

LOUISIANA NATURAL AREAS REGISTRY

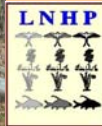


Quarterly Newsletter

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Working with Landowners to
Conserve Louisiana's
Ecologically Sensitive Lands



See back page for photo details

Natural Areas Registry Update

This quarter, we recognize landowners of six new Natural Areas for protecting their ecologically important properties. These new Natural Areas encompass 1,876.1 acres.

⊗ Arkansas Oak Natural Area

- This site is owned by the US Army Corps of Engineers and they have eight registered Natural Areas at Bayou Bodcau in Bossier and Webster Parishes encompassing 3,983.4 acres (Bear Creek, Cason, North Pond, Old, Peananny Creek, Upper Calico Creek, Whittington Fields, and Wenks Landing Seep).

⊗ Eddie D Jones Park Natural Area

⊗ Dickson Nature Preserve Natural Area

⊗ Heartwood Natural Area

⊗ Snider Bend Natural Area

⊗ Walter B Jacobs Memorial Nature Park Natural Area

ARKANSAS OAK NATURAL AREA consists of 673 acres and is owned by the USACOE at Bayou Bodcau Dam and Reservoir in Bossier Parish. It consists of two community types that include a mixed hardwood-pine forest and a small stream forest. The primary tree species in this mixed hardwood-pine forest include mixed pines, loblolly (*Pinus taeda*) and shortleaf (*Pinus elliottii*), and hardwoods (oaks and hickories) on sandy ridges and slopes



adjacent to Bayou Bodcau. Several species such as Georgia holly (*Ilex longipes*) and bull nettle (*Cnidioscolus texana*), shown at right, give the area a sandhill woodland element, but bluejack oak (*Quercus incana*), the best indicator of xeric sands, has not been found on the area. Also included in the natural area are depressions and seeps between the ridges and knolls supporting bottomland hardwood species such as laurel oak (*Quercus laurifolia*), willow oak (*Quercus phellos*), and deciduous holly (*Ilex decidua*). As the name implies, this Natural Area was created to capture Arkansas Oak (*Quercus arkansana*). Arkansas oaks at this site are common on the sandy ridges, knolls, and bayou bank. Regeneration of Arkansas Oak is evident by the presence of seedlings and saplings.



EDDIE D JONES PARK NATURAL AREA consists of 782



acres and is owned by the Caddo Parish Parks and Recreation Department. It includes two plant communities: hardwood slope and small stream forests. These communities occur in



all parts of Louisiana. Hardwood slope forests are a variable mixed forest, usually occurring on slopes rising out of small stream floodplains that dissect pinelands. Soil moisture increases down slope. Small stream forests are relatively narrow wetland forests occurring along small rivers and large creeks. These forested wetlands are critical components of the landscape, filtering surface and subsurface flows, improving water quality, and storing sediment and nutrients. They are seasonally flooded for brief periods. The state-rare downy yellow violet (*Viola pubescens*), shown at top left, and a new state record of a bee reported to occur from Texas to Georgia (*Panurginus polytrichus*) were found on the park.

DICKSON NATURE PRESERVE NATURAL AREA consists



of 173 acres and is owned by George S. Dickson, Charles Fitzpatrick, Frances J. Schmidt, Nelson Walters, and Anthony Walters in Desoto Parish. It contains excellent examples of unique natural communities including the state and globally rare saline prairie, and associated post oak woodlands, sloughs, small pond depressions and riparian forest. The site occurs on low flat terraces adjacent to Cypress Bayou interspersed with an occasional slight ridge. Riparian or small stream forest occurs adjacent to the bayou, and forested vegetation extends approximately 300 meters southward from the waterway. The forest composition changes as the elevation increases south of the bayou. Sloughs and small pond depressions are scattered throughout the forest, and small pockets of saline prairies appear as one approaches the southern edge of the forest grading into the largest of the saline prairies present on the site. These large saline prairies contain both scattered pimple mounds sparsely vegetated with shrubs and trees, and small barren or semi-barren salt slicks. The woodlands to the south



of the large prairies are almost savannah-like, with widely spaced trees and a grassy, open understory. Small prairies are found in a mosaic throughout this woodland. Nineteen state and globally rare plant species populations including earth fruit (*Geocarpon minimum*) shown at bottom left has been confirmed on the site.

HEARTWOOD NATURAL AREA consists of 75 acres in Union Parish and is owned by Kelby and Amy Ouchley. It contains three plant community types, a mixed hardwood-



loblolly pine forest with some shortleaf pine, a hardwood slope forest, and a few small forested seeps. Most of Heartwood Natural Area exhibits old-growth characteristics including mature trees (greater than 100 years old), has numerous large vines, and an open understory with scattered shrubs and young trees. Hardwood slope forests usually occur on slopes rising out of small stream floodplains that dissect pinelands. Forested seeps typically occur in mixed pine-hardwood forests, on hillsides, at the base of slopes, and in the narrow bottoms of small perennial or intermittent streams. They are limited in size, seldom larger than a few acres, and are continually moist due to constant seepage forced to the surface by an underlying impervious layer. The understory is typically covered with ferns and sphagnum moss is often abundant. We spotted blue-gray gnatcatchers (*Polioptera caerulea*) at their nest in a hawthorn tree while surveying (photo of nest above has lichens on the outside).

SNIDER BEND NATURAL AREA consists of 5.4 acres in Beauregard Parish and is owned by George Melancon. It contains an excellent example of a state and globally rare Flatwoods Pond community. Flatwoods Ponds are relatively small, natural depressional wetlands embedded within current or historical longleaf pine flatwoods / savannahs of western Louisiana. They are believed to occupy swales and depressions remaining from ancient Pleistocene stream channels, and are often linear in shape, although circular and elliptic ponds are common.



Generally treeless, these ponds are vegetated by a variety of obligate and facultative wetland herbaceous species, mainly tall sedges and grasses. Historically fire maintained this longleaf plant community by killing encroaching



shrubs and trees and rejuvenating the herbaceous ground cover. A couple of interesting plants pictured on page two that were seen at Snider's Bend are white topped sedge (*Dichromena colorata*) and a tiny insectivorous plant, sundew (*Drosera* sp.) shown at bottom on page 2 (photo by Lee Casebere, USDA NRCS).

WALTER B JACOBS MEMORIAL NATURE PARK NATURAL AREA

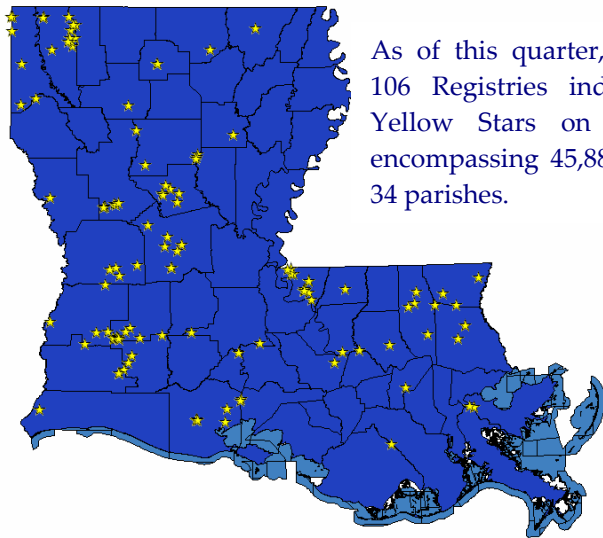
consists of 167.7 acres and is owned by the Caddo Parish Parks and Recreation Department. It includes an excellent example of a mixed hardwood-loblolly forest. Shettleworth and Fordney Bayous intersect on the park and periodically flood low lying areas. Fifteen state-rare plants have been recorded at this site including



common shooting-star (*Dodecatheon meadia*), Kentucky Lady's slipper (*Cypripedium kentuckiense*) shown above, American alumroot (*Heuchera americana*), Granite gooseberry (*Ribes curvatum*), and nodding pogonia (*Triphora trianthophora*). A state-rare animal, Strecker's Chorus Frog (*Pseudacris streckeri*), and a state imperiled bird, white-breasted nuthatch (*Sitta carolinensis*), shown left has been



recorded here also. Additionally, in 2006, a new crawfish species, Caddo chimney crawfish (*Procambarus machardy*), was identified and described. This crawfish inhabits the park's bayous.



As of this quarter, there are 106 Registries indicated by Yellow Stars on the map encompassing 45,885 acres in 34 parishes.

LNHP SPECIAL PROJECTS

A number of commitments for special projects are being conducted and planned for completion in 2007 by LNHP staff. These include: field surveys for state imperiled and/or threatened / endangered plant communities Morse clay

prairies, plants (earth fruit and pondberry), and animals (Louisiana pearlshell, Gopher tortoise, and Louisiana pine snake); breeding bird surveys; book updates (coastal zone); globally imperiled species fact sheets; manatee educational materials development; and data exchanges with NatureServe and other organizations. Most of these are described in more detail below.

Zoology Program Activities

In addition to tracking about 175 animal species, the Zoology Program has several projects keeping us busy this year. A few of the animals that we are working with include the Louisiana pearlshell mussel (*Margaritifera hembeli*), shown right, the Louisiana pine snake (*Pituophis ruthveni*), the West Indian manatee (*Trichechus manatus*), and the



gopher tortoise (*Gopherus polyphemus*). Our mussel project consists of surveying all of the privately owned portions of the creeks in Grant and Rapides Parishes where this special mussel is known to occur. Thus far we are excited to report that we have located several areas in these creeks from which the pearlshell was previously unknown. The Louisiana pine snake is believed to be one of the rarest snakes in North



America, and it spends most of its time underground in pocket gopher burrow systems. For these reasons it is very difficult to capture and consequently little

is known about this animal. LNHP is currently testing new and possibly more efficient methods for capturing this uncommon reptile thus enabling researchers more opportunities to learn more about its natural history. Not many citizens are aware that there are manatees (pictured above) in Louisiana during the summer months, creating a need for our manatee public awareness project. Our plans include posting signs in and around known manatee areas making boaters aware of the need to drive slowly to prevent propeller injuries to these animals. Finally, we have plans to

survey for gopher tortoises, shown right, in the southeastern part of the state. These rare tortoises often construct their burrows on utility rights of way, and may have been impacted by



the reconstruction after hurricane Katrina. LNHP plans to survey these areas in order to gather information on this animal's current population status. (Gopher Tortoise photo by Chris Evans, The University of Georgia, www.forestryimages.org)

Ecology Program Activities

In 1987 and 1988, the Louisiana Department of Wildlife and Fisheries Natural Heritage Program (LNHP) produced two manuals containing information on the plant and animal species of special concern, and natural communities of Louisiana's coastal zone (*Plants and Animals of Special Concern in the Louisiana Coastal Zone; The Natural Communities of Coastal Louisiana*). These manuals have been widely distributed over the past 2 decades and



used by a variety of groups including university academics, K-12 instructors, environmental consultants, non-governmental organizations (NGOs), and state and federal government agencies. However, due to the tremendous changes that have occurred along the Louisiana coast during this time period, and also the additional data that has been collected regarding coastal biological resources since 1988, these manuals are outdated. With funding provided by the Barataria-Terrebonne National Estuary Program (BTNEP), the LNHP ecology program has begun production of an updated version combining both species of concern and natural communities for each of the river basins within the LA coastal zone. Fact sheets will be produced for each rare coastal species and natural community, and each will contain a general description, a distribution map, current conservation status, and photos or illustrations as available. These new fact sheets will provide an avenue to educate both general citizenry and students at the K-12 levels regarding rare species and natural communities and will contribute to public commitment for preserving the natural heritage resources of the Louisiana coast. By providing the information on species of concern and natural communities in a single concise source, landowners, land managers, policy decision makers, ecologists, conservation planners, educators and many others will have ready access to the information needed for their various decisions and planning projects. Supplying the most current biological information for the coastal zone will facilitate conservation and restoration



efforts, and will thereby potentially impact the integrity and long-term viability of the state's coastal biological resources. Upon completion of the project, this information will be made available on the LDWF and BTNEP websites. The project began in May 2007 and will be completed by February 2008.

Another ongoing activity of the ecology program includes surveys of northwest and central Louisiana for new saline prairie locations. As a result, four new parishes have been added to the saline prairie range within Louisiana (Caddo, Desoto, Bienville, and Sabine).

Data Exchanges

LNHP and the Louisiana Department of Transportation and Development (DOTD) are currently working together on a Wildflower project. This project involves looking at all of the rare, threatened, and endangered species that occur within a ½ mile buffer of all interstates, US Highways and LA Highways. Once the species have been identified, Chris Reid (LNHP Botanist) and Herb Piller (DOTD Landscape Architect) will work on a plan for management of these species.

Botany Program Activities

Our native flora consists of about 2,400 species, and we track about 380 rare species. "Tracking" means collecting data on occurrences of these species, mapping them, and entering geographical and population data into a database. 380 species and a large state to cover are rather overwhelming. Field inventory priorities are set in the off-season and are based on global rank, data gaps, etc. More intensive focused surveys take place as funding is secured. We received Section 6 funding this year from U.S. Fish and Wildlife Service to conduct surveys for two federally-listed species: earth-fruit (*Geocarpon minimum*), photo shown in Dickson



Nature Preserve on page 2, and pondberry (*Lindera melissifolia*), shown at left. As part of the earth-fruit survey, we established 40 monitoring plots to record long-term population trends. We

were able to hire a contractor to do much of this work. The earth-fruit survey resulted in the discovery of three new stations for this species. The pondberry survey is being done "in-house" and will continue through the fall. Pondberry has not been recorded in Louisiana in 150 years so it would be really nice to re-discover it. Sites being visited this year for general botanizing include saline prairies in northwest Louisiana (especially Dickson Prairie), Pass a Loutre WMA, White Lake Preserve, and Caddo Lake, among others. Other

activities keeping the botanist busy are performing plant identification within LDWF and to the public, and assisting LDWF staff with deer browse surveys and growth monitoring plots.

PEREGRIN FALCON

Falco peregrinus



State Status: Threatened/Endangered (Dec 20, 1989)

Description: This crow-sized falcon is admired for its incredible speeds that are seldom exceeded by any other bird. Plunging from tremendous heights, the peregrine falcon can reach up to 180 mph in pursuit of prey. Adult peregrines are slate-gray above and pale below, with fine dark bars and spots on their under parts. Both adult and immature falcons have a wide, dark "moustache" mark below the eye. The tail is narrow and the wings long and pointed. Juveniles are brown overall, with dark streaking below. Airborne, this falcon can be recognized by characteristic rapid wing beats interspersed with long glides. Adult photo by Steve Maslowski with USFWS.

Life History: Peregrine falcons generally return to the same nesting territory annually and mate for life. The courtship flight is a spectacular sight. The pair climbs high in the air and performs a precise acrobatic act of whirling spirals and steep rapid dives, often touching in midair. The average clutch consists of three to four eggs that hatch after an incubation period of 29-32 days. The single brood fledges after 35-42 days. Both parents participate in incubation and brooding activities, but the female remains at the nest for the majority of the time while the male hunts and brings food to



her and the young. Young falcons may stay in the area for about six weeks after they fledge, developing their flying and hunting skills. Sexual maturity is generally reached at two years of age, but one-year-olds have been known to produce young. Individuals may live as long as 20 years.

Habitat: Rivalled only by the Osprey, the Peregrine Falcon has one of the most global distributions of any bird of prey. This falcon is found on every continent except Antarctica, and lives in a wide variety of habitats from tropics, deserts, and maritime to the tundra, and from sea level to 12,000 feet. Peregrines are highly migratory in the northern part of their range.

Diet: Peregrines chiefly hunt birds such as starlings, pigeons, blackbirds, jays, shorebirds, and waterfowl, but will rarely take mammals, reptiles, or insects. Peregrines may use a variety of hunting techniques, but typically prey is captured in the air after fast pursuit or a rapid dive to catch the prey.

Reproduction: Peregrine Falcons frequently nest near water on ledges of rocky cliffs or buildings, but occasionally will use abandoned stick nests of other species. They do not build nests, but scrape a small depression out of the soil. Peregrines lay 3 - 4 eggs, which are incubated for about 34 days.

Name Derivation: The scientific name comes from the Latin words *falco*, meaning hook-shaped (falcate) and may refer to the beak or claws, and *peregrinus*, meaning to wander. Peregrines have also been called Duck Hawk, Great-footed Hawk, and Wandering Falcon.

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We acknowledged four new Natural Areas Registries that encompassed 290.01 acres. Total Registry acreage was 43,841 for 100 Registries in 32 of 64 parishes. We covered Henslow's Sparrow, Saline Prairie community, and "Why Save Endangered Species?"

Picture on front page was taken at Kisatchie National Forest's Sheard Branch Boulder Natural Area. Kisatchie National Forest (KNF) botanists, Peter Nilles, Converse Griffith, and Shannan Sharp hosted a Natural Areas Field Day on April 23, 2007. Owners from 3 Natural Areas Registries attended along with of the Louisiana Natural Heritage Program staff. Five of KNF's 13 registered Natural Areas were visited. We all had a great time and accidentally picked a lunch spot that was recently visited by horses for an aromatically challenged experience.

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