



Global Warming Effects on Wildlife

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Climate change is affecting many more species than polar bears. The National Audubon Society found that 60 percent of the 305 avian species in North America during winter have shifted their ranges northward by an average of 35 miles, thanks to warming temperatures. The American Goldfinch, pictured here, has moved some 200 miles north in the last 40 years.

***Dear EarthTalk:* I know that polar bears are losing ice cover due to climate change, but what are other ways that global warming affects wildlife around the globe?**

—Hanna Bond, Hartford, CT

Although perhaps the best known examples, polar bears certainly aren't the only wildlife species already suffering as a result of global warming. With the sea ice that they depend upon as hunting platforms and places to rest during long swims quickly melting, polar bears were added to the federal list of threatened species in 2008. This contentious listing decision was significant in that it represented the first time the federal government acknowledged that global warming was not only having a noticeable effect on the environment but could also be blamed for the decline of particular species. Environmentalists claimed the listing was reason enough to reign in our carbon emissions sharply, but of course that has yet to happen.

While all organisms on the planet are affected in one way or another by climate change, some are more at risk than others. "Species with small population sizes, restricted ranges, and limited ability to move to different habitat will be most at risk," reports the National Audubon Society. "Similarly, different habitats and ecosystems will be impacted differently, with those in coastal, high-latitude, and high-altitude regions most vulnerable."

Audubon, which is primarily concerned with birds, recently published a report based on 40 years of data that found some 60 percent of the 305 avian species in North America during winter have been on the move in recent decades—shifting their ranges northward by an average of 35 miles, as habitat shifts thanks to warming temperatures. The Brant (a coastal bird), the Ring-necked Duck (a water bird), and the American Goldfinch (a land bird), all moved about 200 miles north over the last four decades. While it's questionable whether some birds will find suitable habitat to the north—we may have paved that piece of land over—the picture looks even more grim for those species not willing or able to abandon old roosts. Also, Audubon reports that the timing of reproductive events (egg-laying, flowering, spawning) across different interdependent species is occurring earlier than ever "in some cases interrupting delicate cycles that ensure that insects and other food are available for young animals."

Another leading conservation group, Defenders of Wildlife, details how a long list of other North American fauna is in decline as a result of global warming. The gray wolf, trout, salmon, arctic fox, desert bighorn sheep, desert tortoise, Edith's checkerspot butterfly, golden toad, Hawaiian monk seal, lobster, manatee, painted turtle, penguin, streamside salamander and western toad are just a few of the species on Defenders' list that are negatively impacted by our profligate fossil fuel use. Meanwhile, the Wildlife Conservation Society

adds the Irrawaddy dolphin of Southeast Asia, the Arctic's musk ox, the ocean-going hawksbill turtle and others to the list of species that are "feeling the heat" from global warming.

While it may seem futile given the scope of the problem, everyone can still take steps to be part of the solution. Switch out your incandescent bulbs for compact fluorescents or, even better, the new generation of LED bulbs. Bike, walk and take mass transit more; drive your car less. Telecommute when you can. Try to source as much of your food and other goods locally to cut down on carbon-heavy transcontinental freight shipping. If not for yourself, do it for the polar bears, turtles, foxes and toads.

CONTACTS: [National Audubon Society](#); [Defenders of Wildlife](#); [Wildlife Conservation Society](#).

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