

# MISSOURI NATIVE PLANT SOCIETY

## JULY

- 2 Sat., 8 a.m.  
St. Louis **Field Trip to Fults Hill Prairie.** Led by Pat Grace. Meet at South County Shopping Center near the Tire Center at 8 a.m. or at Fults Hill Prairie at 9 a.m.
- 3 Sun., 12 noon  
St. Louis **Inventory Field Trip to Creve Coeur Park.** Led by Jim Bogler. Monthly until Nov. to inventory the flora of this endangered park. Meet at the So. end of parking lot by the Lake.
- 9 Sat., 9:00 a.m.  
Columbia **Field Trip to Prairie Garden Trust.** Meet at the Fish & Wildlife Research Center, 1110 S. College Avenue, to car pool.
- 9 Sat., 8 a.m.  
St. Louis **Field Trip to Iron Mountain and Bismark Lakes** in search of purple fringless orchids. Led by Pat Grace. Meet at South County Shopping Center near the Tire Center.
- 11 Mon., 7 p.m.  
Columbia **Mushroom Identification (tentative) program.** Monthly meeting at the Conference Bldg., National Fisheries Contaminant Center.
- 12-16 Tue.-Sat.  
Manhattan, KS **14th North American Prairie Conference** at Kansas State University. Theme is *Prairie Biodiversity: From molecule to landscapes, from the past to the future.* Field trips to Konza Prairie and The Land Institute. For more info: John Zimmerman, Division of Biology, Ackert Hall, Kansas State Univ., Manhattan, KS 66506, (913) 532-6659.
- 15 Fri., 5:30 p.m.  
Kansas City **Field Trip to Prairie Center/Wagner Prairie.** We've seen it in spring; now let's see what is happening in summer. Take I-35 south to Olathe, take the Hwy 150/Santa Fe exit and go west on Santa Fe about 4 miles. Prairie Center is on the left.
- 23 Sat., 9:00 a.m.  
Kansas City **Field Trip to James A. Reed Wildlife Area** in Lee's Summit. We'll see yellow lotus and other summer woodland and prairie stuff and just explore. Take Hwy 50/350 east through Lee's Summit and past the 291 exit. At the big blue water tower, turn right at the stop light and go south to the sign for James A. Reed, turn left and go to the interpretive center.
- 27 Wed., 7:30 p.m.  
St. Louis **Insect Pollination of Spring Wildflowers in the Tall Grass Prairie.** Program presented by Peter Bernhardt, Associate Professor of Botany at St. Louis University and author of *Wily Violets and Underground Orchids* and *Natural Affairs*. Monthly meeting held at Missouri Botanical Garden, Ridgway Center.

## AUGUST

- 7 Sun., 12 noon **Inventory Field Trip to Creve Coeur Park.** See July 3 for details.



- 8 Mon., 7:00 p.m.  
Columbia **Butterfly Identification and Gardening** (tentative) program . Monthly meeting at the Conference Bldg., National Fisheries Contaminant Center.
- 
- 10 **DUE DATE FOR MATERIAL FOR SEPTEMBER–OCTOBER *PETAL PUSHER***. Please send meeting and field trip information and articles (typed double spaced) to the editor by this date. If article has been word processed on a Macintosh, please send copy on disk to Pat Harris. Disk will be returned.
- 
- 20 Sat., 9:00 a.m.  
Columbia **Field trip to see prescribed burn results.** Led by Jim Whitley. Meet at the Fish & Wildlife Research Center, 1110 S. College Ave. to car pool.
- 
- 24 Wed., 6:00 p.m.  
Columbia **Field trip to see Great Gourds** and have a wiener roast. Susan Forrest will show us her gourd raising operation. Meet at 5:30 p.m. at the Fish & Wildlife Research Center, 1110 S. College Ave. to car pool.
- 
- 24 Wed., 7:30 p.m.  
St. Louis **Bellflowers and Their Relatives in the Midwest.** Program presented by Nancy Morin Ph.D., Assistant Director of Missouri Botanical Garden, and specialist on the Campanulaceae Family. Monthly meeting held at Missouri Botanical Garden, Ridgway Center.
- 
- 25 Thur., 7:00 p.m.  
Springfield **Native Plant Conservation in the Nature Conservancy.** Program presented by Susanne Greenlee, Assistant Land Steward for the Nature Conservancy, Missouri Chapter. Monthly meeting held at the Springfield Conservation Nature Center.
- 
- 26–27 Fri.–Sat.  
Wilmington, DE **Eastern Native Plant Alliance Meeting.** Topics include “Local Land Management Practices” and “The Use of Meadows as Landscape Options in Eastern North America.” Held in Wilmington, Delaware at the Winterthur Museum and Gardens. Registration fee: \$30.00. Send to: Attention: Greg Edinger, Bowman’s Hill Wildflower Preserve, P.O. Box 103, Washington Crossing, PA 18977 by August 10.

## Readings in Botany

*WALKING WITH WILDFLOWERS – A Field Guide to the St. Louis Area*, by Karen S. Haller (Immediate Past President of the Missouri Native Plant Society).

Introduces the beginner to 28 public areas with explicit location maps of where to find specific wildflowers and presents 70 crisp, sharp, color photos (taken by Karen) as incentives to visit the areas and enjoy them in person. Budding botanists take note!

At least one-third of the plants pictured occur over large areas of the state. You may wish to review this publication for possible addition to your library of wildflower photos even if you don't live near the St. Louis area.

258 pages / Pocket size / paper / \$22.50 / 1994, University of Missouri Press.

## Wear the Coneflowers!

The Missouri Native Plant Society (MONPS) Badge of Achievement program has officially begun. In the center of this issue of *PETAL PUSHER* is your very own copy of the brochure. Choose eight of the sixteen steps to be fulfilled and expand your knowledge of our native plants. You can use the brochure yourself or copy it and give it to a friend. Work for your badges together. If you want to see what the badge looks like, your local MONPS chapter has one for review.

July – August 1994

## Federal Native Plant Conservation Committee Formed

The U.S. Fish and Wildlife Service Director Mollie Beattie announced it would join six other Federal Agencies in a partnership to conserve native plants and their habitats.

The partnership, formalized under a Memorandum of Understanding, created the Federal Native Plant Conservation Committee. Agencies included in the partnership are the National Park Service, U.S. Fish and Wildlife Service, the National Biological Survey, the Bureau of Land Management, the U.S. Forest Service, the Soil Conservation Service, and the Agricultural Research Service.

“The future of our public lands depends on native plants and plant communities,” Beattie said. “Plant biodiversity is the basis for healthy ecosystems upon which all life depends. Today, over half of the species listed as endangered or threatened are plants. By working in a cooperative spirit, we can better manage these resources and avoid future conflicts.”

U.S. Senator Daniel K. Akaka, praised the memorandum. “The agreement represents an important commitment to preserving our rich, living heritage of native plants for future generations. Because all the major Federal land managers will be party to this document, we can do a better job of preventing threatened native species from falling through the cracks.”

## TIDBITS

### RICE—A GRASS WHICH IS THE WORLD'S MOST POPULAR FOOD

The May 1994 *NATIONAL GEOGRAPHIC* carried a feature story on rice (*Oryza sativa*). The article pointed out that although wheat and corn volumes are higher, a good percentage of each is used for livestock feed, making rice the #1 food crop in the world. Rice exists in 120,000 varieties. The so-called "wild rice," prized by gourmets, looks like rice, but isn't, being a grass of different genus. Bali has the highest consumption, averaging one pound (dry weight before cooking) per person per day! Americans are far down the list, using about one ounce per day and 10% of that goes into beer, which in some respects isn't too bad a way to consume rice!

### MARYLAND TOWN UNHAPPY ABOUT RARE PLANTS

*THE NATURE SOCIETY NEWS*, monthly publication of The Nature Society, Griggsville, IL, mainly contains birding articles, concentrating on purple martins. However, the May 1994 issue carried a column by John Dennis, concerning rare plants in Princess Anne, on Maryland's eastern shore. The town park, located where fresh water meets tidal brackish water, contains the only Maryland location of sensitive joint vetch (*Aeschynomene virginica*); local citizens are miffed that the plant's designation has prevented the building of a canoe ramp. But Mr. Dennis suggests that having a rare plant may have promotional advantages, such as some Midwestern towns have done with white squirrels. He recommends publicizing the plant with shoulder patches, police car logos, an annual joint vetch festival, plus officially designating Princess Anne as the "Joint Vetch Capital of America." Furthermore, a second rare plant, *Bidens coronata* (southern tickseed), has been found in this same park. However, Mr. Dennis feels that one rare plant per town is enough, especially since the latter produces barbed seeds that stick to clothing.

### UNUSUAL FIND ON FIELD TRIP

The May/June 1994 *MYCOPHILE*, newsletter of the North American Mycological Association, carried an article by a Michigan mushroom club member, who is also a police detective. He gives helpful hints on proper procedures to be followed, such as not disturbing the scene, contacting law enforcement officials, pinpointing the site, etc., if a human corpse is found in the woods. Such occurrence may not be too far-fetched, considering some of the out-of-the-way places botany field trips frequently go!

### CIVIL WAR BOTANIST

The same *MYCOPHILE* newsletter had a biography of Andrew Morgan, a noted mushroomer of the 1800s. Before becoming a mycologist, Morgan was a mathematics teacher who had a great interest in botany. So much so that when he joined the northern Civil War army as a member of the 84th Ohio Infantry, he carried a copy of *GRAY'S MANUAL* in his knapsack.

### RARE PLANT SAVED BY BURNING

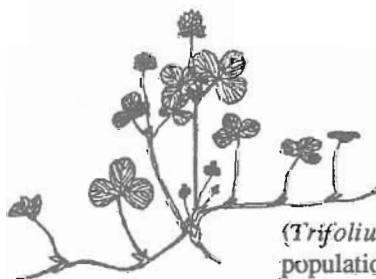
*NATIONAL GEOGRAPHIC'S* June 1994 issue had an item in the Earth Almanac section on efforts to save the rare Peters Mountain mallow (*Liamna corei*). The plant was discovered in 1927 atop Peters Mountain in Virginia; in 1986 a survey crew found the population had decreased to only four. A rescue team from the Nature Conservancy and Virginia Department of Conservation determined that fire was needed to crack the seeds and start germination. The area was burned in 1992 and 1993, resulting in 500 seedlings sprouting.

### RESERVATIONS AT FOREST SERVICE CAMPGROUNDS

The U.S. Forest Service (USFS) has a national reservation system for those who wish to inquire about vacancies and make reservations at any USFS campground. The number is 1-800-280-2267 or 1-800-879-4496 (for the speech & hearing impaired). The fee is \$7.50 for use of the service.

### Systematics Symposium —1994

Mark Your Calendar — 41st Annual Systematics Symposium, The symposium will take place at the Missouri Botanical Garden, 30 September - 1 October 1994. This year's conference is entitled - SYSTEMATICS AGENDA 2000: SYSTEMATICS AND SOCIETY. Major subject areas on the agenda are: Knowledge of Biological Diversity, Improvement of the Human Condition, and Conservation of Biological Diversity. For information and registration information write to Systematics Symposium, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166.



### Running Buffalo Clover Discovery

Running buffalo clover (*Trifolium stoloniferum*), last wild population seen in Missouri in 1907, has been discovered alive and well in Madison County, Missouri. It was found by Deborah Rowan on 18 May 1994 while performing the Regional Natural Features Inventory in Madison, Wayne, and Bollinger counties for the Missouri Department of Conservation (MDC). The species has recently been the subject of a variety of searches and investigations since it mysteriously turned up in topsoil that was delivered to the backyard of George Yatskiyevych, Curator of Missouri Plants. The find will permit the species to be removed from the "Extirpated" category and placed on the "Endangered" column of the *RARE AND ENDANGERED SPECIES OF MISSOURI CHECKLIST*. It is listed as "Endangered" on the federal record also. Our commendations to Deborah for a job well done, and thanks to George for his serendipitous means of raising interest levels about rare plants in Missouri.

JHH

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### INFORMATION ON JOINING MISSOURI NATIVE PLANT SOCIETY

**SOCIETY DUES**

(Chapter dues additional)

Student .....\$5.00  
Regular .....\$9.00  
Contributing .....\$20.00  
Life .....\$200.00

**CHAPTER DUES**

Columbia .....\$6.00  
Jefferson City .....\$5.00  
Kansas City .....\$5.00  
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St. Louis .....\$5.00  
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Name \_\_\_\_\_  
Street \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Please mail information on \_\_\_\_\_ Chapter

**Missouri Native Plant Society**  
**P.O. Box 20073**  
**St. Louis, MO 63144-0073**

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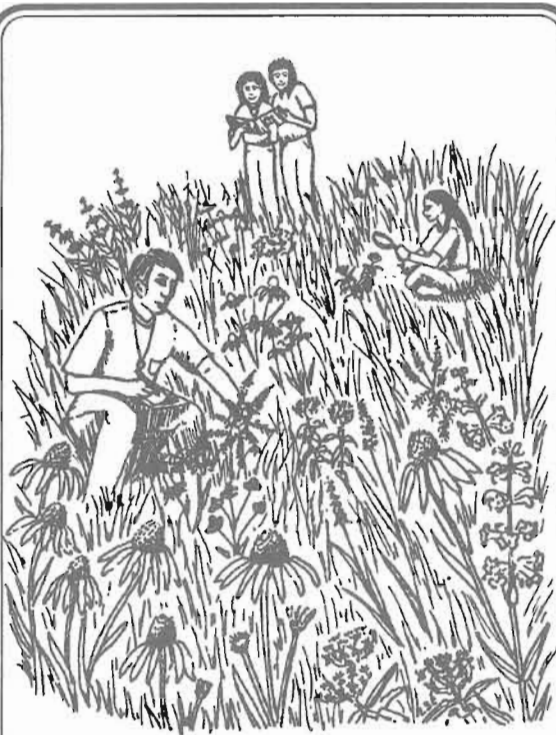
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The Missouri Native Plant Society was formed to promote the enjoyment and study of plants native to the state of Missouri. The Missouri Native Plant Badge of Achievement\* is designed to help those interested in the subject get a friendly start in learning to enjoy the fascinating world of plants. The program is formulated to be adaptable to ages from middle-school to adults. It is broadly suitable for individuals or groups according to preference. It is especially recommended to teachers and group leaders as an introduction to beginning field botany.

\*Concept derived from the Kansas Wildflower Society's "Wear the Violet!" Program.

## SUGGESTED REFERENCES

Denison, Edgar. *Missouri Wildflowers*. Fourth Revised and Expanded Edition. Jefferson City: Missouri Department of Conservation, 1989.

Foster, Steven and Duke, James A. The Peterson Field Guide Series, *A Field Guide to Medicinal Plants*. Boston: Houghton Mifflin Co., 1990.

Peterson, Roger Tory and McKenny, Margaret. *A Field Guide To Wildflowers of Northeastern and North Central North America*. Boston: Houghton Mifflin Co., 1968.

Phillips, Jan. *Wild Edibles of Missouri*. Jefferson City: Missouri Department of Conservation, 1979.

Gleason, Henry A. and Cronquist, Arthur. *Manual of the Vascular Plants of Northeastern United States and Adjacent Canada*. Second Ed. Bronx: The New York Botanical Garden, 1991. (Advanced)

Steyermark, Julian A. *Flora of Missouri*. Ames: The Iowa State University Press, 1963. (Advanced)

Dorling Kindersley, Inc. *The Visual Dictionary of Plants*. New York: 1992.

These and other publications may be available at the local library, book stores, Missouri State Parks or offices of the Missouri Department of Conservation.



MISSOURI  
NATIVE PLANT  
SOCIETY

P.O. Box 20073  
St. Louis, MO  
63144-0073

### Join the MISSOURI NATIVE PLANT SOCIETY

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

### State Membership Categories

_____ \$9.00 Regular	_____ \$5.00 Student
_____ \$20.00 Contributing	_____ \$200.00 Life

# WEAR THE CONEFLOWERS!

## The Missouri Native Plant Society's Badge of Achievement

The MONPS Badge of Achievement shows the pale purple and yellow coneflowers on a blue background trimmed with green and yellow. These bright, showy wildflowers are representative of the wide variety of plants native to the state. The badge is embroidered on sturdy material that may be sewn onto a pack, hat or other item. Actual size, 3½ inches.

Designed by Linda S. Ellis



- It's fun
- You'll learn about our native wildflowers and other plants
- It will look good on your hat, pack or jacket
- It marks you as an achiever with special knowledge of native plants and their habitat, because  
**THIS BADGE MUST BE EARNED**

## WHAT YOU DO

To earn the Missouri Native Plant Society (MONPS) Badge of Achievement, you must demonstrate that you have studied and learned about a number of plants from several different aspects. You do this by performing a prescribed set of activities. Certain minimum activities are required, while others are elected by the participant. Your responses, prepared to meet those requirements, are to be assembled in a folder or lightweight notebook.

Depending on which projects you choose, you may need to devote considerable time to completing all the requirements. This program does not require a personal collection of whole plant specimens. If you do collect plant materials, practice good conservation. When plants are sparse, do not deplete; even when plants are plentiful, be frugal in collecting. Be sure you know what you are collecting, and NEVER DISTURB A RARE OR ENDANGERED SPECIES. The Missouri Native Plant Society discourages collecting whole plants from the wild for gardening, personal, or commercial reasons.

Check your material over carefully before sending it. Be sure the necessary requirements have been met. If working with a group, have the group leader review it first.

The plants studied may be found elsewhere than in Missouri, and you need not be a resident of Missouri to earn the MONPS Badge of Achievement.



When you have finished your folder or notebook containing the eight or more completed steps (Step One plus seven others of your choice), arrange the answers in numerical order, corresponding to those on the list of requirements. Mail the completed packet to the Missouri Native Plant Society. Include your name and mailing address, and enclose \$3.00 to cover the costs of the badge, postage and handling. Your entry will be carefully read and evaluated by a qualified member of MONPS. The badge will be mailed to you. If you want your materials returned, include a stamped, self-addressed envelope large enough to hold the materials. If the material is not requested to be returned, it becomes the property of MONPS and may be used in future promotions of the Society and its programs. Send your materials to:

Missouri Native Plant Society  
Badge of Achievement  
P.O. Box 20073  
St. Louis, MO 63144-0073

## Steps To Be Fulfilled

**Step One** (Everyone must complete this step.)

- A. Identify and record thirty (30) wild plants outdoors. List each one by common and scientific name.
- B. Note the location, habitat, and abundance of each plant found.
- C. Note whether the plant is in flower, seed, or fruiting stage.
- D. Note the date you found each plant.

**NOW CHOOSE AND COMPLETE AT LEAST SEVEN (7) OF THE FOLLOWING STEPS:**

**Step Two**

Illustrate your project showing at least five (5) of the above by sketching, photographing, tracing, or other graphic means. Include both blossom and leaf.

**Step Three**

Carefully collect seeds. Take only a few from any individual plant. Do not over-collect. Try to grow some of them. Do you know what is inside a seed? What? Sketch the seeds of five (5) species. Name three ways seeds are distributed naturally.

**Step Four**

Chose two (2) plant families. List species that are found in your area. List some not found in your area. What common characteristics does each family share which distinguishes it from the other?

**Step Five**

Find five (5) native plants which have at least one relative that can be found in your local flower shop, greenhouse, garden, farm, or field. List the native plant, its relative, and at least one common characteristic the two share.

**Step Six**

Identify Poison Ivy. How do you recognize its vine in winter? Sketch a typical leaf — be careful that you do not touch the plant. Tell how to avoid exposure to the plant and how to treat for Poison Ivy if exposed or if contracted.

**Step Seven**

Name three (3) wild plants used for medicinal purposes today. What specific part(s) are used? Name three (3) other wild plants used for medicinal purposes by native Americans. Name at least three (3) plants used in making dyes. Tell how the dyes are made and described the colors produced.

**Step Eight**

List fifteen (15) wild plants that have edible parts. Name the edible part(s) of each specific plant and tell how it/they are prepared. List five (5) plants to avoid eating, naming the toxic part(s).

**Step Nine**

List some organizations in your community, state, and/or nation which are working for the protection and propagation of wild plants. Discuss their activities. How can you help them?

**Step Ten**

Attend a local or state meeting of the Missouri Native Plant Society. Write a brief report of the business covered at this meeting and discuss any information you learned about native plants.

**Step Eleven**

Visit an area where native plants can be found. Tell the history of the plants found on this land, how they are or not being protected, and what their future is apt to be.

**Step Twelve**

Choose a small area from one to two yards square and list all plant and animal life found in that area. Date your list. Describe other features of the habitat, such as soil, water, exposure, and shelter.

**Step Thirteen**

Go on an outing with members of MONPS, The Nature Conservancy, or some similar organization. List all the plants found on this hike, using both common and scientific names. Note the abundance and habitat of the plants. Date your list.

**Step Fourteen**

List at least four (4) local, state, and/or federal agencies that control land in Missouri open to the public. Discuss the role each of these agencies plays in conserving the land. Visit one of these sites and describe the measures being taken to protect native plants.

**Step Fifteen**

Obtain the *Rare and Endangered Species of Missouri Checklist* from the Missouri Department of Conservation. How many flowering plants are currently listed for Missouri? Discuss some of the reasons why so many plants may be facing extinction.

**Step Sixteen**

Write a short essay on the ethics of native plant use and conservation.