

Sargassum's Role in Dune Restoration

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Who are we?

- * 501(c)(3) organization founded in 2003
- * “Promote education and awareness of coastal margins and marine ecosystems through science and art”
 - * Students
 - * Adult learners
 - * General public
- * Habitat restoration program



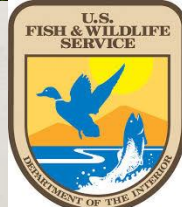


Artist Boat has planted beach habitat throughout the Galveston area

- * Since 2007, ~50 acres of restored dune/beach habitat
- * Galveston Island State Park, Dellanera RV Park, Follet's Island, Seawall



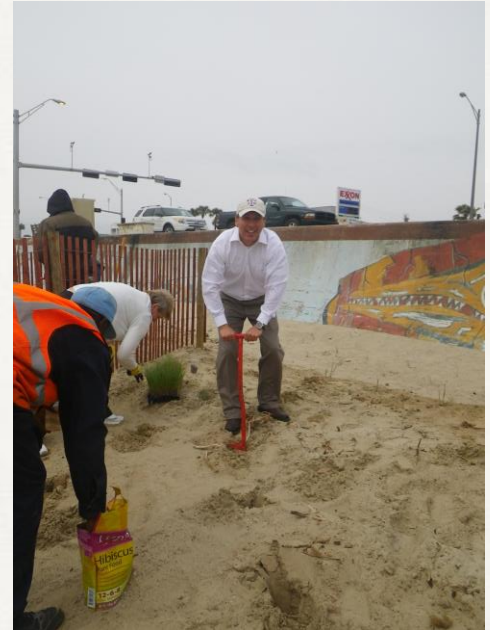
Help us Plant Dunes on Galveston Island!





Dune restoration is a great public event

- * ~7,000 volunteers
- * Bitter panicum, sea oats, shoreline purslane, railroad vine, *Spartina patens*
- * > 275 events for schools, public, O&G





Sargassum 101

- * Genus of brown macroalgae or seaweed
 - * *fluitans and natans*
- * Originate as floating mats in the Sargasso sea, May to August landings in Galveston
- * Massive landings on beaches, typically raked and moved to other areas of the island





Sargassum provides many ecological benefits to coastal habitats

- * Both coastal environments and marine environments
- * Physical structure for habitat
- * Provides sources of food for predators
- * Provides nutrients for plant growth
 - * Nitrogen and Potassium
- * Protection from erosion and storms





play a huge role in dune restoration

- * Dune plants (*panicum*) have been shown to be positively affected by the addition of unwashed *sargassum*
 - * Williams and Feagin, 2010
- * Could act as natural sources for dune restoration
 - * Builds up dunes, provides nutrients for vegetation, food and shelter for wildlife



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Future directions, specifically with Artist Boat

- * *Sargassum* could aid in
 - * New dune establishment
 - * Current dune maintenance
 - * Education and awareness

