



Brazilian Peppertree Removal and Treatment in the City of Port Aransas

Final Report
Contract No. 2322-1
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The views expressed herein are those of the authors and do not necessarily reflect the views of CBBEP or other organizations that may have provided funding for this project.

Background/Objective

The Nature Preserve at Charlie's Pasture is 1,217 acres of grassland prairie, tidal flat, and fresh and salt marsh habitat within Port Aransas, TX. The Nature Preserve, located within the city limits of Port Aransas, provides a haven for wildlife that face continuous pressure from habitat destruction and development. Migrating and resident shorebirds, waterfowl, and songbirds make use of the Nature Preserve, including threatened and endangered species such as, piping plover, reddish egret, and Aplomado falcon.

Brazilian peppertree (*Schinus terebinthifolia*) is a highly invasive species that threatens many native habitats throughout the United States, including the Port Aransas Nature Preserve. The grassland prairie habitat at the preserve requires constant management for Brazilian peppertree and since 2014, over 200 acres have been treated. The City has additional lands that contain Brazilian peppertree and other invasive trees that are being managed by the Nature Preserve. The properties include an approximately 56-acre tract that abuts the Nature Preserve at Charlie's Pasture North, a 2-acre GLO leased tract that abuts the Nature Preserve at Charlie's Pasture South, and a 6-acre property located behind the Family Center IGA Grocery Store.

Project Summary

The contract was executed October 18, 2024 and a post-award meeting took place on November 6, 2024.

At the entrance to the Nature Preserve at Charlie's Pasture South, an 11.4-acre upland area of the Nature Preserve and GLO land leased to the City contained Brazilian peppertrees that were chemically treated in CBBEP Project 2322. The City engaged with a contractor to shred/mulch the dead trees. Removal of the dead trees allows for the native grasses to move into the area. (Figure 1). The contractor also shredded the Brazilian peppertrees on the newly acquired 6-acre tract behind the IGA (Figure 2).

The City requested bids for chemical treatment of Brazilian peppertree and white lead tree on the 6-acre property behind the IGA and 40-acres of uplands in the Nature Preserve at Charlie's Pasture North. The City selected BioTree Care for the chemical (herbicide triclopyr) treatment of the areas (Figure 2 & 3). The initial treatment was completed on January 7, 2025. A retreatment of the area was completed February 28, 2025.

Finally, the City requested estimates for shredding a 56-acre tract that abuts the Nature Preserve at Charlie's Pasture North (Figure 4) and 1.3 acre and 0.75 acre areas within the Nature Preserve at Charlie's Pasture (Figure 5). The shredding was completed March 24, 2025. In April, the City will install anti-vehicular fencing along the area in Figure 5. The City has also requested estimates to have these areas chemically treated after regrowth occurs. This work will be paid for with City funds and done later in Spring and Summer 2025.

Photos of the project can be found in the photo log at the end of this report.



Figure 1. Delineated in green were the dead Brazilian peppertrees that were shredded in the approximately 11.4-acre upland area near the entrance to the Nature Preserve at Charlie's Pasture South. The Brazilian peppertrees were previously treated with herbicide. The blue area was not included as it is currently under construction for the airport expansion project.



Figure 2. Delineated in yellow is the 6-acre City of Port Aransas land located behind the IGA Grocery Store. The red area is approximately 2-acres where the most dense stands of Brazilian peppertree were.



Figure 3. Delineated in red is the 40-acre area within the Nature Preserve at Charlie's Pasture where Brazilian peppertree and white lead tree were chemically treated with herbicide.



Figure 4. Delineated in red is the 56-acre tract that abuts the Nature Preserve at Charlie's Pasture where Brazilian peppertree and white lead tree were shredded.



Figure 4. Delineated in red are the 1.3-acre and 0.75-acre areas in the Nature Preserve at Charlie's Pasture where Brazilian peppertree was shredded. The City will install additional anti-vehicular fencing in this area (delineated in pink). The City will also hire a contractor to spray herbicide on the regrowth of Brazilian peppertree.

Conclusions

Cut stump, basal and foliar chemical treatment of Brazilian peppertree and white lead tree is an effective method of killing these invasive trees. Approximately 46 acres of Brazilian peppertree and white lead tree were chemically treated with herbicide. The City of Port Aransas will continue to monitor these areas for regrowth or new growth via germination of seeds and remove and/or treat accordingly.

Approximately 75 acres of Brazilian peppertree and white lead tree were mechanically removed by shredding. Some of these areas were chemically treated before or after shredding. The 57-acre area that was shredded toward the end of the project will get chemically treated later this year. A contractor will be hired using City funds.

Additionally, native plants have begun to regrow in these areas. Plants include but are not limited to sea ox-eye daisy, sea purslane, false willow, coral bean, narrowleaf marsh elder, silver leaf sunflower, and lambsquarter.

Photo Log

**Nature Preserve at Charlie's Pasture South and City land along 361
Post treatment (done with project 2322) and shredding (2322-1)**





Pre-shredding and treatment at the wetlands behind the IGA







Post shredding and treatment









Native plants in removal areas



Charlie's Pasture North Post Treatment – Brazilian peppertree foliar and basal bark treated



Pre shredding – Nature Preserve at Charlie’s Pasture and City property





Post-shredding





