

The Crosby Arboretum

Mississippi State University Extension Service

Quarterly News Journal

Fall 2019

33.4

NATIVE PINES OF MISSISSIPPI

On a worldwide scale, pine trees (*Pinus* spp.) are found primarily in the Northern Hemisphere, as one might expect. The total number of species is around 100, with some species ranging as far south as Central America in the West and the islands of Indonesia in the East. What one might not expect is that Mexico has the greatest diversity of pine tree species globally, in part due to varied topography and precipitation levels leading to isolated species in specific mountain ranges or at specific elevations that could have tropical, temperate, or even “boreal” climates toward the summits of the highest peaks.

Pines are among the most useful groups of plants for man. They supply lumber for construction in many cultures, are used for paper products, for naval stores, and some species, particularly in the American Southwest and the northern Mediterranean region, produce the edible seeds we know as pine nuts (great in salads, in Italian pesto, or toasted and incorporated in various rice dishes with complimenting herbs). Some species of pines are desirable subjects in the horticultural landscape and are also frequently used as Christmas trees. Still other kinds of pine trees are sources of oils for soaps, while some pines, including the signature longleaf pine of the Piney Woods Region of Mississippi, can be used in making fireworks.

Seven different species of pines have been documented in Mississippi: sand pine (*Pinus clausa*), shortleaf pine (*P. echinata*), slash pine (*P. elliottii*), spruce pine (*P. glabra*), longleaf pine (*P. palustris*), loblolly pine (*P. taeda*), and Virginia pine (*P. virginiana*). Of these, all have been found in Crosby Arboretum natural areas except for sand pine and Virginia pine. No wonder much of southern Mississippi, including the lower Pearl River Drainage Basin, is known as the Piney Woods, especially because of the presence of longleaf pine!



Needles and mature form of sand pine (*Pinus clausa*).



Mature shortleaf pine (*Pinus echinata*), needles and cone.

Collectively, all pines in Mississippi are wind-pollinated and wind-dispersed, single-trunked trees that bear both male and female cones on the same trees (monoecious). Male cones are short-lived, finger-like structures that are more abundant on the lower branches, whereas female cones are the larger, more familiar pine cones that characteristically take at least two years to mature and are more common on the upper branches – this positioning of the male and female cones helps to avoid self-pollination. Pollen from pines is unmistakable in having two air bladders that resemble “Mickey Mouse ears” when viewed under the compound light microscope. Much of that familiar “yellow dust” on our vehicles during early spring is from native pines. Seeds from female cones have long wing-like appendages that help propel them through the air in helicopter-like fashion.

Pines actually have two types of branches: long shoots and short shoots. Clusters, or fascicles, of evergreen needles (leaves) are present on the short shoots; the number of needles per fascicle is quite characteristic for different pine tree species. The needle-shaped leaves with a thick coating of wax are an adaptation to conserve water in their frequently dry (xerophytic) habitat. The waxy, reduced surface area (compared to broad leaves) does not allow water vapor to escape with ease. The taproot systems of pines, aided by soil fungi, efficiently absorb water from the soil.

The two most common and widely distributed pine species over much of Mississippi are shortleaf and loblolly, although shortleaf becomes less common as one approaches the Gulf Coast. No pine species is native to the Yazoo-Mississippi Delta; however, some species can be planted and do well there. Needles (2-5 inches) in shortleaf pine are mostly

(Continued on Page 5)

Part One of a two-part series by **Wayne Morris, Ph.D.**, Troy University. Wayne holds a M.S. in botany from MSU, with graduate work under Dr. Sidney McDaniel at the Crosby Arboretum in 1986. All photos this article are courtesy of www.SoutheasternFlora.com



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 have been preparing for a busy autumn at the Arboretum, planning another outstanding season of programs and events! Fall brings the return of long-standing favorites such as BugFest and Piney Woods Heritage Festival, now in its seventeenth year. Due to the success of our evening open mic event this spring, "Music Under the Pines", we are having an encore. Scarecrows will be appearing along the pathways once again, an opportunity for the community to enjoy displaying their creativity. You will enjoy our second Family Pawz Fest, an event celebrating family pets, coordinated by Sherri Lowe and her dedicated team of volunteers. Most of you already know by now that our public garden is pet-friendly, which means largely those of the canine variety, although we have had the occasional parrot riding a shoulder through the forest. Speaking of this, our "Through the Forest" 5K Trail Run is making its smashing debut this season! We are fortunate indeed that Nickie Smith has joined us to market and coordinate our events. We will be benefiting greatly from her knowledge and expertise with the coordination and promotion for the trail run as well as other events this season. Nickie has already made her goal to reach 5,000 likes on the Arboretum's Facebook page and has already dramatically improved our social media outreach.

As our Gum Pond Educational Exhibit continues to expand, the area is becoming an exciting destination in the north end of our site, and we eagerly anticipate the construction of the Rosen Pavilion, scheduled to begin in early fall. Please visit the Arboretum library for a sneak peek at the beautiful model built by summer intern Daniel Leclercq. The fall botany field walk will include a journey down the Swamp Forest Trail, and we will check out the current progress on the new pavilion!

- Patricia Drackett, Director

The Crosby Arboretum, MSU Extension Service



In August, a team of U.S. Navy community service volunteers from Stennis Space Center, led by Terren Hudson, N2 Department LCPO, pruned vegetation along the service road and painted signage kiosks.



WELCOME, NICKIE SMITH!

Please join us in giving a hearty welcome to **Nickie Smith**, The Crosby Arboretum's new Event and Marketing Coordinator! Having lived in Pearl River County her entire life, Nickie has a familiarity and love for Picayune and the surrounding area that will be evident as she takes on promoting the Arboretum. She graduated from Picayune Memorial High School and continued her education at the University of Southern Mississippi where she received a degree in Psychology. After college, she chose to help manage her family's business, The Furniture Place, which afforded her many years of working with and in the community as well as extensive experience in business management. After the family business closed, she moved on to a position as Executive Assistant and Project Manager at Firmidable, an ad agency in New Orleans. As this company expanded their digital advertising services, her interest expanded in that niche, as well.

In 2015, Nickie started a marketing and event coordinating business, Southern Social Butterfly, where she manages the marketing for businesses and organizations throughout the area as well as serves as a wedding and event coordinator. She will use that experience to promote and grow our Arboretum programs, events, and the organization as a whole.

She says, "I'm very excited to be a part of the Arboretum and Mississippi State University family. When you have a passion for what you do, success is the end result. I'm looking forward to MANY great things to come!"

- Nickie Smith, Event & Marketing Coordinator
The Crosby Arboretum, MSU Extension Service



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

(Continued from page 1)

NATIVE PINES OF MISSISSIPPI

present in 2's (some 3's), and those in loblolly pine (6-9 inches) are mostly present in 3's (some 2's). The persistent female cones (2 inches long) of shortleaf pine are generally rounded, and the non-lustrous, brown female cones (4-5 inches long) of loblolly pine are elongated. Crowns of shortleaf pines can appear to be covered with numerous, small cones. Both shortleaf and loblolly pines colonize forest gaps and old fields and are often the first types of trees to move into these sites. Both pines can also grow intermixed with hardwood tree species such as oaks and hickories. Game bird species such as quail, dove, and wild turkey, ingest the seeds; many songbirds use these pines for nesting material.

Sand pine is the rarest of all pine species in Mississippi and is at present only historically known from xeric sands that still support Florida rosemary (*Ceratiola ericoides*) and shrub goldenrod (*Chrysoma pauciflosculosa*) near Fontainebleau beach in Jackson County, Mississippi. This population and associated species were documented by Dr. Sidney McDaniel, and these elements represent the unique sand pine scrub ecosystem that is largely restricted to Florida. Sand pine scrub needs fire (historically caused by lightning strikes and today due to prescribed, controlled burning) to persist, but at infrequent intervals of 30-50 years. As a result, much fuel builds up, and the fires get very hot and often kill adult trees and shrubs. Ironically, this is needed because the seeds of some forms of sand pine and associated plant species must be scorched in order to germinate. Ash from the burned vegetation provides fertilizer for seedlings of the same species, and the seedlings have no competition from larger plants for light and water. The bark of the picturesque, often windswept, sand pine trees becomes scaly and flaky on older branches, the short needles (1.5-3.25 inches) are typically present in 2's per fascicle, and the scales on the rounded to oblong female cones (2-3.25 inches) have dark distal tips.



The characteristic bark, and cones of spruce pine (*P. glabra*).



Loblolly (*P. taeda*) (L), and Virginia pine (*P. virginiana*) (R) cones.

Even though the wild form of sand pine usually appears gnarled, this species can be shaped into traditional-looking Christmas trees on farms in Florida. In fact, I purchased a sand pine marketed as a Christmas tree by the University of Florida School of Forest Resources & Conservation when I was a graduate student in botany there. I must say that it seemed every bit as good as a Scottish pine to me!

With ridged and furrowed bark that superficially resembles bark of hardwood trees such as oaks, the spruce pine is unusual in that respect and in its habitat preferences. Unlike both sand and longleaf pines that are adapted for natural fires in different ways, spruce pine does not do well with fire and does not typically form large stands like both of those species. Spruce pine is often found as an isolated tree among oaks, hickories, maples, magnolias, and hollies on river bluffs and on natural levees in floodplains – areas not prone to frequent fires. In Mississippi, spruce pine is primarily found in the southern half of the state, with more scattered populations farther north in the upper Pearl River Drainage Basin. The short, twisted, dark green needles (2-4 inches) in 2's per fascicle help to immediately identify it. Female cones are 0.5-2 inches long, and the brown scales do not have dark tips like the sand pine. Seeds of spruce pine are ingested by both birds and mammals; branches and needles are used for nesting and cover.

Virginia pine somewhat resembles both sand pine and spruce pine in that the short needles (0.75-2 inches) are twisted and in 2's per fascicle. However, this species often grows in dense stands, particularly in old fields in uplands and in well-drained forest gaps; and it has light orange-brown bark in thin plates. The prickly female cones are usually 1.5-2 inches long. Although very common in the southern Appalachians, Virginia pine is rather rare in Mississippi, only occurring in the Tennessee River Hills of northeastern Mississippi in Alcorn, Itawamba, and Tishomingo counties.

- Wayne Morris, Ph.D., Troy University
(Part Two on slash and longleaf pine will follow in the Winter 2019-20 Quarterly News Journal)

Update: Summer Intern Danielle Leclercq

We are very pleased that **Danielle Leclercq**, a Picayune native and architecture student at Mississippi State University, agreed to join us this summer as our intern. She has now returned to Starkville for her fourth year in the five-year program. This summer, Danielle's work included building a basswood model of the Rosen Pavilion, which is a memorial gift to the Arboretum from the family of Yvette Rosen. Construction will begin this fall on the structure, which will be located in our Gum Pond. She also created a virtual reality model of the Rosen Pavilion, viewable on the new virtual reality headset donated by Foundation board member Ruth Cook. Danielle also designed concepts for a small structure to serve as place of contemplation for persons who make memorial donations to the Arboretum for loved ones. She also created interpretive brochures for the Pinecote Pavilion, and an architectural exhibition that was displayed March 2019 in the Giles Hall School of Architecture Gallery at Mississippi State University, called *Unbuilt Arboretum: Unrealized Structures of Fay Jones for The Crosby Arboretum*, developed by Professor Hans Herrmann, MSU Dept. of Architecture. The exhibit will be on national display in 2020, and examines E. Fay Jones' Crosby Arboretum work, which includes schematic designs for four additional buildings to complement the Pinecote Pavilion and intended to support the day-to-day activities of the Arboretum. Funded by a Criss Trust Award, a digital archive of the drawings and the exhibition of the designs was developed, for the purpose of publicly sharing this exceptional special design work and building a greater awareness and appreciation of MSU's very own Mississippi cultural treasure.



MSU architecture student Danielle Leclercq with Terry Johnson and the model of the Rosen Pavilion she built over the summer.

We have many volunteer opportunities at the Crosby Arboretum. No amount of time to give is too small, and we are sincerely grateful for any assistance!

The News Journal is a quarterly publication of The Crosby Arboretum, Mississippi State University Extension Service. A news journal subscription is included with an annual membership to the Arboretum.

Please send correspondence to: pat.drackett@msstate.edu
Patricia Drackett, Editor, The Crosby Arboretum
P.O. Box 1639, Picayune, MS 39466

Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status.

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)	\$ 20.00
_____ Individual	35.00
_____ Individual Senior (55+)	30.00
_____ Family	45.00
_____ Donor	100.00
_____ Patron	250.00+
_____ Benefactor	1,000.00
_____ Business/Club	
_____ 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

September 2019

MUSHROOM FIELD WALK!

Saturday, September 7, 10:00 a.m. to Noon

Dr. Juan Mata, biology instructor at the University of South Alabama, will reveal fungi's fascinating ecology, taxonomy, and relationship to mankind. You may bring your own knife, gloves, and basket/bag for collecting, but basics will be provided. Reservations please. Non-members \$6, members \$3. Non-members' children \$3, members' children \$1.

GEAUX GROW NATIVES: Plants that will Attract Butterflies to Your Garden!

Saturday, September 14, 10:00 a.m. to Noon
Program, butterfly plant sale & book signing

Join New Orleans' "BugLady" **Linda Auld**, a long-time insect educator passionate about butterflies, particularly monarchs, for a fun and informative presentation followed by a walk through the Arboretum Pollinator Garden. Linda's many educational projects seek to increase knowledge for creating habitats to support these insects. Learn about her "Geaux Grow Natives" project that promotes awareness, and the nursery availability, of useful nectar and caterpillar host plants. Butterfly plants, and Linda's new book, "*BugLady's Butterfly Summer*" will be available for purchase. Reservations requested. Members \$2; non-members \$5.



"BugLady" Linda Auld releases a monarch butterfly in the Crosby Arboretum's pollinator garden.

A Walk with the Scarecrows

Deadline for submissions:

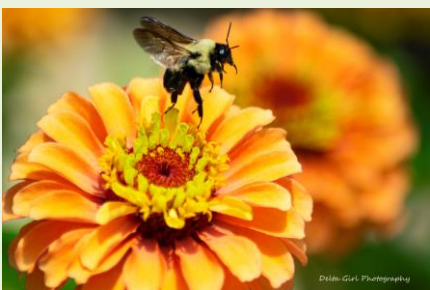
Friday, September 20, at 5:00 p.m.



We're gearing up for fall at The Crosby Arboretum and would LOVE for you to be a part of it! Along with the change of colors and weather, we'd like to have a little piece of you along our 64 acres, or at least a scarecrow version of you. We're asking for help to decorate our trails with a scarecrow that represents you, your organization, or your business. Make it as

festive as you like, but it must be family-friendly and non-offensive. You may place a sign to let people know the story of your scarecrow and more about your organization or business. Scarecrows will go up between **October 4 – 6** and will need to be taken down the week of **November 20 - 24**. Winners will be announced in our news journal, on Facebook, and you'll receive a free day pass for the individual winner and the organization or business winner. There is no charge to participate in this fun community event! For more information or for a registration form, please contact Nickie Smith, Event & Marketing Coordinator, at nickie.smith@msstate.edu, call 601-799-2311, or message us on Facebook.

Fall Gallery Exhibit Opening: Photography by Jenny Bibb Ryals



September 14, 1:00 to 3:00 p.m.

Jenny Ryals works for Mississippi State University at the South MS Branch Experiment Station in Poplarville where she is both a Research Associate and Doctoral Student for Dr. Patricia Knight. Originally from the Delta (Indianola), she grew up fully engulfed and obsessed with all things agriculture. Once in college, Jenny studied animal science, entomology, plant pathology, agronomy, and currently, horticulture. Through her love of agriculture and the outdoors, she finds her subjects for her photography. After a short introduction, the opening event will be held in the gallery. Light refreshments will be served. Event is free to all. Exhibit is on display through November 30.

Would you like to volunteer to be a reader for a Story Time children's event at the Arboretum? If so, please contact Sherri Lowe at s.lowe@msstate.edu or 601-799-2311 for more information and to arrange a time to read.

Crosby Arboretum Program Schedule

September – October 2019

Family PAWZ Fest!



*Saturday
September 28*

~ ~ ~ ~
10 a.m. to 3 p.m.

A joint fundraiser benefiting area animal rescue organizations and the Crosby Arboretum, with the goal of increasing pet health, wellness, awareness, adoption, and improving the quality of life for all animals. Please come and help us support our furry friends! The festival will feature an Adopt-A-Thon, a costume contest, bake sale, face painting, children's craft activities, raffles, live music, games, photo opportunities, food vendors, and more. Admission for members and non-members for this fundraiser: Adults \$5; Seniors (55+) and military adults \$4, children under 12, \$2.

SMART LANDSCAPES: SUSTAINABLE HOME LANDSCAPING

Saturday, October 5, 9:30 to 10:30 a.m.

Learn wise maintenance and landscaping practices to conserve resources and energy and create eco-friendly home landscapes through reducing maintenance needs. Benefit local wildlife and strengthen biodiversity by incorporating native plant species, discover new methods for reducing stormwater impacts and conserving water, recycle yard waste, and learn how to work with your existing soil in this program with Pearl River County Extension Agent **Dr. Eddie Smith**. Reservations requested. Free to members; non-members \$5.

NATIVE PLANTS FOR HOME GARDENS

Saturday, October 5, 11:00 a.m. to Noon

Learn to design low-care "Smart Landscapes" based on ecological processes. Save money, reduce labor and energy needs, and increase your yard's biodiversity. Arboretum Director **Pat Drackett** will discuss methods for creating durable, useful, and attractive native plant species to help you reduce your property's landscape maintenance needs. Reservations requested. Members \$2, non-members \$5.

SEMI-PRECIOUS STONES: ORIGINS & HISTORY

Saturday, October 5, 1:00 to 2:00 p.m.

Enjoy this introduction to the fascinating history, origin, and cultural uses of semi-precious stones, their levels of hardness and ease of being worked in lapidary with **Connie Boyd** of Unique Stones, in Ocean Springs. Reservations requested. Members \$2; non-members \$5.



Whether you're a runner or a walker, an adult or a child, please join us on an early morning 5K run "Through the Forest" and enjoy our beautiful Arboretum while getting fit. Local health facilities will be present to talk about their programs, and an awards ceremony will follow the run. Check-in/registration begins at 7:30 and **run begins promptly at 8:00 a.m.** Early registration by **September 27**. Entry fee is \$30. Late entry or entry on the day of event is \$35. Pre-registered participants will receive an event T-shirt. Late registrants are not guaranteed a shirt. Entry fees will support The Crosby Arboretum building and grounds, and programs/events. To register, become a sponsor, or make a donation, please contact Nickie Smith, Event and Marketing Coordinator, at nickie.smith@msstate.edu or at the Arboretum office, 601-799-2311.

MUSIC UNDER THE PINES! OPEN MIC NIGHT on Pinecote Pavilion



*Saturday,
October 12*

~ ~ ~ ~
*6:00 to 9:00
p.m.*

Enjoy an encore of our open mic event, which was so well-attended this past spring, in the lovely outdoor setting of the Pinecote Pavilion. Reserve your 15 minute time slot, or join the audience and kick back for an evening featuring talented local musicians and singers. Coffee, tea, and desserts will be served at this FREE community event!. This is also a rare chance to see the Pinecote Pavilion illuminated at night! Call 601-799-2311 to let us know you are planning to attend or to sign up for a time slot.

Crosby Arboretum Program Schedule

October – November 2019

Save the date! **64th Annual Edward C. Martin LANDSCAPE SYMPOSIUM**
Wednesday, October 16, 2019, 9:00 a.m. to Noon

Bost Auditorium, Mississippi State University, with Dr. Gary Bachman, Dr. Geoff Denny, Bob Brzuszek. Details: <https://www.lalc.msstate.edu/workshops/martin/index.php>



FRIDAY, October 18, 9:00 a.m. to 1:00 p.m.
Field Day for School and Homeschool Groups

6:00 p.m. to 8:30 p.m.: Blacklighting for Bugs (Public)

SATURDAY, October 19 - 9:00 a.m. to 1:00 p.m. Field Day (All Ages), Audubon Institute Bugmobile 10:30 a.m.

Explore the world of entomology with insect collecting, identification, and more, with Extension Entomologist **Dr. John Guyton**, and professors and students from the Mississippi State University Biochemistry, Molecular Biology, Entomology and Plant Pathology Department. School groups will enjoy Friday's field day, and Friday evening features "Black Lighting for Bugs" and night-collecting activities (bring a flashlight!). Enjoy entomology-based children's crafts and other activities! Friday Field Day, students \$2; no charge for teachers or chaperones (groups, call to be assigned an arrival time). Friday evening & Saturday \$5 for adults, children \$2, members free!

Fall Native Plant Sale



October 25 & 26 (Fri/Sat), 10 a.m. to 3 p.m.
(Members enter each day at 9:00 a.m.)

Grab your cart and choose from an outstanding selection of native plants for fall planting projects. Knowledgeable staff, volunteers, and Mississippi Master Gardeners will assist you with your plant questions and provide advice on appropriate plant selections for your property's unique environmental conditions. **Free site admission.** Sale to be held in Greenhouse area. Use Service Road entrance.



The children's craft activities at our annual BugFest event is usually a very popular destination for families!



**WIRE-WRAPPED
JEWELRY
WORKSHOP:
MAKE A PENDANT!**

*Saturday, November 2
9:00 a.m. to 12:30 p.m.*

Back by popular demand! In this workshop with jewelry maker **Connie Boyd of Unique Stones**, you will leave with a beautiful handmade pendant (photo is from last workshop) Create your pendant with semi-precious finished polished stones, wrapped in Sterling Silver. Cost of \$70 includes chain, tools for use, silver wire, semi-precious stone and lesson, paid directly to the instructor on the day of the workshop, cash or check only. More precious stones will be available for a little more, if desired. Limited to 10 persons. Reservations required.

YOGA ON THE PINECOTE PAVILION

Saturday, November 2, 1:00 to 2:30 p.m.

Join certified yoga instructor **James Sones** in the beautiful natural setting of Pinecote Pavilion for a gentle yoga class and short meditation sitting. Class limited to 16. Yoga mats provided, or, bring your own. Please arrive 10 minutes early. Reservations requested. Members \$2, non-members \$5.

One benefit of your Arboretum membership is borrowing privileges in our Library! Come in to browse our books on native plants, gardening, local history and so much more!

Crosby Arboretum Program Schedule

November 2019

THE 17TH ANNUAL PINEY WOODS HERITAGE FESTIVAL



Saturday, November 16, 10:00 to 3:00 p.m.

Exhibitors, music, and demonstrations!

Join us for this long-running annual event that celebrates the early days of the Piney Woods region. The festivities will feature musical performances and exhibitors with demonstrations and displays of traditional skills and crafts such as blacksmithing, quilting, spinning, butter churning, dulcimer playing, basket-making, Piney Woods cattle, and more. Saturday admission, adults \$5, children \$2. Free entry for Arboretum members.

WHAT'S IN BLOOM – FALL SELECTIONS:

Honeycombhead, *Balduina uniflora*, yellow
Dense Blazing Star, *Liatris spicata*, purple
Boneset, *Eupatorium perfoliatum*, white
Chaffhead, *Carphephorus pseudoliatris*, purple
American Crinum Lily, *Crinum americanum*, white
Deer's Tongue, *Carphephorus odoratissimus*, purple
Heath Aster, *Symphotrichum pilosum*, white
Southern Blazing Star, *Liatris squarrellosa*, purple
Meadow Beauty, *Rhexia alifanum*, pinks
Pickerel Weed, *Pontederia cordata*, purple
Pinelands Hibiscus, *Hibiscus aculeatus*, white
St. John's Wort, *Hypericum brachyphyllum*, yellow
Swamp Sunflower, *Helianthus angustifolius*, yellows
Sugarcane Plumegrass, *Saccharum giganteum*, tan plumes

If you've been considering volunteering at the Arboretum, we have many opportunities. No amount of time is too small, and we are sincerely grateful for any assistance.



*In late summer, the Arboretum begins receiving inquiries about whether our Pine Lilies (*Lilium catesbaei*) are blooming. Terry Johnson discovered this beautiful first specimen in late August.*

KIDS' NATURE CRAFTS WORKSHOP

Saturday, November 23, 10:00 to 11:00 a.m.

Children will enjoy this activity working with natural materials to complete a craft project. As children must be accompanied by an adult, there is no minimum age requirement. Space is limited, reservations requested. Members' children \$4; non-members' children \$6 (no charge for adults).

FALL BOTANY FIELD WALK: The Swamp Forest Trail

Saturday, November 23, 1:00 to 2:00 p.m.

Enjoy a fall field walk along the Arboretum's 700' trail that meanders along the intermittent stream in the center of the Swamp Forest Educational Exhibit and learn about the native shrubs and trees seen in this exhibit and the Gum Pond at the north end of this trail, and how to use them in your home landscape with Arboretum Director **Pat Drackett**. Reservations requested. Members free; \$5 for non-members.



www.crosbyarboretum.msstate.edu

Reservations: Call the Arboretum office at (601) 799-231. **Physical Address:** 370 Ridge Road, Picayune, MS 39466. **Hours:** Wed-Sun, 9 AM – 5 PM.

Programs of Mississippi State University Extension Service are open to all people, without regard to race, color, religion, sex, national origin, age, disability, veteran's status, sexual orientation, group affiliation or any other status protected by applicable law. Mississippi State is an equal opportunity institution. Questions about equal opportunity programs or compliance should be directed to the Office of Compliance and Integrity, 56 Morgan Ave., P.O. Box 6044, Mississippi State, MS 39762, (662) 325-5839