Audubon | FLORIDA Coastal Report

2019 ANNUAL SUMMARY



In a year of environmental challenges, the overall success of the 2019 sea and shorebird nesting season shone a spotlight not only on Audubon's protection efforts, but also on avian resiliency when they are given a chance to thrive. Though nesting efforts in the 2019 season were much improved over 2018's year of toxic algae and storm surges, birds still contended with plenty of threats. Hurricane Dorian damaged the Atlantic coast beaches and Tropical Storm Humberto rearranged shorebird nesting habitat in the Panhandle, but Florida was spared a major storm this year.

Thanks to hundreds of online supporters helping us secure funding for restoration, we are able to report another "win" for the birds at the Alafia Banks Critical Wildlife Area, leased from and managed in collaboration with The Mosaic Company and Port Tampa Bay as a bird sanctuary. After years of planning, 5,000 feet of additional living shoreline along both Bird and Sunken Islands were completed in 2019, bringing the total area of protected coastline to over 6,000 linear feet.



Marianne Korosy, Ph.D., Director of Bird Conservation

More of these shoreline stabilizers, called Wave Attenuation Devices, are planned for four other regionally significant nesting islands. These breakwaters protect the colony shoreline from erosion while allowing water to flow through to the shallow, quiet water lagoon adjacent to the shoreline. Through protecting habitat and nesting colonies, the new living shorelines will help bolster declining wading bird populations in the Tampa Bay region.

On behalf of Florida's iconic coastal birds, thank you. Your involvement in support of Audubon makes a measurable and direct difference for species that depend on Audubon protection. Your help gives our coastal birds a fighting chance, and for that, we are grateful.

Toname Skowsy

Marianne Korosy, Director of Bird Conservation



Volunteers at St. Pete beach.





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Thank you for supporting our coastal work!



2019 Sea and Shorebird Summary

After a dismal 2018 summer nesting season, 2019 brings hope to these vulnerable seabirds and shorebirds.



Although mortality of adult Snowy Plovers was high during Hurricane Michael, a Category 5 storm that made landfall in the

Eastern Panhandle in October 2018, saltwater flooded beach habitat and killed dense vegetation. Because predators use the cover of this vegetation when hunting, the storm vastly reduced their beach populations, which in turn led to extraordinary nesting success in 2019.

Wilson's Plovers also had relatively high nesting success at sites hard-hit by Hurricane Michael, including Tyndall Air Force Base's multi-mile long beaches. In the western Panhandle, Black Skimmers fledged chicks at Navarre Beach and Causeway and at multiple sites along Pensacola Beach. Across the Panhandle, Least Terns fledged chicks at Alligator Point CWA and at several sites along Pensacola Beach. Unfortunately rooftops fledged fewer Least Terns, partially due to the loss of gravel rooftops that were replaced (without gravel) in the Panama City area after they were damaged during Hurricane Michael.

Little Talbot Island in Northeast Florida experienced one of the most successful nesting seasons in recent memory. Thanks to the dedication of the Timucuan Shorebird Partnership, which includes staff and volunteers from Audubon Florida, the Florida Fish and Wildlife Conservation Commission (FWC), the Florida Park Service, and the City of Jacksonville, five species of beach-nesting birds successfully raised chicks on Little Talbot Island: American Oystercatchers, Least Terns, Gull-billed Terns, Wilson's Plovers, and Black Skimmers.

In Southwest Florida, the efforts of Audubon staff, seasonal anchor stewards, and volunteers were rewarded when Black Skimmer nesting colonies fledged 1,200 chicks across six sites in Pinellas, Sarasota, Lee, and Collier counties. Least Terns fledged chicks at several Audubonstewarded sites as well, including Longboat Key, Lido Key, and Second Chance CWA.

Wilson's Plovers nesting in the Big Marco Pass CWA fledged one chick per pair from 12 recorded nests, a good year for this shorebird which nests in a wide variety of habitats and is thus difficult to census statewide.



Snowy Plovers nesting on Siesta Key did not fare well again this year due to Fish Crow depredation, a continuing challenge for this small nesting population.

In locations where Audubon Florida monitored nesting American Oystercatchers, few chicks fledged. According to FWC biologists, breeding success was high in the St. Marks National Wildlife Refuge and on oyster rakes within river channels in Northeast Florida.

Deepwater Horizon

On April 20, 2010, the BP Deepwater Horizon oil rig exploded, a tragedy taking 11 lives, injuring 17, and sending 210 million gallons of



crude gushing into the Gulf of Mexico. The wellhead was so deep underwater that teams working around the clock could not plug the leak until mid-July, creating havoc in coastal communities from Texas to Florida. Those who loved the Gulf could do nothing but wait and watch, as the oil drifted ever-closer to their fisheries, beaches, and wildlife.

In the early days of the spill, Audubon stepped up to organize the rafts of volunteers wanting to help, setting up transports to move oiled birds from the shore to rehabilitation centers, protecting beach nesting birds from accidental harm by emergency clean-up teams, and planning for future restoration.

As we mark the 10th anniversary of the Deepwater Horizon spill this year, Audubon continues to be a leader in Gulf coast resilience, science, and conservation, investing in multi-state bird monitoring, education programs, habitat protection, living shorelines, and more. Though the spill remains in our rear-view mirror, a moratorium on eastern Gulf Coast drilling is scheduled to expire in 2022, making Florida even more vulnerable to future disasters.

To trace the impacts of the spill while learning from our subsequent protection and restoration efforts, we have published After Deepwater Horizon: A Decade of Audubon Efforts to Restore a Resilient Gulf of Mexico.

Follow the url below for your free digital copy!

FL.Audubon.org/news/after-deepwater-horizon

Tampa Bay Region Wading Birds Report

Every nesting season, Audubon Florida staff head out around the Tampa Bay region to count wading birds. Since 1995, we have compiled data in the Tampa Bay region on the populations of Roseate Spoonbills, Wood Storks, Reddish Egrets, Little Blue Herons, Great Blue Herons, Tricolored Herons, Brown Pelicans, and others.

For most species, populations have declined as boating and disturbances at nesting sites have gone up, while development impacts have reduced freshwater and estuarine foraging areas.

Roseate Spoonbill populations are holding steady, while 2019 saw an uptick in nesting Brown Pelicans, possibly as recovery from algal blooms led to a temporary increase in baitfish. Wood Storks shift northward to renest in years when nesting failure occurs in South Florida, causing nest numbers to spike in the Tampa Bay region in some years.

Though Great Blue Heron nesting numbers increased in 2019, overall they join Little Blue Herons, Tricolored Herons, and Reddish Egrets, which are all experiencing population declines as human development and population upswings have decimated their fresh and estuarine foraging habitats.



Importantly, Audubon and our partners have stepped up protection at the nesting colony sites, stemming population declines and working towards higher numbers of fledged chicks in recent years.

FL.Audubon.org/news/2019-tampa-wading-bird-report

Audubon Gears Up for New Living Shorelines in Tampa Bay

The Greater Tampa Bay region hosts the largest population of nesting waterbirds outside the Everglades. To bolster nesting grounds in the face of sea level rise and increased erosion, Audubon is working to enhance nesting habitat in the region.

One mile of formerly unprotected shoreline in Alafia Bank Critical Wildlife Area (CWA) is now braced with wave attenuation devices (WADs) that calm ship wakes and storm-driven waves, minimizing further erosion. Oysters and barnacles growing on previously constructed WAD and oyster reef-ball segments serve as food for American Oystercatchers and migratory shorebirds. Waves transporting sediment lose energy after passing the WADs, allowing sediment to be deposited, increasing shoreline width.

Work completed to date protects nests of Brown Pelicans, Reddish Egrets, Roseate Spoonbills, and other species in mangroves near the shorelines where, in the past, they were vulnerable to collapse during storm surge events. To continue enhancing nesting habitat for vulnerable species, Audubon Florida is planning living shoreline construction in fall of 2021 around four regionally important waterbird nesting islands: Dot Dash Dit Bird Islands CWA in Manatee County, Dogleg Key, Indian Rocks

Beach South, and Dunedin Sand Key West in Pinellas County.

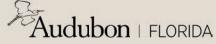
Erosion is progressively reducing the footprint of these islands, toppling mangroves and palms, and reducing the capacity of these sites to provide nesting substrate for birds. Construction of breakwater arrays at each site using living shoreline structural components (e.g.,

pH-neutral concrete units) will dramatically reduce erosional impacts to nesting trees and shoreline beach habitat, provide oyster and barnacle attachment substrate, habitat for shrimp, crabs, and fin fish, and foraging habitat for shorebirds and wading birds.

Installation of breakwater arrays will halt or slow erosion impacts, allowing continued nesting by colonial waterbirds for decades to come.







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