Photo by Mac Stone

A CHANGING CLIMATE: A CHANGING FLORIDA

The National Audubon Society has launched a groundbreaking climate report, *Survival by Degrees: 389 Bird Species on the Brink*. As a result of climate change, two-thirds of America's bird species are threatened with extinction. However, we still have time to save up to 75 percent of these at-risk species if we take action now.

In *Survival by Degrees*, Audubon scientists studied 604 North American bird species using 140 million bird records, including observational data from bird lovers and field biologists across the country.

In Florida, Audubon is working to reduce our state's carbon footprint and save taxpayer dollars by improving energy efficiency, helping make our coastal areas more resilient, and inspiring citizens to work with their elected officials to expand renewable energy sources.

Much of the progress at local levels is driven by individual Floridians. Audubon Florida and its chapters collaborate with municipalities to make real gains for climate resilience at local levels. To make it easier for Floridians to engage their cities and counties on these issues, Audubon Florida is piloting a ***Model Ordinance Toolkit*** with examples citizens can take to their councils and commissions for adoption.

Audubon has outlined three key priority areas for addressing Climate Change:

1. **Natural Resources:** increase wetlands along coasts and rivers to absorb soaking rains; protect forests and grasslands that are homes to birds and serve as carbon storage banks; put native plants everywhere to help birds adapt to climate change; encourage local governments to protect tree canopy and engage residents in tree-planting; incentivize stormwater management best practices

2. **Greenhouse Gas Reduction:** commit to GHG emission and carbon sink inventories of government operations; make investments in solar energy and energy storage/battery technology; support local government fleet conversion to zero emission electric; mandate electric vehicle infrastructure tied to new construction projects and areas of public parking

3. **Energy Efficiency:** adopt cool/green roofing standards for new roof construction, replacement roofs, and government owned or managed buildings; adopt green building construction and renovation standards for new buildings, reconstruction projects, and land development projects

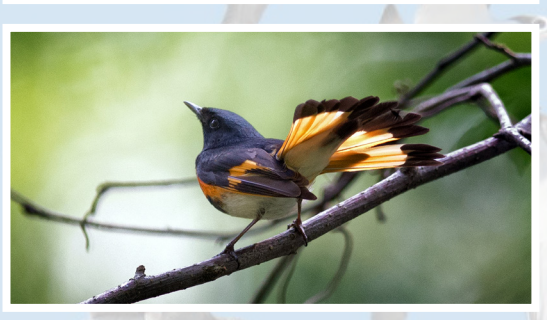
Photo by Robbyn Spratt/APA

To showcase how bird populations will change in the coming decades, we explore how five focal species are likely to respond to the conditions predicted within the Survival By Degrees report for Florida.

Roseate Spoonbill: Predicted to Move
Already shifting their range northward in response to habitat destruction and changing water conditions, Audubon modeling predicts spoonbills will shift even farther to find the right places to feed and raise their young.

Black Skimmer: Predicted to Decline
Black Skimmers are affected by more than just climate change. Oil spills continue to be a threat, as crude oil can coat feathers and fill the food chain with chemical compounds harmful to both adult skimmers and their chicks.

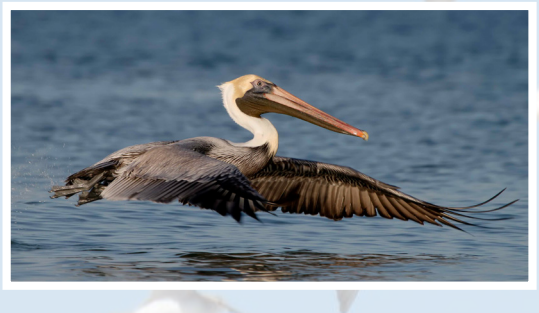
American Redstart: Predicted to Increase
American Redstarts are migratory, so they may be well positioned to take advantage of newly suitable areas. In particular, large swaths of Alaska, the Yukon, and the Northwest Territories could become suitable for breeding—but only if the plant and insect communities can also follow the shift in climate, and redstarts follow these shifts.*



Wood Thrush: Predicted to Disappear
In the late 20th century, the Wood Thrush was one of the most potent symbols of Eastern forests under siege. Sharp population declines have been blamed on a variety of issues, but Audubon's climate model projects a substantial loss of current summer range, with a critical shift in the offing, as new range could become available across much of what is today the boreal forest.*

Brown Pelican: Predicted to Adapt
An icon of coastal waters, this species is projected to lose much of its current winter range by 2080. Potentially significant expansion of range may be possible—but much of this is well away from the coastal areas required for this species. One big uncertainty facing the bird in the coming decades is how climate change will affect its prey fish, even along its required coastal habitats.*

*climate.audubon.org



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

Photo credits (top to bottom): Chris Heisey, Anurada Shankar, Tom Warren, Kathy Johnston, Jean Hall.