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# Mississippi Native Plant Quarterly

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Mississippi Native Plant Society

June 1992

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## Rethinking Pine-Tree Giveaways For School Children In Mississippi

NOTES FROM THE PRESIDENT, Victor A. Rudis, Starkville

It happened again. For at least the past six years, children in the primary grades in Starkville were given a tree to plant in their yards.

Private corporations and public officials sponsor the free distribution of tree seedlings as a way to celebrate Mississippi's Arbor Day in February of each year. Teachers, school administrators and even some parents feel proud that children have the "experience" of being involved with nature, contributing to energy conservation and witnessing the long-term growth of this tree as they get older.

In my region, the species handed out is loblolly pine (*Pinus taeda*). Loblolly pine

is a great tree for pulpwood in industrial plantations. And in some situations this pine is also useful as a producer of sawtimber and pine straw mulch. This pine also provides light shade for understory plants and hardwood tree seedlings that could not survive otherwise. A fast-maturing tree, loblolly pine quickly provides shade, abundant seeds

for wildlife and pinecones for hobbyists.

Structurally, pines (*Pinus* sp.) provide a vertical habitat for wildlife. They increase the energy-efficiency of the land by reducing runoff, contributing to air quality, increasing oxygen supplies and reducing air-conditioning needs. Being short-lived pioneers, pines excel in tough, disturbance-



prone environments. These trees grow fast and, without continued disturbance, contribute to their own demise by making the area more comfortable for shade-tolerant, long-lived species and others suited to more delicate, humus-rich environments.

But just like eating, too much of a good thing can be harmful. By distributing pines across the diverse habitats of Mississippi, one eliminates opportunities for other native tree species to take their place. Biological diversity is reduced.

Back to the school program. What happens to all these seedlings? I don't know for sure. I can only write from my own experience. Some years the seedlings are left to dry out in the little bags that they come in and are tossed in the trash. At other times, children or families plant them in their rural acreage or in backyard habitats.

Increasingly, these seedling pines are planted in subdivisions and small lots in cities. As pines mature, those that are not well-situated become menacing towers

over homes or grow into powerlines. Because they retain their leaves in winter, the increased surface area of evergreen needles makes for considerable ice accumulation. Their added weight eventually breaks branches during ice storms. The trees inadvertently create employment for roof repairers, electricians, powerline maintenance workers and arborists.

In developed areas with powerlines, side branches are trimmed asymmetrically to avoid powerlines. Many are removed shortly after a major ice storm comes by, or when owners grow weary of raking up pine needles, cones and deciduous branches that fall throughout the year. In stressed areas, trees are prone to insect attack, fungus diseases and windthrow.

Many hardwoods are ideal choices in urban situations. With several species, the angular or ascending branch habit allows side-trimming without loss to the natural form of the tree. Species can be selected so that litterfall occurs in a single season. Native oaks (nearly all Quercus sp. in nurser-

ies, except Q. acutissima), ash (Fraxinus sp.) and native hardwood species of smaller stature (e.g., redbud (Cercis canadensis) that are suited to bare-root distribution are endless. But it is rare that these are provided to school children.

For pine lovers, consider longleaf pine (Pinus palustris) for dry, sterile, sandy sites in the south part of the state, shortleaf pine (Pinus echinata) for dry soils in the northern part of the state, spruce pine (Pinus glabra), for moist, sandy loams and slash pine (Pinus elliottii) for low, wet sites in fire-prone areas.

With all these choices, is distributing loblolly pine to children in Mississippi's growing urban areas a good idea? Is the almost exclusive use of pines in this program a net benefit or a net loss to Mississippi's environment? And, more importantly, does this program achieve its intended purpose--to educate our children about the positive effect of nature, man's role in conserving en-

ergy and society's contribution to long-term environmental education?

MNPS is pilot-testing a giveaway program in Starkville. It is centered on Coreopsis sp., the state's wildflower genus. Plans include giving out seeds to children as part of the Starkville school system's "Mississippi Week" to be

held mid-May 1992. Instructions on care, maintenance and reasons for promoting wildflowers will be provided. At the state level, MNPS is particularly interested in volunteers willing to sponsor similar activities in schools throughout the state.

Please share with us what your community is doing with free

plant distribution as part of an environmental awareness program for children. In this newsletter forum we can share our ideas and, hopefully, come up with solutions amenable to well-meaning corporations and public officials, as well as enlightened readers such as yourselves.

## Mississippi Highway Department Offers "Adopt-an-Interchange" Program.

by  
Becky Gillette

Members who want to promote native plants along Mississippi's roadsides now have an unprecedented opportunity through the Mississippi State Highway Department's new "Adopt-An-Interchange" program.

Groups can adopt interchanges or medians, and provide plants and labor for landscaping. With this program MNPS members could not only promote using native plants to beautify the one interchange adopted, but also educate highway workers about how to use natives throughout the state to beautify roadsides while cutting down the number of mowings needed per year--saving gas and money. This program could also be a highly visible way to educate

the public about native plants.

In Hattiesburg we are working through MNPS to adopt the Pine Belt Airport interchange between Hattiesburg and Laurel on Highway 59. So far I have found the highway department very enthusiastic about the proposed native park. The district horticulturist, Chuck Walters, says he would like to use more natives in his district, just needs to know more about them. With other allies like Chuck and Southern District Highway Commissioner Ronnie Shows, who is also enthusiastic about the program, we could greatly improve the beauty of Mississippi's roadsides.

The plan for the Pine Belt Native Park is to have at least one species of every tree

native to Mississippi represented at the site. Since the site has high hillsides as well as boggy lowlands, there may be a big enough diversity of habitats to meet this goal. I've already found a number of volunteers eager to help provide planning and plants for the park. Anyone in the society who wants to donate trees, shrubs or wildflowers, or who lives close enough to Hattiesburg to volunteer some time for planning or planting, please contact me at 582-5975. Roger is going to provide sturdy labeling for the trees, shrubs and wildflowers.

In May when some of the visitors from the Alabama Wildflower Society were leaving to go back after the MNPS Ragland Hills field trip, they asked if there was anywhere

along Highway 59 they could stop under a shady tree to eat lunch. Unfortunately, the answer was "no." Although we have fancy welcome centers at state borders, roadside parks are all too rare throughout most of the state. We need more places for motorists to stop, take a break from the road and enjoy the natural wild plant heritage of Mississippi. For more information on what you can do in your area, contact your district highway commissioner.



Yellow Jessamine (*Gelsemium sempervirens*)

### **National Wildflower Research Center info...**

#### A free copy of Landscaping with Wildflowers and Native Plants

is one of the benefits of joining the National Wildflower Research Center, which is dedicated to conservation and preservation of endangered plants and wildflowers. For more information, write NWRC, 2600 Farm to Market Road 973 North, Austin TX 78725.

### **Seed request...**

Mary L. Bell, 705 Woodland Ave., Houston TX 77009 has sent the following note: I am searching for a source for *macranthera flammea* (no common name), a wildflower of Mississippi and Louisiana. Could any of your members refer me to a source of seeds or plants?

Last issue the editors suggested a seed exchange column. Several people wrote to receive the seeds we listed, but no new offerings have shown up as yet. Our seed/plant exchange column must be limited to natives. Send your offering to MNPS Quarterly, Rt. 1, Box 833 Hattiesburg MS 39401. The Grandmother's Garden newsletter, P.O. Box 5522, Brandon MS 39047 has an active plant\seed share column.

### **Publications...**

Fontenot, William R. 1992, Native Gardening In The South. Prairie Basse Publications, Rt. 2, Box 491-F, Carencro LA 70520.

Beginning with the geological development and ecological outcome involving the entire spectrum of Atlantic

and Gulf Coast Plain habitats, this book travels down the highways and byways of energy and wildlife conservation, folklore, natural landscaping propagation and more. Illustrated with maps, sketches and diagrams. To order send \$16 (La. resident add \$1.20) to address listed above.

Wilson, Jim, 1992, Landscaping With Wildflowers: An Environmental Approach to Gardening, Houghton Mifflin Company, New York. American Library Association Booklist review of this book by PBS "The Victory Garden" host Jim Wilson says: "A fine resource with beautiful color photograph to aid readers in the cultivation of hardy native plants that naturally minimize disease and pest problems." Price: \$35 (cloth).

# Using Native Plants Would Make Mississippi Unique

by Felder Rushing

(Editors' note:  
Reprinted from Felder's  
Feb. 4 column in the  
Clarion-Ledger)

Why spruce up the town? Spruces don't grow well here.

A couple of weeks ago, a group of civic leaders and businessmen interested in city beautification brought in a speaker from out of state to discuss "sprucing up" their city. The visitor's assessment of the situation was correct, as he noted the junk piles and backsides of industrial property--too often, the first impression given by our home towns is not very flattering. Entrances to cities should be clean and inviting, and bold plantings of durable flowers can help lots ('scuze the pun).

But his examples of outstanding plantings from his own city were rife with over-used Bradford pears, crepe myrtles and daylillies, cleome and Leyland cypress. Nothing wrong with those plants, mind you--they are actually out-

standing and beautiful. Trouble is, they're used so much; they have no identification.

Why make Jackson look like Chattanooga, which looks like St. Louis, which looks like...?

Where is our sense of place that proclaims to visitors that they are indeed in the rich and diverse South? Why not use native cedar, cypress, wild pears and plums, sumac, oakleaf hydrangeas, and the many other natives we are having to cut down in the first place? Kudos to the folks setting out magnolias along roadsides, and here's to the highway department for seeding native coreopsis to spread naturally instead of replanting California poppies.

Let's make our public gardens at least partly sustainable.

By designing with lower maintenance in mind (bold grouping and masses of hardy plants and materials) and by choosing only long-lived, pest-free and drought-tolerant plants in the first place, we can create durable focal points for cities,

neighborhoods, homes and businesses. By ignoring the allure of instant gratification with "fast food" plants, and planning for the long haul, we'll be more likely to come up with something that has a regional identity, which is what tourists and residents alike find satisfying. Like New Orleans, Charleston, S.C., even Natchez.

This could, in turn, create a regional pride on our unique part of the world that can go far in helping wean us away from a dependence on artificial irrigation, high labor costs, routine plant replacements, pesticides, the works.

Wendell Berry wrote, "The only sustainable city is a city in balance with its countryside...a locality, by becoming partly sustainable, would produce the thought it would need to become more sustainable." It's a circle easily started.

Sustainable landscapes start in our own front yards.

# Wildflower Seeding Techniques

by

The American Seed Trade Association

Few people can argue about the beauty of an established, successful wildflower garden. The colors and fragrances of wildflowers make them a popular gardening choice wherever they are grown.

There are many different ways to have a positive experience with wildflowers, but each involves the same essential elements: soil preparation, weed control, even distribution of seed and time.

Before the first seed is planted, it is necessary to prepare the soil correctly. This involves working the soil so it retains water, but still has good drainage, and is broken up enough to insure good seed-to-soil contact. If the soil is not hard-packed, it should be tilled very lightly (about 1/2 inch), only enough to break up the surface. Tilling deeply often enables wildflowers to grow well, but it has the disadvantage of bringing up many weed seeds that have lain dormant in the soil. Once these seeds are exposed to light, air and water, they germinate and grow quickly, compounding the weed problem.

If the area to be planted is hard-packed, deep tilling is usually

necessary. This can be done with a plow, rototiller or spade, depending on the size of the area. In this case, weed control is even more important.

The control of weeds is always a critical part of a successful project. Try eliminating as many weeds from a plot as possible before wildflower seeds are planted. This can be accomplished by frequent tilling or spraying with a broad-spectrum herbicide prior to planting. After planting, hand-pulling or spot-spraying are the best techniques to use.

Although both soil preparation and weed control are essential factors, no less important is the even distribution of seeds. Commercial contractors have developed several innovative and successful ways of distributing wildflower seed. Hydromulching or hydroseeding, used on large residential sites and on commercial property, is perhaps the most effective of all methods. With this technique, a mixture of fertilizer, seed and wood fiber mulch are forcibly expelled to distribute these materials to hard-to-reach areas. The mulch holds the seed in place until

rainfall facilitates germination and establishment of seedlings.

A drill seeder is another machine used by commercial contractors to distribute seed. This device creates a small furrow in the ground, drops seed into the furrow, and covers it. The drill seeder is often followed by a cultipacker, which firms the soil around the seed.

For the homeowner, we recommend two methods for wildflower distribution. The first is simply broadcasting seed by hand. To facilitate even distribution, first mix the seed with an equal amount of sand, dry sawdust, cornmeal or vermiculite. This not only makes seed easier to sow, but also allows seeds of varying sizes and weights to be evenly mixed and distributed. To make sure the entire area is covered evenly, broadcast half of the seed mixture over all of the planting area, walking in an east-west orientation. Broadcast the remainder of the mixture walking north-south, again covering the entire area.

A cyclone spreader is an inexpensive, effective device useful for spreading wildflower seeds. Small

plastic spreaders can be purchased for under \$10. Use a technique similar to that described above for hand seeding.

There is no "right" or "wrong" method of establishing wildflowers. Each site will be different, and each situation presents its own challenges. For more information, contact the American Seed Trade Association, 1030 15th St., N.W., Washington D.C. 20005-1593.

***Editors' note: A problem we've found with buying and seeding wildflower mixtures is being able to tell the wildflowers from the weeds when the plants first appear. For that reason we like to plant the wildflower seeds in trays first. We prepare the soil by tilling once or twice, and covering with mulch. Then when the wildflowers are large enough to be transplanted, we move the mulch back and plant the flowers, being careful to keep the area damp while the plants get established. This method gives more control over plant distribution than broadcasting. The mulch helps retain moisture while keeping weeds down.***

## Members Enjoy Field Trips To Crosby Arbortum, Ragland Hills

by Becky Gillette

The joint meeting of the MNPS and the Alabama Wildflower Society in Picayune May 9 & 10 was well attended by plant lovers on both sides of the border.

The trip started with tours of Crosby Arboretum, the Pinecote Native Plant Center in Picayune. For those of us who have been going to Pinecote for the past several years, it's a pleasure to see how much things have grown and matured at the center. The area is looking more natural--and lovely--each year. At Pinecote the emphasis is on reproducing native plant communities instead of just collecting different kinds of trees, shrubs and wildflowers.

Unlike most arboreta, plants aren't labeled at Pinecote. It may look more natural without labeling or interpretive signs, but I miss them. Otherwise, unless I'm on a guided tour, I don't learn much walking through the area. An enjoyable walk...but not as much to gain educationally as I would like.

I do learn a lot,

though, when I have the opportunity to go on field trips with Crosby employees like Chris Wells, a favorite with MNPS members as much because of his quirky sense of humor as his impressive knowledge about natives. Bob Brzuszek, who could certainly earn a nomination for the surname most difficult to spell, also leads a fine field trip. He took part of the group to Honey Island Swamp for a hike on a nature trail in the Pearl River Game Management Area. The most outstanding feature of the trail was the size and age (60 to 80 years old) of the trees. There were very large cypress trees, water oaks, swamp basket oaks, ironwoods, etc. Anyone taking the I-59 route to New Orleans who needs a break should consider a side trip to this area. It's a lovely road to the nature trail, a perfect place to stop for some exercise during a road trip.

I wish I could report on the other field trips that day. There

were too many good field trips to choose from. Thanks to all at Crosby Arboretum, and to MNPS members in the Picayune area who helped make the day a success.

Sunday Dr. Sam Rosso led a special field trip on private land in Ragland Hills, an area off Highway 98 southeast of Hattiesburg that is so unique and diverse in plant life that there was an attempt to make the area a part of the U.S. Forest Service. Those efforts seem stymied for now. Hopefully negotiations will be renewed sometime in the near future.

Here's a summation of the information Sam Rosso provided about Ragland Hills:

The Ragland Hills areas is part of a divide between the Leaf River and Black Creek. The slopes and ravines originated from long-past erosion by the Leaf and Black. Elevations range from about 300 feet along the crests of the divide to a little below 100 feet along the Leaf and Black. North-facing slopes in the area are often richer in terms of plant species because they are wetter

and cooler.

The plant communities include river swamps, hardwood bottoms, savannah, sandhills, bays and upland forests of pine, mixed pine-hardwoods and hardwood. According to Ken Rogers, author of "The Vascular Flora of the Ragland Hills Area," 1977, the richest plant community is the beech-magnolia forest associated with moist (mesic) ravines along the north slope of the divide. Rogers considered these beech-magnolia ravines to be the richest and largest remnant of the beech-magnolia forest in Mississippi.

Besides trees, other plant life is also very diverse: there are 153 species of grasses, 136 species in the sunflower family, 79 species of sedges, 73 species of legumes and 27 species of mint. One sedge species occurs here and only in four other locations in the U.S. Certain other sedges and grasses are found here and in less than ten other places in the state.

A big thanks to Sam Rosso for arranging a very memorable field trip.

## Calendar of Events

**June 6, Crosby Arboretum, Picayune, Gardening by Fire, 10:30 a.m.** Edward L. Blake Jr. will lead a tour of Pincoote's savannah and discuss how fire is used to develop and maintain the aesthetics of a grassland. Meet at Pincoote Pavilion.

**June 10-12, 8 a.m., Crosby Arboretum, Plant Identification Course** led by arboretum botanist Chris Wells. Begins at Pincoote Pavilion at 8 a.m. and involves field trips. Limited to first 20 registrants. \$20

**June 20, 10:30 a.m. Crosby Arboretum, Coastal Wildflowers,** Bob Brunsch lead a one-hour tour of the beauty of Pincoote's savannah and bog exhibits. Meadow beauties, coreopsis and candy root will be in bloom. Meet at Pincoote Pavilion.

**July 21, 7 p.m., Scott Marine Education Center, 116 Beach Blvd. (Highway 90), "Indian Herbs and Food: History and Usage,"** by Nina Gale Throver, Pearch Creek Indian Reservation. Starts at 7 p.m. Free. More info, 374-5550.

**July 22-25, Callowhee Conference on Landscaping with Native Plants, Callowhee, NC.**

**August 12, Scott Marine Education Center, "The Ants That Ate the South,"** Dr. Tim Lockley, USDA Imported Fire Ant Lab. Free.



# PAWPAWS: LARGEST NATIVE AMERICAN FRUIT HAS ANTICANCER AND PESTICIDAL QUALITIES

By M. Brett Callaway, Frankfort KY

The pawpaw has been prized for its delicious, custard-like fruit since before the arrival of the first European settlers to North America. It is the largest fruit native to the United States (Darrow, 1975) and is native throughout the country east of the Great Plains (Callaway, 1990). It is a member of the tropical family Annonaceae, which includes the custard apple (*Annona reticulata* L.), cherimoya (*A. cherimola* Mill.), sweet-sop (*A. squamosa* L.), and sour-sop (*A. muricata* L.). Pawpaw's unusual maroon flowers appear from March to May. Mature fruit may be found beginning in August and continuing well into October.

## Horticulture

**Culture.** Essentially no scientific work has been done on cultural requirements of pawpaws. Because of the difficulty with which they are transplanted, plants are best started as seedlings in deep containers and grown to a height of 0.6 to 0.9 m before transplanting to the field. Seedlings should be protected from direct sunlight for the first year of growth. Afterward, plants should be placed in full sun, as fruit production is best under these conditions (Willson and Schemske, 1980). The limited cultural information available has been summarized by Callaway (1993).

**Pests.** Diseases include flyspeck (*Zygothrips jamaicensis* Mason) and a leaf spot caused by a complex of pathogens [*Mycocentrospora asiminae* (Ellis et Kellerm.) Deighton, *Rhizoglyphus asiminae* (Ellis et Morg.) Petr., and *Phyllosticta asiminae* Ellis et Kellerm.] (Nasu and Kunoh, 1987; Peterson, 1991). None of these diseases cause significant damage to the fruit. Insect pests include two leaf feeders, *Eurytides marcellus* Cramer and *Omphalocera munroei* Martin (Jamman, 1986), and one peduncle borer, *Talponia plummeriana* Busck (Allard, 1955), that may cause serious flower loss in some years. A number of vertebrates, such as foxes, opossums, and squirrels, are known to eat the fruit.

**Propagation.** Seed should not be allowed to dry out before planting. Small quantities should be placed in polyethylene bags containing damp sphagnum moss. Stratification at 2 to 4°C for 60 to 100 days is recommended (U.S. Dept. of Agriculture, 1948). Rate of germination is improved by bottom heat (27 to 30°C) and shading (Callaway, 1993; Evert and Payne, 1991; Peterson, 1991). The most reliable method of vegetative propagation is chip budding (unpublished data). Root cuttings have also been successful (U.S. Dept. of Agriculture, 1948). Tissue and softwood propagation methods have not been satisfactorily developed.

**Varieties.** Compilations of information on past and present varieties have appeared in reports by Callaway (1990, 1993) and Peterson (1991). Much of the information available on varieties is subjective and of questionable value. Many "varieties" are trees that have been named by their owners and reported in the literature of various fruit-grower societies. However, until properly conducted variety trials have been carried out, these are the best sources of information available. Of the 68 varieties listed by Callaway (1993), commercial suppliers are known for 19. However, only 'Sunflower' is listed by more than two nurseries; it is listed by six. Eight are listed by two nurseries and 10 by only one. 'Davis', 'Overleese', and 'Sunflower' are probably the most widely grown varieties. 'Overleese' and 'Sunflower' are generally considered to be among the best varieties currently available. 'Overleese' bears fruit weighing ~350 g and ripens about the first week of October in Michigan. It was selected from the wild around 1950 in Rushville, Ind. Fruit of 'Sunflower' are somewhat smaller, weighing ~250 g and ripening at about the same time as 'Overleese' in Michigan. 'Sunflower' originated in Chanute, Kan.

## Use and prospects

Currently, pawpaws are primarily consumed as fresh fruit. They may also be processed into ice creams, juices, and other products, as are their *Annona* relatives. In addition to food uses, scientists at Purdue Univ., West Lafayette, Ind., have found that the vegetative parts of the pawpaw plant contain compounds that exhibit highly effective pesticidal and anticancer properties (Alkofahi et al., 1989;

Rupprecht et al., 1986, 1990). Although pawpaw is native to the United States, its commercialization is more advanced in other countries, such as Japan and Italy. I am aware of only one commercial planting in the United States and these plants are still too small to bear fruit. However, this situation seems to be changing. Pawpaw plants have been selling briskly in the nursery trade, particularly named varieties. None of the nurseries selling pawpaw varieties have been able to meet the demand within the last 2 years. Although adequate assessment of market demand is quite difficult for new crops, these examples indicate that the prospects for successful commercialization of this fruit appear good.

## Pawpaw research at Kentucky State Univ.

Although Kentucky State Univ. (KSU) is one of the 1890 land-grant institutions, research in horticulture first began in June 1990. From its inception, the horticulture program

has placed a priority on the development of pawpaw as a commercial crop. Shortly after arriving at KSU, I initiated a nationwide contest with two goals in mind: 1) collection of germplasm and 2) increasing the public's awareness of pawpaws (Callaway, 1991). This contest was based on one conducted in 1916 by the American Genetic Association to identify superior pawpaws from the wild (American Genetic Assn., 1917). The 1990 contest resulted in more than 430 fruit entries from 75 persons in 15 states. Several nurseries have expressed interest in marketing contest entries. One that is being marketed, 'Wells', immediately sold out for 1992 and has a waiting list of buyers for 1993. This variety was the winner of the 1990 contest, weighing >400 g. It was discovered growing wild on the property of David Wells of Salem, Ind. Public interest in pawpaws was also stimulated by the contest. Hundreds of letters have been received from 40 states and seven foreign countries. Newspaper, magazine, and television coverage continues 1 year after the contest, improving public awareness for pawpaws. In addition to germplasm collection, research projects are continuing on improved methods of propagation, the genetics of commercially important traits (e.g., yield, fruit size, and quality), variety and elite line yield testing, and variety development.

In Jan. 1990, KSU hosted the first meeting of pawpaw researchers. Scientists and institution representatives attended from Georgia; Arkansas; Washington, D.C.; Indiana; Maryland; and Kentucky. This meeting provided a forum for the exchange of information on pawpaw research. Because of the recent initiation of pawpaw research projects at several institutions, coordination of research efforts early in the development of this crop is possible. The establishment of much-needed regional test sites and coordinated data collection was discussed. The first regional variety test site will be established at KSU in Spring 1992.

## Research needs

Pawpaw research is in its infancy. Several research needs have been identified (Callaway, 1990, 1993), including germplasm collection, improved methods of vegetative propagation, pollination biology, genetics of commercially important traits, variety trials, cultural information, and fruit processing and storage.

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# The Pawpaw

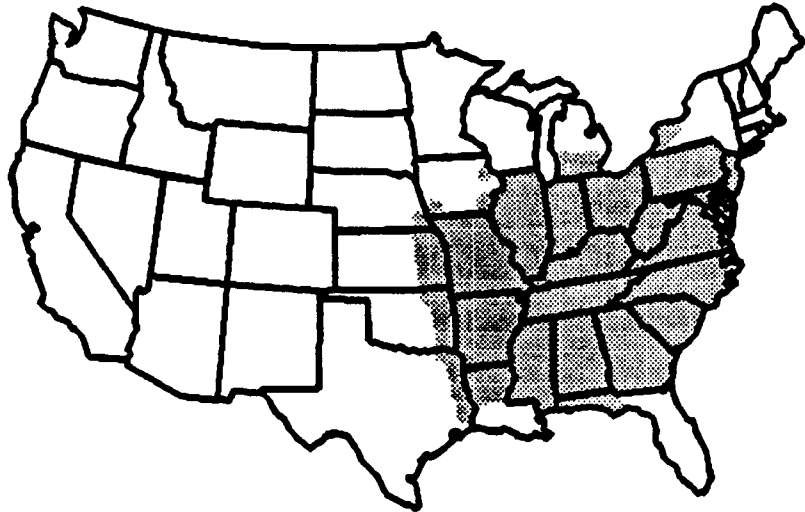


Figure 1. Distribution of *Asimina triloba* in the United States

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**Editor's note: Fruit expert T.O. Warren says the biggest problem growing pawpaws is "critters"; possums, racoons and squirrels love pawpaws, usually getting to the fruit before you do. Even worse, the critters often break the top out of the trees. So to have pawpaws, you'll probably need fencing or repellents.**

## *Asimina triloba*

Lvs: 6"-12" long, glabrous at maturity

Size: 15-20' high, 30-40' in favorable locations

Flowers: 1-2" across, lurid purple

Seeds: 1" long

Fruit: 2"-5" long (cultivars to 6" & up to 1 lb.)

Habitat: NY to TX & FL

## *Asimina parviflora*

Lvs: 4"-7" long, persistent rusty pubescent beneath

Size: 6'-8' high

Flowers: 1/2" to 3/4" across, brown purple

Seeds: 1/2" long

Fruit: 1/2" to 1 1/4" long, 1/2" wide

Habitat: VA to MS, Coastal, Zone 7-9

## *Asimina incarnata* (*A. speciosa*)

Lvs? Flowers?

Size: 4' to 5'

Fruits: 1 3/4" to 3" long

Seeds: 1/2" long

Habitat: SE GA, NE FL, Zone 8-9, sandhills

From: Manual of Woody Landscape Plants: their cultivation, ornamental characteristics, culture, propagation and uses, by Michael A. Dirr, 1990. Stipes Publishing Co., Champaign, IL 4th Ed., 1007 p.

**1992-93 Board of Directors**

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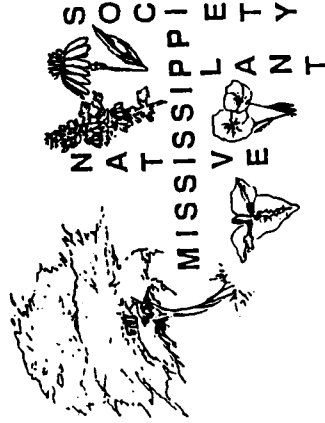
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*Special thanks to James Danley for layout and design of this issue of the Mississippi Native Plant Quarterly.*



T-shirts with a new design are being prepared by Susan Haltom, Bob Brzuszek and Lynn Ashford. For now we still have some silver-grey t-shirts left with the present logo shown above available in the following sizes: Adult small and medium; child small, medium and large. They can be purchased for \$8.50 plus \$1.50 shipping.

Wildflowers of Mississippi, softcover edition, is for sale by the MNPS at a cost of \$19.50 plus \$2.50 shipping (an additional \$1 for first class).

T-shirts and books can be purchased from Vic Rudis, P.O. Box 2151, Starkville MS 39759.

**WE NEED ARTICLES** for the newsletter on all kinds of issues of interest to members. Scientific plant reviews particularly welcome. Deadline for the next issue is August 15. Please double space manuscript, and submit copy on diskette if possible (WordPerfect 5.1 on 3 1/2 disk preferred, but can translate most other word processing program on 3 1/2 or 5 1/4 disks).

Mississippi Sierra Club, Mississippi Nature Conservancy and similar groups.  
-Lectures, seminars and slide shows by native plant experts, ecologists, landscape experts, knowledgeable amateurs and gardeners.

-Facilitate study of state flora and monitor nature preserves through newsletter announcements, networking with concerned and knowledgeable members, and awarding small grants to support research and education.

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

**NEWSLETTER AND MEMBERSHIP**

The Mississippi Native Plant Society Quarterly provides a calendar of upcoming events, 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 with fee.

**Membership Application and Dues Notice**

Please indicate class of membership and enclose dues:

Student, \$5.00

Individual or family, \$7.50

Sustaining, \$10.00

Contributing, \$25

Life, \$125.00

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 Quarterly. Life members will receive a copy of Wildflowers of Mississippi.

Please make checks payable to Mississippi Native Plant Society.

Return form and check 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 (optional): \_\_\_\_\_

If Mississippi, county of residence \_\_\_\_\_

MISSISSIPPI NATIVE PLANT SOCIETY  
P. O. BOX 2151  
STARBUCKVILLE, MS 39755



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, Davis Lake, Tishomingo State Park, Delta National Forest, Starkville, Horn Island and Gloster. Joint meetings are sponsored with the Alabama Wildflower Society.