

March - April 2002

Vol. 17, No. 2

Missouri Native Plant Society

March

- 11 Mon., 7:00 PM Columbia **Missouri's Tallgrass Prairies: An American Original**, the newest video from the Dept. of Conservation. It traces the origins of the state's most fertile landscape from its presettlement grandeur to current restoration efforts. The 49 minute video features an original music score, narrative by James Earl Jones and captivating footage of prairie wildlife.
- 27 Wed., 7:30 PM St. Louis **The Landscape and Flora of Bolivia** presented by Bill Summers. Chapter meeting at Missouri Botanical Garden, Ridgway Bldg.

April

- 1 **Due date for material for May-June *Petal Pusher*.** Please send meeting and field trip information and articles (typed double-spaced) to the editor by this date. Send e-mail to: paharris@mac.com
- 13 Sat., 9:00 AM St. Louis **Field Botany: Sunset Park** in Florissant to see the white trillium. Take I-270 north to McDonnell Blvd./Shackelford Rd. exit, then 6 mi north to Humes Lane, then left at light at Post Office to parking lot at top of hill. Call Linda Barteau for info 314-830-0642.
- 24 Wed., 7:30 PM St. Louis **Chapter meeting.** Topic to be announced. Meeting held at Missouri Botanical Garden, Ridgway Bldg.
- 26-28 Fri.-Sun. **Spring Board Meeting & Field Botany Trip.** See page 3 for details.



Graphic by Ann Grotjan

2002 MONPS Meeting & Field Botany Schedule

Mark your calendars now! The quarterly MONPS Board meetings have been scheduled for 2002. Join other native plant enthusiasts for some exciting field botany in these areas. More information on these weekends will be in future issues of the *Petal Pusher*.

June 7-9	Warrensburg. Field botany trips to Knob Noster and Powell Gardens.
Sept. 13-15	Keokuk, Iowa. We'll visit remnants of sand prairies along the Des Moines River.
December 7	Columbia. This will be an all day business meeting. Plans will be made for 2003.

Rare Missouri Natives Endowed

By Kimberlie McCue

Everybody can use a little help from their friends—even plants! Now some of the rarest plants in Missouri will be getting that help thanks to a generous donation from the Edward K. Love Conservation Foundation to the Center for Plant Conservation (CPC). The donation of \$105,000 will endow eleven rare native Missouri plants in the CPC's National Collection of Endangered Plants. Proceeds from the endowment are paid annually to botanical gardens (CPC Participating Institutions) in the Midwest region to support their conservation work with the endowed plants. The Foundation, chaired by Andy Love, Jr., is based in Missouri and was established to aid the protection and conservation of wildlife in the state. "This is a significant gift. The stable annual funding sponsorships provide is often key in supporting a sustained effort to conserve genetic material and achieve restoration in the wild," said Kathryn Kennedy, Executive Director of the Center for Plant Conservation.

Plants (and Participating Institutions) that will benefit from the Love donation:

Chicago Botanic Garden/Morton Arboretum

Agalinis skinneriana
Asclepias meadii
Aster furcatus
Platanthera leucophaea
Scirpus hallii

Missouri Botanical Garden

Callirhoe bushii
Geocarpon minimum

Nebraska Statewide Arboretum

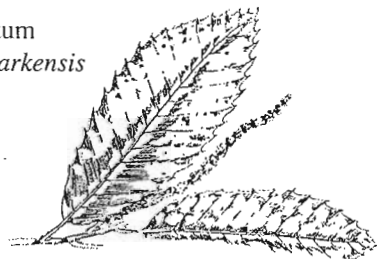
Castanea pumila var. ozarkensis

Holden Arboretum

Cyperus grayioides
Plantago cordata

Mercer Arboretum

Lindera melissifolia



Nominations Committee Report

by George Yatskievych

The Society will elect two board members this spring to take office following the annual meeting in June. The Nominating Committee (listed below) hereby nominates the following persons to fill the two (3 year term) board positions.

Pam Haverland — Columbia, MO

Robin Kennedy — Columbia, MO

If you would like to be considered for one of these positions or if you would like to nominate someone else, send a written nomination and a written second from another member. Also send a written confirmation of willingness to serve from the nominee. These documents should be sent to the address shown below before March 20, 2002.

George Yatskievych, Chair,

MO Botanical Garden, PO Box 299, St. Louis, MO 63166

Nominating Committee Members:

Kathleen Wood (St. Louis)

Bill Summers (St. Louis)



Welcome Max Towler

By Jack H. Harris

When board member Kimberlie McCue accepted the appointment to the Society position of Secretary, that left her board position open. In order to fill that vacant position, the President placed in nomination before the Board of Directors (BoD) the name of Max Towler. That nomination was subsequently approved by the BoD. Max will fill the board position until June 2003. At that time the position will be filled by routine election procedures.

We all wish to extend our sincere welcome to Max and look forward to his association as an officer of the Society. (See back page for address.)

Spring 2002 Field Botany Trips & Board Meeting

APRIL 26 – 28 MONTAUK STATE PARK

As the nationally recognized scenic Current River literally “springs” forth at Montauk State Park, so we shall begin to explore the ancient landforms and botanically rich central Ozarks starting from the same site. The offerings this trip include a possible sighting of a native orchid that has 2 stamens, rather than the more common single stamen versions—but perhaps you already knew that? And then on to

visit the largest (by area) privately owned forest in Missouri. This forest has been an economic model for the use of environmentally sensitive and sustainable management methods for over 50 years.

We look forward to being visually inundated by a rainbow of spring wildflowers.

How’s your annual serendipity cup? Is it full yet? Join us!

ITINERARY

- 26 April Fri., 7:00 PM **Evening get-together.** Held in the Searcy Building across the road from the lodge. Greg Iffrig will give a short presentation on Pioneer Forest and Jamin Bray, the naturalist at Montauk, will also give a presentation on the park.
- 27 April Sat., 8:00 AM **Field Botany Trip.** Leave from parking lot near lodge at Montauk State Park and drive to **Angeline Conservation Area.** We will head over to Hwy 19 via Hwy 119, Hwy E and Hwy K. Go south on Hwy 19 to Round Spring (about 26 mi.), arriving at about 8:45 AM. At Round Spring we will meet any members who may not have been staying at Montauk and consolidate into as few vehicles as needed. We will continue south on Hwy 19 for about 8 more miles to the site for the small white ladies slipper orchid and a diverse dolomite glade on Angeline Conservation Area.
- Sat., 11:00 AM **Depart Angeline C. A.** and go back north on Hwy 19 about 5 mi. to our first stop on a tour of **Pioneer Forest.** Greg Iffrig of Pioneer Forest will lead us through several stops along and east of Hwy 19, including a virgin shortleaf pine site and Missouri’s first natural area, Current River Natural Area. Please bring your own picnic lunch and be prepared for a full day enjoying spring in the Ozarks. You can find out more about Pioneer Forest at pioneerforest.com.
- Sat., 4:30 PM **End field trip** and return to Montauk State Park. There should be time for supper before the Board meeting at 6:30 PM.
- Sat., 6:30 PM **MONPS Spring Board Meeting.** Held in the Searcy Building across the road from the lodge.
- 28 April Sun. **Own your own.** For those staying at Montauk State Park, there are opportunities for wildflower viewing there on Sunday morning. More information will be provided at the Board Meeting on Saturday night.

LODGING

Montauk State Park has a lodge, duplex cabins and camping. The telephone number for reservations is 573-548-2434.

Lodge or cabin rates:

1 person	\$50.00
2 persons	\$54.00
3 persons	\$58.00
4 persons	\$62.00

Since this is fishing season, we suggest you make your reservations early.

The Lodge also has a dining room which is open from 7:00 AM to 8:00 PM. The restaurant will also prepare a “sack” lunch for Saturday for those interested **IF YOU ORDER IT THE NIGHT BEFORE.**

If you are unable to make reservations at the Park or would rather stay somewhere else, you could try Eminence, since we will be heading in that direction.

Montauk State Park is 21 miles southwest of Salem on Hwy. 119 in Dent County.



Dear *Echinacea* Enthusiasts:

By Jennifer Delisle

Kelly Kindscher of the Kansas Natural Heritage Inventory will lead a research team at the University of Kansas to conduct a range wide conservation assessment of all *Echinacea* species in the U.S. and Canada. Plants in this genus are highly valued as herbal medicinal plants and as a result, extensive and potentially unsustainable harvesting of wild populations has occurred. This project is funded by the Forest Service because two species are listed as threatened or endangered, and others are of concern due to harvesting pressure. In addition, we are conducting field work this summer in Kansas and North Dakota.

We are just getting started with this project and would like to find out who within the Heritage network has information on any *Echinacea* species. We'd also like to know if you know anyone within or outside the network who is working on this genus, or on other medicinal plants, especially as it relates to harvest (we are familiar with the work of Binns, Baum, Foster, Hurlburt, McKeown, and Price).

If your program does have any information on this genus, we'd be interested in hearing from you. We have requested EOR data from NatureServe. Here are some of the types of additional info we'd like to gather from you:

Have you populated your state plant characterization abstract (PCA) for any *Echinacea* species? Do you have a state ranking form for any *Echinacea* species? Do you have harvest information? Do you know of others we should contact for more info?

For your information, the new *Echinacea* taxonomy proposed by Binns et al. is:

Echinacea purpurea
E. laevigata
E. pallida
var. *angustifolia*
var. *pallida*
var. *tennesseensis*
var. *sanguinea*
var. *simulata*
E. atrorubens
var. *atrorubens*
var. *neglecta*
var. *paradoxa*



We'd also be glad to provide more details on this project to anyone who is interested. Contact Jennifer Delisle at jdellisle@ku.edu to express your interest in being involved.



Membership List:

Please check the two digits following your name. These digits describe the Treasurer's records on the status of your dues. For example an "02" means you are paid up until July of this year. An "03" means your dues are paid until July of 2003. Life memberships are also indicated. If there are any corrections, please advise the Treasurer, Donna Kennedy (see back page for address).

Welcome to New Members

We're happy to welcome these new members to the Missouri Native Plant Society. We hope you will join us soon at some of our upcoming meetings and field botany trips.

Patrick B. Baldwin, Hampton, VA
Pamela Borden, Springfield
Cathy Bylinowski, Kansas City
William M. Edwards, Mason, OH
David Larson, Ballwin
Donna Sauer, Osceola



Calling all Native Plant Societies

The California Native Plant Society (CNPS) and the Center for Biological Diversity invite you to join us in a new project—the Native Plant Conservation Campaign.

The goal of the Campaign is to assemble a national network of native plant societies, botanical gardens, and other plant conservation organizations that will support each other's work, exchange information and work together to create a strong national voice in support of native plants.

We will advocate for:

- Improved staffing and funding for Federal botany programs on National Parks, National Forests, BLM lands, and within the U.S. Fish and Wildlife Service;
- Improved staffing and funding for prevention and control programs for invasive exotic organisms;
- Increased use of local native plants in restoration;
- Increased funding for plant science research and education;
- Changes in Federal law better to conserve imperiled plants.

A full project description is available at <http://www.cnps.org/NPCC/npsc.pdf>

For more information about the Native Plant Conservation Campaign visit <http://www.cnps.org/npsc.htm>

Emily B. Roberson, Ph.D., Director Native Plant Conservation Campaign, 415-970-0394 or emilyr@cnps.org

(Ed. Note: MONPS members may wish to individually participate and/or bring this notice to the attention of friends of our native plant communities.)

Mark-up Your List of Sedges

By Jack H. Harris

From the Fall 2001 *Kansas Wildflower Society Newsletter* we find news that two species of plants, previously unknown to science, have been recently described by Tony Reznicek and Paul Rothrock, researchers from the University of Michigan and Taylor University. Both species are members of the sedge family Cyperaceae. They are (1) *Carex shinersii* (Shinner's caric-sedge) with a range of south-central Kansas to north-eastern Texas, and (2) *Carex missouriensis* (Missouri caric-sedge) is found from western Indiana through eastern Kansas, which of course includes Missouri—so add one more to your carefully maintained *Carex* list. Both species apparently prefer wet prairies and wetlands.

Of course the plant species themselves have been around a long time, merrily and sustainably reproducing their kind. They just haven't been recognized and accorded the official rank of a separate species and named until recently. The earliest collection of *Carex missouriensis* dates back to 1870. It was then called *C. bicknellii* or less often *C. bicknellii* var. *opaca*. Reznicek and Rothrock were the first to recognize that these two species were actually distinct. Their paper was published in mid-2001 and entitled "The Taxonomy of the *Carex bicknellii* Group (Cyperaceae) and new species for central North America" (Novon 11:205-228).

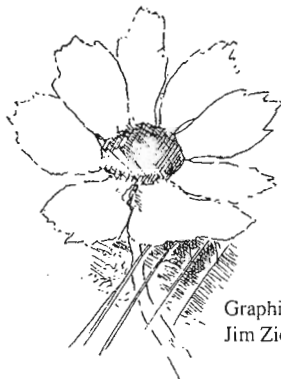
Dr. Paul McKenzie, US F&WS, Columbia, collected the material that now represents the type specimen for *Carex missouriensis*. This is the first species of flowering plant with a type collection from the state of Missouri to be described since about 1968 when *Echinacea simulata* was described. For a thorough discussion of the *C. bicknellii* situation in Missouri, see *Steyermark's Flora of Missouri, Vol. I, Revised Edition, 1999* (pp. 282–285) by George Yatskievych.

Carex missouriensis is now listed in the Flora of Missouri data base currently displayed on the web at :

<http://ridgwaydb.mobot.org/mobot/missouri/index.asp>
and both new species are listed in the w3 TROPICOS data base at :

<http://mobot.mobot.org/W3T/Search/vast.html>

Many thanks to Dr. George Yatskievych, Flora of Missouri Project, Missouri Botanical Garden, for providing the historical thread and technical information for this article.



Graphic by
Jim Ziebol

Invasion of Rust Fungi

This is a request for information on two new exotic rust fungi on ground ivy (*Glechoma hederacea*), English Daisy (*Bellis perennis*), and groundsel (*Senecio* spp.) in North America.

The rust fungi are *Puccinia glechomatis* and *P. lagenophorae*. Both were recently introduced to North America. To assess their present distribution in North America, their spread, and their impact on wild plants and ornamentals we need and would very much appreciate your help. On the following webpage <http://www.btny.purdue.edu/Herbaria/rust/> you will find descriptions of the characters of these fungi and their host plants, when and where you can find them, and how you can support us.

We expect that the species will reach Wisconsin, Illinois, Missouri, Arkansas and the southeastern states by 2001 to 2002. *P. glechomatis* can be found from July to late fall.

Please forward this information to persons who might be interested in this study or who might help us.

Thank you for your collaboration.
Markus Scholler, Ph.D. Director, Arthur & Kriebel Herbaria
Dept. of Botany & Plant Pathology, 1155 Lilly Hall
West Lafayette, IN 47907-1155
Voice: (765) 494-4623 (office) or 494-4644 (lab)
Fax: (765) 494-0363
email: scholler@btny.purdue.edu
webpage: <http://www.btny.purdue.edu>



Upcoming Conferences

Native Plants in Native Places: Botanical Treasures Off the Garden Path

The 22nd Annual Conference of the Florida Native Plant Society, 21–24 March, 2002, Tallahassee, Florida

For more information about the conference or to register, go to www.fnps.org or call 561-462-0000. **Deadline** for mail or fax registration is March 14, 2002.

The North America Prairie Conference

Kirkville, MO, 23-27 June 2002.

Selected subtopics:

Restoration and Reconstruction of Prairie;
Prairie Biodiversity and Its Importance to Society;
Legislative & Organizational Initiatives to Preserve Prairies;
Prairie Education & Outreach;
Commercial Ventures: Backyard Prairies & Landscaping;
Prairie as Pollution Control & Environmental Improvement.

For more information, see the web site at:
www.napc2002.org/

Missouri Native Plant Species of Conservation Concern – 2001

by Jack H. Harris

The following table is a summary count of plant species determined to qualify for ranking as to their degree of imperilment in Missouri. It is derived from the Missouri Department of Conservation (MDC) report "Missouri

Species of Conservation Concern Checklist - June 2001." However the values listed in the right hand column are not the sums of ranked/listed species but are *estimates* of the total statewide taxa from other sources identified below.

PLANT TYPE	RANK									Total Mo Taxa
	S1	S2	S3	S4	SH	SX	S-Other	SRF	#Listed	
Lichens	12	2			1		9	2	26	436 ¹
Liverworts	10						9		19	400 ²
Mosses	47					1	31	8	87	2382 ³
Ferns & Allies	11	7	1		1	1	3	2	26	
Flowering Plants	186	100	17	1	83	4	54	12	457	
Totals	266	109	18	1	85	6	106	24	615	3218

Where: **S1** = critically imperiled, extremely rare and / or vulnerable, 5 or fewer occurrences;
S2 = imperiled due to rarity or vulnerable to extirpation, 6–20 occurrences; **S3** = rare and uncommon, 21–100 occurrences; **S4** = widespread, many occurrences but of long term concern; **SH** = occurred historically, may be rediscovered; **SX** = extirpated from the state; **S-Other** = aggregate of various tentative rankings due to lack of data, uncertain sources, etc.; **SRF** = reported falsely – error persists in literature. ⁴

A companion publication that contains descriptions and illustrations of 37 of the listed plants which are at greatest risk is *Missouri Plants of Conservation Concern*, by Tim Smith, 2000, MDC.

MDC publications are available upon request to Missouri Department of Conservation, PO Box 180, Jefferson City, MO, 65102-0180; 573-751-4115.

¹ The total number of Lichens (taxa) in Missouri as reported in "Checklist and Bibliography of Missouri Lichens" by Douglas Ladd, 1996; Conservation Commission of the State of Missouri.

² The total number of Bryophytes (Liverworts and Mosses) in Missouri as estimated in "The Biodiversity of Missouri: Definition, Status, and Recommendations for its Conservation," 1992. Missouri Department of Conservation & the Mark Twain National Forest, USFS.

³ The total number of vascular plants (ferns & flowering plants) estimated at the end of 1997. See Table 7, page 83 in *Steyermark's Flora of Missouri*, Revised Edition 1999, by George Yatskievych, Missouri Department of Conservation and the Missouri Botanical Garden.

⁴ The S1 ... S4, etc., ranking system was developed by The Nature Conservancy, Conservation Science Division and adapted for use by MDC.

INFORMATION ON JOINING MISSOURI NATIVE PLANT SOCIETY

SOCIETY DUES

(Chapter dues additional)
 Student \$5.00
 Regular \$10.00
 Contributing \$20.00
 Life \$200.00

CHAPTER DUES

Columbia \$6.00
 Jefferson City \$5.00
 Kansas City \$5.00
 Osage Plains00
 St. Louis \$5.00

(Circle all that apply)

Do not publish my name and address in the membership list.

Make check payable to: Missouri Native Plant Society

Mail to: Donna Kennedy, Treasurer
 816 Samone Ct., Ballwin, MO 63021

Name _____
 Street _____
 City, State _____
 9 digit Zip _____ Phone _____
 e-mail _____

- Spring Field Botany & Board Meeting
- 2002 Membership List
- Last Call for Board Nominations

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