

## **The future for England's birds and their habitat**

A RSPB paper for *Tomorrow's England*  
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As climate change occurs, many species may have to move their ranges north to find suitable climate in which they can survive. Whether a species will be able to track its moving climate space north, however, is uncertain. For instance, while the climate at a new location may be suitable, there may be no suitable habitat. For some species, the south of their UK range may become unsuitable. In worst case scenarios, for some northern species it is predicted that there could be no part of the UK left with suitable climate. The RSPB has put a great deal about the impacts of cc on birds on its website already (see [www.rspb.org.uk/climate](http://www.rspb.org.uk/climate) and [www.rspb.org.uk/policy/climate](http://www.rspb.org.uk/policy/climate)) so feel free to quote any references to climate mapping in this approved text.

One major reason why changing climate will make some areas more unsuitable is via effects on the habitat (think polar bears and lack of ice). The big challenge for UK conservationists will be to manage, and even create, habitats in ways that can help species to move north in response to climate change (enhancing *adaptation*) and, if possible, to retard the detrimental change in habitat that climate change would otherwise cause (enhancing *resilience*).

The MONARCH3 report provides predictions of the sorts of changes we might expect for particular species by 2020 and 2050. For Capercaillie, for instance, the risk increases that the species may disappear entirely from the current range in Scotland. Habitat management to counter the impacts of climate change will be essential to maintain this species. Generally, the species at greatest increased risk, such as Dotterel and Ptarmigan, are northern or upland species with few or no breeders in England and with which most people are not terribly familiar. England, however, will not be free from impacts – for instance the Black Grouse, which is already a cause of conservation concern and now restricted to the North Pennines, is predicted to retreat north out of England by 2050.

However, it is not all gloom. England will benefit from a number of species expansions. Indeed, the heathland-specialist Dartford Warbler is already increasing its range north at quite a rate. Other species, such as Turtle Dove may also expand north and become as familiar as they were in the past, if there is suitable habitat management. European species that might be predicted to colonise England from the south include spectacular species like Little Bustard, and the pretty Serin – a familiar garden bird of the near continent.

Migrant birds, including familiar species such as swallow, swift and house martin, have the extra risk that climate change could affect both their breeding grounds and their wintering grounds. However, though there are worrying trends of declines in migrant species, we do not yet have strong evidence of the role of climate change.

The top 20 garden birds that feature in Big Garden Birdwatch do not really provide many stories for 2025 and 2050. The bottom line is that these species are common and

well loved just because they are so adaptable and generalist, so their climate space is broader and their English range less likely to be affected by climate change. The same is true of familiar species of the wider countryside, such as skylark. One potential exception to this is the song thrush, which like several other species largely relies on eating worms. If the trend for dry summers continues, especially in the south east of England, it may become increasingly difficult for this species to breed successfully in that region.

Droughts induced by drier and hotter summers will probably also reduce breeding success of wading birds such as lapwing, which will probably become even scarcer across southern England as a result. We may be able to combat this to an extent with habitat management and reductions in agricultural drainage.

In Scotland, it is emerging that climate change may have played a key role in the recent breeding failures of seabirds, via the effect of disrupted ocean currents on the birds' food chain. Though there has been just one failure at an English colony in recent years (2004, Bempton cliffs), this could be an issue in England in the future. It will likely be much harder to find solutions to offset the effects of climate change for the marine environment than on land.

Enhancing both adaptation and resilience will depend critically upon conservation management including not only protected areas but also broader countryside management. In this regard, it is critical that climate change mitigation measures such as biofuel crops should not be grown in such a way, ie monocultures without wild areas, that wildlife is unable to move easily across the countryside. That is where the adaptation agenda looms large and the RSPB has a particular interest.