Climate Change and Florida Bird Conservation

How Climate Change Will Affect Birds

There are over 500 species of birds that spend all or part of their lives in Florida; many of our state’s iconic birds, including Roseate Spoonbills, Black Skimmers, Brown Pelicans, and Florida Scrub-Jays, are being forced out of their traditional habitat ranges by rising seas, sprawling development, invasive species, and poor habitat quality.

We protect Florida’s birds by protecting and restoring their habitat, educating community members, and studying avian populations to understand how best to conserve populations. However, we can only accomplish our conservation goals if we also mitigate the causes of climate change and adapt to climate impacts.

Coastal Florida is challenged by sea level rise and extreme weather events. Across the state, warmer seasons and changing hydropatterns affect nearly all bird populations and critical habitat. Ecosystems are resilient and adaptive, but the climate is changing at a rate that makes it difficult for plant and animal species to keep up.

Scientists have observed and modeled how birds will fare under varying levels of warming. Here are a few of the threats that Florida’s bird populations face now and in the years to come as a result of a warming climate.
Behavior and Phenology

A warming climate will change the way birds behave and the timing of natural events, like migration and reproduction. For instance, for many species, spring migration is shifting earlier as temperatures rise. In the short term, this shift reduces prey availability that is necessary for successful breeding. In the long term, these changes may result in a declining population for several species.

Habitat Range

Warmer temperatures will cause 24% of the state to transition to a different biome. With changing habitat in Florida, birds are moving farther North. This shift in their existing ranges, combined with habitat loss from industrial and urban development, can limit habitat that birds need to breed and live. The result will be fewer birds living in and migrating to the state of Florida. The Wood Thrush, for example, will lose a great deal of its summer range.

Extreme Weather Events

Tropical storms and hurricanes have become more intense over the past 20 years and will continue to grow in intensity with warmer waters and a warmer climate. Warming also causes more frequent heavy rain showers, extreme spring heat, spring droughts, and tornadoes. Black Skimmers and other coastal birds feel the direct effects of more frequent and more intense storms, which decrease suitable coastal habitat and food availability.

Sea Level Rise

Higher sea levels not only affect buildings and homes, but they also affect natural areas. Coastal nesting sites and foraging habitat are lost or become unusable. Sea level rise also results in saltwater intrusion, turning our groundwater into brackish water that is unsafe for consumption and inhospitable for the prey that birds rely on. As a result, Roseate Spoonbills will shift even farther north to find the right places to feed and raise their young.

What We Can Do

Mitigating the causes of climate change lessens climate impacts and gives our natural systems more time to adapt. The good news? We already have solutions that reduce the state’s carbon footprint, save taxpayer dollars, and protect our special places.

Audubon Florida works to improve energy efficiency, conserve ecosystems that absorb carbon and protect against climate impacts, expand renewable energy sources, and collaborate with community members who are passionate about protecting the birds we love and the places that they need.

By advocating for climate mitigation efforts and resilient communities, we supplement bird conservation efforts with long-term solutions that will protect bird populations now and in the future.

We already know what we need to do to help the birds we love. Protect the places birds need now and into the future. In addition to taking personal action at home, we must urge action at local, state, and federal levels to address the root causes of our changing climate.

Want to get involved in climate advocacy?
Contact Laura.Aguirre@audubon.org.

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