

The Crosby Arboretum

Mississippi State University Extension Service

Quarterly News Journal

Summer 2016

30.3

THE MISSISSIPPI NATURAL HERITAGE PROGRAM

State Monitoring of Rare Plants

The Mississippi Natural Heritage Program (MNHP) is part of the Mississippi Wildlife, Fisheries, and Parks and is housed at the Mississippi Museum on Natural Science. The MNHP identifies and maps the localities of Mississippi's rarest plants, animals, natural communities, and special geological features. This information is used to promote and facilitate sound stewardship and wise decisions concerning land and water resources. The MNHP database is updated continuously and utilized to portray the distribution of each species, to determine its degree of rarity, and assist with development of state, national, and global priorities for the preservation of natural diversity. Established in 1976 as a cooperative agreement between The Nature Conservancy and the Mississippi Parks Commission, it is part of an international network of State Natural Heritage Programs and Conservation Data Centers, all building on the same data collection methodology.

The program has four major areas of activity:

1. To obtain information on the status and location of rare biota and other entities of conservation interest by conducting field surveys for new occurrences and verifying existing records.
2. To maintain distributional and status information on rare biota, exemplary natural communities, and other features of conservation interest.
3. To use information in the database to facilitate conservation of these entities during the environmental review process.
4. To manage and promote the Natural Areas Registry and the Scenic Streams Stewardship Program, both of which encourage landowners to voluntarily protect special habitats and streamside areas through either non-binding conservation agreements or long-term conservation easements. State and Federal income tax incentives exist for landowners who protect these areas through the creation of conservation easements.

The Natural Heritage Program publishes its lists of tracked species on the website: <http://www.mdwfp.com/seek-study/heritage-program.aspx>. The program uses the Heritage ranking system developed by The Nature Conservancy to assign rarity ranks to each species. A species is assigned two ranks: one representing its global status and the other for its status in the state. In both cases a number indicates the rarity of the species, with "1" denoting



American Chaffseed (Schwalbea americana), a wetland perennial, is a state monitored, federally Endangered species (photo courtesy Jason Ksepka).

five or fewer populations; "2", 20 or fewer populations; "3", 100 or fewer populations; "4", over 100 populations; and "5", abundant populations. The Natural Heritage Program only monitors species with 100 or fewer populations, which are state ranks "1-3." Additionally, species may have a federal status of "Endangered" or "Threatened." If a species is "Endangered," it is in danger of extinction throughout all or a portion of its ranges. A "Threatened" species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. For example, Louisiana Quillwort (*Isoetes louisianensis*) has a global rank of "G2G3", a state rank of "S2" and is federally "Endangered." This means that, globally, there are fewer than 100 populations and in the state, fewer than 20 populations. The program currently monitors 585 Mississippi plant species. Of these, three are listed as federally "Endangered", including Louisiana Quillwort, American Chaffseed (*Schwalbea americana*), and Pondberry (*Lindera melissifolia*). Price's Potato Bean (*Apios priceana*) is federally "Threatened."

A simplified version of the MNHP database is available online at <http://www.mdwfp.com/seek-study/heritage-program/nhp-online-data.aspx>. On this webpage, you can generate either a list of the plants and animals by county or list all the counties in which a species has been documented. If you wish to report a species, please contact the MNHP at heather.sullivan@mmns.state.ms.us (plants) or tom.mann@mmns.state.ms.us (animals).

- *Heather Sullivan, Botanist, Mississippi Department of Wildlife, Fisheries and Parks*



The Crosby Arboretum Mississippi State University

A regional arboretum representing the native flora of the Pearl River Drainage Basin in Mississippi and Louisiana.

Picayune, Mississippi, USA

Director's Notebook:

It is impossible to produce a quarterly news journal without continually looking back in awe over the past season, and pondering how we have accomplished so much with our small staff. This assessment inevitably leads to a feeling of deep gratitude. We are able to achieve what we do because of the many persons who give their support and time to further the mission of the Crosby Arboretum – visitors, members, volunteers, donors, and the individuals scattered across the country who are appreciators of our public garden and the principles that continue to guide its development. This land may at first appear to be incredibly ordinary, but the more time spent here will reveal instead that it is the rarest of the rare, the perfect combination of persons and circumstances joined to create a proverbial whole greater than the sum of its parts.

As we approach the end of the spring season, our membership now numbers 345 persons. We did not see this total until October of last year. A large part of our growth is due to the continual membership recruiting efforts of office associate **Sherri Lowe**. The Arboretum's volunteer program has been revitalized through the hard work of new coordinator **Kim Johnson**. Under her care, volunteer numbers have grown significantly over the past quarter. We've also benefited this season from several group volunteer projects. In late May, twelve members of the **Naval Oceanography Mine Warfare Center** at Stennis Space Center provided the Arboretum with some much-needed trail maintenance, and pruning of vegetation along the pathways. Because of our volunteers we are able to participate in area and community events, and spread the word about our activities and programs.

- **Patricia Drackett, Director**
The Crosby Arboretum, MSU Extension Service



The Pearl River County Partners in Leadership garden renovation project led by **Michelle Berdux, Sharon Guepet, and Laurie Langlois** was a huge success!



Collecting at Hillside Bog Natural Area: **Jason Ksepka** tagging a *A. michauxii* field specimen for the herbarium (left) and later adding it along with a specimen of *A. obovata* in his plant press (right).

SURVEY OF N. AMERICAN ASCLEPIAS BY OKLAHOMA STATE UNIVERSITY

In May, we learned from the Mississippi Native Plant Society that field technician **Jason Ksepka** was searching for locations within our region to collect milkweed (*Asclepias*) samples on behalf of **Dr. Mark Fishbein**, Associate Professor and Director of the Herbarium at **Oklahoma State University**, for a phylogenetic survey he is conducting. We contacted Jason to let him know the Arboretum might have some potential specimens. Both *A. lanceolata* (currently blooming) and *A. longifolia* (going out of bloom and setting pods) occur in our south pitcher plant bog. Board member **Julia Anderson** had also discovered *A. obovata* on a utility easement near her house, and this plant was also spotted in April by **Heather Sullivan** at our Hillside Bog Natural Area. In early May, we were also delighted to discover one *A. michauxii* at Hillside Bog.

For each plant mentioned above, Jason collected a genetic sample – one leaf, and one stem that contained reproductive parts for a herbarium voucher. It was fascinating to observe the care that he took in selecting each sample. At Hillside Bog, he located several more *A. michauxii* (setting pods) and *A. obovata* (still to bloom). We hope to collect seed here for our 2017 seed trials at the South MS Branch Experiment Station.

Jason is also a talented photographer. His excursions seem to take him to locations filled with endless subject matter. Visit his photo galleries at <http://jasonksepka.smugmug.com> for a healthy dose of snakes, carnivorous plants, and flowers galore, including – of course – some stunning *Asclepias* images. He mentioned he is interested in conducting milkweed preference trials (just as soon as he has time to sit still, that is) to determine which species Monarchs prefer over another. That is exciting!



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Heather Sullivan with one of the many books donated to the library by Dr. Jean Wooten, former curator of the USM herbarium.

LIBRARY DONATIONS

This spring, we received several delightful book donations for the Crosby Arboretum Library. Approximately one hundred volumes were donated by member **Dr. Jean Wooten**, botanist and former curator of the herbarium at The University of Southern Mississippi. On the same weekend that Jean brought us her many boxes, the Mississippi Native Plant Society just happened to be holding their annual meeting. Fortunately, state botanist Heather Sullivan was in attendance, and was able to give us an informative “walk” through Dr. Wooten’s collection, pointing out their merits and notable books in the group. It was an exciting excursion! We are grateful to Dr. Wooten for her kind donation, which included a plant specimen press. Books were also donated this spring by members **Bill and Rosie Schoell**, and **Dr. Charles Allen** (his *Louisiana Wildflower Guide*). Arboretum volunteer and Master Gardener **Tammy Mokray** has been hard at work cataloging these books into our library. By the way, we are in need of some extra bookcases for the library, should anyone know of one that is no longer needed.

FERNS OF MISSISSIPPI

Wondering about that fern you spotted in your backyard? Check out the Ferns of Mississippi website at <http://www.mississippiferns.com/>. Developed by Heather Sullivan and Alan Holditch, the site contains over 500 photographs, and lists all fern species native or naturalized in Mississippi. Easily identify fern species without knowing how to read a plant identification key by giving only a few characteristics about your specimen, and your selection can quickly be narrowed to the exact species.

UPDATE: VISIT MISSISSIPPI GRANT

Our **Visit Mississippi** tourism grant from the **Mississippi Development Authority** is drawing to a close. Through this \$15,000 award, we have increased public awareness of the Arboretum and improved the quality of the visitor experience. Some funds were spent on advertising in various venues, such as Facebook, and for a small cost we received a big return. Web developer **Andy Collins**, Coastal Research & Extension Center, placed ads for our major events and some programs, building attendance and also the number of “likes” on our Facebook page. Since September 2015, we’ve gained over 1,000 persons, who now view our posts about upcoming events.

We also brought speakers and performers to the Arboretum with the grant, such as Hazel & the Delta Ramblers and the Choctaw dance group for the Piney Woods Heritage Festival, and our spring Snakes program with Terry Vandeventer and butterfly program with Dr. Charles Allen. We purchased banner stands and other graphic displays, an event tent, and portable signs to help in conducting events. The grant also funded an 18-month calendar, a rack card to be distributed at Mississippi Welcome Centers and other venues, and other promotional items. We also contracted award-winning nature photographer **Lana Gramlich** to create a professional portfolio of images of Arboretum exhibits, plants, and the Pinecote Pavilion. Many of Lana’s images were incorporated into the new graphics designed by the MSU Ag Communications Department.

One major improvement was the purchase of a sound system, a flatscreen television, DVD player, and wireless mic for our program room so that attendees can hear the presenter speaking over the noise of the room’s HVAC unit. Groups will also be able to view our orientation film before going outside on a tour. By enjoying their time spent at the Arboretum, visitors now have even more reasons to spread the word about our activities!



Our new stands allow us to display banners at our big events.

ARBORETUM RECEIVES APGA GARDEN EXCELLENCE AWARD

The Crosby Arboretum was the recipient of the **2016 Garden Excellence Award** from the **American Public Gardens Association**, a prestigious national award given to one public garden each year. Past award recipients include Ladybird Johnson Wildflower Center, Longwood Gardens, Chicago Botanic Garden and Missouri Botanical Garden. The award will be presented in June during the association's annual conference in Miami.

QUAKING BOG EXHIBIT: FLOATING BRIDGE DESIGN & CONSTRUCTION

Students in **Dr. Tim Schauwecker's** spring Construction Cost Estimating class (LA 4724) at Mississippi State University developed bridge design details for the Arboretum's Quaking Bog Educational Exhibit. In April, they came down with Professor **Bob Brzuszek** and constructed sections of the floating bridge that will cross over the exhibit. The project area has been too wet to carry out the planned excavation, but we are hoping it will dry out soon.

DONATIONS AND MEMORIALS

The Arboretum extends our sincere thanks to **Stewart and Lynn Gammill** for their contribution to our 2015 Annual Appeal. This acknowledgment was omitted from our spring news journal. The appeal is funding the construction of a cypress deck at the south end of the Swamp Forest Trail, and will be constructed this summer. Memorial trees were planted this spring for **Grace Newberger** and **Dorothy Cook**, from Stewart and Lynn Gammill, and for **Mildred Tynkiw**, from Jessica Hewett.



The Boy Scouts and Cub Scouts with **Picayune Troop 2** and **Pack 2** are the second group to join the Arboretum's **Adopt a Trail Program** created by staff member **Sherri Lowe**. The Scouts adopted our Woodland Trail, and will carry out trail maintenance projects throughout the year. **Chris and Judy Schneidau** of New Orleans were our very first participants in the new program. They have adopted our South Slough Trail.

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Please send correspondence to:

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The Crosby Arboretum, P.O. Box 1639, Picayune, MS 39466

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Membership Application

All contributions are tax deductible to the extent allowed. For more information call: (601) 799-2311 or print form online.

_____ Student (send copy of student ID)	\$ 15.00
_____ Individual	30.00
_____ Family	40.00
_____ Donor	100.00
_____ Patron	250.00
_____ Benefactor	1,000.00
_____ Business	
_____ Sweetgum	100.00
_____ Sassafras	250.00
_____ Live Oak	500.00
_____ Bigleaf Magnolia	1,000.00

Name

Address

City

State Zip Phone

Renewing? Memberships are for one year.



MISSISSIPPI STATE UNIVERSITY.
EXTENSION

The Crosby Arboretum

Mississippi State University
P.O. Box 1639
Picayune, MS 39466-1639

Crosby Arboretum Program Schedule

June – August 2016

June 2016

SUMMER GALLERY OPENING EVENT: **PHOTOGRAPHY BY FRANK CUERVO**



Saturday, June 11, from 1:00 to 3:00 p.m.

Photographer **Frank Cuervo** has a passion for Nature Photography and a life-long interest in capturing images. Born in Havana, Cuba, he has traveled extensively to many countries and was an avid mountaineer and scuba diver, activities providing countless opportunities for photographing the natural world. Frank says, "Even humble plants and small creatures in the woods or backyard can be the subject of excellent photos." Open to the public. Light refreshments will be served, and admission is free. Exhibit on display through August 31.

PROJECT WILD TEACHERS' WORKSHOP

**Friday, June 24
9:00 to 3:00 p.m.**

Project WILD is one of the most widely-used conservation and environmental education programs by K-12 educators. This hands-on interdisciplinary workshop for teachers and homeschool educators will be taught by Mississippi Museum of Natural Science Outreach Educator **Sabrina Cummings**, who will focus on wildlife topics to show methods for teaching subjects across the curriculum. All materials will be provided. Prepare for a "working lunch" (bring a brown bag lunch). Both the workshop, and CEU's (.6) are FREE to educators. Please call the office at 601-799-2311 to register for this workshop by June 17.

SUMMER WILDFLOWER WALK

**Saturday, June 25
10:00 to 11:00 a.m.**

On a field walk on the Arboretum grounds, Director **Pat Drackett** will talk about the native wildflowers and other plants blooming this time of year, and how you can use them in your home landscape. Enjoy a stroll through the Arboretum's south Savanna Exhibit and pitcher plant bog. Bring your camera, and dress for walking. Members free, non-member adults \$5, children \$2. Register by June 24.

CHILDREN'S WORKSHOP: INSECTS

**Wednesday, June 29
10:00 a.m. to Noon**

Children will enjoy this fun and educational entomology event led by Hancock County Extension Agent **Christian Stephenson**. After a brief overview of insects, including why they are important to our environment, the children will go on an insect collecting expedition around the Arboretum grounds. Members free; non-members' children \$2. Children must be accompanied by parent or guardian (no charge for adults). Register by June 26.

July 2016

AQUATIC NATIVE PLANT SALE!



Saturday, July 9, 9:00 AM to Noon

Come early for the best selection of non-invasive native aquatic plants, including hardy water lilies, Texas star hibiscus, native iris, spider lilies, lizard's tail, arrow arum, and golden club. Many of these plants will be divisions from our exhibits. **Free admission!** The sale will be held in the Greenhouse area (Please use our Service Entrance).

Crosby Arboretum Program Schedule

July – August 2016

July 2016 (Con't.)

FLYING WILD TEACHER WORKSHOP

Thursday, July 14

9:00 to 3:00 p.m.

Flying WILD introduces students to bird conservation through standards-based classroom activities and environmental stewardship projects and encourages schools to work closely with conservation organizations, community groups, and businesses involved with birds to implement school bird festivals and bird conservation projects. This interactive K-12 workshop will be taught by Mississippi Museum of Natural Science Outreach Educator, **Sabrina Cummings**. Bring a brown-bag lunch. Both the workshop, and CEU's (.6) are FREE to educators. Call 601-799-2311 to register by July 8.

CONEFLOWERS

FOR THE HOME GARDEN!



Saturday, July 30

10:00 to 11:00 a.m.

Coneflowers (*Echinacea*) are bright-blooming perennials, some of which are used in herbal remedies. They are easy to care for, relatively drought-tolerant, and good for cut flowers. Coneflowers are daisy-like with raised centers, and the seeds in their dried flower heads will attract songbirds to your garden. Come learn about some of the new varieties of coneflowers in this program with Pearl River County Extension Agent **Dr. Eddie Smith**. Program is free to members, and cost for non-members is \$5. Please register by July 29.

August 2016

CHILDREN'S WORKSHOP: FIELD WALK AND HANDBUILDING WITH CLAY

Saturday, August 6

10:00 to 11:30 a.m.

So many natural materials can be found at the Crosby Arboretum that will make interesting impressions! Children will walk the pathways to collect plants and dried material and will work with self-hardening clay to create lasting memories in this fun family workshop with Arboretum Director **Pat Drackett**. Children must be accompanied by a parent or guardian. Materials fee is \$5 per child for members' children, and \$6 for non-members' children. No charge for adults. Register by August 5.

• SUMMER VOLUNTEER PROJECTS •

Interested in volunteering at the Crosby Arboretum? We have ongoing projects that are a lot of fun even in the summer. The *Volunteer Gazette* newsletter and e-mails with volunteer needs will inform you of events. To become an Arboretum volunteer, please contact Kim Johnson at 601-799-2311 or kim.johnson@msstate.edu.



Terry Vandeventer's May Snakes program, funded through our Visit Mississippi tourism grant, drew 200 enthusiastic attendees!

Reservations: Call the Arboretum office at (601) 799-2311 for questions, and to make program reservations. We are located at 370 Ridge Road, Picayune, MS 39466. See www.crosbyarboretum.msstate.edu for directions as GPS can be inaccurate. **Hours:** Wed-Sun 9:00 AM to 5:00 PM.