WILDFLOWERS OF THE SOUTHEASTERN UNITED STATES

By Bobby J. Ward

The flora of the American Southeast contains many rare and endangered species, some of which are endemic only to the Southeast. The region’s three distinct physiographic provinces – the mountains, piedmont, and coastal plain – shape the landscape, and consequently the region’s flora. (Peninsular Florida is excluded as it has much warmer climate, rarely freezes for any duration, and contains subtropical vegetation.) Weather influences from the Gulf of Mexico, the Canadian interior, and the Atlantic Ocean provide mild winters and wet summers to the region.

The Southeast was not glaciated during the last Ice Age, which ended about 10,000 years ago. However, many plants from Canada migrated southward along the Appalachian mountain chain during the colder climate that accompanied the period of glaciers in North America. When the climate warmed and the glaciers retreated, some plants stayed, occupying north-facing slopes and coves at the upper elevations. As a result, plant species occurring in the southern Appalachians can also be found in the American Northeast and southern Canada.

When the Spanish arrived in the Southeast in the early 1500’s, large stands of longleaf pine covered 150 million square miles of the coastal plain, from the James River in southeast Virginia to northern Florida and westward to southeast Texas. These forests had developed since the last Ice Age. With European colonization came heavy deforestation of the longleaf pine, to support naval stores for resin, turpentine, and timber for European navies.

A field of atamasco lilies in the coastal plain.

Longleaf pines are adapted to fire. Periodic natural wildfires from lightning do not harm them, resulting in areas of open grassy savannas. Many coastal plain wildflowers evolved in the fire-regime areas and they became fire dependent for seed germination and removal of competing vegetation. When wildfires began to be controlled in the early twentieth century, many species declined. A few adaptable ones retreated to power-line, gas, and railroad rights of way, whose regular mowing and maintenance remove competing shrubby vegetation, thereby mimicking the openness produced by wildfires.

Bobby J. Ward will be the featured fall speaker for the Crosby Arboretum Lecture Series on November 5, 2011. The topic will be “Wildflowers of the Southeastern United States” and his talk will highlight both widely distributed species, as well as rare, endangered, and uniquely localized plants. While some of the latter are being afforded federal and state government protection, other impacted plant species are currently without protection, pending formal inventory and development of habitat management plans by botanists and natural heritage personnel.

Bobby grew up on a farm in eastern North Carolina and lives in Raleigh. A retired environmental scientist, he holds an undergraduate degree from East Carolina University and master’s and doctoral degrees from North Carolina State University. Bobby is the author of “The Plant Hunter’s Garden: the New Explorers and Their Discoveries” (Timber Press 2004), that profiles 32 of today’s prolific planthunters,
**Director’s Notebook:**
Looking Down the Path Ahead

This July, I accepted the position of Director of the Crosby Arboretum. In addition to being incredibly honored to hold this title, I’m also keenly aware of my role in carrying on the work and vision of the persons who have come before me. It is impossible to walk these paths and not be conscious of the imprint made by those who have created and cared for the Arboretum, and of those who are still lending a guiding hand toward its continued development. This group includes long-time friends and members, our small but loyal and hard-working staff and dedicated Arboretum Volunteers, the Mississippi State University Extension Service, and our Crosby Arboretum Foundation board members. All together, they are the wonderful and supportive extended family that I’ve had the good fortune to get to know well over the past four years.

In each other’s company, we will be walking around that next bend in the path, so to speak. I look forward to accomplishing many things in the years to come, notably in assisting the Foundation board members with their fundraising efforts to build our new Education Center. Armed with an unfailing enthusiasm and colorful tales about our outstanding educational programs and activities, along with a sprinkling of stories of lives that have been transformed through a visit here, I hope to convince others that our new building is certainly a project worthy of their support.

My daily reward is hearing children who muse that they are having the best field trip ever (after walking only a hundred feet!), to be told by a new member that they wish they had discovered us years ago, and to occasionally hear a wood thrush sing in the trees outside my window. It is so heartening to know that we are making a difference in the lives of each of our visitors.

Particularly exciting is the forward movement we are making on our two newest exhibits – our recently constructed Gum Pond Exhibit and the upcoming Swamp Forest Exhibit, funded through grants from the National Fish and Wildlife Foundation’s Five Star Restoration Grant Program. Thanks to our relationship with the MSU department of landscape architecture and professor (and former Curator) Bob Brzuszek, master plans guiding the development of each exhibit were prepared by his design students. Bob has also provided continuous advice and support as these projects are built out. Stay tuned, there is so much more coming around that bend!

— Patricia R. Drackett  
Director, The Crosby Arboretum

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**ARBORETUM RECEIVES DONATION OF ANTIQUARIAN BOOKS**

In July, the Crosby Arboretum received a donation of over 100 books from the Woodburn Company of Hopewell, N.J., a firm specializing in antiquarian horticultural books since 1946. The books range from the mid 1800’s through mid 1900’s and cover a wide range of historic garden design, garden history, botany, forestry, and conservation topics. The donation was made possible by Arboretum volunteer Nadine Phillips of Hattiesburg, who connected the Arboretum with Woodburn Books. The books were great fun to unpack and explore, and we are grateful to have acquired such an incredible collection of historic titles for our library.

**WILDFLOWERS by Bobby Ward**
(Continued from Page 1)

nurserymen/women in the private sector, and authored “Chlorophyll in His Veins” (BJW Books 2009), a biography celebrating the life and accomplishments of J.C. Raulston, a professor of horticulture at North Carolina State University and founder of the arboretum now named in his memory. Bobby was the co-editor for “A Garden of One’s Own,” a collection of articles by North Carolina garden writer Elizabeth Lawrence (UNC Press, 1997). He is a past president of the North American Rock Garden Society and currently its executive secretary, a contributing editor to *Horticulture* magazine, and writer for *Carolina Gardener*, the Scottish Rock Garden Club, *Rock Garden Quarterly*, and the Raleigh *News & Observer*. He is a member of the Board of Advisors for the J.C. Raulston Arboretum. Visit his Website at www.bobbyjward.com.
PLANTS AT THE ARBORETUM WITH FALL INTEREST

BALDUINA (Balduina uniflora)
BEAUTYBERRY (Callicarpa americana)
FALSE LIATRIS (Carphephorus pseudoliatris)
DEER’S TONGUE (Carphephorus odoratissimus)
COREOPSIS/TICKSEED (Coreopsis spp.)
PERSIMMON (Diospyros virginiana)
PIPEWORT (Eriocaulon decangulare)
INKBERRY (Ilex glabra)
PINE LILY (Lilium catesbaei)
SHORT MILKWORT (Polygala ramosa)
GOLDENROD (Solidago spp.)

For detailed information, and photographs for the above plants and other native plants found in our exhibits, visit www.crosbyarboretum.msstate.edu to search the Crosby Arboretum Native Plant Database, hosted by the Lady Bird Johnson Wildflower Center (http://www.wildflower.org/).

MY FAVORITE NATIVES: LIATRIS
By Mac Alford

One of my favorite genera is Liatris (Asteraceae/Compositae), the blazing stars or gay feathers. We have several species (L. pycnostachya, L. elegans, L. spicata, L. squarrosa, L. squarrulosa) planted at our house, which vary just enough in color, number of flower heads, height, and timing to be endlessly amazing. I really enjoy them, too, because they are like daytime sparklers (fireworks) and attract a lot of butterflies.

Dr. Mac Alford is assistant professor of biological sciences at The University of Southern Mississippi, curator of the Southern Miss herbarium, and president of the Mississippi Native Plant Society.

TRAVELING EDUCATOR BOXES

Thanks to the Internship for Educators program with Pearl River Community College and Hancock School District, the Arboretum received 40 hours of service from art teacher Bronco Sloan from West Hancock Elementary. Bronco painted a “track stories” sheet, which will be part of the Arboretum’s Tracks and Scat educator box. Teachers may check out boxes on Nature Exploration, Insects, and Mississippi Snakes for one to two weeks. For more information, or to check out a box, please call (601) 799-2311.

ARBORETUM WINTER EVENTS: MARK YOUR CALENDAR!

Kids’ Holiday Papermaking, Dec. 3 • 10-11 a.m.
Landscape Design Interpretive Walk with Bob Brzuszek, Dec. 3 • 1-3 p.m.
Arboretum Open House, Dec. 10 • 10 a.m.-1 p.m.
Volunteer Lunch, Dec. 10 at Noon

CROSBY ARBORETUM VOLUNTEER MEETINGS
Saturday, Sept. 3, Oct. 8, & Nov. 12 at 9:00 a.m.
Regular volunteer meetings will resume on September 3. All are invited to attend. Learn about the many volunteer opportunities and activities you will enjoy here at the Crosby Arboretum. For more information, call Robin Veerkamp at (601) 799-2311, Ext. 104.
PLEIN AIR PAINTING AT THE ARBORETUM

On Saturday, September 10, the Crosby Arboretum will be a venue for the 9th Annual International Plein Air Painters Worldwide Paint Out, an event occurring simultaneously in international locations. Outdoor painters will bring their paint boxes and easels to paint from 9 a.m. to 3 p.m. The public will be able to join in the fun by watching individual artists work. A plein air painting class for beginners will be offered from 10 to 11 a.m. (see program schedule), with watercolor and oil kits available. Artists will formally display their work from 3 to 4 p.m. Some will be available for purchase. Plein air painting developed in France in the mid 19th century and is becoming increasingly popular. Plein air artists seek to capture the quality of natural light and atmosphere found outdoors. Their art is in direct response to the beauty they find in nature. To learn more about the International Plein Air Painters group, visit their website at http://www.i-p-a-p.com.

LET YOUR CHILD BE A NATURE DETECTIVE WITH A NEW iPHONE ADVENTURE

By Bob Brzuszek, Mississippi State University

A new project is on the horizon at the Arboretum, and is currently working toward approval through MSU. The Crosby Arboretum, MSUES is planning to host a free fun smartphone app for kids that can be used along the Pond Journey. Anyone with an iPhone, iPad, or iPod Touch can use this learning game during the months of October through March 2012. The app will feature an educational treasure hunt that families can use as they walk along the Pond and south Savanna Journeys. Users can download the app called GPTrex Adventures from the App Store for free during this trial period, and select the Crosby Nature Explorer game. It has a series of short questions about the plants and animals of the exhibits, and features photos, short videos, and location maps. We’d love to have your feedback about the game. Ask about it at the Visitors Center or you can find out more by visiting the GPTrex website at http://www.gptrex.com/.

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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

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Renewing? [ ] Memberships are for one year.
September - October 2011

FIELD TRIP: HUMMINGBIRD MIGRATION!
Saturday, September 10  (Family)
8:30 to 11:00 a.m.
Join us for a trip to the legendary property of Dot Burge, long-time friend of the Arboretum, in a field walk led by the Arboretum's own Terry Johnson. Dot is an avid hummingbird feeder, and her yard is a magnet for the migrating birds. Meet in the Visitor Parking Area to carpool. We will leave at 8:30 a.m. Prepare for a moderate walk of about a mile, with potential areas of underbrush. Bring snacks, refreshments, and dress comfortably. Members free, non-members $5. Register by September 9.

PLEIN AIR PAINTING DEMONSTRATION
Saturday, September 10  (Adults)
10:00 to 11:00 a.m.
Celebrate the International Plein Air Painters Worldwide Paint Out event! Artist April Holifield of April's Art Studio will demonstrate “plein air painting,” or painting outdoors. Those who would like to try their hand at painting “en plein air” may purchase a watercolors or oils materials packet for $35 with all you will need to get started. Bring your lunch and stay the day! Join others who will be enjoying this all day venue painting the Arboretum's woodland, savanna, and aquatic scenes. Dress comfortably. Members free, non-members $5. Please register by September 3 so that materials packets may be assembled.

FALL FIELD WALK: NATIVE PLANTS FOR THE HOME LANDSCAPE
Saturday, Sept. 10  (Family)
1:00 to 2:00 p.m.
Join Director Pat Drackett for a field walk through the Aquatic, Woodland, and Savanna Exhibits to discuss plants growing in these habitats and how you can use them in your home landscape. Learn how to select plant material based on your property's site conditions. Free to Arboretum members; $5 for non-members. Please register by September 9.

BIRD PROGRAM: RAPTORS!  (Family)
Saturday, September 17
10:00 to 11:00 a.m.
Raptors, such as eagles, hawks, owls, osprey, vultures, falcons, swallowtail kites and more, have been unfairly persecuted for years. These fascinating predators are not the pests that many people think they are. Avid bird guide and writer Susan Epps will dispel the myths and talk about raptors' many benefits to mankind. Members free, non-members $5. Please register by September 16.

BUGFEST  (Family Event!)
Friday, Sept. 23, 10:00 a.m. to 10:00 p.m.
Saturday, Sept. 24, 10:00 a.m. to 5:00 p.m.
Bring the family for a two-day extravaganza of buggy events! Friday from 10 a.m. to 2 p.m. is open to insect collecting by school groups (groups over 20 persons must call to pre-register for an arrival time). Student admission, $2; no charge for teachers or chaperons. Collecting on your own continues from 2 to 6 p.m. An insect I.D. and mounting station will be open continually on Pinecote Pavilion. At 6 to 8 p.m. Friday, children will enjoy crafts and games at the Buggy Midway! At dusk, night collecting activities begin, using lighted sheets to draw insects. Bring a flashlight or headlamp! On Saturday morning, the Midway is open 10 a.m. to noon. All day Saturday, enjoy on-going live insect demonstrations, collections, pet bugs and exhibits. Download the insect collecting manual on the Arboretum's program calendar page, www.crosbyarboretum.msstate.edu. Adults $5, children $2.

FALL NATIVE PLANT SALE:
Sat./Sun., Oct. 1-2 • 10:00 a.m. to 3:00 p.m.
Members Admitted at 9:00 a.m. on Sat.
Grab a cart and choose from a wide variety of native trees and shrubs 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.

RAIN BARREL WORKSHOP  (Adults)
Saturday, October 8
10:00 to 11:00 a.m.
Back by popular demand! Capture nature's gift of rain with a rain barrel – a simple solution to cut down on your water bill and on storm water runoff in this workshop led by Stephanie Pendleton, MSU Extension Director in Jackson County. Cost for the class is $45.00, which includes all materials needed to make a 55 gallon rain barrel. Please register as soon as possible so that we may plan for materials.

PINE NEEDLE BASKETRY  (Adults)
Saturday, October 8
1:00 to 3:00 p.m.
Join Judy Breland, Stone County Extension Director, for a workshop on the art of pine needle basket-making. A small basket can be completed in the workshop. You will also learn methods for continuing with future projects. Wear old clothes, materials can stain. All supplies provided. Admission is $5 for members and $7 for non-members. Register by October 7.

Crosby Arboretum Program Schedule
September - October 2011
October - November 2011

**INTRODUCTION TO NATURE SKETCHING**
*Adults*

**Saturday, October 15**
9:00 a.m. to Noon

Artist Robin Veerkamp will teach the basic techniques of sketching from nature in this session. Learn to set up your own field journal and sketch landscapes, woodlands, savannas, and life around a pond. Techniques will be taught for quickly sketching birds and mammals from life. Program fee (includes all materials) is $25 for members and $35 for non-members. Please register by October 8 so that we may plan for supplies.

**PAINTED PUMPKINS**
*Kids*

**Saturday, October 22**
10:00 to 11:00 a.m.

Design a painted pumpkin to add to your fall décor! Families will use natural materials and a variety of props to personalize their pumpkin in this program with Master Naturalist Mary Cordray. One pumpkin will be provided per family, however, you are welcome to bring more pumpkins for decorating. Members’ children, $4, non-members’ children, $6.

**YOGA AT PINCOTE PAVILION**
*Adults*

**Saturday, October 22**
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 followed by a short meditation sitting. Class size is limited to 16. Yoga mats will be provided, but you are welcome to bring your own. Please arrive at least 10 minutes early. Free for members; non-members $5. Register by October 21.

**THE CROSBY ARBORETUM LECTURE SERIES:**
*“Southeastern Wildflowers” with Bestselling Author Bobby J. Ward*

**Saturday, November 5, 2011**
10:00 to 11:00 a.m.
at the
Margaret Reed
Crosby Library
900 Goodyear Boulevard
Picayune

Join author Bobby Ward for an informative lecture about Southeastern wildflowers. His talk will highlight both widely distributed species from the mountains, piedmont, and coastal plain, in addition to rare and endangered plants. Bobby’s training in botany and plant physiology and his love of gardening and world travel has led to the writing or collaborating on five books so far, as well as his numerous newspaper and magazine articles. Admission $5.

**PROJECT WILD WORKSHOP**
*Teachers*

**Saturday, November 12**
9:00 a.m. to 3:00 p.m.

A Mississippi Museum of Natural Science K-12 workshop with outreach educator Crystie Baker for teachers and homeschool educators. Although activities in ProjectWILD are based in wildlife and ecology topics, many activities are cross-disciplinary. Teachers of any subject or grade can learn new ways to incorporate these activities into their curriculum. FREE for those working or living in Pearl River or Hancock Counties; no cost for manual and 0.6 CEU’s. Others, cost is $15, and $10 for CEU’s. Sign up early. To register, please call the office at (601) 799-2311.

**PINEY WOODS HERITAGE FESTIVAL**
*Schools*
**Friday, Nov. 18, 10 a.m.-2 p.m.**
*Family*
**Saturday, Nov. 19, 10 a.m.-4 p.m.**

Celebrate the early days of the Piney Woods in this seventh annual festival with exhibits and demonstrations of traditional skills such as blacksmithing, quilting, spinning, basket-making, and more. Friday open to preregistered school groups, $2 per child; free to teachers/chaperones, and bus drivers. Saturday admission adults $5, children $2.