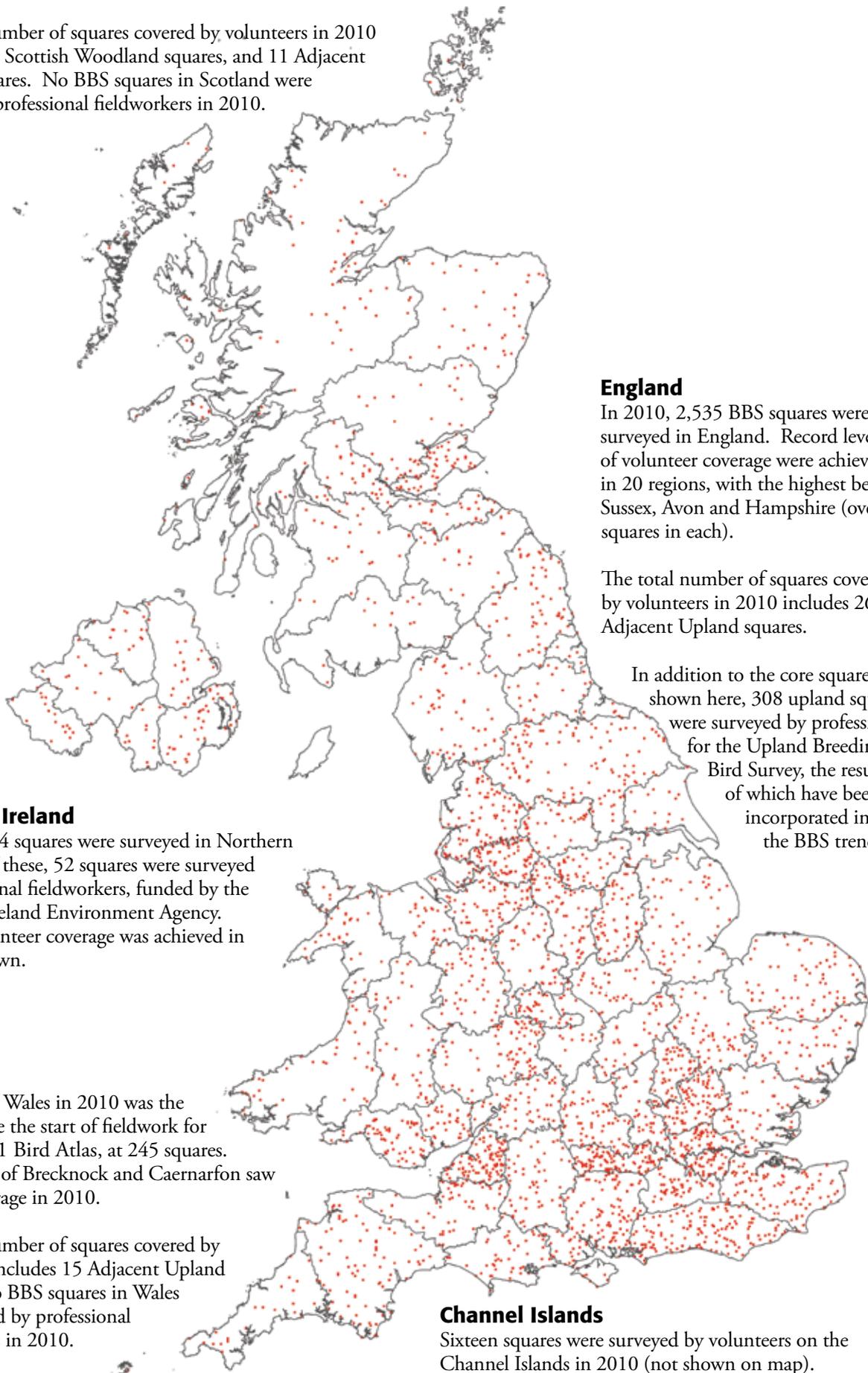
Wales

Coverage in Wales in 2010 was the highest since the start of fieldwork for the 2007–11 Bird Atlas, at 245 squares. The regions of Brecknock and Caernarfon saw record coverage in 2010.

The total number of squares covered by volunteers includes 15 Adjacent Upland squares. No BBS squares in Wales were covered by professional fieldworkers in 2010.

Channel Islands

Sixteen squares were surveyed by volunteers on the Channel Islands in 2010 (not shown on map).



SPECIES RECORDED

Many Woodpigeons, one Black Redstart

In total, 209 species, including a number of domestic breeds and escapees (marked with an asterisk in the table), were recorded on the 3,239 BBS squares surveyed in 2010.

Although we don't report population trends for all species, some indication of population status can be found on the BBS website, where we report the number of squares on which each species is recorded in each year. Full details of the number of individuals counted, for all years, can also be found on the BBS website: www.bto.org/bbs.

The two most widespread species in 2010 were Woodpigeon and Chaffinch (both found on 93% of squares), followed by Blackbird (92%) and Carrion Crow (89%). As usual, Woodpigeon was the most numerous species recorded, with 82,378 individuals counted, followed by Blackbird (37,677) and Rook (36,909).

Interesting species recorded on BBS squares in 2010 included a Montagu's Harrier in North Yorkshire, a Black Redstart in Kent and Red-necked Phalaropes on a square in Shetland.

The average number of species recorded on a BBS square in 2010 was 30, but the highest number was 75 species, on a square in the West Midlands. Species richness varied across the country, with an average of over 37 species recorded on squares in the BTO regions of Anglesey, Lincolnshire (North) and Norfolk (North-East), compared to just 12 species in some areas of Scotland. However, the value of the results does not depend on the number of species recorded, and we are particularly grateful to observers who survey species-poor, remote or urban areas, as it is just as important to know where there are few birds as where there are many.

Over 80,000 Woodpigeons were counted on BBS visits in 2010



WOODPIGEON BY JILL PAKENHAM

Table 2 Species recorded in 2010

Species	Scientific name	Squares	%
Mute Swan	<i>Cygnus olor</i>	303	9.4
Whooper Swan	<i>Cygnus cygnus</i>	5	0.2
Pink-footed Goose	<i>Anser brachyrhynchus</i>	9	0.3
White-fronted Goose	<i>Anser albifrons</i>	2	0.1
Greylag Goose	<i>Anser anser</i>	303	9.4
Greylag Goose (domestic)*	<i>Anser anser</i>	14	0.4
Canada Goose (i)	<i>Branta canadensis</i>	613	18.9
Barnacle Goose	<i>Branta leucopsis</i>	5	0.2
Brent Goose	<i>Branta bernicla</i>	4	0.1
Egyptian Goose (i)	<i>Alopochen aegyptiaca</i>	44	1.4
Shelduck	<i>Tadorna tadorna</i>	164	5.1
Mandarin Duck (i)	<i>Aix galericulata</i>	44	1.4
Wigeon	<i>Anas penelope</i>	18	0.6
Gadwall	<i>Anas strepera</i>	47	1.5
Teal	<i>Anas crecca</i>	36	1.1
Mallard	<i>Anas platyrhynchos</i>	1,596	49.3
Mallard (domestic)*	<i>Anas platyrhynchos</i>	36	1.1
Garganey	<i>Anas querquedula</i>	3	0.1
Showeler	<i>Anas clypeata</i>	22	0.7
Pochard	<i>Aythya ferina</i>	27	0.8
Tufted Duck	<i>Aythya fuligula</i>	181	5.6
Eider	<i>Somateria mollissima</i>	14	0.4
Common Scoter	<i>Melanitta nigra</i>	1	0.0
Goldeneye	<i>Bucephala clangula</i>	2	0.1
Red-breasted Merganser	<i>Mergus serrator</i>	7	0.2
Goosander	<i>Mergus merganser</i>	44	1.4
Ruddy Duck (i)	<i>Oxyura jamaicensis</i>	4	0.1
Red Grouse	<i>Lagopus lagopus</i>	143	4.4
Ptarmigan	<i>Lagopus muta</i>	1	0.0
Black Grouse	<i>Tetrao tetrix</i>	10	0.3
Red-legged Partridge (i)	<i>Alectoris rufa</i>	671	20.7
Grey Partridge	<i>Perdix perdix</i>	187	5.8
Quail	<i>Coturnix coturnix</i>	8	0.2
Pheasant (i)	<i>Phasianus colchicus</i>	2,282	70.5
Red-throated Diver	<i>Gavia stellata</i>	9	0.3
Black-throated Diver	<i>Gavia arctica</i>	3	0.1
Great Northern Diver	<i>Gavia immer</i>	4	0.1
Little Grebe	<i>Tachybaptus ruficollis</i>	86	2.7
Great Crested Grebe	<i>Podiceps cristatus</i>	75	2.3
Black-necked Grebe	<i>Podiceps nigricollis</i>	1	0.0
Fulmar	<i>Fulmarus glacialis</i>	22	0.7
Gannet	<i>Morus bassanus</i>	9	0.3
Cormorant	<i>Phalacrocorax carbo</i>	298	9.2
Shag	<i>Phalacrocorax aristotelis</i>	12	0.4
Bittern	<i>Botaurus stellaris</i>	2	0.1
Little Egret	<i>Egretta garzetta</i>	60	1.9
Grey Heron	<i>Ardea cinerea</i>	746	23.0
Red Kite	<i>Milvus milvus</i>	227	7.0
White-tailed Eagle	<i>Haliaeetus albicilla</i>	1	0.0
Marsh Harrier	<i>Circus aeruginosus</i>	29	0.9
Hen Harrier	<i>Circus cyaneus</i>	11	0.3
Montagu's Harrier	<i>Circus pygargus</i>	1	0.0
Goshawk	<i>Accipiter gentilis</i>	12	0.4
Sparrowhawk	<i>Accipiter nisus</i>	391	12.1
Buzzard	<i>Buteo buteo</i>	1,411	43.6
Golden Eagle	<i>Aquila chrysaetos</i>	5	0.2
Osprey	<i>Pandion haliaetus</i>	9	0.3
Kestrel	<i>Falco tinnunculus</i>	709	21.9
Merlin	<i>Falco columbarius</i>	8	0.2
Hobby	<i>Falco subbuteo</i>	55	1.7
Peregrine	<i>Falco peregrinus</i>	48	1.5
Water Rail	<i>Rallus aquaticus</i>	4	0.1
Corncrake	<i>Crex crex</i>	2	0.1
Moorhen	<i>Gallinula chloropus</i>	760	23.5
Coot	<i>Fulica atra</i>	334	10.3
Oystercatcher	<i>Haematopus ostralegus</i>	358	11.1
Avocet	<i>Recurvirostra avosetta</i>	5	0.2
Stone-curlew	<i>Burhinus oedicnemus</i>	3	0.1
Little Ringed Plover	<i>Charadrius dubius</i>	14	0.4
Ringed Plover	<i>Charadrius hiaticula</i>	28	0.9
Golden Plover	<i>Pluvialis apricaria</i>	108	3.3
Grey Plover	<i>Pluvialis squatarola</i>	6	0.2
Lapwing	<i>Vanellus vanellus</i>	777	24.0
Sanderling	<i>Calidris alba</i>	4	0.1
Dunlin	<i>Calidris alpina</i>	23	0.7

209
species
recorded in
2010

Species	Scientific name	Squares	%
Ruff	<i>Philomachus pugnax</i>	2	0.1
Jack Snipe	<i>Limnocyptes minimus</i>	1	0.0
Snipe	<i>Gallinago gallinago</i>	174	5.4
Woodcock	<i>Scolopax rusticola</i>	8	0.2
Black-tailed Godwit	<i>Limosa limosa</i>	5	0.2
Bar-tailed Godwit	<i>Limosa lapponica</i>	3	0.1
Whimbrel	<i>Numenius phaeopus</i>	31	1.0
Curlew	<i>Numenius arquata</i>	516	15.9
Redshank	<i>Tringa totanus</i>	80	2.5
Greenshank	<i>Tringa nebularia</i>	10	0.3
Green Sandpiper	<i>Tringa ochropus</i>	7	0.2
Common Sandpiper	<i>Actitis hypoleucos</i>	65	2.0
Turnstone	<i>Arenaria interpres</i>	7	0.2
Red-necked Phalarope	<i>Phalaropus lobatus</i>	1	0.0
Arctic Skua	<i>Stercorarius parasiticus</i>	4	0.1
Great Skua	<i>Stercorarius skua</i>	4	0.1
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	647	20.0
Mediterranean Gull	<i>Larus melanocephalus</i>	12	0.4
Common Gull	<i>Larus canus</i>	156	4.8
Lesser Black-backed Gull	<i>Larus fuscus</i>	782	24.1
Herring Gull	<i>Larus argentatus</i>	882	27.2
Great Black-backed Gull	<i>Larus marinus</i>	128	4.0
Kittiwake	<i>Rissa tridactyla</i>	3	0.1
Sandwich Tern	<i>Sterna sandvicensis</i>	11	0.3
Common Tern	<i>Sterna hirundo</i>	85	2.6
Arctic Tern	<i>Sterna paradisaea</i>	10	0.3
Little Tern	<i>Sternula albifrons</i>	5	0.2
Guillemot	<i>Uria aalge</i>	2	0.1
Razorbill	<i>Alca torda</i>	2	0.1
Black Guillemot	<i>Cepphus grylle</i>	1	0.0
Rock Dove	<i>Columba livia</i>	13	0.4
Feral Pigeon*	<i>Columba livia</i>	772	23.8
Stock Dove	<i>Columba oenas</i>	958	29.6
Woodpigeon	<i>Columba palumbus</i>	3,019	93.2
Collared Dove	<i>Streptopelia decaocto</i>	1,671	51.6
Turtle Dove	<i>Streptopelia turtur</i>	95	2.9
Ring-necked Parakeet (i)	<i>Psittacula krameri</i>	115	3.6
Cuckoo	<i>Cuculus canorus</i>	616	19.0
Barn Owl	<i>Tyto alba</i>	86	2.7
Little Owl (i)	<i>Athene noctua</i>	99	3.1
Tawny Owl	<i>Strix aluco</i>	99	3.1
Long-eared Owl	<i>Asio otus</i>	3	0.1
Short-eared Owl	<i>Asio flammeus</i>	9	0.3
Nightjar	<i>Caprimulgus europaeus</i>	3	0.1
Swift	<i>Apus apus</i>	1,061	32.8
Kingfisher	<i>Alcedo atthis</i>	42	1.3
Green Woodpecker	<i>Picus viridis</i>	1,057	32.6
Gt Spotted Woodpecker	<i>Dendrocopos major</i>	1,549	47.8
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>	33	1.0
Woodlark	<i>Lullula arborea</i>	21	0.6
Skylark	<i>Alauda arvensis</i>	1,929	59.6
Sand Martin	<i>Riparia riparia</i>	138	4.3
Swallow	<i>Hirundo rustica</i>	2,383	73.6
House Martin	<i>Delichon urbicum</i>	967	29.9
Tree Pipit	<i>Anthus trivialis</i>	144	4.4
Meadow Pipit	<i>Anthus pratensis</i>	846	26.1
Rock Pipit	<i>Anthus petrosus</i>	19	0.6
Yellow Wagtail	<i>Motacilla flava</i>	146	4.5
Grey Wagtail	<i>Motacilla cinerea</i>	199	6.1
Pied Wagtail	<i>Motacilla alba</i>	1,276	39.4
Dipper	<i>Cinclus cinclus</i>	63	1.9
Wren	<i>Troglodytes troglodytes</i>	2,843	87.8
Dunnock	<i>Prunella modularis</i>	2,528	78.0
Robin	<i>Erithacus rubecula</i>	2,848	87.9
Nightingale	<i>Luscinia megarhynchos</i>	26	0.8
Black Redstart	<i>Phoenicurus ochruros</i>	1	0.0
Redstart	<i>Phoenicurus phoenicurus</i>	185	5.7
Whinchat	<i>Saxicola rubetra</i>	56	1.7
Stonechat	<i>Saxicola torquatus</i>	106	3.3
Wheatear	<i>Oenanthe oenanthe</i>	424	13.1
Ring Ouzel	<i>Turdus torquatus</i>	26	0.8
Blackbird	<i>Turdus merula</i>	2,984	92.1
Fieldfare	<i>Turdus pilaris</i>	37	1.1
Song Thrush	<i>Turdus philomelos</i>	2,417	74.6
Redwing	<i>Turdus iliacus</i>	3	0.1
Mistle Thrush	<i>Turdus viscivorus</i>	1,228	37.9

Species	Scientific name	Squares	%
Cetti's Warbler	<i>Cettia cetti</i>	47	1.5
Grasshopper Warbler	<i>Locustella naevia</i>	116	3.6
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	325	10.0
Reed Warbler	<i>Acrocephalus scirpaceus</i>	164	5.1
Blackcap	<i>Sylvia atricapilla</i>	2,121	65.5
Garden Warbler	<i>Sylvia borin</i>	534	16.5
Lesser Whitethroat	<i>Sylvia curruca</i>	334	10.3
Whitethroat	<i>Sylvia communis</i>	1711	52.8
Dartford Warbler	<i>Sylvia undata</i>	9	0.3
Wood Warbler	<i>Phylloscopus sibilatrix</i>	44	1.4
Chiffchaff	<i>Phylloscopus collybita</i>	2,030	62.7
Willow Warbler	<i>Phylloscopus trochilus</i>	1,549	47.8
Goldcrest	<i>Regulus regulus</i>	780	24.1
Firecrest	<i>Regulus ignicapilla</i>	8	0.2
Spotted Flycatcher	<i>Muscicapa striata</i>	157	4.8
Pied Flycatcher	<i>Ficedula hypoleuca</i>	36	1.1
Bearded Tit	<i>Panurus biarmicus</i>	4	0.1
Long-tailed Tit	<i>Aegithalos caudatus</i>	1,452	44.8
Marsh Tit	<i>Poecile palustris</i>	154	4.8
Willow Tit	<i>Poecile montana</i>	46	1.4
Crested Tit	<i>Lophophanes cristatus</i>	3	0.1
Coal Tit	<i>Periparus ater</i>	1,125	34.7
Blue Tit	<i>Cyanistes caeruleus</i>	2,828	87.3
Great Tit	<i>Parus major</i>	2,722	84.0
Nuthatch	<i>Sitta europaea</i>	715	22.1
Treecreeper	<i>Certhia familiaris</i>	408	12.6
Jay	<i>Garrulus glandarius</i>	987	30.5
Magpie	<i>Pica pica</i>	2,292	70.8
Chough	<i>Pyrrhocorax pyrrhocorax</i>	10	0.3
Jackdaw	<i>Corvus monedula</i>	2,167	66.9
Rook	<i>Corvus frugilegus</i>	1,559	48.1
Carrion Crow	<i>Corvus corone</i>	2,890	89.2
Hooded Crow	<i>Corvus cornix</i>	136	4.2
Raven	<i>Corvus corax</i>	405	12.5
Starling	<i>Sturnus vulgaris</i>	1,839	56.8
House Sparrow	<i>Passer domesticus</i>	1,885	58.2
Tree Sparrow	<i>Passer montanus</i>	211	6.5
Chaffinch	<i>Fringilla coelebs</i>	3,019	93.2
Greenfinch	<i>Carduelis chloris</i>	2,141	66.1
Goldfinch	<i>Carduelis carduelis</i>	2,234	69.0
Siskin	<i>Carduelis spinus</i>	217	6.7
Linnet	<i>Carduelis cannabina</i>	1,273	39.3
Twite	<i>Carduelis flavirostris</i>	14	0.4
Lesser Redpoll	<i>Carduelis cabaret</i>	182	5.6
Common Crossbill	<i>Loxia curvirostra</i>	79	2.4
Scottish Crossbill	<i>Loxia scotica</i>	2	0.1
Bullfinch	<i>Pyrrhula pyrrhula</i>	756	23.3
Hawfinch	<i>Coccothraustes coccothraustes</i>	2	0.1
Yellowhammer	<i>Emberiza citrinella</i>	1,344	41.5
Cirl Bunting	<i>Emberiza cirlus</i>	5	0.2
Reed Bunting	<i>Emberiza schoenicus</i>	611	18.9
Corn Bunting	<i>Emberiza calandra</i>	133	4.1
[Black Swan]	<i>Cygnus atratus</i>	4	0.1
[Swan Goose]	<i>Anser cygnoides</i>	1	0.0
[Indian Peafowl (Peacock)]	<i>Pavo cristatus</i>	42	1.3
[Helmeted Guineafowl]	<i>Numida meleagris</i>	13	0.4
[Red-tailed Hawk]	<i>Buteo jamaicensis</i>	1	0.0
[Alexandrine Parakeet]	<i>Psittacula eupatria</i>	1	0.0

- Squares: number of squares on which the species was recorded, also shown as a percentage of the total number of squares.
- Entirely non-native species with self-sustaining populations in the UK (BOU category C, if not also BOU category A) are followed by (i).
- Non-native species that are not thought to have self-sustaining populations in the UK (BOU category E) are shown in square brackets.
- Species with an asterisk are usually recognised as races or forms, rather than full species.

United Kingdom

Willow Tits
declined by
76%
since the start
of the BBS

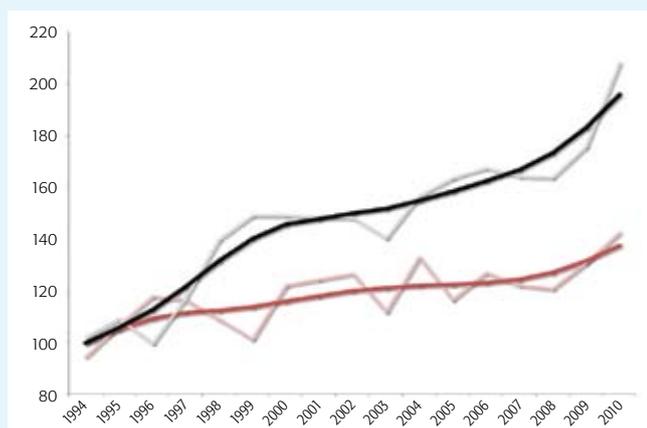
This section contains the latest population trends of the UK's common and widespread birds, and interesting results are highlighted. For a species-by-species discussion of population trends and survey results, visit the BirdTrends web pages at www.bto.org/birdtrends.

Table 3 opposite shows the UK BBS results for 2010. We can produce reliable population trends only for those species recorded on an average of at least 40 squares per year, which in 2010, as in 2009, was 106 species. Trends are not normally reported for species that do not reach the minimum sample size, but we do report UK trends for Hobby and Nightingale, as these species meet the criteria for reporting trends in England, to which their populations are mainly confined.

Before the 2008 BBS report, BBS annual reports presented unsmoothed population trends. We now have a sufficiently long run of data to calculate smoothed trends for population changes since the start of the survey in 1994, and these smoothed trends are presented here. Since smoothing involves truncation of the end points, the long-term trend shown in this report, which uses data from 1994 to 2010, is labelled 1995–2009. The unsmoothed trend between the two most recent years, 2009 and 2010, is also shown.

These trends include additional data collected on Upland BBS squares by professionals, and on Scottish Woodland BBS squares by volunteers and professionals. These squares were surveyed using the same methodology as standard BBS squares, and the different sampling strategy was accounted for in trend calculations. Improved trends for 48 woodland and upland species were calculated using the additional data.

Figure 2 Blackcap (black line) and Whitethroat (red line) smoothed and unsmoothed trends



Declines

Of the 106 species for which we can produce trends, 26 have declined significantly since the start of the survey, with the greatest declines shown by Willow Tit, Turtle Dove, Wood Warbler, Nightingale, Whinchat and Yellow Wagtail. Thirteen species declined significantly between 2009 and 2010, with the greatest declines shown by Stonechat, Kingfisher, Lapwing, Turtle Dove and Grey Wagtail.

Species that have reached their lowest levels since the start of the survey include the farmland species Grey Partridge, Lapwing, Skylark, Rook, Starling and Corn Bunting and the long-distance migrants Turtle Dove, Swift, Yellow Wagtail, Nightingale and Whinchat. Kingfisher numbers fell to their lowest level since 1994, possibly due to prolonged freezing conditions in recent winters, and Greenfinch numbers are also at their lowest level, due to the disease trichomonosis. Numbers of Redshank, Meadow Pipit, Pied Wagtail and Mistle Thrush have also declined to their lowest levels.

Increases

Forty species have increased significantly since the start of the survey, with the greatest increases shown by Ring-necked Parakeet, Barn Owl (with the caveat that the BBS monitors nocturnal species poorly), Red Kite and Great Spotted Woodpecker. Twenty-one species increased significantly between 2009 and 2010, with the greatest increases shown by Common Crossbill, Tufted Duck, Siskin, Treecreeper and Long-tailed Tit.

Species that have reached their highest level since the start of the BBS include Whitethroat, numbers of which are still recovering from the population crash in the 1960s, and the medium-distance migrant Blackcap (see Figure 2). Others are Tufted Duck, Ring-necked Parakeet, Great Spotted Woodpecker, Dunnock, Reed Warbler, Nuthatch, Jay, Tree Sparrow and Goldfinch. The small-bodied birds Coal Tit and Long-tailed Tit also reached their highest levels since 1994, despite recent cold winters, and numbers of Blue Tits and Goldcrests, which fell between 2008 and 2009, showed signs of recovery.

Birds of Conservation Concern

The BBS monitors 20 red-listed species, of which 14 have decreased significantly since the start of the survey, and two, Song Thrush and Tree Sparrow, have increased significantly. Four red-listed species (Lapwing, Turtle Dove, Skylark and Song Thrush) decreased significantly between 2009 and 2010, and one, House Sparrow, increased significantly. Thirty-six amber-listed species are monitored, of which ten have increased significantly and nine decreased significantly since the start of the survey.

Table 3 UK population trends during 2009–10 and 1995–2009

Species	Sample	09–10	95–09	LCL	UCL	Species	Sample	09–10	95–09	LCL	UCL
Mute Swan	234	-12	23*	0	74	Wren	2,328	-12*	12*	7	17
Greylag Goose	161	-20	148	-11	392	Dunnock UKBAP	1,950	7*	24*	18	31
Canada Goose	437	-6	93*	51	137	Robin	2,249	-10*	19*	15	23
Shelduck	136	-5	2	-45	45	Nightingale	30	-27	-60*	-76	-34
Mallard	1,212	-1	18*	5	29	Redstart	153	18	7	-9	24
Tufted Duck	145	34*	47*	7	108	Whinchat	76	0	-55*	-69	-38
Red Grouse UKBAP	132	8	3	-15	20	Stonechat	154	-53*	68*	45	150
Red-legged Partridge	515	2	27*	12	42	Wheatear	312	5	1	-20	27
Grey Partridge UKBAP	222	-8	-54*	-61	-43	Blackbird	2,342	1	26*	22	31
Pheasant	1,678	0	34*	25	42	Song Thrush UKBAP	1,882	-11*	24*	17	31
Little Grebe	67	-21	15	-15	69	Mistle Thrush	1,145	-8	-21*	-28	-13
Great Crested Grebe	68	3	16	-32	60	Grasshopper Warbler UKBAP	73	-5	23	-14	48
(Cormorant)	224	-15	34	-3	82	Sedge Warbler	284	-1	8	-14	29
(Grey Heron)	632	-8	2	-12	16	Reed Warbler	120	14	30*	8	62
Red Kite	73	0	475*	205	1,060	Blackcap	1,445	19*	73*	64	88
Sparrowhawk	337	21*	-8	-20	5	Garden Warbler	429	6	-10	-22	1
Buzzard	844	-10*	72*	56	94	Lesser Whitethroat	256	11	3	-16	20
Kestrel	632	3	-28*	-35	-18	Whitethroat	1,257	9*	25*	17	36
Hobby	39	-20	20	-15	62	Wood Warbler UKBAP	54	-13	-63*	-75	-44
Moorhen	631	-14*	14*	6	27	Chiffchaff	1,355	9*	52*	43	61
Coot	255	4	37*	14	71	Willow Warbler	1,354	3	-5	-12	4
Oystercatcher	313	-6	-8	-19	4	Goldcrest	734	25*	-8	-17	11
Golden Plover	62	-23	-4	-29	31	Spotted Flycatcher UKBAP	195	-9	-47*	-62	-28
Lapwing UKBAP	653	-22*	-20*	-28	-10	Pied Flycatcher	40	9	-51*	-69	-27
Snipe	159	-11	50*	1	114	Long-tailed Tit	892	30*	24*	14	36
Curlew UKBAP	500	3	-41*	-47	-33	Marsh Tit UKBAP	141	-16	-21*	-36	-3
Redshank	84	-5	-35*	-50	-7	Willow Tit UKBAP	52	8	-76*	-83	-65
Common Sandpiper	65	-4	-7	-34	17	Coal Tit	761	17*	12*	2	25
(Common Tern)	62	96	3	-48	103	Blue Tit	2,191	18*	4	0	8
Feral Pigeon	650	-11	-8	-23	8	Great Tit	2,062	9*	45*	39	51
Stock Dove	730	10	4	-6	18	Nuthatch	436	22*	66*	45	86
Woodpigeon	2,329	5*	38*	30	45	Treecreeper	327	34*	-6	-21	13
Collared Dove	1,284	-2	25*	16	35	Jay	711	11*	16*	8	27
Turtle Dove UKBAP	163	-21*	-74*	-80	-69	Magpie	1,785	1	-3	-8	2
Ring-necked Parakeet	51	21	842*	237	3,603	Jackdaw	1,578	0	39*	27	50
Cuckoo UKBAP	720	7	-48*	-53	-42	Rook	1,230	-12	-12*	-22	-3
(Barn Owl)	43	-17	501*	279	842	Carrion Crow	2,200	5	9*	1	18
Little Owl	98	0	-29*	-44	-14	Hooded Crow	129	29	3	-24	37
(Tawny Owl)	86	-9	-18	-35	6	Raven	263	21*	0	-49	108
Swift	1,003	-13	-31*	-41	-18	Starling UKBAP	1,699	-4	-45*	-49	-40
Kingfisher	53	-39*	-17	-37	20	House Sparrow UKBAP	1,515	11*	-6	-13	0
Green Woodpecker	771	0	47*	36	61	Tree Sparrow UKBAP	162	17	73*	31	133
Gt Spotted Woodpecker	971	6	139*	120	158	Chaffinch	2,354	5*	11*	7	16
Skylark UKBAP	1,636	-10*	-15*	-22	-7	Greenfinch	1,718	-5	2	-3	11
Sand Martin	119	21	33	-20	155	Goldfinch	1,456	11*	73*	63	91
Swallow	1,830	-7*	34*	25	45	Siskin	157	34*	38*	0	78
House Martin	893	0	-4	-14	7	Linnet UKBAP	1,143	-4	-23*	-31	-14
Tree Pipit UKBAP	136	18	-13	-34	7	Lesser Redpoll UKBAP	152	4	16	-14	52
Meadow Pipit	780	-8*	-21*	-29	-14	Common Crossbill	53	512*	10	-28	95
Yellow Wagtail UKBAP	153	-5	-55*	-63	-46	Bullfinch UKBAP	564	9	-4	-15	5
Grey Wagtail	219	-21*	15	-3	36	Yellowhammer UKBAP	1,141	1	-17*	-22	-8
Pied Wagtail	1,216	-15	-5	-14	4	Reed Bunting UKBAP	456	-4	30*	16	47
Dipper	57	1	-35*	-55	-4	Corn Bunting UKBAP	142	-11	-33*	-48	-20

- Trends are percentage changes, and are marked with an asterisk (*) where the 95% confidence limits of the change do not overlap zero (indicating that there has been a significant change).
- The trend since the start of the survey, covering the years 1994–2010, has been smoothed, and the end years truncated. This trend is labelled as 1995–2009.
- The sample is the mean number of squares per year on which the species was recorded during 1994–2010.

- LCL and UCL are the lower and upper 95% confidence limits for the 1995–2009 trend.
- Red-listed and amber-listed species from 'Birds of Conservation Concern 3' are shown in the relevant colour.
- UK Biodiversity Action Plan species are marked with UKBAP.
- Trends for species in brackets are reported with caveats (see p7).

**TREND GRAPHS
ONLINE:**

www.bto.org/bbs/graphs



POPULATION TRENDS

England

England-specific trends can be calculated for the 100 species found on an average of at least 30 squares in England per year, shown in Table 4 opposite (the same number as in 2009).

These trends include additional data collected on Upland BBS squares by professionals. These squares were surveyed using the same methodology as standard BBS squares, and the different sampling strategy was accounted for in trend calculations. Improved trends for 18 species with substantial populations in upland areas were calculated using the additional data: Red Grouse, Red Kite, Buzzard, Oystercatcher, Snipe, Curlew, Redshank, Tree Pipit, Meadow Pipit, Grey Wagtail, Pied Wagtail, Redstart, Whinchat, Stonechat, Wheatear, Raven, Siskin and Lesser Redpoll.

Declines

As the greater part of most UK bird populations are in England, the England-specific trends are generally similar to the overall UK trends. Of the 100 species for which we can produce trends, 26 have declined significantly since the start of the survey, with the greatest declines, all significant, shown by Willow Tit, Turtle Dove, Cuckoo, Nightingale, Yellow Wagtail and Spotted Flycatcher.

Nine species declined significantly in England between 2009 and 2010, with the greatest declines shown by Stonechat, Kingfisher, Moorhen and Pied Wagtail.

A number of species reached their lowest levels in England since the start of the survey, including Grey Partridge, Kestrel, Curlew, Feral Pigeon, Turtle Dove, Little Owl, Swift, Kingfisher, Skylark, House Martin, Tree Pipit, Yellow Wagtail, Pied Wagtail, Nightingale, Mistle Thrush, Rook, Starling, Greenfinch and Corn Bunting.

Species that have fared worse in England than in the UK as a whole since the start of the survey include Feral Pigeon, House Martin, Tree Pipit, Willow Warbler and House Sparrow, which have all declined significantly in England but not in the UK as a whole.

Increases

Thirty-nine species have increased significantly since the start of the survey, with the greatest increases shown by Red Kite, Ring-necked Parakeet, Barn Owl (though with the caveat that the BBS monitors nocturnal species poorly), Greylag Goose and Buzzard.

Twenty species increased significantly in England between 2009 and 2010, with the greatest increases shown by Redshank, Goldcrest, Wheatear (see Figure 3), Long-tailed Tit and Tufted Duck.

A number of species reached their highest levels in England since the start of the survey, including Gadwall, Tufted Duck, Red Kite, Ring-necked Parakeet, Great Spotted Woodpecker, Dunnock, Wheatear, Reed Warbler, Blackcap, Whitethroat, Long-tailed Tit, Coal Tit, Nuthatch, Tree Sparrow, Goldfinch and Reed Bunting.

Species that did better in England than in the UK as a whole between 2009 and 2010 include Redshank, Wheatear, Linnet and Bullfinch, which increased significantly in England but not in the UK as a whole.

In total, 189 species were recorded on the 2,535 BBS squares covered in England in 2010. The most widespread species were Woodpigeon, Blackbird and Carrion Crow. The average sample size for Dipper and Common Sandpiper was just below the threshold for reporting trends, so an increase in survey coverage or species range should allow trends to be produced in future.

Wheatears
increased by
35%
in England from
2009 to 2010

Figure 3 Wheatear trend in England (smoothed and unsmoothed trend)



Table 4 Trends in England during 2009–10 and 1995–2009

Species	Sample	09–10	95–09	LCL	UCL	Species	Sample	09–10	95–09	LCL	UCL
Mute Swan	200	-7	6	-15	30	Pied Wagtail	927	-12*	-5	-13	2
Greylag Goose	132	-18	199*	92	433	Wren	1,788	-5*	8*	3	12
Canada Goose	407	-7	82*	43	125	Duncock UKBAP	1,579	9*	18*	11	24
Shelduck	112	-14	35	-14	74	Robin	1,758	-9*	24*	20	29
Gadwall	32	39	69*	4	194	Nightingale	30	-27	-57*	-73	-27
Mallard	1,021	-6	31*	21	44	Redstart	86	1	-3	-25	12
Tufted Duck	127	23*	35	-7	74	Whinchat	33	17	-45*	-70	-9
Red Grouse UKBAP	74	12	-10	-30	15	Stonechat	69	-50*	43	-8	154
Red-legged Partridge	501	1	22*	8	36	Wheatear	172	35*	7	-15	46
Grey Partridge UKBAP	198	-5	-50*	-57	-39	Blackbird	1,850	0	23*	20	28
Pheasant	1,417	-1	34*	25	41	Song Thrush UKBAP	1,452	-4	22*	16	29
Little Grebe	53	-10	1	-33	49	Mistle Thrush	899	-4	-30*	-36	-23
Great Crested Grebe	62	7	-6	-28	26	Grasshopper Warbler UKBAP	33	20	-21	-49	12
(Cormorant)	187	-1	24*	1	48	Sedge Warbler	182	0	-5	-27	13
(Grey Heron)	521	-11*	-3	-15	9	Reed Warbler	114	15	26*	4	60
Red Kite	50	21	7,839*	3,306	8,986	Blackcap	1,239	15*	61*	53	72
Sparrowhawk	277	9	-7	-20	7	Garden Warbler	348	14*	-17*	-27	-5
Buzzard	546	0	146*	109	189	Lesser Whitethroat	245	9	-2	-21	16
Kestrel	553	-5	-13*	-19	-4	Whitethroat	1,088	10*	23*	15	31
Hobby	38	-22	24	-8	80	Chiffchaff	1,139	12*	53*	44	66
Moorhen	584	-14*	13*	3	24	Willow Warbler	894	-4	-30*	-38	-23
Coot	232	1	38*	16	69	Goldcrest	510	37*	6	-5	28
Oystercatcher	167	-1	50*	21	84	Spotted Flycatcher UKBAP	137	10	-52*	-63	-38
Lapwing UKBAP	541	-5	-3	-16	10	Long-tailed Tit	785	25*	21*	11	33
Snipe	84	13	2	-21	22	Marsh Tit UKBAP	128	-10	-24*	-37	-2
Curlew UKBAP	317	-5	-30*	-38	-19	Willow Tit UKBAP	46	3	-76*	-83	-67
Redshank	59	55*	-24	-48	7	Coal Tit	496	15*	26*	9	58
(Common Tern)	57	12	46	-3	139	Blue Tit	1,765	20*	2	-2	7
Feral Pigeon	542	-11	-17*	-28	-4	Great Tit	1,662	12*	41*	35	49
Stock Dove	673	2	1	-12	15	Nuthatch	368	19*	71*	48	101
Woodpigeon	1,870	3	45*	36	53	Treecreeper	240	18	-11	-23	6
Collared Dove	1,130	-4	25*	16	34	Jay	612	8	8	-2	16
Turtle Dove UKBAP	161	-21	-74*	-79	-67	Magpie	1,495	2	-3	-7	3
Ring-necked Parakeet	51	21	842*	294	5,061	Jackdaw	1,260	-5	44*	33	55
Cuckoo UKBAP	563	1	-63*	-67	-59	Rook	974	-3	-6	-17	5
(Barn Owl)	41	-7	459*	269	737	Carrion Crow	1,814	0	17*	7	25
Little Owl	95	-2	-28*	-43	-11	Raven	109	12	-35	-77	235
(Tawny Owl)	74	-14	-16	-35	12	Starling UKBAP	1,394	-2	-51*	-55	-46
Swift	867	-11	-32*	-43	-17	House Sparrow UKBAP	1,250	13*	-18*	-24	-11
Kingfisher	47	-40*	-11	-34	26	Tree Sparrow UKBAP	131	22*	37*	4	90
Green Woodpecker	713	-1	56*	43	70	Chaffinch	1,809	3*	13*	9	18
Gt Spotted Woodpecker	846	5	120*	104	138	Greenfinch	1,448	-7*	3	-2	11
Skylark UKBAP	1,299	-6*	-23*	-27	-18	Goldfinch	1,202	10*	63*	51	75
Sand Martin	77	2	4	-36	40	Siskin	54	14	47	-30	214
Swallow	1,411	4	33*	21	45	Linnet UKBAP	924	14*	-32*	-37	-26
House Martin	706	-2	-15*	-24	-4	Lesser Redpoll UKBAP	60	-15	-28	-56	24
Tree Pipit UKBAP	73	-3	-50*	-68	-25	Bullfinch UKBAP	433	19*	-6	-16	8
Meadow Pipit	421	-4	-16*	-28	-5	Yellowhammer UKBAP	996	2	-23*	-28	-18
Yellow Wagtail UKBAP	150	-1	-55*	-64	-44	Reed Bunting UKBAP	342	2	31*	14	47
Grey Wagtail	145	-16	23*	1	52	Corn Bunting UKBAP	136	-9	-29*	-43	-11

- Trends are percentage changes, and are marked with an asterisk (*) where the 95% confidence limits of the change do not overlap zero (indicating that there has been a significant change).
- The trend since the start of the survey, covering the years 1994–2010, has been smoothed, and the end years truncated. This trend is labelled as 1995–2009.
- The sample is the mean number of squares per year on which the species was recorded during 1994–2010.

- LCL and UCL are the lower and upper 95% confidence limits for the 1995–2009 trend.
- Red-listed and amber-listed species from 'Birds of Conservation Concern 3' are shown in the relevant colour.
- UK Biodiversity Action Plan species are marked with UKBAP.
- Trends for species in brackets are reported with caveats (see p7).

**TREND GRAPHS
ONLINE:**

www.bto.org/bbs/graphs



POPULATION TRENDS

Scotland

Stonechats
declined by
77%
in Scotland from
2009 to 2010

Scotland-specific trends can be calculated for the 60 species found on an average of at least 30 squares in Scotland per year, shown in Table 5 opposite (the same number as in 2009).

These trends include additional data collected on Scottish Woodland BBS squares, by volunteers in 2010 and by professionals in previous years. These squares were surveyed using the same methodology as standard BBS squares, and the different sampling strategy was accounted for in trend calculations. Improved trends for 22 species were calculated using the additional data: Buzzard, Cuckoo, Great Spotted Woodpecker, Tree Pipit, Wren, Dunnock, Robin, Blackbird, Song Thrush, Mistle Thrush, Blackcap, Chiffchaff, Willow Warbler, Goldcrest, Coal Tit, Blue Tit, Great Tit, Treecreeper, Chaffinch, Siskin, Lesser Redpoll and Bullfinch.

Declines

Of the 60 species for which trends are presented, six have declined significantly since the start of the survey, with the greatest declines (all statistically significant) shown by Kestrel, Curlew, Lapwing and Meadow Pipit.

Eight species have declined significantly in Scotland between 2009 and 2010, and the greatest significant declines have been shown by Stonechat, Lapwing, Wren, Mistle Thrush, Swallow and Song Thrush.

Stonechat numbers in Scotland fell sharply from a peak in 2007 to their lowest level since the start of the survey (see Figure 4). Wren numbers also declined sharply between 2009 and 2010. Numbers of Lapwings, Meadow Pipits, Rooks and Starlings fell to their lowest level in 2010. Kestrel, Curlew and Goldcrest recovered slightly in 2010, following severe declines.

Since the start of the survey, numbers of Woodpigeon and Carrion Crow have remained stable or declined in Scotland, despite increasing significantly in the UK overall. Chiffchaff numbers declined between 2009 and 2010 in Scotland, though in the UK overall numbers increased significantly between these two years.

Increases

Twenty-four species have increased significantly since the start of the survey in 1994. The largest significant increases have been shown by Great Spotted Woodpecker, Chiffchaff, Blackcap, Goldfinch and House Martin, all of which have more than doubled in numbers in Scotland since the start of the survey.

Just one species – Blackcap – increased significantly in Scotland between 2009 and 2010. Blackcap, Whitethroat, Chaffinch and Goldfinch all reached their highest levels in Scotland since 1994.

Since the start of the survey, House Martin, Tree Pipit and Willow Warbler have increased significantly in Scotland, though all have shown slight declines in the UK as a whole (see Figure 5 for House Martin trends). The overall severe decline in Cuckoo numbers has not been shown by the Scottish population, which has shown only a small decline.

In total, 162 species were recorded on the 329 squares covered in Scotland in 2010. The most widespread species were Chaffinch, Woodpigeon and Willow Warbler. The average sample size for Long-tailed Tit was just below the threshold for reporting trends, so an increase in survey coverage or species range should allow trends to be produced in future.

Figure 4 Stonechat trend in Scotland (smoothed and unsmoothed trend)

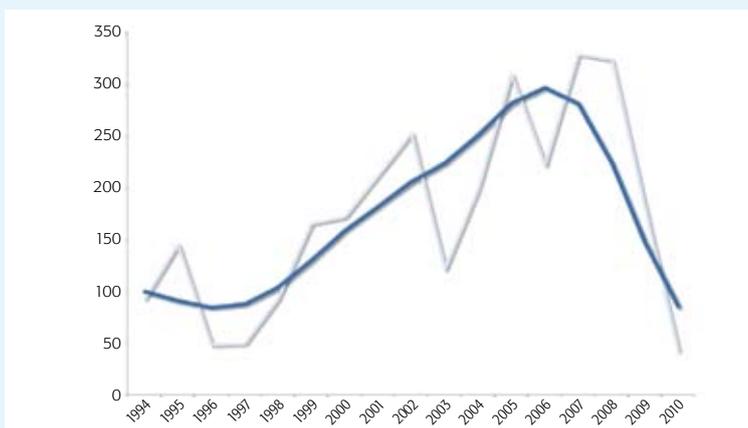


Table 5 Trends in Scotland during 2009–10 and 1995–2009

Species	Sample	09–10	95–09	LCL	UCL	Species	Sample	09–10	95–09	LCL	UCL
Mallard	96	24	-17	-35	5	Blackbird	188	3	32*	9	56
Red Grouse <small>UKBAP</small>	52	-3	-2	-21	23	Song Thrush <small>UKBAP</small>	170	-22*	20	-4	51
Pheasant	125	2	17	-8	43	Mistle Thrush	76	-32*	15	-19	61
(Grey Heron)	48	12	9	-22	49	Sedge Warbler	52	-8	30	-11	96
Buzzard	135	-15	36*	11	76	Blackcap	51	36*	209*	96	363
Kestrel	42	45	-58*	-73	-36	Whitethroat	73	7	94*	30	190
Oystercatcher	125	-3	-24*	-35	-12	Chiffchaff	41	-20	274*	139	589
Golden Plover	39	-27	-19	-45	4	Willow Warbler	205	5	21*	4	37
Lapwing <small>UKBAP</small>	88	-41*	-37*	-54	-20	Goldcrest	90	16	-6	-26	34
Snipe	56	-8	57*	9	142	Coal Tit	124	17	0	-19	19
Curlew <small>UKBAP</small>	120	19	-53*	-62	-41	Blue Tit	158	15	3	-11	17
Common Sandpiper	30	-6	-5	-36	20	Great Tit	143	-6	47*	21	74
Feral Pigeon	59	-5	16	-37	104	Treecreeper	35	49	-2	-43	55
Woodpigeon	188	14	0	-19	26	Magpie	44	-8	2	-25	48
Collared Dove	48	5	-6	-41	47	Jackdaw	109	-8	23	-3	60
Cuckoo <small>UKBAP</small>	72	-2	-2	-23	18	Rook	107	-40	-25	-46	3
Swift	49	-31	-27	-63	10	Carrion Crow	178	19	-10	-33	14
Gt Spotted Woodpecker	43	13	311*	189	521	Hooded Crow	50	60	-22	-50	25
Skylark <small>UKBAP</small>	202	-15*	5	-17	27	Raven	43	46	65	-10	160
Swallow	162	-25*	49*	27	81	Starling <small>UKBAP</small>	141	-20	-29*	-42	-10
House Martin	58	8	114*	33	206	House Sparrow <small>UKBAP</small>	88	0	44	-6	89
Tree Pipit <small>UKBAP</small>	32	14	51*	3	128	Chaffinch	232	6	13*	2	27
Meadow Pipit	199	-2	-31*	-42	-20	Greenfinch	101	6	-6	-27	21
Grey Wagtail	29	10	6	-32	62	Goldfinch	82	18	123*	61	201
Pied Wagtail	126	-4	-10	-30	7	Siskin	72	37	31	-11	83
Wren	219	-40*	31*	19	58	Linnet <small>UKBAP</small>	88	-32	10	-26	60
Dunnock <small>UKBAP</small>	134	3	56*	32	89	Lesser Redpoll <small>UKBAP</small>	45	31	2	-48	69
Robin	191	-16*	16	-1	30	Bullfinch <small>UKBAP</small>	38	6	25	-24	57
Stonechat	34	-77*	62*	39	238	Yellowhammer <small>UKBAP</small>	100	-2	13	-15	42
Wheatear	77	-19	3	-25	48	Reed Bunting <small>UKBAP</small>	56	-8	50*	5	119

- Trends are percentage changes, and are marked with an asterisk (*) where the 95% confidence limits of the change do not overlap zero (indicating that there has been a significant change).
- The trend since the start of the survey, covering the years 1994–2010, has been smoothed, and the end years truncated. This trend is labelled as 1995–2009.
- The sample is the mean number of squares per year on which the species was recorded during 1994–2010.

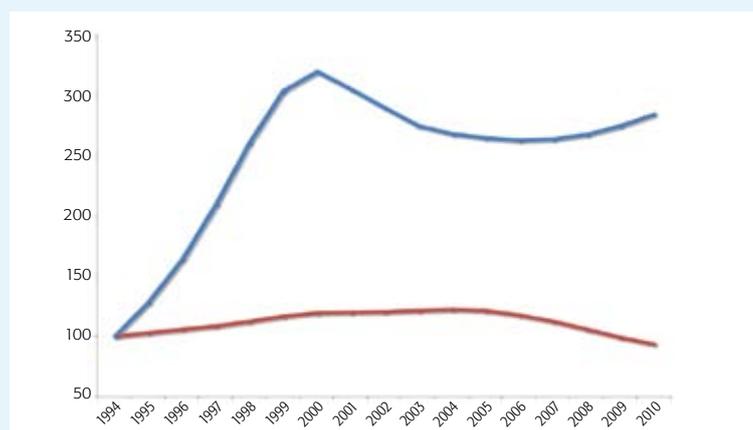
- LCL and UCL are the lower and upper 95% confidence limits for the 1995–2009 trend.
- Red-listed and amber-listed species from 'Birds of Conservation Concern 3' are shown in the relevant colour.
- UK Biodiversity Action Plan species are marked with UKBAP.
- Trends for species in brackets are reported with caveats (see p7).

TREND GRAPHS ONLINE:



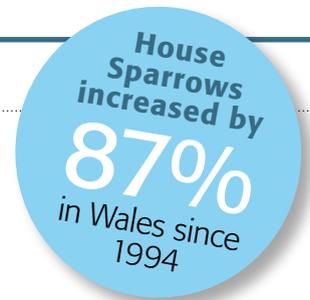
www.bto.org/bbs/graphs

Figure 5 Smoothed House Martin trends in Scotland (blue line) and the whole UK (red line)



HOUSE MARTIN BY DOUG WELCH

POPULATION TRENDS



Wales

Wales-specific trends can be calculated for the 53 species found on an average of at least 30 squares in Wales per year, shown in Table 6 opposite (the same number as in 2009).

Declines

Of the 53 species for which trends are presented, nine decreased significantly since the start of the survey, with the greatest declines shown by Starling, Goldcrest, Swift, Curlew and Yellowhammer.

Only 16 species showed declines between 2009 and 2010, which compares favourably to the 29 species that declined between 2008 and 2009. The species that showed the greatest annual decline between 2009 and 2010 were Feral Pigeon, Pied Wagtail, Bullfinch and Buzzard; however, none of these annual changes was statistically significant. The largest significant declines were shown by Song Thrush and Swallow, two species which have increased significantly in Wales since the start of the survey.

Three red- or amber-listed species of open country, Skylark, Meadow Pipit and Starling, fell to their lowest levels in Wales since the start of the survey.

Increases

Sixteen species have increased significantly in Wales since the start of the survey. The biggest increases have been shown by House Sparrow, Stonechat and Great Spotted Woodpecker. Stonechat numbers, which fell significantly in 2009, appear to have stabilised.

Many species increased in Wales between 2009 and 2010 – 37 species, compared to 23 species that increased between 2008 and 2009. The species that increased the most in Wales between 2009 and 2010 were Tree Pipit, Rook, Cuckoo and Linnet, and the largest significant increases were of Tree Pipit, Linnet, Blackcap and House Sparrow. Numbers of Redstart, Blackcap and House Sparrow reached their highest levels since the start of the survey.

In total, 132 species were recorded on the 245 BBS squares surveyed in 2010. Blackbird, Carrion Crow and Chaffinch were the most widespread species, occurring on over 93% of squares. Stock Dove was recorded on an average of 29 squares in Wales during the survey period, so is the species for which a trend is most likely to be produced in future, given an increase in survey coverage or species range.

Northern Ireland

Trends specific to Northern Ireland were produced for 30 species in 2010, shown in Table 7 opposite. In this report, we are able to report a Northern Ireland trend for Chiffchaff for the first time.

Declines

Of the 30 species, only one, Skylark, has declined significantly since the start of the survey. Because of the relatively small number of squares surveyed in Northern Ireland, we can produce trends only for the most widespread and numerous species – therefore, many declining species cannot be monitored by the BBS in Northern Ireland.

Seven species declined significantly between 2009 and 2010, including Meadow Pipit, numbers of which are now dropping below 1994 levels.

Increases

Fourteen species have increased significantly in Northern Ireland since the start of the survey, with the largest significant increases shown by Goldfinch, Great Tit and Pheasant.

The greatest increases between 2009 and 2010 were shown by Starling, Jackdaw and Goldfinch. Willow Warbler, Jackdaw and Goldfinch all reached their highest levels since the start of the survey.

In total, 106 species were recorded in Northern Ireland in 2010. Collared Dove, Blackcap, Sedge Warbler and Bullfinch were all recorded on an average of 28 squares over the survey period, so an increase in survey coverage or species range may enable reliable trends to be calculated.

Isle of Man and the Channel Islands

No BBS squares were surveyed in the Isle of Man in 2010. Sixteen squares were covered on the Channel Islands in 2010, the joint second-highest total, comprising 11 on Jersey and five on Guernsey. In total, 62 species were recorded.

Table 6 Trends in Wales during 2009–10 and 1995–2009

Species	Sample	09–10	95–09	LCL	UCL	Species	Sample	09–10	95–09	LCL	UCL
Mallard	63	10	-13	-54	57	Blackcap	113	22*	74*	42	116
Pheasant	88	13	51*	13	96	Garden Warbler	55	5	-15	-41	18
(Grey Heron)	42	-14	-4	-32	34	Whitethroat	78	4	-9	-25	13
Buzzard	136	-22	5	-16	31	Chiffchaff	130	6	31*	10	56
Curlew UKBAP	36	21	-49*	-64	-33	Willow Warbler	155	1	-10	-24	6
Feral Pigeon	32	-24	38	-10	108	Goldcrest	78	11	-52*	-73	-15
Woodpigeon	181	37	39*	14	71	Long-tailed Tit	58	-3	21	-12	62
Collared Dove	69	12	58*	9	113	Coal Tit	70	-2	-11	-43	32
Cuckoo UKBAP	56	48	-34*	-51	-14	Blue Tit	171	16*	13	-3	29
Swift	65	17	-50*	-66	-22	Great Tit	164	8	51*	27	77
Green Woodpecker	46	26	-5	-31	29	Nuthatch	67	19	33*	3	77
Gt Spotted Woodpecker	71	-2	178*	118	276	Treecreeper	39	1	1	-37	51
Skylark UKBAP	101	-14	-20*	-40	-1	Jay	68	36	48*	9	91
Swallow	165	-15*	25*	3	47	Magpie	157	8	-10	-23	1
House Martin	84	17	-2	-26	27	Jackdaw	134	17	29	-15	102
Tree Pipit UKBAP	31	83*	-26	-52	27	Rook	76	59	-13	-43	32
Meadow Pipit	84	-11	-16*	-28	-3	Carrion Crow	195	9	1	-17	20
Pied Wagtail	111	-23	-9	-26	14	Raven	85	16	29	-19	144
Wren	190	-9*	1	-13	11	Starling UKBAP	80	-1	-63*	-73	-45
Dunnock UKBAP	146	16	38*	13	65	House Sparrow UKBAP	117	18*	87*	44	141
Robin	186	-12*	6	-4	15	Chaffinch	191	12*	-8	-21	6
Redstart	55	28	10	-15	38	Greenfinch	109	6	9	-17	40
Stonechat	35	-4	141*	39	305	Goldfinch	121	5	59*	27	112
Wheatear	50	35	-15	-41	13	Linnet UKBAP	90	38*	-31*	-52	-1
Blackbird	190	2	43*	29	58	Bullfinch UKBAP	60	-22	-18	-39	11
Song Thrush UKBAP	162	-16*	31*	14	52	Yellowhammer UKBAP	36	10	-35*	-59	-13
Mistle Thrush	97	24	2	-25	37						

Table 7 Trends in Northern Ireland during 2009–10 and 1995–2009

Species	Sample	09–10	95–09	LCL	UCL	Species	Sample	09–10	95–09	LCL	UCL
Pheasant	37	-7	171*	47	272	Goldcrest	43	-2	44	-2	107
Woodpigeon	78	5	77*	31	125	Coal Tit	58	9	66*	13	111
Skylark UKBAP	33	5	-36*	-53	-28	Blue Tit	72	-7	14	-22	47
Swallow	80	-8	13	-13	54	Great Tit	67	-7	172*	101	215
House Martin	39	-23	40	-24	147	Magpie	78	-5	13	-19	46
Meadow Pipit	62	-22*	1	-19	44	Jackdaw	71	24*	77*	19	133
Pied Wagtail	41	13*	32*	Not estimatable		Rook	70	-17	-2	-29	40
Wren	86	-19*	63*	18	105	Hooded Crow	75	-7	108*	50	167
Dunnock UKBAP	65	-13*	95*	16	140	Starling UKBAP	74	46*	26	-10	84
Robin	82	-13*	19	-3	41	House Sparrow UKBAP	49	6	50	-13	137
Blackbird	81	3	41*	5	65	Chaffinch	84	11	38	0	59
Song Thrush UKBAP	72	-28*	66*	13	125	Greenfinch	48	0	18	-29	93
Mistle Thrush	56	-22	-1	-54	76	Goldfinch	43	23*	728*	Not estimatable	
Chiffchaff	30	-5	11	-32	53	Linnet UKBAP	35	-48*	104*	16	291
Willow Warbler	74	10	84*	35	121	Reed Bunting UKBAP	31	-34*	-3	-35	68

- Trends are percentage changes, and are marked with an asterisk (*) where the 95% confidence limits of the change do not overlap zero (indicating that there has been a significant change).
- The trend since the start of the survey, covering the years 1994–2010, has been smoothed, and the end years truncated. This trend is labelled as 1995–2009.
- The sample is the mean number of squares per year on which the species was recorded during 1994–2010.

- LCL and UCL are the lower and upper 95% confidence limits for the 1995–2009 trend.
- Red-listed and amber-listed species from 'Birds of Conservation Concern 3' are shown in the relevant colour.
- UK Biodiversity Action Plan species are marked with UKBAP.
- Trends for species in brackets are reported with caveats (see p7).

**TREND GRAPHS
ONLINE:**

www.bto.org/bbs/graphs



POPULATION TRENDS

English Regions

Regional trends
produced for
77
species in 2010

We are able to produce specific bird population trends for a number of English regions. Coverage varies considerably from one region to another, with the number of squares surveyed dependent on the number of BBS observers available in the area. We report regional trends only for species found on an average of at least 30 squares per year in that region over the survey period.

Trends discussed here are the population changes since the start of the BBS, and comparisons between regions are made below only if trends have been calculated in at least four regions. More detailed information is available on the BBS website, including population changes between 2009 and 2010, and population trend graphs.

For the first time, we are able to produce a regional trend for Red Grouse, in Yorkshire and the Humber.

Pied Wagtail has increased more in the **North East** than in any other English region for which trends can be calculated. Blackcap has shown the smallest increase in the North East of all the English regions, and it is the only region in which Jackdaw has shown a decline. We can now produce a trend for Chiffchaff in the region, taking the total to 31 species. Of these, Starling has shown the greatest decline, and Chiffchaff the greatest increase.

Sparrowhawk has declined more in the **North West** than in any other region for which trends can be calculated. Cuckoo has declined less than in any other region, and it is the only region in which House Martin and Mistle Thrush increased. Pheasant, Coot, Stock Dove, Blackcap, Willow Warbler, Goldcrest and Nuthatch all increased more than in any other English region. We can now produce a trend for Nuthatch in the region, taking the total to 55 species. Of these, Starling has shown the greatest decline, and Nuthatch the greatest increase.

Mallard, Grey Heron, Dunnock and Song Thrush have increased more in the **West Midlands** than in any other region. Feral Pigeon, Collared Dove, Blue Tit, Jay, Chaffinch and Yellowhammer have all declined more than in any other region, and Canada Goose, Woodpigeon and Long-tailed Tit have shown smaller increases than in other regions. Of the 51 species for which trends can be calculated, Cuckoo has shown the greatest decline, and Buzzard the greatest increase.

Meadow Pipit and Garden Warbler numbers have declined by a smaller amount in the **South West** than in any other English region, and Canada Goose, Great Spotted Woodpecker and Swallow have shown greater increases than in other regions. Starlings have declined more than in other regions, and it is the only region in which Goldcrest numbers have declined. Of the 60 species for which trends can be calculated, Cuckoo has shown the greatest decline, and Canada Goose the greatest increase.

We can now produce a trend for Corn Bunting in the **South East**, bringing the total number of species to 65, of which Turtle Dove showed the greatest decline, and Red Kite the greatest increase. Red-legged Partridge, Buzzard and Whitethroat have all increased more than in any other region, while Feral Pigeon has declined less than in other regions. Lapwing, Swift, House Martin, Greenfinch, Linnets and Bullfinch have shown greater declines than in other English regions, and it is the only region in which Wren, Lesser Whitethroat, Greenfinch and Reed Bunting have declined.

Region	Counties	Squares 2010
1 North West	Cheshire, Cumbria, Lancashire, Greater Manchester, Merseyside	291
2 North East	Cleveland, County Durham, Northumberland	96
3 Yorkshire and the Humber	East Yorkshire, North Lincolnshire, North Yorkshire, South Yorkshire, West Yorkshire	216
4 East Midlands	Derbyshire, Northamptonshire, Leicestershire & Rutland, Lincolnshire, Nottinghamshire	244
5 East of England	Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk, Suffolk	352
6 West Midlands	Birmingham, Herefordshire, Shropshire, Staffordshire, Warwickshire, Worcestershire	220
7 South East	Berkshire, Buckinghamshire, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey, Sussex	604
8 South West	Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire	411
9 London	Greater London	101

We are now able to produce regional trends for Red Grouse and Oystercatcher in **Yorkshire and the Humber**, taking the total to 49 species, of which Cuckoo has shown the greatest decline, and Oystercatcher the greatest increase. Moorhen, Woodpigeon, Blackbird, Long-tailed Tit, Coal Tit and Reed Bunting have all shown greater increases than in other English regions, and it is the only region in which Skylark has increased. Great Spotted Woodpecker has increased less than in other regions, and is the only region in which Whitethroat has declined. Kestrel, Pied Wagtail, Magpie and Rook all declined more than in other regions.

The **East Midlands** is the only region in which Kestrel numbers have increased, albeit by a small amount. Lapwing, Green Woodpecker, Chiffchaff, Rook and Bullfinch have all increased more than in other regions, and Yellowhammer has declined less than in other regions. Red-legged Partridge, Moorhen, Stock Dove, Cuckoo and Skylark have shown more severe declines than in any other region. Of the 52 species for which trends are calculated, Yellow Wagtail has shown the greatest decline, and Green Woodpecker the greatest increase.

The **East of England** is the only region in which Swift numbers have increased, and Sparrowhawk, Collared Dove, Lesser Whitethroat, Jay, Magpie, Jackdaw and Carrion Crow have increased more than in any other English region. It is the only region in which Pheasants have declined, and Swallow, Coal Tit and Great Tit have shown their smallest increases in this region. Of the 64 species for which trends are calculated, Turtle Dove has shown the greatest decline, and Green Woodpecker the greatest increase.

Wren, Robin, Blue Tit, Great Tit, Magpie, Chaffinch, Greenfinch and Goldfinch have all increased more in **London** than in other English regions. Song Thrush and House Sparrow have declined more than in other regions, and it is the only region in which Mallard and Blackbird have declined. Of the 23 species for which trends are calculated, House Sparrow has shown the greatest decline, and Goldfinch the greatest increase.



Table 8 Trends in English Regions during 1995–2009

Species	North West	North East	Yorkshire	East Midlands	East of England	West Midlands	South East	South West	London							
Mute Swan					21	41	-11	51	9	31						
Greylag Goose					60	36										
Canada Goose	134*	60		40	37	35	53	20	62	33	101	188*	42			
Shelduck						48	34									
Mallard	23*	145	44*	82	19*	94	17	181	65*	105	25*	211	61*	141	-15	38
Red Grouse UKBAP			-2	30												
Red-legged Partridge			39	42	-8	73	-4	172	78*	33	103*	110	97*	49		
Grey Partridge					-50*	30	-47*	42			-67*	34				
Pheasant	100*	122	51*	55	77*	113	27	133	-7	260	60*	127	34*	353	56*	246
(Cormorant)							10	46			72	41			4	31
(Grey Heron)	0	76	-12	32	0	48	-22	80	30	56	1	114	-11	77		
Red Kite											7,381*	36				
Sparrowhawk	-42*	31					18	46			-8	65	3	46		
Buzzard	111*	53							203*	81	863*	110	21*	199		
Kestrel	-15	66	-33	46	2	57	-16*	103	-1	42	-11	129	-31*	74		
Moorhen	-4	70	62*	36	-5	56	18	124	-3	59	3	138	20	63		
Coot	33	30					11	38			9	58				
Oystercatcher	11	51	162*	30												
Lapwing UKBAP	-17	109	-12	37	28*	87	53	61	24	73	-4	39	-34*	106		
Curlew UKBAP	-44*	83	-38*	38	-11	81										
Feral Pigeon	-27*	73	-18	53	-32	47	-4	73	-37*	42	-3	103	-9	65	-25*	66
Stock Dove	99*	48	63*	43	-47*	66	-12	129	27*	76	9	175	2	111		
Woodpigeon	45*	196	30	68	83*	136	34*	171	56*	302	28*	168	38*	440	40*	316
Collared Dove	54*	123	1	69	48*	101	76*	200	-21*	112	22*	275	10	177	55*	48
Turtle Dove UKBAP							-76*	76			-77*	55				
Cuckoo UKBAP	-51*	34	-66*	39	-76*	54	-66*	115	-68*	57	-58*	167	-73*	79		
Swift	-41*	107	-33*	72	-43*	78	6	147	-10	74	-48*	166	-47*	138	-25	56
Green Woodpecker					205*	36	153*	153	32	59	43*	280	21	121		
Gt Spotted Woodpecker	157*	77	60	35	118*	50	78*	136	123*	91	110*	266	158*	138	122*	33
Skylark UKBAP	-26*	112	-24*	56	7	116	-37*	140	-26*	260	-20*	109	-27*	293	-24*	202
Swallow	19	180	43*	60	18	126	33*	131	11	212	24*	132	23*	289	73*	267
House Martin	4	95	-28	57	-9	51	-29	99	-10	76	-45*	145	-10	140		
Meadow Pipit	-18	77	-7	42	-14	76	-33*	39	-37	43	-23	48	-5	44		
Yellow Wagtail UKBAP					-82*	33	-43*	47								
Grey Wagtail													4	31		
Pied Wagtail	-20	119	15	40	-43*	82	-24	88	7	147	4	82	-8	191	-10	141
Wren	37*	194	10	62	31*	137	10	161	10	278	11	161	-9*	418	0	309
Duncock UKBAP	33*	162	36*	48	13	105	35	148	19*	249	36*	152	10*	383	16	279
Robin	40*	186	34*	58	54*	119	24*	157	29*	275	41*	165	8*	423	16*	305
Wheatear	-4	41	-2	30												
Blackbird	45*	195	40	59	56*	135	29*	168	10*	294	38*	168	3	440	27*	317
Song Thrush UKBAP	75*	149	-7	51	56*	91	32*	117	-4	218	91*	138	-5	381	26*	262
Mistle Thrush	4	115	-11	35	-47*	70	-20	80	-50*	137	-12	84	-47*	225	-37*	121
Sedge Warbler									-14	46			18	33	36	30
Reed Warbler									7	40						
Blackcap	124*	99	35*	33	50*	65	54*	97	51*	214	65*	119	59*	336	69*	238
Garden Warbler									-25*	58	-11	43	-12	94	0	60
Lesser Whitethroat					12	30	13	67			-32*	52	5	39		
Whitethroat	0	78	46*	32	-3	66	44*	117	11	228	27*	95	50*	266	29*	185
Chiffchaff	144*	80	140*	30	134*	50	187*	73	79*	178	76*	122	25*	319	28*	260
Willow Warbler	17	134	-20	56	8	95	-46*	86	-66*	121	-41*	88	-66*	154	-46*	150
Goldcrest	63	38							17	66	40*	38	10	171	-22	118
Spotted Flycatcher UKBAP											-61*	31	-18	30		
Long-tailed Tit	34*	74			51	39	39*	66	39*	135	1	80	3	220	23	127
Marsh Tit UKBAP											-10	49				
Coal Tit	30	59	54	33	110*	32	12	32	5	57	50*	43	7	135	19	92
Blue Tit	-5	187	-3	53	3	122	12	156	12*	279	-5	165	6	428	-2	302
Great Tit	40*	172	62*	47	53*	104	58*	143	26*	263	32*	160	32*	416	57*	289
Nuthatch	292*	30									119*	43	39*	152	69*	74
Treecreeper													-5	81	-21	45
Jay	30	62							58*	103	-23*	56	-4	205	-1	97
Magpie	-13*	172	-27*	84	2	125	24*	223	24*	223	-19*	150	10*	377	-6	264
Jackdaw	59*	122	-2	50	44	91	61*	97	106*	197	54*	125	51*	321	24*	242
Rook	-35	81	-21	42	-63*	89	34	84	21	171	4	81	13	223	-7	201
Carrion Crow	24*	203	13	65	75*	139	16	158	80*	277	4	166	14	423	0	310
Raven															-54	50
Starling UKBAP	-52*	168	-50*	50	-58*	106	-33*	124	-33*	229	-57*	130	-57*	323	-67*	193
House Sparrow UKBAP	-5	147	-19	34	-4	82	8	108	-35*	193	-4	132	-39*	280	9	209
Tree Sparrow UKBAP					34	31										
Chaffinch	19*	193	26	66	25*	136	32*	165	38*	293	-14*	165	8*	430	-3	313
Greenfinch	17	145	7	39	-5	92	9	127	24*	243	6	134	-17*	354	-7	259
Goldfinch	118*	141	83*	41	133*	89	69*	105	29*	181	137*	107	23*	275	43*	226
Linnnet UKBAP	-11	88	-11	40	-20	79	-42*	101	-35*	160	-37*	70	-48*	213	-32*	164
Bullfinch UKBAP	10	35			23	37	-17	59	9	48	-38*	124	-11	96		
Yellowhammer UKBAP	-33*	55	-35*	38	-17	74	-3	123	-19*	208	-36*	103	-27*	238	-13	153
Reed Bunting UKBAP	16	55			66	34	26	50	24	75	-18	56				
Corn Bunting UKBAP									-23	39			-54*	30		

• This table shows the smoothed trend since the start of the survey (in bold) and sample sizes (normal font).
• Trends are percentage changes, and are marked with an asterisk (*) where the 95% confidence limits of the change do not overlap zero (indicating that there has been a significant change).

• The sample is the mean number of squares per year on which the species was recorded during 1994–2010.
• Red-listed and amber-listed species from 'Birds of Conservation Concern 3' are shown in the relevant colour.

• UK Biodiversity Action Plan species are marked with UKBAP.
• Trends for species in brackets are reported with caveats (see p7).

MAMMAL MONITORING

2,415
BBS squares
surveyed for
mammalsMammals
recorded in 2010

Mammal records were received from 2,415 squares, 75% of the total number of squares surveyed. This includes 'null' counts, where the recorder confirmed that no mammals were detected.

Table 9 shows the 15 most widespread species in 2010. For easily detectable diurnal species, such as Brown Hare, Rabbit, Grey Squirrel and some deer, the vast majority of records were of individuals seen and counted during the two BBS visits. However, a large proportion of the records for other mammals were based on field signs, dead animals, and local knowledge. These include those for mainly nocturnal or crepuscular species, such as Red Fox, Hedgehog, Mole, Badger, Stoat and Weasel.

In addition to those listed in Table 9, a further 30 species were recorded during BBS visits in 2010 – these are listed in Table 10. The order of species within the tables follows Harris & Yalden (2008).

Live mammals were seen and counted during at least one bird-recording visit on 2,167 squares (90% of the mammal returns). On 108 squares (4%) the only mammal records were from extra visits, field signs, dead animals or local knowledge, leaving 140 squares (6%) on which the observer looked out for mammals, but encountered no evidence of any.

It is important that we continue to receive counts of zero mammals, to ensure that our records remain unbiased.

HARVEST MOUSE BY MIKE TOMS



- **Squares recorded:** number of squares on which the species was recorded, including counts, field signs, dead animals and local knowledge.
- **Squares seen:** number of squares on which the species was seen and counted during BBS visits.
- **Individuals:** total number of individuals counted, taking the maximum count from the two visits to each square.

Table 9 Common mammal species in 2010

Species	Scientific name	Squares recorded	Squares seen	Individuals
Grey Squirrel	<i>Sciurus carolinensis</i>	911	826	1,852
Common Rat	<i>Rattus norvegicus</i>	109	21	30
Rabbit	<i>Oryctolagus cuniculus</i>	1,621	1,502	12,294
Brown Hare	<i>Lepus europaeus</i>	778	731	2,393
Mountain/ Irish Hare	<i>Lepus timidus</i>	50	45	127
Hedgehog	<i>Erinaceus europaeus</i>	91	14	14
Mole	<i>Talpa europaea</i>	586	0	0
Domestic Cat	<i>Felis catus</i>	331	280	482
Red Fox	<i>Vulpes vulpes</i>	568	286	353
Badger	<i>Meles meles</i>	298	9	10
Stoat	<i>Mustela erminea</i>	94	39	42
Muntjac	<i>Muntiacus reevesi</i>	147	110	151
Red Deer	<i>Cervus elaphus</i>	77	61	788
Fallow Deer	<i>Dama dama</i>	98	71	1,207
Roe Deer	<i>Capreolus capreolus</i>	580	486	1,050

Table 10 All other mammal species in 2010

Species	Scientific name	Squares recorded
Red Squirrel	<i>Sciurus vulgaris</i>	37
Bank Vole	<i>Myodes glareolus</i>	15
Short-tailed Vole	<i>Microtus agrestis</i>	17
Water Vole	<i>Arvicola amphibius</i>	9
Harvest Mouse	<i>Micromys minutus</i>	2
Wood Mouse	<i>Apodemus sylvaticus</i>	19
Yellow-necked Mouse	<i>Apodemus flavicollis</i>	1
House Mouse	<i>Mus domesticus</i>	8
Common Shrew	<i>Sorex araneus</i>	37
Pygmy Shrew	<i>Sorex minutus</i>	8
Water Shrew	<i>Neomys fodiens</i>	3
Lesser White-toothed Shrew	<i>Crocidura suaveolens</i>	1
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	1
Natterer's Bat	<i>Myotis nattereri</i>	2
Noctule	<i>Nyctalus noctula</i>	1
Pipistrelle sp.	<i>Pipistrellus pipistrellus/pygmaeus</i>	21
Brown Long-eared Bat	<i>Plecotus auritus</i>	2
Otter	<i>Lutra lutra</i>	26
Pine Marten	<i>Martes martes</i>	5
Weasel	<i>Mustela nivalis</i>	45
Polecat	<i>Mustela putorius</i>	4
Feral Ferret	<i>Mustela furo</i>	1
American Mink	<i>Mustela vison</i>	23
Common Seal	<i>Phoca vitulina</i>	2
Grey Seal	<i>Halichoerus grypus</i>	3
Wild Boar	<i>Sus scrofa</i>	2
Sika Deer	<i>Cervus nippon</i>	13
Chinese Water Deer	<i>Hydropotes inermis</i>	7
Feral Goat	<i>Capra hircus</i>	2
Park Cattle	<i>Bos taurus</i>	2

Mammal trends

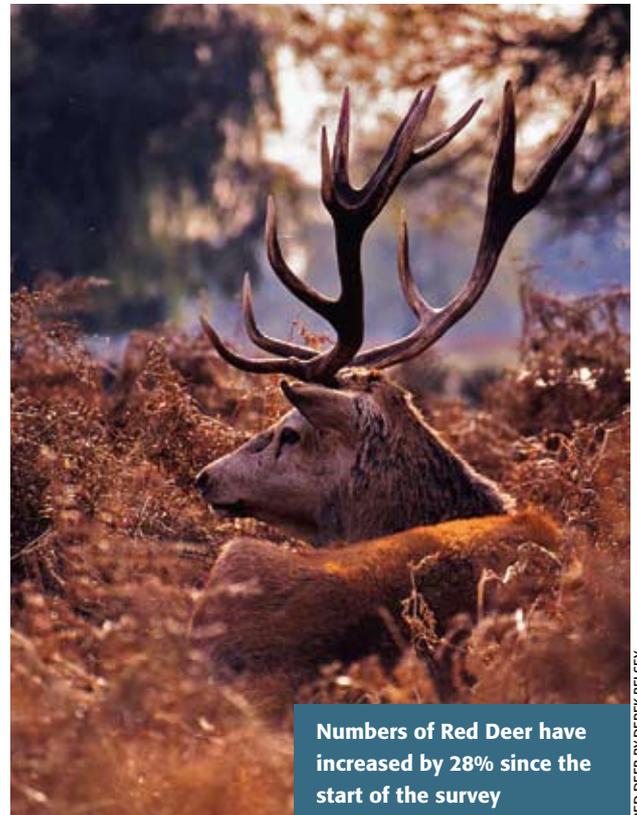
1995–2009

The BTO is a member of the Tracking Mammals Partnership (TMP), a collaborative initiative involving 25 organisations with a variety of interests in UK mammals. The TMP aims to provide good-quality trend data to guide conservation and wildlife management policy for mammals. The BBS is an important component of the TMP surveillance programme, and BBS count data are used to calculate population trends for several mammal species.

The latest year for which these trends are available is 2009, when we were able to produce reliable trends since 1995 for nine, relatively widespread, mammal species.

Of the nine mammals for which trends can be produced from BBS counts, four have increased significantly, with the greatest significant increase shown by Muntjac. Rabbit is the only mammal which has declined significantly since the start of the survey.

The information on species detected more often by signs of their presence than by sightings (e.g. Badger, Hedgehog and Mole) can also be used to estimate trends, although these require more careful interpretation. For more information, see the BBS website.



Numbers of Red Deer have increased by 28% since the start of the survey

RED DEER BY DEREK BELSEY

Table 11 UK mammal trends during 1995–2009

	Grey Squirrel	Rabbit	Brown Hare	Mountain/Irish Hare	Red Fox	Muntjac	Red Deer	Fallow Deer	Roe Deer
UNITED KINGDOM	31* 601	-36* 1,206	-3 601	-26 43	-1 256	112* 69	28* 54	7 47	61* 313
England	26* 535	-14* 981	3 518		13 207	113* 69			38* 242
Scotland		-70* 103	-21 60				57 37		84 70
Wales	53* 46	19 79							
Northern Ireland		-20 39							
North West	104* 48	-43* 98	-38* 56						
North East		-2 35							
Yorkshire and the Humber		3 86	18 54						
East Midlands	154* 35	-96* 87	65* 73						
East of England	13 81	38* 175	7 129			94* 34			
West Midlands	-6 65	-34* 97	-13 36						
South East	2 159	-34* 242	-17 88		40* 58				62* 88
South West	50* 78	27* 151	51* 78		47* 44				47* 79
London	42* 40								

- This table shows unsmoothed trends (in bold) and sample sizes (normal font).
- Population changes are shown for mammal species for which the sample size is at least 35 squares.

- Trends are percentage changes, and are marked with an asterisk (*) where significant at the 95% level or more.
- The sample is the mean number of squares on which the species was recorded each year during the survey period 1995–2009.



SPECIAL THANKS

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

BBS Regional Organisers in 2010:

ENGLAND

Avon
Bedfordshire
Berkshire
Birmingham & West Midlands
Buckinghamshire
Cambridgeshire
Cheshire (Mid)
Cheshire (North-East)
Cheshire (South)
Cleveland
Cornwall
Cumbria
Derbyshire (North, South)
Devon

Dorset

Durham
Essex (North-East)
Essex (North-West)
Essex (South)
Gloucestershire
Hampshire
Herefordshire

Hertfordshire
Huntingdon & Peterborough
Isle of Wight
Isles of Scilly
Kent
Lancashire (East)
Lancashire (North-West)
Lancashire (South)
Leicestershire & Rutland
Lincolnshire (East)
Lincolnshire (North)
Lincolnshire (South)

Lincolnshire (West)
London (North)
London (South)
Manchester
Merseyside
Norfolk (North-East)
Norfolk (North-West)
Norfolk (South-East)
Norfolk (South-West)
Northamptonshire
Northumberland
Nottinghamshire
Oxfordshire (North)
Oxfordshire (South)
Shropshire
Somerset
Staffordshire (North, South, West)
Suffolk
Surrey
Sussex
The Wirral
Wanwickshire
Wiltshire (North, South)
Worcestershire
Yorkshire (Bradford)
Yorkshire (Central)
Yorkshire (East)
Yorkshire (Hull)
Yorkshire (Leeds & Wakefield)
Yorkshire (North-East)
Yorkshire (North-West)
Yorkshire (Richmond)
Yorkshire (South-East, South-West)
Yorkshire (York)

John Tully
Judith Knight
Sarah Priest & Ken White
Steve Davies
Roger Warren
Mark Welch
Paul Miller
Mark Eddowes
Charles Hull
Vic Fairbrother
Stephen Jackson
Clive Hartley
Dave Budworth
John Twyford (now Stella Beavan)
Ieuan Evans (now Simon Breeze)
David Sowerbutts
Matthew Shuter
Graham Smith
VACANT
Mike Smart
Glynne Evans
Steve Coney (now Chris Robinson)
Chris Dee
Mick Twinn
James Gloyn
Will Wagstaff
Sally Hunter (now Geoff Orton)
Tony Cooper
Jean Roberts
Stephen Dunstan
Tim Grove (now David Wright)
Phil Espin
Chris Gunn
Richard Heath (now Hugh Dorrington)
Peter Overton
Ian Woodward
Richard Arnold
Judith Smith
Bob Harris
Chris Hudson
Allan Hale (now Bob Osborne)
Rachel Warren
Vince Matthews
Barrie Galpin
Muriel Cadwallender
Lynda Milner
Frances Buckel
John Melling
Allan Dawes
Penny Allwright
Gerald Gittens
Mick Wright
Penny Williams
Helen Crabtree
Paul Miller
Mark Smith
Bill Quantrell
Harry Green
Mike Denton
Mike Brown
VACANT
Geoff Dobbs
Colin Bonnington
Mick Carroll
Gerald Light
John Edwards
David Gains (now **VACANT**)
Rob Chapman

Islay, Jura & Colonsay
Kincardine & Deeside
Kirkcudbright
Lanark, Renfrew & Dunbarton
Lewis & Harris
Lothian
Moray & Nairn
Orkney
Perthshire
Rhum, Eigg, Canna & Muck
Ross-shire
Shetland
Skye
Sutherland
Wigtown

John Armitage
Graham Cooper
Andrew Bielinski
John Knowler (now **VACANT**)
Chris Reynolds
Alan Heavisides
Bob Proctor
Colin Corse
Richard Paul
Bob Swann
Simon Cohen
Dave Okill
Helen Crabtree
VACANT
Geoff Sheppard

WALES

BTO Wales Officer
Anglesey
Brecknock
Caernarfon
Cardigan
Carmarthen
Clwyd (East)
Clwyd (West)
Glamorgan (Mid, South)
Glamorgan (West)
Gwent
Merioneth
Montgomery
Pembrokeshire
Radnorshire

John Lloyd
Tony White
John Lloyd
Geoff Gibbs
Moiria Convery
Terry Wells
Anne Brechley
Mel ab Owain
Wayne Morris
Rhian Evans
Jerry Lewis
David Anning
Jane Kelsall
Annie Haycock
The late Brian Jones

NORTHERN IRELAND

BTO Ireland Officer
Antrim & Belfast
Armagh

Down
Fermanagh
Londonderry
Tyrone

Shane Wolsey
Ruth Wilson
David Knight (now Stephen Hewitt)
Alastair McIlwain
Michael Stinson
Charles Stewart
Michael Stinson

CHANNEL ISLANDS

Channel Islands (excl. Jersey)
Jersey

Phil Alexander
Tony Paintin

ISLE OF MAN

Isle of Man

Pat Cullen

Many thanks are due to the following ROs who retired during the past year, having supported the BBS in their regions: Steve Coney, Ieuan Evans, David Gains, Tim Grove, Allan Hale, Richard Heath, Sally Hunter, David Knight, John Knowler and John Twyford.

We also remember Brian Jones, RO for Radnorshire, who sadly passed away in February 2011.

We would like to thank and welcome Stella Beavan, Yvonne Benting, Simon Breeze, Hugh Dorrington, Stephen Hewitt, Geoff Orton, Bob Osborne, Michael Stinson, Roger Warren, Terry Wells, Penny Williams and David Wright, who have taken over as ROs during the past year.

Finally, we would like to thank all the landowners who kindly allow volunteers to carry out BBS surveys on their land.



British Trust for Ornithology
The Nunnery
Thetford
Norfolk
IP24 2PU

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

BTO Research Report 597
ISSN 1368-9932
ISBN 978-1-906204-96-9



9 781906 204969 >