

# BBS and the wider picture

You don't need to spend long looking at the population trends in the annual Breeding Bird Survey report before you start thinking about the ecology that lies behind the changes says KATE RISELY, BBS organiser.

**As an example**, take a look at the pigeons: Stock Dove, Woodpigeon, Collared Dove and Turtle Dove. The one that stands out is Turtle Dove, which has declined by a staggering 74% since 1994, while the other three species are doing very well. What makes Turtle Dove the odd one out? The obvious difference is that Turtle Doves migrate to Africa every year, while the others stay put – you wouldn't need to be aware of current conservation issues to conclude that the migratory habits of these species could be behind the different population trends.

This might lead you to look at some other summer migrants, and you'd quickly notice that nearly all of the most severe BBS declines are shown by migrant birds – Cuckoo (down 48%), Yellow Wagtail (down 55%), Nightingale (down 60%), Wood Warbler (down 63%), Spotted Flycatcher (down 47%), Pied Flycatcher (down 51%)... the pattern is clear. It's this pattern that has led to the recent focus on migrant birds in conservation research, to tease out exactly what is causing these declines.

However, you'd also notice that not all migrants are declining. Blackcap, Chiffchaff and Whitethroat have all increased significantly since the start of the BBS in 1994 (up 73%, 52% and 25% respectively), and all also increased significantly between 2009 and 2010 (up 19%, 9% and 9% respectively). You would conclude, from this, that migration as such is not causing birds to decline, but that there are problems

faced by a specific sub-set of migrants. This is where we need to look more closely at the ecology and life-history of specific species, in order to understand their population trends.

**Blackcaps and some** Chiffchaffs spend the winter north of the Sahara, where conditions are seemingly more benign, and Whitethroats appear to be benefiting from increased rainfall in the Sahel, the arid zone south of the Sahara where they spend the winter. Whitethroat populations crashed in the 1960s, following drought in the Sahel, but are finally starting to recover. We still aren't sure why birds that winter further south, in the humid zones of Africa, are doing so badly, but this is the subject of much of the BTO's current research.

This work on migrants is an example of how the BBS allows us to monitor the population changes of birds, which can be explained and understood through further work on survival, productivity and ecology. This understanding can guide conservation action, meaning that volunteers who take part in the BBS really are in the driving seat of bird conservation.

## FIND OUT MORE

To read the latest BBS report, or to get involved in the survey, please visit [www.bto.org/bbs](http://www.bto.org/bbs) or email [bbs@bto.org](mailto:bbs@bto.org) or 'phone 01842 750 050.

## BBS REPORT 2010

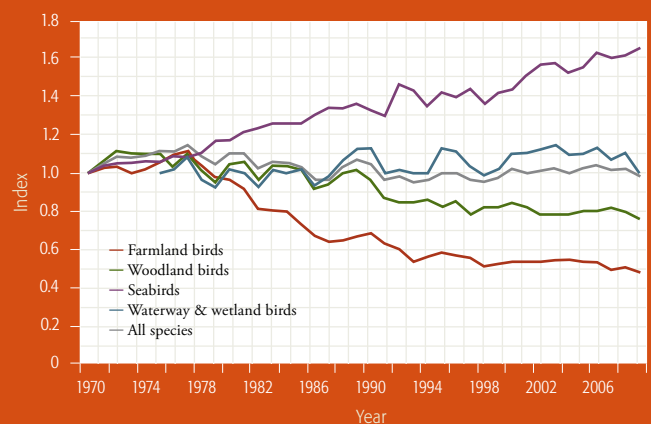
The latest figures, quoted above, are from the 2010 BBS report, published in July 2011 (and available on the BBS website). Good coverage was achieved in 2010, with 3,239 squares covered across the UK. This figure is slightly lower than in 2009, but volunteer coverage was actually higher, as a number of squares were covered by professionals in 2009. It has always been very important that the BBS, and our capacity for long-term monitoring of bird populations, should not be negatively affected by the effort put in to fieldwork for the *Bird Atlas 2007-11*. While we don't yet have the final numbers of BBS squares covered in 2011, it appears that BBS has remained remarkably stable and healthy throughout the Atlas period, and we are very grateful to all volunteers and regional Organisers. We hope that many volunteers who have enjoyed surveying Atlas tetrads will take on a BBS square in 2012, and help us with the valuable work of long-term monitoring of bird populations.

## England wild bird indicator 1970-2009

Looking at the shared characteristics of birds that are declining can often give us a good indication of the drivers of change – as discussed for long-distance migrants. Bird numbers are often influenced by conditions on their breeding habitats, as this can affect productivity as well as survival, so it is generally useful to consider species grouped by habitat. Aggregate trends, known as indicators, are produced

by combining the BBS trends for specific groups of birds, such as woodland or farmland species. This gives us a good overall picture of bird populations, and hence of the health of the habitat in general.

BBS results are integral to the government's wild bird indicators, particularly for farmland and woodland'. Seabird trends are largely based on the Seabird Monitoring Programme.



## Unexplained UPS & DOWNS

The BBS results show the continued declines of many of our African migrants. Turtle Doves have declined by 74% in just 16 years and many warblers are showing equally dramatic declines, for example. It is not a simple story, however, as several migrant species including Blackcap, are thriving with numbers increasing each year. This variation suggests that it is not the act of migrating that is causing the problem but rather the causes are likely to be on the wintering grounds. This is where BTO is focusing its attention at the moment.

