



Mississippi Native Plants and Environmental Education

Newsletter of The Mississippi Native Plant Society and the Mississippi Environmental Education Alliance



Volume 24 Issue 2

Deep summer is when laziness finds respectability. – Sam Keen

Summer, 2006

The **Mississippi Native Plant Society**, is a non-profit organization established in 1980 to promote the preservation of native and naturalized plants and their habitats in Mississippi through conservation, education and utilization

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Welcome Northeast Mississippi Native Plant Society

Margaret Gratz reported the NMNPS reorganized on Jan 29, 2006 with Louise Godwin as president and voted to affiliate with the MNPS! Bob Brzuszek did a program on native trees and shrubs to a gathering of over 30 attendees. Welcome to MNPS!

Life Along the Sewer Line by Gail Barton, Horticulture Faculty at MCC

I've heard many a gardener lament when the bounty of spring blossoms begins to fade. I count myself among them, saddened to see the dogwood flowers diminish and woebegone when the native azaleas wane. I would be truly bummed if not for the beautiful plant combinations that follow close behind, gracing my land in late spring and early summer.

At this time of year, most of my favorite floral medleys can be found in a wet area that provides drainage for my street. The sewer line runs alongside it and a seasonal creek meanders through in winter and other rainy seasons. In short, the area would be considered by many to be a wasteland. When I first purchased the land, I might have agreed if asked during the many hours I spent warring against Chinese privet. The battle is still in progress, by the way. For now, however, I am in the lead, and the native plants are flourishing. In one particular spot, the layers of trees, shrubs and ground cover have come together to form a beautifully cohesive plant community

All through spring the emerald green foliage of the bald cypress (*Taxodium distichum*) and pond cypress (*Taxodium ascendens*) provide an excellent backdrop for my plantings. I enjoy cypress in all seasons, but particularly in spring. My enthusiasm for bald cypress has been tempered somewhat by the numerous repair bills I have had to pay after making contact with cypress knees on my riding mower. I greatly admire the fact that Pond cypress has no knees. I planted the cypress trees and they mingle easily with the indigenous sweetbay magnolias (*Magnolia virginiana*) that I am blessed to know.

My land has many large sweetbays. In late spring tiny lemon-scented magnolias about 3 inches across are produced in profusion. A few years ago Richard and I realized that late evening is the best time to appreciate sweetbay fragrance. One evening we just happened to be on our deck at 6:17. We were relaxing and talking about the day when the scent of sweetbays began to move up through the bottom and exert itself. The fragrance was like a force of nature and when it reached a peak, the scent left us both speechless. We returned to the deck on subsequent evenings at about the same time. We found that the pinnacle of fragrance could vary as much as 30 minutes from one night to the next. We're fairly sure that a certain temperature sets off the olfactory display. It is probably also the optimum temperature for the tiny beetles that serve as magnolia pollinators. The heady scent that we enjoy so well is actually magnolia-speak for "Come hither little beetles."

The succession of shrub blooms beneath the trees begins when Virginia sweetspire or Virginia willow (*Itea virginica*) buds. I think of the *Itea* bud phase as the niblet phase because the buds look like tender immature ears of corn. The niblets gradually mature into fragrant white spiky flowers. In autumn *Itea* rises to the occasion again as it contributes brilliant red foliage to the pallet. *Continued on page 5*

Dear MNPS Members,

Though it might not be the most favorable time of the year to plant, I have been quite busy doing just that lately. My fall and winter consisted of resolving problems left by the dreaded Katrina. After spending months preoccupied with cleaning up the properties my company maintains, it is so good to be planting again. We've had our normal April hot-snap and we were some ungodly amount shy of our normal rainfall amount. The rainfall thing changed last week when we were relieved by an inch and a half on Wednesday and a twenty hour 3-plus-inch soaker/torrent Saturday and Sunday. So, since we actually did get April showers, we may well get our share of May flowers. As a matter of fact our last substantial rain was the weekend that our much anticipated Cove field trip was to be. As you may know the trip to the Cove was cancelled the morning of the event due to unruly clouds. I am certain that if it wasn't raining so well, many of us would have ventured. But there is something to say about staying home listening to the rain pitter pat on the roof while watching the food channel. The **Cove trip is rescheduled for June 10**. Come join us. I am hopeful to see you there!

Regarding the **October MNPS meeting**, we will be presented with **Dr. Charles Allen's** renown native edible plant extravaganza. Dr. Allen has spent his very active life learning and teaching about native plants. He will share many samples of some of the Gulf Coast's most delectable delicacies. Charles is cofounder with Malcom Vidrine of the Cajun Prairie Habitat Preservation Society, a nonprofit group that has been actively preserving the diversity of the Louisiana Coastal Prairie. He has written or assisted in writing *The Grasses of Louisiana*, *Trees, Shrubs, and Woody Vines of Louisiana*, *Edible Plants of the Gulf South*, *Mamou (Acadian Folklore, Natural History, and Botany of the Mamou Plant, Erythrina herbacea L. Fabaceae)*, and has delivered the manuscript to a near-by State University press for the printing of *Wildflowers of Louisiana*. Over the years I've observed that Charles never forgets a plant nor a good one liner. **Gail Barton** of Meridian, Mississippi and **Peter Loos** of Cherino, Texas will discuss propagating good natives (See note from Gail on bottom of page 3). Peter is a Texan by way of New York. He and his wife Cassandra operate Ecovirons, a native plant nursery and landscape construction business. Ecovirons designs and installs wetland and prairie projects as well as urban specialty gardens. Peter is an avid highway Botanist and his truck makes frequent stops. He is past president of the Native Plant Society of Texas and has learned what he knows from some of the most respected native plant people in Texas and the Deep South. Gail Barton has spent over twenty years as Horticulture instructor at the Meridian Community College. She and Optometrist husband Richard Lowery operated Flowerplace Plant Farm in the 1990's because they liked to grow good plants. Gail currently includes into her school program propagation of some of the most desirable native plants. She has produced a very thorough must-have book called *Basic Gardening, A Guide for the South*. Both Peter and Gail are passionate about Horticulture and Botany. **Bob Brzuzek** will share with us some techniques for using Mississippi natives in our landscapes. Bob is of course former president of this Society and is presently teaching Landscape Design at Mississippi State University. He spent ten years as the senior curator of the Crosby Arboretum and has worked on numerous residential and community garden designs. His understanding of our regional plant communities is formidable and his design skills desirable. Bob has that rare combination of academic and practical hands-on knowledge and the ability to convey it. MNPS Education Chair, and newsletter co-editor **Dr. John Guyton**, of Ocean Springs, will offer a session he describes as Fun With Plants where he will share a plethora of uses, fun facts and interesting tidbits. John works for the Extension Service and is on a quest for useful and fun facts about plants that he believes are the key to engaging youth and adults in the outdoors.

So, hopefully we will see you at the Old Cove field trip June 10! Be sure to pencil in October 7th for the Native Plant Society meeting. Hoping you find what you are looking for in your wild area.

Sincerely yours, Marc Pastorek MNPS President

Dear MEEA Members,

I want to start off with a **big thank you to all those responsible, and especially Conference Chair John DeFillipo, for putting together another excellent MEEA annual conference**. The conference was held March 24-26 at the Twin Lakes Conference Center in Florence, MS. All of those who attended enjoyed the sights and sounds of an awakening spring season combined with the crisp temperature of the autumn. Presenters offered a range of sessions including raising monarch butterflies, the most recent update on the rediscovery of the Ivory-billed woodpecker, overview of new Mississippi science curriculum, solar and hydrogen powered cars. The silent auction brought another success raising funds for the MEEA grants program. One highlight of our 10th Anniversary conference was the announcement of Cynthia Harrell, Executive Director, Crows Neck Environmental Education and Conference Center as this year's Environmental Educator of the Year. Finally, of course there was great food, fun, and fellowship.

On the horizon MEEA is looking forward to becoming a part of a southeastern Environmental Education **website**. MEEA is also looking for opportunities to assist state universities and colleges with new accreditation guidelines for pre-service teachers. These guidelines will become a part of NCATE certification for colleges of education and are being developed with input from NAAEE. With our new collaborative partner, Mississippi Native Plant Society, plans are in the works for joint field trips. After an initial field trip to the Red Hills Lignite Mine earlier this spring a field trip to the Old Cove area in Webster County was rained out. The trip has been rescheduled for June 10th. This is a unique Mississippi natural area and an incredible field trip opportunity!

Keep up-to-date with the exciting things happening with MEEA through this newsletter and the NAAEE e-newsletter.

Best regards,
Matthew Miller, President

Weeds & Wildflowers in Our Yard Part 1 by John and Peggy Guyton

It would be interesting to see a record of the evolution of an old yard: who planted what; where, when and why. Where did they get it and what did it mean to them; what lived and what died; what viruses, fungi, protists and bacteria have been problems; what spiders have lived in the yard; what insects have stopped by for a visit and what plants did they find useful; when did various weeds first show up in the neighborhood, the yard; what practices have been used to manage weeds, insects, fungus and mold, bacteria and viral vectors. Do birds find the yard useful? What has been used for fertilizer, any composting practices or sites, leaf disposal or recycling? We have added a lot of wood material to our compost pile including: the cypress bark the last owners were breeding termites in from the beds around the house and copious amounts of black walnut, pine, Osage orange and cypress sawdust and of course food scraps. Have there been any floods or drought impacts and what is the origin and composition of the soil. How many latitudes has this land wandered through on its tectonic journey. Just who has lived on this land for the past 20,000 years.

All of these are important questions in gaining a real sense of place. One early observation, of our yard, is that there are a lot of non-indigenous species and some really cool weeds... uh, make that wildflowers. I was just about ready to begin experimenting with dandelion root (*Taraxacum officinale*) coffee when I noticed a bottle of broadleaf poison in the garage and a wife proud to have at last won the Faustian struggle with dandelions! "What good are they?" she asked. Thus began our adventure.

In a corner of one of our field notebooks we have been recording the "weeds" and plants we have identified in our yard. At the top of the page is Louis Agassiz's famous quote and the theme of a great adventure in our household, "I spent the summer traveling." "I got halfway across my backyard." We live at 2712 English Drive in Ocean Springs, MS. We are 0.6 miles from the Mississippi Sound of the Gulf of Mexico. To be more precise N 30° 24.123' W 088° 47.860' and right at 20 feet above sea level according to the Ocean Springs Quadrangle Topographic map and in the Halstead Bayou watershed. This will be a progressive article in the sense that we will regularly report on what we find as we work our way across the yard.

Now, a few disclaimers are in order. First, we have elected to use a native theme in planning our landscape, to a degree. To paraphrase Ed Blake, the landscape designer of the MSU Crosby Arboretum, describing his idea for plants around the Lynn Meadows Discovery Center, I don't think you want to limit yourself to just natives when there are so many other options. So, we have actually encouraged and accidentally introduced a few exotics. In fact, in our study of the local flora we have, on several occasions, brought home shovel fulls of roadside soil with plants and seeds to add a few new adventures to our investigation. Plant material left over from several of my programs and workshops has also ends up in our "experimental flower bed." In the spirit of providing an accurate record of what, when and why we have noted which species we introduced.

Wild Lettuce (*Lactuca scariola*) is a common weed or an uncommon vegetable that grows around our house. The bitter prickly leaves of this ancestor of all lettuce have been used as a sedative and opium substitute and may be useful has a hand lotion. In fact, we made a mental note to experiment with this - we see a great promotion for Wild Lettuce Hand Lotion, "a hand lotion that softens the skin and deadens the nerve endings leaving your hands soft and high, uh, we mean pain free. Small wonder our ancestors brought it with them from Europe. The leaves are said to follow the sun earning its moniker, compass plant, however this might require some rather close observations - we have not observed this characteristic.

Wild lettuce has an ancient association with humans as a sedative and pain reliever. It was used as an opium substitute until the 19th century. The Romans also served wild lettuce at banquets to reduce inebriation. New mothers drank a tea of the leaves to encourage lactation. It is a diuretic, was once used to calm excited children, relieves headaches, is used to treat coughs and lowers the libido.

The Hopi smoked lettuce opium, wild lettuce sap, or resin. They collected the latex sap by cutting the flower off the stalk and collecting the sap bit-by-bit over a few weeks. After air-drying it becomes brown, smells like opium and is ready for a ritual smoke and vivid dreams before a deep sleep. Wild lettuce is gathered in mid to late summer when it flowers. We can't help but wonder who would want it if it reduces inebriation and lowers the libido! *To be continued*

MNP&EE is the newsletter of the Mississippi Native Plant Society and the Mississippi Environmental Education Alliance.

MNP EE is a quarterly publication.

Deadlines for Articles

Winter (Dec - Feb) - November 15

Spring (March - May) - February 15

Summer (June - August) - May 15

Fall (Sept - Nov) - August 15

Listen to the Trees

No, this is not a Dr. Seuss story. Trees are living organisms that breath, rest, eat and excrete. During the early spring press a stethoscope firmly to a flat section of bark on a 6 to 8 inch, or larger diameter, deciduous tree and listen for the gurgling or crackling sound. You may have to try several different spots. Listen for differences among different trees.

Propagation Problems?

Plants, that is! Call Gail Barton at 601-483-3588, she is working on a session for the Fall MNPS Meeting and would like to discuss plants you would like to propagate.

Teachers' and Naturalists' Guide to Weather Forecasting Part 1 by John Guyton, Ed.D.

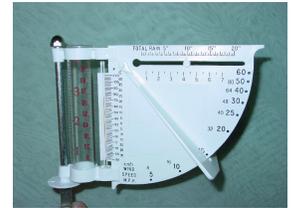
"Some people are weather wise, some are otherwise" – Ben Franklin

The purpose of teaching a weather unit should be to help students learn a little about forecasting, adapting to its eventualities and preparing for its extremes. The easiest way to teach meteorology is to start making forecasts and watching for impending meteorological changes. We will focus on three interrelated techniques for forecasting the weather in this and the next two newsletters.

Where Weather Comes From

Weather is about air masses. Cold dry air masses come from the polar regions and warm moist air masses from nearer the equator. Winds arrive with moisture and temperature characteristic of where they originate. Wind arriving from over land is dry and wind from over water is moist. Wind direction and speed can be used to forecast the arrival of these masses. A flag, wind vane, wind sock or a piece of yarn on a fence post in a field outside a window, allowing for routine observations, is a good place to start.

If the prevailing winds have been from the north and begin shifting to the west and then southwest, a warm air mass is coming to town. If on the other hand the prevailing winds have been from the southwest and they begin shifting through west to northwest, then a colder air mass is on its way. Rain often accompanies both, but weather from the southwest brings more moisture, hence more rain and it usually last longer. Changes in wind direction alone provides a useful forecasting tool. Of course you must know your cardinal directions and regularly notice wind direction to know when there is a change. The very useful and inexpensive weather station shown measures wind direction and speed, rain, and temperature. *To be continued*



Field Trip to the Old Cove

Mark your calendar we are headed for the Old Cove on **June 10**. We will **meet at the McDonalds at 9:00 Saturday morning** at the Hwy 9 exit off the **Hwy 82 bypass around Eupora**. Field Trip Chair Gail Barton's phone numbers are 601-483-3588 (home) and 601-481-5440 (cell). Time permitting we will also visit a Xeric blackjack forest with 200 year old trees that are only 6 to 8 inches in diameter and Magnolia Cove.

Cogon Crazy by MNPS President Marc Pastorek

For those of us in the part of the state where cogongrass exists, Hurricane Katrina dealt a blow to our battle against this horrible weed. For years I've watched a stand of cogon grow on a ditch bank along the road near a friend's house. It was interesting to note over the years, that the cogon was hanging out in this sunny area and wasn't moving into the shady, forested area adjacent to the ditch. I had seen cogon grow in an area where it had existed and the pine canopy grew up around it, shading densely the cogon. It was still surviving but the shade was giving it a run for its money. Well the shady, forested canopy adjacent to the ditch is gone, a la Katrina, and I am pert near sure that the cogon will take off. The Mississippi Department of Transportation is as frustrated and alarmed with Cogongrass as the rest of us, and they have a spray program using the best tools in our arsenal to combat its spread. For the past 8 months the MDOT District 6 (coastal counties) has been heavily focusing on Katrina related issues but Cogongrass is still on their radar screen. They have requested equipment and two crews to work exclusively on cogongrass control. Go MDOT!

The best solutions may include close mowing before the seed heads form and/or burning before applications of glyphosate (Roundup, Glypro, Accord, etc...) and imazapyr (Arsenal, Arsenal AC, and Chopper). Burning or mowing may improve chemical effectiveness by reducing thatch and stimulating new growth that better absorbs the herbicides. Note: Cogongrass burns very hot so caution and assistance is advised and discouraged during drought conditions as have been prevalent in Region 6.



23rd Cullowhee Native Plants Conference

July 19-22, 2006 Western Carolina Univ. Cullowhee, NC

The Cullowhee Conference increases interest in and knowledge of propagating and preserving native southeastern plant species.

Cullowhee is located between the Great Smoky and Blue Ridge mountains, approximately fifty miles west of Asheville. Close to both the Blue Ridge Parkway and the Great Smoky Mountains National Park, Cullowhee is in an ideal place for those interested in nature. More information at

<http://nativeplants.wcu.edu/>

Life Along the Sewer Line *Continued*

Sweetspire can be found throughout the state along creeks and rivers. In spite of this abundance, a sweetspire purchased from any garden center in Mississippi is likely to be a variety called 'Henry's Garnet' that hails from Pennsylvania. 'Henry's Garnet' is a fine selection but I've seen equally fine plants hanging off the banks of the Chunky River. One very memorable specimen comes to mind. My canoeing pals and I were moving at warp speed toward a particularly floriferous *Itea*. We were almost close enough to snag some cuttings when we saw that a large handsome copperhead was draped over the branches. We startled the snake and it almost fell into our boat. I'm not sure if the image of that plant is burned into my mind because of the long beautiful blooms or because of the snake! We should be propagating our own superior Mississippi *Itea* ecotypes but maybe not the ones inhabited by venomous reptiles.

While the *Itea* is still in bloom, swamp rose (*Rosa palustris*) joins in with a bounty of pink roses. Swamp rose is one of the latest of the spring blooming roses. It is not native to my county but is native in other areas of Mississippi. Swamp rose flowers are medium to hot pink and can be single or semi-double. For me, the most fetching attribute of the swamp rose is its graceful form. Swamp rose has delicate fine textured leaves on slender arching canes. I've seen some lovely specimens leaning out over the water. My own is perched up on a slightly higher mound of soil with branches that arch down to almost touch the ground. In autumn this fine native rose produces hips for the birds.

The thread that ties the ground cover or herbaceous layer together is an indigenous stand of Southern shield fern (*Thelypteris kunthii*). This deciduous native wends its way among the other plants producing chartreuse fronds complimenting their colors.

The ground cover layer is also composed of various native irises I have planted over the years. Prior to Katrina, the irises bloomed sparingly. This spring with more sun they have bloomed with abandon. I had a particularly nice display of copper iris (*Iris fulva*) this year. Copper iris is one of the 5 species of Louisiana iris that spawned all the Louisiana iris hybrids. The flowers are fairly small but intensely colored in shades of red, rust and scarlet. I grow several selections of the blue to purple zig-zag iris (*Iris brevicaulis*) and several strains of the native blue flag (*Iris virginica*). One natural hybrid from a friend's garden is a magenta form that he calls 'God's Gift'. Another friend gave me a pink form of the native blue flag. A few other older hybrids like 'Bayou Comeaux', 'Black Gamecock' and an unknown clear yellow round out the color scheme. When the kaleidoscope of blooms has ended, the attractive bluish sword shaped iris leaves assert themselves agreeably into the rich summer foliage tapestry.

During high spring, there are blossoms to be found at every turn. They are a dime a dozen. As the season transitions to summer, I cherish the late bloomers that add color to the green phase of spring.

I'm also grateful for these trouperers that have turned my wasteland into a veritable Garden of Eden. If you don't have your own boggy wasteland to plant, all the species listed here will grow in well drained soil as well.

REFUSE REUSED by MNPS President Marc Pastorek

I've heard in the past someone say "problems don't exist, opportunities do." I tried to look at the aftermath of the storm that way. Before Hurricane Katrina I used fallen pine trunks cut in long lengths for totems or I cut them into short lengths to edge gardens. I stacked lengths of pine branches into pyramid sculptures topped off with a large pine knot on top for interest. When some stumps had to be dug at one garden, I had the trunks cut into three feet from the ground and then dug the stumps. After digging a large post-hole the trunk was inserted into the hole roots-up. Add eyes, a nose, and a smile and viola! A wood sculpture! I cut up the trunk of a sixty foot fallen pine once into two foot sections and made a serpentine arrangement. Odd? Yes. Interesting? Yes! Stumps can also be inverted and set on top of stout galvanized poles concreted into the ground. The poles can be set on their own as vertical sculptures or they can be set toward the interior of a large rounded evergreen shrub so the shrubs act as a torso. I incorporated stumps on poles into an area in a large garden where we used to burn piles of debris. We still pile debris in this spot but now we never burn it. The debris decomposes from the interior of the pile, it slowly settles, and we add more! Viola! Debris sculpture! A client I produced some of these for jokingly refers to them as snake dens. I call them ornamental wildlife refuges. And so it occurred to me after the storm that I could use some of the stumps left after clean-up for growing edible mushrooms. I actually stole the idea from some visionary friends. Within a week a delivery of spore plugs came to my door ready for planting. Stumps left after tree removal can provide a good nursery for fungi. So do partially submerged logs and as the spore vendor suggests, lengths of four feet stacked openly for easy picking at harvest time. Simply drill holes the size of the spore plugs and tap in with a hammer. Then wait for the harvest in nine months or a year. In our part of the country planting spore plugs can be done year-round. Shiitake (*Lentinula edodes*), Lion's Mane (*Hericium erinaceus*), Tree Oyster (*Pleurotus ostreatus*), and Chicken of the Woods (*Laetiporus conifericola*) are the selections I planted. In the meantime, while the spores are germinating, I'll be planning recipes.

Educators and Native Plant enthusiasts: see the Jackson Audubon Society's calendar of exciting field trips and speakers on their website www.dreamwater.org/jxnaudubon

Grasshoppers in Mississippi by JoVonn G. Hill

The order Orthoptera contains several types of insects that are commonly referred to as grasshoppers and crickets. The grasshoppers belong to the suborder Caelifera and include the families Tetrigidae (pygmy grasshoppers) and Acrididae (grasshoppers). The species in these families are characterized by having hind legs modified for jumping, short antennae, and are most active during the daytime. In contrast, the crickets and katydids, which are in the suborder Ensifera, are characterized by their long antennae and mostly nocturnal behavior.

Open, grassy areas are not the only place grasshoppers live. Many species live in or on the edge of forests or in harsh open areas such as sand dunes and chalk or rock outcrops. Others may live in wet boggy areas on emergent vegetation, and others live exclusively in trees. Pygmy grasshoppers also live in a wide variety of habitats, but are usually associated with moist areas.

Until recently, most grasshopper collecting in Mississippi was confined to agricultural research or collections made by taxonomists passing through the state. The limited amount of collecting in the state is surprising given that two species of grasshopper have been described from Mississippi. Beginning in the fall of 2000 a study of the grasshopper fauna of Mississippi's Black Belt Prairie remnants was initiated, and this survey was extended last year to the Jackson Prairie region and remainder of the state. Thus far 31 species of grasshoppers have been found living in the state's prairie remnants. Two of these species, *Pseudopomala brachyptera* and *Campylacantha olivacea*, are restricted to prairie remnants in Mississippi, and are disjunct from populations in the Great Plains. For the entire state, a total of 12 pygmy grasshoppers and 49 grasshoppers have been found in Mississippi.

For comparison, a survey of the Orthoptera of Alabama during a five-year period revealed 13 species of pygmy grasshoppers and 72 species of grasshoppers. A survey currently in progress in the Great Smoky Mountains National Park has revealed 8 species of pygmy grasshoppers and 37 species of grasshoppers. It is expected that several more years of collecting will result in a similar number of species in Mississippi as in Alabama.

Editor's note to teachers – why not encourage specialty grasshopper collections or award extra credit for one?

MEEA Celebrates 10th Anniversary

The Mississippi Environmental Education Alliance (MEEA) celebrated its anniversary during its annual conference at Twin Lakes Conference Center during March. The conference was originally scheduled for the fall, but was postponed because of Hurricane Katrina. As members arrived they observed the Guyton's demonstration solar water heater on the front porch. The opening keynote was by Lee Moore, from the Nature Conservancy, discussing the Rediscovery of the Ivory-Billed Woodpecker. Lashanda Colbert with the MS Department of Education also delivered a keynote address. David Oberst with Monarch Watch spoke on Monarchs in the Classroom. Other sessions included Solar Energy We Could be Using Now, Observations 101, Preparing Preservice Teachers to Teach EE, Project Trail, Mississippi's Endangered Species, Katrina's Impact on the Natural Resources of Coastal MS and Field Notebooks and Nature Journaling. Morning hikes, hayless hay rides to observe nocturnal creatures, bonfires and storytelling were also popular options. Cynthia Harrell, Executive Director, Crows Neck EE Center is this year's Environmental Educator of the Year!

Membership in MEEA is \$10 or a benefit from attending the annual conference. For more information contact John DeFillipo, 4391 Frontage Road, Columbus, MS 39701. Members are also eligible for MEEA Mini Grants for education initiatives.

First MEEA–MNPS Field Trip

The first MEEA-MNPS field trip was an excellent tour of the Red Hills Lignite Mine near Ackerman. After an introduction we headed for the mine. The mine has six seams that are being mined and the spoils from the current strip are being used to fill the previously mined area. After a tour of the power plant we visited the restored area and were pleasantly surprised at the beauty of the area. Participating on the trip were John DeFillipo, Beverly Smith, Laura Beiser, Harold Anderson, John and Peggy Guyton, Sandra Murphy, Robert Stewart, Tom and Ruth Pullen and Jesse Ellard. Rain on Saturday postponed the Old Cove trip.

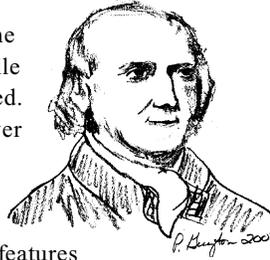
Gail Barton to serve as MNPS Field Trip Chair

A big THANK YOU to long-term MNPS member Gail Barton who has agreed to serve as Field Trip Chair. She has expressed interest in co-chairs from each quadrant in the state to assist in finding good field trip sites. Gail's email is now on the cover and she is ready for your suggestions. I forgot to mention to her, this position is hers until she trains a replacement.

If You Don't Remember Your History it can Come Back to Bite You! In his Natural History (Book XXII) Pliny stated, "The smoke of burnt lupins kills gnats."

Bartram's Trail at the MSU Crosby Arboretum by Dr. John Guyton

When I reached Bartram's excursion up the Pearl River seeking medical attention, while reading his *Travels*, my interest was peaked. Did he describe the plants of the Pearl River drainage basin? As his eyes improved he started walking about the island he called Pearl Island and recording its flora. Since the MSU Crosby Arboretum features plants of the Pearl River drainage basin it seemed logical we should have a Bartram's Trail. It did not take long to convince MNPS member Bob Brzuszek, then Senior Curator of the Crosby Arboretum. I had already extracted a list of the plants and Bob began searching for an ideal location for the trail. By the time the trail was ready we had a booklet describing its plants, an article for the Crosby newsletter and a poster for the visitors center featuring Bartram's contributions, stamps containing Bartram's illustration of the *Franklinia alataamaha* and several first day covers. On the reverse of the poster we attached a topographic map showing Prevost Island, now thought to be Bartram's Pearl Island.



John Bartram (1699-1777) and his son William (1739-1823) were America's first great botanists, naturalists and plant explorers. The Bartrams are credited with identifying and introducing into cultivation over 200 native plants. William, after accompanying his father on several collecting trips, set out in 1773 on a four-year solitary journey through eight southern colonies, including coastal Mississippi (then West Florida) to collect, identify and sketch native flora and fauna and learn about native American Indians customs and environment.

The *Franklinia alataamaha* or Franklin Tree

Bartram and his father, John, are credited with saving the *Franklinia alataamaha* (named for Ben Franklin a family friend), found along the banks of the Altamaha River in Georgia in 1770, from becoming extinct. The Franklin Tree became extinct in the wild about the time cotton was introduced. The wilt caused by *Phytophthora cinnamoni* (a root-rotting fungi associated with commercial plants) accompanied cotton and is credited with the demise of wild Franklin Trees. All Franklin trees today are derived from the plants collected by the Bartrams. Recently a group of Bartram aficionados planted about a dozen *Franklinias* on the banks of the Altamaha River. The Franklin tree can reach 20 feet height and is hardy in Zones 5 to 8 or 9.

Plants Bartram Found on Pearl Island

Pearl Island, the site of Mr. Rumsey's plantation where Bartram spent 4 - 5 weeks recovering from what possibly was scarlet fever and which served as his home base while exploring the area, was likely not the present Pearl Island at the mouth of the Pearl River - that island consist wholly of a salt marsh. Bartram's Pearl Island was probably bordered on the east by the West Pearl River, on the south by The Rigolets, Salt Bayou on the north and Lake Pontchartrain on the west (Prevost Island on the Rigolets quadrangle). Bartram probably departed the area the end of October 1775.

Trees Reported on Pearl Island

Live Oaks (mentions, but no details) *Quercus virginiana*;
Magnolia Grandiflora - Southern Magnolia;
 Laurus Borbonia - red bay (*Persea borbonia*)?;
 Olea Americana - devil-wood (*Osmanthus americana* [L.] Gray);
 Fagus sylvatica - American beech (*F. grandifolia* Ehrh);
 Laurus Sassafras - (*Sassafras albidum* [Nutt.] Nees);
 Quercus hemispherica - Darlington oak (*Q. hemisphaerica* Bartr. Ex Willd.);
 Telea - basswood (*Tilia* spp.) or wafer ash (*Ptelea trifoliata* L.);
 Liquid Amber - styraciflua - sweet gum (*L. styraciflua*);
 Morus - red mulberry (*M. rubra* L.);
 Gleidtsia - honey locus (*G. triacanthos* L.) likely water locus (*G. aquatica*);
 Callicarpa - French mulberry *C. americana* L.) Cultivated by the ancients...; and
 Halesia - silverbell tree (*Halesia* spp.).

Shrubs Reported on Pearl Island

Rhamnus or *Rhamnus frangula* - buckthorn and Sideroxilon or Sideroxilon or Sideroxilum buckthorn (*Bumelia* spp.);
 Myrica - wax myrtle (*Myrica cerifera* L.); Zanthoxilion Hercules' club or toothache tree (Zanthoxilion or Zanthoxilum) clava Herculis (*Xanthoxylum clava-herculis* L.);
 Juniperus Americana - southern red cedar nomen nudum (*J. silicicola* [Small] Bailey);
 Lycium (Lysium) salsum Christmas berry (*L. carolinianum*);
 Croton - a genus of Euphorbiaceae comprising the crotons;
 Stillingia - queen's delight (probably *S. sylvatica* L.); and
Mimosa virgata (virgata) - sensitive briar? (probably *D. illinoensis*)

Bartram also reported corn or maize, indigo, batatas (sweet potatoes), beans, peas, cotton and tobacco brought by Indians from Cuba growing on the island.

Resources

- Frances Harper's *Naturalist Edition of Bartram's Travels*, University of Georgia Press; ISBN 0-8203-2027-7.
- The Bartram Trail Conference organization has a lot of information on their site and many useful links <<http://www.bartramtrail.org/pages/species.html>>. They also host a Bartram Trail Conference Biannual meeting.
- The Library at the University of North Carolina at Chapel Hill has a searchable copy of *Travels* on their Internet site <<http://docsouth.unc.edu/nc/bartram/menu.html>>
- Check out the articles in the March 2001 *National Geographic*
- You might be interested knowing there are Trail and Historic Markers (including one on the Mississippi Gulf Coast) a Bartram Stamp (see picture above) and first day covers.



