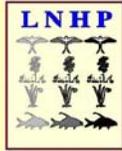


# LOUISIANA NATURAL AREAS REGISTRY Quarterly Newsletter



Photo © Deni Bown



June 2008

Volume 5 Number 4 of 4



Working with landowners towards conservation of Louisiana's ecologically sensitive lands

<http://www.wlf.louisiana.gov/experience/naturalheritage/naturalareasregistry/>

Can you name the plant in the above photo?  
See back page for answer.

## Natural Areas Registry Update

We have registered Beverly Anderson's **Place of Peace Natural Area** that consists of 111 acres in Desoto Parish. It contains excellent examples of two unique natural communities: the state and globally rare saline prairie and associated saline oak woodlands. The site occurs on low flat terraces adjacent to Rambin Bayou interspersed with an occasional slight ridge. Sloughs and small pond depressions are scattered throughout the forest and several small pockets of saline prairies occur around the largest saline prairie in the southwestern area of the site. The large saline prairie contains both scattered pimple mounds sparsely vegetated with woody shrubs and trees, and small barren or semi-barren salt slicks. Saline prairies are imperiled with only 10 to 15 percent remaining in the state covering approximately 1,000 acres. Soils have high levels of exchangeable sodium and magnesium in the subsoil and near the surface horizons that creates extreme conditions for plant growth. Certain water-soluble salts are at relatively high levels and are injurious to plants. The plant community therefore includes many halophytic (salt tolerant) forbs, grasses, and grass-like plants. Six state and globally rare plant species populations including earth fruit (*Geocarpon minimum*), flame hedgehyssop (*Gratiola flava*), and Texas saxifrage (*Saxifraga texana*), shown right have been confirmed on the site. Additionally, six animal species including Field Sparrow (*Spizella pusilla*) shown at right – photo by Thomas Schultz, Hispid pocket mouse (*Chaetodipus hispidus*), and western slender glass lizard (*Ophisaurus attenuatus*) are of conservation concern in saline prairies communities.



Field Sparrow  
courtesy Thomas Schultz

Four landowners contacted the Natural Areas recently about our consideration of their property for Natural Areas Registry recognition. We will visit all of these very soon to determine their quality and ecological significance.

All 104 registry members were contacted over the past year about their continued interest in remaining in the registry, changes or threats to their sites, cost-share assistance, additional signs, management needs, and if they would like us to visit their registry site. All issues were taken care of promptly and we hope to visit all those whom requested visits by the end of this year.

We urge all registry members to take advantage of state and federal programs available to landowners through district National Resource Conservation Services offices that provide assistance with cost-share programs, technical and management assistance, burning assistance, invasive species eradication and restoration. Please feel free to contact Judy Jones or Patti Faulkner about these programs and we will be happy to help you. ☺

## Renewal of Increased Tax Incentives for Conservation Easements

Chuck Roe, SE Program Director, Land Trust Alliance  
(Edited by LNHP)

On May 23, 2008 the final bill emerged as expected with the conservation tax incentive now enacted for two more years. This puts back in place the incentive that had expired January 1st with the exact same terms, that is, raising the deduction for donated conservation easements from 30 to 50% of adjusted gross income—and 100% for farmers and ranchers—and extending the time period for using the deduction from 6 to 16 years.

The Land Trust Alliance worked closely with the Congress to ensure that the tax incentive and major new funding for the Farmland Protection Program and Grassland Reserve Program (both of which provide grants to land trusts for the purchase of conservation easements) were included in the final bill. The new law rewards and encourages private landowners who are willing to donate permanent conservation management agreements through deed restrictions on their properties (these agreements are often called "conservation easements"). The new law may reduce your federal income taxes because it:

- ◆ raises the deduction a landowner can take for donating a conservation easement from the previous 30% to now 50% of their adjusted gross income in any year;
- ◆ allows qualifying farmers, ranchers, and timberland owners to deduct up to 100% of their income from federal income taxes; and even more importantly
- ◆ extends the carry-forward deduction period for a donor to take federal income tax deductions for a voluntary conservation agreement from the past 5 to now 15 years.

A conservation easement is a permanent deed restriction on future property uses that guarantees protection of sensitive environmental and wildlife resources, minimizes future land development, and assures sustainable management of natural resources including agricultural and timber production. For more information contact your favorite sportsmen's organization, The Nature Conservancy, or local land trust members of the national Land Trust Alliance (go to [www.lta.org/publicpolicy](http://www.lta.org/publicpolicy) or email [policy@lta.org](mailto:policy@lta.org) for more information about the new law and for directions to contact a qualified land conservation organization interested in working with you to arrange a conservation easement management agreement on your land). 🍷

## Coastal Dune Grassland

Presently, there are no Natural Areas Registries in this community type but Louisiana Natural Areas Program (LNHP) does strive to register landowners in every plant community type. So, please contact LNHP if you own property in this plant community and we would be happy to visit your site for consideration for recognition of a new Natural Areas Registry.



**Rarity Rank:** S1S2/G2G3

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

### Ecological Systems:

CES203.469 Louisiana Beach

CES203.471 Southeastern Coastal Plain Interduna Wetland

Endangered; G1; SZN

**General Description:** Coastal dune grasslands occur 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 (carried by the wind). Dune swales may be extensive, and dunes and ridges may be shifted or eroded by storm floods that subsequently destroy vegetation. Coastal dune grasslands are normally xeric (excessively drained) owing to the fact that they are elevated 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. These factors create harsh conditions for establishment and growth of coastal dune vegetation.

### Plant Community Associates

**Common grasses include:** *Spartina patens* (wiregrass), *Uniola paniculata* (sea oats), *Panicum amarum* (beach panic), *Triplasis purpurea* (purple sandgrass), *Paspalum vaginatum* (jointgrass), *Distichlis spicata* (saltgrass), *Schizachyrium maritimum* (seacoast bluestem), *Cenchrus* spp (sandburs), *Chloris petraea* (finger grass), *Sporobolus virginicus* (coast dropseed), *Eragrostis oxylepis* (red lovegrass)

**Common forbs include:** *Batis maritima* (salt wort), *Iva imbricata* (sumpweed), *Ipomea stolonifera* (beach morning-glory), *I. pes-caprae* (goat-foot morning-glory), *Heliotropium currasivicum* (seaside heliotrope), *Strophostyles helvola* (sand wild bean), *Agalinis maritima* (seaside false foxglove), *Cakile* spp. (sea rockets), *Solidago sempervirens* (seaside goldenrod), *Croton punctatus* (punctate goatweed), *Hydrocotyle bonariensis* (large leaf pennywort), *Sabatia stellaris* (seastar rose-gentian), *Heterotheca subaxillaris* (camphor weed), *Atriplex arenaria* (quelite), *Sesuvium portulacastrum* (sea purselane), *Pluchea camphorata* (camphor-weed), *Aphanostephus skirrobasis* (lazy daisy), *Salicornia* spp. (glassworts), *Sueda linearis* (annual seepweed), *Centrosema virginianum* (butterfly pea), *Lippia nodiflora* (common frog-fruit) shown right

**Federally-listed plant & animal species:** *Lepidochelys kempii* (Kemp's Ridley sea turtle), *Caretta caretta* (loggerhead sea turtle), *Pelecanus occidentalis* (brown pelican)

**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, 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

### References:

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- Smith, L. M. 1993. Estimated presettlement and current acres of natural plant communities in Louisiana. Louisiana Natural Heritage Program, Louisiana Department of Wildlife and Fisheries, Baton Rouge, LA. 🚫

## Louisiana Native Plant Initiative (LNPI)

### Why Local Ecotype?

Louisiana plant species have evolved over tens of thousands of years in response to environmental influences including grazing, fire, drought, and flooding. Native plants are well adapted to our growing conditions and thrive with little input. Restoration experts agree that plant materials native to an area should be used in conservation projects to achieve long term sustainability.

There is a growing interest in the public and private sectors to utilize locally adapted native plant materials for restoration and revegetation projects in Louisiana. Ensuring ecosystem stability and ensuring genetic integrity is a major concern for restoration and habitat creation projects.

Despite a strong demand for native plant material for conservation, restoration, and habitat creation, it is not available. Louisiana consumers must purchase less adapted plant material from Texas and the Midwest. Many restoration projects in Louisiana have failed or been unable to proceed because of the lack of commercially available sources of plant material that are adapted to the state.

The collection, assembly, selection and release of new plant material are the goals of the Louisiana Native Plant Initiative (LNPI). The LNPI uses observational and/or quantitative evaluations along with plant breeding methods to isolate and/or select improved local ecotypes. The LNPI uses the USDA-Natural Resources Conservation (NRCS) Service Plant Materials Program model for seed collection, increase, and release of adapted native grasses, forbs and legumes for commercial production.

The LNPI will collect, preserve, increase, and study native grasses, forbs and legumes of Louisiana, conserving a vanishing natural resource and providing an essential step in the development of a native plant industry. Two integral parts to the LNPI are seed collection and the increase and production of seed. Candidate species are selected by the LNPI Technical Committee based on

resource concern, wildlife value, range of distribution and physical characteristics for commercial production. Local native seeds are then collected from sources on private and public lands in the specific ecosystem as identified by the technical committee. Seeds are collected by hand or by mechanical means, and labeled based on location and other relevant scientific information.

Seed collection is an ongoing process throughout the growing season, typically April to November. This includes seed collection on remnant grasslands and seed harvest from the breeder and foundation seed blocks. Seed processing, cleaning and greenhouse grow out occurs November to March. Using the year round grow out process, a local ecotype release will take 3 to 5 years from initial collection to release to the commercial market.

### Estimated Release Timeline 2007 to 2011

#### 2007

Little bluestem	<i>Schizachyrium scoparium</i>
Wooly rose mallow	<i>Hibiscus moscheutos</i>
Cluster bushmint	<i>Hyptis alata</i>

#### 2009

Indiangrass	<i>Sorghastrum nutans</i>
Big bluestem	<i>Andropogon gerardii</i>
Rattlesnake-master	<i>Eryngium yuccifolium</i>
Hoarypea	<i>Tephrosia onobrychoides</i>
Kansas gayfeather	<i>Liatris pycnostachya</i>

#### Candidate species to be collected in 2008 / 2009

#### 2010

Indian plantain	<i>Arnoglossum ovatum</i>
Slender mountain-mint	<i>Pycnanthemum tenuifolium</i>
Shiny coneflower	<i>Rudbeckia texana</i>
Yellow wild-indigo	<i>Baptisia sphaerocarpa</i>
Prairie aloe	<i>Manfreda virginica</i>
Ashy sunflower	<i>Helianthus mollis</i>
Rough coneflower	<i>Rudbeckia grandiflora</i>
Meadow beauty	<i>Rhexia mariana</i>

#### Candidate species to be collected in 2009 / 2010

#### 2011

Pale purple coneflower	<i>Echinacea pallida</i>
Yellow Indian-blanket	<i>Gaillardia aestivalis</i>
Prairie bluet	<i>Hedyotis nigricans</i>
Dense gayfeather	<i>Liatris spicata</i>
Nuttall's prairie parsley	<i>Polytaenia nuttallii</i>
Prairie petunia	<i>Ruellia humilis</i>
Azure blue sage	<i>Salvia azurea</i>
Slender bluestem	<i>Schizachyrium tenerum</i>
Compass plant	<i>Silphium laciniatum</i>
Sweet goldenrod	<i>Solidago odora</i>

### Partners in the LNPI include:

- |   |                           |
|---|---------------------------|
| USDA – NRCS                                     | Coastal Plain Conservancy |
| McNeese State University                        | USGS – NWRC               |
| Nicholls State University                       |                           |
| Barataria – Terrebonne National Estuary Program |                           |
| Louisiana Department of Wildlife & Fisheries    |                           |

Adapted from Brochure on website: [www.acadianarc.com](http://www.acadianarc.com) 🚫

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Newsletter editor / publisher

Picture from front page: *Spigelia marilandica* (Indian Pink) is in the Strychnaceae Family. It is a shady woodland plant that occurs in rich, moist hardwood forests in the southeastern U.S. from South Carolina west to southern Indiana, and south to eastern Texas and northern Florida. Indian Pink is usually found in calcareous woods or in hardwood slope forests. It dies to the ground in winter and comes back each spring. The flowers are in upright clusters (cymes), each consisting of a 2 inch long scarlet trumpet which opens at the end into a five-pointed star exposing its yellowish inside. The poison, strychnine, comes from members of this family and extracts of Indian pink root was used medicinally by native Americans to rid the body of parasitic worms ([www.florida.com](http://www.florida.com)).

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