

LOUISIANA NATURAL AREAS REGISTRY

Quarterly Newsletter

September 2009

Volume 7

Number 1 of 4



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

http://www.Louisiana.gov/experience/natural_heritage/naturalareasregistry/

Can you guess what this is? Page 6 for answer.

Update on Louisiana Quillwort Transplanting

You may recall from our December 2008 newsletter that several government and non-government groups, including some members of our own Natural Areas Registry, joined forces in October 2008 to reintroduce federally endangered quillwort plants (*Isoetes louisianensis*) moved during bridge improvements along Abita Creek in St. Tammany Parish, Louisiana.

Surveys of Abita Creek for relocation and survival counts of LA quillwort transplants were conducted in March 2009 by LNHP and The Nature Conservancy. GPS points and notes from the October, 2008 transplanting were used to relocate planting sites. Individual plants were then searched for and counted if found. This information was noted for each of the GPS planting location points.

Of the original 124 transplants, a total of 65 were relocated or approximately 52%. In general, water levels in the creek were slightly higher than during the October transplanting, and therefore plants were usually found submerged (figure below).



Sediment and leaf debris were both heavy in the creek, and many of the plants were found partially covered. There may have been other quillwort individuals that were not found due to the heavy degree of sedimentation, and actual survival rates may be slightly higher than the 52%. Rather than relying on GPS points, it would be helpful in future transplant efforts to mark groups of transplants with staked flags to facilitate relocation for survival

counts. Monitoring of transplant survival will continue in 2010, with plans for project expansion.

The preliminary results from this project will be presented in poster format at the Center for Plant Conservation (CPC) Reintroduction Symposium to be held October 21-22, 2009 in St. Louis, MO. Presenters will explore the past and current state of knowledge about plant reintroductions and their role in improving endangered species conservation. Anita Tiller, our partner with Mercer Arboretum & Botanical Gardens in Texas will represent the group and present the results of the quillwort project at the meeting. For more information on CPC, visit their website at: www.centerforplantconservation.org. ♣

PLANT COMMUNITY

Macon Ridge Green Ash Pond

We do not have any Natural Areas Registries in this plant community.



Rarity Rank: S1/G2

Synonyms: spicewood pond

Ecological Systems:

CES203.193 Lower Mississippi River Flatwoods

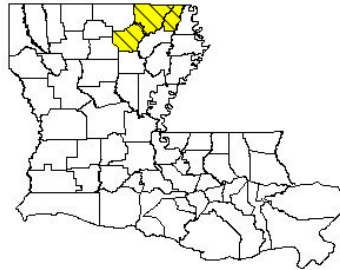
General Description: The Macon Ridge Green Ash Pond community is restricted to northeast Louisiana, primarily on the Macon Ridge. These are small depressional isolated ponds that are often surrounded by agricultural fields but were historically found within hardwood flatwood forests. These ponds do not receive alluvial flooding, but instead collect storm water and seepage from the surrounding landscape. This community is also a potential habitat for *Lindera melissifolia* (pondberry, state

historical (SH) record, very rare Globally (G2) "Imperiled", and a federally listed endangered plant.

Plant Community Associates: *Characteristic overstory species include* *Fraxinus pennsylvanica* (green ash), *Ulmus americana* (American elm), *Populus heterophylla* (swamp cottonwood), *Nyssa biflora* (swamp blackgum), *Quercus lyrata* (overcup oak), *Quercus nigra* (water oak), and *Celtis laevigata* (sugarberry). *Characteristic understory species include* *Diospyros virginiana* (persimmon), *Planera aquatica* (water elm), *Acer rubrum* var. *drummondii* (swamp red maple), *Styrax americanus* (snowbell), *Ilex decidua* (deciduous holly), *Cephalanthus occidentalis* (buttonbush). *Common herbaceous species include* *Arundinaria gigantea* (switchcane), *Sambucus canadensis* (elderberry), *Sabal minor* (palmetto), *Campsis radicans* (trumpet creeper), *Vitis* sp. (wild grape), *Smilax* sp. (greenbriars).

Federally-listed plant species: *Lindera melissifolia* (pondberry)

Range and Geology: The Macon Ridge Green Ash Pond community is located in Northeast Louisiana within the Macon Ridge and adjacent areas. The **Macon Ridge** ecoregion is a prominent ridge that consists almost entirely of early-Wisconsin glacial outwash. Although it is a continuation of



the Western Lowlands Pleistocene Valley Trains, it is generally higher. The eastern edge of the region is higher than the west, 20 to 30 feet above the adjacent Northern Holocene Meander Belts, and it has a veneer of loess, similar to areas in the Grand Prairie and Bluff Hills ecoregions. On the western side, elevations of the ridge are approximately the same as those in the Arkansas / Ouachita River Holocene Meander Belts so that it is sometimes difficult to distinguish the two at the surface. Macon Ridge is better drained and supports drier plant communities. Forest types range from those of wet flats dominated by willow oak, water oak and swamp chestnut oak to upland hardwood forests dominated by white oak and southern red oak, with post oak on more xeric sites. Cropland is extensive; corn, cotton, and rice are prominent crops, and half of the farmland is irrigated. [http://www.eoearth.org/article/Ecoregions_of_the_Mississippi_Alluvial_Plain_\(EPA\)](http://www.eoearth.org/article/Ecoregions_of_the_Mississippi_Alluvial_Plain_(EPA))

Above at right is an aerial of a verified Macon Ridge Green Ash Pond where photos were taken for this community. We use aerials to locate plant communities across the state like this one, however, this community can be especially difficult to distinguish from similar forested communities. As you can see below at left, a possible Macon Ridge Green Ash Pond may exist. The only way to be absolutely positive is to visit the site and verify the existing ecological indicators.

Threats & Management Considerations: Little is known about both the historic and current extents of spicewood ponds on the Macon Ridge. Land survey data and topographic maps may provide some of this information. It is known that many of these ponds have been lost to agricultural development, and continue to be threatened by farming practices in the way of hydrologic alterations, chemical runoff and contamination, trash dumping, and invasive species.

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 Macon Ridge green ash ponds. Such management strategies should include:

- ♣ Preventing conversion of existing natural ponds to other land uses
- ♣ Maintain natural species composition by following appropriate hardwood management techniques
- ♣ Surveying for and removal of any invasive plant species (exotics or woody) with use of spot herbicides or mechanical means
- ♣ No soil disturbance or other activities that alter natural waterflow, including from adjacent areas. ♣

LSU's Herbarium Plant Keys

www.herbarium.lsu.edu

Do you need help identifying a plant? Check out Louisiana State University's (LSU) Herbarium web site that allows you to search for plants by selecting tabs at www.herbarium.lsu.edu/plants/. Search categories include *Browsing Taxonomy*, *Collection*, *Checklist*, *Images*, *Interactive Map*, *FactSheets*, and *Interactive Keys*. The LSU Herbarium staff studies biodiversity of green plants, lichens, and fungi from the state of Louisiana and around the world. The Herbarium maintains a permanent reference collection that documents the historical distribution and composition of the local flora, provides botanical information to researchers and the general public via specimen and web-based interfaces, and specializes in research on native and introduced plants and fungi, their ecology, and evolution. The Department of Biological Sciences within the College of Basic Sciences oversees the Herbarium and staff include Dr. Lowell Urbatsch (Director & Professor, Biological Sciences), Dr. Meredith Blackwell (Mycologist & Boyd Professor, Biological Sciences), and Dr. Diane M. Ferguson (Collection Manager, LSU & LSU-M). They also collaborate with the LSU Museum of Natural History.

Tabs for searching LSU's Herbarium Plant Keys include:

Browse Taxonomy – select Taxonomy, Family, Genus, Regions, East Baton Rouge Parish and Collectors to search for species.

Search Collections - select filters for Category (dicot, fern, fungi, etc), Family, Genus, Species, Common Name, Country, State,

Parish/County, Locality, Catalog #, Collector, Collector #, Collected Start, and Collected End.

Checklist - select Locations and Filters that display species by Combined Checklist or by Regional Biodiversity.

Images - select Filter Characters (Awn, Color, Fruit Type, etc) and by Filter Images by selecting Family

Interactive Map - view an area of interest via Map, Satellite, Hybrid, or Terrain. A Graph is displayed below the map with the number of records on a ten-year interval that have been collected. Information can be viewed by selected tabs to the right of map that include Records, Data Sources, Search, and Help.

Fact Sheets - search species alphabetically that displays detailed information and close up photo identification

Interactive Keys that include allows you to select Key Searches by Keys Index, Specimen Database, Carex, Cyperus, Eleocharis, Juncus, Kyllinga, Rhynchospora, Scleria, Xyris, and Image Glossary. Answer features about a plant and a list is displayed that reflects your input until your plant species is identified or a short list of possibilities is displayed. ♣

BIRDING FALL MIGRATION

Occurs Mid-July through October
by America's Wetland Resources

http://www.americaswetlandresources.com/wildlife_ecology/birding/fall.html

Fall Migration peaks early September through mid October

Each year after nesting is completed and young are fledged, millions of seabirds, waterfowl, wading birds, raptors, shorebirds, and land birds (such as hummingbirds and swifts, flycatchers, warblers, vireos, thrushes, and orioles) move south from northerly breeding sites to spend the winter in warmer climates. Some may fly south only as far as Louisiana and make coastal Louisiana their winter home. Others pass through and continue further south to the West Indies, Mexico, Central and South America. Louisiana's diverse habitats, swamps, marshes and forested wetlands provide food and shelter for fall migrating birds.

Where do the migrants come from? Image below right from http://www.hunter-ed.com/wildlife/upland_birds.htm

Pacific Flyway

Central Flyway

Mississippi Flyway

Atlantic Flyway

Coastal Louisiana is located at the southern end of the Mississippi or Central Flyway. They arrive from Western Alaska and across Canada, the



northern ends of the Mississippi flyway on the Great Plains, and eastern parts of the United States. Migrating birds are funneled to the Louisiana coast as they fly southward. They are channeled to Louisiana by the geographic slope of the continent and continental

September 2009

air currents. As they approach the Gulf of Mexico their route is either over open water across the Gulf of Mexico (trans-Gulf) or they follow the western coastline of the Gulf (circum-Gulf). Fall migration routes for some species are different in spring and fall; species generally absent from Louisiana's coast during spring migration can easily be seen during the fall migration (Alder Flycatcher, Mourning Warbler, Prairie Warbler). Some species common during spring migration are absent during fall migration (American Golden Plover, Hudsonian Godwit, White-rumped Sandpiper, and Blackpoll Warbler).

Fall migration is of long duration spanning several months and beginning as early July and extending into early December.

Aggregations of migrating Purple Martins appear in late June. Huge numbers can be seen congregating in July on the New Orleans Causeway, which connects East Florida Loop 12 and Orleans Loop 2 loops, especially (site 7-2). Shorebirds start to return to Louisiana's rice fields by early July. The first adults are returning from their Arctic nesting sites; and young birds



follow typically about a month behind adults. Great Crested and Least flycatchers and Black-and-white warblers appear in coastal cheniers also during July. Species diversity increases through August. September and October offer the best opportunities to see the greatest species diversity of southbound migrants along the coast.

Fall migration is more leisurely than that of spring. Periods of southerly flow may



concentrate more birds, but in general fall bird watching is not as hit or miss in the coastal cheniers as it is during spring migration—there are always migrants to look at. An additional challenge for fall bird watchers is that many songbirds will be in unfamiliar, often drab, winter plumage. This is especially true for many warblers that were so brightly colored and easily identified in spring, such as Chestnut-sided (shown in Spring above and Fall plumage at right) and Bay-breasted. Sometimes a glimpse of an unidentifiable warbler is referred to humorously as a “confusing fall warbler”.



Southbound migrants are rarely as concentrated as they can become during a spring “fall-out,” but weather does play a role.

Occasionally birds “fall-out” during the fall. During September and October, large numbers of raptors and swallows can be seen moving west along the coast following a front. Ducks and geese are typically using the north winds of later fronts. Just as tired migrants can be seen coming in off the Gulf during spring migration, occasionally birds are accidentally blown out over the Gulf during the night by strong north winds. From sparrows to geese, these birds are often seen making their way back north from out over the Gulf. ♣

Farewell from Patti Faulkner



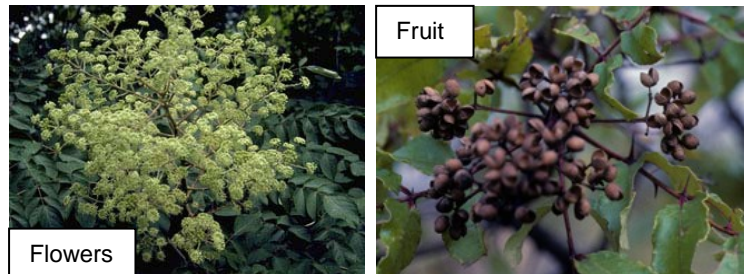
It's with great sadness that I bid farewell to Louisiana, and all the wonderful friends that I've made through my work with the Natural Areas Registry. Starting in November, my husband and I will make our new home in eastern West Virginia where we will be closer to our family, and where I hopefully will continue my conservation efforts. It has been an honor and privilege to work with so many landowners and land managers who truly care about Louisiana's natural areas, and who put those concerns into action. In the words of Garrison Keillor, “Be well, do good work, and keep in touch.” Patti Faulkner – Faulkner.patti@gmail.com. **Photo of Patti in a bed of *Rudbeckia triloba* – Three-lobed Coneflower, a Louisiana state-rare plant.** ♣

Photo from the front page is a close up of a **Toothache Tree or Hercules Club (*Zanthoxylum clava-herculis*)** taken at Caddo Parish's Eddie D Jones State Park Natural Area in the small stream forest in the center of the park (photo at left from park). Toothache trees have beautiful flowers that bloom from April through June that attract butterflies and serve as larval host for the Giant swallowtail butterfly (*Papilio cresphontes*). If you find



tiny pale green eggs on the tips of the new leaves, then you'll know your toothache tree has been discovered by a Giant swallowtail butterfly. The eggs hatch into caterpillars that look almost exactly like bird droppings—a great disguise that helps protect them from predators! Seeds are eaten by many species of birds and by many small and large mammals. Foliage is eaten by

deer and other mammals. Its trunk is dotted with large, corky, domelike outgrowths, and every part of it—leaves, wood, bark, roots, flowers, and fruit are lemon-scented. The big, complicated leaves are glossy and prickly, and the hard little red summer fruits attract mockingbirds and catbirds. If you chew on a berry or a bit of bark, your mouth will go numb; not surprisingly, these parts of the plant were once used in home remedies to relieve toothaches.



<http://www.gwf.org/resources/wildlifehabitats/zanthoxylumclavaherculis.html>

http://tpid.tpwd.state.tx.us/species_report.asp?species=111 ♣

Previous Newsletter, June 2009, Vol. 6, No 4 of 4. We recognized two new Natural Areas Registry members that brings the total number of registries to 110 with 46,689 acres being protected in 34 parishes. Photos from the past year of sites that we visited. Research project update on insect assemblages of rare Saline Prairies by Mindy Mayon on two Natural Areas. Close up of photo of an eye of the Blue-ringed Dancer (*Argia sedula*) was the animal to guess for this quarter.

Louisiana Natural Heritage Program Staff

Program Coordinator - Gary Lester
(225) 765-2823, g Lester@wlf.louisiana.gov
Administrative Assistant - Connie Dunn
(225) 765-2811, cdunn@wlf.louisiana.gov
Zoologist - Beau Gregory
(225) 765-2820, bgregory@wlf.louisiana.gov
Community Ecologist - Patti Faulkner
(225) 765-2975, pfaulkner@wlf.louisiana.gov
Botanist - Chris Reid
(225) 765-2828, creid@wlf.louisiana.gov
Data Manager - Nicole Lorenz
(225) 765-2643, nlorenz@wlf.louisiana.gov
Assistant Data Manager - Carolyn Michon
(225) 765-2357, cmichon@wlf.louisiana.gov
Field Biologist – Keri Landry
(225) 765-2809, klandry@wlf.louisiana.gov
Nongame Avian Biologist – Michael Seymour
(225) 763-3554, mseymour@wlf.louisiana.gov
Natural Areas Registry Coordinator Judy Jones
(Contractor) (225) 765-2822, jjones@wlf.louisiana.gov
Newsletter editor / publisher