

# Natural Communities of Louisiana



## Coastal Dune Grassland

**Rarity Rank:** S1S2/G2G3

	1	2	3	4	5
State					
Global					
	imperiled		rare		secure

**Synonyms:** Maritime Grassland, Dune Meadow, Dune Grass

### Ecological Systems:

CES203.469 Louisiana Beach  
CES203.471 Southeastern Coastal Plain  
Interdunal Wetland



### **General Description:**

- Occurs on beach dunes and relatively elevated backshore areas (ridges) above intertidal beaches on barrier islands and on the mainland
- The dunes of Louisiana's barrier islands and mainland beaches are poorly developed because of the high frequency of overwash associated with hurricanes and storms, and a limited amount of eolian-transported sand
- Dune swales may be extensive, and dunes and ridges may be shifted or eroded by storm floods, destroying vegetation
- Normally xeric (excessively drained) due to the sandy substrate and elevation above the highest flood mark (except during hurricanes)
- Vegetative cover ranges from sparse to fairly dense and is dominated by salt spray tolerant grasses
- These sites are exposed to moderate to high amounts of salt spray, have limited nutrient availability, and substrate instability which create harsh conditions for establishment and growth of coastal dune vegetation

### **Plant Community Associates**

#### **Common grasses include:**

*Spartina patens* (wire grass)  
*Panicum amarum* (beach panic)  
*Paspalum vaginatum* (jointgrass)  
*Schizachyrium maritimum* (seacoast bluestem)  
*Chloris petraea* (finger grass)  
*Eragrostis oxylepis* (red lovegrass)

*Uniola paniculata* (sea oats)  
*Triplasis purpurea* (purple sandgrass)  
*Distichlis spicata* (saltgrass)  
*Cenchrus* spp. (sandburs)  
*Sporobolus virginicus* (coast dropseed)  
*Andropogon* spp. (broomsedges)

#### **Common forbs include:**

*Batis maritima* (salt wort)  
*Ipomea stolonifera* (beach morning-glory)  
*Heliotropium currasivicum* (seaside heliotrope)  
*Agalinis maritima* (seaside false foxglove)  
*Solidago sempervirens* (seaside goldenrod)  
*Hydrocotyle bonariensis* (large leaf pennywort)

*Iva imbricata* (sumpweed)  
*I. pes-caprae* (goat-foot morning-glory)  
*Strophostyles helvola* (sand wild bean)  
*Cakile* spp. (sea rockets)  
*Croton punctatus* (punctate goatweed)  
*Sabatia stellaris* (seastar rose-gentian)

# Natural Communities of Louisiana



## Common forbs continued:

*Heterotheca subaxillaris* (camphor weed)  
*Sesuvium portulacastrum* (sea purselane)  
*Aphanostephus skirrobasis* (lazy daisy)  
*Sueda linearis* (annual seepweed)  
*Lippia nodiflora* (common frog-fruit)

*Atriplex arenaria* (quelite)  
*Pluchea camphorata* (camphor-weed)  
*Salicornia* spp. (glassworts)  
*Centrosema virginianum* (butterfly pea)

## Federally-listed plant & animal species:

*Lepidochelys kempii* (Kemp's Ridley sea turtle)  
*Caretta caretta* (loggerhead sea turtle)  
*Pelecanus occidentalis* (brown pelican)

Endangered; G1; SZN  
Threatened; G3; S1  
Endangered (PS:E); G4; S2

## Range:

Coastal dune grasslands are estimated to have occupied less than 2,000 acres in presettlement times, and 50 to 75% was thought to remain prior to the 2005 hurricanes. The most extensive examples of coastal dune grasslands are generally found on Louisiana's barrier islands and the Chenier Plain of southwest Louisiana.

## LA River Basins:

Pontchartrain, Mississippi, Barataria, Terrebonne, Mermentau, Calcasieu, Sabine

## Threats:

- Shoreline erosion
- Construction of roads, pipelines or utilities
- Contamination by chemicals or industrial discharge
- Off-road vehicle use
- Invasive exotic species
- Overgrazing

## Beneficial Management Practices:

- Prevent conversion of existing natural communities to other land uses
- Shoreline or island stabilization
- Prohibit off-road vehicle use
- Remove any invasive exotic plant species with use of spot herbicides or mechanical means
- Prohibit livestock grazing

