

# Mystery shrouds loss of migrant birds

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Mystery is surrounding the huge declines of birds that migrate thousands of miles from Africa to the UK and Europe each spring. Scientists fear that their dwindling numbers – well over 50 per cent down in some cases – may be a warning of widespread environmental damage, which could soon affect man as well.

Climate change, drought and desertification in Africa, and massive pesticide use on African farmland may all be to blame for the declines of once common UK birds such as the spotted flycatcher, wheatear, wood warbler and turtle dove, a Europe-wide study by the RSPB and BirdLife International says.

At the same time, birds such as the European roller, pallid harrier and lesser kestrel have also vanished from regular breeding sites on the continent. All three are now in danger of extinction, according to IUCN - the World Conservation Union.

Dr Fiona Sanderson, a Research Biologist at the RSPB and lead author of the study said: “This is incredibly worrying. We knew that some of these long-distance migrants were declining but we were shocked at the extent of their losses.

“There is something about the migrants’ lifestyle that is making them vulnerable and their declines are reminiscent of those we began to see in farmland birds 30 years ago. Migrants have been slipping away for more than three decades but the scale of their disappearance is only now becoming apparent.”

The research, to be published in the journal *Biological Conservation*, shows that 54 per cent of the 121 long-distance migrants studied have declined or become extinct in many parts of Europe since 1970. The wryneck and red-backed shrike no longer breed in Britain, while the spotted flycatcher (86 per cent down in the UK) and turtle dove (79 per cent drop in Britain) are among migrants whose numbers have slumped.

The study also compared migrants and resident birds with similar characteristics, and in almost every case, the migrant fared worse.

The RSPB's Dr Paul Donald, a co-author of the study, said: "These migrants are highly evolved and some range over a quarter of the planet's land surface. For species like this to be affected so severely suggests that something pretty serious is going wrong somewhere, which cannot be good news for us. These birds used to be common in Europe but many now are rare or extinct in some regions."

Researchers will now investigate four theories for the loss of migrant birds:

- Climate change: air temperatures are changing and warmer springs are causing insects to breed earlier. Resident birds may be surviving winters better and, alongside insects, are adapting more quickly to climate change. Long-distance migrants flying from Africa cannot detect the temperature increase that heralds an early spring in Europe and may arrive too late to use the best nest sites and catch the insect food glut on which their young depend.
- Drought and agriculture in the Sahel: the Sahel borders the southern Sahara, stretching from the Atlantic Ocean in the west to the Horn of Africa in the east. It covers 1.6 billion hectares and includes regions of 12 countries. Long term drought and agricultural intensification, including the widespread use of pesticides and fertilisers, has turned much of the Sahel into desert. The area is the first feeding opportunity for migrants crossing the Sahara.

- Desertification: the Sahara is now much bigger than it used to be, also because of drought. Migrating birds must fly over this desert in one flight, to reach their winter homes. The birds may be unable to fly further in one go and if so, many will not cope with the longer journey.
- Pest control: huge amounts of pesticides are now used to kill locusts and protect crops in Africa, and may be killing birds as well.

There is proof that conservation work for endangered migrants can work, however. Roseate tern numbers have stabilised after huge declines in Britain, because of conservation work in Ghana, while white stork populations have risen in western Europe after reintroduction schemes.

And closer to home there are almost 200 pairs of ospreys now breeding in the UK, partly because of reintroductions and nest protection.

Dr Sanderson said: “We must urgently investigate the effects of climate change and intensive agriculture on migrant birds. Drought and desertification have a massive impact on Africa’s human population too, and declines in migrants may provide an early warning of changes that will affect us all.

“But at the same time, the osprey, the roseate tern and the white stork are showing that conservation can work. Now is the time for European governments, committed under international law to halting biodiversity loss by 2010, to be doing much more to help.”

Source: Royal Society for the Protection of Birds

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