

Natural Communities of Louisiana



Vegetated Pioneer Emerging Delta

Rarity Rank: S2S3/G3G4

	1	2	3	4	5
State		■	■		
Global			■	■	
	imperiled		rare		secure

Synonyms: Delta Flats, Emergent Islands

Ecological Systems: CES203.470

Mississippi Delta Fresh and Oligohaline Tidal Marsh



General Description:

- A dynamic community forming primarily within the actively building delta region at the mouth of the Atchafalaya and Mississippi Rivers
- Soils are formed from course to fine-grained alluvial deposits
- Hydrologic regime ranges from intermittently exposed to intermittently flooded
- Zonation of plant species occurs on the newly accreted land
- Naturally deposited island soils contain a greater percentage of sand and are therefore better drained than marsh soils
- The pioneer ridge vegetation is similar to the sand bars and delta of the Mississippi River while the pioneer marsh vegetation is similar to that of fresh marsh areas
- The pioneer community is successional in nature and changes rapidly with time
- The new delta community's ecological functions are similar in nature to marsh and mudflat systems, serving as nursery grounds for fish and aquatic invertebrate species
- Supports high numbers of wintering waterfowl

Plant Community Associates

Common species dominate on higher elevations include:

Echinochloa walteri (coast cockspur grass)

Common species dominating lower elevation tidally influenced zones include:

Sagittaria latifolia (broadleaf bulltongue)

Sagittaria platyphylla (delta arrowhead)

Leptochloa uninervia (Mexican sprangletop)

Cyperus difformis (variable flatsedge)

Eleocharis parvula (dwarf spikerush)

Common species dominating intermediate zones include:

Sagittaria platyphylla (delta arrowhead)

Cyperus difformis (variable flatsedge)

Bacopa monnieri (coastal water hyssop)

Eleocharis parvula (dwarf spikerush)

Leptochloa fusca ssp. *uninervia* (Mexican sprangletop)

Other common species include:

Salix spp. (willow)

Typha latifolia (common cattail)

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Other common species continued:

Scirpus validus (softstem bulrush)

Juncus effusus (soft rush)

Scirpus americanus (threesquare bulrush)

Federally-listed plant & animal species:

Pelecanus occidentalis (brown pelican)

Haliaeetus leucocephalus (bald eagle)

Endangered, PS:E; G4; S2

Bald & Golden Eagle Protection Act;
G4; S2N, S3B

Trichechus manatus (manatee)

Endangered; G2; SZN

Chelonia mydas (green sea turtle)

Threatened/Endangered; G3; SZN

Eretmochelys imbricata (hawksbill sea turtle)

Endangered; G3; SZN

Lepidochelys kempii (Kemp's Ridley sea turtle)

Endangered; G1; SZN

Dermochelys coriacea (leatherback sea turtle)

Endangered; G2; SZN

Caretta caretta (loggerhead sea turtle)

Threatened; G3; S1

Range:

There are two areas of the Louisiana coast supporting this habitat: the actively forming Atchafalaya Delta and the current mouth of the Mississippi River.

LA River Basins:

Mississippi, Atchafalaya

Threats:

- Channelization and dredging
- Frequent and prolonged fluctuations in river water levels

Beneficial Management Practices:

- Allow natural alluvial deposition processes to continue delta formation
- Identify and protect sensitive areas from disturbances such as boats or other motorized vehicles and recreational use
- Develop better strategies for the placement of dredge materials as a restoration method

