

**Redhead Pond Invasive Species Management
TGLO Contract No. 22-045-007-D104**

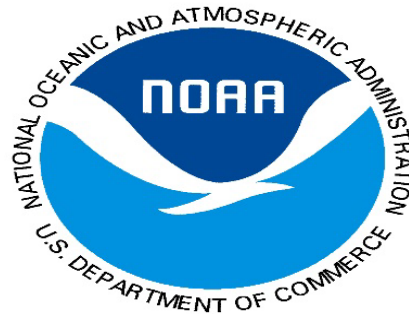
**Final Report
March 2023**

Prepared By:

Robert Vega, Principal Investigator
Shirley Thornton, Vice President, and
Larisa Ford, President
Friends of Redhead Pond and Environmental Stewardship Association
PO Box 181313
Corpus Christi, Texas 78480

Email: redheadpond78418@gmail.com

This report was funded in part by a Texas Coastal Management Program grant approved by the Texas Land Commissioner, providing financial assistance under the Coastal Zone Management Act of 1972, as amended, awarded by the National Oceanic and Atmospheric Administration (NOAA), Office for Coastal Management, pursuant to NOAA Award No. NA21NOS4190136. The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA, the U.S. Department of Commerce, or any of their subagencies.



Project Background:

The 37-acre Redhead Pond property was purchased in 1991 by Texas Parks and Wildlife Department (TPWD) as a Wildlife Management Area (WMA) because of redhead ducks' historic and significant use. The property is located on the Encinal Peninsula (Flour Bluff/Corpus Christi, Texas) which is bounded by Oso Bay and the Laguna Madre (Figure 1). The Redhead Pond Wildlife Management Area (Redhead Pond WMA) property (Figure 2) is located at the following Google Earth coordinates: latitude 27.639535°, longitude -97.288995°.



Figure 1. Redhead Pond WMA is located on the Encinal Peninsula, which is bounded by Oso Bay to the west and the Laguna Madre to the east.



Figure 2. A TPWD 2017 boundary survey depicts the 37-acre Redhead Pond WMA.

The Redhead Pond WMA (Redhead Pond) has degraded over the years due to increased salinities in the pond, invasive plants, infestation by Brazilian peppertrees, trash dumping, and off-road vehicle damage. The Friends of Redhead Pond and Environmental Stewardship Association (The Friends) received a Coastal Management Program (CMP) grant from the Texas General Land Office (GLO) to clear and treat highly invasive exotic Brazilian peppertrees and guineagrass occurring within the WMA.

In coordination with TPWD, the Friends established long-term, overall goals to begin habitat restoration and public engagement. These initial objectives included: 1) protecting the area from further degradation, 2) improving habitat by removing invasive plants, and 3) providing access and encouraging community involvement.

The Friends used CMP Cycle 26 funds to remove invasive plants, specifically Brazilian peppertrees, from the Redhead Pond. In addition, once the initial peppertrees clearing and guineagrass treatments were completed, the site was monitored monthly for peppertree and guineagrass regrowth, seedlings removed, and the areas of regrowth and treated with herbicide. Community volunteers were trained to look for invasive species regrowth, remove debris and trash and monitor the area to determine if non-native vegetation started to reestablish.

Removing invasive plant species from Redhead Pond was done to improve the diversity of native plants and wild bird populations. Redhead Pond provides a variety of essential habitats, including a pond, wetlands, sand flats, and uplands. There are also several native plants found within the area, including Carolina wolfberry, gulf cordgrass, marsh hay cordgrass, honey mesquite, glasswort, and Texas prickly pear.

The purpose of this report is to document pre-clearing, after-clearing, and site conditions as of March 2023 at Redhead Pond obtained by ground-truthing, aerial imagery, identifying and documenting existing vegetation and plant communities, and identifying areas that contain native plant populations. The report details are summarized according to CMP Monthly Progress Report “**Task**” **deliverables** (reported from November 2021 – March 2023).

Task 1 Summary: Brazilian Peppertree Removal

Based on aerial imagery, Brazilian peppertrees began to colonize the Redhead Pond site as early as 2002/2003. It appears that the February 2021 freeze event affected a large number of peppertrees. However, regrowth occurred from many of the root crowns. The Brazilian peppertree infestation at Redhead Pond primarily occurred in four areas (Figure 3). Some peppertrees also occurred outside of the depicted polygons. These scattered or clumps of trees were included in the peppertree clearing and herbicide treatment project.



Figure 3. Approximate 8.7 acreages of peppertrees to be cleared and treated: Section 1 (3.42 acres), Section 2 (2.29 acres), Section 3 (1.53 acres), and Section 4 (1.48 acres).

The Friends used a competitive bid process to obtain a contractor to remove Brazilian peppertree. The Razor Land Clearing & Maintenance Company (Razor Company) cut the Brazilian peppertrees with a skid steer tractor and mulcher (roots left in place). The Apostle Construction Company (Apostle) was hired to use chainsaws to remove peppertrees in areas inaccessible by the skid steer tractor and mulcher.

The Razor Company started to cut Brazilian peppertrees onsite at Redhead Pond (November 29, 2021). Only a limited amount of work was completed during December as soil conditions were very wet at the site, with 1-2 inches of standing water at the base of the Brazilian peppertrees from local heavy rains. As a result, cutting conditions were not conducive for full-length tree cutting activities during the next three months. Therefore, tree cutting activities were conducted off and on according to soil conditions, and the work was completed on April 30, 2022.

Apostle started to perform chain-saw cutting of peppertrees that were inaccessible to heavy equipment cutting efforts on January 25, 2022. Barbed-wire fence lines, wetlands, and pond edges were problematic for heavy equipment cutting. These areas required using chain-saw cutting crews to complete the task. The Apostle crew made steady progress cutting peppertrees along the pond edges (10 ft wide pathway). Most of these pond edge sections were very wet and held several inches of standing water. The Apostle crew worked and completed the agreed CMP contract work of 40 hours on February 2, 2022. Approximately 65% of the pond edge cuttings were completed during that week. Apostle finished chain-saw cutting of peppertrees at the WMA in June 2022 when funds from Ducks Unlimited award became available.

Brazilian peppertree clearing efforts started on November 29, 2021 and were completed April 30, 2022. Photographs 1-8 depict before and after pictures of the four Redhead Pond areas cut and mulched (Sections 1-4). Photographs 9 and 10 show chainsaw cuttings before and after along the property fence line in Section 1 as examples of that work effort.



Photo 1. Redhead Pond Section 1 “Before” cutting and mulching.



Photo 2. Redhead Pond Section 1 “After” cutting and mulching.



Photo 3. Redhead Pond Section 2 “Before” cutting and mulching.



Photo 4. Redhead Pond Section 2 “After” cutting and mulching.



Photo 5. Redhead Pond Section 3 “Before” cutting and mulching.



Photo 6. Redhead Pond Section 3 “After” cutting and mulching.



Photo 7. Redhead Pond Section 4 - "Before" cutting and mulching.



Photo 8. Redhead Pond Section 4 - "After" cutting and mulching.



Photo 9. Redhead Pond fence line Section 1 – “Before” chainsaw cutting.



Photo 10. Redhead Pond fence line Section 1 – “After” chainsaw cutting.

Task 2 Summary: Monitoring and Retreatment

The systemic herbicide (Relegate) was used to kill peppertree regrowth, and Clethodim was used to control guineagrass that re-colonized the cleared/mulched areas. The Coastal Bend Bays and Estuaries Program provided funds to purchase a portion of the herbicides. The Friends of Redhead Pond provided monthly monitoring efforts, and volunteers applied the herbicides as needed and used string trimmers to cut guineagrass.

Volunteers conducted monthly surveys to monitor the areas treated in Task 1. The monthly surveys began after the initial removal and chemical treatment of Brazilian peppertree and guineagrass and continued for eleven months. Volunteers recorded any invasive species found and the new growth of native species. In addition, the Friends volunteers chemically treated any remaining or new Brazilian peppertrees identified at monthly intervals.

Plants were surveyed in Redhead Pond Sections 1-4, and plant identification lists were prepared by the Friends volunteers. Table 1 serves as the initial plant survey list (2021) for Redhead Pond. Tables 2-5 serve as examples of monthly plant identification lists for Sections 1-4. These tables represent the month of July 2022. Tables 6-9 represent plant survey lists for Sections 1-4 prepared during the last month of the project (March 2023).

Table 1. Initial Redhead Pond WMA plant list. The following plants were observed within the Redhead Pond property during several October and November 2021 site visits.

| Herbaceous and Woody Vegetation Common Name(s) | Scientific Name | Status |
|---|---|---------------|
| American Nightshade, American Black Nightshade* | <i>Solanum Americanum</i> | N |
| Annual Glasswort, Dwarf Saltwort* | <i>Salicornia bigelovii</i> | N |
| Blue Mistflower* | <i>Conoclinium coelestinum (syn. Eupatorium coelestinum)</i> | N |
| Bull Thistle, Yellow Thistle* | <i>Cirsium horridulum</i> | N |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala (syn. Machaeranthera phyllocephala)</i> | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |
| Carolina Wolfberry, Carolina Desert-thorn* | <i>Lycium carolinianum</i> | N |
| Common Sunflower* | <i>Helianthus annuus</i> | N |
| Cotton Batting False Cudweed, Cottonbatting Plant* | <i>Pseudognaphalium stramineum (syn. Gnaphalium stramineum)</i> | N |
| Croton, Unknown | <i>Croton spp.</i> | |
| Drummond's Skullcap* | <i>Scutellaria drummondii</i> | N |
| Indian Blanket* | <i>Gaillardia pulchella</i> | N |
| West Indian Lantana, Lantana* | <i>Lantana camara</i> | I |
| Nakedstem Alkaliweed* | <i>Cressa nudicaulis</i> | N |
| Padre Island Mistflower, Betonyleaf Thoroughwort* | <i>Conoclinium betonicifolium</i> | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa (syn. S. virginica)</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Saltwort, Vidrillos, Turtleweed* | <i>Batis maritima</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum (syn. L. nashi)</i> | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrchia frutescens</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Silverleaf Nightshade* | <i>Solanum elaeagnifolium</i> | N |

| | | |
|---|---|----------------|
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Sea Purslane, Slender Seapurslane* | <i>Sesuvium maritimum</i> | N |
| Marsh Fleabane, Sweet Scent* | <i>Pluchea odorata</i> (syn. <i>P. purpurascens</i>) | N |
| Frog Fruit, Turkey Tangle Fogfruit* | <i>Phyla nodiflora</i> | N |
| Texas Marsh Elder* | <i>Iva texensis</i> | N |
| Herbaceous and Woody Vegetation Common Name(s) | Scientific Name | Status |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Tufted Seablite* | <i>Suaeda conferta</i> | N |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Woolly Stomodia, Gray-woolly Twintip* | <i>Stemodia lanata</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> | N |
| Vines Common Name(s) | Scientific Name | Status |
| Climbing Milkweed, Gulf Coast Swallowwort* | <i>Cynanchum angustifolium</i> | N |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Snapdragon Vine, Vine Snapdragon, Roving Sailor* | <i>Maurandya antirrhiniflora</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>C. incisa</i>) | N |
| Trees Common Name(s) | Scientific Name | Status* |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Canary Island Date Palm* | <i>Phoenix canariensis</i> | I |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Saltcedar, Tamarisk, Tamarix* | <i>Tamarix spp.</i> | I |
| Sugar Hackberry, Sugarberry* | <i>Celtis laevigata</i> | N |
| Washington Fan Palm* | <i>Washingtonia robusta</i> | I |
| Yaupon* | <i>Ilex vomitoria</i> | N |
| Grasses Common Name(s) | Scientific Name | Status |
| Bushy Bluestem* | <i>Andropogon glomeratus</i> | N |
| Coastal Sandbur* | <i>Cenchrus spinifex</i> | N |
| Plains Lovegrass* | <i>Eragrostis intermedia</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Gulfdune Paspalum* | <i>Paspalum monostachyum</i> | N |
| Little Bluestem* | <i>Schizachyrium scoparium</i> | N |

| Marshay Cordgrass, Saltmeadow Cordgrass* | <i>Spartina patens</i> | N |
|---|---|---------------|
| Herbaceous and Woody Vegetation Common Name(s) | Scientific Name | Status |
| Pinewoods Fingergrass* | <i>Eustachys petraea</i> (syn. <i>Chloris petraea</i>) | N |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Virginia Dropseed, Seashore Dropseed* | <i>Sporobolus virginicus</i> | N |
| Salt-flat Grass, Shoregrass* | <i>Monanthochloe littoralis</i> | N |
| Sedges Common Name(s) | Scientific Name | Status |
| Unknown Flatsedge | <i>Cyperus</i> | |
| Pine Barren Flatsedge* | <i>Cyperus retrorsus</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name(s) used by USDA

Table 2. Redhead Pond Plant List: Section 1. The following plants were observed within Redhead Pond Section 1 during 7/5/22 and 7/6/22 site visits.

| Common Name* | Scientific Name | Status |
|---------------------------------------|---|---------------|
| American Beautyberry* | <i>Callicarpa americana</i> | N |
| Anacua, Knockaway* | <i>Ehretia anacua</i> | N |
| Annual Sunflower, Common Sunflower* | <i>Helianthus annuus</i> | N |
| Bluntleaf Bedstraw* | <i>Galium obtusum</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |
| Chinese Tallow* | <i>Triadica sebifera</i> | I |
| Frog Fruit, Turkey Tangle Fogfruit* | <i>Phyla nodiflora</i> | N |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| SillHoney Mesquite* | <i>Prosopis glandulosa</i> | N |
| Horse Purslane, Desert Horsepurslane* | <i>Trianthema portulacastrum</i> | N |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Maypop, Fetid Passionflower* | <i>Passiflora foetida</i> | N |
| Poke, American Pokeweed* | <i>Phytolacca americana</i> | N |

| | | |
|--|--|---|
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Prostrate Sandmat* | <i>Chamaesyce prostrata</i> (syn. <i>Euphorbia prostrata</i>) | N |
| Saltcedar, Tamarisk, Tamarix* | <i>Tamarix</i> spp. | I |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrchia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Seaside Gentian, Bluebell Gentian, Catchfly Prairie Gentian* | <i>Eustoma exaltatum</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Sugar Hackberry, Sugarberry* | <i>Celtis laevigata</i> | N |
| Texas Marsh Elder* | <i>Iva texensis</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Tievine* | <i>Ipomoea cordatotriloba</i> | N |
| Trailing Fuzzybean, Trailing Wild Bean, Amberique-bean* | <i>Strophostyles helvula</i> | N |
| Tufted Seablite* | <i>Suaeda conferta</i> | N |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Wild Lettuce, Biannual Lettuce* | <i>Lactuca ludoviciana</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 1 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 3. Redhead Pond Plant List: Section 2. The following plants were observed within Redhead Pond Section 2 during the 7/13/22 site visit.

| Common Name* | Scientific Name | Status |
|---|---|--------|
| American Beautyberry* | <i>Callicarpa americana</i> | N |
| American Nightshade, American Black Nightshade* | <i>Solanum americanum</i> | N |
| Annual Glasswort, Dwarf Saltwort* | <i>Salicornia bigelovii</i> | N |
| Balloon Vine* | <i>Cardiospermum halicacabum</i> | I |
| Bedstraw, Stickwilly* | <i>Galium aparine</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Carolina Wolfberry, Carolina Desert-thorn* | <i>Lycium carolinianum</i> | N |

| | | |
|---|---|---|
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Maypop, Fetid Passionflower* | <i>Passiflora foetida</i> | N |
| Park's Croton | <i>Croton parksii</i> | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa</i> (syn. <i>Salicornia virginica</i>) | N |
| Pigeonberry, Rougeplant* | <i>Rivina humilis</i> | N |
| Plains Bristlegrass, Streambed Bristlegrass* | <i>Setaria leucopila</i> | N |
| Poke, American Pokeweed* | <i>Phytolacca americana</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Rio Grande Skullcap* | <i>Scutellaria muriculata</i> | N |
| Saltcedar, Tamarisk, Tamarix* | <i>Tamarix</i> spp. | I |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltwort, Vidrillos, Turtleweed* | <i>Batis maritima</i> | N |
| Sandhill Amaranth* | <i>Amaranthus arenicola</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrichia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Seaside Gentian, Bluebell Gentian, Catchfly Prairie Gentian* | <i>Eustoma exaltatum</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Slender Seapurslane* | <i>Sesuvium maritimum</i> | N |
| Texas Marsh Elder* | <i>Iva texensis</i> | N |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Tievine* | <i>Ipomoea cordatotriloba</i> | N |
| Tufted Seablite* | <i>Suaeda conferta</i> | N |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Wild Lettuce, Biannual Lettuce* | <i>Lactuca ludoviciana</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 2 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 4. Redhead Pond Plant List: Section 3. The following plants were observed within Redhead Pond Section 3 during the 7/9/22 site visit.

| Common Name* | Scientific Name | Status |
|--|--|--------|
| American Black Nightshade* | <i>Solanum americanum</i> | N |
| Annual Glasswort, Dwarf Glasswort* | <i>Salicornia bigelovii</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |
| Coral Bean, Cherokee Bean, Redcardinal* | <i>Erythrina herbacea</i> | N |
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Grass-leaved Goldenrod, Texas Goldentop* | <i>Euthamia gymnospermoides</i> | N |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Gulfdune Paspalum* | <i>Paspalum monostachyum</i> | N |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Little Bluestem* | <i>Schizachyrium scoparium</i> | N |
| Marsh Fimbry | <i>Fimbristylis castanea</i> | N |
| Partridge Pea | <i>Chamaecrista fasciculata</i> | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa</i> (syn. <i>Salicornia virginica</i>) | N |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltmeadow Cordgrass* | <i>Spartina patens</i> | N |
| Saltwort, Turtleweed* | <i>Batis maritima</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrichia frutescens</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Spotted Beebalm* | <i>Monarda fruticulosa</i> | N |
| Texas Marsh Elder* | <i>Iva texensis</i> | N |

| | | |
|---|---|---|
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Unknown Spikerush | <i>Eleocharis spp.</i> | |
| Vente Conmigo* | <i>Croton glandulosus</i> var. <i>pubentissimus</i> | N |
| Virginia Dropseed, Seashore Dropseed* | <i>Sporobolus virginicus</i> | N |
| West Indian Lantana, Lantana* | <i>Lantana camara</i> | I |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |
| Woolly Stemodia, Gray-woolly Twintip* | <i>Stemodia lanata</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 3 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 5. Redhead Pond Plant List: Section 4. The following plants were observed within Redhead Pond Section 4 during the 7/9/22 site visit.

| Common Name* | Scientific Name | Status |
|--|---|--------|
| Annual Glasswort, Dwarf Glasswort* | <i>Salicornia bigelovii</i> | N |
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |
| Chinese Tallow* | <i>Triadica sebifera</i> | I |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Gulfdune Paspalum* | <i>Paspalum monostachyum</i> | N |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Lindheimer's Sida, Showy Fanpetals* | <i>Sida lindheimeri</i> | N |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa</i> (syn. <i>Salicornia virginica</i>) | N |

| | | |
|---|--|---|
| Poke, American Pokeweed* | <i>Phytolacca americana</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Prostrate Sandmat* | <i>Chamaesyce prostrata</i> (syn. <i>Euphorbia prostrata</i>) | N |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltmeadow Cordgrass* | <i>Spartina patens</i> | N |
| Saltwort, Turtleweed* | <i>Batis maritima</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrchia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Slender Seapurslane* | <i>Sesuvium maritimum</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Tufted Flax* | <i>Linum imbricatum</i> | N |
| Virginia Dropseed, Seashore Dropseed* | <i>Sporobolus virginicus</i> | N |
| West Indian Lantana, Lantana* | <i>Lantana camara</i> | I |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Wild Lettuce, Biannual Lettuce* | <i>Lactuca ludoviciana</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 4 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 6. Redhead Pond Plant List: Section 1. The following plants were observed within Redhead Pond Section 1 during the March 2023 site visit.

| Common Name* | Scientific Name | Status |
|-----------------------|---|------------|
| Alamo vine | <i>Merrmia dissecta</i> | N |
| American glasswort | <i>Salicornia virginica</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> (Seeds likely to continue to sprout periodically, but none found) | I |
| Bull nettle | <i>Cnidocolus stimulosus</i> | N |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Canna flower | Family Cannaceae | Ornamental |

| | | |
|--|--|---------|
| Cardinal flower | <i>Lobelia cardinalis</i> | N |
| Carolina Wolfberry | <i>Lyceum carolinianum</i> | N |
| Chinaberry | <i>Melia azedarach</i> | I |
| Deadly nightshade | <i>Solanum ptycanthum</i> | N |
| Dollarweed | <i>Hydrocotyle spp.</i> | N |
| Frog Fruit, Turkey Tangle Fogfruit* | <i>Phyla nodiflora</i> | N |
| Golden raintree | <i>Koelreuteria paniculata</i> | I |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Indian blanket | <i>Gaillardia pulchella</i> | N |
| Live oak tree | <i>Quercus fusiformis</i> | N |
| Morning Glory | <i>Ipomoea sp.</i> | Unknown |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Mexican olive | <i>Cordia boissierie</i> | N |
| Pink evening primrose | <i>Oenothera speciosa</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Prostrate Sandmat* | <i>Chamaesyce prostrata</i> (syn. <i>Euphorbia prostrata</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrchia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Sow thistle | <i>Sonchus oleraceus</i> | N |
| Texas stork's bill | <i>Erodium texanum</i> | N |
| Tievine* | <i>Ipomoea cordatotriloba</i> | N |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Winecup | <i>Callirhoe involucrate</i> | N |
| Woody glasswort | <i>Salicornia bigelovii</i> | N |
| | | |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 1 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 7. Redhead Pond Plant List: Section 2. The following plants were observed within Redhead Pond Section 2 during the March 2023 site visits.

| Common Name* | Scientific Name | Status |
|---|--|---------------|
| American Beautyberry* | <i>Callicarpa americana</i> | N |
| American Nightshade, American Black Nightshade* | <i>Solanum americanum</i> | N |
| Annual Glasswort, Dwarf Saltwort* | <i>Salicornia bigelovii</i> | N |
| Balloon Vine* | <i>Cardiospermum halicacabum</i> | I |
| Bedstraw, Stickwilly* | <i>Galium aparine</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Carolina Wolfberry, Carolina Desert-thorn* | <i>Lycium carolinianum</i> | N |
| Common Lambsquarters | <i>Chenopodium album</i> L. | N |
| Common Sow-thistle | <i>Sonchus oleraceus</i> | N |
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Firebush* | <i>Hamelia patens</i> | N |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> | I |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Indian Blanket* | <i>Gaillardia pulchella</i> | N |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Maypop, Fetid Passionflower* | <i>Passiflora foetida</i> | N |
| Park's Croton | <i>Croton parksii</i> | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa</i> (syn. <i>Salicornia virginica</i>) | N |
| Pigeonberry, Rougeplant* | <i>Rivina humilis</i> | N |
| Plains Coreopsis* | <i>Coreopsis tinctoria</i> | N |
| Plains Bristlegrass, Streambed Bristlegrass* | <i>Setaria leucopila</i> | N |
| Poke, American Pokeweed* | <i>Phytolacca americana</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Rio Grande Skullcap* | <i>Scutellaria muriculata</i> | N |
| Saltcedar, Tamarisk, Tamarix* | <i>Tamarix</i> spp. | I |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltwort, Vidrillos, Turtleweed* | <i>Batis maritima</i> | N |
| Sandhill Amaranth* | <i>Amaranthus arenicola</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrichia frutescens</i> | N |

| | | |
|---|---|---|
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Seaside Gentian, Bluebell Gentian, Catchfly Prairie Gentian* | <i>Eustoma exaltatum</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Slender Seapurslane* | <i>Sesuvium maritimum</i> | N |
| Texas Marsh Elder* | <i>Iva texensis</i> | N |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Tievine* | <i>Ipomoea cordatotriloba</i> | N |
| Tufted Seablite* | <i>Suaeda conferta</i> | N |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Wild Lettuce, Biannual Lettuce* | <i>Lactuca ludoviciana</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 2 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 8. Redhead Pond Plant List: Section 3. The following plants were observed within Redhead Pond Section 3 during the March 2023 site visits.

| Common Name* | Scientific Name | Status |
|---------------------------------------|--|--------|
| American Black Nightshade* | <i>Solanum americanum</i> | N |
| Annual Glasswort, Dwarf Glasswort* | <i>Salicornia bigelovii</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Buffalo gourd | <i>Curcubita foetidissima</i> | N |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |

| | | |
|---|--|---|
| Carolina cranesbill | <i>Geranium carolinianum</i> | N |
| Carolina wolfberry | <i>Lycium carolinianum</i> | N |
| Corpus Christi fleabane | <i>Erigeron procumbens</i> | N |
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Grass-leafed Goldenrod, Texas Goldentop* | <i>Euthamia gymnospermoides</i> | N |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Gulf Cordgrass* | <i>Spartina spartinae</i> | N |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Honey Mesquite* | <i>Prosopis glandulosa</i> | N |
| Little Bluestem* | <i>Schizachyrium scoparium</i> | N |
| Marsh Fimbry | <i>Fimbristylis castanea</i> | N |
| Meadow Pink | <i>Sabatia campestris</i> | N |
| Partridge Pea | <i>Chamaecrista fasciculata</i> | N |
| Perennial Glasswort, Virginia Glasswort* | <i>Salicornia depressa</i> (syn. <i>Salicornia virginica</i>) | N |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltmeadow Cordgrass* | <i>Spartina patens</i> | N |
| Saltwort, Turtleweed* | <i>Batis maritima</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrchia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seablite, Annual Seepweed* | <i>Suaeda linearis</i> | N |
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Spotted Beebalm* | <i>Monarda fruticulosa</i> | N |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Vente Conmigo* | <i>Croton glandulosus</i> var. <i>pubentissimus</i> | N |
| West Indian Lantana, Lantana* | <i>Lantana camara</i> | I |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |

| | | |
|---------------------------------------|------------------------|---|
| Woolly Stemodia, Gray-woolly Twintip* | <i>Stemodia lanata</i> | N |
|---------------------------------------|------------------------|---|

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 3 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

Table 9. Redhead Pond Plant List: Section 4. The following plants were observed within Redhead Pond Section 4 during the March 2023 site visits.

| Common Name* | Scientific Name | Status |
|---|---|--------|
| American Nightshade, American Black Nightshade* | <i>Solanum americanum</i> | N |
| American Snoutbean* | <i>Rhynchosia americana</i> | N |
| Blackeyed Susan*, Brown-eyed Susan | <i>Rudbeckia hirta</i> | N |
| Brazilian Peppertree* | <i>Schinus terebinthifolius</i> | I |
| Camphor Daisy* | <i>Rayjacksonia phyllocephala</i> (syn. <i>Machaeranthera phyllocephala</i>) | N |
| Camphorweed* | <i>Heterotheca subaxillaris</i> | N |
| Carolina Geranium* | <i>Geranium carolinianum</i> | N |
| Crested Saltbush* | <i>Atriplex cristata</i> | N |
| Crucita, Blue Mistflower* | <i>Conoclinium coelestinum</i> (syn. <i>Eupatorium coelestinum</i>) | N |
| Drummond's Skullcap* | <i>Scutellaria drummondii</i> | N |
| Drummond's Woodsorrel*, Drummond's Oxalis | <i>Oxalis drummondii</i> | N |
| Epazote, Mexican Tea* | <i>Chenopodium ambrosioides</i> | N |
| Fetid Passionflower* | <i>Passiflora foetida</i> | N |
| Graceful Sandmat* | <i>Chamaesyce hypericifolia</i> | N |
| Greenbrier, Catclaw, Saw Greenbrier* | <i>Smilax bona-nox</i> | N |
| Guineagrass* | <i>Urochloa maxima</i> (syn. <i>Panicum maximum</i>) | I |
| Hairy Groundcherry, Husk Tomato* | <i>Physalis pubescens</i> | N |
| Herb of Grace* | <i>Bacopa monnieri</i> | N |
| Indian Blanket* | <i>Gaillardia pulchella</i> | N |
| Kiss Me Quick*, Rose Moss | <i>Portulaca pilosa</i> | N |
| Lambsquarters* | <i>Chenopodium album</i> | N |
| Marsh Fleabane, Sweetscent* | <i>Pluchea odorata</i> (syn. <i>Pluchea purpurascens</i>) | N |
| Phacelia, Sand Phacelia* | <i>Phacelia patuliflora</i> | N |
| Pitseed Goosefoot* | <i>Chenopodium berlandieri</i> | N |

| | | |
|---|--|---|
| Plantain | <i>Plantago spp.</i> | |
| Poke, American Pokeweed* | <i>Phytolacca americana</i> | N |
| Possum Grape, Marine Ivy, Cow Itch, Sorrelvine* | <i>Cissus trifoliata</i> (syn. <i>Cissus incisa</i>) | N |
| Prostrate Sandmat* | <i>Chamaesyce prostrata</i> (syn. <i>Euphorbia prostrata</i>) | N |
| Saltgrass* | <i>Distichlis spicata</i> | N |
| Saltmeadow Cordgrass* | <i>Spartina patens</i> | N |
| Scarlet Pimpernel* | <i>Anagallis arvensis</i> | I |
| Scrambled Eggs* | <i>Corydalis aurea</i> | N |
| Sea Lavender, Lavender Thrift* | <i>Limonium carolinianum</i> (syn. <i>Limonium nashi</i>) | N |
| Sea Ox-eye Daisy, Bushy Seaside Tansy* | <i>Borrichia frutescens</i> | N |
| Sea Purslane, Shoreline Seapurslane* | <i>Sesuvium portulacastrum</i> | N |
| Seaside Heliotrope, Salt Heliotrope* | <i>Heliotropium curassavicum</i> | N |
| Silverleaf Sunflower* | <i>Helianthus argophyllus</i> | N |
| Slender Seapurslane* | <i>Sesuvium maritimum</i> | N |
| Slender Yellow Woodsorrel* | <i>Oxalis dillenii</i> | N |
| Stinging Nettle* | <i>Urtica dioica</i> | N |
| Texas Prickly Pear, Nopal, Texas Pricklypear* | <i>Opuntia engelmannii</i> var. <i>lindheimeri</i> | N |
| Texas Sunflower* | <i>Helianthus praecox</i> | N |
| Tievine* | <i>Ipomoea cordatotriloba</i> | N |
| Tufted Flax* | <i>Linum imbricatum</i> | N |
| Virginia Pepperweed* | <i>Lepidium virginicum</i> | N |
| West Indian Lantana, Lantana* | <i>Lantana camara</i> | I |
| Western Ragweed, Cuman Ragweed* | <i>Ambrosia psilostachya</i> | N |
| Widow's Tears, Whitemouth Dayflower* | <i>Commelina erecta</i> | N |
| Wild Lettuce, Biannual Lettuce* | <i>Lactuca ludoviciana</i> | N |
| Woolly Croton, Hogwort* | <i>Croton capitatus</i> var. <i>lindheimeri</i> | N |
| Yellow Nutsedge* | <i>Cyperus esculentus</i> | N |
| Yellow Thistle* | <i>Cirsium horridulum</i> | N |

Status: N = Native, I = Introduced (Exotic)

Source of Scientific Names: U.S. Department of Agriculture (USDA) Plants Database

*Common Name used by USDA

Plant data was obtained from the areas within Section 4 that were previously (pre-clearing work) infested with Brazilian peppertrees and/or guineagrass.

The Friends volunteers photographed before and after site conditions of retreated areas at Redhead Pond (Sections 1-4). Photos 11- 22 serve as examples of Redhead Pond sections

“After” initial cutting and mulching, “Regrowth” of vegetation after the initial cutting and mulching, and current on-site view (as of March 2023).



Photo 11. Redhead Pond Section 1 – “After” initial cutting and mulching.



Photo 12. Redhead Pond Section 1 – “Regrowth” of vegetation after the initial cutting and mulching.



Photo 13. Redhead Pond Section 1 – On-site view (as of 1-25-23).



Photo 14. Redhead Pond Section 2 – “After” initial cutting and mulching.



Photo 15. Redhead Pond Section 2 – “Regrowth” of vegetation after the initial cutting and mulching.



Photo 16. Redhead Pond Section 2 – On-site view (as of March 2023).



Photo 17. Redhead Pond Section 3 – “After” initial cutting and mulching.



Photo 18. Redhead Pond Section 3 – “Regrowth” of vegetation after the initial cutting and mulching.



Photo 19. Redhead Pond Section 3 – On-site view (as of March 2023).



Photo 20. Redhead Pond Section 4 – “After” initial cutting and mulching.



Photo 21. Redhead Pond Section 4 – “Regrowth” of vegetation after the initial cutting and mulching.



Photo 22. Redhead Pond Section 4 - On-site view (as of March 2023).



Photo 23. Friend’s volunteer collecting debris at Redhead Pond WMA. In addition, community volunteers removed debris and trash from Redhead, and a community volunteer clean-up event was conducted on November 20, 2021.

Task 3 Summary: Project Monitoring and Reporting

The Friends prepared and submitted all reports, deliverables, and requests for reimbursement as required in the CMP contract. This final report describes work completed under each task and includes photos of the “before” and “after” efforts at the project site.

At the conclusion of this project, the Redhead Pond WMA was devoid of mature Brazilian peppertrees (BP). A total of 8.7 acres of infested areas were cut and treated over 16 months from 2021-2023. A skid steer with a mulcher was used to eliminate BP biomass, and chainsaws were used to cut areas along the pond edges. In addition, re-sprout BP populations in the four sections of the WMA were chemically treated. The approach to controlling the extensive areas of BP infestation at the WMA was cutting the BP biomass and following up with herbicide treatments. In addition, guineagrass was cut and chemically treated during the project.

According to the Texas Forest Service, maintaining a well-established native plant cover is an effective method to suppress Brazilian peppertrees since this plant prefers disturbed or open areas. However, since there are no biological control agents for this invasive plant, mechanical and chemical methods for eradication and treatment are recommended.

https://texasinvasives.org/resources/publications/TFS_Brazilian_Pepper.pdf

The purpose of this CMP grant project was to restore coastal habitats, including uplands and vegetated wetlands. This project has resulted in some level of coastal habitat restoration, and plant

diversity and dominance by native plant species has significantly increased in what were previously Brazilian peppertree or guineagrass-infested areas. The Texas Parks and Wildlife Department may be open to approving public access and education outreach facilities such as parking, boardwalks, kiosks, bird blinds, and shade structures in areas previously infested by the Brazilian peppertrees.