



Natural Communities of Louisiana

Saline Prairie

Rarity Rank: S1/G1G2

Synonyms: Barrens, Salt Barrens, Slicks

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

General Description:

- Natural, mostly treeless areas typically only a few acres in size (range < 1 ac to 20 ac)
- Arise on low flat terraces adjacent to small streams
- Occur in a mosaic with the surrounding woodlands
- Usually having variably dense herbaceous vegetation (thick to thin), with interspersed bare soil areas called “slicks”
- Scattered pimple mounds may be present, where woody shrubs and small trees often become established
- Plant community comprised of drought-tolerant forbs, grasses and grass-like plants, spring ephemeral wetland plants, and some halophytes
- 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
- Principal soils in UWGCP and EGCP are the Bonn and Lafe series; LWGCP on Brimstone soils
- Fire likely played a minor role in maintaining these prairies, while the extreme soil conditions were the principal deterrent to woody plant invasion



Plant Community Associates

Characteristic species include:

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| <i>Aristida</i> spp. (three-awn grasses), | <i>Aster subulatus</i> , |
| <i>Bacopa monnieri</i> (water hyssop, wet salines), | <i>Sporobolus vaginiflorus</i> (poverty dropseed), |
| <i>Carex glaucescens</i> (sedge), | <i>Croton michauxii</i> , |
| <i>Chasmanthium latifolium</i> (spikegrass), | <i>Diodia teres</i> (poorjoe), |
| <i>Distichlis spicata</i> (alkali grass, wet salines), | <i>Eleocharis</i> spp. (spikerush), |
| <i>Fimbristylis castanea</i> (wet salines), | <i>Geocarpon minimum</i> (earthfruit, rare), |
| <i>Heliotropium curassivicum</i> (heliotropes, wet salines), | <i>Iris brevicaulis</i> (lamance iris), |
| <i>Hibiscus moscheutos</i> ssp. <i>lasiocarpus</i> (hibiscus), | <i>Iva angustifolia</i> (marsh elder), |
| <i>Juncus</i> spp. (rushes), | <i>Ludwigia</i> spp. (primrose), |
| <i>Lythrum lineare</i> (loosestrife, wet salines), | <i>Panicum virgatum</i> (switchgrass, wet salines), |
| <i>Phyla nodiflora</i> (frog-fruit), | <i>Pluchea camphorata</i> (stinkweed), |
| <i>Polygonum aviculare</i> (knotweed), | <i>Proserpinaca pectinata</i> (mermaid-weed), |
| <i>Rhynchospora corniculata</i> (beakrush), | <i>Schizachyrium scoparium</i> (little bluestem), |
| <i>Solidago sempervirens</i> (seaside goldenrod, wet salines), | <i>Tradescantia occidentalis</i> (spiderwort), |
| <i>Spartina pectinata</i> (prairie cordgrass, wet salines), | <i>Tridens strictus</i> (sandgrass) |



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Common woody species include:

Ampelopsis arborea (peppervine),
Berchemia scandens (rattan vine),
Crataegus berberifolia (barberry hawthorn),
C. virdis (green hawthorn),
Morella cerifera (wax myrtle),
Quercus lyrata (overcup oak),
Q. similis (delta post oak),
Ulmus crassifolia (cedar elm)

Baccharis hamilifolia (saltbush),
Cephalanthus occidentalis (buttonbush),
C. brachyacantha (blueberry hawthorn),
Fraxinus caroliniana (Carolina ash),
Pinus taeda (loblolly pine),
Q. nigra (water oak),
Q. phellos (willow oak),

Federally-listed plant & animal species:

Geocarpon minimum

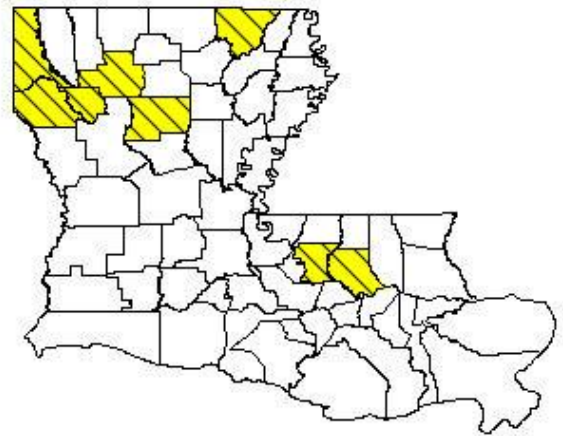
Threatened; G2; S1

Range:

Primarily in the Upper and Lower West Gulf Coastal Plains, with historical occurrences known from East Baton Rouge, Livingston and Morehouse parishes and possibly adjacent areas.

Threats & Management Considerations:

Saline Prairies were not extensive in presettlement times. Total area was estimated at less than 2,000 acres with approximately 10 to 25 % remaining today. Saline prairies have mainly been lost to land use changes. Attempts at conversion to agriculture or homesteads represent the greatest initial losses, while construction of roads, pipelines and utilities, off-road vehicle use, physical damage from timber harvesting, contamination by chemicals (herbicides, fertilizers), and invasive and exotic species all threaten remaining saline prairies.



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 saline prairies. Such management strategies should include:

- Preventing conversion of existing natural prairies to other land uses (ie – food plots or pasture)
- No bedding, plowed fire lines or other soil disturbance that may alter natural water flow patterns
- Use of periodic prescribed fire (every 5 to 10 yrs)
- Prohibiting off-road vehicle use or restricting use to existing trails
- Preventing use of prairie openings as logging sets
- Monitoring for and removal of any invasive or exotic species by prescribed burning, spot herbicide treatments or mechanical means
- Do not apply fertilizer for pasture “improvement”, and prevent off-target application when fertilizing large blocks of timber from aircraft



Saline prairie salt slick