BIRDS

Migration

A study released in the journal Nature Climate Change suggests that rising temperatures are causing birds to migrate a little earlier each spring. It finds that the journey home is shifting forward by a little less than two days each decade

Other studies suggest that global warming may also be affecting the timing of spring vegetation blooms or the abundance of insects and other food sources—factors that can strongly affect the survival of migrating birds.

A study of 52 species published in Ecology Letters found that birds' bodies are getting smaller over time while their wingspans are getting longer, apparently in response to rising temperatures. The smaller size may allow the animals to lose body heat faster as the climate warms, the researchers suggest (Scientific American)

Food

An assessment of 305 common North American bird species found the average latitude of bird wintering range is now about 40 miles farther north than it was in the 1960s.

The timing of birds' migration, reproduction, breeding, nesting, and hatching are all highly adapted to match specific local conditions, such as the availability of suitable habitat and adequate food sources. Since climate change will affect different species differently, bird behavior may no longer be in sync with their food sources and other habitat needs. For example, robins in the Rocky Mountains arrive an average of two weeks earlier in spring than they did a few decades ago, but the worms and other food that they eat are not yet available for their newly hatched offspring. (Audubon)

Habitat

If shifts in temperature take place at a more rapid rate than vegetation responses, or occur beyond the boundaries of suitable potential vegetation, then bird populations could be forced into areas of marginal habitat where they are likely to experience decreased survival and reproduction (Forest Service)
Many bird species synchronize their nesting cycle so the period of maximum food requirements of the young coincides with the maximum food availability (14). In the case of migratory birds, which comprise the majority of species and individuals in many temperate ecosystems, their departures from winter areas are related to photoperiod, whereas the availability of their largely insect food resources is affected by plant phenology. Since plant phenology is related to climate and is advancing in most regions, migratory bird species are in some cases arriving and therefore breeding too late to keep pace with the timing of their food supply (Forest Service)

What to do?

It is my personal belief that climate change has achieved such momentum that it will be next to impossible to have much of a positive impact on birds. We can ensure food sources during migration in our feeders. We can cultivate plants which feed them. We can keep our cats indoors and help to contain ferile cats.

Then we can hope that birds will evolve, as some have shown signs of doing, to adapt to environmental changes. But we shall have to accept that great changes are taking place.

This is open to discussion, and I invite any comments.