

COASTAL WATERBIRD NESTING HABITAT ENHANCEMENT



Huisache



Granjeno



Mesquite



Retama



Fiddlewood



Colima

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center

Purpose

Dredge spoil islands and other coastal sites are in need of native plants and planting techniques to establish vegetation. These locations are important waterbird nesting habitat along the Texas Gulf Coast. Often these sites are either bare-ground or are vegetated primarily with short herbaceous grasses and forbs. While many water birds (such as terns) prefer to nest on bare-ground, others (such as herons and egrets) prefer to nest in trees or tall shrubs.

An establishment experiment on Sundown Island, Port Lavaca, Texas yielded six small tree

and shrub species useful for coastal habitat enhancement. These species are huisache (*Acacia farnesiana*), retama (*Parkinsonia aculeata*), mesquite (*Prosopis glandulosa*), fiddlewood (*Citharexylum berlandieri*), colima (*Zanthoxylum fagara*), and granjeno (*Celtis pallida*). These plants have shown to establish successfully and remain over a two-year period at the study site. Each plant's extended range should be considered before being used in another location.

Species	Scientific Name	Family	Mature Height	Wildlife Uses
Huisache	<i>Acacia farnesiana</i>	Leguminosae	6 meters	Bird nesting site
Retama	<i>Parkinsonia aculeata</i>	Leguminosae	10 meters	Seeds eaten by quail & bird nesting site
Mesquite	<i>Prosopis glandulosa</i>	Leguminosae	10 meters	Bird nesting site
Fiddlewood	<i>Citharexylum berlandieri</i>	Verbenaceae	6 meters	Bird nesting site
Colima	<i>Zanthoxylum fagara</i>	Rutaceae	9 meters	Bird nesting site
Granjeno	<i>Celtis pallida</i>	Ulmaceae	3 meters	Fruits eaten by birds and mammals & bird nesting site

Establishment

Obtain plants or seeds that originated as close to the location where they will be used as possible. This will aid in increasing survival, as these plants will be more adapted to the local climate and growing conditions. Use as many different species as available to increase diversity and to avoid success being dependent on just one species.

Allow plants to grow to a height of 9 to 12 inches before transplanting. Fall is the best time to transplant trees in Texas as the rate of transpiration is less and plants will have time to establish a good root system before facing a Texas summer. Plant trees and shrubs one meter apart.

In locations with adequate seasonal rainfall, short tree shelters or weedmat do not appear to increase survival. However, on more xeric sites small tree shelters will help to improve both survival and plant vigor. Using weed mat in addition to a tree shelter did not show to increase survival.

Management

This planting practice requires little additional management. If the soil is low in fertility, a

slow release fertilizer tablet can be added. Tree shelters can be removed in two years, or they can be allowed to degrade in place. Depending on survival rates, it may be necessary to thin the plants as they get larger. Begin thinning out plants as their canopies begin to grow together, which with most of these species will take several years.

Planting Plot on Sundown Island, TX



Prepared By & Species Coordinators:

John Lloyd-Reilley, Manager
 Shelly D. Maher, Research Scientist
 Kika de la Garza Plant Materials Center
 Kingsville, TX

1Oct2002 SDM

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.