

Quarterly Update -

Coastal Aquatic Plant Nursery and Restoration Outreach

Work began on the Matagorda Bay Foundation coastal nursery in June 2022. Two freshwater wells were drilled to control salinity in the grow-out ponds and to sustain appropriate water quality for *Ruppia maritima*. Towards the end of last year (2022) one pond approximately ½ acre in size was completed for grow out of *Ruppia maritima*. This species is currently growing well and producing large amounts of propagules ready for use.

Heavy equipment failure resulted in a delay of several months to complete excavation and preparation of grow out ponds for emergent marsh plants (*Juncus* and *Spartina*). Supply chain issues and the necessity to order replacement parts from overseas were the predominant causes of the delay. Repairs were made and work on the ponds began in February 2023.

In March and April 2023 work commenced on building the first of 5 wetland nursery cells around 10,000 square foot in size. The cell was lined with a plastic sheeting to act as a root barrier and backfilled with 6 to 8 inches of sandy clay soil. In April, wetland cell number one was planted with 7,500 Black rush (*Juncus roemerianus*) root stock. These were collected from the Turtle Creek aquaculture property. They were dug by hand and small excavator and split into smaller clumps such that each clump had several growing tips. The water salinity will be held at around 10 to 20 ppt for these plants. Water depth in the cell can be maintained at 8 inches of depth or can be drained for easy access. Plants will be observed over the course of the next few weeks for health.

Cell Construction



Juncus cell planting



Spartina alterniflora - construction for cells is ongoing and should be complete by mid-summer. We are currently working with regulatory agencies (TPWD) to locate and permit harvest of *Spartina* plugs from the upper and lower coast for planting in grow out cells.