



Audubon | FLORIDA

Coastal Report

2020 ANNUAL SUMMARY



Friends & Supporters,

Every year the resilience of birds and our coastal team amaze me. While our shores have the potential to offer ideal conditions for all of our beach-nesting species, summer inevitably offers challenges for us and for the birds. The birds do what they have to for survival, and we do what we can to make them more resilient in the face of the cards they are dealt, be it tropical storms, novel predators, or recreational disturbance.

Maintaining these shorelines under ideal conditions is always a challenge. When invasive plants threatened a hardwood hammock at Florida Coastal Islands Sanctuary, we removed them and replanted with native trees. When beachgoers disturb a colony, we educate them or call the Florida Fish and Wildlife Conservation Commission to help us. When an illness spread across a population of skimmer chicks, we helped discover the culprit, saved the sick birds, and shared the news. When the federal government threatened to take away the best protection our birds have in the form of the Migratory Bird Treaty Act, we activated our advocates far and wide in support of that rule and celebrated the reinstated protections.

Thanks to your dedication and tenacity, we are ready to support another successful nesting season in 2021. I look forward to a new season with new staff members, new ideas, and new optimism.



Marianne Korosy, Ph.D.
Director of Bird Conservation

A handwritten signature in black ink that reads "Marianne Korosy".

Marianne Korosy Ph.D.,
Director of Bird Conservation

Learning from a Pandemic Summer

The coronavirus pandemic hit just as the 2020 nesting season was heating up. While we waited to learn more about the virus, we prioritized the safety of our staff and volunteers. Audubon Florida pulled our coastal stewards from the beaches for two weeks, and they returned with special instructions to practice social distancing and adhere to CDC guidelines.

Our volunteer program returned on a limited basis at the end of May at nesting sites in Santa Rosa, Pinellas, and Sarasota Counties.

This year we are prepared for a world where some of our staff and volunteers are vaccinated, and others still wait for protection. Volunteers will be specially trained on COVID-19 protocols, and practice mask-wearing and social distancing while on the beaches. Still, they are there if you have questions about the birds or if you want to wave hello!

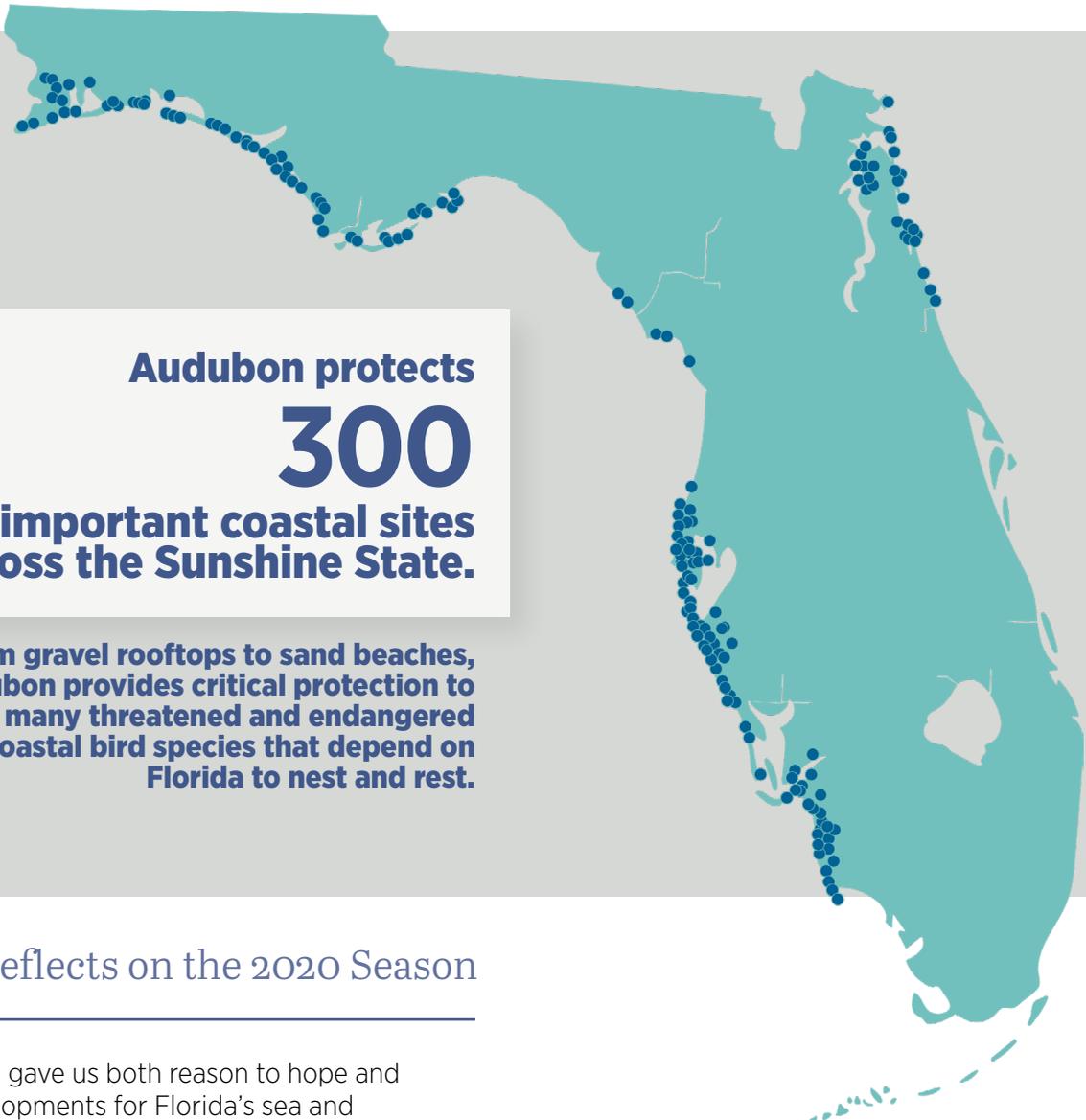


Michael Ferrara

Cover Photos: Miri Hardy and Jean Hall

**Audubon protects
300
important coastal sites
across the Sunshine State.**

**From gravel rooftops to sand beaches,
Audubon provides critical protection to
the many threatened and endangered
coastal bird species that depend on
Florida to nest and rest.**



Audubon Reflects on the 2020 Season

The 2020 season gave us both reason to hope and concerning developments for Florida’s sea and shorebirds. Snowy Plovers experienced a difficult year, with only 15 fledged chicks from 34 pairs at Audubon monitored sites. Predation was a major factor in these low numbers, and staff are looking at methods to reduce predation during the 2021 season. While Least Terns fledged higher numbers than last year (586 from 11 Audubon-managed sites), Black Skimmers put up lower tallies (619 from 7 Audubon-managed sites), in addition to juvenile skimmers affected by a mysterious bacteria at Marco Island causing infections and sick birds. While 6 American Oystercatchers fledged from Hillsborough Bay nesting sites, other counts could not be conducted in the area as a result of COVID-19.

For more information on the 2020 summer season, see our article on page 4 of the Fall Naturalist: https://fl.audubon.org/sites/default/files/fall_naturalist_2020.pdf

 **80** VOLUNTEERS

CLEANED UP FISHING & TACKLE AT

52 
TREE-NESTING ISLAND SITES

CLEANED + REMOVED

2 
TONS OF DEBRIS FROM TAMPA BAY SHORES

 **204** VOLUNTEERS

2,211 HOURS 

INVESTED IN BIRD STEWARDSHIP AND PUBLIC OUTREACH TO PROTECT VULNERABLE COLONIES

WE ALL OWE OUR THANKS TO THIS INCREDIBLE TEAM

Water Quality Woes Continue to Plague Nesting Efforts in the Southwest

This spring and summer, while the pandemic raged across our state, it seemed the Florida coast was clear of the red tide and blue-green algae that beleaguered nesting efforts in 2019. Despite the necessary reduction in volunteer-assisted monitoring efforts, our team began the 2020 nesting season with optimism, especially as stay-at-home orders promised fewer people on area beaches to disturb sensitive nesting colonies. Tropical Storm Cristobol, which hit in June, threw a curve ball, but the resilient birds adjusted and renested.

But, everything changed quickly for the Black Skimmers at one southwest Florida colony. Biologist Adam DiNuovo has been monitoring birds using the stretch of beach on Marco Island from Tigertail Beach to the tip of Sand Dollar for five years.



Emaciated Black Skimmer.
Photo: Adam DiNuovo

This past June, he started encountering skimmer chicks that were limping around the colony with swollen ankles and became concerned. He helped transport several sick birds to rehabilitation facilities but they did not survive. He also sent bird remains to Florida Fish and Wildlife Conservation Commission for analysis. More than one-third of the chicks at this colony was lost to an invisible enemy that later was identified as sepsis.

According to DiNuovo, “several banded birds were among the casualties and these were big, healthy chicks when banded ten days prior to being found dead. The season high count of chicks was hovering around 220 before this outbreak intensified.”

In total, about 100 young skimmers were lost to this disease in 2020, with few clues to its origin.

Sepsis, also called septicemia, is a bacterial infection in the blood that causes irreparable damage to internal organs. It is known to infect the young, the old, and people (or animals) with weakened immune systems. In 2020, this disease was only observed affecting Black Skimmer chicks at the Marco Island colony. More research is needed to better understand the cause of this infection.

The sepsis summer of 2020 caps off a series of mortality events in the region. In summer of 2018, while conducting his banding research on Black Skimmers, DiNuovo noticed that many of the chicks he captured were underweight and fledged with poor body condition. Later, necropsies on their remains found coccidiosis and moderate levels of brevetoxin (from red tide).





Brian Cammarano and Adam DiNuovo banding a Black Skimmer chick. Photo: Jean Hall

That fall, DiNuovo began observing sick and dying Common Terns and Sandwich Terns loafing on this same stretch of beach. Analysis of their remains confirmed the presence of brevetoxicosis (directly caused by red tide) and Bisgaard Taxon 40-induced sepsis. A manuscript published in the *Journal of Comparative Pathology*, authored by professional pathologists and co-authored by DiNuovo, describes this multi-species mortality event and the bacteria isolated from bird remains on Marco Island.

According to Audubon Florida Director of Bird Conservation Marianne Korosy, Ph.D., DiNuovo and Audubon volunteers have been instrumental in documenting mortality, transporting sick birds, and working with FWC pathologists and others to identify the pathogens responsible for these illnesses. This work will continue in 2021 and going forward until we identify and treat the causes — which may be from multiple sources.

Migratory Bird Treaty Act Rollback Delayed

In early 2021, the Biden administration announced it would delay the implementation of a rollback of MBTA protections finalized just weeks before the inauguration. The previous policy change ignored the intent and language of the law to protect and conserve birds.

The change by the previous administration centered on the enforcement of “incidental take.” It attempted to limit the MBTA’s protection only to activities that purposefully kill birds, exempting all industrial hazards from enforcement. Any “incidental” death — no matter how inevitable, avoidable or devastating to birds — became immune from enforcement under the law. If this change had been in place in 2010, BP would have faced no consequences under the MBTA for the more than one million birds killed in the Deepwater Horizon oil spill.

At Audubon, we hope to see Congress pass the Migratory Bird Protection Act, which was passed out of the House Natural Resources Committee in the 116th Congress and had a bipartisan group of 90+ co-sponsors. The bill would secure protections for birds and direct the Fish and Wildlife Service (FWS) to develop a permitting process for “incidental take” through which relevant businesses would implement best management practices and document compliance, further driving innovation in how to best prevent bird deaths. It would need to be reintroduced in this Congress in order to be considered again.



Black Skimmers, Royal Terns, and gulls. Photo: Jean Hall

Comings and Goings on the Audubon Florida Coastal Team

GOING



Ann Paul began her career with Audubon Florida's Coastal Islands Sanctuaries in Tampa Bay in June 1991. Over the years, she has contributed substantially to the collective knowledge and protection of many species of wading birds including the Reddish Egret, Roseate Spoonbill, Brown Pelican, and more. Ann helped start up Project Colonywatch community science in the Tampa Bay region. Renowned for her deep knowledge and signature charisma, she has been an icon of Audubon in the Tampa region and inspired many others to make a difference for wild Florida. We wish her the best in her retirement!

And a fond farewell to **Adam DiNuovo**, our outgoing Southwest Florida Shorebird Project Manager, as he heads north to pursue a new path in avian ecology. During his five-year tenure, Adam monitored Least Terns, Wilson's Plovers, and Black Skimmers nesting, and many more species resting, on beaches from Marco Island to Fort Myers Beach. In 2017 he started a banding program for Black Skimmers with results providing critical insights into migration efforts, breeding success, and habitat needs. He provided educational lectures in the classroom, outreach on the beach, and, in 2021, helped published a manuscript about an illness affecting Black Skimmers at his Marco Island colony. We wish him luck in his future endeavors.



GOING

COMING



Jeff Liechty has worked as Audubon Florida's Suncoast Rooftop Biologist since 2017. In 2020 he was promoted to a brand new role as Assistant Sanctuary Manager at the Florida Coastal Islands Sanctuaries! We are so excited to have Jeff bring his vast bird knowledge to work with Sanctuary Manager Mark Rachal. "Jeff brings his experience of waterbird monitoring at large coastal restoration projects in Louisiana and will help us better protect the important wading bird colonies of Tampa Bay," said Rachal. Congratulations, Jeff!

Rochelle Streker joined our team in February as our Southwest Florida Shorebird Project Manager. In her new role she is managing and continuing to grow Audubon's shorebird program and partnerships in Collier and Lee counties, especially with key partners FWC and Rookery Bay National Estuarine Research Reserve. Rochelle comes to us from Audubon's Seabird Restoration Program on the Maine coast where she was an island supervisor. Welcome, Rochelle!



COMING



Invasive Plant Removal at Florida Coastal Islands Sanctuaries Improves Habitat

Removal of invasive vegetation is nearly complete at Whiskey Stump and Green Keys (the original Hillsborough Bay nesting island), and the Alafia Bank's Bird and Sunken islands. This effort has largely focused on the highly invasive Brazilian pepper and lead tree. Treatment of invasive species will be followed by planting natives such as buttonwood and Florida privet.

We will create a diverse habitat that will be more resilient in the face of rising sea levels and temperatures. Restored habitat will not only provide nesting substrate for our herons, egrets, spoonbills, and pelicans, so they can raise the next generation, but will be a refuge for wintering and migrating birds that use the islands for resting and foraging.

“By removing these exotics we are giving native species a chance to establish themselves in their rightful place,” says Jeff Liechty, Assistant Sanctuary Manager for Audubon Florida, “These are special islands for Tampa Bay’s birds, and we should be treating them as such. Restoring native plant communities to these islands is an important element in preserving the whole ecosystem.”

**The Alafia Bank is a Florida Fish and Wildlife Conservation Commission-designated Critical Wildlife Area (CWA) and is leased from and managed in collaboration with The Mosaic Company and Port Tampa Bay as a bird sanctuary.*



Famous Piping Plover Arrives in Florida

In 2020, a very famous Piping Plover chick arrived on Florida's shores. This Piping Plover, known as "Nish," hatched on Montrose Beach in Chicago from one of only 64 pairs of Piping Plovers nesting along the Great Lakes.

In September, Nish was spotted on Florida's Siesta Key by Sarasota Audubon chapter members. Audubon is thrilled that Nish successfully made the migration jump from Illinois to Florida, and we hope she returns to Chicago to nest this year.

"The arrival of Nish shows us the value of the Florida coastline not only for resident birds, but migrants as well," explains Marianne Korosy, Ph.D., Director of Bird Conservation, "We depend on community scientists to report banded birds. We use this critical data to prioritize conservation and monitoring initiatives across the flyways."



Nish, the Piping Plover chick.
Photo: Rick Greenspun

**Your support is essential to their future.
Help coastal birds and their habitats.**

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Audubon's efforts depend on you. Learn more about giving by contacting Alison Niescier at alison.niescier@audubon.org

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Explore coastal conservation and our efforts: [FL.Audubon.org/Coasts](https://www.audubon.org/coasts)

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Thank you for supporting our coastal work!



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