

Mission-Aransas

National Estuarine Research Reserve



Location: 30 miles northeast of Corpus Christi, Texas

Date Designated: 2006

Area Protected: 186,189 acres

Web Address: missionaransas.org

Management: Daily oversight is provided by The University of Texas Marine Science Institute. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance.

Access and Infrastructure

- The reserve encompasses a large area that includes Goose Island State Park, Redfish Bay State Scientific Area, the Aransas National Wildlife Refuge, Fennessey Ranch, and The University of Texas Marine Science Institute, which serves as the headquarters.
- The 35,000-square-foot headquarter facilities include research labs, offices, an auditorium, and conference rooms. The building is Gold LEEDcertified and was designed to be resilient to harsh coastal conditions, including high winds and storm surges.
- The reserve operates educational centers that are open to the public. These include the Patton Centerfor Marine Science Education, Wetlands Education Center, Bay Education Center, and Fennessey Ranch.

The Mission-Aransas National Estuarine Research Reserve is a large contiguous complex of wetland, terrestrial, and marine environments named after the two river systems that flow into it. Coastal prairie, freshwater wetlands, mangroves, and salt marsh make up the reserve. The water portion consists of three large, open, shallow bays that support extensive tidal flats, seagrass beds, and oyster reefs.

The reserve's research and monitoring programs provide a tremendous amount of information on the estuary and make this an ideal location to conduct estuarine research—much of which focuses on humaninduced change. Integrating this research into their education, training, and stewardship work promotes the long-term protection and careful management of the area's natural resources.

NOAA Office for Coastal Management

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Interesting Things to Know

- This reserve is the third largest in the research reserve system, and the only one in Texas. The only migratory flock of endangered Whooping Cranes makes their winter home in the reserve.
- Fennessey Ranch is a privately-owned, mixed-use facility whose functions include traditional ranching, oil and gas development, and nature tours. Through a conservation easement held by The University of Texas, the ranch protects valuable wetlands, lakes, and woodlands that support reserve programs.
- At the Marine Science Institute, the Amos Rehabilitation Keep rescues and rehabilitates sick and injured birds, sea turtles, terrestrial turtles, and tortoises found along the South Texas coast and returns them to their native habitat.
- The Bay Education Center features Science on a Sphere[®], a display system created by NOAA that creatively illustrates earth science concepts to people of all ages.

About the Programs

The nation's 30 research reserves represent a tremendous asset, protecting nearly 1.4 million acres and providing habitat where plants and wildlife thrive. Community benefits include recreation, flood protection, and water filtration. Because the following programs are offered at each reserve, the system is able to make an environmental impact at the local level, as well as nationally.

Stewardship. Site protection and enhancement are part of every research reserve. Activities may include managing land and water resources, restoring habitat, controlling invasive species, maintaining biodiversity, and reducing environmental stressors.

Research. Reserve research is focused on how environmental factors such as nutrient loading, climate change, invasive species, and storms impact coastal ecosystems. The monitoring program, known as the System-Wide Monitoring Program, or SWMP, provides long-term data on water quality, weather, biological communities, habitat, and land-use and land-cover characteristics. This combination of research and data provides a strong, science-based foundation for addressing coastal management challenges.

Training. To provide the community with the information and skills needed to integrate coastal science into local decision-making and everyday lives, reserves provide specialized courses and information. Reserve training professionals are active in community planning and improvement initiatives.

Education. Local data generated at the reserve provide students with a firsthand experience of local environmental conditions. Educators lead student, teacher, and citizen field trips that are life-changing experiences, as participants see, feel, and smell what makes an estuary one of the most remarkable places in the world.

To learn more, visit coast.noaa.gov/nerrs.

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