

Birds like terns and plovers that are vulnerable to human disturbance need active stewardship to thrive.

New Science Reveals the Big Impact Stewardship Has on Coastal Birds



“Vulnerable species grew 2 times to 34 times faster at stewardship sites”



By Rachel Guillory
Coastal
Communications
Manager
February 01, 2021
Audubon

A new study published in Conservation Biology has found that stewardship and management is essential to helping many coastal birds thrive.

At beaches and islands around the country, Audubon staff, chapter leaders, and volunteers serve as bird stewards (or wardens, as they're known in Texas). On beaches, in classrooms, and online, these stewards engage their local community to protect birds as they nest, raise their young, and spend their winters on our coasts. This looks different in each community and for each type of bird—from fencing off nesting areas to prevent beachgoers or dogs from entering a colony of cotton-ball-sized plovers, to installing large signs on mangrove islands that ask boaters to avoid nesting pelicans.



Photo by Laura Helf, North Fork Audubon Society volunteer shorebird steward

The study, led by Audubon's Science team, looked at nearly 400 sites where Audubon stewarded birds on the Gulf and Atlantic coasts. The authors found that the populations of **four species of vulnerable coastal birds grew 2 to 34 times faster at stewardship sites**, compared to birds in protected areas without known stewardship.

Those four species—Black Skimmer, Brown Pelican, Least Tern, & Piping Plover—have increased since 2007 at stewardship sites, but have decreased, or increased more slowly, at protected and/or unprotected areas. This finding comes as protected areas are expanding globally, while biodiversity continues to decline at unprecedented rates.

That's because most protected areas in the U.S. were designed to provide recreational opportunities for people, such as boating, fishing, and beachgoing, in addition to conserving wildlife. Seeing humans as predators, birds will fly off if threatened, abandoning their nests or the foraging areas they need to find food.

Climate change also makes it difficult for habitat protection alone to support birds. Rising sea levels, as well as stronger, more frequent storms, mean that many coastal birds require additional support through stewardship and management to overcome these compounding threats.

“What we've learned is that coastal bird conservation is incomplete without stewardship,” said Dr. Nicole Michel, director of quantitative science at Audubon and lead author on the study. “And while many of these birds are seeing their populations decline, Audubon's Coastal Bird Stewardship Program may have helped counteract the stressors that are driving those declines.”

This is welcome news as coastal birds are facing a crisis—seabirds around the world have decreased by 70 percent since 1950, and shorebirds in North America alone have seen an even steeper decline since 1973.

Audubon stewardship efforts date back to 1966, with an increased focus during the 2000s and, in the Gulf, a large increase following the BP Deepwater Horizon oil disaster in 2010. Audubon's Coastal Bird Stewardship Program engages hundreds of volunteers and more than 250 partners (including federal and state agencies, municipalities, and Audubon chapters) to protect beach-nesting and -wintering birds at sites along the U.S. Gulf of Mexico and Atlantic coasts, as well as the Pacific and Great Lakes.

“More broadly,” the authors conclude, “our findings demonstrate a clear need to expand stewardship programs that reduce the impacts of human disturbance on coastal birds.”

<https://www.audubon.org/news/new-science-reveals-big-impact-stewardship-has-coastal-birds>