



Mississippi Native Plants and Environmental Education



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

Volume 26 Number 2

We take our clothes off to bask in the sun while trees put their leaves on

Summer 08

The Mississippi Native Plant Society, is a non-profit organization established in 1980 to promote the preservation of native 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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Field Trip to the Wildside with Sherra and Ken Owen

On Saturday April 12, 2008, Mississippi Native Plant Society members met at the Pilot Truck Stop in New Albany. The group then convoyed about 6 miles to "Wildside", Sherra and Ken Owen's home along the Pontotoc Ridge.

About 29 people were in attendance including 22 MNPS members and 7 guests. Participants came from Huntsville, Alabama and a variety of Mississippi towns including Water Valley, Paris, Saltillo, Booneville, Tupelo, Oxford, Iuka, Meridian, Philadelphia, Vicksburg, New Albany and Hattiesburg.

When we arrived at Wildside, Sherra briefly discussed medicinal and folk uses of native plants. We then leisurely toured Sherra's teaching garden and walked her 1 mile nature trail through the woods. Throughout this article, plants that were in bloom are marked with *. Some of the plant species that we observed were: *Actaea pachypoda* (white baneberry), *Aesculus pavia* (red buckeye*), *Calycanthus floridus* (sweet shrub*), *Euonymus americanus* (strawberry bush*), *Hydrangea arborescens* (smooth hydrangea), *Hydrangea quercifolia* (oakleaf hydrangea), *Ilex decidua* (possumhaw), *Lindera benzoin* (spicebush), *Aquilegia canadensis* (columbine*), *Arisaema dracontium* (green dragon), *Arisaema triphyllum* (Jack-in-the-pulpit*), *Aristolochia serpentaria* (Virginia snakeroot), *Asimina triloba* (pawpaw*), *Asarum canadense* (Canada wild ginger), *Cardamine bulbosa* (spring cress*), *Chamaelirium luteum* (fairywand), *Chelone glabra* (white turtlehead), *Chrysogonum virginianum* (green and gold*), *Claytonia virginica* (Virginia spring beauty*), *Corallorhiza wisteriana* (spring coral root*), *Cypripedium parviflorum* (small yellow lady's slipper*), *Cynoglossum virginianum* (wild comfrey*), *Decumaria barbara* (hydrangea vine), *Dentaria diphylla* (slender toothwort*), *Dentaria laciniata* (cut leaf toothwort*), *Dioscorea villosa* (wild yam), *Dodecatheon media* (shooting star*), *Galearis spectabilis* (showy orchis*), *Geranium maculatum* (wild geranium*), *Geranium carolinianum* (Carolina geranium*), *Hepatica* spp. (hepatica), *Hexastylis arifolia* (little brown jugs), *Hexastylis shuttleworthii* (Shuttleworth's ginger), *Hybanthus concolor* (green violet), *Hydrastis canadensis* (goldenseal*), *Iris cristata* (dwarf crested iris*), *Iris fulva* (copper iris), *Iris virginica* (southern blue flag), *Lonicera sempervirens* (trumpet honeysuckle*), *Mitchella repens* (twinberry), *Oxalis violacea* (violet wood sorrel*), *Phlox divaricata* (blue phlox*), *Podophyllum peltatum* (May apple*), *Polemonium reptans* (Jacob's ladder*), *Polygonatum biflorum* (Solomon's seal*), *Sassafras albidum* (sassafras), *Silene virginica* (fire pink*), *Smilacina racemosa* (false Solomon's seal), *Tipularia discolor* (cranefly orchid), *Tradescantia subaspera* (zigzag spiderwort*), *Trillium cuneatum* (sweet little Betsey*), *Trillium grandiflorum* (white trillium*), *Trillium luteum* (yellow trillium*), *Trillium recurvatum* (prairie trillium*), *Trillium stamineum* (twisted trillium*), *Trillium vaseyi* (Vasey's trillium*), *Ulmus serotina* (September elm) and *Uvularia grandiflora* (large flowered bellwort*). We also saw many ferns including: *Adiantum capillus veneris* (southern maiden hair), *Adiantum pedatum* (northern maiden hair), *Athyrium felix femina* (lady fern), *Botrychium dissectum* var. *dissectum* (dissected grape fern), *Botrychium dissectum* var. *obliquum* (ternate grape fern), *Botrychium virginianum* (rattlesnake fern), *Dryopteris marginalis* (marginal shield fern), *Onoclea sensibilis* (sensitive fern), *Ophioglossum vulgatum* (adder's tongue fern), *Osmunda cinnamomea* (cinnamon fern), *Osmunda regalis* (royal fern), *Polystichum acrostichoides* (Christmas fern) and *Thelypteris hexagonoptera* (broad beech fern). *Continued on page 3.*

Dear MNPS Members,

Due to numerous conflicts, we have changed the date for the MNPS Annual Meeting to October 25, 2008.

A Registration form and map will be included in your next newsletter. This year we will charge a small registration fee. See the Revised Agenda in this newsletter for details.

I have been diligently working to recruit a very talented array of workshop leaders for the meeting. These workshops are concurrent. They will be offered one time from 8:30 until 10:15. You will need to choose one of the four options. I ask that you contact me at lgbarton@comcast.net or at 601-483-3588 with your workshop preference by June 30 so that we can wisely allocate the facilities.

Option #1 – Exploring the Red-cockaded Woodpecker Habitat - Margaret Copeland of Oktibbeha Audubon Society will lead this informative walk along the Refuge's ¼ mile Red-cockaded Trail. Margaret will discuss the endangered woodpecker's habitat needs and explain how the Refuge's management practices have encouraged population increases. If time permits, the group will move on to a nearby site for more birding.

Option #2 – Native Grass Identification – If you are baffled by our lovely native grasses, this is a perfect opportunity to begin sorting them out. Botanist Lucas Majure will discuss grass identification features and then assist the group in using their new-found knowledge. Participants will practice their ID skills on a walk through the Morgan Hill Prairie. If you have one, please bring a hand lens to take a closer look at the micromorphology of some species that will be presented. Lucas Majure is a native of Decatur, Mississippi. He has written the *Vascular Flora of the Chunky River* and is currently working on the *Vascular Flora of Lauderdale County*. He is a Ph.D. student at the University of Florida working on the systematics of prickly pear cacti (*Opuntia*) of eastern North America. This workshop is limited to 20 participants and a few hand lenses will be available for use.

Option #3 – Planning Your Backyard Habitat Garden – Lelia Kelly will lead a lively discussion about techniques and tricks used to attract wildlife to your back yard. Emphasis will include landscape design methods that are appealing to the viewer and wildlife friendly. The group will take a short walk to identify native plants in the Noxubee Native Garden. This workshop should be especially beneficial to beginning gardeners and to those wishing to re-design a more natural garden. Lelia Scott Kelly is a wild thing at heart, but she works as an Associate Extension Professor and Consumer Horticulture Specialist for the Mississippi State University Extension Service. She also serves as the statewide coordinator for the Master Gardener Program and the 4-H Junior Master Gardener Program. She earned her M.S. and Ph.D. in Horticulture from Mississippi State University. Lelia is a popular speaker at garden events in the Southeast. She lives and gardens in Corinth, Mississippi with her three sons and husband.

Option #4 – Using Native Plants in Floral Design – Sam Ledbetter has been trained as a Biologist, Horticulturist and Florist. He currently serves as Curator of University of Western Alabama's 13 acre Black Belt Garden. The garden is funded by the Center for the Study of the Black Belt and is designed to display plants of the Black Belt Prairie. Sam will lead you on an exciting adventure in floral design. He will demonstrate design techniques and discuss natives with long vase life. Materials will be provided for each person to make a personal flower arrangement. A \$10.00 materials fee will be charged. Be sure to sign up early because this workshop is limited to 15 participants.

I hope that you don't fret too much when choosing among these wonderful workshops. I am really looking forward to seeing you all at our 2008 MNPS Meeting – Gail Barton

MEEA President's Letter May 2008

As environmental educators we focus much of our attention on the "problems" with the environment and lose sight of the positive aspects of our healing planet. The public can respond with great passion to global climate change, deforestation, natural disasters and the impending demise of life as depicted in the media. But I believe the response that we seek can be fostered through highlighting the success stories of our time. I propose this summer we seek out and educate others about an example of stewardship or success in your neck of the woods. At the Noxubee Wildlife Refuge, for example, a nesting pair of bald eagles has successfully reared three eaglets this spring. I'm sure many of you have heard about this story and are familiar with the effects of DDT long ago on this magnificent bird of prey. When I teach a child about this event and ask them if they have ever seen a bald eagle...numerous hands go up and many stories follow. How amazing this is to me because most of us didn't witness our first eagle in Mississippi until the 1980s. Or it could be the artist down the street who covets all types of plastic trash to convert into an artistic treasure? What are the examples in your county? How can you highlight a success in your area? Come and share an example at our **MEEA Fall Conference... November 6-7, 2008**. Our foresight of the environment should include understanding, compassion and hope of a healthy planet beyond our time.
– John DeFillipo

Self-Guided Summer Adventures by Heather Sullivan

Instead of scheduling an early summer field trip, Heather Sullivan, Botanist for the Mississippi Museum of Natural Science, offers these ideas for self-guided adventures.

Idea #1: Some members might like to visit Harrell Hill prairie around Father's day which is the peak of the **purple coneflower** season.

Idea #2: There is a HUGE **Turk's cap lily** population on the Natchez Trace Parkway right of way near mile marker 179. I just missed the height of the bloom on July 20th last year. But this year has been pretty cool so far, so the bloom peak could be the second or third week of July.

Idea #3: At the Vicksburg Military Park around the Minnesota Monument the **prairie nymph**, *Herbertia lahue* var. *caerulea*, will be blooming through May. **Oak-leaf hydrangea** would be in bloom at that time, also. There are some particularly nice trails (primitive Boy Scout trails) featuring the native flora of the loess hills.

Idea #4: For general habitat typical of the Jackson (central MS) area, Roosevelt State Park has some good, easy trail hikes. There are **Michaux lilies** in the park (*Lilium michauxii*), as well as typical upland piney species with embedded acid seeps species.

Field Trip to the Wildside continued, from the front page

Since we were in a cultivated garden setting for part of our tour, a portion of the plants listed are not indigenous to the Pontotoc Ridge. However, the benefits of being in a garden setting were that we were able to see 3 species of ginger, 5 species of trillium and 13 kinds of ferns at close range. The experience was invaluable to those trying to fine-tune their plant identification skills. Midway through our walk along the Owen's hilly nature trail, Ken Owen came to offer any takers a ride back to the house. Sherra was very impressed that everyone chose to walk. On returning to the Owen home, we all had a picnic lunch in the garden. Participants enjoyed looking at Sherra's quilt collection and Ken's antique cars. We also enjoyed trekking back through the garden to admire Ken's wonderful rustic arbors and lounge on his handmade garden benches.

After lunch we tore ourselves away from Wildside and convoyed to private land to see an interesting cave and a rare population of walking fern (*Camptosorus rhizophyllus*).

We then traveled toward Tupelo to a Black Prairie site at Coonewah Creek Chalk Bluffs. This site is a rare calcareous bluff forest that sits on top of a Demopolis chalk formation. We met Dr. Lucile McCook, Curator of University of Mississippi's Pullen Herbarium and Matthew Miller of The Nature Conservancy. Matthew Miller explained that The Nature Conservancy purchased the land to protect the globally endangered Price's potato bean. At this very interesting site we saw: *Apios priceana* (Price's potato bean), *Cacalia muhlenbergii* (giant Indian plantain), *Delphinium tricorne* (dwarf larkspur*), *Fraxinus quadrangulata* (blue ash), *Lithospermum canescens* (hoary puccoon*), *Silphium terebinthinaceum* (prairie dock), *Staphylea trifolia* (American bladdernut), *Swertia caroliniensis* a.k.a *Frasera caroliniensis* (American columbo), *Uvularia perfoliata* (bellwort*) and *Viburnum rufidulum* (rusty black haw*).

As predicted in the field trip announcement, our group did not stay on schedule. We ended our foray almost two hours later than anticipated. However, it was a lovely change of pace to linger in the woods rather than rushing from site to site. I think I can safely say that a good time was had by all.

MNPS 2008 Annual Meeting Agenda

Date: Saturday, October 25

Place: Larry Box Conservation Center at the **Noxubee National Wildlife Refuge** between Starkville and Brooksville, Mississippi

Registration Fees: Members who pre-register by October 15 will pay **\$10.00**. Members will also have the option of paying \$15.00 at the door. Non members will pay the same fees but will be required to join the society. A \$10.00 Materials Fee will be charged to those taking the Floral Design Workshop. A Registration form and a map will be included in the next newsletter which should reach you in late August.

- 8:00 - 8:30 Registration
- 8:30 -10:15 Concurrent Workshops – See the President's Notes for Descriptions or Explore the Refuge on your own.
- 10:15-10:30 Registration for those who did not attend a workshop
- 10:30-11:00 Welcome & Overview of the Noxubee Refuge
- 11:00-12:00 Margaret Gratz – "Wildflowers for Wildlife"
- 12:00 - 1:00 Lunch
- 1:00 - 2:00 Marc Pastorek – "Personal Prairies"
- 2:00 - 2:15 Business Meeting
- 2:30 - 4:00 Choice of Field Trips
 - Option #1 – Bob Brzuszek will lead a hike on the Refuge's Scattertown Trail which is a fairly steep older growth Oak/Hickory Woodland
 - Option #2 – JoVonn Hill will lead a group to Crawford, Mississippi to see State Champion Bur Oak and Durand Oak. JoVonn is arranging for a permit so that we can bring vehicles in to the site making this a less strenuous walk.

To Friends of the Black Belt

The annual rental payment due date for the 140 acres of Osborn (16th Section) Prairie is fast approaching (June 13). The rent for this property is \$1,120.00, and our Friends of the Black Belt checking account balance is currently \$723.84. Please do what you can to help us continue this new lease of this unique prairie remnant.

Checks should be made to *Friends of the Black Belt* and sent to: JoVonn Hill, Mississippi Entomological Museum, Box 9775, Mississippi State, MS 39762 before June 12 if possible.

JoVonn Hill, Research Associate I, Mississippi Entomological Museum, PO Box 9775, MSU, MS 39762

Editor's note: Many MEEA and MNPS Officers and members have been long time supporters of the Friends of the Blackbelt and all three organizations share a number of members. Please help keep this important project alive and viable with your contributions. Both research and education products are resulting from this effort, and your continuing support is needed.

Bringing Nature Home, How Native Plants Sustain Wildlife in Our Gardens, A Book Review

In his book *Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens*, Professor of Entomology Douglas Tallamy explains that in order to have birds in our gardens we first have to have the plants that are eaten by the insects which 96% of all songbirds require for feeding their young. He summarizes thus: "our gardens need native plants to support a diverse and balanced food web essential to all sustainable ecosystems."

He suggests smaller lawns, replacing non-natives with natives as they need replacing, and supplementing borders and edges as much as possible - widen the foundation bed, and create a buffer around the edges of your property. Use as many species of native plants as you have room for.

In closing Douglas Tallamy notes that "As gardeners and stewards of the land, we have never been so empowered - and the ecological stakes have never been so high". In these times of rapid growth and canopy loss, this is timely news we can all use.

Book Review by Hilary C.F. Shughart, President East Central Chapter, Mississippi Native Plant Society.

A Treatise on Brussels Sprouts, or How to Save the World by Harold Anderson

I saw a cartoon recently where the old curmudgeon "Crankshaft" was leading a meeting of his garden club. He said, "In closing, I want each of you to sign this petition urging the government to make bio-fuel from Brussels sprouts and leave corn and other things that actually taste good alone!"

Bring it on, Crankshaft: I'll sign. Brussels sprouts (otherwise known as "B.S." for the purpose of this article) are disgusting, and eating them should be illegal. Don't talk to me about constitutional rights. Cannibals are not allowed to satisfy their longings, and tobacco use has dramatically declined because it has become socially unacceptable and we have passed laws to limit it, so there is precedent.

Brussels sprouts are disgusting malignant tumors that grow on the stem of a broccoli-like plant. They look like stunted, deformed cabbages. When cooked, they smell like molded, sweaty gym socks, and taste like vomit. They are riddled with gas-filled pockets. It festers in the gut of the eater until he (or she) expels it dramatically. How gauche!

B.S. ranks right up there with two other disgusting substances some people consider foodstuff: buttermilk and dead sheep. Buttermilk must be popular in Eastern Europe, because some cartons say "Bulgarian Style Buttermilk." Bulgaria was on the losing side in two world wars and the Cold War. Both Hitler and Stalin were buttermilk drinkers. See what such unsavory behavior leads to. And as for dead sheep: it is eaten by both Israelis and Arabs, and they've been at each other's throats for millennia. Each probably blames the other for introducing it into the cuisine. I don't blame them. I was once served lamb, and I had to sit on my hands to keep from slapping the cook.

Corn, on the other hand is a perfectly delicious and satisfying food that is the staff of life for man and beast worldwide. It is the symbol of plenty, productivity, industry and moral purity. Have you ever heard of an innocent, fresh-faced teenager described as "Brussels-sprout fed"? Neither have I.

I think Ol' Crankshaft is on to something. Just think of all the crops farmers can't produce at a profit without government subsidies. I say let's remove the subsidies and encourage them to plant B.S. With the decreased planting of formally subsidized crops, "The invisible hand of the marketplace," will set a price, which will be in equilibrium with demand, and they will again become profitable. What about all that land in the Great Plains that is no longer farmed, but is in Conservation Reserve grassland? Shoot, there are millions of acres of it. Revoke the CRP contracts and tell the farmers to plant B.S. Thank of all the tax money that will free up for social programs. I'll bet the Democrats will love that.

But what about processing the B.S. into gas? I guess we could crush them to release the gas, but that will yield a toxic by-product – crushed B.S. I have a solution – goats! They'll eat anything. My Grandfather once had goats, and they relished green plums. Now, that's the only thing that tastes worse than B.S.

We could recruit retired politicians here in Mississippi to process the B.S. (They have had plenty of experience). We're experts here in raising huge numbers of animals in confined spaces – just look at our chicken, catfish and hog farms. Yep, we could pen the goats up and attach tubing to the appropriate orifice. Thousands of goats all connected to the network would fill up huge containers in a jiffy.

We gotta use goats. They are small, controllable, docile creatures. Can you imagine trying to connect a Brahma bull to the plumbing? Not a pretty sight.

The only by-product would be goat manure, a relative benign substance, compared to crushed B.S. We can use the goat manure to fertilize the B.S. and goat gas to fuel the farm machinery. There you have it, dear friends, a self-sustaining system!

Now, keeping the goats penned all the time is kind of cruel, so once in a while we would allow co-ed visitation so the goats could make whoopee and, well, little goats, which would lead to an excess of goats. But that is good. Goat meat is not bad – sort of like venison. Can you imagine what a delight that would be to people who have never eaten any meat except dead sheep and camels? We will just ship the excess goat meat to the Israelis, under the condition that they invite the Arabs to a goat-roast. Shoot, they'll be yucking it up and slapping each other on the back before the night is over. Peace in the Middle East at last!

Now that our country is running on goat gas, won't that kill the market for petroleum and cause the Arab sheiks to go ballistic? No, petroleum can be used to make a bunch of other stuff. Dr. Thames and the Polymer Science Department down at USM have learned to make all kind of stuff from the lowly soybean. Soybeans will be sky high because unsubsidized production will have allowed the free market to work. Oil will be down to a few dollars a barrel, so the boys down at Southern will have a cheap raw material to work with. Soon a B.S. in Polymer Science from the University of Southern Mississippi will be more highly sought after than an M.B.A. from Harvard!

Of course, the demand for oil will be so low that there will be no need for off-shore drilling, but what about all the oil-field workers who will lose their jobs? Not to worry. What can a Cajun do better than drill oil wells? Grow crawfish, of course. Since we will now be shipping goat gas worldwide, instead of sending all our money to the Arabs for oil, we will simply impose a very small tariff, which we will use to build levees and restore all the wetlands in Louisiana that have subsided and been inundated by salt water and convert them into crawfish ponds. Crawfish are scavengers and bottom feeders, so they should love B.S. – and we will have plenty. Of course they will probably taste pretty funky after eating all that B.S., but you can easily solve that problem by just throwing in a few extra spoonfuls of "Toney Cacheres." Think what that will do for the Louisiana spice industry. We will have so much goat meat and crawfish, we can feed the world!

There you have it, dear friends: the solution to the energy crisis, peace in the Middle East, the end of world hunger, an equitable balance of trade and, with an end to fossil fuel combustion, a cleaner environment!

Now, we just need strong leadership to get congress to pass the necessary legislation and sell this to the American public. Can you imagine either a Democrat or Republican president buying into this idea? I can't either. We need strong leadership – third party leadership. Since this is my idea, I hereby announce that I am running for the nomination of the office of President of the United States from the B.S. party.

Yep, it is as you probably long expected. I'm the leading B.S.'er in America!

MNPS Members Plant Stories

As a little girl, I followed my mother when she worked in her flowers - getting in her way. So she gave me a little bed of my own. I loved the violets and ferns that grew in the woods, and moved them to my bed, - even tried a few "toadstools," til she told me they wouldn't grow. Later I seeded "black-eyed Susans" and moved spiderwort. This gave me the love for native plants and wildflowers that continues today. – Halla Jo Ellis

Yucca - Adam's needle One blade - scrape green pulp to show fibers. The tip is sharp. This is Choctaw "needle and thread" without threading the needle. – Joe Willis

Sweet flag (*Acorus calamus*) Small pieces of roots were chewed by Choctaw drummers to constrict their throats, increasing their pitch during ceremonies. – Bob Brzuszek

Nature's First Aid Kit or the Green Pharmacopeia Part 1 by Dr. John Guyton

No doubt, necessity was really the mother of invention and humans probably learned the usefulness of plants early. As a child I experimented with a lot of things for poison ivy relief, as an example. Noticing how quickly liquid paper (a correction fluid popular during the late days of the typewriter and before the backspace button on computers) dried, I painted it on blistered skin. I can imagine those living closer to nature experimenting with saps, crushed aromatic leaves and roots. It is a sad commentary on life that we have, to a large degree, lost the wisdom of the ages and are now dependent on pharmaceutical companies rediscovering it. Evidence of our early use is steeped in mythology, history, literature, and religious doctrines. It even shows up in bedtime stories. In Greek mythology Achilles' soldiers used yarrow leaves to staunch the flow of blood and Roman soldiers used yarrow on wounds for that purpose. After overindulging in Mr. McGregor's vegetable garden, Peter Rabbit's mother used chamomile tea to alleviate his gastric distress and calm his nerves thus elucidating Beatrix Potter's knowledge of plant uses. People in most parts of the world are still very much dependent on plants for medicines and those with plant knowledge are in demand. Over 40% of the medicines prescribed in the U.S. are derived from plants and less than 1 percent of our dwindling supply of plants have been researched for their medicinal properties.

The following list are some of the time tested remedies for ailments that sent our ancestors into the woods searching for relief. And though I cannot recommend you experiment with these, I can tell you there is nothing in my medicine cabinet that works as well as plantain and it is so plentiful that even the best broadleaf poisons recommended by the Extension service have been unable to remove it from the planet - in my family we use this miracle cure. And, just as our ancestors brought it to the new world, we take it with us. Mullein is another fascinating yard pharmaceutical. While living on the Gulf Coast we grew toothache grass in a flowerbed for the amusement of our friends. The numbing sensation from chewing on a leaf had virtually the same effect on everyone we shared it with, utter surprise something that grows wild can do this! Is this safe? Is this legal? All indigenous populations and most animals turn to nature for effective cures. The range and variety of ailments seem to have been constant through the ages and I have attempted to briefly show just how extensive nature's pharmacopeia actually is. Should you decide to experiment start with the plantain since it is also edible. Do an extensive internet search and discuss this with friends who know or use plants. Check with your state's native plant society to find a guide. As you begin saving money on too expensive pharmaceuticals buy some books on plants and get ready for an exciting adventure!

Aches, pains, and sprains – externally poultices of dock, chickweed, garlic, plantain, sorrel or willow bark. A salve can be made by adding the expressed juices to petroleum jelly instead of the original animal or vegetable oil. You can also use salves made by mixing the juice of these plants in animal fat or vegetable oils. Steep Gentian roots in hot water and then applied the liquid to aching backs. Hyssop (*Hyssopus officinalis*) leaves in poultice or compress for bruises, sprains and wounds; tea from crushed and steeped fresh horsemint leaves.

Anemia – Chives (*Allium schoenoprasum*); stinking clover (*Cleome serrulata*) boiled with rusty iron tea.

Antiseptic – Nasturtium (*Tropaeolum majus*) applied externally is an antiseptic; Garlic (*Allium sativum*) is antibacterial and antifungal; Pot Marigold (*Calendula officinalis*) flowers have anti-inflammatory, antiviral, and antibacterial effects; Lavender (*Lavandula officinalis*) oil is strongly antiseptic and used to heal wounds.

Antispasmodic – Catnip (*Nepeta cataria*).

Arthritis – The seed oil of the evening primrose (*Oenothera biennis*) may ease the symptoms of rheumatoid arthritis.

Asthma and respiratory problems– Skunk Cabbage; smoke dried mullein leaves; a tea of the creosote bush leaves for bronchial.

Athletes foot (fungus) – Antifungal washes. Make a decoction of walnut leaves or oak bark or acorns to treat ringworm and athlete's foot. Apply frequently to the site, alternating with exposure to direct sunlight.

Bleeding – Buckhorn is a astringent and styptic as well as antibacterial and antifungal so it quickly stops the flow of blood and reduces the likelihood of an infection. It even tightens the muscle tissue and will begin dispelling a thorn or splinter. Fresh young Puffballs and mature puffball spores have been used as a styptic and for nosebleeds however they resemble poison mushrooms so positive identification is essential. Puffballs have been used to brew a tea to stop hemorrhages.

Blood pressure – garlic.

Burns – aloe vera.

Burned eyes - slice an Irish potato and squeeze the juice from a slice into the eyes by squeezing it between the bowls of two spoons.

Cancer and tumor prevention – garlic, scallions, onions, leeks, chives, and shallots contain flavonols that have anti tumor effects.

Colds – mullein tea is soothing; Hyssop (*Hyssopus officinalis*) tea can be used in as a salve or chest rub for congestion; boneset tea; nodding onion (*Allium cernuum*) juice can be used in treating colds and sore throats; butterfly weed or pleurisy root (*Asclepias tuberosa*) raw roots can be eaten to treat bronchitis or as an expectorant that promotes coughing that raises phlegm Note: colds are caused by viruses attacking the mucus membranes in the nose and throat and you just have to wait for your immune system to get rid of the virus 3-4 days is typical. Do not take antibiotics.

ROMEO: Your plantain leaf is excellent for that.

BENVOLIO: For what, I pray thee'?

ROMEO: For your broken shin.

Green Corner

MEEA's Growing Greener

by John DeFazio

Our main goal has three aspects: 1) Green all aspects of MEEA including board meetings, conferences, workshops and daily activities; 2) take on one special community action project that would allow MEEA to educate the public about "greening" and 3) educate MEEA members and the general public about greening in our every day lives. The committee developed the following priorities: 1) develop guidelines on how to run a green conference or workshop to be used for all future MEEA events and made available to other organizations; 2) participate in the third Sustainability Conference which will be held in Northeast Mississippi in 2009; 3) take on one of the following community action projects: a) eliminating the use of plastic bags, or recycling in schools (the committee is researching these projects and will decide on which project to pursue) and 4) communicate the idea of "greening" to MEEA members and the general public with a "greening" blog on the MEEA website, a "Green Corner" in the MEEA newsletter, and producing greening articles for small town newspapers around the state.

A School Recycling Program

by John Guyton, Ed. D.

MEEA is working on a green conference check list for our website so if you have suggestions or items for the checklist send them on in. To get you thinking, we will provide some ideas in the next few newsletters.

The science teachers at a school where I taught had a program that was the envy of the school. Each six weeks, the Friday before 6-weeks tests was aluminum can recycling day. Each student had to find a way to get to school early and they could get credit for up to 200 cans. They were required to bring them in plastic bags with 100 cans in each bag and a label on the bag with their name on it. Two students who were not able to bring in cans were selected each 6 weeks to serve as a checker and a stacker. The checker carefully recorded each students name, in their teachers section of the chart, and how many cans they had brought. All cans had to be turned in and recorded before school started. The stacker would stack them in the science lab. Students received one point for each 100 cans turned in added to their 6 weeks grade after it was averaged up to a maximum of 2 points. After school the science teachers would carry load after load in their pickups to the recycling center. The science department was well equipped and always had funds for equipment!

Why You Should Always Cover the Sugar Bowl by Mike Williams and John Guyton

Take a paper towel and blot your tongue dry - it must be very dry. Keeping it out, sprinkle a little sugar on it. Do you notice anything? If you can taste the sugar your tongue is not dry enough. Sugar must be dissolved in water in order to taste it.

Houseflies spit on sugar to dissolve it and then they walk around on it to taste it with receptors located on their feet -

which incidentally are 10 million times more sensitive to sweets than our tongues! What is in their mouth when they spit and what washes off their feet as they walk around on wet sugar should come to mind. So now you know why you should always cover your sugar bowl.

Insects are our most common encounter with wildlife and what you don't know could hurt you! Join us to learn more about bugs and convert this material into activities! To get involved with Project Bug contact John Guyton at jguyton@cfr.msstate.edu or 662-325-3482 or Dr. David Held at dwh56@msstate.edu or 228-388-4710.

The Classroom Environment

Much is known and little is practiced.

by Dr. John Guyton, MSU Wildlife and Fisheries

"My students read words but they have no meaning."

Researchers are perplexed at why after all the millions spent on trying to teach children to read they are not proficient. NCLB (No Child Left Behind) emphasis on English Language Arts and Math at the cost of time for science and social studies has only made it worse. Recently, we listened to a teacher complaining that children could read the words but were unable to extract any meaning.

Before NCLB research had revealed the usefulness of doing a hands-on activity to pique student curiosity before a reading activity. Drilling has its place, unfortunately the practice has been abused getting ready for standardized tests. Most professional educators were horrified when they first saw NCLB and knew children's problem solving abilities, which were poor relative to children in other countries, were going to crash.

NCLB has been a financial windfall for the testing firms, but that is another story. What can we do about this reading dilemma? Children learn best when they are interested in the topic and children are innately curious.

Teachers take advantage of this curiosity by taking children on walks to explore the outdoors or allowing them to learn science by doing experiments. Once you have their curiosity piqued, tell them the answers to their questions are in the books on the shelf or their text. Curious children will almost teach themselves to read!

Now, where do we get these "trade" books with the answers in them? Libraries are currently getting rid of a wealth of absolutely incredible science related books from the 50s - 70s. And this is back when books were packed with a huge amount of information, and not content void like so many available to students today. Get on you local libraries Friends Group and you will see these books first!

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 _____
 Individual or Family: \$10.00 Address _____
 Sustaining: \$15.00 _____
 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 Chapter: Contact Bob Brzuszek at rbrzuszek@lalc.msstate.edu or phone 662-325-7896.

North East MS Native Plant Society Chapter: contact Margaret Gratz at 662-844-5640 or gratz@redmagnet.com
East Central Chapter Contact Nan Johnson at PO Box 182 Water Valley, MS 38965 nan.n.johnson@gmail.com and 662-473-4559

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)** _____

e-mail: _____ **Fax:** _____

Membership Category	<input type="checkbox"/> Patron (\$150 - \$1,000+)	Committee Interests:
<input type="checkbox"/> Individual (\$10.00)		<input type="checkbox"/> Strategic Planning
<input type="checkbox"/> Student (\$5.00)		<input type="checkbox"/> Nomination
<input type="checkbox"/> Family (\$25.00)		<input type="checkbox"/> Conference/Workshop
<input type="checkbox"/> Institution/Business (\$50)		<input type="checkbox"/> Awards
<input type="checkbox"/> Life (\$150.00)		<input type="checkbox"/> Communications

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 the newsletter, contact President John DeFillipo or check the calendar on ecinMississippi.org

Mark Your Calendars! **MNPS annual meeting October 25, 2008 at the Noxubee National Wildlife Refuge**
Details in the next newsletter **MEEA Fall conference November 6 & 7, 2008**

MISSISSIPPI NATIVE PLANT SOCIETY

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