



# LOUISIANA NATURAL AREAS REGISTRY Quarterly Newsletter

## October 2010

### Volume 8      Number 1 of 4



Working with landowners towards conservation of Louisiana's native habitats  
<http://www.Louisiana.gov/experience/naturalheritage/naturalareasregistry/>

Can you guess what the photo above is?  
The answer is on page 4.

## NATURAL AREAS UPDATE

We are recognizing one new Natural Area this quarter. This addition brings our Natural Areas to 113, capturing 36,698 acres in 36 of 64 parishes.

**Love's Grosse Tete Passe Temps Natural Area** is a 79-acre site



owned by Robert Love in West Baton Rouge Parish. It supports an uneven-aged bottomland hardwood forest with overstory species including sweetgum, water oak, hackberry, American elm, and green ash. Robert's forest management practices over the past 14 years have created conditions that provide important habitat for native wildlife and migratory birds, especially during spring migration. Robert is a certified member of the Louisiana Forest

Stewardship Program.

## COASTAL PRAIRIE

by U.S. Geological Survey; Edited by LNHP

The coastal prairie, located along the coastal plain of southwestern Louisiana and extending to south central Texas, is the southernmost extent of the tall grass prairie ecosystem prevalent in the Midwest. The coastal prairie ecosystem once covered as much as 9 million acres; today, more than 99% of this land has been lost to agriculture, range improvement, and urbanization. The remainder is highly fragmented and severely threatened by exotic species and urban sprawl. In Louisiana, the former 2.5 million acres of coastal prairie



have now been reduced to about 500 acres. In Texas, about 65,000 acres of coastal prairie remain intact (USFWS).

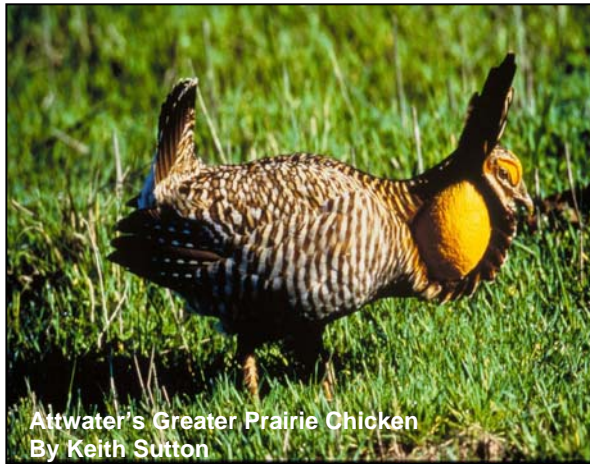
**Biodiversity at risk.** Forbs (nonwoody, broad-leaved plants), and grasses once covered the region. Prairie birds, prairie voles,



**Historical extent of coastal prairie.** The stars indicate national wildlife refuges. Management and restoration of coastal prairies occurs on these conservation areas.

butterflies, and other insects and creatures were abundant. The coastal prairie was home to herds of bison and pronghorn antelope. Red wolves once roamed among the riverine forests that crisscrossed the plains.

Today, this ecosystem is globally imperiled. The Texas Organization for Endangered Species lists the vegetation associations within the coastal prairie as “threatened and endangered communities”. There are many species at stake in coastal prairies. Over a dozen plant species in this ecosystem, including orchids and sedges, are regarded as rare. The coastal prairie is the only place where the federally endangered Attwater’s greater prairie chicken (*Tympanuchus cupido attwateri*) is found (shown above). There are fewer than 100 birds remaining in the wild and efforts to restore them to coastal prairies are now using captive bred birds.



Attwater's Greater Prairie Chicken  
By Keith Sutton

The coastal prairie is also the exclusive wintering ground of the endangered whooping crane (*Grus americana*), shown at the right. Today about 400 whooping cranes survive in three populations in the wild, and there are about 150 individuals in captivity. Whooping cranes are the tallest North American bird. Males can reach 5 feet tall with a wingspan of up to 7



Whooping Crane by Korhnak

feet. They live up to 24 years in the wild. The Louisiana Department of Wildlife and Fisheries and the U.S. Fish and Wildlife Service hosted two public hearings in September regarding the proposal to re-establish a non-migratory flock of whooping cranes in the wetlands of southwestern Louisiana.

Many of the plants typically found in the Midwest prairie region occur in the coastal prairie as well, such as bluestems, coneflowers, and blazing stars, mingled with species native to the coastal wetlands and pine savannas of the eastern region.

**What is coastal prairie?** This region is distinctive from the Midwestern grass lands in the amount of rainfall: 56 inches annually, compared to a mere 28 inches in the Midwest. Such an abundant amount of rainfall typically produces forests rather than grasslands. Scientists believe that the coastal prairie developed because of the hard clay pan beneath the topsoil, which inhibits root penetration of larger species such as forest trees. This clay pan can also accentuate drought conditions. Before settlement, natural fires such as those set

by lightning also contributed to keeping the growth of trees and shrubs in check while stimulating the growth of native grasses.

**Restoration efforts.** Although many of the native populations of plants and animals have been lost in this critical habitat, there are still enough remnants to give hope to restoration efforts. The U.S. Fish and Wildlife Service (USFWS) lists restoration of the coastal prairie as one of the top priorities for the region. Several USFWS national wildlife refuges are managing and restoring the coastal prairie, including Lacassine and Cameron Prairie Refuges in Louisiana and Anahuac, Aransas, Attwater, and Brazoria Refuges in Texas.

Additional groups involved in restoration and management include the Texas Nature Conservancy, Texas Parks and Wildlife, Louisiana Nature Conservancy, Louisiana Department of Wildlife and Fisheries, Cajun Prairie Habitat Preservation Society, Texas A&M University Extension Service, and USDA Natural Resources Conservation Service (NRCS).

Coastal prairie management and restoration are two of the primary mission goals of the U.S. Geological Survey’s National Wetlands Research Center (NWRC). The NWRC provides assistance to land managers in the revegetation, restoration, and management of the coastal prairie.

Some of the research projects at the NWRC relevant to coastal prairie restoration and management currently focus on planting procedures of native grasses and other coastal prairie plants to determine what combinations of native species would have the best chance of success in coastal prairie restoration efforts. Other projects are concerned with the effects of natural and prescribed fire on land and resource management and on community processes in the coastal prairie ecosystem.

**Controlling invasive species.** At Brazoria National Wildlife Refuge in Angleton, Texas, the NWRC conducts coastal prairie restoration and management studies. Recent studies at Brazoria focused on how prescribed burns of prairie land can be used to control Chinese tallow tree (*Triadica sebifera*), an invasive plant that is currently threatening native habitats



Chinese Tallow by James Henson

throughout the southeastern United States and is a particular danger to coastal prairie remnants. The tallow tree is believed to have been introduced to North America in 1772 by Benjamin Franklin. This species, which reproduces abundantly, was sought after for the oils and waxes in its seeds and fruits. Since the 1980’s, tallow trees has become so prevalent that it has been recognized as one of the exotic plants of greatest threat to native habitats in the southern United States, according to Jim Grace with the USGS. Tallow resists both flooding and drought, and to

some degree, fire. There is evidence that burns conducted during the growing season are more effective than traditional dormant-season burns. It appears that fire will hold the tallow at bay but it won't completely eradicate it.

The coastal prairie is a unique and vital part of the biosphere that has almost vanished within the last 100 years. Though much has been lost both in terms of land coverage and native species, much biodiversity yet remains and is in need of being protected and preserved. Future restoration efforts must focus not only on encouraging development of native plant materials for restoration efforts but also on protecting remnants from degradation and destruction.

**For more information, contact:**

U.S. Geological Survey, National Wetlands Research Center,  
700 Cajundome Blvd., Lafayette, LA 70506  
337-266-8500; Fax 337-266-8513  
<http://www.nwrc.usgs.gov>

**References:**

- Louisiana Department of Wildlife and Fisheries  
<http://www.wlf.louisiana.gov/wildlife/whooping-cranes>
- USGS. June 2000. FS-019-00. Coastal Prairie
- USGS. Feb 1999. Press Release. Rekindling Hope for the Coastal Prairie: Using Fire Against the Invasive Tallow Tree.
- USDA-NRCS PLANTS Database, <http://plants.usda.gov/>, Chinese Tallow photo.
- USFWS Coastal Prairie  
<http://www.fws.gov/southwest/clearlakees/coastalprairie.htm>

## Midland Prairie Restoration Update

Located in Acadia Parish, the Midland remnant is a strip of coastal prairie stretching about 5 miles along the Burlington Northern Santa Fe Railroad. A cooperative stewardship effort is underway involving Louisiana Department of Wildlife and Fisheries, Acadia RC&D Council, USGS, The Nature Conservancy, NRCS, and private landowners. This work is being funded by the State Wildlife Grants program.



The Midland remnant is threatened by encroachment of woody species which shade out prairie plants. The goal of this project is to control species such as Chinese tallow tree and salt bush on the site by mechanical and chemical means. Vegetation surveys were

conducted in the spring of 2010 prior to site treatment. Woody species removal was conducted during August of 2010. Debris was



removed from the site and the prairie was mowed. Ongoing monitoring will be carried out to document the response of prairie plants to the treatments. This prairie will serve as a seed source to aid in future coastal prairie restoration projects. Below on the left is a photo of Midland Prairie before treatment and above is a photo of the site after woody species removal.

## Cajun Prairie Habitat Preservation Society



You can contact the Cajun Prairie Habitat Preservation Society if you are interested in learning more about Louisiana's coastal prairie. The Cajun Prairie Habitat Preservation Society is an organization which is dedicated to the study, preservation, restoration and education in regard to coastal prairie. The society was officially founded on May 22, 1989 by a group of prairie enthusiasts. The main purpose of the Society was to restore prairie habitat at a site in Eunice. Since then, the Society has expanded its purpose and membership. The Society has a non-profit status. The society holds many events which include tours, speakers, restoration projects, land acquisitions and fun social events.

The Cajun Prairie Habitat Preservation Society owns Eunice Prairie which has been registered in the Louisiana Natural Areas Registry Program since August 1994. This site was purchased from the city of Eunice in 2003, who originally registered the site in 1994.

**For more information contact:**

Cajun Prairie Habitat Preservation Society at:  
c/o Dr. Charles Allen, 5070 Hwy 399, Pitkin, LA 70656  
Phone: (337) 531-7535, native@camtel.net

Jim Foret, President CPHPS  
Phone: (337) 482-6064, cajunprairie@bigthe.com

**The Mystery Photo is a Pipevine Swallowtail.**

The photo on the front page is a close up of a Pipevine Swallowtail wing taken by Patrick Coin (Cotinis) found on Flickr ([www.flickr.com/photos/pcoin/sets/72057594062903972/](http://www.flickr.com/photos/pcoin/sets/72057594062903972/)).

Pipevine swallowtails lay their eggs on pipevine plants (*Aristolochia* species) including Dutchman's Pipe

(*Aristolochia tomentosa*; shown at top right) and Virginia snakeroot (*Aristolochia serpentaria*). Pipevine plants have a nasty tasting chemical that is retained by the caterpillar and the adult butterfly. A predator is likely to get sick from sampling one and apparently learns from the experience. Black swallowtail and red-spotted purple butterflies, which are non-toxic, have a similar appearance and predators avoid them as well, a benefit called mimicry. In pipevine swallowtail territory, eastern tiger swallowtail females develop a similar dark coloration,

while the same females in other areas are light colored like the males. All swallowtails come equipped with an osmeterium, which is a set of

brightly-colored horns (pictured above) that they extend from their heads when bothered. They can rear back and almost touch their tail, secreting a foul smell which discourages predators.

**Reference:**

<http://redandthepeanut.blogspot.com/2009/07/pipevine-swallowtail-nectaring-on.html> by Kelly Riccetti.



**Previous Newsletter, June 2010, Vol. 7, No. 4 of 4.** We gave an update on the total number of registered areas, introduced three new Natural Areas and the first LDWF servitude. Articles were presented on goat's rue (*Tephrosia virginiana*), and white-breasted nuthatch (*Sitta carolinensis*). A progress report for the Longleaf Pine Savannah Survey was provided. The mystery plant was the pineywoods dropseed (*Sporobolus junceus*).

**Louisiana Natural Heritage Program Staff**

Louisiana Department of Wildlife and Fisheries  
2000 Quail Drive; P.O. Box 98000; Baton Rouge, LA 70898-9000

- Amity Bass** - Biologist Manager / Community Ecologist  
(225) 765-2975, abass@wlf.la.gov
- Jeff Boundy** - Herpetologist  
(225) 765-2815, jboundy@wlf.la.gov
- Blain Cerame** - Technician  
bcerame@wlf.la.gov
- Connie Dunn** - Administrative Assistant  
(225) 765-2811, cdunn@wlf.la.gov
- Beau Gregory** - Zoologist  
(225) 765-2820, bgregory@wlf.la.gov
- Judy Jones** - Natural Areas Registry Coordinator  
(225) 765-2822, jjones@wlf.la.gov
- Keri Landry** - Field Biologist  
(225) 765-2809, klandry@wlf.la.gov
- Nicole Lorenz** - Data Manager  
(225) 765-2643, nlorenz@wlf.la.gov
- Carolyn Michon** - Assistant Data Manager  
(225) 765-2357, cmichon@wlf.la.gov
- Chris Reid** - Botanist  
(225) 765-2828, creid@wlf.la.gov
- Michael Seymour** - Nongame Avian Biologist  
(225) 763-3554, mseymour@wlf.la.gov