The Newsletter of the Mississippi Native Plant Society

Winter 1997

Volume 17 Issue 1



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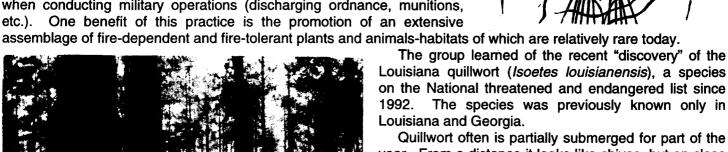
## The MNPS Fall Field Trip: Damp feet but not dampened spirits

#### Vic Rudis

Hattiesburg—Camp Shelby was a staging area October 6 for a group brave enough to trek out in inclement weather for a field trip worth remembering. In attendance were members of the Mississippi Native Plant Society (MNPS), the Hattiesburg chapter of the Audubon Society, and several Hattiesburg area residents curious about the signs and the notice in the local newspaper. MNPS officers--also on hand for an earlier Board meeting, included Bob Brzuszek, Liz Cox, Vic Rudis, and Ron Wieland.

Camp Shelby, known since 1917 as a training site for military maneuvers, is winding up a mutiyear biological inventory to be completed June 1997. Camp Shelby was under intense investigation for the past four years by area scientists. What they found was that Camp Shelby is home to 35 percent of Mississippi's native flora and many of its endangered fauna as well. Tour guides included the same botanists and zoologists, who graciously provided informal presentations of unique finds, habits, and habitats of Camp Shelby. Julie Moore, the chief scientist on the project and an area ecologist, coordinates the biological inventory of the State's military sites and led the walk/bus tour.

Before venturing into the rain, the group stayed in a sheltered area and learned about the comings and goings of the black pine snake, the gopher tortoise, and the red-cockaded woodpecker. Though the area has few large pr old-growth longleaf pines, it is managed in ways to benefit all of these species. Land managers burn the fields and woodlands, sometimes annually. The prime is to minimize fire-hazard when conducting military operations (discharging ordnance, munitions, etc.). One benefit of this practice is the promotion of an extensive



Quillwort often is partially submerged for part of the year. From a distance it looks like chives, but on close inspection resembles a sedge, but it produces spores and has a swollen base from which leafy structures emerge. Quillworts are in their own order like ferns. Represented by a single little-known genus, quillwort habitat typically is a permanent or seasonal wetland.

When the rain let up a bit, the group boarded a bus for a journey across the area. Camp Shelby, at 134,000 acres, is the largest National Guard and Training facility in the continental U.S. Today,



managers on military land and in the adjacent DeSoto National Forest are aware of the serendipitous habitats created by the use of prescribed fires. Some scientists believe that the entire Coastal Plain longleaf pine ecosystem existed only because of periodic fires. Cutting of timber trees, later conversion to pine plantations other than longleaf, and extensive fire suppression elsewhere may have contributed to the near loss of this community type and its fauna elsewhere in the region. Continued on page 5

### Mississippi Native Plant Society Board of Directors Meeting held October 6, 1996

Present President, Bob Brzuszek, Vice-president, Liz Cox, Secretary/Treasurer, Ron Wieland, and Past-president, Vic Rudis. The meeting was called to order by Bob Brzuszek at Dogwood Lake Picnic Shelter, Camp Shelby Training Site, near Hattiesburg, at 11:00 AM.

Agenda Each member discussed club involvement activities. Liz has worked with school children developing nature trails at Perkinston and Seabee Base at Gulfport (with Natural Resources Conservation Service), and has lead environmental education at schools to promote nature study and other outdoor activities.

Newsletter The Newsletter serves as the main club activity. It is an educational tool and is the major service the club provides for membership. The format and article quality are good. Special thanks go to past editor, Becky Gillette, and current editor Lynn Libous-Bailey for their contribution to the society. Suggested by Vic, the board agreed, on the need to pursue a quarterly publication, with timely articles and announcements. An increase in membership dues is being considered to offset the increase in printing and mailing costs. With regards to this issue, your comments are welcomed.

Brochure Bob Brzuszek developed a brochure outlining the purpose of the society. Besides noting how to become a member of the society, the brochure provides basic information about native plants, how to use them in landscaping, and the importance of promoting natural areas in Mississippi. The brochure is just one of the vehicles used in promoting the society. Bob has set up booths at several trade shows, where the brochures were distributed.

Membership Membership numbers were reported by the secretary. Over 400 families, clubs and agencies are listed in the membership rolls. Due to delinquency in dues payment, only 265 of these receive the newsletter. There are 34 active life members, 178 family, sustaining, or contributing members, and 53 complementary or reciprocal arrangements. Efforts to improve the renewal rates will be implemented in the coming year. The membership list will be upgraded to more readily track the status of the membership, I.e., the numbers of new members per year and rates of renewals. Bob proposed that a packet of information be sent to new members to encourage their participation. The board accepted his proposal. The secretary is to send names of new members periodically to Bob so that he can send the promotional material.

 ◆ Active members make ◆ for an active society

Have you run across an article that made you stop and think? Pass it to the editor. Other members would most likely be interested too.

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If you're involved in a public project don't keep it a secret. Chances are there are other members interested in ideas about starting or helping with such projects. Fill us in. We want to know what our members are up to.

The lack of 'Seasonal Favorites' in this issue indicates NO member input. Drop a line to the editor and let us know your favorite native plant of the season.

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Questions about native plants? Write and ask. Somebody in the member-ship is bound to know the answer.

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♦ ♦ ♦
What do you want from your society?
Contact any of the officers or send a
Letter to the Editor and let us know what
you like or want to see changed.

YOUR IDEAS and thoughts are always welcome, but without YOUR HELP, carrying them out may not always be possible.

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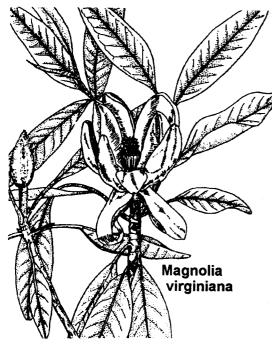
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Why not consider a more active role in the Mississippi Native Plant Society?

New Officers Ron Wieland was elected as president of the society. All board members will continue to remain active on the society board. The Secretary/Treasurer office will be appointed by the president. Continued on page 4

CHECK YOUR ADDRESS LABEL. IF THERE'S CELERY GREEN ON THE DATE THIS IS YOUR LAST ISSUE ®®. ORANGE INDICATES YOUR DUES ARE DELIQUENT. WHILE WE ALL FORGET, LAPSED MEMBERSHIPS OF MORE THAN 6 MONTHS ARE NO LONGER CONSIDERED 'ACTIVE BUT NEGLIGENT'. ®®

### **WHAT'S ON THE MENU?**



One of our most attractive native trees is the Sweet Bay or Bay Magnolia (*Magnolia virginiana*). Occurring naturally in wooded areas with damp rich soils or along streams throughout the eastern two-thirds of the state a stand of this native is a beautiful sight. The attractive grey bark, deep-sage evergreen leaves, and fragrant lemonscented flowers make it a great choice for the normal to moist area in the urban landscape as well. A closer look at the leaves often reveals that this tree has something else to offer.

For some members of the butterfly family Papilionidae, the Swallowtails, *Magnolia virginiana* serves as an important larval (caterpillar) food source. The Swallowtail butterflies are large, brightly colored butterflies with tailed hind wings, hence the name Swallowtail. Mississippi's state butterfly, the Spicebush Swallowtail (*Pterourus troilus*), and the Tiger Swallowtail (*Pterourus glaucus*) butterflies use the leaves of this magnolia species as a food source during their larval development. Found throughout Mississippi both the Spicebush Swallowtail and Tiger Swallowtail prefer deciduous broadleaf forests, damp woodland edges, wooded swamps, and moist areas near rivers or streams. Adults can be seen taking nectar from native plants such as joe-pye weed (*Eupatorium* spp.), various milkweeds (*Asclepias* spp.), and sweet pepperbush (*Clethera alnifolia*).

Near the Gulf Coast in broadleaf evergreen swamp forests and wet woods near rivers one can find the Palamedes Swallowtail (*Pterourus palamedes*). Its preferred larval host plant is Red Bay (*Persea borbonia*) and although there are no known recorded observations in the wild, *Magnolia virginiana* is often listed as an alternative host plant for the Palamedes Swallowtail. Consider *Magnolia virginiana* the next time you're thinking about a tree to put in an average to damp area of your yard. With increased habitat destruction containing their larval food sources conservation of larval host plants as well as nectar sources prefered by adults will ensure an abundant population of our state butterfly the Spicebush Swallowtail. -Lynn Libous-Bailey

**EDITORS NOTE:** Bryant Mather was kind enough to proofread and edit this segment and suggests that anyone observing Palamedes Swallowtail larvae feeding on Sweet Bay Magnolia (*Magnolia virginiana*) contact the editor. Authorities will be notified and proper documentation of the occurrence obtained.

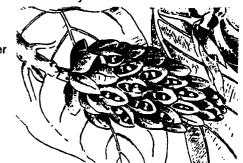
#### References:

Ajilvsgi, Geyata; Butterfly Gardening for the South; pg. 117-120, 209.

Harrar, Ellwood S. and J. George Harrar; <u>Guide to Southern Trees</u>; pg. 280-282. Opler, P. and V. Maliul; <u>Eastern Butterflies</u> (Peterson Field Guides); pg. 55-56, 58-59.

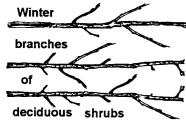
Timme, S. Lee; Wildflowers of Mississippi; pg. 175

Watts, David L.; Backyards for Butterflies (Mississippi Outdoors; May-June, 1995).

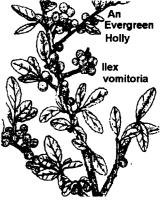


### Coming to terms with...

Each fall and winter many trees and shrubs dropped their leaves. Such trees and shrubs that completely loose their leaves at the end of each growing season are referred to as **deciduous**, from the Latin *deciduus*, meaning 'falling down'. The term **evergreen** is



used to describe those plants which retain almost all of their leaves from one growing season to the next. Some evergreens, such as the American holly, lose many of their older leaves in a flush when the new foliage emerges. Pines tend to shed old leaves early each winter. Other evergreens have no noticable flush but drop older leaves intermittently throughout the year. -Lynn Libous-Bailey



Board Meeting - Continued from page 2

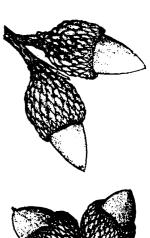
To maintain a stable club address, presently at the Mississippi Museum of Natural Science, the new Secretary/Treasurer must be living in the Jackson area so that the membership list can remain at the museum. Efforts to increase the number of members on the board will be pursued

City Code and Native Plant Landscaping Several incidents were reported in which homeowners chose to leave their yard unmowed in an effort to promote native plant Neighbors complained of the "unkempt appearance" and invoked city ordinances to get the yard tidied up. Bob reported excellent material distributed by the National Wildlflower Research Center that suggests creating defined beds for native plants will promote a context of order. This way it is possible to have native plantings conform with city code requirements.

Regional Chapters Interest in forming chapters has been presented and is being pursued. There is currently a potential to develop three chapters; Starkville, Jackson, and Mississippi Gulf Coast. A group in Tupelo is interested in forming a club also. Interested members should contact Ron Wieland.

Treasurer Report In June 1995, the club had \$5,200 dollars, in October 1996, the amount stands at \$4,800 dollars, which included a \$3,000 CD savings account.

Old P.O. Box Vic Rudis noted that the Society's PO Box at Starkville will be closed out at the end of this year. - Ron Wieland





### Seed, Seed, Seed

I have a fair amount of the following seed available to members who are interested. They were harvested in late November and have been stored in a cool room. Most stock plants were purchased from various nurseries across the southeast. The seed will be packaged and labeled but won't come with planting instructions. Growing and Propagating Wildflowers by Harry R. Phillips (Univ. of N. Carolina Press, ISBN 0-8078-4131-5) is an excellent book containing information on germination techniques.

Tall Black-eyed Susan (Rudbeckia heliopsidis) Sweet Black-eyed Susan (R. subtomentosa) Swamp Sunflower (Helianthus angustifolius)

Grey Headed coneflower (Ratibida pinnata) Linear Leaf Aster(Aster hemisphericus) False Goldenrod (Solidago sphacelata)

The mailing envelope will be furnished, but please send two 32 cent stamps (if it only takes one I'll return the other) or one 55 cent stamp along with your legible address to MNPS Seed Request, PO Box 357, Stoneville, MS 38776-0357. Be sure to include what species you'd like to receive. Expect some chaff. I don't ever have enough time to thoroughly clean seed (or my house for that matter!). - Lynn Libous-Bailey



Mississippi Native Plants The Newsletter of the Mississippi Native Plant Society



Mississippi Native Plants is the quarterly publication of the Mississippi Native Plant Society.

Winter (Issue 1)

December/January/February

Spring (Issue 2)

March/April/May Summer (Issue 3) June/July/ August

Fall (Issue 4)

September/October/November

Deadlines for the **Spring Issue** are as follows: Calendar of Events---Jan 30 Articles---Jan 15

Deadlines for the **Summer Issue** are as follows: Calendar of Events---Apr 30 Articles---Apr 15

Hard copies and/or articles in Word Perfect or Word submitted to the Editor are solicited and welcomed.

Camp Shelby - Continued from page 1



Julie Moore discusses some of the species present near a gopher tortoise hole with onlooking members

them." Leaves are evergreen--a desirable characteristic for landscape uses. In the South, the genus occurs naturally only on Coastal Plain soils, especially in burned areas with associates like turkey oaks. Stems are slender, but the plant has an extensive root system and a thick base at ground-line. A close relative, the coco-plum (C.icaco), is a valued native hedge or small specimen tree in south Florida. The fruit, 1 inch in diameter, is edible raw or cooked into preserves. When roasted, the flavor is like almonds.

The rain really put a damper on a lot of the field trip. There was so much more to see, but the roads were muddy. The field trip was worth the 3 hour drive from Starkville and the \$6.00 I paid for a hastily purchased rain slicker. As it turned out, there was a tropical storm brewing in the Gulf. Next time I will listen to the weather report. Julie offered, and the group agreed, to come back another time when the weather was better.

We were greeted by purple-flowered gerardia (Agalinis), in bloom, covered the fields. Agalinus was notable as it is uncommon and is one of the showiest species. A naturalist told us the species is parasitic on the roots of grasses and other herbaceous plants. Other species in flower included spurge (Euphorbia zinniiflora?), and lobelia (Lobelia spp.). Interesting grasses were slender bluestem (Andropogon spp.), and muhly grass (Muhlenbergia spp.)

The group also saw an odd and curious species commonly called gopher apple. Chrysobalanus michauxii (C. oblongifolius). The common name comes from fruit borne low to the ground on a short shrub. Gopher tortoises eat it, but Julie said they are rather indiscriminate herbivores -- "they eat anything in front of

> To arrange group tours or learn more about the ecology of Camp Shelby contact

Julie Moore, Ecologist, c/o Camp Shelby Training Site **Directorate of Public Works** Environmental Bldg #6678 Camp Shelby, MS 39407-5500 or phone 601-558-2894



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

### 1995 -1996 MNPS BOARD OF DIRECTORS

#### **ELECTIVE POSITIONS**

#### **PRESIDENT**

Ron Wieland MS Museum of Natural Science 111 North Jefferson St. Jackson, MS 39201

20 Box 357

601-354-7303 (D) 601-981-7731 (E)

VICE-PRESIDENT:

Liz Cox 52 Cable Bridge Road Perkinston, MS 39573 601-928-4881 (D) 601-928-5837 (E)

## SECRETARY/TREASURER

VACANT

#### **NEWSLETTER EDITOR:**

Lynn Libous-Bailey PO Box 357 Stoneville, MS 38776-0357 601-686-5312 (D) 601-686-9873 (E)

#### PAST PRESIDENT:

Bob Brzuszek Crosby Arboretum PO Box 190 Picayune, MS 39466 601-799-2311 (D)

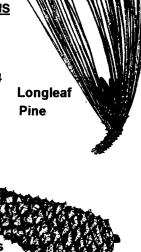
#### **NON-ELECTIVE POSITIONS**

#### **EDUCATION CHAIR:**

Felder Rushing 1735 Wilson Blvd. Jackson, MS 39204 601-372-4651 (D)

### TRIPS CHAIR:

Sidney McDaniel 601-325-7570 (D)



palustris

December-January-February

Volume **17 Issue 1** 

### Do you Recognize?

Naturalized from Eurasia this cool weather annual can be found all across the southeastern United States. Thriving in the moist soils of low lying fields and ditches, it can't be missed once it begins blooming. The glossy five petaled clear yellow flowers reflect sunlight, brightening even in the coldest of winter days. When held under someones chin a buttery yellow reflection can be seen, giving rise to the common name used across much of the U.S. - Lynn Libous-Bailey



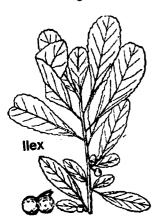
**Button** 

## Low spot in the yard? Consider these native shrubs

As the winter rains settle in it becomes easier to spot those low areas of the yard. If you have such an area, one that remains damp for several days after a rain and receives at least six hours of sun each day it is the perfect spot to utilize shrubs that like their feet damp. A niche such as this can be filled with a variety of native shrubs that will

make it much more attractive to birds and butterflies than an expanse of damp turf grass. Many shrubs found occurring in moist meadows, ditches, and stream edges are equally happy in the garden, as long as conditions mimic those in their natural habitat. In essence that area of the garden should not become too dry for an

extended length of time or the plants will suffer.



Virginia sweetspire (*Itea virginica*) is among the first shrubs to bloom. Emerging in late April on the burgundy stems, three to five inch panicles of white flowers are produced providing an early nectar source for butterflies that over winter in the area. This four to six foot deciduous shrub with fall color ranging from burgundy to pumpkin yellow is a welcome addition to any garden.

Button bush (Cephalanthus occidentalis) is a large shrub often overlooked for damp sites. This eight foot

deciduous native begins flowering in June and for nearly three months the tiny flowers, in clusters resembling miniature golf balls are visited by adult butterflies of all types. A wonderful source of nectar, one photographer finds that this shrub 'holds' butterflies longer than other flowers, providing ample opportunity for the perfect picture. Reason enough to plant it!

Fall berries providing winter interest as well as food can be found on the winterberry holly (*llex verticillata*). A large shrub, eight to twelve feet at maturity, this deciduous holly suckers at the base becoming multi-stemmed. Lacking spines on its leaves it is 'user friendly'. Cardinals relish the fruits through out the winter and should there be any left by spring, migrating cedar waxwings make sure they don't go to waste. - Lynn Libous-Bailey

### February 15 10:00 A.M. - 3:00 P.M.

Plant Sale in observance of Mississippi Arbor Day. Great selection of native trees & shrubs at a perfect time for planting. Free. Crosby Arboretum 601-799-3211

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February 27 6:30 P.M.

Charlotte Seindenberg, author of 'The Wildlife Garden', will speak on planning backyard habitats. \$Fee\$ Crosby Arboretum 601-799-3211

### **Calendar of Events**

March 21 - March 22 10:00 A.M. - 3:00 P.M.

Spring Plant Sale at the Arboretum. Native perennials, woodies, bird and butterfly favorites and more. Free. Crosby Arboretum 601-799-3211

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April 12 9:00 A.M. - 4:00 P.M.

Spring Plant Sale at the Dixon Gallery and Gardens. Wonderful selection of native shrubs and perennials. Free. Dixon Gallery (Memphis) 901-761-5250

April 18 9:30 - 6:00 April 19 9:30 - 4:00

Spring Plant Sale at Lichterman Nature Center. Native perennials, trees and shrubs for sale. Free, Lichterman Nature Center (Memphis) 901-767-7322

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April 18 - 19 10:00 - 6:00 April 20 11:00 - 4:00

Spring Plant Sale at the Memphis Botanic Garden. Native and other reliable garden plants for sale. Free. Memphis Botanic Garden (Memphis) 901-685-1566

The Newsletter of the Mississippi Native Plant Society

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## Perennials with winter foliage interest

I sit inside my warm house looking out into the back yard on this third week in December. I smile. Gardening with native plants has enabled me to have a yard filled with winter growing annuals and near-evergreen perennials and grasses. The cold ground in my yard is covered with something other than mulch. My appreciation for foliar interest is at its highest during the winter months. This year is no exception.

The low-lying area that the majority of my swamp iris (*Iris fulva* and its relatives) reside in looks like hundreds of

Other perennials with winter foliar interest include: Prairie phlox Phlox pilosa Sedges Carex sp. **Spiderwort** Tradescantia sp. Stokes aster Stokesia laevis Woodland phlox Phlox divaricata Cardinal flower Lobelia cardinalis Woodland columbine Aquilegia canadensis Woodland silphium Silphium aspirrinum Mouse-eared coreopsis Coreopsis auriculata **Atamasco Lily** Zephranthes atamasco

green bayonets held upright. The fresh mulch which was placed in that area in early November is now covered with the foliage of the annual buttercup (Ranuculus sardous). I am also greated by several dozen of their bright yellow blooms. An occasional clump of Juncus (Juncus effuses) provides height and character to the planting with its quill like foliage. One clump of a shorter species of Juncus graces the front of the planting helping to tie the whole area together. This part of the yard is far from being winter barron.

Close to the house is a bed that is filled with the grey green foliage of Hinkleys columbine (*Aquilegia chrysantha*). Evergreen here, even in the worst of winters it is the back bone of the area at this time of the year. Companions to the columbine include the smooth aster (*Aster laevis*), with its rosette of glaucus leaves, green grass-like clumps of blue-eyed grass (*Sisyrinchium* sp.) foliage, and the thicker leaved mound of *Carex flaccosperma*. In a few weeks they will be joined by the burgundy leaves of the emerging spring beauty (*Claytonia virginica*).

Grey headed coneflower (*Ratibida pinnata*) carries another area through the winter with its green mound of pinnately cut leaves. The Lindheimers Muhly (*Mulhenbergia lindheimerei*) carrying its slim light tan plumes atop the narrow grey foliage provides a great companion not only for the coneflower but also for the clumps of tall verbena (*Verbena bonariensis*) that have begun to put up their winter growth. Towards the end of the bed are hundreds of seedlings of the annual clasping coneflower (*Dracopsis amplexicaulis*) filling in the area where the now dormant purple coneflower (*Echineaceae purpurea*) once filled. An occasional flower from the clumps of false wild garlic (*Nothoscordum bivalve*) can be seen but it is the sight of the tiny green foliage blanketing the ground around the garlic that brings the smile to my face. The bluettes (*Hedyotis* sp.) have once again returned. -Lynn Libous-Bailey

## Privet - What a pain in the back

Here in my neck of the world, *Ligustrum vulgare* or common privet trounces any other plant (except for kudzu and Japanese honeysuckle) which dares to stand in the way. In short, privet hedge is a bully - a visitor from another country which has taken over and will not allow the natives to survive. To add insult to injury, this bully has traditionally provided switches to many an irate mother (including my own). So, I'm not exactly unbiased in my attitude.

A few years ago my feelings intensified. I purchased the land beside my home and became the proud owner of almost 2 acres of privet. In an effort to control the privet so that the native plants could survive, I tried hacking it back, using a weedeater, burning it, mowing it and using herbicides. The next season it's back - very dense and about knee high - sitting on go.

A couple of years ago a friend in Texas taught me that privet (even fairly large ones) can be pulled by hand so that roots are removed as well as top growth. But... it seemed that the more privet I pulled, the more trips I made to the chiropractor.



Continued on page 8

Privet - Continued from page 7

Last winter I decided on a new tactic. I read in the Whole Earth Catalog about a tool described as a woody plant puller. I chose a model which the manufacturer declared would pull woody plants with stems up to 2" in diameter. In the dead of winter, my Weed Wrench™ arrived in a box all the way from Oregon.

The Weed Wrench™ has powerful jaws at ground level and a four foot lever on a fulcrum. After the jaws are positioned around the base of a privet stem, I pull the lever back and the jaws lock in place. I then pull or pump the lever and extract the plant, roots and all, with a satisfying rending noise.

Although not quite as easy as it sounds, I have pulled a great many privets and other assorted woody weeds in the months since I purchased the Weed Wrench  $^{\text{TM}}$ . I have cleared substantial patches of privet with very few visits to the chiropractor. This spring I was delighted at the play of the late evening sun through my new opening in the woods.

I know that privet is not a totally worthless plant. My friend, Bill Fontenot would remind me that this and many other exotic plant 'pests' provide food and shelter for wildlife. In fact, I've come to think of privet as a character building plant. My mother attempted many years ago to use privet to improve my character. I'm relatively sure that the hours I've spend pulling privet have done exactly that.

-Gail Barton



The Weed Wrench<sup>TM</sup> pictured above is manufactured and sold exclusively by: New Tribe, 5517 Riverbanks Road, Grants Pass, OR 97527. Write for a free brochure. The above picture is reproduced from their "Tips for Weed Wrench Users" bulletin.

**Ed. Note:** This article was reprinted with permission from the Garden Paths Newsletter., May 1996 Issue. While it is not the policy of the MNPS to advertise products, this environmentally friendly piece of equipment may be the answer to many a prayer in the ongoing eridacation of privet.

## **Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds**

On April 26, 1994 President Clinton issued a memorandum which ordered federal agencies to put into use more environmentally responsible landscaping practices. He directed that "agencies shall, where cost-effective and to the extent practicable":

- \* Use regionally native plants for landscaping
- \* Design, use or promote construction practices that minimize adverse effects on the natural habitat
- \* Reduce pollution through reduced fertilizer and pesticide use
- **\*** Impliment water-efficient practices
- \* Create outdoor demonstrations to promote awareness of the environmental and economic benefits of implementing the directive

This was it. The memo that I had been looking for. As a federal employee and a native plant enthusiest I took a copy to the Area Director and explained to him that I would like to begin such a sight at the Stoneville MS installation. Politics and government paperwork being what they are I had to fill out appropriate forms requesting to 'farm' certain areas on the complex. And 'farm' I have. Since the fall of 1994 I have planted two flower beds at the exit of the parking lot and last spring began a planting around the employees pavilion, both filled with southeastern native or naturalized plants. The comments have been an overwhelming 'thumbs up'.

Over half of the plants are seedlings or divisions from my garden and that of a friend with extras to share. Last spring monies were made available and I was able to finish filling in both of the existing beds and begin on the pavilion bed. This spring I will begin placing permenant markers in the planting labeling plants with both scientific and common names and holding Brown Bag Lunches under the pavilion for those employees that want to learn more about native plants. Can one person really make a difference? I hope so.

-Lynn Libous-Bailey

### Saving the Pieces: The Center for Plant Conservation

Biological diversity, the variety of living organisms on this planet, is a global resource that urgently needs to be preserved. Plants are a central part of this life system; they provide us with food, shelter, clothing, fuel. medicines, the air we breath, and an incredibly rich and aesthetically pleasing environment in which to live. Plants are also integral parts of natural ecosystems. Functioning ecosystems provide many essential services such as the regulation of air and water quality, climate moderation, and waste disposal. some species may not have a direct use by humans. we need to keep all the pieces of the puzzle, to save as many species as possible, for they may hold clues to preserving our own future and the majority of them stimulate and please us beyond calculation.

Of the 20,000 plant species native to the United States, one out of every ten is in danger of extinction. A national survey completed by the Center for Plant Conservation (CPC) in 1988 found that over threequarters of the endangered flora of the United States are found in five areas: Hawaii, California, Florida, Texas, and Puerto Rico and the U.S. Virgin Islands. While extinctioin is a natural process, it is the rate of extinction that is alarming. The causes of plant endangerment are mainly human-induced; population growth that has lead to rapid urban development, conversiton of wildlands to agricultural and grazing lands, over-collection of "unusual" native plants such as pitcher plants, orchids and cacti, and so on. These actions have caused habitat loss and degradation, and plant extinctions.

In the United States, many governmental and non-governmental organizations work together to preserve rare plants. This cooperative effort involves both protecting species where they live (in situ) and maintaining conservation collections of rare plants in safe sites (ex situ). These off-site plant collections are usually housed at botanical gardens or in seed and germ plasm banks.

### The role of the Center for Plant Conservation

The CPC is a national network of 25 leading botanical gardens and arboreta that holds a living collection of many of the most endangered and threatened plants of the U.S. The goal of the CPC is to conserve the rich, native U.S. diversity of plant life for future generations.

The Center's National Office at the Missouri Botanical Garden in St. Louis, Missouri, provides coordination and support services, while the 25 gardens around the country collect, maintain, and store the plant The primary objectives of the National germplasm. Office are: 1) to develop the National Collection of Endangered Species and to coordinate the conservation, research and educational projects that are associated with it; 2) to maintain a national database concering the biology, horticulture, and conservation status of all imperiled native U.S. plants; 3) to work with colleague organizatons on collaborative projects combining species-level research. management, and restoration of rare plants in the wild; and 4) to assist the U.S. botanical gardens in developing public awareness of plant endangerment and conservation issues/

### The National Collection of Endangered Plants

The National Collection is made up of nearly 500 of the rarest plants of this country. The plant material is collected, grown, and maintained by the 25 botanical gardens and arboreta that make up the CPC network. These gardens grow plants that are native to their regions. The plant material is kept in different forms; as cuttings, seeds, and whole plants.

The National Collection is a "back up" in case a species should become extinct in the wild. Material from the Collection has been used by state and federal agencies in their efforts to reintroduce imperiled plants into the wild. The Collection is a resource for scientific study on the nature of rare plants, their life cycles, their germination requirements, and so on. It is also useful in informing people about threatened and endangered plants.

The Center for Plant Conservation offers opportunities to sponsor species in the National Collection. Sponsorship provides for the protection and care of a rare plant in perpetuity within one of the 25 participating institutions. For more information about sponsoring a species in the National Collection, or about the Center's efforts, please contact CPC at 314-577-9450.

Editors Note: The information in this article is distributed by the CPC and was written by Anukriti Sud, Manager/Conservation Programs. A list of the plants and participating institutions can be found at their homesite at <a href="http://www.mobot.org/CPC">http://www.mobot.org/CPC</a> Call for a hard copy; a fee may apply to cover printing and mailing.



'The first prerequisite of intelligent tinkering is to save all the pieces."

Aldo Leopold



## Founder of the North Carolina State University Arboretum killed in car accident

It is with regret that I inform members of the MNPS of the death of Dr. James Chester "J.C." Raulston who was killed in an automobile accident on December 21, 1996 in Ramseur, North Carolina.

Founding Director he is credited with turning the eight acres of university land near the state fairgrounds in West Raleigh into the infamous NCSU Arboretum. It is the home not only to the world's only collection of dwarf loblolly pines but also to a 450 foot perennial border, designed by Edith Eddleman, which is filled with hundreds of native plants. One can not view the border without admiring a director who, long before it was vogue, supported and encouraged such a planting.

He promoted enriched landscapes by using a diverse, well-adapted array of plants. In major part due to his energy and vision, more than 15,000 plants annualy, thousands of them native, were distributed to the plant industry annually. Raulston, who began the Arboretum in 1975 with an annual budget of less than \$25,000 today has helped to create a garden considered to be a \$5 million assett.

He will be greatly missed by horticulturists, landscapers, nursery growers, and gardeners alike.

Memorial donations may be made payable to:

"The NC Agricultural Foundation" with the memo line reading "Arboretum Building Fund"

and mailed to:

NCSU Dept of Horticulture Box 7609 North Carolina State University Raleigh, NC 27695-7609.

### **Invasive Exotic Plant Species**

Three of the last four newsletters or information bulletins that have passed into my hands contain articles on invasive exotic plants. In the Fall 1996 Issue of Alabama Wildflower Watch, Leon Bates, a retired TVA senior botanist is quoted as saying "Plant contaminants, invasive aliens, biological pollutants are some of the names given to unwanted plant species now insidiously displacing thousands of acres of native plants in Alabama. As plants go, so go the animals, reflecting the domino effect imposed on our state's natural resources." There is no reason for us to suspect that any less is true in Mississippi.

For a complete list of invasive plants compiled by the National Association of Exotic Pest Plant Councils

Send \$3.00 to:
Faith Campbell

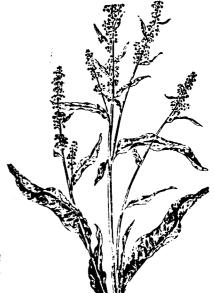
8208 Dabney Avenue
Springfield, VA 22151

The National Association of Exotic Pest Plant Councils has compiled a list of the 300 most invasive exotic plant pests in North America. Faith T. Campbell, Executive Secretary, in an article that appeared in Vol 14, No. 4 of The Columbine, The National Council of State Garden Clubs Conservation Newsletter, states that over 70% of the plants on the list are still being sold by at least one nursery. A further breakdown shows that 93% of the invasive trees and 84% of the shrubs are for sale. While 'trailing' by a tendril, 66% of the invasive vines can currently be purchased for horticultural use.

Planning Backyard Habitats, Charlotte Seidenberg writes that unlike our gardens and backyards "when aggressive aliens leave the garden - and if they are attractive to birds, like Chinese tallow trees, Chinese privet and Japanese honeysuckle, they will - there is no one to cut them back or pull them up." But we try. Several weeks ago I picked up the Memphis, TN paper to see a picture of volunteers at the Lichterman Nature Center participating in the annual 'January Privet Pull'. A relentless, ongoing battle, no one knows better than Larry Wilson and the thousands of other managers of natural area around the country just how 'at home' these exotics have made themselves.

They crowd out native species and reduce diversity in our native landscapes. If you think that the problem doesn't exist or isn't as serious as 'they' make it out to be, try remembering the last time that you took a ride in the country without seeing the thick vines of Japanese honeysuckle (*Lonicera japonica*) weighing down shrubs. Let alone the hauhting landscape that kudzu (*Pueraria lobata*) has provided us with. If that's what we can see from the road, imagine what's going on beyond our view.

-Lynn Libous-Bailey



## Winter Spotlight: Mistletoe (Phoradendron sp.)

The genus *Phoradendron* comprises the mistletoes found on deciduous trees in the United States. Thomas Nuttal named this genus from the greek *phor*, a thief, and *dendron*, a tree, in reference to the plants parasitic habit. Much of its mistique arrives from the fact that it hangs from the skeletal canopy of a deciduous forest in the dead of winter. Often the only green in such a forest the sight is indeed mystical if not eerie.

An evergreen, like all mistletoes, *P. serotinum* can be found in nearly every county in Mississippi. The leaves are opposite, simple, entire, and leathery. The flowers, which have no petals, are greenish and inconspicuous. Fruit is a berry with a viscus gluey fluid inside. Most, if not all, mistletoe species are poisonous with *P. serotinum* being no exception.

Seed dissemination is mostly by birds. The seed are defecated and stick, or are wiped from the beak, onto branches near the perch. Mistletoe seed lack a seed coat and are covered instead with viscin, a mass of cellulose strands in a pectic substance. This not only helps the seed to stick to the host plant but also absorbs moisture. Seed of most species germinates in the spring. After germination the formation of the parasitic root (haustoria) and penetration into the host plant may take up to six weeks once contact is made with the host surface. Seed which fall to the ground and germinate soon die.

Early observations of birds eating the seed are apparent, as the word 'mistletoe', originated from *mistelta*n in Anglo-Saxon, the diminutive german *mist* (dung) and the Anglo-Saxon *tan* (twig). Lore? There is plenty. It is said that 'the' cross was made from mistletoe wood, and as a punishment the plant was banned from the earth, to hang for all eternity. In parts of Brittany, it is still called 'Herbe de la Croix' or 'Plant of the cross'.

Referenced in part from: Mistletoe - the Christmas Weed; Mitich, L. W.; In Weed Technology (1991) 5(3): 692-694.

### Mississippi Native Plant Society Membership Application

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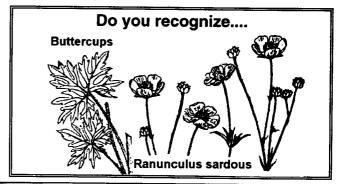


Return this form along with a check made payable to Mississippi Native Plant Society to:

Mississippi Native Plant Society C/O Ron Wieland MS. Museum of Natural Science 111 N. Jefferson St. Jackson, MS 39202



All members receive Mississippi Native Plants. Life members also receive <u>Wildflowers of Mississippi</u> by S. Lee Timme



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## The "Purple Plaque"

Tennessee is the latest of fourteen states that have now banned the importation of purple loosestrife Lythrum salicaria, L. virgatum, and their hybrids. Natives of Europe, in their natural habitat they are the favored food of beetles that keep them in check. Here in the United States, it is without a natural preditor. It has quickly spread in wetland



areas out competing native species which provide sources of food for birds and other animals.

The seed of purple loosestrife, produced by the millions, is light and easily carried by wind and water. While many of the named hybrids commonly sold in garden centers are thought to be sterile, some available cultivars are simply selections of the highly fertile wild species.

## Mississippi Native Plant Society PO Box 357 Stoneville MS 38776-0357

M N P S