



## Interior Salt Flat

**Rarity Rank:** S1/G1

**Synonyms:** Salt Seepage Barren, Salt Barren, Interior Saline Soil Marsh

**Ecological Systems:** CES203.291 West Gulf Coastal Plain Saline Glade

### General Description:

- Natural, treeless areas typically only a few acres in size (range < 1 ac to 20 ac)
- Arise on low flat terraces adjacent to small streams
- Frequent flooding during and immediately following storm events
- Expansive barren soil areas interspersed with variably dense, often monospecific, herbaceous vegetation
- Plant community dominated by halophytic (salt-tolerant) forbs, grasses and grass-like plants, and some scattered trees
- Zonal plant configurations occur and appear related to micro-relief and consequent moisture patterns
- May be associated with inland subsurface salt domes
- Soils with high levels of exchangeable sodium, high alkalinity, very poor movement of water and air, and resistance to both wetting and drying
- Subsoil that acts as a dense clay pan restricting tree root penetration and water movement



### Plant Community Associates

#### Common grass and forb species include:

*Eleocharis spp.* (spike sedges),  
*Distichlis spicata* (spike grass),  
*Juncus spp.* (rushes),  
*Alternanthera sp.* (a chaff-flower),  
*Portulaca sp.* (portulaca),  
*Hibiscus lasiocarpus* (hibiscus),  
*Solidago sempervirens* (seaside goldenrod),

*Iva angustifolia* (marsh-elder),  
*Bacopa monnieri* (coastal waterhyssop),  
*Scirpus spp.* (bullrushes),  
*Fimbristylis spp.* (fimbry-sedge),  
*Pluchea sp.* (marsh-fleabane),  
*Spartina pectinata* (prairie cordgrass),  
*Heliotropium curassavicum* (heliotropes)

#### Common shrub species include:

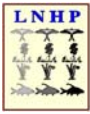
*Baccharis halimifolia* (saltbush),  
*Sideroxylon lanuginosum* (chittum wood)

*Crataegus berderifolia* (barberry hawthorn),

#### Federally-listed plant & animal species:

*Geocarpon minimum* (earthfruit)  
(may be possible on higher sites)

Threatened; G2; S1



# Natural Communities of Louisiana



## **Range:**

Restricted to the Upper West Gulf Coastal Plain in north central to northwest Louisiana

## **Threats & Management Considerations:**

Interior salt flats are a naturally rare association. In presettlement times total area was estimated at less than 2,000 acres, and only an estimated 25 to 50 % remains today. Salt flats have mainly been lost to land use changes. Threats to this natural community include construction of roads, pipelines and utilities, off-road vehicle use, physical damage from timber harvesting, contamination by chemicals (herbicides, fertilizers), and trash dumping.



Use of appropriate management activities and developing a compatible management plan prevents destruction or degradation of this habitat type and promotes long-term maintenance of healthy interior salt flats. Such management strategies should include:

- Preventing conversion of existing flats to other land uses
- No bedding or other soil disturbance that may alter natural water flow patterns
- Prohibiting off-road vehicle use or restricting use to existing trails
- Preventing use of flats or barren openings as logging sets
- Prohibit trash dumping
- Do not apply fertilizer for pasture “improvement”, and prevent off-target application when fertilizing large blocks of timber from aircraft



Salt flat with soil damage from off- road vehicle use.