

JULY 2023

Removing Invasive Vegetation in the Coastal Bend alongside the Texas Gulf Region Cooperative Weed Management Area

The Texas Gulf Region Cooperative Weed Management Area (CWMA) was established in 2014 by the City of Port Aransas and initial partners the Texas A&M Forest Service and Lady Bird Johnson

Wildflower Center. The mission of this CWMA is to address invasive Brazilian peppertree (Schinus terebinthifolious) from Port O'Connor to Packery Channel on the Texas Gulf Coast. The Texas Gulf Region CWMA is a voluntary network of public and private stakeholders that are concerned with the management of Brazilian peppertree, now including representatives from state and federal agencies, local governments, non-profit organizations, academic institutions, and community members. The CWMA aims to prevent the spread and movement of the species by advocating for cooperative control amongst willing landowners and managers.



A 2-year partnership program with the (CWMA) and CBBEP reached its final phase in 2022, restoring over 100 square miles of coastal prairie to usable habitat by removing the invasive Brazilian peppertree. After rising to



popularity as an ornamental plant in the late 1950s, the Brazilian peppertree quickly spread across the Gulf Coast as birds enjoy the small red fruits and thank the tree by spreading the seed. Given the largely roadless nature of a bird's journey, many of the seeds find themselves among the dune hills, out of the reach of asphalt and heavy equipment. Without the ability to utilize heavy machinery to mulch and spray the established motts, the removal process required hands and feet on the ground, contracted through American Conservation Experience (ACE).

When funding support from Texas General Land Office – Coastal Management Program and Texas Commission on Environmental Quality was received and work began in 2018, the best way to treat infested areas was unclear. This project utilized a combination of foliar, cut stump, and basal treatments to knock back the already-established shrubs, sometimes reaching over 2 foot in diameter. Cutting at the base and quickly spraying the exposed trunk with herbicidal spray to prevent regrowth and pulling smaller saplings by hand grew to be an especially effective method during this removal project. Nearby areas on the Port Aransas Nature Preserve received a variety of treatments, some by mulching in place and others prescribed fires. Several productive workdays over the course of two years, carried out by contractors and volunteers, have helped to knock down the thicker, more mature, motts.

While the core focus of this project was removal of Brazilian peppertrees, planting native species in the freshly cleared areas proved to be a key piece in limiting re-growth of invasives. By replacing the invasive with native plant species that otherwise would not be able to compete for space and nutrients, the seeds that still lay dormant in the dunes won't have the space, or nutrients they need to survive.

With this project nearing successful completion, the question arises of "where to next?". Though this CWMA division focuses on the mid-coast area of the Coastal Bend, they will begin moving further south into the thickly vegetated stretch of dunes on Mustang and Padre Island. Aside from the difficulties associated with physically treating the infested areas, getting permission to access privately held lands presents a new set of hurdles that can grind eradication efforts to a halt. The experience gained from this collaboration provided useful insights leading to innovations in management methods following closely behind. In early phases now, groups are working with drone mapping to identify otherwise tough to reach areas of invasive growth. Once refined, this technique will make identifying areas needing treatment a much more efficient endeavor.



To learn more about the Coastal Weed Management Areas, <u>https://www.texasinvasives.org/professionals/gulfregion.php</u>

The Coastal Bend Bays & Estuaries Program is a non-profit organization dedicated to protecting and restoring bays and estuaries in the 12- county region of Texas Coastal Bend. CBBEP is partially funded by the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency. For more information about the Coastal Bend Bays & Estuaries Program, contact Quinn Hendrick, 361-336-0305 or qhendrick@cbbep.org. Published in May 2023. www.cbbep.org - www.facebook.com/CBBEP

