Mississippi Native Plant Quarterly
Mississippi Native Plant Society  DEC. 1992

Noxubee Crest: "Fecund with flowering dogwood, fragrant spicebush, pawpaw"

by Tim Stevens

Sidney McDaniel stopped and looked up. "That's a cucumber magnolia," he said as he pointed up to a small tree with sharply pointed oval leaves. "That's a cucumber tree because the fruit looks like a little, short cucumber. They're in ravines and places like this and again, this is indicative of mesic places."

The understory was open, surprisingly clear, fecund with flowering dogwood, fragrant spicebush, pawpaw in flower and oak-leaf hydrangea as well as a diversity of herbaceous plants. Hound's tongue, jack-in-the-pulpit, wood vetch, Solomon's seal, blue phlox and bellworts were scattered across the dark ground like delegates at a presidential nominating convention.

Massive high trees surrounded Mississippi State's McDaniel, silent

by Randy Winstead

On April 4 about 20 people gathered at Jackson's Grocery in Sturgis for a field trip into the wilds of Winston County. The trip was led by Dr. Sidney McDaniel, whose Plant Ecology class was present to swell our ranks. Also among those gathered were Vic Rudis, Randy Winstead, Alan Moore, Gail Barton, Dr. Lyle Nelson, and probably others I am forgetting. But a few minutes after nine we were headed to the field, where we met Randy Warren and his wife Vicky.

The first location visited was a ravine in the Noxubee Crest area. The Noxubee Crest is a deeply dissected region of the North Central Plateau near some of the headwaters of the Noxubee River. Several nice older growth, mesophytic forest sites exist here. These "rich woods" sites are perhaps the most rapidly disappearing
giants, their canopy held high above, pointed in the early April sun--a classic example of an oak-hickory successional woodland with several persistent "transitional" pines.

"This is an interesting area," stated McDaniel, "that was not disturbed, oh, probably until the previous century--back in the 19th Century for the most part. As an area like this progresses in succession, you lose the pine trees. There are some pines in one place we may visit later today that are about 150 years old."

The Noxubee Crest, as this florid, pristine woodland in Mississippi's North Center Plateau region is known, encompasses about 670 protected areas within the boundaries of the Tombigbee National Forest near Starkville. "It's a research natural area," explained McDaniel. "It's been set aside permanently for the purpose of being studied."

"This is very indicative of humid or--mesic would be a better way of putting it--conditions with a more northern aspect than most places," said McDaniel, pointing to Peltigera canina, a, typically, more northern foliose lichen growing on a steep soil bank. "In Mississippi it's restricted to real deep ravines and things like that...well drained soils. On banks like this it's protected. It just barely gets into Mississippi and is very sporadic in Mississippi."

Alan Moore, one of McDaniel's graduate students at Mississippi State, is currently studying the Noxubee Crest; an area which despite its obvious floristic diversity has had virtually no previous, detailed studies done of its lush plant life.

A woodland buttercup with wet feet, Ranunculus recurvatus, is another "indicator" species for the Noxubee Crest's floristic luxuriance. "It's found in low, rich woods," explained botanist Randy Winstead. "It's about the only Ranunculus I can

habitat type in the North Central Plateau. Most of the remaining examples in the North Central Plateau are small enclaves of ten acres or less. The ravine which we visited is much larger in size and is one of the nicest remaining examples of this habitat type in the region.

Among the interested trees seen in the ravine were Magnolia acuminata (cucumber tree), Acer barbatum (Florida maple), and Quercus rubra, (Northern red oak). A somewhat out-of-place introduced species, Paulownia tomentosa (royal Palownia or princess tree), has made its way into the ravine also. Notable understory species include Aesculus pavia (red buckeye), Hydrangea quercifolia (oak-leaf hydrangea), Asimina triloba (pawpaw), and Lindera benzoin (spicebush).

Herbaceous species were numerous and varied, with many in flower. Some of the more noteworthy taxa seen included Phlox divaricata (wild blue phlox), Prenanthes sp. (rattlesnake root), Galium circaezans (wild licorice), Cynoglossum virginianum (wild comfrey or hound's tongue), Vicia caroliniana (Carolina vetch), Aristolochia serpentaria (birthwort or Virginia snakeroot), Actaea pachypoda (baneberry), Arisaema triphyllum (Jack-in-the-pulpit), Trillium cuneatum (little sweet Betsy), Trillium recurvatum (prairie wake robin or red trillium), Smilacina racemose (false Solomon's seal), Podophyllum peltatum (mayapple), Lithospermum tuberosum (gromwell or stoneseed), Calacca atriplicifolia (pale Indian plantain), Uvularia grandifolia (large flowered bellwort), Ranunculus recurvatus (hooked crowfoot), Tipularia discolor (crane-fly orchid), Sanicula gregaria (clustered snakeroot), Oxalis violacea (violet wood sorrel), Viola walteri (prostrate blue violet), and Obolaria virginica (pennywort).

Plants encountered which are on
Stevens continued...

think of that is somewhat of an indicator for rich woods, particularly for low, rich woods."

Surprisingly, one of the most striking "Crest" plants of early April is a plantain, Robin's Plantain. "It's related to daisy fleabane," explained McDaniel. "They occur in the woods."

"They call it Robin's Plantain because it's real showy," added Randy Warren, who is a consulting botanist. "It's indicative of real rich woods."

Other common plants that are found in the Noxubee Crest area include Turk's cap lily, ginseng, pink lady slipper orchids, hazelnut and pennywort.

The bizarre pennywort, Obolaria virginica--typically found in rich woods, bottomlands or along river banks--was initially described by Linnaeus in 1737 but Linnaeus, perhaps because of its unusual appearance, mysteriously placed it in the parasitic broom-rape family (Orobanchaceae) along with such obligate parasites as squawroot and beechdrops.

Not a true parasite at all though, the pennywort has its own chlorophyll and is fully capable of food production, being considered only a hemiparasite. "It can be parasitic or not parasitic," explained Warren. "It's a saprophyte," added McDaniel. "Or at least partially saprophytic." Not an obligate parasite at all, the pennywort actually belongs to the Gentian Family, unexpected having more in common with the closed gentians or with the sabiatis.

McDaniel then stopped and pointed out a magnificent wild azalea in full bloom; its sweet, intoxicating aroma permeating the air for several feet around it. "Did you smell it?" he asked. "That's the best part of it."

(From the newsletter of the Montgomery Native Plant Society)

Winstead continued...

state or federal listings of rare plants include Lilium superbum (Turk's-cap lily), Panax quinquefolium (ginseng), and Osmorhiza claytonii (sweet cicely). Although not visited on this trip, an area farther down the ravine contains the rare orchid Cypripedium pubescens (yellow lady's slipper orchid). Eight species of ferns were noticed at the ravine, among which were Thelypteris hexagonoptera (broad beech-fern), Botrychium virginianum (rattlesnake fern or Virginia grapefern), and the introduced and rapidly spreading Old World fern Thelypteris torresiana (Mariana maid fern).

The second site visited was a flat, boggy area along a small stream. One of the more noticable species here was Magnolia virginiana (sweet bay). Other species found that were not noticed at the previous site include Rhododendron canescens (wild azalea or pink honeysuckle), Arisaema dracontium (green dragon), Uvularia sessilifolia (wild oats or sessile bellwort), and Decumaria barbara (climbing hydrangea or wood vamp).

Very impressive was a sizable and almost pure stand of Lindera benzoin (spicebush). Several species of ferns were found in large numbers in the nice bog areas. Also seen were Jack-in-the-pulpit, trillium, pawpaw and Florida maple.

The last area visited was the ravine behind the roadside park on Highway 25 between Starkville and Louisville. This site is also a nice example of a rich woods habitat. Species not seen at the other sites include Iris cristata (crested drawf iris), Gentiana villosa (Sampson's snakeroot or straw-colored gentian), Erigeron pulchellus (robin's plantain), and Lilium michauxii (Carolina lily). Leafy liverworts as well as a thallose liverwort, Pellia epiphylla, were also found.
Corps wildflower planting "pretty" economical

BEAUTY THAT SAVES MONEY TOO! Paul Slinkerd (left), assistant Greenwood area engineer for the Corps of Engineers, and Margaret Allen (right) of the City Beautiful Committee, admire the beautiful wildflowers along the Greenwood Protection Works.

by Veronica R. Jackson

GREENWOOD--An idea to improve the environment and reduce the cost of maintaining flood control works is paying dividends for the Army Corps of Engineers.

The Corps is growing wildflowers on the protection works at Greenwood, to not only enhance the beauty of nature, but also eliminate the weekly requirement of mowing the grass.

The idea was born when Paul Slinkerd, assistant area engineer with the Corp's Greenwood Area office, attended the National Roadside Vegetation Management Association Conference. During the conference, he learned how to use wildflowers to beautify the highways.

Slinkerd ordered a Southeast seed mixture composed of 22 varieties of wildflowers from a Texas seed company. The seeds were planted on a one-mile stretch of the Greenwood Protection Works. The flowers have drawn positive comments and, in June, the Corps received the City Beautification Award.

Slinkerd plans to expand the wildflower project to Port Pemberton Control Structure, which is visible from two Federal Highways, and to other selected locations.

He also said that besides the esthetic value of the project, the Corps is saving about $200 per acre each year because of reduced mowing costs.

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Letters to the society:

Native seed bank needs help

Dear MNPS members,

Would it be possible to solicit help from the Mississippi Native Plant Society to collect wildflower seeds? I want to study the plants and establish a "seed bank" so person wanting to grow native ecotypes will have them available. It would be something like Seed Savers Exchange has done with heirloom varieties. Available seeds would be offered free to contributors and at a nominal fee to other MNPS members, depending on the success of the increase.

I am also collecting "old timey" heirloom garden varieties for Seed Savers Exchange and would appreciate seeds of anything that members may be growing or could obtain from friends.

Any seeds, wildflower or heirloom, received from MNPS members will be acknowledged and greatly appreciated. Seeds should be sent with collection information (plant name, collector, state, county, habitat, location, etc.), if known. Seeds may be sent either of the following addresses: James A. Wolfe, Plant Materials Specialist, Whitten Plant Materials Center, Route 3, Box 215A, Coffeeville, MS 38922, (601)-675-2588 or James A. Wolfe, Rt. 1, Box 115, Coffeeville MS 38922, (601)-675-2807.

My schedule has not allowed me to participate in many MNPS activities, but I always enjoy your newsletter. For a number of years, I have been interested in collecting and preserving germplasm of under-utilized plant species for conservation as a vocation. Now I hope I can do the same with native species as an avocation.

James A. Wolfe

We agree, oaks beat pines for yard trees

Just ran across your newsletter again and want to say we agree with you in regard to passing out pine trees to school children. We are partners in "The Learning Tree", a kindergarten with extended care, with my daughter, Debbie Ellis. Every year at "graduation" she gives each student a sturdy oak tree to plant. She is fortunate to have a parent who provides the tree.

We have some trees growing in the back yard in pots that we plant to share. We just discovered that they have grown roots through the pots so now we will have to wait until fall to give them away. They pop up all over the yard and, since we don't relish trees growing in rose beds, we dig them up and put them in pots.

We saw beautiful pitcher plants and a few wild orchids near my daughters' house in Ocean Springs. Also some flowers we haven't identified yet.

We're glad you spoke out about the pine trees.

Carolyn and Frank Jones, Greenwood
Publications of interest to members:

Grasses of Louisiana

The Cajun Prairie Habitat Preservation Society and the Herbarium at Northeast Louisiana University recently announced that Grasses of Louisiana, 2nd Edition by Dr. Charles M. Allen is now available. This upgraded version contains keys and descriptions to more than 380 grass taxa growing without cultivation in Louisiana. The documented distribution by parishes for each taxon is presented in a checklist. There are more than 370 illustration representing nearly all taxa.

The book costs $40. Send your check to Cajun Prairie Habitat Preservation Society, P.O. Box 172, Eunice LA 70535.

The New Royal Horticultural Society Dictionary of Gardening

List Price: $795.
Order by calling: 1-800-221-2123

The 1992 Plant Conservation Directory

This directory is billed as "the only comprehensive list of over 500 professionals and offices involved in conserving U.S. native plants."
Also includes:
* State plant conservation laws, and Center for Plant Conservation contacts within each state.
* Government contacts to provide information about rare and endangered plants, permit procedures and government programs.
* Names of botanists and other contacts in state Heritage Programs and native plant society leaders.
* Rare plant laws and rare and endangered plant lists by state.

Cost: $15. Order from Center for Plant Conservation, Missouri Botanical Garden, P.O. Box 299, St. Louis MO 63166.

1993 Gardeners' Guide for the South Calendar, American Horticultural Society, $11 including postage. Tips on when to plant, prune, fertilize; information on native plants; eco-tips. To order, call 1-800-777-7931.

The following six books are published by Stipes Publishing, and available by ordering through your local bookstore:


Landscape Construction, Procedures, Techniques and Design, by Floyd Giles, Hardback, $28.80.

Shade Trees for the Central and Northern United States and Canada, by Sharon Yiesla and Floyd Giles. Cost, $28.80.


Treasurer’s Report from Sherrie Wiygul

The Mississippi Native Plant Society underwrote a scholarship to the 23rd Summer Seminar in Horticulture held at Mississippi State University in June 1992. This three-day "hands-on" seminar emphasizes plant propagation techniques. We chose a Starkville High School student, Buddhika Abesinghe. When the seminar rolls around next year, let us know if you have a high school student in mind for the scholarship.

The society would like your suggestions for good uses for our money (treasurer’s report follows). Let us know if you have any ideas.

As of Oct. 6, 1992, our bank balance stood at $4349.50. Our primary expense is the newsletter which costs several hundred dollars for printing and mailing. But, as you can see, we are in pretty good shape.

Wildflower Seed Available from NEWFS

The New England Wild Flower Society is offering seeds or spores of more than 200 varieties and ferns in their 1993 Seed and Book Catalogue. Included in the Catalogue are natives for woodland, wetland and meadow gardens. To receive a copy, send $2 plus a self-address, 52-cent stamped envelope to Seeds, New England Wild Flower Society, Garden in the Woods, Hemenway Road, Framingham MA 01701. Requests must be received by March 1. Seed sales close March 15.

New Address for Editors

Your editors, Becky Gillette and Roger Danley, have swapped the Piney Woods of Hattiesburg for the marshlands of the Mississippi Gulf Coast. Our new address is: 6104 Olvida Circle, Ocean Springs MS 39564. Telephone: (601)-872-3457. A big thanks to those who contributed articles for this edition! Please send articles/news items for spring edition by January 15.

REMEMBER!!! CHECK YOUR LABEL NOW TO SEE IF IT IS TIME TO RENEW!!!

Page Seven
Time to reassess the garden worthiness of goldenrods, the colorful daisies of autumn

by Judy Glattstein

Condensed from Arnoldia, the magazine of the Arnold Arboretum)

There are those of us who refuse to give up gardening with the Labor Day holiday, who expect more gratification from the late season garden than planting bulbs. For these dedicated gardeners, goldenrods (Solidago species) can be invited into cultivation from the roadside to brighten the fall of the year and lead the garden into winter rest.

The lack of popularity of the goldenrod stems in part from the widespread misconception that goldenrods cause hay fever—an outright fallacy in view of the fact that plants which produce showy, colorful flowers in order to lure insect pollinators will also make heavy, sticky pollen for the insect to carry away. Fall hay fever is caused by light, wind-borne pollen produced by plants with inconspicuous flowers, such as ragweed, while plants with conspicuous flowers such as goldenrods often take the blame.

The genus Solidago contains about 130 species, most of which are native to North America, with a few found in Europe, Asia and South America. They flower in summer or in autumn, are good for cut-flower use, are easily raised from seed, and can be readily propagated by division. If it sounds like a nursery's dream, I can only assume that it is the public's perception of all goldenrods as noxious weeds that eliminates their use as garden perennials. It is time to reassess the garden worthi-ness of goldenrods, and this is slowly happening, especially in that segment of the horticultural world interested in native plants. Perhaps other gardens will catch up with them—and sooner rather than later.

There is tremendous variation (and consequently taxonomic confusion) within the genus Solidago regarding bloom time, shape of the flower head, overall height, and cultural needs. Nearly all of the goldenrods have bright golden-yellow flowers, small individually, but clustered on a spikey raceme, a flat-topped corymb, or a plume-like panicle whose numerous flowers make a bright display. Following are some recommendations of species, largely unselected wild plants, valuable for their bright floral displays. Except where noted, I have chosen to follow the taxonomy presented in Hortus II.

Solidago altissima has the appropriate common name of tall goldenrod, as it will reach 80 inches. It has long (up to six inches), rough, gray leaves with hairs on the stems and the underside of the leaves. This the one species that should be pinched back to encourage stout, sturdy growth, because in its native meadow habitats it grows among a host of other plants that provide mutual support. In the garden, it might be necessary to provide support in the form of stakes and string. This species is so vigorous that it looks better in a naturalistic setting. It looks particularly good in combination with tall grasses.

Solidago bicolor is a goldenrod with, surprisingly, white rather than golden flowers, and hence its common name of silverrod. It grows 2-3 feet tall with unbranched gray, hairy stems. Short-lived, this species is quite possibly biennial.

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The lance leaved goldenrod, **Solidago graminifolia**, is unlisted in *Hortus III*, but is mentioned in one of the best native plant books, *Handbook of Wildflower Cultivation*, by Kathryn S. Taylor and Stephen F. Hamblin (1963). A branching, bushy plant, this species grows 2-4 feet tall, with numerous, narrow, grass-like leaves. The many small, flat clustered flower heads appear from mid-summer through autumn on short branches at the top of the stem. Tolerant of a range of soil conditions, lance-leaved goldenrod will grow in wet or dry sites, and is also easily propagated by division in spring.

The gray or field goldenrod, **Solidago nemoralis**, is among the earliest of goldenrods to flower. Growing only 1-2 feet tall, this clump-forming plant has mottled, gray-green leaves. Its graceful, arching, one-sided flower stalk first appears in August, a sure sign that summer is drawing to a close. This species is somewhat short-lived, possibly biennial, and grows best on poor dry sites.

The sweet goldenrod, **Solidago odora**, has fragrant, anise-scented foliage. Growing 3-5 feet tall, the one-sided panicle of flowers is attractive from late summer into autumn. It will grow well not only in average soil, but even in poor sandy sites. The leaves can be used for tea if harvested before flowering begins, as the intensity of flavor will then decline.

**Solidago pinetorum** is not listed in *Hortus III*, but is offered for sale in catalogs. Commonly called early goldenrod, it flowers in midsummer. The bright green foliage grows in a low clump, with 4-foot-tall, rather arching flower stalks. This species is valuable for its handsome foliage and early bloom.

**Solidago rugosa** is commonly called rough-stemmed or, more accurately, rough-leaved goldenrod, since the specific name refers to the wrinkled, veiny rugose leaves. Another large goldenrod, growing 4-6 feet tall or more, its spectacular flowers appear in late summer or early autumn, with curving sprays of vivid yellow flowers atop vase-shaped plants. The species appreciates moist to average soil conditions, and combines well with *Eupatorium purpureum*, Joe-pye weed, for a lovely display in fall meadows. It will seed about and "volunteer" in the garden. Division in late winter is another means of propagation.

The seaside goldenrod, **Solidago sempervirens**, has adapted to harsh coastal conditions of sandy soil and strong winds, and reveals a waxy coating on the somewhat succulent leaves. Not insistent on beach conditions, this species will grow perfectly well in average soil in the perennial border. Variable in bloom time and height, different plants can be seen in bloom from summer into October, anywhere from 2-6 feet high. The individual florets, large compared to most goldenrods, are carried in large flattened panicles. As this species tends to have a deep root system, especially in light soils, it is best to transplant it when small.

**Solidago speciosa** is also unlisted in *Hortus III*. Growing 2-3 feet tall, it has 12-inch-long wands of vivid yellow flowers. Growing in average soil, it also tolerates nutrient poor sandy soils; good selection for xeric landscapes.

**Nurseries offering goldenrods:**
- Holbrook Farm and Nursery, Rt. 2, Box 223B, Fletcher NC 28732; Little River Farm, Rt. 1, Box 220 Middlesex NC 27557 (catalog $2); Native Gardens, Rt. 1, Box 494, Greenback TW 37742 (cat. $1); Niche Gardens, 111 Dawson Rd., Chapel Hill NC 27516 (cat. $3); Prairie Nursery, P.O. Box 306, Westfield WI 53964 (cat. $3).
Grandmother's Garden ceases publication, but seed share service is still being offered

Dear MNPS members,

I have been meaning for a while to drop you a note to thank you for the mention of my newsletter, Grandmother's Garden, in the MNPS newsletter. I'm sure you're wondering what happened to the newsletter. No, I didn't drop off the face of the earth, as it must have seemed. Back at the beginning of the year, I had a very difficult decision to make. As much as I loved doing Grandmother's Garden, it was going a different direction that I had originally intended. The concentration was less on plant sharing and more on articles, events, etc. It was turning into a mini-magazine.

As much as I discovered I loved to write, my focus was and has always intended to be on providing a way for people to share with each other. I had found I had no time for much else, including my own gardening. Therefore, I made the very difficult decision to halt production and return all my subscribers unused subscription money. I wrote a letter explaining my decision with checks to my subscribers. I am keeping a list of plants and seeds to share on my computer and will share them free in exchange for a self-addressed envelope to my home address when I collect enough to warrant a list.

I never expected the response I got: many notes and letters with a very warm understanding spirit. Some people even returned their checks! I always knew gardeners were very sharing people and I guess this proves it. I want to continue getting information about the newsletters, etc., so I am enclosing a check for my subscription to the Native Plant Society. Hopefully now I may even have time to go to some of the conferences I listed in my newsletter.

Sincerely,

Melissa Legate
28 Rochelle St.
Brandon MS 39042

EDITOR'S NOTE: If members have seeds to share, we would like to run notices of them in the newsletter. Please seed share offers or requests to: MNPS Quarterly, 6104 Olvida Circle, Ocean Springs MS 39564. We would prefer to run native seed swap offers, but will run non-native seeds also if space permits.

Spring Landscape Seminar coming in February

A Spring Landscape Management Seminar featuring presentations from Felder Rushing, Barbara Bridges (perennials for Miss. gardens), Ed Blake and Susan Haltom will be held February 27-28 at Mississippi State Bost Extension Center. For more information, contact Jim Perry, 325-3012.
Please include class of membership and enclose dues.

Membership Application and Due Notice

Please mail the application below with fee.

MEMBERSHIP AND MEMBERSHIP: THE MISSISSIPPI NATIVE PLANT SOCIETY IS OPEN TO ANY INTERESTED IN NATIVE PLANTS AND PEOPLE ASSOCIATED WITH NATIVE AND PLANT AND SEED EXCHANGES, LANDSCAPE DESIGN, PLANT PROPAGATION AND NATIVE PLANTS.

NEWSLETTER: THE MISSISSIPPI NATIVE PLANT SOCIETY QUARTERLY PROVIDES A NATIVE PLANT SOCIETY NEWSLETTER.

Programs

6140 Vista Verde Circle, Ocean Springs, MS 34569

Phone: 982-4540

Programs: Seed Exchange, Workshops, Field Trips, Educational Seminars, and Self-Guided Nature Tours.

NC NSF Grant Award: 982-4540

President: Victoria Washburn, 329-5750

Board Members: Becky Girard, Roger Byrnes, 877-3457

V.P.: Randy Wooten, 289-455 or 289-5638

Programs: Workshops, Seed Exchange, Nature Tours, and Educational Seminars.
As a result of a meeting called by Fred Searcy, Jr., on April 19, 1980, at the Museum of Natural History in Jackson, the Mississippi Native Plant Society was formed for all aspects of botany, particularly the vascular flora of Mississippi. The group is interested in all aspects of botany, including the enhancement of knowledge about the native and naturalized plant species of Mississippi and the encouragement of attitudes of respect and appreciation for these species.

GOALS

- Gather and disseminate knowledge about the native and naturalized plant species and their habitats in Mississippi.
- Work for the preservation of these species and conservation of their habitats.
- Inform the public about these species and their importance, ecology, and need for protection.
- Encourage the propagation and use of native plans and habitats in designing residential, commercial, and public landscapes.
- Foster fellowship among all persons interested in understanding and appreciating native plans and their habitats.

Mississippi Native Plant Society
P.O. Box 2151
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