SEPTEMBER

4–5 Sat. & Sun.  
St. Louis  
Field Trip to Schwarz Prairie. This will be a two day trip to S.W. MO to look at prairies. Details flexible. Contact Jim Bogler (314) 842–0111.

7  
Tues., 7:30 p.m.  
Jefferson City  

18  
Sat.  
Jefferson City  
Field trips to Prairies south of Sedalia. For more information contact Becky Washburn, (314) 635–3194.

18  
Sat., 9 a.m.  
St. Louis  
Fall Field Trip to Faust Property, led by Jim Bogler. This area contains some long undisturbed areas. We will be doing a plant inventory. Meet at Faust County Park parking lot.

22  
Wed., 7:30 p.m.  
St. Louis  
Forest Trees – Habitats and Characteristics program by Charlotte Schneider, Naturalist at Rockwood Reservation. Also, how the flood affects trees. Monthly meeting at the Ridgway Center, Missouri Botanical Garden.

23  
Thur., 7 p.m.  
Springfield  
Trees, Shrubs and Vines program by Carl Hunter, author of Wildflowers of Arkansas and Trees, Shrubs and Vines of Arkansas. Monthly Meeting at the Springfield Conservation Nature Center. A walk to identify trees, shrubs and vines of Missouri will start at 6 p.m. before the 7 p.m. meeting.

24–26 Fri.–Sun.  
BOARD MEETING  
MONPS State Board Meeting and Field Trips in the St. Louis area. See article on page 3.

OCTOBER

1  
Fri., 5:30 p.m.  
Kansas City  
Return Field trip to Shawnee Mission Park prairie area to see fall flowers. Meet at Ogg Rd. just south of Oak Ridge Stables. Contact Mike Laird (913) 677–2830 for further information.

2  
Sat., 8:00 a.m.  
Kansas City  
Field trip to Ivan Boyd Prairie and woodlands near Baldwin City, KS. We should see a good variety of both prairie and woodland species on this trip. Meet in the Walmart parking lot on the frontage road east of I–35 between 75 St. and 87 St, just south of the J.C. Penney outlet store at 8 a.m., or at the prairie at 9 a.m. Bring water and lunch. For more info call Mike Laird, (913) 677–2830.
5 Tues., 7:30 p.m. Jefferson City  Autumn—the Least Known, Best Season for Mushrooms program by Phil Roos, of the Missouri Mycological Society. Monthly meeting at the Runge Conservation Nature Center.

8–9 Fri.–Sat. St. Louis  Annual Systematics Symposium. The theme this year is “Plants and Man.” Missouri Botanical Garden. Contact the Garden for details.

9 Sat., 10 a.m. St. Louis  Field Trip to Monsanto's Chesterfield Village site, led by Mary Smidt. This is the third and last trip to do a plant inventory. Exit Hwy 40, north on Olive St. Rd. to first stoplight and go left (west) on Chesterfield Parkway North about 1/2 mile to Monsanto World Headquarters gate.

10 DUE DATE FOR MATERIAL FOR NOVEMBER–DECEMBER Petal Pusher. Please send meetings 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.

15 Fri., 8:30 a.m.–1 p.m. St. Louis  World Ecology Day, University of Missouri–St. Louis, J.C. Penney Building. The theme is “Healing the Earth: Community Based Strategies for the Future.” The keynote address will be delivered by Dr. Paul Ehrlich.

16 Sat. Jefferson City  Field Trips to look for fall mushrooms. For more information contact Becky Washburn, (314) 635-3194.

23 Sat., 9:00 a.m. Kansas City  Fall Colors at Maple Woods in Gladstone. Take North Oak Trafficway north to NE 76 St.; go east for some distance; 76 St. goes right to the park. Watch for signs.

27 Wed., 7:30 p.m. St. Louis  Annual Members Show—and—Tell. Show us where you have been or what you have done this year. 10 slides maximum. Monthly meeting at the Ridgway Center, Missouri Botanical Garden.

28 Thur., 7 p.m. Springfield  Wreath Construction with Native Plant Material program by Louise Wienckowski. This will be a hands on workshop for all those who wish to participate. Bring a wreath of grape vine, honeysuckle, trumpet vine, etc. Some dried plant material will be furnished or bring your own. Monthly Meeting at the Springfield Conservation Nature Center.

EDGAR DENISON 1904–1993

We were saddened to hear of the death of Edgar Denison on Saturday, August 14th. He would have been 89 on August 31st. Edgar was one of the founders of the Missouri Native Plant Society (MONPS). He was also active in the Webster Groves Nature Study Society. Edgar was born in Stuttgart, Germany, and came to the United States in 1927.

Edgar’s garden in Kirkwood was a showplace where he grew wildflowers from seed. He was the author of Missouri Wildflowers, a field guide much used by many interested in learning about wildflowers. The book, which was illustrated by him also contains his own photographs. It is now in its fourth edition, and has sold 85,000 copies since it was first published in 1962. He was also an artist. The Missouri Botanical Garden recently had on display his watercolors of wildflowers which he had donated to them. Many people knew him from his numerous botany field trips most notably at Shaw Arboretum.

In 1985, Edgar received the MONPS Ema R. Eisenhardt Memorial Education Award. This year MONPS again honored him with an award; the Julian A. Steyermark Award for superior contributions to the appreciation, knowledge and conservation of Missouri native flora. The Steyermark Award is the highest MONPS award. Edgar is the only person to receive two of the Society’s awards.

There will be a tribute for Edgar at 11 a.m. September 11, at the Brick Manor House, Missouri Botanical Garden's Arboretum. Our sympathy to his wife Ruth and his family. He will be missed by all who knew him.

September – October 1993  Petal Pusher  Page 2
1993 FALL BOARD MEETING

Join fellow Missouri Native Plant (MONPS) members this weekend to welcome the Eastern Native Plant Alliance (ENPA) to the St. Louis area. The ENPA is holding their Annual Meeting at the Missouri Botanical Garden. Some MONPS activities this weekend will be held jointly with ENPA such as the Saturday field trips and banquet.

Major subjects to be addressed at the ENPA meeting are: Invasive Exotics, and Deer – Native Plant Impact. Other committees meeting on Saturday morning are: Nursery Liaison and Public Outreach & Education.

There will be a choice of three Field Trips on Saturday afternoon: Shaw Arboretum, Valley View Glades or the Missouri Botanical Garden.

See the July–August issue of Petal Pusher for registration information for Saturday's lunch, banquet and field trips.

HELP WANTED: We are appealing for help from individuals who can spend a few hours working at the ENPA registration table Saturday morning, 25 September. Also needed are individuals who can provide transportation for ENPA members to and from local field trip locations. This is an opportunity to meet those from other states with interest in native plants, etc.

Please contact the Program Director, Linda Ellis (314) 353–1449 for details and schedule.

September – October 1993

Petal Pusher

Page 3

WHAT IS THE EASTERN NATIVE PLANT ALLIANCE?

The Eastern Native Plant Alliance (ENPA) is an association of organizations that promote and demonstrate native plant conservation in the eastern U.S. and southeastern Canada. Its purpose is to provide a network for exchanging ideas and defining issues, and to facilitate cooperative action.

ENPA fosters public education about and appreciation for native plants. It seeks to be a catalyst for effective conservation efforts. Common interests are explored at annual meetings and through a regular newsletter.

You can learn more about ENPA in September when the Missouri Native Plant Society will be hosting their annual meeting in St. Louis at the Missouri Botanical Garden, September 24–26, 1993. (See article above.)

Membership ($25 per year) is open to organizations and to individuals who are committed to serving as liaison to one or more such organizations. For more information about ENPA, write to P.O. Box 6101, McLean, VA 22106.

AN AID TO CONTROLLING EXOTIC SPECIES IN MISSOURI

by Jack H. Harris

The Missouri Department of Conservation (MDC) has produced a document: MISSOURI VEGETATION MANAGEMENT MANUAL. This manual will be of assistance to those with responsibilities for vegetation management and who find it necessary to suppress and control exotic species of vascular plants. These aggressive species may threaten many native plants and natural communities in Missouri. The information included draws on material from a similarly titled manual from Illinois, data from the Nature Conservancy, the Natural Areas Association (NAA) Compendium on Exotic Species, and with additional material from the MDC/NAA Exotic Plant Species Workshop. (See Petal Pusher, Vol. 8, No. 3, p. 7.)

Interested parties may inquire of Tim Smith, Botanist, MDC, Natural History Division, P.O. Box 180, Jefferson City, MO, 65102 to determine the applicability to their situation.

MONPS ITINERARY

Sept. 24 Fri. 5:30 – 7:00 p.m. Informal dinner at the Mekong Restaurant, 3131 S. Grand.

7:30 – 9:00 p.m. Program on the Cahokia Mounds at the Ridgway Center.

Sept. 25 Sat. 8:00 – 9:00 a.m. Registration and coffee at the Ridgway Center with ENPA participants.

9:00 – 12:30 p.m. Field trip to Cahokia Mounds with Dr. Gayle Fritz, ethnobotanist from Washington University and Leonard Blake.

12:30 – 1:15 p.m. Return to Ridgway Center for lunch with ENPA.

1:15 – 2:00 p.m. Dr. Nancy Morin will speak on the Flora of North America project.

2:00 – 5:00 p.m. Field Trips with ENPA members. Three concurrent trips will be offered.

A. Shaw Arboretum, Gray Summit, MO.

B. Valley View Glades (near Hillsboro).

C. Missouri Botanical Garden grounds.

6:30 – 9:00 p.m. MONPS & ENPA Banquet at Favazza's restaurant. Speaker is Susanne Greenlee, Assistant Land Steward for the Missouri Chapter of the Nature Conservancy.

Sept. 26 Sun. 9:00 – 12:00 a.m. MONPS Board Meeting at Ridgway Center. Tour of the Garden available to those not attending the meeting. All members are invited to attend the Board Meeting. See what your Society is doing. Get involved.
QUARTERLY BOARD MEETING HIGHLIGHTS

JUNE 20, 1993

President Karen Haller presided at the quarterly board meeting, held June 20, 1993 at Tonanzio's Country Restaurant, in Guthrie, MO, with 14 board members in attendance.

Treasurer's Report: There was a balance of $10,147.08, as of June 17, 1993.

Committee Reports:

Archives: Jim Bogler has been receiving good flora lists and field trips notes after chapters were reminded to place archivist on their mailing lists.

Editorial: Karen Haller said that the new editorial committee is finalized with all nominees accepting.

Petal Pusher: Pat Harris reported that the 4th issue of 1993 is almost finished. All unpaid members will be dropped from the mailing list, a suggestion was made to add an extra label to remind these members that this issue will be their last. Karen Haller asked Ann Wakeman to check with Columbia chapter president concerning lack of renewals from this chapter.

Environment/Education: Jack Harris reported that House Bill 536 on noxious weeds, including ban on collecting roadside native plants, has been passed by the Legislature and is awaiting signing by the governor. (See article on page 5.) MONPS letters had been written to several legislators in support of the bill. Jody Eberly reported on a proposal to create a 2,000 acre natural area near Carmen Springs. A local timber operator has appealed the decision and the Ozark Showy Chapter has requested to be an intervenor in the process.

Field Trips: Karen Yates said that September meeting field trips will be publicized in the next Petal Pusher, Linda Ellis reviewed plans for the September meeting held in conjunction with Eastern Native Plant Alliance (ENPA).

Membership: Pat Grace stated that she will be working with Linda on registration of members at the upcoming meeting and that a new T-shirt and new brochures will be available.

Awards: Awards were announced at the annual meeting June 19, with Father James Sullivan receiving the Erna R. Eisendrath Memorial Education Award and Edgar Denison receiving the Julian A. Steyermark Award.

Old Business

Wildflower Award Program: Jim Bogler requested comments on the wildflower award program draft brochure; program should be ready by next year.

Internal Structure Proposal: Much discussion took place on pros and cons of the new internal structure proposal. A motion to adopt the philosophy of changing the internal structure, including appointment of a task force to identify changes needed, was moved, seconded and failed (MSC).

New Business

Board Appointments: Karen Haller noted that the new president will need to reappoint all committee chairs; also several new board appointments will be needed in the immediate future.

Piedmont Environmental Council: Letter was received asking for support for the Rural Land Conservation Act of 1993, currently being introduced in the U. S. Legislature. The bill involves saving land near urban areas through tax deference methods. Motion not to write support letter, was moved, seconded and carried (MSC).

Alert Handout: Ann Wakeman discussed possibility of starting an alert handout, to be used for native plant problems, such as illegal collecting, selling of illegally collected plants, weed problems, etc. This could be sent to gardeners, posted at nurseries, and other pertinent places. Ann will have a draft of a MONPS alert for the December meeting.

St. Louis Flower Show: MONPS was invited to have a booth at the 1994 show. Since not enough interest was received at the booth in the 1992 show, it was decided not to sponsor a booth at the state level.

National Wildlife Federation Summit: Karen Haller handed out information on NWF workshops.

New Book: Karen Haller gave out information on new book, Hegman's and Fairy Candles, by John Sanders, which is being offered at a discount to MONPS members.

Wildflower Festival: Pat Harris passed around information about the 1994 Crested Butte, CO Wildflower Festival (800-545-4505).

Highway Spraying: Merv Wallace indicated concern that Highway Department indiscriminate spraying was harming desirable plants. Numerous points were discussed, including possibility of supplying plant ID photos at different growth stages, giving awards to "careful" sprayers, adopt Iowa Highway Department roadside wildflower folder idea, do something in conjunction with the 1994 Wildflower Proclamation, write article on wildflower ID for Highway Department internal publication. MONPS chapters should try to work positively with individual districts as efforts at state level have met with little success. Some encouraging signs are that the Highway Department has hired a person to be in charge of T, R & E plants on highway land and also has agreed to stop planting crown vetch.

WELCOME TO NEW MEMBERS

During the months of April and May, the following persons joined MONPS. Welcome to all of you. We hope to see you at some of our events.

Daryl J. Anderson, St. Charles
Cyndi A. Evans, Joplin
Gwen Fuchring, Maryland Heights
John W. Harrison, Kansas City
Jeri Matzen, St. Louis
Tom O'Gorman, Kirkwood
Carole Rienstra, Creve Coeur
David N. Stokely, Billings
Steven H. Sykes, Springfield
Diggers Dealt Deterrent

By Jack H. Harris

On July 8, 1993 Lt. Governor Roger Wilson signed HB-536 into law. Section 1.1 of this law declares that, without permission, it is a misdemeanor to dig roots, bulbs, tubers, and rhizomes of plants for commercial purposes from any real property or the right-of-way of any state or county highway or roadway. All law enforcement officials, Department of Natural Resources and Department of Conservation agents are authorized to enforce this law. Wide support for the bill was evident at the signing ceremony by the attendance of a number of dignitaries including Senator Mike Lybyer and various members of his immediate family, Gerald Ross and Tim Smith of the Missouri Department of Conservation, Cliff Jett of the Missouri Department of Highways and Transportation, and several garden club representatives. MONPS representatives in attendance were Karen Haller (Immediate Past President), Jack & Pat Harris, Environment Committee, and Linda Lathrop, Springfield representative to the MONPS Board of Directors. The new law goes into effect August 28, 1993. MONPS members are encouraged to write to Lt. Governor Wilson, Senator Lybyer, the Missouri Department of Highways and Transportation, and the Missouri Department of Conservation and thank them for their efforts to protect this valuable Missouri resource. (See also Petal Pusher Vol. 8, No. 3, p. 4: “SUPPORT SB-383” for more details on this issue.)

Purple Loosestrife

The aggressive nature and genetic repertoire of purple loosestrife (Lythrum salicaria), as renowned as it is even for an exotic species, is perhaps more adaptive than it was first credited with. This plant has been popular with gardeners for all the usual exotic species reasons for many years. From Virginia* comes a tentative warning to all who will listen. Seems that nurseries from that region have been pushing cultivars of Lythrum that they assured customers are sterile, or were derived from L. virgatum, another European species but not the “bad guy.” And then from the University of Minnesota comes bad news that even if cultivars of either species are sterile when self-polinated, they are highly fertile when they are pollinated from wild L. salicaria.

Purple Loosestrife has been known in Missouri since the 1950s. It was declared a noxious weed by state law in 1989. As such the sale of L. salicaria or any of its hybrids is prohibited. It is also illegal to distribute plant seeds, plants or plant parts in the state. But is it safe to grow a different species of Lythrum without risking yet another viable hybrid? If so, which cultivars are safe? All the answers are not in yet. Stay tuned for more on this issue.

This year soggy weather patterns have turned many areas normally considered marginally suitable for L. salicaria into prime swampy habitat. Showy purple/ magenta patches may be showing up along roadsides and other low areas. The Missouri Department of Conservation has a Purple Loosestrife Report Form that is available for the public to use to report populations of this aggressive exotic. A copy may be obtained by writing to: Tim Smith, Natural History Division, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO. 65102.

*Nuff said.


JHH

New Nature Center for Jefferson City

The Missouri Department of Conservation (MDC) opened the Runge Conservation Nature Center on July 10, 1993. It is located just off U.S. 50, one mile north on Highway 179.

The center’s theme is “Missouri Habitats.” You will learn about the Wetlands, River and Streams, Ponds and Lakes, Forests, Glades, Prairies, Caves and Agricultural Lands in our state. The center has interactive, hands-on exhibits including videos that show how MDC uses techniques such as trapping wild turkeys and radio-tracking river otters to manage Missouri wildlife. The facility also has an indoor wildlife viewing area, a library, classrooms, and an auditorium. There are five nature trails, including one that is disabled-accessible, surrounding the Nature Center that will lead visitors through a variety of habitats.

Building hours are 8 a.m. to 6 p.m. Trails are open daily 6 a.m. to 8 p.m. from April 1 through October 31, and daily 6 a.m. to 6 p.m. from November 1 through March 31. Closed New Year’s Day, Thanksgiving, and Christmas. There is no charge for programs, but reservations are required. For more information or to get on the mailing list for the bi-monthly newsletter describing upcoming programs call (314) 526-5544.

September – October 1993

Petal Pusher

Page 5
**VULTURE SHADOW**

Bulldozers push off
from the safe shore of the road.
Shredding oaks and cedars
like future ghosts of newspapers
reporting the opening of a new hotel.

Bulldozers wallow like oil tankers
through waves of limbs.
They coast down the stream bank
as earth’s flesh screeches
its protest of the impaling blade.

Cement spreads its smothering
bulk
across the now prostrate grass.
Its vulture shadow darkens
where it touches, entombing all life.

Now the dim reflections
of the next acre under the knife
glower from steel framed glass.
A question calls from within,
“Where are the hills, streams and trees?”

John Thaxter Hollister
(MONPS Springfield Chapter member)

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**TIDBITS**

**CONTAMINATED SOIL: CAN PLANTS GET THE LEAD OUT?**

(Adapted from August 1993 National Geographic)

An article in the Earth Almanac section describes how weeds are being investigated as a means of removing lead from a 25 acre contaminated New Jersey chemical factory site. Two weeds, common ragweed and hemp dogbane, had been observed growing and thriving on this wasteland, while accumulating lead in their tissues. Researchers have planted more of these weeds, as well as other plants, to determine if significant amounts of heavy metals can be drawn from contaminated soils, a technique called plant remediation. The researchers say that all plants store some metals in their roots, but few have an advantage by also storing metals in leaves, which may be a mechanism to avoid being eaten by bugs or infected by fungus. If a weed’s lead intake can be increased to 1% of its mass, the plants could be cut, dried and burned to reclaim and recycle the lead. The specific plants are not named, but the hemp dogbane is probably Apocynum cannabinum and from the leaf structure in the photograph with the article, the ragweed appears to be Ambrosia trifida (giant ragweed); “other plants” are not described.

**FAKE FUNGUS FLOWERS FOOL INSECTS**

(Adapted from Nature Magazine and The Mycophile)

Scientists have discovered a rust fungus that invades a plant, causing production of yellow “pseudoflowers,” which attract insects that allow the fungus to reproduce. This type reproduction had not been discovered previously. Normally a tall, slender stem with delicate, pale blue flowers that droop off the top, this transformed rock cress sends up a yellow “floral” shoot because of a fungal infection. When a rust fungus invades this plant, Arabis holboellii (Holboell’s rock cress), the plant doubles the number of leaves produced and adds extra swirls to the base rosette. Its stem then develops a dense cluster of yellow leaves that makes the plant look like a buttercup, both to insects and botanists. The yellow color develops because male and female fungal sex organs cover the leaf surface. These fake flowers attract insects, which tend to stay at the yellow “pseudoflowers” up to five times as long as at real flowers. The fungus exudes a sugary fluid that makes the “pseudoflowers” smell sweet and can provide the insect visitor with 10 to 100 times as much sugar as real flowers. While visiting the yellow “petals,” insects unknowingly pick up and distribute sex cells, making possible sexual reproduction. Other types of rust fungi make sweet fluids, but no other has been discovered that causes the host plant to make fake flowers.

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**ARCHIVES & FLORA FILE**

Reminder: The archivist (see list of officers) solicits MONPS information for the Archives and Missouri floristic information (all types) for the MONPS Flora File. See articles in January–February 1993 issue of the Petal Pusher.

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**PUBLICATION OF INTEREST**

Poisonous Plants of North America by Randy Westbrooks, US Department of Agriculture, & James Preacher, Chief, Emergency Management Division, US Army Corps of Engineers (226 pages, $29.95)

An identification guide to plants, native and cultivated, that are toxic to humans by way of contact or ingestion. (The above has not been reviewed by MONPS, and this listing is not an endorsement.)

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September – October 1993
MISSOURI NATIVE PLANT WEEK

by Jack H. Harris

It's now official! Governor Mel Carnahan has signed the proclamation declaring that June 5-11, 1994 is MISSOURI NATIVE PLANT WEEK in observance of the 15th anniversary of the founding of the Missouri Native Plant Society (MONPS). (See adjacent panel for a facsimile of the proclamation.) The selection of the specific dates of 5-11 June was settled upon as an optimum and centralized time period around which to schedule wildflower excursions, etc., to celebrate the anniversary and to educate the public about native plants.

We hope this announcement will stir the latent historian in some of our more senior members. This editor invites them to share their knowledge of unique Society historical events so that appropriate anecdotes may be published in the pages of this newsletter for all to enjoy over the period of the 1994 year.

We also hope that each Chapter will take this opportunity to plan special organized activities and events that may further the goals of the Society.

By way of reminder, the Society's By-laws cite our purpose as: "...to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri; to educate the public about the values of the beauty, diversity, and environmental importance of indigenous vegetation; and to publish related information." Perhaps someone could distill all that into a concise motto that would fit neatly on a letterhead.

It's in your hands!

P.S. Please drop Governor Carnahan a note and thank him for his timely support. (address: Office of the Governor, P.O. Box 720, Jefferson City, MO, 65102)
Missouri Native Plant Society
P.O. Box 20073
St. Louis, MO 63144-0073

INSIDE THIS ISSUE

- Edgar Denison 1904–1993
- Fall Board Meeting & Field Trips
- Diggers Dealt Deterrent
- Missouri Native Plant Week

PATRICIA HARRIS
9708 GREEN PARK RD.
ST. LOUIS MO 63123