MISSISSIPPI NATIVE PLANT SOCIETY

October 1981

Crosby Arboretum Underway

A regional arboretum representing plants and trees native to the Pearl River Basin will be developed in Picayune, Mississippi, as a memorial to one of the region's outstanding industrialists, it was recently announced.

The arboretum will be dedicated to the memory of L. O. Crosby, Jr., forest products industrialist, philanthropist, and former mayor of Picayune, who died in 1978.

The 58-acre arboretum will contain identified samples of all the woody and many of the herbaceous plants native to south central Mississippi and neighboring Louisiana and will include over 300 varieties of trees, shrubs, wildflowers and grasses. It will also provide habitat and sanctuary for many species of wildlife.

Located on Interstate Highway 59 adjacent to the State Welcome Center, the arboretum will offer opportunities for scientiffic investigation as well as public education and appreciation of the natural environment. It will also provide a setting for the public to see how native plants may be used in a man-altered environment.

It is expected to serve as a focus of regional interest of the scientific, academic, and general public in four states - Mississippi, Louisiana, Alabama, and Arkansas - in addition to being an attraction for tourists from outside the region who are visiting the Gulf Coast and New Orleans area.

One of the most significant functions of the arboretum will be the protection of native plants so that if one is lost in its natural environment through disease or encroachment on its habitat, there will be preserved a living source of genetic material.

One of the few regional arboreta in the country, its unique collection will provide research for the agricultural industry concerning plants of economic significance, and the arboretum will furnish and exchange plant materials and information with other arboreta throughout the world. Educational programs and exhibits will extend botanical information to the general public at the site and in the community at large.

With an anticipated opening date in 1983, the site will contain a lake, a visitors' center, and marked trails leading visitors throughout the property. The property has recently been fenced, and a grid staked off. Currently, project botanist Dr. Sidney McDaniel, Professor of Botany at Mississippi State University in Starkville, is collecting plant materials for propagations and transfer to the site.

According to Edward L. Blake, Jr., project designer and Professor of Landscape Architecture at Mississippi State University, care will be taken to preserve the natural slash pine savannah on the site. The savannah will serve as a cental spine from which trails will lead.

Design plans for the arboretum call for trees and plants to be organized in such a way as to educate the public to their role in the environment. There will be groupings of plants according to habitat and ecosystem. Represented will be a prai-

rie woodland, a bog, a bottomland hardwood forest, a cypress swamp, and shell mounds - - all unique to this area of Mississippi. Some of the property will be set aside as natural areas and left undisturbed altogether, allowing for natural succession.

Although the arboretum will be in a developmental stage for several years, the educational program of the facility has already begun. A slide presentation is currently available to interested groups.

The arboretum is being developed by the Crosby Arboretum Foundation, a private, non-profit organization.

Three Field Trips Already Held for the Year

HARRISON

The most recent outing was held over the Labor Day weekend as a joint field trip with the New Orleans Mycological Society. Mushrooms, which are certainly within the domain of a native plant society, were the subject of interest for thirty to forty people who attended. Both societies were well represented by their members, but the dedicated mycophiles who drove from College Station and Dallas, Texas demonstrated unquestionable enthusiasm. Two groups of Native Plant Society folks also made a journey to the coast from Cleveland and Starkville.

At the Harrison Experimental Forest headquarters, located approximately 15 miles northwest of Biloxi, participants were able to choose from three planned field trips, each emphasizing different habitat. Each group spent about three hours in the field with the company of accomplished amateurs and professional mycologists.

The diversity of mushrooms brought back and spread upon the tables inside the laboratory at the headquarters was tremendous. At least 100 species were collected, and according to Dr. Bill Cibula, the final list is still incomplete. It was impossible to comprehend such diversity, but with all the specimens arranged on the tables, comparison and study was easily facilitated so that everyone broadened their field knowledge. It was especially exciting to see several species that have yet been described to science, and thus remain nameless.

For the evening, at the Gulf Coast Research Laboratory auditorium in Ocean Springs, an entertaining film on commercial mushroom harvesting in Norway was shown. Mushrooms unfortunately appear seldom in the diet of our southern culture, but in Europe and areas of the northeastern United States, they are a prized delicacy. The film illustrated how Norwegian collectors are trained, licensed, and taught to forage through the forest. After the mushrooms are collected, they are rapidly delivered to a processing station for sorting and further cleaning. Some are canned whereas many are sent fresh to markets. The film's effect even stimulated entrepreneurial thoughts.

Two slide shows distributed by the North American Mycological Association that dealt with the basic skills in identifying mushrooms, including how to distinguish between edible and poisonous species, were seen. In addition, Mrs. Gwen Perkins, a talented nature photographer and doctoral candidate in botany at Mississippi State University, presented some of her beautifully photographed mushroom slides.

On Sunday, the group of 13 that stayed overnight at the Gulf Coast Research Lab dormitory, made a brief foray in the Gulf Islands National Seashore. Several species found in the salt spray community next to the estuary were new additions for the weekend foray. These were taken to the headquarters of the Harrison Experimental Forest where everyone met again for another chance to see and study the results of the foray.

Thanks to the organizational efforts of Dr. Bill Cibula, this was a most enjoyable field trip. For many, this was their first exposure to mushrooms, but members and guests were well instructed by several professional mycologists (Dr. Cibula - NASA, Dr. Ruth Tabor - Texas A&M, Dr. Arthur Welden - Tulane), plus a score of experienced naturalists. Thanks also to Dr. Cook of the Gulf Coast Research Lab for permisssion to use the facility.

DAVIS LAKE

Members and friends of the MNPS met for a field trip on Saturday, June 6 at Davis Lake in the Tombigbee National Forest in Chickasaw County. Dr. Sidney McDaniel led 25 people on the outing around Davis Lake and into the rich wooded slopes and hollows of the Pontotoc Ridge. Many of the species on this broken hilly ridge that acts as a divide between the Mississippi River basin to the west and the Tennessee-Tombigbee basin to theeast have a more "northern" floristic affinity.

Jacob's Ladder (Polemonium reptans) which was seen on moist slopes east of Davis Lake is known from only six northeastern counties in Mississippi. The range of this plant is from New York to Minnesota; south to interior Georgia, northern Alabama, and Mississippi; and in Missouri, and Oklahoma. Jacob's Ladder is listed as rare on Mississippi's Special Plant List. Ginseng (Panax quinquefolius), another "northern" species seen, is classified as threatened in Mississippi. The range for Ginseng extends from Quebec to Manitoba, then south to north Florida, Alabama, and westward across to Louisiana and Oklahoma. Swertia caroliniensis (American Columbo - .isted as rare in Mississippi) and Juglans cinera (White Walnut - listed as endangered) were two other examples of northern species found. To see White Walnut in Mississippi was a real treat since this tree is known from no more than five locations. White Walnut occurs in southern New Brunswick to the valley of the St. Lawrence River in Ontario, northern Michigan, southern Minnesota, eastern South Dakota, eastern Iowa, southeastern Nebraska, and southward to central Kansas, northern Arkansas, Delaware, eastern Virginia, and on the Appalachian Mountains and their foothills to northern Georgia, northern Alabama, northern Mississippi, southern Illinois, and western Tennessee. It is most abundant northward.

A "cedar glade" was also visited. These interesting plant communities punctuate the forest on the eastern edge of the Pontotoc Ridge on hills where calcareous or very alkaline soils outcrop. Cedar was observed to be practically the only tree to inhabite the glade, and they were widely scattered over a herbaceous flora that distinctly differed from that in the surrounding forest in the Pontotoc Ridge.

This was another thoroughly enjoyed field trip highlighted not only by rare plants, but equally by its being the society's first field trip into one of Mississippi's most distinctive floristic regions.

PICAYUNE

This past spring, on March 21, the society held in Picayune what is still considered by many to be their most memorable field trip. A surprising 50 people met at the State Welcome Center on I-55 just south of Picayune to follow Dr. Sidney McDaniel to the site where portions of the Crosby Arboretum were being developed. He briefed the crown on the goals, purpose, and operation of the arboretum, and then led a walk across a slash pine sava-nah on the grounds. Chaptalia tomentosa (sunbonnet) and Viola primulifolia (primrose-leaved violet) were among the wildflowers noted on the moist, open, almost treeless savannah. Dr. McDaniel pointed out a pond cypress (Taxodium ascendens) to explain that it usually inhabits the acidic and peaty soils of bogs and savannahs, whereas bald cypress (Taxodium distichum) predominately occurs .1 swamps and river bottomlands subject to periodic flooding.

The group then drove to beautiful Catahoula Creek and its tributaries to see the vegetation associated with small, sandy, coastal streams. Swamp cyrilla (Cyrilla racemiflora) and titi (Cliftonia monophylla) two shrubs or small trees that are unique to small coastal streams and bottoms, were seen in addition to many other species. After another short drive, the group stopped as a scenic bluff overlooking a wide sandy sweep of Catahoula Creek. A walk along the deep white sand bordering the woods and back through a small slough revealed many of the evergreen and often aromatic woody species of coastal Mississippi (in part were sweetbay magnolia - Magnolia virginiana, redbay - Persea bourbonia, devilwood or wild olive - Osmanthus americanus, and star-anise - (Illicium floridanum). The extremely rare pitcher plant, Sarracenia rubra, which is considered to be endangered in

Mississippi, was also observed.

Following a leisurely lunch on the bluff, the trip continued to another savannah and then to Hoblochitto Creek. Among the species, too many of which to mention, was an outstanding star-anise in full bloom.

The outing conveniently ended before a drought relieving heavy rain that continued throughout the night. At least 60 flowering plants had been seen.

That evening at the Picayune Public Library, Dr. McDaniel presented a slide show to discuss the plant collecting activities of the Institute for Botanical Exploration in Peru. As director of the Institute, he explained that most of the plant collections are made to provide affiliated scientists at the U.S. Department of Agriculture with samples to screen for anti-cancer compounds. In essence, these plants naturally synthesize an incredible number of unique biochemical compounds of unknown medicinal value. Preliminary tests with crude plant extracts has indicated the presence of anti-tumor agents in many species. As a consequence, samples of these species have been requested for recollection in an attemp to isolate and identify the active anti-tumor agents.

Corresponding with the Institute's role in providing cancer researchers with authoritatively identified plant samples from a region where undescribed species abound, is a study on the flora of Peru. Slides illustrating the botanical diversity of the area, staff members collecting specimens in the rainforests, and the Institutes facilities in Iquitos, Peru were seen.

This special program culminated a tremendously enjoyed field trip. Dr. McDaniel's casual, informative, and well planned outing and program was appreciated by everyone.

Officers

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Goodyera pubescens

Downy Rattlesnake Plantain



Goodyera pubescens

Status: Endangered

IDENTIFICATION: Goodyera is distinguished by the conspicuous basal rosettes of varigated leaves (dark green with a network of white lines). The basal rosette persists throughout the winter. When flowering the raceme grows to 18 inches tall and has several to many small white flowers. Goodyera pubescens is the only member of the genus to occur in Mississippi.

DISTRIBUTION: Goodyera (Downy Rattlesnake Plantain) is known in Mississippi only from reliable but unverified reports in Kemper and Calhoun Co.'s.

ECOLOGY: The habitat for Goodyera is reported as dry to moist coniferous or hardwood forests often growing in colonies

COMMENTS: Downy Rattlesnake Plantain is related to neither plantains (Plantago) nor rattlesnakes. The name is reportedly derived from the resemblance of the pattern on the leaf to rattlesnake skin. Under the "doctrine of signatures", a belief held by practicing physicians during the Middle Ages, the resemblance of plants to organs of the body or other animals was supposedly a clue to the herbs' medicinal use. The resemblance to rattlesnake skin was thought to mean the leaf should be used in some way to cure snakebite.

Goodyera pubescens is considered endangered in Mississippi because 1) there are only two reports of this species, and 2) there are no records of it having been located in the pa' either by Geological Survey biologists at th turn of the century or by the more recent

Mississippi Flora project. The Mississippi Natural Heritage Program would like to enlist members of the Mississippi Native Plant Society to report any information they may have regarding a sighting of this rare orchid. No attempt to transplant Goodyera to the home garden should be attempted. Most terrestrial orchids (like Goodyera) have a symbiotic relationship with specific soil fungi that are necessary for life. It is very unlikely that these specific conditions can be duplicated in the garden. Downy Rattlesnake Plantain should be admired, photographed, and left alone.

Please report any information regarding the occurrence of this species in Mississippi to:

Ken Gordon
Natural Heritage Program Botanist
Miss. Museum of Natural Science
111 N. Jefferson St.
Jackson, MS 39202

Personalia

Travis Salley - The Jackson Audubon Society has announced their March 23 program will feature Travis and his popular slide program on Mississippi wildflowers.

Cary Norquist has left Jackson to attend graduate school in botany at the University of Wyoming.

Jerry Hall recently graduated with a M.S. in botany from Mississippi State University, and has accepted a position with the U.S. Army Corps of Engineers Wetland Experimental Station in Vicksburg.

Peggy Newby has returned to Brookhaven after graduating from the nursing school at the University of Mississippi Med Center.

Dr. J. Ray Watson- we are glad to hear has recovered from surgery this summer.

Martha Cunningham has left Greenville to study at Dartmouth

Next MNPS Field Trip Scheduled Saturday October 24

The next Native Plant Society field trip will be held Saturday, October 24 in Picayune. Once again, we will return to a region of fascinating botanical diversity with the popular leadership of Dr. Sidney McDaniel. The late summer-fall flora will stand in stark contrast to the spring that was witnessed on an earlier field trip. One of the areas on interest that will be visited is a stand of Atlantic White Cedar known to be the westernmost occurrence of the tree in the United States. The plant community associated with Atlantic White Cedar will also be of special interest. In addition, we will travel to several other different habitats to see as much of the floristic diversity in this region as possible. A fine display of wildflowers is expected.

We will meet at 9 A.M. at the Welcome Center located approximately one mile south of Picayune on I-59. We'll group and caravan behind Dr. McDaniel for the day's activity. If you plan or even think you will attend, please indicate by detaching the notice below, and mail to Dr. Sidney McDaniel, Box EN, Mississippi State University, Mississippi State, MS , 39762. This will enable him to plan a more enjoyable outing.

As usual, bring a lunch and dress for rain or shine. The late October weather should be pleasant, so plan to attend. This one day field trip should end between 4 and 6 o'clock Saturday afternoon.

NON-MEMBERS AND GUESTS WELCOME

Name

I plan to attend ____

I hope to attend _____

Number in party _____

IN PICAYUNE:

Sandman Motel (601) 798-3491 off I-59 near Ford Dealer. Singles $14.50, Doubles $18.70 with 4 people.

Picayune Motel (601) 798-7508 Hwy 11 North on west side

IN SLIDELL (across the river from Picayune)

Days Inn (504) 641-3450, I-10 at US 190 Exit, Single $24.88-29.88 + Tax, Double $34.88-39.88 + Tax, Restaurant - Breakfast, Lunch, and Supper.

Holiday Inn (504) 643-9770 I-10
Single $28.00-30.00, Double $30.00-32.00
Restaurant Breakfast, Lunch, Supper

Ramada Inn (504) 643-9960 I-10
Single $25.00, Double $28.00, Extra persons $3.00/room, Restaurant 6:30 A.M. - 10:00 P.M.

CAMPGROUNDS

Jellystone Campground (601) 798-2239 Picayune
A family type campground with trailer hook-ups and tent areas
Fees: $9.00 Camping with no hookup
$10.00 Camping with hookup
$2.00/Day/Person for hiking, etc.

KOA Campground in Slidell

Note: These are listed for your reference. No recommendations are made.

√ BOOK REVIEW

Wildflowers of Louisiana and Adjoining States. Clair A. Brown. Louisiana State University Press, Baton Rouge, 1972. 247 pages, illustrated, hardcover $20.00, paperback $8.95, dimensions (hardcover) 9" x 6" x 1".

Although this book is similar in size and scope to Wildflowers of the Southeastern United States, I always carry both books into the field because each has omissions which are filled by the other. For example, the "Louisiana" book lists the everpresent Virginia Creeper while the "Southeastern" book does not. The "Southeastern" book contains a description of the very common Rabbit Tobacco (a popular smoke of children, at least in my day) whereas no mention of it is found in the "Louisiana" book. Wildflowers of Louisiana and Adjoining States contains over 400 color pictures as well as many listings which are not pictured. The first 42 pages are about monocots and the rest of the book is devoted to dicots. All plants are listed by family. The pictures are excellent, and the verbal description of each plant is conveniently located under its picture instead of on the opposite page like in the "Southeastern" book. All dimensions are given in feet and inches instead of metric, which may or may not appeal to you. As an amateur to other amateurs, I recommend it highly.

Lowell Newby

Sources of Native Plants

The New England Wild Flower Society conducted a survey among 204 nurseries located throughout the United States and Canada in the summer of 1980. The primary purposes of the survey were to determine the extent to which each nursery 1) propagates and/or rescues from threatened areas, 2) wild-collects , and 3) purchases from another source its saleable, native plant stock. The New England Wild Flower Society believes it has compiled the information received from the questionnaires accurately and completely, but it cannot, of course, vouch for the completeness or accuracy of the information received.

The list is divided into four groups: I - Nurseries primarily selling PERENNIAL native plants, II - WOODY native plants, III - native plant SEEDS, and IV - additional nurseries selling native plants. In Groups I and II, nurseries are listed according to their percentages of native plant propagation and then alphabetically. In Groups III and IV nurseries are listed alphabetically.

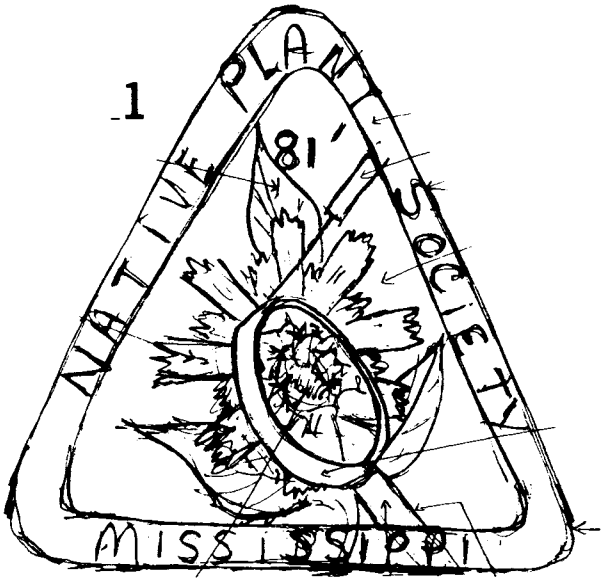
The New England Wild Flower Society supports the conservation of native plants and promotes horticultural propagation as a means of protecting and increasing the numbers of native plants. The Society encourages all nurseries to propagate, rather than wild-collect, native plants which they sell.

Copies of this list may be purchased for $1.00 from the New England Wild Flower Society, Hemenway Road, Framingham, MA, 01701

Logo Selection

Here are the excellent responses to our request to develop a society logo or letterhead. Please vote for your favorite, and respond with your decision to Travis Salley, 202 N. Andrews Ave., Cleveland, MS 38732.

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MISSISSIPPI NATIVE PLANT SOCIETY

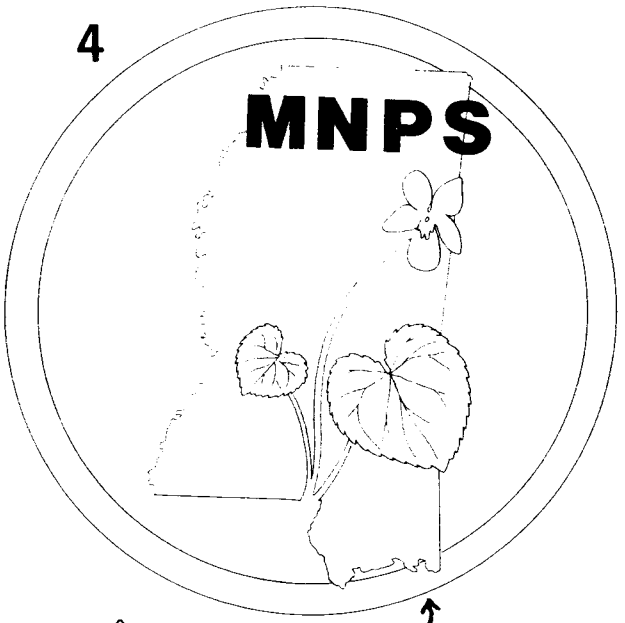
P.O. Box --- JACKSON, MS ----- (601)--- -----

letterhead

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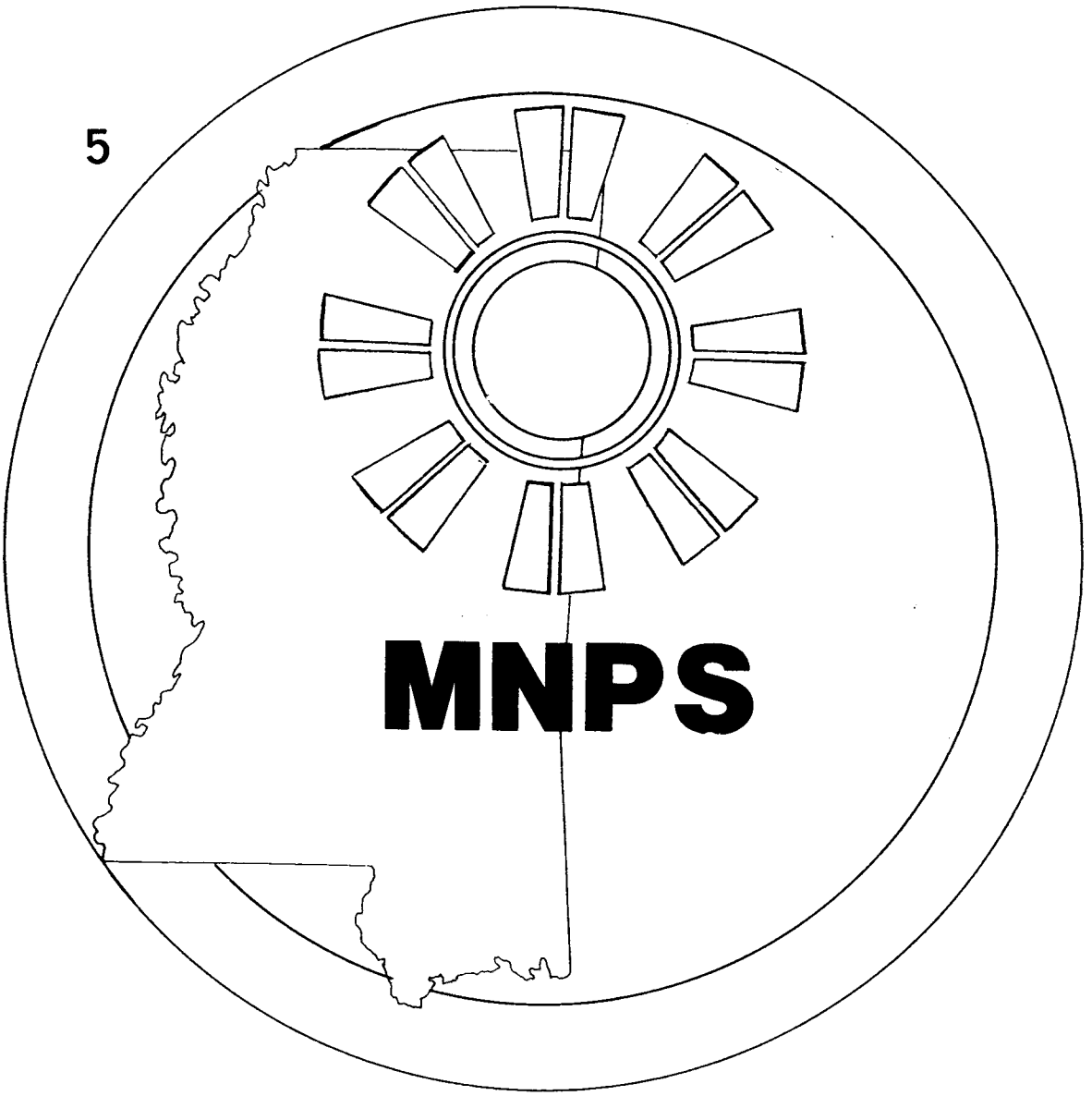
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name of society in border

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