

The Crosby Arboretum

Mississippi State University Extension Service

Quarterly News Journal

Spring 2012

26.2

The Native Orchids of Mississippi

by Glen Ladnier

It's always surprising whenever someone discovers that Mississippi has multiple populations of native orchids. Everyone seems to consider orchids as those plants which only grow deep in tropical rainforests, or temperate climates near the equator. Nothing could be further from the truth. Antarctica is the only continent where orchids do not grow naturally, which leaves a vast array of climates and growing conditions for the more than 20,000 other orchid species growing in every other part of the world. Another surprise is that Hawaii, which has, in my opinion, the perfect climate for growing most orchids, only has three unspectacular natives of its own.

Of the more than 50 orchid species that are native to Mississippi, only about 30 of them grow in natural habitats between Hattiesburg and the Gulf of Mexico. The three coastal counties can account for approximately 20 different native orchid species, with the majority of them thriving mainly in the Jackson County area. In the northern part of the state grow the species that like it cooler. This group includes some of the most interesting, and fragile of this state's orchids.

Most of Mississippi's native orchids are terrestrial. They grow in the ground, and die back in winter to either underground tubers, or tuberous roots. The only exception is *Epidendrum conopseum* (Synonym, *Epidendrum magnoliae*), which is an epiphyte. Actually, it is the only epiphyte in the U. S. that grows north of Florida. *Epidendrum conopseum* grows on the bark of certain trees, and near enough to rivers and lakes to take advantage of the increased humidity. It endures freezing temperatures during the winter, which are deadly to most other epiphytic orchids, only to bloom again the following year.

Mississippi native orchid, *Pogonia ophioglossiodes*, is found in the Crosby Arboretum's Hillside Bog natural area. (image by M. Lyman)



Mississippi native orchid, *Calopogon pallidus*. The genus name is Greek and means "beautiful beard."

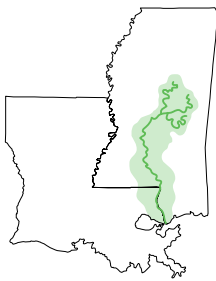
(Photo courtesy of www.southeasternflora.com)

Like many of the other orchid species in Mississippi, *Epidendrum conopseum* resists attempts to grow it outside its natural environment.

The native populations that I monitor along the Gulf Coast, as well as the ones in my personal collection, are primarily what we call bog orchids. They prefer to grow in moist or wet conditions, either in full sun or light shade. During a normal year, the populations will thrive, flowering profusely, and multiplying through seed germination and an increase in tuber multiplication. In a less than perfect year, droughts such as the one we experienced in the spring of 2011, caused bogs and other natural habitats to dry out in areas which had always been reliably wet. Some species in these areas reacted by staying dormant, rather than trying to sprout foliage and produce flowers. Many terrestrial orchids in harsh environments will stay dormant for years when conditions are not favorable. Once conditions are suitable, their dormancy ends, and the tubers resume the process of keeping the colony viable. This behavior helps to keep a whole colony from being wiped out at once.

I never cease to be amazed at the orchid family's resilience. They have evolved to possess an unusual bag of tricks, all aimed at ensuring pollination and reproduction. Many use their aromas

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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: We're Having a Great New Year!

On your next visit to the Crosby Arboretum you may notice some dynamic changes in our site, and our staff. Last year we set a goal to increase membership by 10%. We exceeded this goal, and at the end of 2011 celebrated a 22 % increase, thanks to all our staff making the steady effort to gain new members, and the dedication of membership coordinator Kim Johnson.

Kim is now also responsible for our Gift Shop. She is having great fun organizing and planning the area, and has also started a Saturday walking program. Volunteer coordinator Robin Veerkamp has been comparing notes with other botanical gardens and arboreta for ideas to grow our volunteer base. Robin is planning a docent training program, researching grant opportunities for volunteer projects, and developing brochures for our educational exhibits.

Terry Johnson, Jarrett Hurlston, and the volunteer burn crew were pleased with the favorable January weather conditions allowing them to perform two prescribed burns already this year. The crew also tested a flexible water tank, custom fitted to the bed of our "fire truck," designed and donated to the Arboretum by Avon Engineered Fabrications.

This spring, MSU landscape architecture professor Bob Brzuszek's graduate class will focus on a site planning study for our new Education Building. His students will explore the building's relationship to our existing exhibits and to Pinecote Pavilion, consider the flow of vehicular and pedestrian traffic, and analyze our parking needs.

New senior curator Richelle has hit the ground running, making great strides with planning and facilitating our programs and events. Through her exceptional talents in social media and website management, she has greatly increased our ability to reach the public about our activities.

This year I will be assisting the Crosby Arboretum Foundation in their fundraising campaign for the new Education Building, assessing the condition of the Pinecote Pavilion in order to pursue funding for restoration, and monitoring the construction of our Gum Pond and Swamp Forest Exhibit. This year we will also assess the Arboretum's historical documents and pursue funding sources for their preservation and organization.

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



Kristen Hooge, local Girl Scout, is volunteering to earn her Girl Scout Gold Award. (image by R. Stafne)

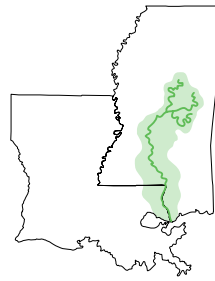
Senior Curator's Corner

In January the Crosby Arboretum welcomed local Girl Scout and long-time Arboretum member Kristen Hooge to the ranks of volunteer. Ms. Hooge is working with us for the next several months to earn her Gold Award for the Girl Scouts. During her time at the Arboretum, Kristen will assist with archiving by scanning past Arboretum News Journals into .pdf format which will allow me to post them to the website. (Creating an electronic copy of these archives is part of our ongoing plan to preserve the Arboretum's historical documents and make this information accessible to others.) Ms. Hooge will also be organizing and filing media-related materials involving the Arboretum, its staff, board members, and volunteers. This includes special events, programs, and third-party articles written about the arboretum. Should time allow, the next step would be to scan these items into .pdf format so that an electronic copy is always on-hand. Kristen has enjoyed reading through the items she is working with including finding photos and articles related to work and events that she and her brother, Ross Hooge, have participated in throughout the years. The Hooges are an example of a family that has literally grown up with the Crosby Arboretum. We are thankful to have them as part of our Arboretum family.

The Crosby Arboretum offers many great opportunities for all kinds of student projects. Keep us in mind and spread the word. It's never too early to bring your children and grandchildren to the Arboretum so that as they grow and develop we are part of their education into native plants and the natural world.

(You can view additional images of Kristen's work on our blog at crosbyarboretum.wordpress.com)

- **Richelle Stafne**, Senior Curator
The Crosby Arboretum, MSU Extension Service



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native flora of the Pearl River Drainage
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Picayune, Mississippi, USA

Thank you, Annual Appeal Contributors

The Crosby Arboretum wishes to express our sincere gratitude to the following persons and businesses for their generous contributions to our 2011 Annual Appeal. To date, a total of \$6,560 has been raised for our new Swamp Forest Exhibit, exceeding our appeal for \$5,000. This will allow us to fund the construction of trails, fabricate benches, and install plant materials for the exhibit. We are grateful that so many of you are committed to seeing this long-anticipated portion of our site's Aquatic Exhibit completed. Thank you to all who are helping to make the Swamp Forest Educational Exhibit become a reality.

Captain and Mrs. C.W. Acheson, Jr.
Mr. & Mrs. Jerry Alexander
Shelley Antoine
Ivan & Mary Biernacki
Valerie Bogart
Dr. Donald M. Bradburn
Fay & Phlean Bright
Dr. Howard Bruggers
Bob Brzuszek
Dorothy M. Burge
Dennis Caddell
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Mr. Thomas Price
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Dave & Janet Schlauderaff
Mr. & Mrs. Norman G. Stevens, Jr.
William L. Thames
The Landscape Studio
John & Melanie Walrod



MSU landscape architecture professor Bob Brzuszek and his Land Management graduate students participated in a design charrette in February 2011 for the Swamp Forest Educational Exhibit, guided by representatives from the Seattle land planning firm of Jones & Jones. (image by P. Drackett)

SPRING VOLUNTEER MEETINGS **SATURDAYS, March 3, April 21 & May 5** **9:00 a.m.**

Connect with nature and meet some great folks at the same time! Come learn about the many exciting volunteer opportunities and activities that you will enjoy here at the Crosby Arboretum at our next volunteer meeting. For more information, please call Volunteer Coordinator **Robin Veerkamp** at (601)799-2311, Ext. 104.

Native Orchids... *(Continued from page 1)*

to lure specific pollinators to visit their flowers. Some *Bulbophyllum* species smell like rotted meat, urine, or doggie doo, to attract carrion flies as pollinators. Other scents give an empty promise of nectar, but it is only a ploy used to fool potential pollinators. The flowers of some orchids resemble the female of a species of wasp or moth, and the male is coerced into pollinating the plant while trying to mate with the fake female. Still others have devised unique spring-loaded traps that hold the insect in a way that its struggles cause it to provide pollination, or slick-sided pouches which offer victims only one escape route (you guessed it!), right to the area where they are forced to deposit the pollinia on the stigma, located on the underside of the column. One of the best tricks used by orchids is the fact that their seeds are so small and light that even a small breeze can carry them for miles, thus ensuring the formation of multiple colonies for the perpetuation of the species.

For someone who has predictably become bored with other hobbies in the past, I continue to be excited about the orchid family, and learn something new about them on a daily basis, either through my research, or personal experience in my greenhouse.

- **Glen Ladnier**, long-time orchid enthusiast, is a member of the Gulf Coast Orchid Society, South Mississippi Orchid Society, and Greater Pensacola Orchid Society



It was a beautiful January day for the fourth annual Forge Day, January 28, 2012. (image by R. Stafne)

The News Journal is a quarterly publication of The Crosby Arboretum, Mississippi State University Extension Service. Journal subscriptions may be obtained with membership at the Arboretum. Printed on recycled paper.

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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

_____	Student (send student i.d.)	\$ 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 _____

Renewing? Memberships are for one year.

The Crosby Arboretum
Mississippi State University
P.O. Box 1639
Picayune, MS 39466-1639
(601) 799-2311
www.crosbyarboretum.msstate.edu

Crosby Arboretum Program Schedule

March - April 2012

March 2012

FLYING WILD TEACHER'S WORKSHOP

Saturday, March 3
9:00 a.m. to 3:00 p.m.

The Mississippi Museum of Natural Science is offering a fun-filled and hands-on, interactive workshop for teachers and homeschool educators using migratory birds to teach core curriculum. Flying WILD is designed to inspire young people to discover more about conservation and the natural world. Cost is \$15 for the class (FREE for participants from Pearl River or Hancock counties), and includes the teacher's manual Flying WILD: An Educator's Guide to Celebrating Birds; \$10 for CEU's. Bring a brown bag lunch. For questions, contact **Crystie Baker**, at crystie1@gmail.com; to register, call (601) 799-2311.

FIREWISE EVENT:

"HOW TO HAVE A FIREWISE HOME" (Adults)
Saturday, March 10
9:00 a.m. to 1:00 p.m.

Firewise is an educational program for homeowners and community leaders. Information will be presented on how to design, construct, landscape, and maintain home or community so as to withstand a wildfire without the aid of firefighting resources. Participants will learn why homes burn, various wildland fuel reduction techniques, and how to assess the fire danger of their home. Lunch, refreshments and workshop materials will be provided. Firewise events are free, but pre-registration is required. Register by Wednesday February 29th. Call 601-799-2311.

WILDLIFE DAY (School Field Trip for Kids)

Thursday, March 22
9:00 a.m. to 12 Noon

Children will be thrilled to see the array of exhibitors displaying both live and preserved animals, while they learn how to protect and maintain wildlife in this field day open to area schools and homeschool groups. Admission is \$2 per child, free to teachers, chaperones, and bus drivers. Please call by March 21 to schedule an arrival time for your group.

THE JEAN CHISHOLM LINDSEY LECTURE IN LANDSCAPE DESIGN (Adults)

Saturday, March 31
12 Noon, Jackson, MS

The Crosby Arboretum Foundation cordially invites you to the Jean Chisolm Lindsey Lecture in Landscape Design at the Welty House Garden, featuring authors of *One Writer's Garden: Eudora Welty's Home Place*, **Susan Haltom** and **Jane Roy Brown**. Lecture and lunch begin at twelve noon at the Mississippi Museum of Art with afternoon refreshments to follow in the Welty House Garden. Cost \$60. For ticket information, please call 601-799-2311.

April 2012

STRAWBERRIES & CREAM FESTIVAL

Sunday, April 1 (Family)
1:00 to 3:00 p.m.

Bring the family, and join us to celebrate the history of the old strawberry farm on the lovely Pinecote Pavilion. Ice cream, fresh strawberries, and Picayune Frog Lemonade will be served. **Admission is free** and open to the public!

SPRING PLANT SALE

Sat/Sun April 7 & 8
10:00 a.m. to 3:00 p.m.

Members Admitted at 9:00 a.m. Sat.

Grab a cart and choose from a variety of wonderful native trees, shrubs, and perennials for your home landscape. Come early for the best selection of many hard-to-find plants. We'll help you select the right plant for the right place on your property. **Free admission.** Arboretum greenhouse.



SPIDER DAY!

Saturday, April 14 (Family)
10:00 a.m. to 2:00 p.m.

MSU Entomology Student **Breanna Lyle** will begin the day with a 30-minute tarantula presentation in the Pinecote Pavilion. Afterwards children can participate in various art activities coordinated by Master Naturalist **Mary Cordray**. A 30-minute talk on venomous spiders will be conducted at 12:30. All morning arts and crafts projects will continue with volunteers on-hand to answer questions. Free to Arboretum members; Price for non-members is \$5, and \$2 for non-members' children. CLIPART SOURCE: etc.usf.edu/clipart

SPRING FIELD WALK: NATIVE PLANTS FOR THE HOME LANDSCAPE

Saturday, April 21 (Family)
10:00 to 11:00 a.m.

Join Director **Pat Drackett** for a field walk through the Aquatic, Woodland, and Savanna Exhibits to discuss the plants growing in these habitats and how to use them in your home landscape. Free to Arboretum members; \$5 for non-members. Please register by April 20.

Crosby Arboretum Program Schedule

April - May 2012

April 2012

EARTH DAY AT THE ARBORETUM!

Saturday, April 28 (Family)
10:00 a.m. to 2:00 p.m.

Celebrate the 42st anniversary of Earth Day! Come to a program, or visit exhibits that focus on nature and sustainable gardening. Explore a variety of stations from 11:00 a.m. to 1:00 p.m. with topics such as beekeeping, rainwater irrigation, gardening, birds and butterflies, composting, and vegetable gardening. Members free; non-members \$5; non-members' children \$2.

EARTH DAY PROGRAM: STRATEGIES TO PROTECT COASTAL HABITATS (Adults)

Saturday, April 28
10:00 to 11:00 a.m.

Dr. Chris Boyd, Assistant Extension Professor in Environmental Sciences, will present an exciting lecture about our local coastal ecosystems. Come learn about the habitats of coastal Mississippi along with descriptions of the many aquatic and terrestrial animals that live within them. You will also acquire information about management strategies that are used to protect this land from urban development. Members free; non-members \$5.

EARTH DAY PROGRAM: GET TO KNOW NATIVE AZALEAS AND THEIR FRIENDS (Adults)

Saturday, April 28
1:00 to 2:00 p.m.

Tom Dodd of Dodd Natives nursery in Semmes, Alabama will present a fun and informative talk teaching us about native azaleas, their culture, how some hybrids came to be, and how to make them best fit into your garden design. He'll also talk about plants that play well with native azaleas in the home landscape. Members free; non-members \$5.

Reservations: Call the Arboretum office at (601) 799-2311, to confirm all events and to make program reservations, as seating is limited. Programs are subject to change.

Physical Address: 370 Ridge Road, Picayune, MS 39466

Mailing Address: P.O. Box 1639, Picayune, MS 39466

E-mail Contact: rstafne@ext.msstate.edu

Hours of Operation: Wednesday-Sunday, 9:00 a.m.-5:00 p.m.

2011 Admission Fees: Adults, \$5; Seniors (over 55), \$4; Children under 12, \$2; Members, free admission to grounds and programs.

Webpage: www.crosbyarboretum.msstate.edu. Lists programs and events, volunteer opportunities, Arboretum and Natural Area information, and news updates.

May 2012

PAINTED POTS (Kids)
Saturday, May 12
10:00 to 11:00 a.m.

Here is the perfect Mother's Day gift for moms who love plants! Decorate a clay pot and design a Mother's Day Card using recycled materials. Workshop led by Master Naturalist **Mary Cordray**. Children must be accompanied by parent or guardian. All materials provided. Members' children \$2; non-members' children \$4. Register by May 11.

The NATIVE ORCHIDS OF SOUTH MISSISSIPPI (Adults)

Saturday, May 19
1:00 to 2:00 p.m.

Learn to recognize and enjoy many of the thirty species of orchids native to the Gulf Coast. There are many interesting species which are often overlooked by everyone but the most avid orchid grower. **Glen Ladnier**, long-time orchid enthusiast and member of the Gulf Coast Orchid Society, will discuss habitats, plant and flower characteristics, and touch on common conservation techniques. Members free; non-members \$5. Register by May 18.

Register early to reserve your seat for programs by calling (601) 799-2311.

Website and Social Media Updates!

- We now have a "twitter" feed on the front of the website.
- Even if you do not "twitter" you can see our recent tweets!
- Be sure to check out and follow our blog, youtube channel and tweets!



NEW for 2012!

Let us help you keep that New Year's resolution. Get in shape while enjoying the great outdoors.

"Walking with Kim" • Saturday 8:30-9:30 a.m.

Meet at the Crosby Arboretum ticket booth. Wear comfortable clothes. Bring your leashed pet if you want!

Every Saturday in March, April and May.

Cost: Members: FREE Non-members: \$5

Sr. Citizens (55+): \$4 Military: \$4 Children under 12: \$2

For more information, call (601) 799-2311 and ask for Kim.