

Restoring Whooping Crane Habitat in Texas

by Karen Cathey

As the warm Texas sun rises, a tall, white bird seems to glow in the sunlight as he moves slowly through the marsh, taking each step with a choreographed grace. He stops, slowly dropping his foot back to the muddy bottom, and opens his wings slightly, as if to shade the water and marsh grasses below, exposing the black tips of his wings. His long, sinuous neck turns his red-blazoned head to one side, searching the thick

reeds. Suddenly, like a bolt of lightning, his head shoots down, and then lifts to reveal his prize—a blue crab—in the tip of his strong, tapered beak. Raising his beak high, he drops the crab into his mouth. Then he spreads his great wings and, with ponderous strokes, lifts just high enough to glide several hundred yards before dropping again near his lifetime mate, who is feeding nearby.

This whooping crane (*Grus americana*) is one of 237 that visited the Texas Coast last winter. Standing nearly 5 feet (1.5 meters) tall, with a wingspan over a whopping 7 feet (2.3 m), the endangered birds return to the coast every year in search of habitat to sustain them before they head back north to their breeding grounds.

Our crane represents a species that was once found throughout Midwestern America. In 1860, the wild population was estimated to be around 1,400 birds, but by 1941 the migrating population had dropped to a mere 16 birds. The Texas wild whooping crane flock summers in Wood Buffalo National Park in Canada, where the birds nest and rear their young. During their fall migration, the birds travel an astounding 2,400 miles (3,860 kilometers) south to spend winter and early spring at the Aransas National Wildlife Refuge, located along the central Texas coast. While hazards such as power line collisions and predators have certainly taken their toll, the main cause of the population drop has been the loss or degradation of its habitat.



Ryan Haggerty



Alcoa-created marsh that will become part of the Aransas NWR complex.

The Fish and Wildlife Service's Corpus Christi Ecological Services Field Office in Texas is seeking to restore and preserve the crane's vital estuarine habitat. Its most recent success was made possible through a cooperative assessment by state and federal trustees and Alcoa (Aluminum Company of America) of natural resource damage caused by the release of contaminants from Alcoa's Point Comfort facility. Mercury and polycyclic aromatic hydrocarbons from this facility damaged wildlife and other natural resources in Lavaca Bay, and the parties recognized the need for compensatory restoration projects.

Alcoa, acknowledging responsibility to the surrounding Lavaca Bay neighbors, entered into a cooperative agreement to restore losses to wildlife populations, groundwater, and surface water resulting from the releases of contaminants. As part of the settlement, a restoration plan developed by the trustees established goals to compensate for the injured natural resources and the lost recreational use of those resources. In this case, the trustees are the Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and three state agencies,

the Texas Parks and Wildlife Department, Texas Commission on Environmental Quality, and Texas General Land Office.

To fulfill the restoration goal, Alcoa created 11 acres (4.5 hectares) of oyster reef in Lavaca Bay to replenish shellfish losses, built three fishing piers, and improved three existing boat ramps around Lavaca Bay to restore lost recreational fishing opportunities. For the endangered whooping crane, it also acquired a 729-acre (295-ha) tract of coastal prairie and wetlands that will

Restored whooping crane habitat.



Kenneth Rice

become part of the Aransas National Wildlife Refuge complex. Included within this acreage are 70 acres (28 ha) of newly created estuarine marsh.

The marsh itself is a marvel of construction. It was built as a matrix of open water ovals and circles, connected by gracefully winding channels that will allow tides to naturally ebb and flow throughout the site. Benthic organisms (plants and animals that live in the top few inches of the ocean's bottom), crustaceans, and fishes common to marsh habitats are already colonizing the area. From the air, the marsh will soon appear as a precious gem, as the blue Gulf of Mexico water mixes with the emerald green of the marsh grasses.

On March 28, 2007, Alcoa joined the trustees in a public celebration of the successful restoration efforts. The celebration culminated in a visit to the marsh restoration site, where Alcoa project managers proudly discussed their approaches to the project. The trustees eagerly await confirmation, which may come next winter, that whooping cranes have begun to use the restoration site.

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