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# MISSISSIPPI NATIVE PLANT QUARTERLY

MISSISSIPPI NATIVE PLANT SOCIETY

FEBRUARY 1992

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## Designing a Backyard Wildlife Habitat

by Hartley Fairchild, Jackson Area Landscape Architect

Note: The following article was adapted by Vic Rudis from: Fairchild, H.P. 1991. Creation of a backyard habitat. Pages 57-60 in Cohen, W.E., ed. Proceedings of the 1991 backyard wildlife short course; 1991, Nov. 9; Jackson, MS. Mississippi State, MS: MS Cooperative Extension Service. 68 p.

People fear that the creation of a backyard wildlife habitat is a gigantic undertaking. "Wild" plants, as their name implies, are viewed as engulfing monsters of brambles and invasives that overtake a yard once established.

But, just as in floral design, art, or literary writing, the creation of a wildlife habitat can be fun and rewarding if only a few guidelines are followed.

Beauty and control can be maintained and give the appearance of a natural woodland setting.

Logic should dictate the design. What does this mean? It means that the backyard habitat should fulfill the needs of wildlife while meeting the needs and dreams of the family. This can lead to a more unified, cohesive living



environment that supports and promotes an environmentally sensitive, one-world community.

### PLANNING THE HABITAT

Take a look around and get a feel for what can be used and what needs to be enhanced or played down. Preservation of what exists is of the utmost importance. It is existing features that give your yard immediate character and its unique charm. A fallen log, a twisted pine, a moss-covered rock, and a roaming muscadine vine can become garden sculptures. A hollow stump can be a birdbath. And a thicket of privet and cedar can be transformed into privacy screening.

When the inventory of

existing features is completed, incorporating functional needs is the next step. How the features and functions relate to each other determines the amount of space required. Allowance should be made for future growth of plants as well as the logical flow of functions. This ordered placement of functional needs can be blended with aesthetic qualities so that the outdoors provides maximum beauty for man and adequate food and shelter for animals.

In formal terms, planning a backyard habitat should include (1) an environmental inventory and analysis of existing features, and (2) an orderly placement of functional needs meshed with the site's existing features. A record or map of all physical features such as drainage, vegetation, slope, soil, solar orientation, and views (or feelings) of the site is helpful. This is particularly true with the existing home sites, and even more so with woodlots on which a home is to be built.

#### LANDSCAPE PRINCIPLES

As in any endeavor, certain principles or guidelines should be followed in landscape design. There should be an easy transition from the man-made to natural features. This transition usually progresses from the manicured lawn to the edged ground cover, selectively pruned shrub mass, random placement of trees, natural sprouting of seedlings, and to the natural succession of plant material. This transition gives an orderly control to the landscape and gives people a feeling of safe retreat from the seemingly untamed.

As in decorating your home, repetition of fabric, furniture and accessories of a particular era limits chaos and provides unity. Contrasting materials provide excitement and interest. Balance yields a feeling of completeness. With plants, repetition is achieved by using similar plant textures, colors, forms, and lines. Contrast is accomplished by using different ones. Asymmetrical balance is used in wildlife habitats.

#### INSTALLATION OF HABITAT

How is a backyard wildlife habitat installed? First, don't send a yardman to clean it up. Not knowing what one has or knowing what benefits are provided by existing vegetation is a tragedy to be avoided. Often one may need only to add to what is already there.

Adding to the landscape may take two approaches. First, plants can be installed on an individual basis. Since the top 12 inches of woodlot soil is comprised of fibrous root material, carefully dig a pit twice the size of the root ball of the plant. Mix half of the soil taken out of the hole with a good soil mix, and backfill around the plant. This will help water to flow back into the existing soil and not be trapped in the hole--drowning the plant.

The second approach is to bridge over existing soil, which lessens the chance of root damage. Lightly till the existing soil to create a bond between it and the soil to be added. Add four to six inches of good soil mix on top. Be careful, as too much soil will suffocate existing plant roots.

#### PLANTING PRIORITIES

Establish priorities for areas to be planted from the most important to the least important. Consider important those areas that will be viewed from the home or from entertainment areas in the yard. Areas rarely seen should be low on the priority list. When selecting additional plants, keep in mind the line, form, color, and texture of the plant, and that it is being used for balance or repetition.

Select mature plants for important areas. Spend your money on the areas of most importance to you, and down-size the plants that area farthest away from the focal points. This will help stretch always limited funds a little further. Typically, slower-growing trees are planted first, then shrubs, then ground covers. Ground covers are the most expensive because they cover the least amount of area per plant.

Last minute deviations from the plan, e.g., because the nurseryman was out of a particular plant, or because of the expense, may jeopardize the quality of the effect you are trying to achieve. Keep in mind the design principles mentioned above when making changes.

#### SUMMARY

You should have a basic philosophy that the backyard wildlife habitats should interact and interrelate with the living area so that there is not a sharp line where the traditional yard ends and the backyard begins. By careful planning and analysis of the site, existing patterns become apparent. Combining one's functional needs with knowledge of the existing environment and

proven design principles will help you create a natural beauty that is both manageable and enjoyable.

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#### PAWPAWS MAY FIGHT CANCER!!!

by Becky Gillette

A Purdue University researcher has evidence that pawpaws show potential as an anti-cancer drug and as an insecticide.

The pawpaw derivative tested thus far only in animals is reportedly a million times as potent as the widely used cancer drug Adriamycin.

Could growing pawpaws be a new industry for our area? Anyone knowledgeable about pawpaws, PLEASE SEND US AN ARTICLE FOR THE NEXT ISSUE!!! Also, let's try to share pawpaw seeds and trees.

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#### LETTER FROM THE NEW EDITORS:

First, let's introduce ourselves. Roger is a chemist at Miss. Power Co. in Petal; Becky is a free-lance writer who often writes on garden & environmental issues and has a mini specialty writing on how plants can be used to solve pollution problems.

We're both plant fanatics and although our interest level is exceedingly high (our son Tyler, 8, asked once: "Do you love plants more than me?"), we still have much to learn about plants. In fact, part of the reason we took on the job as editors was to spur us into learning even more.

But, since we aren't professional botanists or even the most knowledgeable of the amateurs in the society--some of you guys we've met on field trips leave us in AWE with your grasp of Mississippi's plant

Thursday, April 23, at the public library.

The seminar will be jointly sponsored by the Resecraft Garden Club, the Wildwood Garden Club and the Lincoln-Lawrence-Franklin County Regional Library of Brookhaven. Registration begins at 9 a.m.

The program will include the following topics: wildflower identification, meadow gardens, butterfly gardens, arranging wildflowers for the home, the art of collecting botanical prints and the photography of wildflowers.

Anyone interested in attending should send a check for \$3, which includes the cost of a sack lunch, to Kay Calcote, 714 Natchez Dr., Brookhaven MS 39601. For more information, call 833-6600.

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## Publication Announcements:

Stevens, M.P. 1991. The botanical literature of Mississippi: A taxonomic geography and subject guide. 1854 through 1984. Jackson: Mississippi Museum of Natural Science, Department of Wildlife, Fisheries and Parks, 50p.

This indexed bibliography of the botanical literature of Mississippi is the first attempt to summarize the botanical literature of the state. The 327 botanical references are arranged alphabetically by author, followed by various indices: taxonomic, geographic, author, plant communities, scientific

name and subject.

Botanical publications were included if they met one of the following criteria: were primarily about Mississippi, reported new state records, summarized Mississippi distribution records, or reported original field work conducted within the state.

References include information on vascular plants, bryophytes, algae, plant communities, paleobotany, historical records, aquatic plants, endangered species, ferns, fungi, mosses, slime molds, soils and seagrasses. Special emphasis has been placed on indexing geographic localities and place names.

Copies are available for \$5 plus \$1 postage from: Mississippi Museum of Natural Science, 111 N. Jefferson Street, Jackson MS 39202 (601) 354-7303.

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### North American Horticulture, 2nd Edition

Compiled by the American Horticulture Society, the revised North American Horticulture: A Reference Guide is a comprehensive directory to organizations and programs concerned with horticulture in the United States and Canada.

Major new sections have been added to this edition listing native plant societies and botanical clubs; state, provincial and local horticultural organizations; horticultural therapy; and historical horticulture.

The 368-page book can be ordered for \$75 from Macmillan Publishing Company, 1-800-257-5755. ISBN 0-02-897001-2.

## **IVES ONLY" GARDEN PLANNED**

by Vic Rudis

The Starkville Area Henderson School Complex Master Plan has been established. Included are plans to establish a wildflower meadow sponsored by the MNPS and area environmental groups.

"Natives only" is the theme for additional planting around the 25-acre complex. Also, areas will be set aside for composting and garden education. Good job for those of you involved!

MNPS will be calling on you in the next year to help get this underway--after a steering committee is approved by the school board. A special thanks to Joyce Roberts of Bayou View Jr. High School for timely materials on their school's successful efforts.

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**ECO-MS, THE ENVIRONMENTAL COALITION OF MISSISSIPPI**, has rapidly become one of the most influential citizen lobbying groups in the state. Last year the Mississippi Legislature was **STUNNED** by the number of coalition members who converged on the Capitol to lobby for environmental legislation.

The legislature isn't used to a high level of citizen involvement. To the credit of the legislators, they **LISTENED** and **ACTED**. One legislator told ECO-MS that if he actually gets five calls to support a bill, he usually will vote for it; he rarely gets any calls at all.

Despite a low budget compared to the thousands spent for lobbying by waste-handlers like BFI, ECO-MS was successful in getting the Bad Boy bill passed to require waste companies to reveal past

criminal histories of price fixing and pollution citations. ECO-MS also successfully support legislation that gives us ammunition to help prevent companies from using the state as a dumping ground for out-of-state garbage.

One of the most successful elements of ECO-MS is a state-wide phone tree that is activated to influence legislators. When a phone tree message comes out of Jackson, it can result in a hundred or more calls being placed to legislators. The Sierra Club thought so highly of the phone tree that it gave ECO-MS \$500 to help pay phone bills.

Unfortunately, it is a never ending battle just to support gains already made, not to mention make more progress. The uncaring, profit-oriented corporate polluters are not quietly accepting it when people advance their own health by passing protective legislation.

Already legislation is being introduced to weaken the Bad Boy bill. The corporations have the money to hire lobbyists to spend a great amount of time (and money to wine and dine legislators) trying to erode the environmental gains.

ECO-MS, in contrast, is run entirely by volunteers, and operates on a shoestring budget. If you can afford to help financially with the lobbying effort, tax deductible contributions can be made out to Mississippi 2020/ECO-MS Box 31292, Jackson MS 39286.

If you're interested in joining the phone tree or have pollution violations to report, call the ECO-MS hotline, 1-800-844-0467.

# An Alternative to the "Bulldozer" Mentality: Subtractive Landscaping

by Roger Danley, Hattiesburg

The desire to manipulate the environment to their own liking is a strong one for most people. The process of establishing a home in a particular place usually involves bulldozing off a site, constructing a house, and then coming back in to landscape the area.

The landscaping seems to be determined by what's available at the local nursery, what the neighbors are growing, the price and ease of maintenance. Because plants are expensive and many people don't want to bother with mowing around a bunch of trees, the end result of many home landscaping projects is a bland arrangement of foundation plantings, few of which are native, and a large expanse of high-maintenance lawn.

These sweeping expanses of lawn take an inordinate amount of time to mow and, in the process, use up energy reserves better spent elsewhere. There's also a barrenness to the landscape that I find unappealing.

I had the opportunity to follow this same path when my wife and I purchased a five-acre plot of steep land in Covington County along the edge of the Okatoma Creek wetlands.

There was a small coppice of trees at the bottom of the land but the remainder of the land was a bahia grass pasture. Having no desire to mow such a large expanse of grass, we mowed only what we needed for an orchard and pathways around the house. This left a pasture of about three acres.

It was interesting to observe what happened when we allowed the three acres to be reclaimed by nature. As the first year progressed, we were surprised to see many different types of trees and other plant life quickly begin to take hold. We were fortunate to be in a transition zone between uplands and wetlands, so there was a greater diversity of plants.

We had planted hundreds of pine trees in rows paralleling the road, and were surprised when the naturally seeded "volunteer" pines trees



quickly overgrew those we had planted. This easily convinced us that, except for fruit trees, nature would provide all the trees we needed without us relying on transplant from a nursery.

While we were pleased to see how well nature was proceeding to establish a natural landscape, it was soon apparent that a complete "hands off" policy wasn't what we wanted, either. In some areas the stands of trees were too dense to be healthy, and obnoxious vines and shrubs were also a common problem.

After three years of "laissez faire", we decided to assist the natural growth process by removing members of some of the unwanted species. These usually--but not always --involved non-natives such as Japanese honeysuckle, which was introduced to the U.S. by some idiot who ought to be consigned to an eternity of cleaning up the mess he started.

Kudzu has a bad reputation but it doesn't have a thing on Japanese honeysuckle. This imported vine can wrap itself around the trunk of a small growing tree and completely choke it off, causing the tree to put up more shoots which are subsequently twined until the honeysuckle forms a bushlike structure the size of a large azalea.

This is a very tenacious plant difficult to eradicate, but I found that by unwrapping it from a growing tree and cutting all of the lower branches of the tree, the vine could not easily climb back up. It was also interesting to

observe which trees were better able to keep the vine from getting a start, pine being the most successful. That must be one reason why pines dominate in this section of South Mississippi, which is nicknamed "The Piney Woods."

The second most dominant plant selected for elimination was Japanese privet. This dense shrub moves in after a clear cut and so successfully shades the ground that trees have a very difficult time getting established. It can only be killed by completely pulling the plant up by the roots, not an easy proposition once the trunk diameter exceeds 4-5". After six years of mowing, our orchard still has low growing specimens of privet that refuse to die.



Another plant I felt compelled to remove was wild grape or muscadine. Two plants in the middle of a section of pasture had twined around and pulled down all the small trees within a large radius. The trees were so badly damaged that the vines and trees had to be cut down. Most

of the trees quickly came back from the roots, but I completely removed the grapes.

Another real devil that girdled many trees was Cat-briar (*Smilax* spp.) The thorns on this character are quite formidable and the roots go halfway to China. Just cutting it off at ground level doesn't do anything but encourage it. You've got to get as much root as possible to have any success eliminating it. Another native that has been rampantly undesirable is the wild blackberry. It becomes less of a problem as the trees grow up and provide more shade.



Trees were removed where they were too dense or diseased. One important hard and fast rule to the tree thinning process was: "If you can't identify it, don't kill it." Thus, while it didn't bother my conscience to thin pines and sweetgums because they are so plentiful on my site, if I wasn't familiar with a tree, I left it until it was large enough to identify. In many cases this

meant untangling the small tree from the vines when it would have been much easier just to cut the entire mess down.

I was rewarded in this philosophy when our friend, T.O. Warren, who has taught us much about Mississippi natives, identified a rare sloe (plum) that had been saved initially just because I wasn't sure what it was.

Other interesting "volunteers" we didn't immediately recognize were pawpaws, several other varieties of sloes, winged elms, cherry laurel and hawthorns.

As I see it, there are numerous advantages of "subtractive landscaping" over bulldozing. First, you retain a greater variety of trees, shrubs and underlying vegetation, providing a diversity that is both healthy and attractive. Second, this process allows the site to be closer to what nature intended; you don't have as much problem with matching plants to the sites they like. Third, because you don't have to buy all the plants for landscaping at your homesite, you save a bunch of money!

When people visit our place now, especially ones who saw it in the beginning as a pasture nine years ago, they are amazed at the beautiful forest that now enriches our lives. Considering that it was just allowing nature free reign--with a bit of judicious pruning--that produced the lovely woods, sometimes I'm almost embarrassed at all the praise. So I laughingly say, "This is what happens when you don't mow the grass!"



Mississippi Sierra Club, Mississippi Nature Conservancy, and similar groups.

-- Lectures, seminars, and slide shows by native plant experts, ecologists, landscape professionals, knowledgeable amateurs, and gardeners.

-- Offer Wildflowers of Mississippi by S. Lee Timme, T-shirts, and related materials for sale to promote the goals of the Society.

-- Facilitating the study of Mississippi flora and monitoring of nature preserves through newsletter announcements, networking with concerned and knowledgeable members, and awarding small grants to support research and education consistent with the Society's goals.

-- Plant and seed exchanges, creating and maintaining displays for public education and appreciation, and plant rescues in areas about to be developed.

#### NEWSLETTER AND MEMBERSHIP

The MISSISSIPPI NATIVE PLANT SOCIETY NEWSLETTER is published 4 times annually. In addition to a calendar of upcoming events, the newsletter contains articles on native plant propagation and identification, notes on plant and seed exchanges, landscape design, habitat preserves and descriptions, reviews of books, activities, and people associated with native and naturalized plants of Mississippi.

Membership is open to any interested individual, family, or organization. If you wish to join us, please mail the application below, indicate the class of membership desired and enclose appropriate dues.

\*\*\*\*\* MEMBERSHIP APPLICATION AND DUES NOTICE \*\*\*\*\*  
----- Renewal ----- New

Please indicate class of membership desired and enclose appropriate dues:  
----- Student \$5  
----- Regular \$7.50  
----- Family \$7.50  
----- Sustaining \$10.00  
----- Contributing \$25.00  
----- Life \$725  
The Mississippi Native Plant Society is an organization dedicated to the scientific and educational exchange of information about native and naturalized plants occurring in the State of Mississippi.

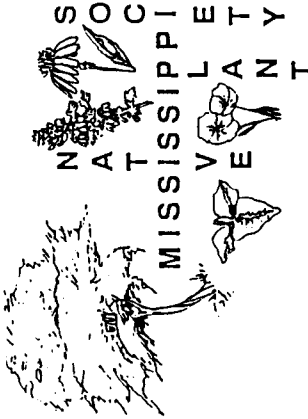
All classes of membership receive the MNPS Newsletter. Please make checks payable to: Mississippi Native Plant Society. Return this form with payment to: Mississippi Native Plant Society  
P.O. Box 2151  
Starkville, MS 39759

Be sure to include the following information with your payment:

Name \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone No. (optional) \_\_\_\_\_  
If Mississippi, county of residence \_\_\_\_\_

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T-SHIRTS with the above logo are available in adult and children sizes in GRAY background. A few in LARGE and EX-LARGE are also available in PINK or WATERMELON background. Cost \$8.50 + \$1.50 for shipping.

WILDFLOWERS OF MISSISSIPPI by S. Lee Timme is available at a cost of \$37.00, plus \$2.50 shipping 4th class (an additional \$1.00 for 1st class.) Quantity discounts are available for 5 or more books.

#### ATTENTION WRITERS! ATTENTION ARTISTS AND

PHOTOGRAPHERS! If you've got an interest in native plants, here's your opportunity to be "published."

Photos and drawings must be capable of reproduction for standard (black and white) photocopy machines. Deadlines for submission of materials is one month prior to the issue date. The deadline for the next issue is April 15th.

In addition, a NEW MNPS T-SHIRT LOGO is desired -- one that incorporates several native Coreopsis species -- as well as native shrubs or trees. Send your designs to the Editor for publication in a future newsletter.

Address sales \_\_\_\_\_ to: Vic Rudis,  
Editor, Mississippi Native Plant Society, P.O. Box  
2151, Starkville, MS 39759.

NOTE: MAILING LABELS with "FINAL ISSUE" have been marked for deletion. For those interested in continuing to receive the newsletter and share in membership, send dues to: Mississippi Native Plant Society, c/o Sherrie Wiygul, Secretary/Treasurer, P.O. Box 2151, Starkville, MS 39759



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 drew its first breath. The organization was formed for individuals and groups interested in all aspects of botany, particularly the vascular flora of Mississippi.

There always have been people with a love for the native plants of Mississippi. The overall purpose of the Mississippi Native Plant Society is the furtherance of knowledge about the native and naturalized plant species of the State of Mississippi and the encouragement of an attitude of respect and appreciation for these species.

GOALS are to:

- 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 habitats, including their propagation, importance, ecology, and need for protection
- Encourage the propagation and use of native plants and habitats in designing residential, commercial, and public landscapes
- Promote fellowship among all persons interested in the understanding and appreciation of native plants and their habitats

PROGRAMS include:

- Field trips. In past years, Mississippi locations have included Ocean Springs, Crosby Arboretum, Davys Lake, Tishomingo State Park, Delta National Forest, Starkville, Horn Island and Gloster. Joint meetings are sponsored with the Alabama Wildflower Society.

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