



Mississippi Native Plants and Environmental Education

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



Volume 25 Number 1

"Celebrate Earth Day every day." – John Denver

Spring 07

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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The **Mississippi Environmental Education Alliance** promotes environmental education, supports the work of environmental educators and encourages the adoption of earth-friendly lifestyles leading to the sustainability of natural resources.

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PLT Received Award for Outstanding Global Service

Project Learning Tree (PLT) has received the North American Association for Environmental Education's (NAAEE) Award for Outstanding Service by an Organization at the Global Level. According to Brian Day, NAAEE's Executive Director, "NAAEE's award pays tribute to PLT's 30 years of dedicated service and outstanding leadership in the field of environmental education, both in the United States and beyond." Day presented the award to PLT Director Kathy McGlaulin on October 13 at a special luncheon during NAAEE's 35th annual conference in St. Paul, MN. (From Fall issue of the PLT Branch newsletter)

PLT is operated in Mississippi by Harold Anderson, formerly with the Mississippi Forestry Commission. Contact him to participate in a workshop or to become a facilitator at handerson212@gmail.com or 601-613-5567.

A Grassroots Master Urban Forestry Program Sprouts

It is exciting when leadership emerges from a grassroots effort and that has certainly been the case with Dr. Joy Anderson and Mississippi's Master Urban Forestry Program. Responding to needs in northwest Mississippi, Dr. Anderson, a MSU Horticulture Extension Agent, partnered with the Mississippi Forestry Commission (MFC) to develop this innovative program. It was modeled on the highly successful Master Gardner Program that produces volunteers to help with educational projects in communities around the state.

In October of 2005 Dr. Anderson, with Bettie Pruitt, City of Horn Lake Urban Forester, and the MFC, trained and certified the first 13 trainees in DeSoto County. Trainers included Rick Olsen, George Byrd, and Drew Stafford with MFC. Dr. Anderson used the manual from the Southern Urban Forest Council (www.urbanforestrysouth.org) as the text. The trainees receive 20 hours of hands-on instruction, including activities and written material. In exchange, the volunteers gave back 20 hours of volunteer time to become certified Master Urban Foresters.

In October 2006, 12 more MUFs from Desoto and Tunica Counties in MS and Shelby County TN were trained. These volunteers helped with school tree-planting programs in 15 Desoto County schools on how to plant and care for trees. Each student was given 3 pine trees to plant. That's 2600 students in a weeks time and 7800 trees planted. They plan on repeating the program this year.

They also assisted the MFC and the Desoto County Soil and Water Conservation District in distributing approximately 38,000 trees during Mississippi's Arbor Day. They helped homeowners select the right trees for their yards and suggested planting techniques.

The MUFs also helped planted trees in a Katrina reforestation project utilizing a tree grant from the Mississippi Urban Forest Council. The council provided the Cities of Hernando and Horn Lake with trees ,and the MUFs planted them in pots for cities on the Gulf Coast.

The Master Urban Forester Volunteer Training program will soon be offered in other Mississippi counties. It is an excellent program and increases urban forest awareness in fast-growing urban areas and small communities. The focus is on tree planting and care, but what it really does is reconnect urbanites with the environment and increases their awareness of their surroundings, even in the cities.

Dear MEEA Members,

The half way point between the winter solstice and the spring equinox, Ground Hog Day, has come and gone. Daylight hours are noticeably longer. Daffodils, cress and self-heal are blooming here in north Mississippi. It's still cold, and winter weather has put much of the U.S. in a snowy deep freeze, but spring is on the way.

MEEA will host its next conference in March as the season turns from winter to spring. What a great way to usher in and celebrate the new season. Renew, recharge, learn, and relax while participating in the conference at scenic Hugh White State Park. If you haven't already done so, I urge to scan the great agenda of events and sessions planned for the conference and send in your registration. Share the message and opportunities of EE in Mississippi with friends, colleagues, and co-workers and join us on March 23rd and 24th.

This conference will mark the end of my tenure as president of MEEA. Over the past two years MEEA has held conferences that have presented some of the best EE projects and programs in Mississippi along with great food, fellowship and fun. We have awarded grants that have funded a number of innovative projects and recognized outstanding contributions to EE through our awards. MEEA has increased its communication capacity through printed and electronic newsletters and the launching of a website. This would not have been possible without the efforts and enthusiasm of MEEA members. I want to take this opportunity to offer my sincere thanks to everyone who has contributed to the work of MEEA. It wouldn't get done without you.

Best regards, Matthew Miller, MEEA President

Dear MNPS,

I recently finished the Steven Ambrose book *Undaunted Courage*, the story of the Lewis and Clark expedition. It gave me a new perspective on the prairies of the Midwest prior to the opening-up of the West. Captain Lewis describes "a forest of plum trees garnish a plain about 20 feet elevated, nearly 3 miles by 3 miles." Another description reads "vast herds of buffalo, deer, elk and antelope were seen feeding in every direction as far as the eye of the observer could reach. I estimated the number of buffalo which could be comprehended at one view to be about 3000." The men on the expedition were unaware that the landscape they traveled through was a fire-maintained ecosystem managed by the numerous Native American nations.

I have been intrigued with fire ever since Momma told me not to play with matches. She could tell you a little about my match playing days... These days I am quite satisfied assisting certified burn technicians. Then, I relax and enjoy the fruits of the meadow. Timing a prescribed burn is essential in a meadow management plan. In general, burning in the dead of Winter is best. Fuel from grasses is available and seeds from most plants have been utilized by birds and other critters or have fallen to the ground. Growing season burns are a bit controversial. They are usually implemented to reduce woody invasive exotics such as Chinese privet and Japanese Honeysuckle (I have seen evidence of sufficient suppression of these by winter burns). Opponents of growing season burns point out damage to ground-nesting birds and desirable insects.

I recently had a conversation with Richard Johnson, co-curator (with his wife Jesse) of the Caroline Dormand Nature Preserve in Saline, Louisiana. Richard, as a child, helped Ms. Dormand in her gardens and will freely relate wonderfully quaint stories of "life on the farm." He told me that on a predetermined day (or "burn day" as he called it) everyone for miles around would light the woods and fields afire. I wondered if the Native Americans had a "burn day?" I admit that I sometimes feel like I'm exploring uncharted territory when I walk my meadows. I love what fire does to them.

Marc Pastorek, MNPS President

Green Time R̄ for ADHD: a book review by Dr. John Guyton, Education Chair

Neurologically, human beings are hardwired to nature, and research has revealed that current lifestyles, devoid of nature, are responsible for a host of problems. Richard Louv points out in *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder* (Algonquin Books, ISBN13: 978-1-56512-522-3) that Attention Deficit Hyperactivity Disorder (ADHD) diagnoses are up 33 percent from 1997 to 2002, and spending on ADHD drugs for children under five rose 369 percent.

In less than a century, we have gone from a time when our grandparents were directly involved in nature, to today when youth are almost totally disconnected. As the family farms vanished so did our intimate and familial attachment to the land. Even in the suburbs, parks and open spaces, the opportunity to build tree houses, dam streams, and wander aimlessly is forbidden by zoning ordinances, park rules or is considered too dangerous. Louv describes the human cost of alienation from nature as the diminished use of senses, attention difficulties and higher rates of physical and emotional illnesses.

Some children will likely always need medicating but teachers can immediately implement a powerful partial solution. A walk in the woods, a lesson in the outdoor classroom or even a window facing the garden or woods can be a useful treatment, with few side effects, that costs virtually nothing. Helping children learn to enjoy the outdoors contributes to a more healthy lifestyle and even addresses a growing obesity problem.

Go ahead and purchase *Last Child in the Woods* so you can highlight essential passages. When you have finished reading it, consider giving it to your local school superintendent.

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

Deadlines for Articles

Winter (Dec - Feb) - November 15
 Spring (March - May) - February 15
 Summer (June - August) - May 15
 Fall (Sept - Nov) - August 15

Weeds & Wildflowers in Our Yard Part 4 by John and Peggy Guyton

"I spent the summer traveling. I got halfway across my backyard." – Louis Agassiz

This will be the final report on what we discovered in our Ocean Springs yard, since we have moved. In the first part we wondered what previous inhabitants had contributed to the yard and as we leave we can report on a few of our contributions. The **lantana** from Peg's father will be more welcoming than the stinkhorn fungi that greeted us. We noticed it virtually always has an aerial cover of Gulf Fritillaries! Since it is naturalized along the Gulf Coast and adds curb appeal to the house, we make no apologies. Although we have not experimented with lantana, in Mexico a decoction of the leaves has been used to make a stomach tonic and to treat snake bites. Crushed leaves were used as a poultice on the wound. Since it is drought tolerant, it will grace the yard for years to come, and since it is under our mail box, the post-person will be striving to avoid the bees for years to come!

We sincerely regret accidentally introducing **Flora's paintbrush** (*Emilia fosbergii*) to the yard. We spotted the beautiful flower growing between a concrete curb and an asphalt parking lot in Daytona Beach - that should have been a warning as to its hardiness. We tried in vain to identify it while in Florida and finally pulled it up, wrapped its roots in moist paper towel and stuffed it in a plastic Coke bottle. When unloading the car in Ocean Springs I stuck the bottle in a flower bed. You are probably racing ahead - by the next morning, as threatened plants are wont to do, it had produced a ½ inch diameter dandelion like seed head... and half of it was gone. And on our last trip to Ocean Springs we were still trying to put the genie back in the bottle. I wonder how long it will be before someone else wonders just how this plant got there? After an exhaustive search of my plant books and too much time on the internet Dr. Victor Maddox, with MSU's GeoResources Institute, correctly identified it from my verbal description!

Club Moss (Lycopodiaceae) There was a lonely plant in our backyard when we moved in, and we have added several more to a front flowerbed. *Lycopodium* produce thousands of highly flammable spores. These spores were used in early "flash photography" and their water repellent properties made them useful as pill coverings and as a substitute for talcum powder for diaper rash. A hand remains dry when inserted in a glass of water with spores sprinkled on the surface of the water. The spores have also been used to stop nose bleeds. John's talks are sometimes quite explosive, and he is never far from a supply of his favorite flammable spores.

We would be seriously remiss if we didn't mention **Buckhorn** (*Plantago lanceolata*). It is our most commonly used medicinal plant. The genus *Plantago* comes from the Latin *planta*, or "footprint" and the Native Americans called it "White Man's Foot" since it followed their settlements. Buckhorn plantain arrived in the New World with early European settlers and has since spread across the continent. Native Americans were quick to find uses for plantain - a chewed leaf has antiseptic properties useful for insect stings and irritation from stinging nettle; the root can be chewed to alleviate toothaches. Dried leaves are recommended for blisters and boils. Rabbits and small mammals eat the leaves and birds the seeds. Many butterflies find it useful as well. The young leaves are edible raw but better cooked. As with most leafy plants the older leaves are less desirable - think tough and hairy. Try the leaves in a tea or as a seasoning in other dishes. If you try the seeds note if they have the reported laxative effect, and let me know. Extension agents are always offering me advice on how to get rid of my broadleaves and I am steadily telling them their virtues. We use buckhorn on cuts, abrasions and broken cuticles. Rinse and chew a leaf; then apply it under a band aid for about 10 minutes only - longer and the leaf will cause a temporary tannin tattoo. Its antibacterial and antifungal properties speed the healing. As an astringent it is useful in removing splinters and stopping the blood flow from small cuts. And the final pièce de résistance is its ability to stop the pain associated with minor cuts! There is nothing in our medicine cabinet that works as quickly and as well as buckhorn! It is easy to understand why our ancestors brought it with them to the New World.

It is not unusual to find salt crystals on the leaves of halophytic **saltgrass** (*Distichlis spicata*). Special glands on the leaves and stem secrete salt absorbed by the roots. Salt grass is fire adapted and its roots form dense mats making it useful in controlling erosion. *Distichlis spicata* provides food and nesting grounds for birds, insects, fish and the larvae of numerous marine invertebrates. As it decomposes it provides food for clams, crabs, and fish. The leaves are resistant to trampling and I wonder if it would survive close cuttings.

We don't mind leaving the **Florida Betony** or rattlesnake weed (*Stachys floridana*) behind but John did so much want to give some "rattlesnake seeds" to a colleague's daughter to plant in their yard! We will miss the **Virginia Chain Fern** (*Woodwardia virginica*), the **Violet Wood Sorrel** (*Oxalis violacea*) and the **Butterwort** (*Pinguicula*) or flypaper plant; but there will be new plants to learn.

We enjoyed living on the coast and learning some of the plants but we didn't get halfway across our yard! Incidentally, there are still no dandelions in our Ocean Springs yard! Dandelions are, you probably recall, what launched this adventure. We have moved to Mayhew, MS and in the tradition of Agassiz a new adventure has begun. I haven't seen any buckhorn yet, and yes, we have brought some from the coast in the tradition of our ancestors, taking useful plants with them! I see Osage orange in the hedge; there is a willow for our willow tea and I wonder what else is in that long hedge? We are now in the Black Prairie... I wonder what burning the back field will reveal?

Willow Branch Chew Stick for Tension or Heat Related Headaches

Peter Loos, a speaker at the 2006 MNPS conference, reported that a willow branch softened by soaking to make a rooting tea could be chewed like gum to relieve tension or heat related headaches. In an earlier newsletter we described Peter as "an avid highway Botanist and his truck makes frequent stops." Now, after a confessional tip we understand the reason for these frequent roadside stops – and Peter reported these occasions, when nature is calling the loudest, are when and where he makes some of his most exciting finds!

Spring Ephemerals by Gail Barton Horticulture Instructor Meridian CC

Even though our Mississippi winters are mild, I still have days when I long for spring. I'm particularly fond of the spring ephemerals that grow in my garden and woods because they are nature's showy heralds of spring.

The spring ephemerals are so called because they bloom in spring for only a short period of time. Spring ephemerals are typically woodland perennials that emerge from the ground when the trees still have no leaves. They make use of this narrow window of available sunlight to quickly grow to maturity. They sometimes even finish flowering and start to form seed before the trees leaf out. As the shade intensifies and weather gets hotter they usually die back to some sort of underground stem.

I wasn't 100% certain about the Spring Ephemeral plant list I had devised, so I asked a couple of MNPS members for help. Botanists Heather Sullivan and Mac Alford gave me their own spin on what makes a Spring Ephemeral. They also very graciously updated the Latin names I had used. In the plant lists I have cited correct and current nomenclature first followed by the used-to-be name that I was familiar with.

According to Heather Sullivan, the Mississippi Museum of Natural Science Botanist, "It just depends on how you define a spring ephemeral. I've always thought that it included species that flowered, fruited, and essentially disappeared by the heat of summer, leaving no evidence of their existence in a habitat. Other people might define it by the short flowering period, and not consider the persistence of the vegetative parts."

Mac Alford, University of Southern Mississippi Botany Professor, elaborated, "It might be interesting to note for our readers that in Mississippi our "ephemerals" are not nearly so ephemeral as those farther north. Whoever coined the term probably lived in the north. When I was in upstate New York for the first spring, I was shocked that the spring flowers came out during the last week of April or first week of May and were gone within ... one week. That was hardly time to get the camera out! Most of ours last quite a bit longer. Also, farther north, there tend to be fewer winter/early spring plants, so when the ephemerals pop out, it makes a wild show. For most of us, we have to be in hardwood forest to notice a difference. We have so much greenery from henbit, chickweed, ryegrass, bluegrass, and the like that the change from winter to spring seems continuous."

In any case, I think we can agree that Spring Ephemerals *usually*:

- Are herbaceous perennials found in old growth woodlands.
- Emerge from dormancy in late winter when trees are leafless.
- Make the most efficient use of winter sun by growing, flowering and fruiting quickly – usually within six weeks or so.
- Finish their life cycle and go dormant (or in some cases semi-dormant) when the trees leaf out and dense shade returns. Their summer dormancy also allows them to avoid blistering Mississippi summers and arduous periods of drought.
- Are low to the ground and protected from late freezes by the existing leaf litter. The moist winter soil holds heat absorbed during the day and resists rapid temperature changes at night.

Since the Spring Ephemerals are in bloom for such a short time, I use mnemonic devices to help me remember when to watch for them. I know that in my part of the world, trillium busts out of the ground around February 8 which is my Mama's birthday. The late Toey Tisdale, a renowned local botanist taught me to look for bloodroot around March 10 which happens to be a few days after my husband's birthday. Bloodroot is perhaps the most ephemeral of the Spring ephemerals. It blooms for barely over a week and its solitary leaf is gone about a month later.

Spring Ephemerals appear to be fragile but their avoidance tactics allow them to grow in very inhospitable environments. I know of a clear-cut filled with brambles, new sapling sweetgums and the beginnings of a kudzu invasion. In late winter, when all of the above are dormant, I sometimes suit up in bramble proof attire and go to dig trillium from the site.

Most people who have botanized very much have a favorite spring ephemeral. I took an informal poll of a few MNPS Members and Mississippi botanists and have printed most of the responses here. I simply asked each person to name their favorite spring ephemeral and tell why.

1. "My favorite Spring ephemeral is the "green dragon" (*Arisaema dracontium*), because in spite of its not being really showy, it is way unique enough, and seeds itself around in just leaf litter so I can share more plants with new shade gardeners. And it dies down before anyone has time to kill it - either with kindness or neglect - but the slender reddish orange seeds remain. I also admire how mayapple (*Podophyllum peltatum*) can survive and actually show up in the late winter in huge colonies under kudzu - often being the only shiny, dark green plant left on a hillside where trees used to be." – Felder Rushing, Garden Writer and Media Personality

2. "My favorite spring ephemeral is the mayapple (*Podophyllum peltatum*). I

like it because it forms beautiful colonies that bring to mind a gathering of friends in the forest. They are the subject of lots of plant lore, being used for everything from poison and insecticides to food and laxatives. What else would we expect from creatures that look like little green umbrellas or toadstools and have hidden flowers?" – Mac Alford, University of Southern Mississippi Professor and Herbarium Curator

3. As poet Amy Lowell once noted, "In the damp Spring woods, The painted trillium smiles." – Bob Brzuszek, Mississippi State University Landscape Architecture Professor

4. "My favorite Spring ephemeral is the *Trillium recurvatum*, purple trillium, because of its color. Also, it makes me wonder about the beauty and vastness of the Southern forest in ancient times." – Jerry Palmer, Greens Superintendent of Jackson's Colonial Country Club

5. "My favorite Spring ephemeral is a toss-up between *Claytonia virginica*, because of its delicate pastel flowers coupled with its ability self-sow in the lawn, and *Sisyrinchium angustifolium*, for providing the hard to come by blue in the Delta garden." – Lynn Libous-Bailey

6. "My favorite Spring Ephemeral is bluets. I like it because as a child, I always knew that spring had FINALLY arrived once the bluets appeared in our lawn. We would make tiny bouquets of bluets and quaking grass in an acorn cap vase to give to our mother!" – Heather Sullivan, Botanist for the Mississippi Museum of Natural Science

I still remember my own first interaction with Spring Ephemerals. During College I lived in the country on New Light Road near Starkville. The house was raggedy but there were plenty of opportunities to interact with nature. I had never lived in the country before so I was enchanted by my surroundings and would often take my dogs on long walks through the woods. I skipped a couple of weeks of walking and the next time I took my usual route through the oak hickory woodlands, I topped a gentle rise and was immediately captivated by an awesome patch of trillium. That was a few decades ago but I can still close my eyes and see the low mounding hill covered with a showy mass of mottled trillium. Each plant was crowned with a garnet colored flower. I walked on and topped another hill to find an extremely curious looking mass of Mayapple umbrellas. So... the deal with Spring Ephemerals is that "now you see them – now you don't!"

Species listed below are true Spring Ephemerals that disappear soon after flowering.

Ramps (<i>Allium</i> spp.)	Trout Lily or Dogtooth Violet (<i>Erythronium albidum</i>)
Rue Anemone - <i>Thalictrum thalictroides</i> (<i>Anemonella thalictroides</i>)	Bluets (<i>Houstonia</i> spp.)
Green Dragon (<i>Arisaema dracontium</i>)	Southern Twayblade (<i>Listera australis</i>)
** Jack in the Pulpit (<i>Arisaema triphyllum</i>)	Pennywort (<i>Obolaria virginica</i>)
Spring Cress (<i>Cardamine bulbosa</i>)	Mayapple (<i>Podophyllum peltatum</i>)
Spring Beauty (<i>Claytonia virginica</i>)	Bloodroot (<i>Sanguinaria canadensis</i>)
Spring Coralroot (<i>Corallorhiza wisteriana</i>)	Giant Chickweed (<i>Stellaria pubera</i>)
Dwarf Larkspur (<i>Delphinium tricorne</i>)	Trillium (<i>Trillium</i> spp.)
Toothwort - <i>Cardamine</i> spp. (formerly <i>Dentaria</i> spp.)	Bird's Foot Violet (<i>Viola pedata</i>)

The wildflowers listed below behave like Spring Ephemerals but have growth that persists later in the season after trees have leafed. Even though the leafy growth is present after flowering, it seems to be semi-dormant rather than in a stage of active growth during hot weather.

** Doll's Eyes (<i>Actaea pachypoda</i>)	Allegheny spurge (<i>Pachysandra procumbens</i>)
Wild Ginger (<i>Asarum canadense</i>)	Lousewort (<i>Pedicularis canadensis</i>)
** Devil's Bit or Fairywand (<i>Chamaelirium luteum</i>)	Woodland Phlox (<i>Phlox divaricata</i>)
Yellow Lady Slipper - <i>Cypripedium pubescens</i> or <i>Cypripedium parviflorum</i> var. <i>pubescens</i> (formerly known as <i>Cypripedium calceolus</i>)	Solomon's Seal (<i>Polygonatum biflorum</i>)
Wild Geranium (<i>Geranium maculatum</i>)	Early Saxifrage (<i>Saxifraga virginiana</i>)
Liverleaf - <i>Hepatica nobilis</i> var. <i>obtusata</i> (<i>Hepatica americana</i>)	** False Solomon's Seal - <i>Maianthemum racemosum</i> (<i>Smilacina racemosa</i>)
Alumroot (<i>Heuchera americana</i>)	Foam Flower (<i>Tiarella cordifolia</i>)
Heart-leaf Wild Ginger (<i>Hexastylis arifolia</i>)	Bellwort (<i>Uvularia grandiflora</i> or <i>Uvularia perfoliata</i>)
** Crested Iris (<i>Iris cristata</i>)	Atamasco Lily (<i>Zephyranthes atamasco</i>)

I was inspired to write about Spring Ephemerals because of the next MNPS field trip. It is possible that we will see those species marked above with ** on our March 24 trip to the Old Cove.

The early spring bloom cycle makes Spring Ephemerals powerful contenders in the competition to attract pollinators. The pollinators usually find the flowers by detecting a scent. In winter, there just aren't that many flowers, so the few solitary bees and flies that are out and about, have few other choices if they crave nectar.

Several spring ephemerals are engineered specifically to attract flies and beetles. Wild ginger, for example, is sometimes called "Little brown jugs" due to the appearance of its flowers. The reddish-brown, vase shaped flowers are the color of and scented like rotting meat.

Some of these low growers like bloodroot and trillium have seed that are dispersed by insects. Bloodroot seed are coated with a nutritious oily material that is very attractive to ants. The ants carry their tasty treats into moist warm underground storage vaults in the soil. Since ants are so efficient, they usually "plant" more seed than they have time to eat.

It is also likely that we will see a wide assortment of ferns in the Old Cove including Broad Beech Fern, Southern Lady Fern, Christmas Fern and the interesting and somewhat ephemeral Grape Fern (*Botrychium* spp.).

Grape Fern emerges from the soil in winter and produces a vegetative frond or two with separate spore-laden segments. When magnified or studied closely, the spore cases resemble a bunch of Thompson seedless grapes. The fronds are gone long before hot weather. Spores grow into underground prothalli that are associated with a beneficial fungus. So the Grape Fern dies back to underground stems but also reproduces sexually (via egg and sperm) beneath the soil.

On March 24, the trees should be just beginning to leaf at the Old Cove site. The woods will be rampant with plant sex. The bugs will be pollinating. The ants will be dispersing the embryos. The spores will drift downward to the moist soil. It should be a very exciting day. I hope to see you there.

At Last, a Prairie Plant Catalog and Prairie Primer!

Are you interested in learning about prairies, planting a meadow, or perhaps just looking for a few sun-loving Mississippi wildflowers? The new 2007 Meadowmakers Catalog and Planting Guide may have the perfect seed or plants for your project. Meadowmakers is the brain child of MNPS President Marc Pastorek. This unique publication is Marc's first mail-order catalog. Meadowmakers sells seed collected from prairie remnants on private land in Mississippi, Louisiana and East Texas. In addition to plant descriptions of each species sold, the 24 page catalog contains basic information about prairie locations, establishment and maintenance. A detailed map shows locations where seed were harvested, and patrons are invited to select their preferred geographic seed source from the map. The catalog is bursting with information and is liberally illustrated with original artwork. To obtain your copy, send \$5.00 to Meadowmakers / 248 Charles Daughdrill Road / Carriere, MS 39426.

Editors note: *This is a good read. The first night we read it from cover to cover pausing only for dinner! Peg and I were pretty excited with this outstanding catalog packed with information and since we are now living in the blackbelt prairie we are glad to have the catalog as a reference and a seed and plant source.*

MNPS Field Trips! Ethel S. Vance Natural Area and Old Cove

On Saturday, May 5th, the MNPS will meet at the **Ethel S. Vance Natural Area**, 1.2 miles west of Liberty (Amite County) on Mississippi Highway 24. The Vance Natural Area consists of three major plant communities: bottomland hardwood, open wetland from beaver impoundment, and mixed hardwood on gravel outcrops overlooking the West Fork Amite River. The gravel outcrops are home to hickories, oaks, cucumber trees, paw-paws, and various hollies with a rich understory of species like buckeye, oak-leaf hydrangea, trillium, and violets. Some rare plants encountered here are starvine (*Schisandra glabra*), hempvine (*Mikania cordifolia*), and silky camellia (*Stewartia malacodendron*), which hopefully will be in full bloom. Spring-seeps scattered at the base of the gravel outcrop yield areas with hummocks of *Carex*, peat moss, dwarf palmettos, and occasional orchids like *Spiranthes cernua* and *Habenaria repens*. The bottomland features older forest of beech, southern magnolia, spruce pine, various oaks, horse-sugar, and uncountable "stinkbush" or star anise (*Illicium floridanum*). The open wetland is surrounded by wax-myrtle and possumhaw viburnum and consists of yellow pond-lily, numerous sedges, composites, and Ludwigias. It's a better place for bird watching and fall plants but always yields something interesting. On the same day at the multi-purpose center at the Vance Natural Area the Liberty Heritage Days festival will be held. Arts and crafts will be sold, music will be performed, and lunch options will be available.

For more information contact MNPS member Mac H. Alford, Ph.D., Assistant Professor and Curator of the Herbarium, USM, Telephone: 601-266-6531, e-mail: mac.alford@usm.edu, www.usm.edu/biology/. Let Gail Barton know if you will be participating.

On March 27 we will visit **Old Cove** in Webster County, which has been called Mississippi's Grand Canyon. It is also a carefully guarded secret place. When I asked Dr. Troy Laswell, a past chair of MSU's Geology Dept., if he was familiar with it, I was surprised he wasn't. After describing its depth and the climate change, so evident to those who visit it, he asked if it was so deep wouldn't I expect the geology department chair to know of its existence? Later after examining maps of Webster county he excitedly exclaimed "all the contour lines run together, it must be very steep and deep... no wonder I never noticed" "What are you doing Saturday?" Saturday we visited the Old Cove and it was quite enjoyable to share my knowledge of the area with someone who had shared so much about geology with me! The Old Cove is also home to a wealth of plants. Many of our heritage plants can be found in the Old Cove. I first encountered white baneberry or dolls eyes (*Actaea pachypoda*) in the Old Cove and I have on many occasions convinced gullible visitors the picture of its berries on my wall was taken at the eye clinic in Memphis... Other noteworthy plants to be on the lookout for include: yellow ladies slipper (*Cypripedium calceolus*), Jack in the pulpit (*Arisaema triphyllum*), broad beech fern (*Thelypteris hexagonoptera*), southern lady fern (*Athyrium asplenoides*), grape fern (*Botrychium virginianum*), Christmas fern (*Polystichum acrostichoides*), resurrection fern (*Polypodium polypodioides*), pinesap (*Monotropa hypopithys*), dwarf crested iris (*Iris cristata*), Dutchman's pipe (*Aristolochia serpentaria*), American beech (*Fagus grandifolia*), Big leaf magnolia (*Magnolia macrophylla*), Tulip poplar (*Liriodendron tulipifera*), witch hazel (*Hamamelis virginiana*), cucumber tree (*Magnolia acuminata*), star vine (*Schisandra glabra*), maple-leaf viburnum (*Viburnum acerifolium*), coral honeysuckle (*Lonicera sempervirens*) and wild azalea (*Rhododendron canescens*). Near the Old Cove is a xeric blackjack oak forest with 200 year old trees that are only about 6-8 inches in diameter and the nearby Magnolia Cove has a beech tree with a 200 foot crown spread. Could this be a state champion? – John Guyton

Contact Trip Chair Gail Barton if you plan to participate in either field trip or with questions at lgbarton@gmail.com, 601-483-3588 (home) or 601-481-5440 (cell). Please let Gail know ASAP since arrangements often depend on the number of participants expected.

The Leopold Education Project (LEP) is Growing in Mississippi

Jonathan Peeples, Dr. John Guyton and the Noxubee National Wildlife Reserve hosted a facilitators training at the on February 8-9. LEP is a collection of over 20 land ethic lessons based on Aldo Leopold's A Sand County Almanac. The almanac is composed of essays arranged by month. Janine Newhouse from Pheasants Forever, Jonathan Peeples with the MSU Wildlife Fisheries Dept., along with Suzanne and Marc Hirrel led the workshop. If you would like to be trained to use the materials contact Jonathan or John. Other new facilitators include: Dr. Glenn Hughes, Andrea Dunstan, Terri Jacobson, Beverly Smith, Frank Dungan, Don Bales, Dr. Bronson Strickland, Andrew Couch, Marion Sansing and Harold Anderson. Next fall, a second facilitator training will be offered.

MS Native Plant Society Membership Application or Renewal Form

Join the organization devoted to the study and appreciation of wildflowers, grasses, shrubs and trees native to the state of Mississippi. **Join Today!**

_____ New Member _____ Renewal Name _____
_____ Student: \$7.50 County _____
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_____ Contributing: \$35.00 Telephone _____
_____ Life: \$125.00 email _____

Please return this form with check to: MNPS, Inc., C/O Dr. Debora Mann, 114 Auburn Drive, Clinton, MS 39056-6002

Coastal Plains Chapter MNPS: Meets every 4th Monday at various locations near Gulfport. For more information contact president, Edie Dreher at 228-864-2775 or mail to 100 24th St., Gulfport, MS 39507.

Starkville Area Chapter: For meeting times and information, contact Bob Brzuszek at rbrzuszek@lalc.msstate.edu or phone 662-325-7896.

NE MS Native Plant Society Chapter: contact Margaret Gratz at 662-844-5640 or gratz@redmagnet.com

Visit the MNPS, Inc. Web site at: groups.msn.cm/mississippinativeplantsociety

Mississippi Environmental Education Alliance Membership Application

The state alliance devoted to environmental education and the affiliate of the North American Association for Environmental Education. **Join Today!**

Name: _____ New _____ Renewal _____

School or Organization: _____

Address: _____ **City:** _____ **State:** _____ **Zip:** _____

Phone:(day) _____ **(evening)** _____

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- | | | |
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| Membership Category | Committee Interests: | with your check or money order, |
| <input type="checkbox"/> Individual (\$10.00) | <input type="checkbox"/> Strategic Planning | to MEEA, C/O John DeFillipo, |
| <input type="checkbox"/> Student (\$5.00) | <input type="checkbox"/> Nomination | MS Museum of Natural Science, |
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Join MNPS, MEEA or Both!

The Mississippi Environmental Education Alliance conducts an annual conference and occasional workshops. They are preparing to assist colleges of education meet the new EE standards required for NCATE accreditation. For information on upcoming activities watch this newsletter or contact President Matt Miller. Their web site will go active within a few months.

Don't miss MEEA's Spring Conference, March 23-24, at Hugh White State Park near Grenada, MS

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