



1986

CALENDAR

Coming events statewide--look for details elsewhere in this newsletter.

April 26, Saturday 9:00-4:00. Spring board meeting and field trips. Central Missouri State University, Warrensburg.

May 6, Tuesday. Jefferson City Chapter Meeting, 7:30 p.m., Dept. of Conservation Headquarters.

May 10, Saturday. 9:15 - Noon. Field trip to Pickle Springs Natural History Area, Ste. Genevieve County. See article for details.

May 17, Saturday. 8:00-4:00. Prairie Day, Diamond Grove Prairie, Newton County. For more information write Prairie Day, MDC, P.O. Box 180, Jefferson City, MO 65102.

May 25, Sunday. 9:30 a.m. Field trip to Indian Creek in Howell/Douglas counties. See article for details.

June 13-14, Friday-Saturday. MoNPS annual meeting at Big Lake State Park, Holt County, and field trips to the loess hill prairies. We'll see at least ten state-listed rare plants as well as the elusive prairie white-fringed orchid. Mark your calendar now--details will be out in the June newsletter. (Friday night will probably be the board meeting with annual meeting and field trips beginning around 9:00 a.m. Saturday.)

PRESIDENTIAL MEMO #2

From Dave Castener

Happy Springtime! Welcome to our new members and our new chapters. I was impressed by the "Mid-Missouri Chapter's newsletter. Nice job!

On March 21 (or thereabouts) the Editorial Committee of the Society will meet to discuss MISSOURIENSIS in Jefferson City. Since we are still in the formulative stage, any comments or suggestions before or after this meeting would be appreciated.

In April, we will be having out Joint Meeting with the Missouri Academy of Science. I would like to have a meeting during that time to discuss and state the goals and methods of our State Inventory Project. If you have comments or suggestions please let a Board member know.

Ideas for field trips? Contact Ginny Wallace or an officer.

In June, (13 & 14) we will have our annual meeting. We should have selected our candidates for two Board positions by then. THE SOCIETY WELCOMES SUGGESTIONS AT THIS TIME. If you are interested in serving on the Board, PLEASE CONTACT ME- I will pass your name on to THIS and future nominating committees. In the next Newsletter (#3), we hope to present the society with a slate of candidates to be voted on.

See you in Warrensburg.

WELCOME NEW MEMBERS

Ronald L. McGregor
Keith H. Vinyard
Murray Sullivan
James L. & Marguerite D. Ruschill
Sharon Pettus
Mr. and Mrs. L. Stannard
Robert C. Hansen
Betty Withers
Susan Morgan
Jerry M. Baskin
Chris Maron
Paul & Gail Barham
Elizabeth M. Hollis
Carl & Eleanor King
Ron Bass
Martha O. Harris

Columbia Chapter:

Wally Wosilait
Jeanne Barr
Robin Kennedy
Paul & Darlene Short
Joyce & Edward Pickett
Lisle & Alice Jeffrey
Robert & Kay Eastman
Karen Shippen
Kathleen Norvell
Mark Thomas
David & Netta Witten
David Bogler
Jackie Cook
Shirley Pales

SPRING BOARD MEETING

Saturday, April 26, 1986
 Science Building*
 Central Missouri State University

- 9:00 - 11:00 a.m. Board Meeting, Science Building
- 11:00 - 12:00 Program: Pollen Collecting. John Sneed, Ashland Farm Botanicals
- 12:00 - 1:30 p.m. Lunch (on your own)
- 1:30 - 4:00 p.m. Meet at Knob Noster State Park for field trips.

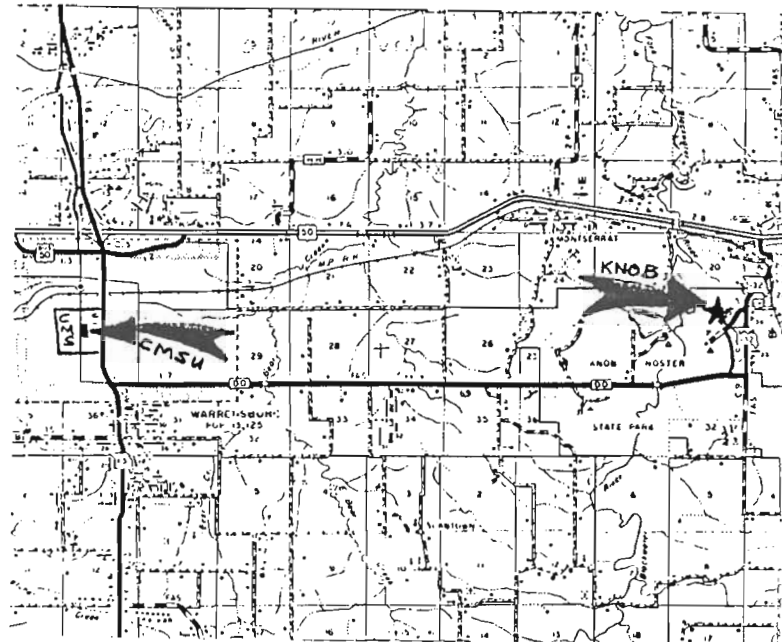
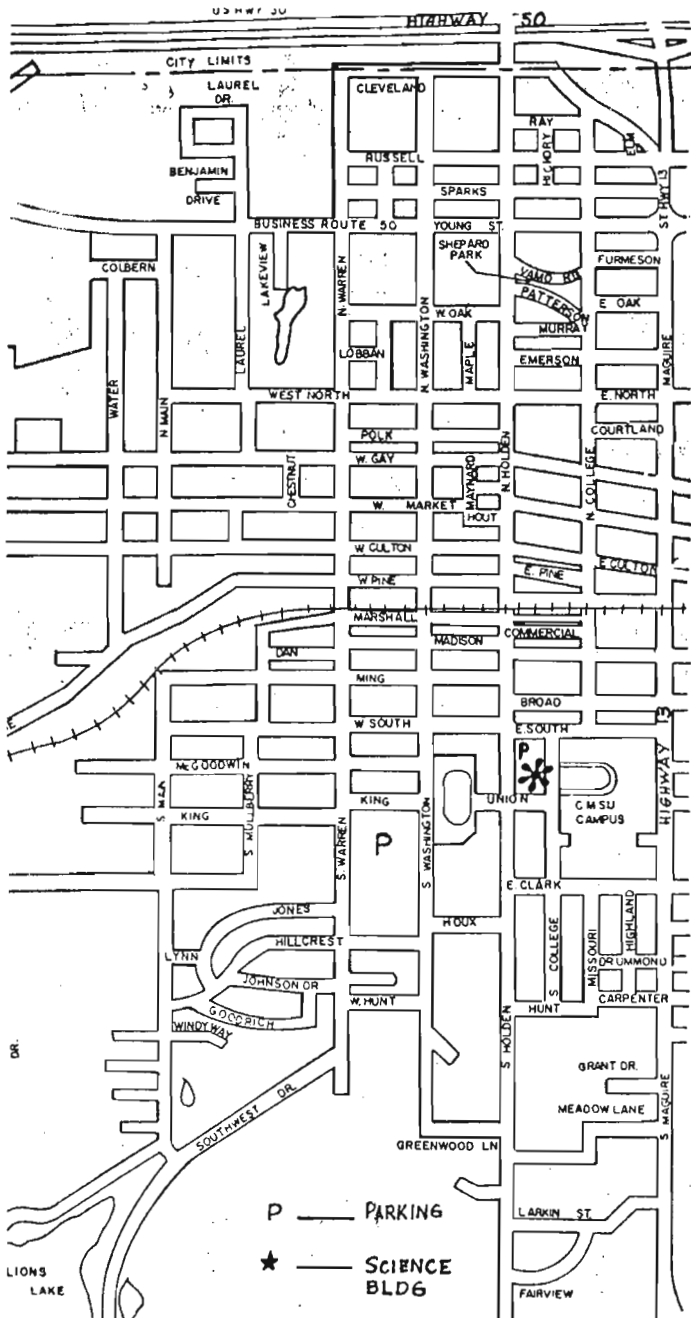
*Rooms had not been assigned by printing date. The room will be posted at the Science Building entrance.

Lodging - Motels

- | | |
|---|---|
| University Inn,
Best Western
(816)747-5125
Reservations 1-800-528-1234 | Belmont Motel
Bus. Hwy 50 East
(816)747-8634 |
| Super 8 Motel
440 Russell Ave.
(816)747-2183
1-800-843-1991 | CMSU Conference Center (Continuing Education)
Anderson Street, Campus
(816)429-4034 |
| Skyhaven Motel
Hwy 50 West
(3 miles to CMSU)
(816)747-6131 | Bell Towers Motel
Hwy 50 East-Knob Noster
(10 miles to CMSU)
(816)563-3044 |

Camping:

- Pertle Springs (CMSU) Campground
(816)429-4034
- Knob Noster State Park
(State Route DD East)



For those who plan to arrive Friday night, Sue Hollis and Linda Ellis will be hosting an informal get together in Sue's motel room from 6 pm to ? This will be at the Super 8 Motel; ask at the office for room number.

This will be a good opportunity for editors and leaders of local chapters to exchange ideas. Everyone is welcome for light socializing. Munchies will be provided.

FIELD TRIPS PLANNED

Several field trips are planned around the state. For all field trips participants should wear long pants and sturdy foot gear such as boots or high topped tennis shoes. You will also need to bring insect repellent, a snack or sack lunch and water. You may also want to bring a hand lens, field guide, notebook and pencil, binoculars and your camera. We ask that no collecting be done on the trips, and that you leave your dog at home. Be prepared for the weather--trips go rain or shine.

Knob Noster State Park (Johnson County) - April 26 (Saturday). We will meet at the Park Visitor Center at 1:30 p.m. (following the quarterly board meeting and program at CMSU in Warrensburg). We'll tour the visitor center display about Savannah restoration, then head to the woods. Field trip leaders Paul Nelson and Sheila Larabee (park naturalist) will take us on a one mile trail to visit a savannah restoration site. The trail winds through mesic bottomland forest which should be lush with spring wildflowers, before heading up slope through drier forest to a plateau where the savannah restoration is being done. The walk should be fairly easy, though hilly.

Those interested will also be able to visit Pin Oak Slough Natural Area on the Park grounds. The Natural Area features a former oxbow slough of Clearfork Creek and a wet-mesic forest and buttonbush shrub swamp.

To reach the park take Highway 50 seventeen miles west of Sedalia or nine miles east of Warrensburg to Highway 132. Travel south on 132 to DD following the State Park signs to the Visitor Center.

Pickle Springs Natural History Area (Ste. Genevieve Co.) - May 10 (Saturday). This will be a joint field trip with folks from the Audubon Societies in Farmington and Cape Girardeau. They'll meet us at the area parking lot on Darlac Road by 9:30 a.m. The trip should end by about lunch time, but you may want to bring a packable snack just in case. A two mile trail through the area is under construction and this is what we'll be taking (it will be near completion). We will leave the trail at several points to look at area features more closely and this will involve climbing up and down some steep slopes.

We should hit the peak of azalea bloom so be sure to bring a camera. For a description of other sites, and a map see the last issue of Missouriensis. Pickle Springs is located eight miles east of Farmington and can be reached by taking Highway 32 east from Farmington to Route AA. Travel about 1 1/2 miles east on AA to Darlac Road (gravel), then turn left. The parking area is about 1/8 to 1/4 mile north on the righthand side of Darlac Road (watch for the Natural Area sign with a Jack-in-the-Pulpit). Please R.S.V.P. to Ginny Wallace, P.O. Box 180, Jefferson City, MO 65102, so we know who we're waiting for.

Indian Creek (Howell/Douglas counties) - May 25 (Sunday). Join trip leaders Bill Summers and Merv and Ginny Wallace to tour one of the orchid hot spots of Missouri. Our main target will be the showy lady slipper orchid, which should be in bloom. We may also see yellow-lipped ladies-tresses, adder's mouth orchid and lily-leaved twayblade in bloom, as well as leaves of showy orchis, yellow lady slippers and rattlesnake plantain. Other unique plants in the area include the rare Sullivantia, Zigadenus elegans and the southern maiden hair fern.

This trip will involve both wading and hiking some rocky slopes, so wear sturdy shoes that you don't mind getting wet (high-topped tennies are good). Bring your camera and a lunch. We will meet at the Hillbilly Junction restaurant at 9:30 a.m. on the 25th. Hillbilly Junction is located at the junction of Hwy 60 and 63 just south of Willow Springs. Please RSVP to Ginny Wallace at P.O. Box 180, Jefferson City, MO 65102, so we know who we're waiting for.



GRANT AVAILABLE

As promised in the last newsletter, the awards committee has established guidelines for distribution of a \$250 grant established at the December board meeting. The purpose of the grant is to encourage and enable MoNPS members to do small projects contributing to the knowledge of our flora. Such projects might include a search for a rare or endangered plant or community; a botanical survey of a particular area such as a natural area; production of illustrations which could be used in a Society publication; or conduct a search of herbaria for particular species. The grant is not limited to individuals: a group might want to apply in order to conduct a survey of an area or a search for a species.

Since there's no such thing as a free lunch, MoNPS would like something in return. We would like the recipient(s) to write a report of their activities and any results which could be published in Missouriensis or the newsletter. We would also ask that any plants collected during the course of the project be placed in a Missouri herbarium within a reasonable time period.

If you've been wanting to get out and search for something but lacked the gas money, now's your chance. More than one project may be funded depending on how many proposals we receive, but the total amount given this year will not exceed \$250.00.

In order to apply please send us a proposal which includes a description of what you would like to do, and a justification of the expenses you wish covered (figure mileage at 20.5¢ per mile).

We need the proposals for 1986 projects by May 1. Sent them to: MoNPS Grant, P.O. Box 6612, Jefferson City, MO 65102.

CHAPTER NEWS

Jefferson City Chapter formed: Twenty-four wildflower enthusiasts met February 27 at the Department of Conservation Headquarters to form the Jefferson City Chapter of MoNPS. Ginny Wallace began the meeting with a brief slide program about MoNPS (of the 24 present only 7 already belonged to MoNPS). Following the presentation the group set dues (\$5.00 in addition to the state dues), and a meeting time (the first Tuesday of each month, 7:30 p.m. at Department of Conservation Headquarters). After a short break giving us a chance to get to know each other, we elected officers. They are:

Theresa Johnson, President
Dennis Figg, Vice-President
John Logan, Secretary-Treasurer
Mervin Wallace & Marion Neely, Newsletter
Ginny & Mervin Wallace, Field Trips

The J.C. Chapter will have a display at Spring Fever Days at the Capitol Mall with fliers about our club including meeting and field trip dates. Our first field trip will be March 29 at 8:30 a.m. at the Department of Conservation. We're all looking forward to lots of interesting programs and trips in the coming year.

HAWTHORN CHAPTER IS OFFICIAL

Thanks to the organizational efforts of Bill Clark, Columbia is home to the second Chapter of the Native Plant Society. The group held its second meeting on February 26 with 35 people attending, and voted to call themselves the Hawthorn Chapter. Meetings will be held the fourth Wednesday of each month at 7:00 p.m.

Officers elected at the first meeting are:

President - Lisle Jeffrey, Columbia, MO
Vice President - Cal Royall, Fayette, MO
Secretary - Jeanne Barr, Columbia, MO
Treasurer - Karen Shippen, Columbia, MO

Andy Runge of Mexico wrote by-laws for the Chapter and these were adopted at the February meeting. Gary Reese volunteered to edit and mail the monthly newsletter. Cal Royall is chairman of the program committee.

Bill Clark wrote these comments about the officers in the first newsletter. "Lisle Jeffrey is second to none in his knowledge of the flora and fauna of Central Missouri. He is a fine botanist, an excellent birder, an able administrator, a sound politician, and one of the most likeable gentlemen you'll ever meet. We're very fortunate to have Andy Runge helping us. Andy is our legal guide. An attorney from Mexico, he turned down any officer's positions because he is currently

the President of the Missouri Quail Association, and will be the next President of the Conservation Federation of Missouri. Cal Royall brings a lifetime of work with the U.S. Fish and Wildlife Service to us. Jeanne Barr and Karen Shippen are long-time conservationists deeply interested in all living things."

The Hawthorn Chapter is looking forward to an interesting and busy spring with several field trips in addition to monthly meetings.

ENVIRONMENTAL ISSUES by John Doggett

As your environmental issues and education chairman - here goes, maybe a little bit like a bull in a china closet. I think that my feelings are well described by an anecdote in the February 1986 Reader's Digest, Campus Comedy, pp. 100. Anecdote: During a Psychology class, our instructor admitted she felt as if she were in "an ocean of knowledge with only a spoon to consume it". "But, Mrs. Woolen" a forlorn voice piped up, "I feel like I have a fork." well, I feel I also have a fork.

Most people who are members of a conservation oriented organization are more aware of what modern civilization is doing to our home, yes, our home because this is where we live. What we do, or do not do is really just housekeeping and how we do it determines the quality of our home. It is my intention to more or less primarily develop this report from the news media. I will use as background the various conservation publications I get along with information from members or who have you. Maybe we can get some debates going.

From a personal experience, I have watched the depreciation of what I still consider a beautiful stream of water; Little Whitewater River. I was born on a farm adjacent to it. It forms part of the boundary. As a youth it was my play ground. Fishing was good. Early, I began bass plugging and very successfully, so I now have a farm about twenty miles down the river. But today there is a difference. Soil erosion and silting has altered the character of the stream. Now, I fly-fish and release. The fish are smaller and there appears not to be very many. I am sure it's watershed contributes its fair share of twelve tons of top soil each year here in Missouri.

Another disturbing factor came forward while I was watching Wild World of Animals on Public Television Jan. 22. A statement was quoted from an earlier environmentalist who describes man as one of the most adaptable animals on earth. This is not necessarily to our advantage as we do adapt to pollution and habitat degeneration and, yes, to an ever lessening quality of life.

EDITORIAL # 1

It's still daylight outside when I drive home from work. And, I found *Androsace occidentalis* and a snake: out for a sun bath last weekend. My conclusion is that just in time to prevent my demise from cabin fever, spring is here. Ginny Wallace has an article on early flowering shrubs in this month's Mo. Conservationist Magazine which made me heave deep sighs and clean all my camera lenses. Also the next few month's field trip schedules really sound full of possibilities. It will be wonderful to hit the road again.

There seems to be a rising interest in local chapters growing in the plant society. Elsewhere in this newsletter you will find note of the forming of a Jefferson City chapter and a Columbia chapter. Sue Hollis is hoping to get Kansas City members together after the Burr Oak field trip to discuss a western Mo. organization. A warm welcome to all new members and chapters. And don't forget to keep the newsletter informed of your activities and finds.

One final note: The January 1986 issue of Audubon Magazine has a fantastic article on the saving of the Merimac River. The River They Couldn't Kill by John Madison and Len Lahman filled me with hope for our vanishing wild areas. It makes you feel that maybe, as individuals, we can do something. As plant society members our efforts really count.

Happy Trails,

Jinda Ellis

Since many of us are amateurs and rather intimidated by more formal reports, this newsletter gives us an opportunity to get in our two cents worth.

We appreciate camera ready copy - single spaced, good ribbon, 4 inches wide. If you can't do that, try to make it legible. If you aren't sure about spelling, grammar, etc., we can fix that. We would also like to know what you want to read in the newsletter.

Sue Hollis

AWARDS TO BE GIVEN

At the annual meeting this year four lucky people will be presented with the first ever MoNPS awards, in recognition of their contributions to our knowledge of Missouri's plant life.

The Erna A. Eisendrath Memorial Education Award will be presented to someone who has instilled their own enthusiasm for and knowledge of our native plants in others. This person might be a teacher, or someone who reaches people through writing, or leading field trips.

The Research Award will be given to a person who has significantly contributed to our knowledge of Missouri plants during 1985. Perhaps this person has surveyed rare plant populations, or learned more about how certain types of plants exist in certain habitats, or studied the plants on a particular area.

One lucky person or organization will be the recipient of the Plant Stewardship Award for their efforts to protect our native plants and their habitats, through purchase, registry and/or management practices.

The individual who has made outstanding contributions to any or all aspects of Missouri botany will be presented with the prestigious Julian A. Steyermark Award.

Who will these lucky people be? You tell us. The decisions will be difficult because we have so many deserving members. But we need to know who they are. Please take a few minutes to fill out the nomination form below and return it by April 25 to MoNPS Awards, P.O. Box 6612, Jefferson City, MO 65102.

Award _____

Name of Nominee _____

Nominator _____

Address (of nominator) _____

Phone _____

Please attach a brief description (1-2 paragraphs) of the nominee's achievements-- why do you feel they deserve this award?

Thank you from the Awards Committee and 1st recipients!

EDITORIAL # 2

The purpose of establishing this newsletter was to enhance communication among the membership. One part of that communication is timely notification of meetings and other matters of importance.

However, another part of the intent is to establish an informal forum for all of us to exchange information and ideas -including all those dumb questions and half baked thoughts we are all subject to now and then.

So here's your opportunity to share information. Some things you might want to write about are special locations which have an unexpected species or variety of plants, reports of new county records (these can be informal - just tell us whether you have submitted a voucher) any of those odd finds we stumble across sometimes.

Or you can ask about places or plants that interest you. Who else is interested in your favorite group? Who can tell you where a plant has been located in your county?

GROWING NATIVES or MARVIN'S GARDEN

by Mervin Wallace

In response to Dave Castaner's plea for a series on growing native plants and considerable prodding from the field trip chairperson this is intended to be the first in a series on propagating and growing native plants. Please don't consider this the only column about growing natives that should be found in this publication. Your comments, questions, and articles about this subject are more than welcome. The editorial staff needs your articles and we all look forward to learning from you.

Many of us, when we are in the field and see a particularly attractive wildflower in full bloom, have a driving urge to have that plant or one like it growing near our house. No matter what native wildflower you want to raise in your garden or naturalize on your property, I hope you get the plant by propagation not transplantation. When we dig a native plant and take it home there is one less wildflower in the wild. And there is possibly one less wildflower period, if the transplanting is not successful. Transplanting is especially damaging to the rare and unusual (carniverous) plants.

The most acceptable method of propagating native plants is by seed (sexual). Other methods that do not result in entire plants being removed from the wild include stem and root cuttings, layering, and division (asexual).

Growing wildflowers from seed is not always as simple as gathering the seed, sowing them in the spring, and waiting for them to come up. Some seeds have an impervious seed coat that prevents water from entering the seed and starting the germination process (mechanical dormancy). There are numerous forms of chemical dormancy involving chemicals that must be changed chemically or removed (leached out) before germination will begin. Some seeds have both mechanical and chemical dormancy combined resulting in double dormancy. There are also seeds that have to be exposed to light before germination will occur, an interesting subject that will have to be covered at a different time. The various forms of seed dormancy are not nature's way of thwarting the efforts of the would be gardner of native plants but methods of insuring that the seed will germinate at a time when they will have a chance to survive.

Methods of overcoming dormancies are numerous but not terribly complicated. If planted in outdoor beds immediately after harvest, most seeds native to Missouri will germinate the following spring after being subjected to the cold, wet conditions afforded by our climate. A few species need a second year before germination will occur outdoors. It is not always advantageous to plant seed in outdoor beds after

harvest. Small seeds may be carried too deep into the soil or washed away by rain. Many larger seeds may be eaten by birds and rodents. If you have only a few seeds to start with, you might not have any germinating the following spring.

Methods of breaking dormancy are available which not only save seeds and shorten the time they are dormant, but also allow germination to occur when you want it to. Many seeds need only to be stored dry in a refrigerator for a period of time. Impervious seed coats can be scarified, a process of breaking, scratching, mechanically altering or softening the seed coverings to allow water and gasses to pass into the seed. Scarification processes include soaking the seeds in acid, rubbing with sandpaper, filing holes in the coats, soaking in hot water, and placing in a warm, moist, nonsterile medium to permit bacterial breakdown of the coats. Most forms of chemical dormancy can be broken by a process called stratification or moist-chilling. Basically stratification involves layering or mixing seeds in a moist medium and placing them in a cold, 32-50 degrees F (0-10 degrees C), place for one to four months. The length of time depends on the species. Temperatures just above freezing are more preferable to reduce premature germination.

By now you may be wondering which treatment should be given those seeds you collected last summer. The references listed below will help, but there are many species that have not been researched to determine their germination requirements. I have also noticed numerous discrepancies between these references about germination requirements. The most common discrepancy is one book stating that a species needs a cold treatment only while another says that a cold damp stratification is needed for the same species. I don't have the experience yet to know which is most reliable.

In future articles I want to discuss growing and propagation techniques for individual species. I would like to know which species you are interested in learning about so please start those cards and letters coming.

REFERENCES

- Hartmann, Hudson T. and Dale E. Kester. 1983. Plant Propagation Principles and Practices. 4th edition. Englewood Cliffs, N.J.: Prentice-Hall.
- Phillips, Harry R. 1985. Growing and Propagating Wild Flowers. Chapel Hill, N.C.: Univ of N.C.
- Rock, Harold W. 1981. Prairie Propagation Handbook. 6th edition. Hales Corners, Wis.: Wehr Nature Center.
- Sullivan, Gene A. and Richard H. Daley. 1981. Directory to Resources on Wildflower Propagation. St. Louis, MO: Missouri Botanical Garden

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RESPONSE APPRECIATED

A note of thanks to those who have responded to the Speaker's Bureau article in the last newsletter. So far we've received about a half dozen responses. We'll try to get the information put together sometime this spring or early summer. If you'd like to give programs to other groups on behalf of MoNPS, but don't have photos, this is a good time to think about taking them. Consider your topic and list the photos you will need. Then be sure to take your camera with you in your travels.

