Audubon Texas

Matagorda Bay Rookery Island Conservation

PORT O'CONNOR, TEXAS

Emily Murphy/Audubon Photography Awards

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WITH ABUNDANT MARSH, BEACH, AND OTHER HABITAT, THE TEXAS MID-COAST SERVES AS CRITICAL BREEDING, WINTERING, AND FORAGING GROUNDS FOR DOZENS OF SPECIES OF COASTAL BIRDS, INCLUDING THREATENED AND ENDANGERED SPECIES LIKE PIPING PLOVER AND WHOOPING CRANE. These coastal birds face a host of mounting threats, including habitat loss, human disturbance, intensified weather events, and ongoing sea level rise; populations have been declining across Matagorda Bay and the larger Texas coast for the last five decades. Audubon Texas, a state field office of the National Audubon Society, has been active on the Texas coast protecting wildlife, conserving habitat, and inspiring environmental stewardship through outreach and education since 1923. Today, Audubon Texas works with strategic partners to manage **177 islands along the Texas coast**, including **twelve islands within the Matagorda and San Antonio Bay systems.**

Audubon Texas's coastal conservation project strives to maintain, restore, and create critical breeding habitat for coastal birds in Matagorda Bay. **Twenty-seven bird species,** including iconic species like Roseate Spoonbill and Brown Pelican, rely on Audubon Texas-managed rookeries (colonies of breeding birds) to complete the nesting phase of their annual life-cycle. Audubon Texas monitors nesting islands during the breeding season by performing formal breeding bird counts, conducting nest and hatchling counts, and reporting nesting bird behavior. This long-term monitoring data supports the planning and implementation of meaningful habitat management through disturbance mitigation, planting native plants, and erosion control measures. Additionally, Audubon Texas is working to create new habitat by siting, designing, and advocating for new rookery islands and the expansion of existing sites in the bay. Together, these project objectives create high quality habitat with wide-ranging benefits for coastal bird populations.

BENEFITS OF CREATING COASTAL ROOKERY ISLANDS

ENVIRONMENTAL BENEFITS

NESTING HABITAT

USE OF DREDGED SEDIMENT

RESTORATION OF NATIVE ECOSYSTEMS

ECONOMIC BENEFITS

STORM MITIGATION

INCREASED COASTAL RESILIENCE

ECOTOURISM OPPORTUNITIES

HUMAN BENEFITS

RECREATIONAL OPPORTUNITIES

CULTURAL SIGNIFICANCE

COMMUNITY VOLUNTEERS

Much of the several hundred million cubic meters of sediment dredged each year from U.S. ports, harbors and waterways is disposed of in a wasteful manner. However, most of this dredged material could be used for beneficial projects, such as for nourishment of beaches with clean sand or development of wildlife habitats. Audubon Texas saw this need, and partnered with the U.S. Army Corps of Engineers to facilitate the application of beneficial use dredge material to Chester Island (Matagorda Bay) in 2019 and 2020, expanding the island by several acres. Audubon Texas also completed an island construction feasibility study in 2019, outlining five sites in Matagorda Bay with appropriate hydrology, bathymetry, and other factors to support the construction of new rookery islands. **Audubon Texas's island construction project will analyze the overall benefit of this type of habitat creation, explore the effectiveness of other island material types, and overall develop newly innovative approaches to coastal conservation.**

MISSION

The National Audubon Society protects birds and the places they need, today and tomorrow. Audubon Texas is a state field office of the National Audubon Society dedicated for the past 100 years to protecting birds, other wildlife, and their habitats. In collaboration with Audubon chapters and partners, they protect and manage colonial waterbird populations in every major bay system on the Texas Gulf Coast, identify and conserve the most important sites for birds statewide, and bring conservation education to 50,000 students annually at three urban Audubon centers.

IMPACT

- **164,833 Matagorda Bay residents** impacted through regional ecotourism supported by the project, ecosystem services provided by healthy bay and estuary habitat, and recreational opportunities (i.e., birding).
- Texas Parks and Wildlife Department estimates that there are **2.2 million bird watchers** in Texas, a major driver in the **$1.8 billion economic impact** from Texas wildlife viewing.
- **Over 3,000 acres of habitat managed** for coastal bird populations in the Texas mid-coast.
- Habitat for **more than 400 species,** with a **heightened focus on the historic 27 species of colonial waterbirds on the Texas coast.** Audubon's 2020 annual waterbird count at Chester Island alone recorded **18 species, all nesting on a single 73-acre site.**

PARTNERS

Audubon Texas could not protect coastal birds without support and collaboration from these partners: Calhoun Port Authority, Coastal Bend Bays and Estuaries Program, Cornell Lab of Ornithology, Freese and Nichols, Gulf Coast Bird Observatory, Houston Audubon, Matagorda Bay Foundation, Texas A&M University, Texas Commission on Environmental Quality, Texas General Land Office, Texas Parks and Wildlife Department, Texas Trustee Implementation Group, The Nature Conservancy of Texas, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service.

NEEDS

Audubon Texas was selected for Texan by Nature Conservation Wrangler based on the project's positive impact to people, prosperity, and natural resources. Through the program, Texan by Nature is working with the Audubon Texas Matagorda Bay Rookery program to address the following needs:

- **Diverse partnerships** with stakeholders in Matagorda Bay, including local communities, businesses, industry and nonprofit organizations, and upstream urban populations.
- **Media visibility** to bring awareness to their project and its benefits to local communities and their economies, environmental services, and ecotourism.
- **Funding** for conservation and island construction in Matagorda Bay. Island building projects are highly scalable, and Audubon would love to engage new partners in the construction of rookery habitat.