

A Guide on Common, Herbaceous, Hydrophytic Vegetation of Southern Texas

Plant Materials Technical Note



Horsetail

Background:

Wetlands are those lands that have saturated soils, shallow standing water or flooding during at least a portion of the growing season. These sites have soils that are saturated for at least two consecutive weeks during the growing season and support a distinct vegetation type adapted for life in saturated soil conditions.

Purpose:

The purpose of this Technical Note is to provide information on the use of some common wetland plants of southern Texas. The list includes plants found along the Guadalupe River around Tivoli southward to the Rio Grande River floodplain. It is not intended to be a comprehensive treatment of the wetland flora of this region. Rather it is intended to introduce to the reader the many common wetland plant species that occur in south Texas. The guide is broken down into four categories: wildlife habitat, shoreline erosion control, water quality improvement and landscaping. Each species has a brief description of its identifying features, notes on its ecology or habitat, use and its National Wetlands Inventory (NWI) assessment. For more detailed information we suggest referring to our listed references. All pictures came from the USDA Plants Data Base or the E. "Kika" de la Garza Plant Materials Center.

Plants for wildlife habitat:

The plants listed in this section are primarily for waterbird and waterfowl habitat as well as for fish nursery and spawning areas. Texas coastal wetlands are an important wintering and migration area for North American waterfowl. An estimated 80% of the world's redhead ducks winter yearly in the Laguna Madre of south Texas. Freshwater ponds near the Laguna Madre provide an important and heavily used source of water for redheads. Other birds of special concern, such as the bald eagle, peregrine falcon, brown pelican and whooping crane, all depend on Texas marshes and estuaries.

South Texas freshwater or brackish wetlands include small, isolated depressions, or potholes, and resacas, which are relic meanderings of the Rio Grande River. Coastal potholes, formed when clay soils exposed by wind action trap and hold water, often supply the only fresh water for resident wildlife in an area generally devoid of creeks and rivers.

Common Name	Scientific Name	Page #
Wild celery	<i>Vallisneria americana</i>	10
Sago Pondweed	<i>Potamogeton pectinatus</i>	10
Widgeon grass	<i>Ruppia maritima</i>	11
Water lily	<i>Nymphaea elegans, odorata, mexicana</i>	11
Swamp sunflower	<i>Helianthus angustifolius</i>	15
Seacoast goldenrod	<i>Solidago sempervirens</i>	16
Obedient plant	<i>Physostegia</i> spp.	17
Coastal water-hyssop	<i>Bacopa monnieri</i>	18
Seedbox	<i>Ludwigia uruguayensis, octovalis, spp.</i>	18
Arrowhead, Duck potato	<i>Sagittaria longiloba, latifolia, platyphylla, spp.</i>	19
Spikerush	<i>Eleocharis cellulosa, quadrangulata</i>	19
Hydrolea	<i>Hydrolea ovata</i>	20
California bulrush	<i>Schoenoplectus californicus</i>	22
Cattail	<i>Typha</i> spp.	23
Olney bulrush	<i>Schoenoplectus americanus</i>	23

Plants for wildlife habitat (continued):

Common Name	Scientific Name	Page #
Marshhay cordgrass	<i>Spartina patens</i>	25
Smartweed	<i>Polygonum</i> spp.	26
Carolina wolfberry	<i>Lycium carolinianum</i>	26
Saltmarsh bulrush	<i>Bolboschoenus robustus</i>	27
Rivergrass	<i>Echinochloa polystachya</i>	27
Black mangrove	<i>Avicennia germinans</i>	30
Marsh elder	<i>Iva frutescens</i>	30



Wetland area in South Texas

Plants for water quality improvement:

Plants used in constructed wetlands can improve the water quality from domestic and industrial effluent as well as from catfish, redfish and shrimp farms. Along the border, there are approximately 1,200 Colonias, which often lack water treatment systems. These communities desperately need sustainable, low-cost water treatment technologies that increase public health. Constructed wetlands developed for treating wastewater can improve public health and provide a clean water resource useful for economic development.

Common Name	Scientific Name	Page #
Giant cutgrass	<i>Zizaniopsis miliacea</i>	21
Jamaica sawgrass	<i>Cladium jamaicense</i>	22
California bulrush	<i>Schoenoplectus californicus</i>	22
Olney bulrush	<i>Schoenoplectus americanus</i>	23
American bulrush	<i>Schoenoplectus pungens</i>	24



Constructed wetland on a shrimp farm

Plants for shoreline erosion control:

There are approximately 1,500 acres of land lost over 1,000 miles of the Texas Gulf Coast every year. Both Gulf Coast shoreline and coastal bays as well as freshwater reservoirs and ponds are affected by shoreline erosion. The plants listed in this section provide valuable service in the protection of these shorelines.

Common Name	Scientific Name	Page #
Smooth Cordgrass	<i>Spartina alterniflora</i>	21
Giant cutgrass	<i>Zizaniopsis miliacea</i>	21
Jamaica sawgrass	<i>Cladium jamaicense</i>	22
California bulrush	<i>Schoenoplectus californicus</i>	22
Black needlerush	<i>Juncus roemerianus</i>	24
Gulf cordgrass	<i>Spartina spartinae</i>	25
Seashore dropseed	<i>Sporobolus virginicus</i>	29
Marshhay cordgrass	<i>Spartina patens</i>	25
Black mangrove	<i>Avicennia germinans</i>	30
Marsh elder	<i>Iva frutescens</i>	30



Gulf cordgrass, marshhay cordgrass, and seashore dropseed used on a shoreline erosion control project

Plants for landscaping:

Landscaping with native plants provides the landowner with multiple benefits. Native plants are drought tolerant and adapted to the overall climate of South Texas. They are a necessary component for any water-wise gardener. Native plants also are necessary to attract both birds and butterflies.

Pollination by bees and other species contributes an estimated \$3 billion dollars of fruits and vegetables production, and \$1.6 billion to \$8.3 billion for agricultural crops. Texas crops that benefit from pollinators include: sunflowers, tomatoes, berries, alfalfa, fruit orchards, soybeans, cotton, rice and vegetables.

Thirty-seven percent of all animal species are herbivorous insects and 96% of terrestrial birds rely on these insects. Insect survival relies on native habitat. Landscape ecologists estimate that only 3-5% of the United States remains as undisturbed habitat. Many ecologists consider the suburban landscape a critical factor for insect habitat and the preservation of these insects.

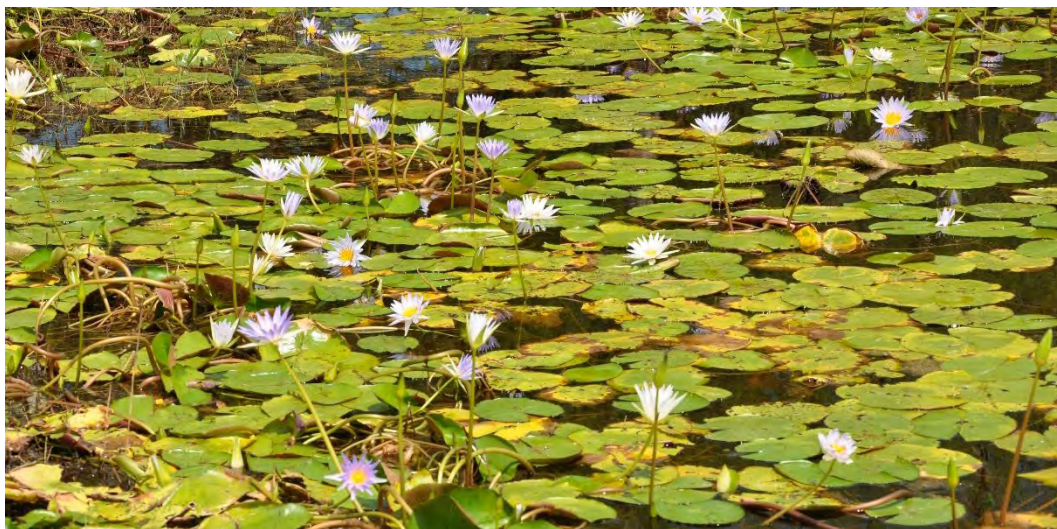
Texas is situated at the core of the migratory flyway for the Eastern monarch population. It plays a vital role in monarch conservation due to its importance for both spring breeding while returning to the United States and fall nectar sources that fuel the butterfly's magnificent migration to Mexico.

The plants listed in this section provide not only native plants for landscaping but also attractive plants useful in waterscaping of backyard ponds. Two plants, water lettuce (*Pistia stratiotes*) and water hyacinth (*Eichhornia crassipes*) are commonly used in waterscaping, but these species are introduced invasive and should not be used. Information on these two species is found on page 9.

Common Name	Scientific Name	Page #
Wild celery	<i>Vallisneria americana</i>	10
Water lily	<i>Nymphaea elegans, odorata, mexicana</i>	11
Lotus	<i>Nelumbo lutea</i>	12
Scouring rush	<i>Equisetum hyemale</i>	12
Spiderlily	<i>Hymenocallis caroliniana, liriosme, occidentalis</i>	13
Southern Swamp Lily	<i>Crinum americanum</i>	13
Wooly Rose Mallow	<i>Hibiscus moscheutos</i>	14

Plants for landscaping (continued):

Common Name	Scientific Name	Page #
Halberd-leaved Rose Mallow	<i>Hibiscus laevis</i>	14
Salt marsh-mallow	<i>Kosteletzkya virginica</i>	15
Swamp sunflower	<i>Helianthus angustifolius</i>	15
Seacoast goldenrod	<i>Solidago sempervirens</i>	16
Pickernelweed	<i>Pontederia cordata</i>	16
Iris	<i>Iris virginica</i>	17
Obedient Plant	<i>Physostegia</i> spp.	17
Seedbox	<i>Ludwigia uruguayensis, octovalis, spp.</i>	18
Arrowhead, Duck Potato	<i>Sagittaria longiloba, latifolia, platyphylla, spp.</i>	19
Spikerush	<i>Eleocharis cellulosa, quadrangulata</i>	19
Hydrolea	<i>Hydrolea ovata</i>	20
Bushybeard bluestem	<i>Andropogon glomeratus</i>	20
White-topped sedge	<i>Rhynchospora colorata</i>	28
Water spider orchid	<i>Habenaria repens</i>	28
Seaside heliotrope	<i>Heliotropium curassavicum</i>	29
Seashore dropseed	<i>Sporobolus virginicus</i>	29



Native water lilies on a pond in South Texas

Individual Plant Descriptions



Large wetland area in South Texas during the spring wildflower season

INTRODUCED – EXOTIC PLANTS

Common/Scientific Name	Water lettuce - <i>Pistia stratiotes</i>
Identification	Floating, stoloniferous plants with a rosette of light green leaves 1-6 inches wide. Leaves are simple, roundish and densely pubescent
Ecology/Habitat	Water lettuce is an extremely invasive plant. It is generally found in shallow, freshwater environments. Plants proliferate forming dense floating mats along shorelines and protected coves
Usage	DO NOT USE!
NWI	Obligate (OBL)



Common/Scientific Name	Water Hyacinth – <i>Eichhornia crassipes</i>
Identification	Floating, perennial plant up to 3 feet tall. Inflorescence a terminal spike with light blue to purplish flowers. Leaves are leathery and roundish. Abundant, hairy roots.
Ecology/Habitat	Water hyacinth is an extremely invasive plant. It is generally found in freshwater marshes. Like water lettuce, water hyacinth proliferates forming dense floating mats along shorelines and protected coves.
Usage	DO NOT USE!
NWI	OBL



Common/Scientific Name	Wild celery - <i>Vallisneria americana</i>
Identification	Long thin ribbon-like leaves, 3-4 feet in length and ½ to ¾ inches wide that have a green to purplish color. Distinct venation pattern on the leaves. Forming dense underwater colonies from extensive rhizomes.
Ecology/Habitat	Found primarily in freshwater but can tolerate low salinities (0-3.5 ppt). Exists on a variety of soil types at depths of 3-4 feet.
Usage	Provides ideal underwater habitat for fish and invertebrates. Excellent plant for water gardens.
NWI	OBL



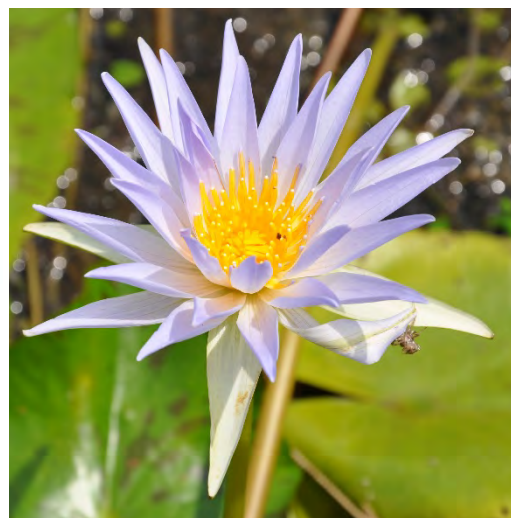
Common/Scientific Name	Sago Pondweed – <i>Potamogeton pectinatus</i>
Identification	Rooted, submerged perennial aquatic plant. Short leaves 1 millimeter wide growing in layered masses. Bushy many branched stems, Rhizomes producing tuberous bulbets.
Ecology/Habitat	Sago pondweed is found in fresh to slightly saline waters (0-3.5 ppt). Thrives in clear, shallow water up to 4 feet deep.
Usage	Waterfowl relish the small tubers making it an excellent wildlife food plant.
NWI	OBL



Common/Scientific Name	Widgeon grass – <i>Ruppia maritima</i>
Identification	Perennial, rooted submerged aquatic plant. Thread-like leaves green to orangish, 0.5 to 1 millimeter wide with pointed tip. Long branched stems to 3 feet long.
Ecology/Habitat	Widgeon grass is found in brackish water with salinities ranging from 0 to 10 ppt.
Usage	Widgeon grass is one of the most important aquatic plants along the Gulf Coast. Seed, leaves and stems are eaten by waterfowl. The dense growth provides critical shelter for marine organisms, especially juvenile shrimp and crabs.
NWI	OBL



Common/Scientific Name	Water lily - <i>Nymphaea elegans, odorata, mexicana</i>
Identification	Perennial aquatic rising from a stout rootstock. Leaves floating roundish 3-12 inches wide. Flowers ranging from white (<i>N. elegans</i>), to blue (<i>N. odorata</i>) to yellow (<i>N. Mexicana</i>).
Ecology/Habitat	All the water lilies prefer permanent, clear, fresh water 1-4 feet deep.
Usage	Great water landscaping plant! Yellow water lily produces tuberous roots that are utilized by canvasback ducks.
NWI	OBL



Common/Scientific Name	Lotus – <i>Nelumbo lutea</i>
Identification	Aquatic, perennial plant with round leaves that are 12 to 24 inches in diameter with a waxy coating. Those leaves rising 1 to 3 feet above the water surface often developing a cup-shape. Flowers are yellow on long, stiff stalks producing flat-topped seed pods.
Ecology/Habitat	Lotus grows in fresh water that ranges in depth from 0 to 4 feet.
Usage	This is another great waterscaping plant if you have enough space. The seed pods are used in dry flower arrangements.
NWI	OBL



Common/Scientific Name	Scouring rush – <i>Equisetum hyemale</i>
Identification	Slender perennial that grows to 36 inches tall. Hollow, jointed stems 5 to 8 millimeters wide. Tubular, toothed leaf sheaths.
Ecology/Habitat	Scouring rush or horsetail is found on a variety of wetland soils. It is restricted to freshwater swampy areas.
Usage	An attractive waterscaping plant. Because of the accumulation of silica in the stems, this plant was used for washing pots and brushing teeth.
NWI	FACW



Common/Scientific Name	Spiderlily – <i>Hymenocallis caroliniana</i>, <i>liriosme</i>, <i>occidentalis</i>
Identification	Perennial plant with long, strap-like leaves. Plants grow from 16 inches to 3.5 feet tall from large underground bulbs. Flowers are white, fragrant and very attractive.
Ecology/Habitat	Spiderlilies grow on moist wetland soils that dry out periodically in the summer. Found on slightly elevated sites adjacent to freshwater marshes.
Usage	A very attractive plant for wetland landscaping.
NWI	OBL



Common/Scientific Name	Southern Swamp Lily – <i>Crinum americanum</i>
Identification	Perennial plant that can grow 3 feet tall from a large stoloniferous bulb. It has broad, thick strap-like leaves that are 2 inches wide. Swamp lily has fragrant, white flowers, 2 to 6 per umbel, with thread-like filaments and long, separated petals.
Ecology/Habitat	Swamp lily grows on slightly elevated sites adjacent to permanent freshwater marshes.
Usage	A very attractive plant for wetland landscaping.
NWI	OBL



Common/Scientific Name	Wooly Rose Mallow – <i>Hibiscus moscheutos</i>
Identification	Perennial plant growing up to 4 feet tall. Leaves are heart shaped with both surfaces being pubescent or wooly. White to cream colored flowers are funnel-shaped with a crimson red or deep purple coloring inside at the base.
Ecology/Habitat	Wooly rose mallow is a wetland plant that occurs on the edge of fresh and intermediate marshes with salinities ranging from 0 to 3.5 ppt. Plants prefer slightly elevated sites that dry out during the summer
Usage	Very attractive wetland plant. Easy to grow from seed.
NWI	OBL



Common/Scientific Name	Halberd-leaved Rose Mallow – <i>Hibiscus laevis</i>
Identification	Perennial plant growing up to 8 feet tall. Leaves are glabrous, narrow, arrow-shaped and 4 inches long with a lobe at the base. Stems have small thorns. Flowers are funnel-shaped and light purple.
Ecology/Habitat	This rose mallow is a wetland plant that occurs only from the freshwater marshes of the Guadalupe river delta. Plants grow on moist clay soils that periodically dry out during the summer.
Usage	Very attractive wetland plant. Easy to grow from seed.
NWI	OBL



Common/Scientific Name	Salt marsh-mallow – <i>Kosteletzkya virginica</i>
Identification	An attractive wetland plant that grows up to about 4 feet. Leaves are broadly heart-shaped about 3 inches long and densely hairy. Shrubby with numerous branches. Leaves gradually reduced in size above midstem. Numerous flowers that are pale-pink to rose-pink.
Ecology/Habitat	Salt marsh-mallow tends to grow in sparse stands on slightly elevated sites adjacent to permanent water. It is adapted to intermediate to brackish water handling salinities from 0 to 10 ppt.
Usage	Attractive waterscaping plant.
NWI	OBL



Common/Scientific Name	Swamp sunflower – <i>Helianthus angustifolius</i>
Identification	Slender, upright perennial plant 4 to 5 feet tall. Leaves are narrow, alternate and rough. Stems are solitary, branching in the upper portion of the plant. 2.5 inch flowers at the end of slender stems.
Ecology/Habitat	Found on wet prairie soils that are moist in the winter but dry out during summer.
Usage	Seeds are consumed by doves and quail. Attractive plant for landscaping. Good pollinator plant and an important plant for the migrating Monarch butterfly.
NWI	FACW



Common/Scientific Name	Seacoast goldenrod – <i>Solidago sempervirens</i>
Identification	Erect perennial 2 to 4 feet tall. Leaves are alternate and narrow. Stems are usually unbranched. Flowers occurring in late summer or fall. A mass of small yellow flowers at the tip of the plant.
Ecology/Habitat	Seacoast goldenrod grows on elevated, moist soils adjacent to intermediate to brackish marshes with salinities ranging from 0 to 10 ppt.
Usage	Useful plant for urban landscaping and fall migrating butterflies.
NWI	FACW



Common/Scientific Name	Pickerelweed – <i>Pontederia cordata</i>
Identification	Aquatic perennial up to 3 feet tall. Leaves broadly arrow-shaped with a long stalk. Flowers are blue, 2-lipped and marked with yellow.
Ecology/Habitat	Pickerelweed is found along the margins of freshwater wetlands.
Usage	Attractive plant useful for waterscaping.
NWI	OBL



Common/Scientific Name	Iris – <i>Iris virginica</i>
Identification	Rhizomatous, perennial plant that grows up to 3.5 feet tall. Long strap-like leaves. Flowers are light bluish with dark blue to purple venation. A yellow patch at the base of each petal
Ecology/Habitat	Slightly elevated sites adjacent to freshwater wetlands. Moist soils that tend to dry-out during the summer.
Usage	Useful plant for urban landscaping.
NWI	OBL



Common/Scientific Name	Obedient Plant – <i>Physostegia spp.</i>
Identification	Annual/Perennial herbs with square stems growing to 3 feet tall. Sparingly branched. Leaves are opposite, narrow and lance-like up to 6 inches long. Flowers are in a terminal spike. They range from white to rose-colored, but are mostly light purple variegated with dark purple
Ecology/Habitat	Obedient plant is found on moist wetland soils.
Usage	Very attractive plant useful for waterscaping and pollinator habitat.
NWI	FACW



Common/Scientific Name	Coastal water-hyssop – <i>Bacopa monnieri</i>
Identification	Prostrate, succulent, perennial herb 6 to 12 inches tall forming dense mats. Leaves opposite and spatulate. Single flowers arising from its nodes. Flowers are white to pale bluish.
Ecology/Habitat	Bacopa grows in intermediate to brackish marshes (0-10 ppt).
Usage	Coastal water-hyssop is an important wildlife plant. It is utilized by waterfowl, especially widgeons.
NWI	OBL



Common/Scientific Name	Seedbox – <i>Ludwigia uruguayensis, octovalis, spp.</i>
Identification	Seedbox is a perennial wetland plant that grows up to 4 feet tall. Leaves are alternate, narrowly lance-like. Flowers are yellow, 4 and 5 petaled, solitary in the axils of the leaves. Capsules are long, cylindrical 1 to 2 inches long.
Ecology/Habitat	Seedbox is found on wetland soils that are fresh to intermediate in salinity (0 to 3.5 ppt) Generally found on slightly elevated sites that dry-out in the summer.
Usage	Provides pollinator habitat. Ducks and other birds consume the seed. Attractive landscaping plant.
NWI	OBL



Common/Scientific Name	Arrowhead, Duck Potato – <i>Sagittaria longiloba, latifolia, platyphylla, spp.</i>
Identification	Perennial aquatic plant growing to 3 feet tall. Tubers developing from rhizomes on some species. Arrow-shaped leaves extending from long stalks. Flowers 3-petaled and white.
Ecology/Habitat	Arrowhead is a wetland plant that grows in fresh to slightly saline marshes (0-3.5 ppt.)
Usage	An attractive plant useful in waterscaping. Tuberous species are consumed by waterfowl.
NWI	OBL



Common/Scientific Name	Spikerush – <i>Eleocharis cellulosa, quadrangulata</i>
Identification	Rhizomatous wetland plants that produce small whitish tubers. Plants grow from 18 to 30 inches tall. Cylindrical, terminal seedheads 1 to 2 inches long.
Ecology/Habitat	Spikerush is found on shallowly flooded sites of fresh to intermediate marshes (0-3.5 ppt.)
Usage	Spikerush is an excellent wildlife plant providing seeds and tubers for a wide range of waterfowl. Useful for waterscaping
NWI	OBL



Common/Scientific Name	Hydrolea – <i>Hydrolea ovata</i>
Identification	Rhizomatous, perennial, wetland plant about 2.5 feet tall. Hairy stems with sharp spines in axils of the leaves. Leaves simple, hairy 2 inches long and about 1 inch wide. Terminal inflorescence with attractive blue flowers.
Ecology/Habitat	Hydrolea is found on moist, freshwater, wetlands that tend to dry-out in the summer
Usage	Attractive landscaping and pollinator plant
NWI	OBL



Common/Scientific Name	Bushybeard bluestem – <i>Andropogon glomeratus</i>
Identification	This is a wetland grass that grows up to 4 feet tall. Plants take on an attractive bronze color in the fall and winter. Terminal flowering composed of a dense cluster of silky haired seeds.
Ecology/Habitat	Bushybeard bluestem is found in wet prairies and on slightly elevated ridges adjacent to freshwater marshes.
Usage	An attractive plant for landscaping.
NWI	FACW



Common/Scientific Name	Smooth Cordgrass – <i>Spartina alterniflora</i>
Identification	A tall growing (2 to 4 feet) coastal grass growing from extensive rhizomes.
Ecology/Habitat	Smooth cordgrass forms dense colonies along the coast in salinities ranging from 10 to 30 ppt.
Usage	A critical plant in the struggle against coastal erosion
NWI	OBL



Common/Scientific Name	Giant cutgrass – <i>Zizaniopsis miliacea</i>
Identification	Large, perennial grass growing from extensive rhizomes. Giant cut-grass leaves are sharp edged, hence its name. Grass grows up to 6 feet with leaves 2 to 3 feet long and 3/4 inch wide. A large nodding seedhead 1 to 2 feet long.
Ecology/Habitat	Giant cut-grass grows in shallow, freshwater, marshes less than 3 feet deep. It develops into large, dense circular colonies.
Usage	This is an excellent plant for erosion protection on levees and embankments. It also provides wind breaks for open, freshwater marshes.
NWI	OBL



Common/Scientific Name	Jamaica sawgrass – <i>Cladium jamaicense</i>
Identification	Sawgrass is a large perennial wetland plant growing from an extensive stoloniferous root system. It grows from 4 to 8 feet tall. Its leaves are long with severe, saw-toothed edges.
Ecology/Habitat	Found primarily as dense colonies in fresh and intermediate marshes (0 to 3.5 ppt).
Usage	Excellent plant for controlling bank erosion. Seeds are consumed by waterfowl.
NWI	OBL



Common/Scientific Name	California bulrush – <i>Schoenoplectus californicus</i>
Identification	California bulrush is a tall wetland plant growing 4 to 8 feet tall from an extensive system of rhizomes. Stems are a dark green, roundish to triangular. Seedhead is a terminal cluster of brownish seeds.
Ecology/Habitat	California bulrush is found in fresh to intermediate marshes (0 to 3.5 ppt) where it can grow into large, dense stands.
Usage	Excellent plant for water quality improvement in constructed wetlands. Seeds are consumed by waterfowl. Provides habitat for nutria.
NWI	OBL



Common/Scientific Name	Cattail – <i>Typha spp.</i>
Identification	A wetland plant that grows from creeping rhizomes to a height of 4 to 8 feet tall. Leaves linear, strap-like in 2 vertical rows growing as long as the height of the stem. Cinnamon to brownish flowers congested in a terminal spike.
Ecology/Habitat	Cattails grow in submerged to slightly moist soils ranging in salinity from 0 to 10 ppt. Develops into large, dense stands
Usage	Cattail rhizomes are consumed by nutria and muskrats as well as snow and white-fronted geese. The Kickapoo Indian Tribe use woven cattail mats in the construction of their traditional homes and ceremonial structures.
NWI	OBL



Common/Scientific Name	Olney bulrush – <i>Schoenoplectus americanus</i>
Identification	Olney bulrush is a wetland plant that grows from extensive rhizomes to a height of 5 feet. It is easily identified by its strongly triangular stems that are deeply concaved. The flowers are a small cluster in a terminal spike.
Ecology/Habitat	Olney bulrush is generally found on moist soils below salinities of 3.5 ppt. It is often found in association with marshhay cordgrass (<i>Spartina patens</i>).
Usage	It is one of the most important plants for muskrats. It is also utilized by waterfowl and nutria.
NWI	OBL



Common/Scientific Name	Black needlerush – <i>Juncus roemerianus</i>
Identification	Black needlerush is a wetland plant that grows from vigorous rhizomes to a height of 5 feet. Stems are round and have a dark black-green color. Seeds are found in a loose terminal cluster.
Ecology/Habitat	Black needlerush is found in brackish to saline marshes (10 to 30 ppt.) that are tidally influenced.
Usage	Black needlerush along with smooth cordgrass (<i>Spartina alterniflora</i>) are important plants for coastal erosion control.
NWI	OBL



Common/Scientific Name	American bulrush – <i>Schoenoplectus pungens</i>
Identification	American bulrush is a perennial wetland plant that grows from a vigorous rhizome and can attain a height of 5 feet tall. The stems are triangular with 2 concave and 1 convex. A similar species is Olney bulrush (<i>Schoenoplectus pungens</i>) which is triangular, but all 3 faces are wider and much more deeply concave. Seeds are found in a terminal, small, tight cluster.
Ecology/Habitat	American bulrush prefers fresh to intermediate marshes (0 to 3.5 ppt). Like Olney bulrush it can be found in association with marshhay cordgrass (<i>Spartina patens</i>). It is generally found more frequent than Olney bulrush the farther south one travels in south Texas.
Usage	Useful plant for water quality improvement.
NWI	OBL



Common/Scientific Name	Marshhay cordgrass – <i>Spartina patens</i>
Identification	Rhizomatous grass growing to 4 feet tall. Leaves are long, slender and smooth. Seedheads are on open, spike-like branches. Two to fifteen branches per stalk and 1 to 3 inches long.
Ecology/Habitat	Marshhay cordgrass grows on an assortment of marshy soils that are wet for at least a portion of the year. It tolerates salinities of 10 ppt. or more.
Usage	An important wetland plant for a variety of wildlife; muskrats, nutria, rabbits, geese and ducks
NWI	FACW



Common/Scientific Name	Gulf cordgrass – <i>Spartina spartinae</i>
Identification	Gulf cordgrass is a large, tough bunch grass growing to a height of 2 to 4 feet. The root crown is often 1 to 2 feet in diameter. Leaves are long, slender, stiff and very, sharp-tipped. Seedheads are at the terminal end of the stalk composed of numerous compressed spikes.
Ecology/Habitat	Gulf cordgrass grows on elevated sites slightly above standing water or high tide. It is found on a variety soils both clay and sand with salinity tolerances up to 10 ppt or more.
Usage	The tough root system makes this an important coastal erosion control plant on levees, embankments and shorelines.
NWI	FACW



Common/Scientific Name	Smartweed – <i>Polygonum spp.</i>
Identification	Smartweed is a wetland plant that can grow to 3 feet tall. Its leaves are alternate and lance-like. A defining characteristic of smartweed is the nodal sheath called an ocrea. Terminal flowers on spike-like branches ranging in color from white to pink.
Ecology/Habitat	Found on slightly elevated, freshwater wetland sites
Usage	Seeds are readily consumed by waterfowl and other small birds.
NWI	OBL



Common/Scientific Name	Carolina wolfberry – <i>Lycium carolinianum</i>
Identification	Carolina wolfberry is a perennial, erect, slender shrub that grows up to 3 feet tall. Short branchlets jutting from the main stems are rigid and thorn tipped. Leaves are alternate, simple, spatulate, thickly succulent 1 to 2 inches long. Flowers are lavender in color, found in the leaf axils. Produces a bright red berry.
Ecology/Habitat	It is generally found on moist, brackish soils on elevated ridges and along coastal bay shorelines.
Usage	Carolina wolfberry is an important food source for the endangered whooping crane.
NWI	FACW



Common/Scientific Name	Saltmarsh bulrush – <i>Bolboschoenus robustus</i>
Identification	Saltmarsh bulrush is a perennial wetland species that grows to 3 feet tall from extensive rhizomes. Stems are stout, erect and strongly triangular. Seedheads are composed of round, dark brown clusters with visible scales.
Ecology/Habitat	This plant is found in the intermediate to brackish marshes (3.5 to 10 ppt) influenced by tidal action.
Usage	It is utilized by ducks, snow geese, nutria and muskrats.
NWI	OBL



Common/Scientific Name	Rivergrass – <i>Echinochloa polystachya</i>
Identification	Native, perennial, wetland grass growing up to 5 feet tall. Stems stout, creeping and rooting at the nodes. Leaf blades long, over 12 inches in length. Terminal seedheads narrow, compacted and nodding with awns as long as ½ to 1 inch in length.
Ecology/Habitat	Early successional grass restricted to freshwater marshes of 0 to 2 feet in depth.
Usage	Rivergrass is an excellent wildlife plant for waterfowl providing both seeds and cover.
NWI	FACW - OBL



Common/Scientific Name	White-topped sedge – <i>Rhynchospora colorata</i>
Identification	White-topped sedge is a perennial, wetland plant that grows 12 to 18 inches tall. It has triangular stems. Terminal cluster of seeds are surrounded by 4 to 6 bracts that are white at the base but becoming dark green at the tapering pointed tips.
Ecology/Habitat	Plant is found on moist soils and elevated ridges of freshwater marshes.
Usage	An attractive landscaping plant.
NWI	FACW



Common/Scientific Name	Water spider orchid – <i>Habenaria repens</i>
Identification	Water spider orchid is a slender wetland plant that grows to 2 feet tall. Its leaves are long, 3-ribbed and strongly veined, sheathing the stem below. Terminal flowers are green and small.
Ecology/Habitat	Found only in freshwater either in very moist soil or shallow water.
Usage	Waterscaping
NWI	OBL



Common/Scientific Name	Seaside heliotrope – <i>Heliotropium curassavicum</i>
Identification	Seaside heliotrope is a perennial, saline wetland plant that has prostrate stems. Leaves are a blue-green color about 2 inches long. Flowers are small, white and in a coiled row.
Ecology/Habitat	Found on moist saline clays
Usage	An excellent landscaping and pollinator plant.
NWI	FACW



Common/Scientific Name	Seashore dropseed – <i>Sporobolus virginicus</i>
Identification	Short, rhizomatous grass that grows prostrate to 2 feet tall. Leaves are 2 to 4 inches long, 2-ranked and frequently in-rolled. Seedhead is a terminal cluster.
Ecology/Habitat	Found on moist tidalflats, beaches and on edges of inland saline marshes with salinities from 0 to 30 ppt.
Usage	High-saline coastal landscaping and erosion control
NWI	FACW



Common/Scientific Name	Black mangrove – <i>Avicennia germinans</i>
Identification	Small, woody shrub that grows from 3 to 6 feet tall. Simple, opposite leaves that appear grayish green in color. Terminal flowers are small and white.
Ecology/Habitat	Black mangrove is restricted to brackish and saline waters. It is found mainly in tidal zones with salinities of 10-35 ppt. Black mangrove is sensitive to freezing temperatures and will die when exposed to temperatures below 20 degrees F.
Usage	Black mangrove provides nesting habitat for various water birds. It also is an important plant for coastal shoreline erosion control.
NWI	OBL



Common/Scientific Name	Marsh elder - <i>Iva frutescens</i>
Identification	Perennial evergreen shrub that grows to 8 feet tall. Leaves opposite, toothed margins and pale green.
Ecology/Habitat	Marsh elder grows on slightly elevated sites in brackish and saline wetlands. Functions similar to freshwater willows.
Usage	Marsh elder provides nesting habitat for various water birds. It also is a useful plant for coastal shoreline erosion control.
NWI	FACW



For More Information:

USDA/NRCS
E. "Kika" de la Garza Plant Materials Center
3409 N FM 1355
Kingsville, TX 78363

361-595-1313

References:

Hatch, Stephan L., J.L. Schuster and D. L. Drawe. 1999. *Grasses of the Texas Gulf Prairies and Marshes*. Texas A&M University Press. 355 pp.

Hoag, J.C. 2003. *Harvesting, Propagating and Planting Wetland Plants*. USDA- Natural Resources Conservation Service. Idaho Technical Note Plant Materials #13. Boise, Idaho. 11 pp.

Jones-Lewey, Sky 2016. *A Field Guide to Riparian Plants Found Within Most of Texas*. Nueces River Authority. 166 pp.

Lehman, Roy L., Ruth O'Brien and Tammy White. 2005. *Plants of the Texas Coastal Bend*. Texas A&M University Press. 352 pp.

Richardson, Alfred and Ken King 2011. *Plants of Deep South Texas; a field guide to the woody and flowering species*. Texas A&M University Press. 457 pp.

Stutzenbacker, Charles D. 1999. *Aquatic and Wetland Plants of the Western Gulf Coast*. Texas Parks and Wildlife Press. 465 pp.

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