

MONPS joins Arkansas friends in Springfield

The end of May brings another joint meeting of the Missouri Native Plant Society with the Arkansas Native Plant Society for a study of prairie flora and a hunt for Mead's milkweed.

Meetings are planned to take place at the Springfield Conservation Nature Center in southeast Springfield, Mo.

Look inside on page 4 for an article by Sherry Leis on Mead's milkweed. Also of note for this field trip will be a silent auction that is intended to raise money to bolster the Hudson Fund. Read about that on page 3.

Tentative schedule

Friday, May 29

7 p.m. — Emily Horner will give a 45-minute program on Mead's milkweed at the Springfield Conservation Nature Center auditorium. The auditorium will be open at 6 p.m. for those arriving earlier.

Saturday, May 30

8 a.m. — Leave for field trips to prairies from the parking lot of the Super 8 Motel (3034 S. Moulder Ave., which is on the south side of Battlefield Road in southeast Springfield — (417) 889-7313). Bring your own picnic lunch.

5 p.m. — Silent auction open at Springfield Conservation Nature Center multipurpose room.

7 p.m. — Societies' board meetings at Springfield Conservation Nature Center multipurpose room.

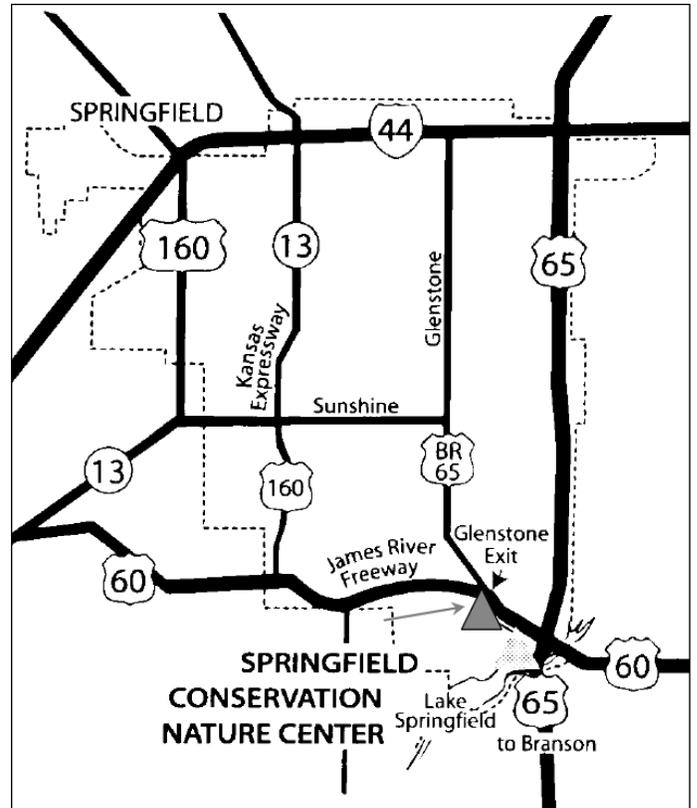
9 p.m. — Must be out of Springfield Conservation Nature Center facility.

Sunday, May 31

8 a.m. — Leave for field trip from parking lot of the Super 8 Motel (see above)

Noon or earlier — Field trip concludes for drive home.

For questions about schedule or arrangements, contact Rex Hill at (314) 849-1464 or rexhill@earthlink.net.



Motel options

Super 8 Motel (South side of Battlefield Road between Hwy. 65 and Glenstone Ave.)
(417) 889-7313
Double or single room: \$55.69 per night plus taxes

Baymont Inn and Suites
3776 S. Glenstone Ave.
(417) 889-8188
Double or single room: \$80.10 per night plus taxes

Clarion Inn
3333 S. Glenstone Ave.
(417) 883-6550
Double rooms: \$89.95 per night plus taxes

Calendar of Events

Hawthorn Chapter

May 11: Regular Meeting at 7 p.m. at the Unitarian Church, 2615 Shepard Blvd. Mike Currier will speak on Missouri Natural Areas and the plants found in them.

Thursday, May 21: Lunch with Native Plant Enthusiasts. 11:30 a.m. at the Uprise Bakery at 10 Hitt St.

Sunday, May 24: Walk at the Marshall Diggs Conservation Area. Meet at 8 a.m. at the MDC Research Center.

June 7: Dedication for Marge McDermott's Memorial in Rocheport Pocket Park at First and Central, next to Katy Trail. Dedication will take place at 1 p.m. followed by refreshments at Jean Graebner's home.

June 18: Bobwhite quail/native plant field day at Bradford farm. Please plan to help with our booth. We will sell both plants and books.

Thursday, June 25: Lunch with Native Plant Enthusiasts. 11:30 a.m. at the Uprise Bakery at 10 Hitt St.

Saturday, June 27: Prairie Walk in Pettis County. Meet at 8 a.m. at MDC Research Center, Columbia

For more information, contact Paula Peters (573) 474-4225

Kansas City Chapter

May 1-3: Spring plant sale at Powell Gardens.

May 16: Field trip to private prairie near King City, Mo., owned by MONPS member Larry Mayer. Meet at 9 a.m. at northwest corner of Wal-Mart parking lot, located at junction of Highway 152 and Interstate 35. Lance Jessee is the sponsor for this field trip and can be contacted at (816) 444-4933.

Saturday, June 6: Annual Mead's Milkweed survey at South Fork Prairie. Those who wish to caravan to South Fork, plan on meeting at K-Mart in the northeast corner of the parking lot across from old Bannister Mall location, at 9 a.m. Sack lunch and water are suggested. Following the Mead's survey at South Fork, members will move on to Tickwood Ranch to tour the prairie restoration project of Dave Alburty and Carol Pranulis. Tickwood is just minutes from South Fork. David and Kathy Winn are sponsors for this trip, and can e-mail directions to you, if you wish to drive out on your own. Call (913) 432-4220 or (913) 486-4220 for details.

Saturday, June 13: Field trip with members of Missouri Native Plant Society and the team of herpetologist Mindy Walker of Rockhurst College, at Kill Creek Prairie. Dr. Walker is a herpetologist who has been involved in the study and preservation of timber rattlesnake populations in the Kansas City area. Members will help document numbers of Mead's milkweed, and enjoy the many other native plants at Kill Creek. Contact David and Kathy Winn for details of this trip. (913) 432-4220 or (913) 486-4220.

Osage Plains Chapter

April 20: Ferns — Emily Horner. NEW TIME 6:30 p.m. Conservation Department

May 16: Field trip TBA (We always meet at the library parking lot at 9 a.m.)

May 18: Mead's milkweed — Josh Cromer — 6:30 a.m. Conservation Department

June 13: Field trip — prairie

June 15: Native Gardening and Native Plant Sale - Josh Jones Wild Goose Gardens

July 11: Meeting and field tour at Dale Jennings Bring a covered dish and a story to share

Ozarks Chapter

Sunday, May 3: 1 p.m. Field trip to enjoy the blooming of the native azaleas in Oregon County. Led by Rose Scarlet and Ellen Kauffman. Contact Ellen Kauffman for more details: (417) 764-3640 or kauffman@socket.net

Tuesday, May 19: Evening field trip in lieu of chapter meeting. Meet in the parking lot of the MDC Regional Office in West Plains. For more information, contact Susan Farrington (417) 255-9561 x 307.

Tuesday, June 16: Evening field trip in lieu of chapter meeting. Meet in the parking lot of the MDC Regional Office in West Plains. For more information, contact Susan Farrington (417) 255-9561 x 307.

Perennis Chapter

No dates submitted

St. Louis Chapter

Wednesday, May 27: Chapter meeting at 7:30 p.m. at Powder Valley Nature Center, 11715 Cragwood Dr., Kirkwood (off Geyer Rd., between Watson and Big Bend Rds.). Program by Rex Hill on prairies. This talk is a synopsis of the class he and Nels Holmberg are giving on prairies, sponsored by MONPS, at the Meramec Community College in May.

Wednesday, June 24: We have an annual evening walk at one of the local parks. This year we are going to take the "Trail Among the Trees" walk at Rockwoods Reservation at 6 p.m. To get there, take Interstate 44 to the Eureka Hwy. 109 exit, drive north and the park is on the left. We meet in front of the Visitor's Center.

Other calendar dates

MONPS member Sylvia Forbes has compiled a list of calendar dates celebrating nature-related causes.

May

- American Wetlands Month
- National Wildflower Week — 4-9
- International Day for Biological Diversity — 22

June

- Great Outdoors Month
- Perennial Gardening

Month

- National Rose Month
- World Environment Day — 5
- National Trails Day — 6
- Nature Photography Day — 15
- Summer Solstice — 21

Silent auction planned for field trip

By Kathy Thiele

Immediate past president
and auction chairwoman

It's time to root through your books, your works of art and perhaps your plants.

It's time for a silent auction.

The proceeds from items donated by Missouri members will benefit the Hudson Fund, which provides scholarships for those deserving people who do research that benefits our native plants.

Our friends from the Arkansas Native Plant Society will also have items for auction, and their proceeds will be used for an equally beneficial purpose by their organization.

For those of you who have never been involved in a silent auction, it works like this – people make donations of items

which are left on display for people to view and bid on by writing their name and their bid on a sheet by the item. At the end of the auction period, the highest bidder wins (and pays for) the auction item.

The auction is scheduled for the week-end of May 29-31, which is our MONPS state field trip in Springfield, Mo. Folks can view auction items on Friday evening and even begin bidding on them starting at 6 p.m., before (and after) the presentation from our guest speaker. Then on Saturday evening, the doors open at 5 p.m., and people can continue bidding until after the annual meeting.

Cash and personal checks will be accepted but not credit cards.

WE NEED DONATIONS!

For this auction to be successful we need lots of donated items but they must

have something to do with the native plant theme of our societies. Some examples might include (but are not limited to) used books, new books, artwork, wood-working items, crafts using native plants, live plants, gift certificates to native plant nurseries, perhaps even certificates for guided trips to areas with rare native plants.

If you have items to donate, it would be helpful if you would contact me in advance of the meeting (contact info on the last page). However, we will not turn down any donations that show up unannounced. If you can't make it to the meeting, send your donated item with someone from your region. Use your imagination, bring your money, and let's have some fun for a good cause!

Phlox pilosa

Common in dry to mesic prairies and open oak savannas, *Phlox pilosa* often grows in rocky or sandy areas. Its hairy stems earn it the common name of downy phlox. It also is known as prairie phlox.

It grows 3 feet tall. Its leaves are widely spaced and have no petioles. The leaves taper to pointed tips and are up to 4 inches long and 0.75 inches wide.

It blooms in midspring to midsummer, with some blooming lingering into fall.

Flowers bloom in clusters at the tops of the stems. Each flower is three-quarters of an inch wide with five pink petal-like lobes at the end of a narrow tube about a half inch long.

The details of its flowers are identical to *P. divaricata*, but *P. divaricata* is smooth-stemmed. *P. divaricata* is found in open woods, wet streambanks and bottomlands.

Sources: "Tallgrass Prairie Wildflowers" by Doug Ladd and "Missouri Wildflowers" by Edgar Denison.



Dues renewal time nears

By Ann Earley

Membership chairwoman

Membership renewals for the July 2009-June 2010 year are due.

Please check the top line of your mailing label. If it shows the date 20090630, your dues are now payable.

To renew, please look for the renewal envelope in this issue of the Petal Pusher. Please remember to complete your contact information and your society and chapter dues preferences.

If you have questions about your membership status, please contact me (see back page for contact information).

We value our members and urge you to renew today!

New members

- | | |
|----------------------------------|--|
| ■ Eric Feltz, St. Louis | ■ Carolyn Navarre, Mountain View |
| ■ Ted Bolich, Clinton | ■ Evie Harris, Maryland Heights |
| ■ Sharon Warnaca, Clinton | ■ Susan Appel, Leawood, Kan. |
| ■ Cynthia Walker, Sikeston | ■ Lindsay & Scott Namestnik, North Liberty, Ind. |
| ■ Jennifer Gruhn, St. Louis | ■ Mary Millman, Berkeley, Calif. |
| ■ Ken O'Dell, Paola, Kan. | |
| ■ John Petzing, Monticello, Ill. | |
| ■ Sibylla Brown, Leon, Iowa | |
| ■ Susan Treadway, Gladwyne, Pa. | |

Unlocking the secrets of Mead's milkweed recovery

By Sherry Leis

Our spring meeting will focus on the search for Mead's milkweed (*Asclepias meadii*).

This milkweed once ranged throughout the tallgrass prairie region, but it is now restricted to isolated populations in a few states. As a result Mead's milkweed is listed as threatened range wide and endangered in Missouri.

It can be found in the Glaciated Plains, Springfield Plateau, Osage Plains, and St. Francois Mountains regions of Missouri. Although plants in these regions fall under the same species name, they have some morphological differences. The most notable are the St. Francois Mountain plants. Occurring on igneous glades, they are more robust in that they are much taller and flower more prolifically. The plants in the other regions tend to be on prairies and can be very difficult to find, especially if they are not in bloom.

Mead's milkweed is a long-lived perennial plant reproducing from rhizomes or seeds. It has a single green nodding inflorescence and is often confused with green milkweed or dogbane (Figure 1). Mead's has 3-7 pairs of opposite leaves and a smooth hairless stem, unlike green milkweed, which has a hairy stem (Figure 2). A small percentage of plants tend to flower in a given year and even fewer actually produce fruit (Figure 3).

Numbers of Mead's milkweed plants fluctuate annually but in general have been on the decline for some time. The Mead's Milkweed Recovery Team, led by Emily Horner, has been involved in annual censuses of known populations and restoration efforts. Restoration efforts have included attempts to cross-pollinate plants by hand as well as collection of seed used to grow and transplant seedlings (Figure 4). Wild hog eradication also became a necessity when the animals were found rooting around near the Mead's milkweed populations within the St. Francois Mountains.

Another point of focus is learning more about the source of the decline. The decline of Mead's is somewhat of a mystery to grassland ecologists in Missouri. Speculation ranges from loss of habitat and pollinators to changes in disturbance patterns like grazing, fire and haying of the prairies. Throw in the complicating factor of ever-changing weather patterns and the waters only get more muddled. You can really start to pull out your hair when you find out that Mead's populations in Kansas seem to be relatively stable.

The best way to learn more about this plant would be to conduct some experiments, but unfortunately the small populations are precious and must be handled thoughtfully. That's one reason for augmenting the populations with seedlings.

Another reason for augmenting the current populations is to enhance genetic diversity within local populations. When populations of sexually reproducing plants become small and isolated, genetic material becomes less diverse, and the chances for

Continued next page



Photo by Emily Horner

Figure 2. Mead's Milkweed in bloom (Profitt Mountain in the St. Francois Mountains).

From the previous page

successful reproduction more limited.

Perhaps one day, we'll have enough plants to not only better sustain populations, but also with which to conduct some trials.

In lieu of traditional experiments, Missouri prairie ecologists are taking an adaptive approach to learn more about Mead's. They are building data sets of Mead's populations over time to cross reference with weather and known management actions. Comparisons will be made within and between populations to better understand trends and triggers.

The recovery team has also piggy-backed Mead's research onto a study of the effects of patch burn grazing on Niawathe Prairie. (Patch burn grazing draws on the synergy of fire and grazing to manage prairies, but that's another story).

Plans are being developed with St. Louis University to conduct a three-year pollination study.

Historically, Missouri farmers have annually hayed prairies. Haying could eliminate a plant's ability to reproduce for the year unless the cutting occurred after seed maturity. Many years of haying could have stimulated vegetative stem production, but depleted nutrition stores and prevented flowering. Prescribed fire occurring in late summer or fall may stimulate flower production for the next year, but the effect of spring fires may differ.

Finally, the effect of grazing is uncertain and under study. Mead's doesn't appear to be as toxic as other milkweeds, but it seems to be avoided by cattle for the most part. Emily and the recovery team hope that understanding the effect of these variations in management through the multifaceted approach described above will unlock the secrets of Mead's milkweed recovery.

More information including conservation areas that are known to have Mead's can be found at: <http://mdc.mo.gov/nathis/plantpage/flora/meads/>.



Photo by Emily Horner

Figure 3. A Mead's milkweed pod on Proffitt Mountain in the St. Francois Mountains.



Photo by Emily Horner

Figure 4. Larry Rizzo transplanting Mead's seedlings raised by Powell Gardens.



Figure 1. Mead's Milkweed in bloom.

Hawthorn Chapter

Submitted by Nadia Navarrete-Tindall, chapter representative

With excerpts from the MONPS-Hawthorn Chapter January-February newsletters submitted by various members.

The Hawthorn Chapter has a new president.

Vanessa Melton, who was elected vice-president in January has assumed the role of president after past-recent president Nancy Langworthy resigned because of personal reasons. While, Jean Graebner and Paula Peters remain secretary and treasurer, respectively, our chapter is now looking for a volunteer to fill the vice-presidency position.

During the regular meeting in March, Jean Graebner reported on the development of the pocket park at Rocheport. She informed that a tulip tree was planted in memory of member Marge McDermott and a picnic table and a pink-to-rose granite stone will be engraved and placed near the tree. The site is located near the Katy Trail and is surrounded by native vegetation.

Member Glenn Pickett informed members present about a proposal to offer modest grants to Columbia Public Schools teachers for educational projects. The proposal was approved which consist in offering \$250 for grants for the 2009-10 fiscal years. Glenn and other grant committee members would evaluate and approve one or two proposals up to the \$250 amount budgeted.

Lincoln University has an opening for a regional educator — horticulture/native plants (Saline County) . More information is at <http://www.lincolnu.edu/pages/110.asp?PositionID=396>.

Kansas City Chapter

Submitted by Daniel Rice, chapter representative

The Kansas City Chapter held its March 19 meeting at the Winstead's restaurant on the Country Club Plaza. We are having scheduling problems with the Discovery Center, but are hopeful everything will be worked out in time for our May meeting.

One topic covered was our participation in the Kansas City Flower Lawn and Garden/Home Show the 26th to the 29th of March. All shifts are taken, which is great! We also discussed our April 11 field trip to Isley Park Woods in Excelsior Springs, Mo. This is a great north slope woodland with lots of spring ephemerals, including bloodroot.

Another topic of discussion was our participation in two Earth Day events. We will have a display table and lots of information to hand out at the Sprint Earth Day Festival on April 17th. Then on April 18th, we will be selling plants from Missouri Wildflower Nursery at the Lakeside Nature Center's Earth Day Celebration.

We also discussed our May 16 field trip to the restored private prairie of Larry Maher near King City, Mo. This will be an all day field trip. Hopefully, we will be able to see Mr. Maher's stand of yellow Indian paintbrush, which he has been painstakingly trying to increase over the last 30 years.

The meeting adjourned at 9 p.m., with everyone excited about the upcoming events and field trips we will be a part of. If you have any questions or would like to know more about our future events, please feel free to e-mail me at drice95875@aol.com.

Osage Plains Chapter

Submitted by Marlene T. Miller, chapter representative

First I need to make a correction to our last report. We did not have meetings in December and January not January and February as I wrote. FYI: That's what happens when you get older :).

This will be my last report for Osage Plains. We put our farm up for sale today. We will be moving to Georgia when it sells to be near our son. I will have a whole new set of plants to learn and I am barely getting started with the ones in Missouri. My son assures that regardless of its red color, the red Georgia clay will grow anything so ...

Our first field trip is Saturday, April 4, so I don't have a report on it since it hasn't happened as of the time this report must be in to our editor. If the sun will cooperate the next few days to bring out a few more things, it should be a nice one as it will be at the Peterman property. This is always a trip that we all look forward to doing since it has such a wide variety of spring plants.

Our first meeting for the year was Feb. 16 with 14 members and friends present. Our second meeting was March 16 with 21 members and friends present. The topics were very different and both were interesting and informative.

In February Dorothy and Jim Harlan spoke on hazelnut trees or *Corylus americana*. We were given several handouts that included identifying characteristics and how to grow. There was a synopsis of the Arbor Day Foundation's research on hazelnut trees. They have been encouraging the planting of hazelnut trees not only as ornamentals and nuts for personal use but also as a tree farm type operation. Even the shells are marketable as mulch.

After the presentation we discussed meetings and field trips. Our current president will be on a hiatus again in August and September (maternity leave) and will need help with her duties if she is still our president at that time. We have an opportunity to save some native plants from gardens at Wakonta Headquarters. They are in gardens that they do not plan to continue to maintain.

In March our speaker was Ted Bolich. The topic for the evening was prehistoric petroglyphs and the wondrous archeology of The Petrified Forrest and the desert southwest. He had a lot of information that was new to most of the participants including a handout on terminology. He presented information on chronological periods, dating, rock varnish, types of figures and interpretation.

If you ever get out into the area of the Petrified Forrest and Painted Desert in Arizona, don't just plan a quick drive through. You need to spend a couple days at least hiking back into the area of the petroglyphs and other rock art. His pass-around pictures, display and slides (Emily helped with those) were terrific. There are even a few that appear to be representations of plants.

As he kept reminding us, however, interpretation is in the eye of the beholder. During the meeting we firmed up field trips and meetings, had a brief over view of Community Supported Agriculture programs, and made plans for the Wakonta plant

Continued next page



Photos by Alicia Mullarkey

Tall larkspur (*Delphinium exaltatum*) is found in two Missouri counties, Shannon and Howell.

From the previous page

dig. April to mid May. Elections will be in April. We changed our meeting times from 7 p.m. to 6:30 p.m.

If you live near Clinton, please come join us. See our field trip and meeting list elsewhere in this Petal Pusher or call me at (660) 694-3581.

Ozarks Chapter

Submitted by Susan Farrington, chapter representative

At our February meeting, Alicia Mullarkey, Missouri Department of Conservation plant ecologist graduate intern, gave a great presentation about her work evaluating the ecology and population status of tall larkspur (*Delphinium exaltatum*).

Tall larkspur is a rare plant that is only known from two counties in Missouri (Shannon and Howell), and is globally rare as well as locally rare. Alicia found that of the 13 known populations in Missouri, five are declining, six are maintaining and two are increasing in population. However, two of the populations that are maintaining their numbers have exhibited a major decline in the percentage of plants that are blooming.

The largest known population (650 plants) has declined to 228 plants, and the percentage of reproductive plants has plunged from approximately 80% to 5%. This decrease in blooming plants overall reflects the increasing canopy cover in most of the sites. Tall larkspur appears to be a dry-mesic woodland species, preferring partial openings in the canopy. Historically, fire and/or beavers maintained these open condi-

tions, and management by fire and/or thinning is recommended to improve the habitat for this plant. The good news for the plant is that three new populations were discovered in 2008, one of which is in a prescribed burn unit and is doing very well. Alicia recently accepted a position as prairie preserve manager for the University of Nebraska in Omaha. We wish her the best of luck in her new job!

At our March meeting, Chris Crabtree, natural resource steward with Department of Natural Resources State Parks, gave an awesome presentation about mushroom identification. His photographs were amazing, and he inspired us all to learn much more about mushrooms. As great as morels are, there are so many more worth learning about! Thank you, Chris, for taking the time out of your busy schedule to enlighten us!

We are looking forward to what promises to be a wonderful presentation by Theo Witsell at our April meeting (we'll report on that next time). From May to July, we decided that we'd prefer to be outside looking at wildflowers while the days are long, rather than sitting inside watching programs, so we'll be holding evening field trips instead of our regular chapter meetings.

Perennis Chapter

Submitted by Allison Vaughn, chapter representative

On Feb. 21, Perennis members met in Ste. Genevieve to learn about viticulture in Missouri. We visited three wineries in the area: Ste. Genevieve, Charleville, and Crown Valley.

Kelly Tindall led the tour and discussed how the common

Continued next page

From the previous page

native woodland species, *Vitis aestivalis*, was crossed to create the state's well-known Norton/Cynthiana grape.

Along the tour, members listened to vintners discuss grape-growing techniques, wine-making skills, suitable Missouri soils and various barrel materials used in our grape-growing regions. Several wines offered to members were aged in Missouri white oak barrels, offering a distinctive taste unmatched in French oak barrels or stainless steel. Members had a rollicking good time, staying in Ste. Genevieve from 11 a.m., when the wineries opened, to almost 7 p.m., just as they were closing for the night.

In March, following a massive ice storm that caused extensive damage to trees in southeast Missouri, President Kent Fothergill arranged a trail clean up day at Morris State Park. A crew of volunteers spent the day clearing the trails in time for spring wildflower season. Wildflowers arrived early on Crowley's Ridge, with reports of *Claytonia virginica* springing up in February, just in time for another round of sleet and snow.

St. Louis Chapter

Submitted by Martha Hill, chapter representative

On Feb. 25, with about 50 people in attendance, Steve Buback, the nature reserve foreman at Forest Park in St. Louis, gave a winter tree identification program, with a field trip the following Saturday.

Since I was not in town in February, George Yatskievych, our chapter president, kindly sent me his notes, saying that 15 people braved the frigid and breezy weather to attend this walk with Steve, held at the Forest 44 Conservation Area, for a hands-on demonstration in identifying trees in winter.

For a change of pace, on March 25, George Yatskievych gave a program on "Philosophy and Practice of Preparing Pressed Plant Specimens." The title was a tongue twister, though the talk was tantalizing. Anyone who has attended one of his talks already knows that he is a very good speaker, and did not disappoint us with this one, either. He brought in several herbarium specimens and we got to see a couple of homemade plant presses that both he and Rex Hill brought in for demonstration.

At the March meeting we voted for officers for 2009-10. The following people will begin their term in July 2009:

Steve Buback — President

John Oliver — Vice president

Jane Walker — Secretary

Mary Smidt — Treasurer

Pat Harris — Chapter representative

As a reminder, our April meeting will be on the 22nd, with a talk by George Van Brunt, who is a retired science teacher, on "The Ins and Outs of Pollen Morphology, Mostly the Outs." I've heard an early version of this talk and look forward to learning more. He has some interesting photos of pollen grains and is able to discuss this subject in common, easily understood terms.



Nemastylis geminiflora

Take a hike and find some prairie iris

By Susan Farrington

Plant community ecologist

Keep your eye out in early to mid May for prairie iris (*Nemastylis geminiflora*). It is rare in our state, typically found on rocky glades, prairies or open woodlands, growing on calcareous substrates (dolomite or limestone).

The blue flowers are very showy and are about the size of a silver dollar, with a white ring in the center and yellow stamens. It's a tough one to catch, though, because each blossom lasts only for part of a day, opening in mid-morning and closing by mid to late afternoon. Since the plant usually has several blossoms, a given plant can flower for several days each year, and a population should have one or more flowers visible over a period of about 10 days.

In Shannon County (south central Missouri) in 2008, this blooming period was approximately May 5 to May 15. So take a Mother's Day hike, and try to find it!

The plant may be more widespread than we realize, but is seldom recorded because of its very short blooming period. It is known from the following counties so far: Cass, Franklin, Iron, McDonald, Shannon, St. Francis, St. Genevieve, Taney, Vernon and Washington. If you find it elsewhere, you've got a county record!

If you have landowner permission, and the population size allows, collect a specimen to submit to the Missouri Flora Project. If not, take some clear photographs and note the location, how many plants are present (blooming and vegetative), the habitat and associated species.

The Missouri Department of Conservation tracks the species, so let me know if you find it (contact information on back), and I'll help you submit a heritage record and/or a specimen to the Missouri Flora project.

Look-alike species: celestial lily (*Nemastylis nuttallii*) is a bit more common, especially in the southwestern corner of the state. Unlike prairie iris, its flowers open in the late afternoon and close during the night. Also, note that common blue-eyed grass (*Sisyrinchium* spp.) is closely related and also has beautiful iris-like flowers. However, the flowers are much smaller (no larger than your fingernail).

Arkansas reports new Missouri genus

Another new genus has been added to the list of plants growing in Missouri.

In the recent spring/summer 2009 issue of *Claytonia*, the newsletter of the Arkansas Native Plant Society (Vol. 29-1), Linda Ellis reports finding large quantities of an unusual wildflower during a drive from northwestern Arkansas into adjacent Missouri. She notes that the large, showy, mystery plants formed dense populations and that the flowers were attracting diverse and abundant butterflies.

Eventually, Arkansas state botanist,

Theo Witsell was able to identify the plants as *Scabiosa atropurpurea* (pin-cushion flower), an Old World member of the teasel family, *Dipsacaceae*, that is commonly cultivated as an ornamental in gardens.

This tall annual has lots of flowers in a dense, more or less globose head subtended by an involucre of bracts. It might easily be mistaken for a member of the sunflower family (*Asteraceae*). The corollas are white or pale lavender-tinged and contrast nicely with the purple stamens.

Unlike the familiar teasels, *Scabiosa* is

not spiny.

Despite its beauty and apparent usefulness as a nectar plant, Linda cautioned that because of its rank growth the species has the potential to become an invasive exotic in open habitats in the Ozarks.

Interested readers should visit the Arkansas Native Plant Society's Web site (www.anps.org) and navigate to the *Claytonia* page, where Linda's original article was published. It includes a beautiful set of drawings of the plant and its structural details.

KCWildlands dives into restoration

By Daniel Rice

Kansas City chapter representative

KCWildlands has had a busy late winter/early spring, especially on the restoration side.

Our seed team has put down all the remaining seed at Jerry Smith Park, Blue River Glades, Rocky Point Glades in Missouri and Ernie Miller Park in Kansas.

This is seed gathered during 2008 at these sites. Part of the gathered seed

was used for seedling propagation, with the remainder being sown directly on the sites.

Spring burn season has started, with a good burn at Rocky Point Glades in late February. After the burn, two deer enclosures were installed to monitor the damage done by the deer at this site. The east side of Jerry Smith Park was burned in March. Again, it was a good burn. The Missouri Department of Conservation also held a burn training course in February. Several KCWildlands volun-

teers attended the class, getting more volunteers certified to participate in our prescribed burns.

May 2 is the date set for our annual seedling planting. Seedlings grown for us by several volunteers will be transplanted to restoration sites in Ernie Miller Park, Jerry Smith Park and Rocky Point Glades.

For more information about KCWildlands, visit the Web site at www.kcwildlands.org.

Chicago bans 14 invasive species

The Windy City in mid-April took an aggressive stance against invasive plant species by adding 14 invasive species to its list of restricted flora and fauna established in Chicago's Invasive Species Regulations of May 2007.

The new ordinance orders the Chicago Department of Environment to prosecute sellers and hobbyists who import, sell or possess oriental bittersweet, Japanese hops, privet and princess trees and other plants.

Businesses caught selling invasive species in Chicago face a fine of between \$1000 and \$5000, while a private grower can be charged between \$100 and \$500.

"Invasive species cause great harm to our environment," Kay Havens, director of plant science and conservation at the

Chicago Botanic Garden, told a graduate journalism student reporter for the Medill School's Medill Report. "And when they have been demonstrated to do so in our region, regulation becomes necessary."

The newly banned 14 species:

- *Akebia quinata*, chocolate vine
- *Ampelopsis brevipedunculata*, elegant porcelain berry vine
- *Anthriscus sylvestris*, wild chervil
- *Celastrus orbiculatus*, oriental bittersweet
- *Humulus japonica*, Japanese hops
- *Leymus arenarius*, lyme grass
- *Ligustrum spp.*, privet

- *Miscanthus sacchariflorus*, amur silver grass
- *Paulownia tomentosa*, princess tree
- *Phellodendron amurense*, amur corktree
- *Phellodendron japonica*, Japanese corktree
- *Polygonum cuspidatum*, Japanese knotweed
- *Quercus acutissima*, sawtooth oak
- *Ranunculus ficaria*, lesser celandine

A favorite early spring bloomer

By Retha Meier
St. Louis Chapter

One of my favorite spring flowers is the small bluet, *Hedyotis crassifolia* (also known as *Houstonia minima*). These tiny, delicate, and colorful angiosperms form a carpet of flowers March through April in fields in central and southern Missouri. Other states, from Virginia to Illinois and from Iowa all the way down to Florida and parts of Texas enjoy small bluets.

Hedyotis crassifolia is native to the United States and belong to the *Rubiaceae*, or Madder, family. Gardenia, Coffea (coffee) and *Cinchona* (quinine) are all important members of this family.

"Hedyotis" is a Greek word and means "sweet ear," whereas "crassifolia" is a Latin word and means "thick leaf." The application of the term "sweet ear" to the genus *Hedyotis* is a mystery. The genus name "Houstonia" originated because the flower was originally named in honor of an early English botanist, Dr. William Houston. This plant is a perfect example of how common names can cause confusion.

Approximately 25 names exist for the same bluet, including star-violet, tiny bluet, low bluet, southern bluet, innocence, angel eyes, Quaker ladies and violet bluet. The common name "bluet" is a name given because of the blue flowers.

As many of the common names suggest, the small bluet is miniature in size. A tiny flower with four petals is positioned at the terminal end of a stalk that ranges in length from 1-10 centimeters. Flowers appear blue but can vary from creamy white to purple to deep violet. The center of the tube appears a vivid yellow. Pollination and fertilization result in a small capsule holding a few to several spherical, dark seeds. Leaves are tiny, measuring only about a single centimeter in length and are basal. A few leaves can be found growing in an opposite pattern along the stem. Who are the pollinators? I'm not sure. From the literature, pollinators for the genus *Hedyotis* appears to be flies, bees, butterflies and possibly even thrips.

Two forms (morphs) of flowers exist — flowers with long styles and short stamens (pins) and those with short styles and long stamens (thrums). Distylous species have



Retha Meier

Hedyotis crassifolia (Syn. *Houstonia minima*)

Flowering period: March-April

Size: Grows to 3 inches tall, forming mats.

Leaves: basal only, to 3/8 of an inch long.

Flowers: Flowers always point skyward. On slender stems. Each flower has a small green calyx with four pointed lobes and tubular corolla with four white to bluish-purple lobes and a dark-

er, reddish center. There are four short stamens in the tube.

Habitat: fields, pastures, glades, floodplains, bluffs in central and southern Missouri. Common in open, sandy soils of prairies, pastures, hay meadows and old fields.

Source: "Missouri Wildflowers" by Edgar Denison and "Tallgrass Prairie Wildflowers" by Doug Ladd.

this clever arrangement that ensures cross-pollination. Charles Darwin described distylous species in his book written in 1877, "The Different Forms of Flowers on Plants of the Same Species."

In 1999, Beliveau and Wyatt hand-pollinated long-styled and short-styled morphs of *Houstonia serpyllifolia* and *H. longifolia*. They found that the intermorph crosses had a significantly higher percentage of fruit-set and seed-set per capsule than intramorph crosses. From their results,

they concluded that these two species express heteromorphic genetic incompatibility.

Robert Frost also observed bluets as noted in his poem "The Vantage Point" — "My breathing shakes the bluet like a breeze, I smell the earth, I smell the bruised plant, I look into the crater of the ant."

We could all take a lesson from Robert Frost and get close enough to the bluets to smell the flowers as well as the earth. (But then could we get back up?)

Quarterly board meeting

The quarterly board meeting of the Missouri Native Plant Society took place Dec. 6 at the Dunn-Palmer Herbarium in Columbia, Mo.

The minutes submitted by Ann Schuette, MONPS secretary

Treasurer's Report — Bob Siemer reported that our finances were in good shape.

PUBLICATIONS AND MEDIA

Petal Pusher — Chuck Robinson reported that he is always looking for articles.

Distribution Chairman — Bill Knight noted he will be mailing the *Missouriensis* this week. John Oliver complimented Bill on reducing costs.

Publicity Chairman — Kevin Bley was not in attendance, but President Hill encouraged everyone to keep Kevin posted on Blazing Star awards.

MONPS Web site — President Rex Hill talked with Dave Winn and told him everything looks great.

Missouriensis — As Bill Knight noted the latest volume is ready to be distributed. George Yatskievych said the printing job was bid out this time, but ended up going to the past printer. The next volume will be No. 30. George Yatskievych is waiting to see if there is anything to be done in conjunction with the 30th anniversary. He needs submissions.

COMMITTEES AND TASK FORCES

Membership — Ann Earley reported that we have 10 new members since the September meeting for a total of 347, with one new life member. Seventy members have not renewed and will be taken off the next *Petal Pusher* mailing. Rosters were sent to the chapter representatives.

Hudson Award — George Yatskievych said the announcement of the 2009 award had been sent to the universities. President Hill asked the committee to come back with a recommendation for the 2010 award as to whether the prize should be increased from \$500. In the past we have used donations and revenue from teaching payments to fund the award and have not used the principal or interest on the CDs. Bob Seimer will write an article for the *Petal Pusher* about the Hudson Fund requesting donations to grow the principal.

Archives — Jack Harris brought a photo of the organizational meeting and asked those present to see if they knew any of the "unknowns". He will e-mail a copy to anyone who would like one.

Awards Committee — Jack Harris would like to retire. If anyone would agree to take on the committee chairmanship, please let President Hill know. An announcement will be in the March-April *Petal Pusher*. President Hill agreed to talk to Steve Buback about the position.

Nominating Committee — President Hill thanked Sherry Leis for doing such a good job.

SOCIETY BUSINESS

Spring Meeting — The spring meeting is scheduled for the Sikeston area April 17-19. Possible field trips discussed included Morris State Park, Big Oak Tree State Park, Crowley's Ridge and sand prairies. Allison Vaughn will research possible meeting locations.

Summer Meeting — The annual meeting will be held in the Springfield area May 29-31. It will be a joint meeting with the Arkansas Native Plant Society. Rooms have been reserved at the Springfield Department of Conservation Nature Center for the Friday and Saturday meet-

ings. Sherry Leis will contact Emily Horner about speaking Friday evening and Rex will contact the Arkansas Native Plant Society about a silent auction on Saturday along with our board and annual meetings. Field trips will center around Mead's milkweed in particular and prairies in general.

Fall Meeting — The fall meeting is scheduled for the Fulton area Sept. 25-27. We will be celebrating our 30th anniversary. Larry Morrison is the chairman of the event. Paul McKenzie offered to contact Robert Mohlenbrock to see if he would be willing to speak at the banquet. We will hopefully have something for past presidents who attend.

December meeting — The December meeting is scheduled for Dec. 5, at 10 a.m. at the Dunn-Palmer Herbarium in Columbia.

Letter to John Hoskins, Missouri

Department of Conservation — A letter to John Hoskins recommending a quick filling of the botanist position vacated by Tim Smith was discussed. George Yatskievych had a draft to which President Hill will make a few corrections and additions discussed at the meeting. Sherry Leis will forward an addition to the letter mentioning the state botanist's role in training of plant collectors and the potential cost of contracting out such work if the position is left vacant. Chuck Robinson will add the information to the *Petal Pusher*.

Item from Susan Farrington — Susan participated in a roadside vegetation management meeting for the Current River area with MODOT. Several organizations were encouraging native plants and a scenic byway in the area. MODOT is trying to control spotted knapweed with weevils. The Native Plant Society was asked to support more restricted spraying on the corridors.

INFORMATION ON JOINING THE MISSOURI NATIVE PLANT SOCIETY

SOCIETY DUES

(Chapter dues additional)
 Student dues\$5
 Regular\$10
 Contributing\$20
 Life\$200

CHAPTER DUES

Columbia\$6
 Kansas City\$5
 Osage Plains\$5
 Ozarks Native Plant\$5
 Perennis\$5
 St. Louis\$5

Make checks payable to Missouri Native Plant Society

Mail to: Missouri Native Plant Society

P.O. Box 20073

St. Louis, MO 63144-0073

Name: _____

Street: _____

City, state: _____

9-digit ZIP: _____ Phone: _____

E-mail: _____

(Circle all above that apply)

\$ _____ Contribution for student research award (Hudson Fund)

* All contributions are tax deductible *

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

ADDRESS SERVICE REQUESTED

Non-Profit Organization
U.S. Postage
PAID
St. Louis, MO
Permit No. 1720

INSIDE THIS ISSUE:

- Mead's milkweed
- Tiny bluets

Missouri Native Plant Society Officers and Board Members

PRESIDENT

Rex Hill
4 Grantwood Lane
St. Louis, MO 63123
(314) 849-1464
rexhill@earthlink.net

VICE PRESIDENT

Tim Smith
1704 W. Main
Jefferson City, MO 65109
(573) 635-8085
Tim.Smith@mdc.mo.gov

SECRETARY

Ann Schuette
303 Spring Church Rd.
Troy, MO 63379
(636) 528-6544
basch@centurytel.net

TREASURER

Bob Siemer
74 Conway Cove Drive
Chesterfield, MO 63017
(636) 537-2466
aee623@prodigy.net

IMMEDIATE PAST PRESIDENT

Kathy Thiele
4 Rodelle Woods
Weldon Spring, MO 63304
(636) 300-9290
thiele6330@aol.com

BOARD MEMBERS

Allison Vaughn ('08-'11)
311 Ridgeway
Columbia, MO 65203
(573) 703-6448
allisonjv@yahoo.com

Paul McKenzie ('06-'09)
2311 Grandview Circle
Columbia, MO 65203
(573) 445-3019
paul_mckenzie@fws.gov

Robin Kennedy ('08-'11)
University of Missouri Herbarium
Columbia, MO 65211-3170
(573) 882-6519
umoherb@missouri.edu

John Oliver ('07-'10)
4861 Gatesbury Dr.
St. Louis, MO 63128
(314) 487-5924
joliver02@earthlink.net

Bruce Schuette ('07-'10)
678 St. Rt. 147
Troy, MO 63379
(636) 528-7247 (w)
basch@centurytel.net

Sherry Leis ('06-'09)
533 S. Forest Ct.
Springfield, MO 65806
(417) 836-8919
prairienut@hotmail.com

MISSOURIENSIS

CO-EDITORS
George Yatskievych
MO Botanical Garden
PO Box 299
St. Louis, MO 63166
(314) 577-9522 (w)
george.yatskievych@mobot.org

Doug Ladd
The Nature Conservancy
2800 S. Brentwood Blvd.
St. Louis, MO 63144
(314) 968-1105 (w)

PETAL PUSHER EDITOR

Chuck Robinson
6911 NW Blair Rd.
Parkville, MO 64152
(816) 507-8328
chuckrkc@kc.rr.com

DISTRIBUTION MANAGER

Bill Knight
5101 Dresden Ave..
St. Louis, MO 63116
(314) 832-7081
knight-bill@sbcglobal.net

EDITORIAL COMMITTEE

David Castaner
Paul Redfearn
Tim Smith
Stephen L. Timme

ARCHIVES

Jack Harris
jahar@mac.com
9708 Green Park Rd.
St. Louis, MO 63123
(314) 368-0655

ENVIRONMENT AND EDUCATION

John Oliver, board member

MEMBERSHIP

Ann Early
1425 Bobolink Pl.
St. Louis, MO 63144-1128
(314) 963-0103
aee623@prodigy.net

PUBLICITY

Kevin Bley
4 Zinzer Ct.
Grantwood Village, MO 63123
(314) 729-0335
bley435@yahoo.com

WEBMASTER

David Winn
7302 Rosewood Dr.
Prairie Village, KS 66208
(913) 432-4220
David@SouthForkPrairie.com

CHAPTER REPRESENTATIVES

HAWTHORN
Nadia Navarrete-Tindall
2116 Grant Lance
Columbia, MO 65203
navarrete-tindalln@lincolnu.edu

KANSAS CITY

Daniel Rice
815 W. 31st St.
Independence, MO 64055
(816) 461-0206
Drice95875@aol.com

OSAGE PLAINS

Marlene Miller
949 NE Highway C
Calhoun, MO 65323
(660) 694-3581
jwmiller@dishmail.net

OZARKS NATIVE PLANT

Susan Farrington
MDC Ozark Regional Office
551 Joe Jones Blvd.
West Plains, MO 65775
(417) 255-9561 Ext. 307 (w)
Susan.Farrington@mdc.mo.gov

PERENNIS

Allison Vaughn
311 Ridgeway
Columbia, MO 65203
(573) 703-6448
allisonjv@yahoo.com

ST. LOUIS

Martha Hill
4 Grantwood Lane
St. Louis, MO 63123
(314) 849-1464
marthajhill@earthlink.net

www.MissouriNativePlantSociety.org

