

Missouri Native Plant Society

May

- 5** **Thur., 9:30^{A.M.}** **In conjunction with National Wildflower Week**, the Missouri Native Plant Society and the Webster Groves Nature Study Society will sponsor a wildflower hike at Cuivre River State Park. Meet at the Cuivre River State Park Visitor's Center; group will leave promptly at 9:30. If you need further information, contact hike leader Bruce Schuette at 636-528-7247.

St. Louis

- 6-8** **Fri-Sun.** **Powell Gardens Plant Sale.** This plant sale is the Kansas City Chapter's main fund raiser for the year. If you would like to help, call Sue Hollis. Hours are very flexible, and you get to see the gardens also. If you can not help, then come out to buy some goodies from Missouri Wildflower Nursery, and see the gardens.

Kansas City

- 9** **Wed., 7:00^{P.M.}** **Returning to the Roots:** Integrating native plants and wildlife with modern agriculture at Bradford Farms by speaker Chapter President Nadia Navarrete-Tindall. Regular Hawthorn chapter meeting in the Conference Room A at the Public Library.

Columbia

- 12** **Thurs., 7:00^{P.M.}** **Regular Chapter Meeting** held at the Discovery Center, between KFC and Brush Creek at 4750 Troost. Program to be announced. Contact Sue Hollis, <ferngro@att.net> or 816-561-9419, for more information.

Kansas City

- 15** **Sun., 9:30^{A.M.}** **Joint Field Trip of Hawthorn and St. Louis chapters to Graham Cave/Danville Area.**
& 1:00^{P.M.}
Hawthorn Chapter will depart from MDC on College Avenue at 8:00^{A.M.}, or meet the St. Louis Chapter promptly at 9:30 at Graham Cave State Park parking lot for the morning hike to be led by Bruce Shuette, park naturalist. Sack lunch at noon in the park. Drive to Danville Conservation Area, or meet at 1:00 at the second parking lot on the right as you drive into the area, after State road RA ends for the afternoon hike led by John George, MDC regional biologist.

Columbia
St. Louis

- 16** **Mon., 7:00^{P.M.}** **Sherry Leis, Grassland Biologist, Missouri Department of Conservation** will give a presentation on research applications in grassland management in Missouri. The Osage Plains regular chapter meeting is open to all at the Henry County Courthouse Meeting Room, Clinton.

Clinton

- 20-22** **Fri-Sun.** **Joint Missouri-Illinois Spring Botany Field Trips** and Missouri Native Plant Society Quarterly Board Meeting (see Page 6).

Grafton, IL

- 25** **Wed., 7:30^{P.M.}** **Noted photographer Chris Brown** will present "Plant-Insect Interactions, a Close-up and Personal View" at the regular St. Louis chapter meeting at Powder Valley Nature Center 11715 Cragwold Road, Kirkwood (off Geyer Road, between Watson and Big Bend).

St. Louis



Calendar Continued on Page 2



June

- 1** **Due date for material for July-August *Petal Pusher*.** Please send information, photographs and graphics to Betty Walters, MONPS Newsletter Editor, by this date (contact information on back page).
- 4** **Sat., 9:00 A.M.** **Kansas City Chapter Field Trip to Snowball Hill Prairie;** then, on to the Winn's South Fork Prairie. Both are loaded with many wildflowers and South Fork has the listed Mead's milkweed. Meet in the WalMart parking lot just east of Bannister Mall on Hillcrest Road at 9:00. We will be near the street in the southwest corner. Bring insect repellent, lunch and water.
- 11** **Sat., 9:30 A.M.** **St. Louis Chapter Field Trip to Audrain County** to collect county records missing in the Flora of Missouri data base. Meet at Marshall I. Diggs Conservation Area in the Lake Whitesell parking area. From Wellsville on Hwy 19 take Hwy ZZ west to Hwy RA, then follow RA to Lake Whitesell. We also will visit railroad remnant prairies near Farber and the Northcutt Conservation Area.
- 12** **Sun., 8:30 A.M.** **Hawthorn Chapter Field Trip to visit a glade restoration** in Callaway Co. Meet at MDC on College Ave. to carpool, or 9:00 A.M. at Moser Foods in Ashland to meet Becky Erickson.
- 20** **Mon., 5:30 P.M.** **Summer Picnic at Artesian Park, Clinton.** This will be a carry-in meal. Bring dishes of food and attend an enjoyable evening. For scheduled last Thursday of the month morning Field Tours contact Jim Harlan at 660-885-3350.
- 22** **Wed., 6:00 P.M.** **St. Louis Chapter Annual Twilight Walk,** in lieu of a regular chapter meeting. We will visit the savanna/prairie plantings of the Kennedy Woods complex in Forest Park. Meet in the parking lot just south of the Art Museum at the north end of Kennedy Woods. There may be some other field trips in the offing, including one to Wayne County. Contact Nels Holmberg <nholmbrg@fidnet.com> for further information.
- 24-26** **Fri.-Sun.** **Missouri Native Plant Society Summer Field Trip,** Annual Membership Meeting and Quarterly Board Meeting, Kirksville, MO (see Page 7).

USDA Forest Service Seeks Comments on Mark Twain National Forest Draft Forest Plan

By Bruce Schuette, Park Naturalist, Cuivre River State Park

Mark Twain National Forest covers almost 1.5 million acres in nine units across southern Missouri. Certain elements of the 1986 Forest Plan are currently being revised. Five alternatives were developed, and a preferred alternative (#3) has been chosen. The comment period for the plan revision ends May 5th; then a final decision will be made. The entire forest plan revision, and the Environmental Impact Statement, can be downloaded from the forest website [www.fs.fed.us/r9/marktwain], and comments can also be submitted through the same website.

Topics addressed for this revision include: (1) vegetation and timber management, (2) ecological sustainability and ecosystem health, (3) fire management, (4) management areas, (5) riparian areas and water quality, (6) threatened, endangered, and sensitive species viability, (7) access and transportation management, and (8) monitoring and evaluation. Some issues like mineral management and off-road vehicle use are not part of this revision.

Key elements of the forest plan revision make some changes that should be welcomed and supported by conservation groups.

The most important change would be implementing ecosystem based management on 29% (438,000 acres) of the forest. This means that management activities would be geared toward moving those areas toward the desired condition, which includes the historical natural communities, natural disturbance regimes, long term ecosystem viability, and viability of sensitive species.

It is estimated that within the first 10 years (depending on funding, etc.) this will result in ecosystem based management on 100 to 500 acres of prairie; 5,300 to 13,400 acres of savanna; 36,300 to 45,300 acres of open woodland; 41,800 to 50,400 acres of closed woodland; 0 to 19,300 acres of forest; 13,900 to 19,400 acres of glades; and 11 to 889 acres of fens (97,411 to 149,189 acres overall).

Many thousands of acres of glades and savannas and tens of thousands of acres of woodland will be restored and managed. The plan also calls for the increased use of prescribed fires for ecosystem management, about 68,000 acres per year, and moving toward using prescribed fire for ecosystems within wilderness areas.

Gardening With The Natives: By gardeners possessing a passion for Missouri's diverse indigenous flora

HosNecs for Missouri Natives

Article & Photographs By Tom Terrific

Many times, after a two-hour butterfly gardening presentation, four exhibits and 196 slides, the final question most often asked is, "What one plant should I buy that will get me started?" The answer I always give is "Butterfly Weed," *Asclepias tuberosa*. It's a hardy perennial, which is not only a host plant for the Monarch caterpillar, but is also a good nectar plant for many other butterflies. It's two-two-two plants in one. For the small garden, using this type of plant that I have dubbed HosNec is ideal.

For butterfly neophytes, I should explain that each type of butterfly has a "preferred" plant on which it will lay its eggs. Monarchs lay their eggs on types of milkweed. The Pipevine butterfly lays its eggs on Pipevine. These plants are called host plants because they provide nutrition for a growing caterpillar, also called a larva. If the butterfly lays its egg on the wrong plant, the caterpillar (such as the Spicebush caterpillar below) will likely starve to death.



Nectar plants would seem to be easy to find. Almost every hardware, grocery and nursery is filled with blooming plants in the spring. Butterflies, however, are picky feeders and definitely prefer certain flowers, and you will find that trying to find a HosNec, combination host and nectar plant, starts to become a challenge for any gardener. You can find a list of my seed and plant resources at: [<http://www.butterflygardening.org/tips/plantandseed.html>].

Here is my list of Missouri native HosNecs to jump-start your garden this year.

- **Butterfly Weed, *Asclepias tuberosa*, and Host: Monarchs.** It's number one on my list because it takes zero maintenance and is a nice medium size. Note: It will take about three years before it grows to a decent size, so you might want to spend a little more and buy a good size plant when you start. You can start it from seed if money is tight.

- **Swamp Milkweed, *Asclepias incarnata*, and Host: Monarchs.** This is another nice perennial in the garden with a pretty flower. You can cover it with a plastic container in the spring to encourage it to send up shoots for early migrating monarch butterflies.

- **Milkweeds, Various *Asclepias* species, and Host: Monarchs.** There are many other milkweed varieties which will accomplish the same thing as the two above, but finding them is a problem. I don't usually recommend *Asclepias syriaca*, common milkweed, for the home garden—it tends to become invasive. In a natural setting however, it will be fine.

- **Eastern Redbud, *Cercis canadensis*, and Host: Henry's Elfin.** It's also a great nectar plant for butterflies in the forest where there aren't too much other nectar sources.



A Tiger Swallowtail butterfly flutters from petal to petal as it feeds among the many small flowers of Rose verbena in Tom's garden.

- **Wild Hydrangea, *Hydrangea arborescens*, and Host: Spring Azure.** A good nectar plant and the Spring Azure also use the unopened flower bud as a host.

- **Ironweed, *Vernonia fasciculata*, and Host: American Lady.** This host listing is a bit questionable, but I have seen it listed in some places. It gets over six feet tall, so it will probably need staking.

- **New England Aster, *Aster novae-angliae*, and Host: Pearl Crescent and Silvery Checkerspot.** This aster is an easy hardy perennial for any garden. It flowers in the fall and is usually covered with butterflies in September. You can propagate it by division or just dig up the new seedlings each spring.

- **New Jersey Tea, *Ceanothus americanus*, and Host: Mottled Dusky Wing.** Has a small blossom visited by some butterflies.

- **Purple Prairie Clover, *Dalea purpurea*, and Host: Dog Face butterfly.** I have found that this a difficult plant to grow. It probably prefers neglect and poor soil conditions—just the opposite of what I usually provide.

- **Rudbeckia (many varieties), and Host: Gorgone Checkerspot & Silvery Checkerspot.** There are many beautiful varieties of this species.

- **Spicebush, *Lindera benzoin*, and Host: Spicebush.** The Spicebush has a pretty yellow blossom in early spring which butterflies will visit. It also makes a nice residential bush instead of the traditional Yew. The larva is truly magnificent and easy to spot on Spicebush as they fold up the leaves to hide inside.

- **Verbenaceae, *Vervain* family, and Host: Buckeye.** According to Dr. Jeffrey Glassberg, there may be three broods of Buckeye butterflies in Missouri even though they don't maintain a Missouri winter residence. Buckeyes have been reported to use verbena as a host plant, so you may be increasing the summer population by planting any of the native verbenas.

- **Western Sunflower, *Helianthus occidentalis*, and Host: Silvery and Gorgone Checkerspot.**

- **Wild Plum, *Prunus americana*, and Host: Coral hairstreak, Striped Hairstreak, and Henry's Elfin.**

Understanding and Navigating the World of Digital Plant Photography

Article & Photographs By John Oliver

First the disclaimer: I'm not a great photographer. I have boxes of average slides and undecipherable images which beg the question, "Why did I take that?" to prove it. But like a lot of you, I have never been able to shake the compulsion to document my travels or the desire to have a tangible reminder of the things I have seen.

So on backpacking trips where others cut off the handles of their toothbrushes to save weight, I hauled heavy single-lens reflex cameras and lenses. Sometimes you've seen me with both an SLR and a digital camera, trailing the group and wearing the T-shirt that says "Mediocre but Prolific." And so it's my persistence rather than my expertise, which qualifies me to write this article on digital photography of plants.

My suggestions are distilled from my experience and like other products of distillation, may give you a faulty view of reality. Your *own* experience is what counts. Go out and get some!



Dutchman's breeches, *Dicentra cucullaria*, at Hilda Young Conservation Area, 31 March 2005.

1. Use the best equipment you can afford and practice to learn how to use it. Expensive cameras don't ensure great photos of course, but some features that can improve your chances of taking quality pictures are not found on entry-level cameras. These include higher image resolution, "macro" settings which allow extreme close-ups, tilting/rotating lenses or displays which permit the camera (and you) to view a subject from positions which are no longer wise or even possible for your body.

In general, the higher the "mega pixel" count, the better the result, and today's digitals are boasting numbers as high as 8-12 mega pixels. Of course, these larger data sizes require more memory to store, with the result that you can take fewer shots per memory card used.

Smaller files can be sent more easily as e-mail, make PowerPoint presentations smaller and faster and still look great on the screen. Larger files preserve all the detail of the original and are therefore best for high-quality prints and can be archived on CD's or DVD's so you won't clog your hard drive with massive picture files.



Toothwort, *Cardamine concatenata*, at Hilda Young Conservation Area, 31 March 2005.

Fortunately, state-of-the-art cameras are not necessary for you to take pictures that can both be viewed on a computer screen and printed (with superb quality) on an affordable ink-jet printer. However, images to be printed must be of higher resolution than those meant to be viewed only on a computer monitor. This has implications for the sizes and formats, which you store and would be the subject of another article.

I usually shoot plant pictures at the highest quality my camera is capable of and then save the finished product at sizes and resolutions appropriate for the ways in which they will be.

Practice so you know how to use the features of your camera efficiently. There may be more than one close-up setting, and you should experiment with using them in tandem with the zoom capabilities to learn which combinations are best for your needs. For example, positioning the camera extremely close to the subject may make your flash virtually useless, something to keep in mind in low-light situations.



Rose verbena, *Glandularia canadensis*, at Hilda Young Conservation Area, 31 March 2005.

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“I have seen the future of nature photography, and it looks like ones and zeros.”

Continued from Page 4

One feature I would miss if I didn't have it is a large moveable display that lets me see what the camera is seeing. I've used it pointing down while holding the camera high overhead to see over people in front of me, and it's indispensable when taking nature shots. I can hold the camera in almost any position, even placing it at ground level, for example, and still view the image comfortably.

2. Take lots of pictures. The old adage, “The cheapest part of photography is the film” is even more applicable in the digital age. Use, erase and reuse those memory cards. When the display shows a less than ideal result, press the button and claim a digital do-over. That in itself is a major improvement on film.

With practice, you make fewer mistakes and learn what settings on your camera give the most pleasing results. And, like the proverbial typewriting monkeys, if you take enough pictures even an average photographer will have some which are of remarkable quality.



False rue anemone, *Isopyrum biternatum*, at Hilda Young Conservation Area, 31 March 2005.

3. Use post-processing to improve your pictures. Purists may wince at the suggestion, but the camera is only the first step in digital photography. Using your computer to correct and enhance your photographs is essential to achieve a finished product. Adobe Photoshop® is one full-featured program, but there are many less expensive (**even free***) and less-complicated programs available. Many have “instant fix” settings that can improve your pictures with a single click of the mouse button.

Cropping out unnecessary detail will improve your shots and reduce the memory used. Don't be intimidated by the complex options; begin to use the ones that make sense to you. You may not be Horowitz, but you will still be able to bang out a tune.

4. Use a tripod when appropriate. Close-up settings and low light conditions are an awkward combination. To achieve a usable depth of field (translation: getting the whole flower in focus at once), I use an aperture setting of F8.0+.

This small opening lets in even less light and means the camera will slow down the shutter speed to compensate.

Camera movement, sometimes just the press of the shutter release, can blur your pictures unless you use a tripod to hold it steady. Speeds slower than about 1/30 of a second require support.

5. Be in the right place at the right time. If you want to take great wildflower pictures you have to be where the flowers are when they are in peak bloom.

As a member of MONPS you are lucky to have access to expert advice on both. I recommend going on as many field trips as your schedule permits. Local chapter outings and State meetings are great ways to put yourself and your camera in prime viewing position. Keep records from year to year and soon you will have favorite spots and know when to go there.

Finally, if you haven't taken the plunge into digital photography, start now! You will be amazed and impressed by the improvement in picture quality and convenience even a simple camera and inkjet printer can provide.

I predict the day is not far distant when MONPS members will offer and attend workshops on digital camera techniques including the use of Adobe Photoshop® or a similar program.

One day your grandchildren will come across a box of slides in a closet and ask, “What are these?” Remember the startling change in quality that the use of word processors caused in the appearance of printed material you could produce at home? Digital prints from your home printer will cause a similar improvement in your snapshots.

I have seen the future of nature photograph, and it looks like ones and zeros.

You can see my latest flower shots at:

[<http://community.webshots.com/user/oliverjcomo>].

Come often as they are constantly changing!

***One example of the many programs available for download may be found at [<http://www.picasa.com/features/features-edit.php>].**

False garlic, *Nothoscordum bivalve*, at Hilda Young Conservation Area, 31 March 2005.



Joint Missouri-Illinois May Botany Trips Revised Schedule

FRIDAY NIGHT, 20 MAY 2005, GET-TOGETHER

6:30 P.M. Registration and check-in, Monsanto Research Center, 4500 Shaw Blvd, St. Louis, MO

7:00 P.M. Tour of Monsanto Research Center which houses the library and part of the herbarium for the Missouri Botanical Garden

8:00 P.M. "Are increases in white-tailed deer and decreases in native bees driving *Trillium* extinct?" presented by Tiffany Knight, an assistant professor at Washington University and plant ecologist.

9:00 P.M. Repeat tour for anyone who was unable to attend earlier

SATURDAY, 21 MAY 2005, DAY SCHEDULE

8:30 A.M. Registration check-in

8:45 A.M. Field trips start in the parking lot of the Pere Marquette State Park Visitor's Center. Box lunches will be distributed to all pre-registered guests. Half-day field trips will end at noon. Please dress comfortably, bring drinking water and be prepared for the weather. Field trips will proceed rain or shine.

1:30 P.M. Afternoon field trips will run from 1:30 until 4:30 P.M.

4:45 P.M. INPS Board Meeting; location to be announced.

5:30 P.M. Silent auction items will be available for bidding in the Marquette banquet room. The lounge will be open to purchase alcoholic beverages.

6:00 P.M. Banquet followed by the keynote address offered by Dr. Kayri Havens, "From Global to Local Efforts: Conserving Imperiled Plants." Dr. Havens' address will focus on ex situ conservation of plants, including the role of botanical gardens in contributing to Global Strategy for Plant Conservation and programs in the Midwest, and will highlight conservation actions for several endangered plant species in Illinois and Missouri. Dr. Havens holds a B.S. and M.A. in botany from Southern Illinois University and a Ph.D. in biology from Indiana University, where she studied reproductive success in a rare evening primrose (*Oenothera organensis*) from New Mexico. She spent three years as the conservation biologist at Missouri Botanical Garden before joining the Chicago Botanic Garden in April, 1997, where she is currently Director of the Institute for Plant Conservation. Her research interests include restoration genetics and the biology of plant rarity and invasiveness.

Silent auction will close following Dr. Havens' address.

SATURDAY FIELD TRIPS

ONE ALL-DAY FIELD TRIP, 8:45 A.M. UNTIL 4:30 P.M.

Riverlands National Environmental Demonstration Area, followed by Columbia Bottoms Conservation Area

The Riverlands portion of this trip will be led by Jack Harris, a former president of Missouri Native Plant Society, who remains active both with MONPS and the botany group of Webster Groves Nature Study Society.

From Riverlands, the field trip will go to Columbia Bottoms Conservation Area led by Mike Arduser, the St. Louis Regional Natural History Biologist with the Missouri Department of Conservation and bee specialist.

MORNING FIELD TRIPS, 8:45 A.M. UNTIL 12:00 NOON

Heartland Prairie, Gordon Moore Park, led by Mark Hall.

The Nature Institute led by John Sommerhof, executive director of The Nature Institute and Patti Brown, volunteer coordinator for The Nature Institute. For more information, see [www.thenatureinstitute.org], protected areas.

AFTERNOON FIELD TRIPS, 1:30 UNTIL 4:30 P.M.

Ferns of Pere Marquette State Park, led by Alice DeJarnett, doctoral student in plant biology at SIU-C and member of Southern Chapter, INPS.

Kosciusko Wildlife Habitat and prairie restoration in Forest Park, both in St. Louis, MO

Kosciusko Wildlife Habitat led by Richard Clinebell, research associate at the Missouri Botanical Garden.

Kennedy Woods led by Gary Schimmelpfenig, a biologist and educator with DJM Ecoscapes, Restoration and Management.

"Traditional uses of plants by Native Americans," woodland walk in Pere Marquette State Park led by Victoria Fortner, a herbalist for over 30 years and a professional member of the American Herbalist Guild.

SUNDAY, 22 MAY 2005

9:00 until 11:00 A.M. The MONPS will hold its Quarterly Board Meeting at the Talahi Lodge on the grounds of The Nature Institute.

MORNING FIELD TRIPS, 9:00 A.M. UNTIL 12:30 P.M.

Woodlands and hill prairies in Pere Marquette State Park led by Dr. Richard Keating, professor emeritus at SIU-E and research associate at Missouri Botanical Garden.

Shoal Creek Conservation Area, Litchfield led by Henry Eilers, who serves as steward of the area for the City of Litchfield, and is a member of the Central Chapter of INPS.

Mushrooms, molds and other fungi at Pere Marquette State Park led by Dr. Walter Sundberg, professor emeritus at SIU-C and recipient of the 1999 Mycological Society of America's Excellence in Teaching of Mycology Award.

EDITOR'S NOTE: Please see the Missouri Native Plant Society website at [http://www.missouri.edu/~umo_herb/monps] for a registration form (must be received by 11 May 2005), lodging accommodations and for further updates, as they become available.

If you have any questions, please contact Marty Vogt, <mvogt@accessus.net>, 314-771-7593, or George Yatskievych, <george.yatskievych@mobot.org>, 314-577-9522, or Bob Siemer at <ae623@prodigy.net>.



MONPS Annual Membership & Quarterly Board Meetings Plus Field Trips Set in Kirksville, MO

FRIDAY NIGHT, 24 JUNE 2005, GET-TOGETHER

7:00 P.M. George Yatskievych and Paul McKenzie will present a short program on highlights of the earlier Carex Identification Workshop (see related article) to MONPS members. This will likely involve field identification tips for many of the species observed in the field during the workshop.

SATURDAY, 25 JUNE 2005, FIELD TRIPS & MEETINGS

8:00 A.M. Meet in Kirksville Super 8 Motel parking lot for signing trip waiver sheets and caravan to Morris Prairie in northern Sullivan Co. (ca. 40 mi drive).

9:00 until 11:30 A.M. Tour Morris Prairie Natural Area, a high-quality prairie remnant that will probably be a conservation area by June. It is a site for interesting species such as tall agrimony, auriculate false foxglove, pale gerardia, wood lily and dwarf chinquapin oak. The prairie has been managed in recent years for a diversity of prairie species.

11:30 A.M. Drive ca. 15 mi to lunch spot with privies at Union Ridge Conservation Area. The site is parking lot "N" on area map, which can be downloaded from the MDC website [<http://www.missouriconservation.org>]. Click on "Conservation Atlas" then search by area name to download area map.

12:00 Noon until 1:00 P.M. Eat lunch. Bring a picnic lunch as there are probably no convenient restaurants in the vicinity.

1:00 P.M. Drive to parking lot "S" on same map for afternoon field trip.

1:30 P.M. Until Walking tour of an area being restored on Union Ridge using prescribed fire. Look forward to seeing north Missouri prairie species on high, rounded ridges with entrenched drainages and unusual, scenic topography in north Missouri.

6:30 P.M. Annual Membership Meeting with Quarterly Board Meeting to immediately follow.

SUNDAY, 26 JUNE 2005, OPTIONAL FIELD TRIP

8:00 A.M. Meet in Super 8 Motel parking lot for optional field trip south of Kirksville. Site of this trip not determined at this writing.

ACCOMMODATIONS

SUPER 8, KIRKSVILLE, MO, 1101 Country Club Drive, 660-665-8826. **DIRECTIONS:** Coming into Kirksville from the south on Hwy. 63, the motel is near the south edge of town, one block to the right (east) of Hwy. 63 just past junction with Hwy. 6.

Call the motel *before June 10* and give the registration clerk our organization's name to receive the group rate of \$40 per room per night.

EDITOR'S NOTE: Check the Missouri Native Plant Society website at [http://www.missouri.edu/~umo_herb/monps] as additional details (including locations of the Friday Night Get-together, Saturday night Annual Meeting and Quarterly Board Meeting, and Sunday field trip) will be provided when they become available.

4th Annual Carex ID Workshop Is Scheduled at Truman State

By Paul McKenzie

In association with the MONPS' summer meeting in Kirksville 24-26 June 2005, the 4th Annual Carex Identification Workshop is scheduled for 23-24 June at Truman State University.

The workshop will start around 8:00 A.M. on 23 June and end around 4:00 P.M. on 24 June and will consist

of lectures on Carex morphology, keying, and field exercises. Lecture and lab portions of the workshop will be held in Room 2034 of Magruder Hall on the Truman State campus.

There is room for 34 participants, and the workshop will be offered to all interested parties on a first come, first serve basis.

Instructors for this year's workshop will be Dr. Paul McKenzie of the US Fish & Wildlife Service, Dr. George Yatskievych of the Missouri Department of Conservation and Mike Currier of the Missouri Department of Natural Resources, Division of State Parks.

To register, interested parties must send their name, affiliation and e-mail address to Paul (see back page for contact info). Paul will send out all the future announcements to registrants regarding an agenda, directions to Magruder Hall, parking at the University and field trip logistics.

The local host for the workshop will be Dr. Elisabeth (Lisa) Hooper, Associate Professor of Biology at Truman (660-785-4623), and Greg Gremaud, Regional Biologist with the Missouri Department of Conservation (660-785-2424, ext. 225).

EDITOR'S NOTE: Top left scan is *Carex crinata* and bottom right scan is *Carex gaucodia*; both were submitted by St. Louis Chapter member Pat Harris.



Petals & Wings

Betty Walters, Editor



While I was taking an introductory botany course one-winter semester at St. Louis Community College-Meramec, my instructor, Dan Billman, passionately handed out brochures and flyers about the detrimental effects of what is commonly known as tree topping. He encouraged us to pass them out to all of our neighbors. I took the handouts, and seeing no need for them at the time, they disappeared some years ago during my move from St. Charles County to the City of Manchester.

You have probably seen trees subjected to this extensive pruning technique, which many describe as looking like a very bad haircut. I describe it as coyote ugly!

The Missouri Community Forestry Council defines tree topping as the drastic removal (cutting) of large branches in mature trees, leaving large, open wounds that subject the tree to disease and decay. Topping causes immediate injury to the tree and ultimately results in early failure or death of the tree.

Utility companies' right-of-ways, and most cities' and towns' streets I drive along, use directional pruning (much of the tree's natural symmetrical shape is preserved, and only those limbs in possible contact with power and telephone lines are removed).

I had not seen topping in many, many years—until last fall. First, I came home from work one afternoon to find the ancient oak with perfect architecture, on the corner across the street, sheered; then my neighbor's maples on the side street, and to my complete dismay, two trees on an adjoining street—all topped within the space of no more than two weeks, and all done during the weekdays.

"Why in the world would anyone want to do that to a tree?" I lamented to my daughter. "Why, indeed?" she replied.

This spring, as I work in my gardens and sadly watch the ancient oak in the process of dying, I have decided it is time to become as passionate about eradicating this pruning technique in my neighborhood as Dan was all those years ago.

In an effort to find something "official" to give to my neighbors (so they do not think I am *only* a tree-hugging-free-the-environment-Green Peace-lover-type who lives down the street, and quietly justify dismissing my efforts entirely to themselves), I knew I needed those brochures and handouts!

I made a quick Google search with the keywords "Tree Topping," and immediately shouted, "Bingo!" I first visited the "Missouri Conservationist" online and found an excellent archived article entitled "Tree Topping" by Justine Gartner. View it at [<http://mdc.mo.gov/conmag/2002/09/50.htm>]. This article led me to the Missouri Community Forestry Council and their website at [<http://www.mocommunitytrees.com/pages/4/index.htm>].

Yes, this is where I found those same brochures and handouts Dan had given me, and in convenient printable Adobe format. Plus, what seemed to my daughter to be yet another one of my rhetorical questions was answered. "Myth and lack of public understanding about proper tree care are two major reasons why Missourians pay to have their trees destroyed each year," the brochure reads.

This weekend, I am hitting the streets on a door-to-door mission in my neighborhood, and although some of you may feel I have been preaching to the choir, please, do not wait like I did.

MONPS Chapter Websites

KANSAS CITY

www.angelfire.com/mo2/kcmonps/

COLUMBIA

www.digmo.com/npsboco

SITES FOR MISSOURI BOTANY

Flora of Missouri Project:

<http://ridgwaydb.mobot.org/mobot/missouri/>

Atlas of Missouri Vascular Plants:

http://biology.smsu.edu/herbarium/atlas/atlas_of_missouri_vascular_plant.htm

READER'S SITES OF INTEREST

KCWildlands: www.kcwildlands.org

GrowNative!: www.grownative.org

National Plant Conservation Campaign:

www.cnps.org/NPCC

USDA Forest Service, Mark Twain Nation Forest:

www.fs.fed.us/r9/marktwain

U.S. Department of Agriculture-Animal and Plant Health Inspection Service:

<http://www.aphis.usda.gov>

Missouri Community Forestry Council:

<http://www.mocommunitytrees.com>

Welcome to New Members

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

Denny and Martha Donnell, Columbia

Malinda Slagle, St. Louis

Elizabeth Seielstad, Windsor

Linda Bowman, St. Louis

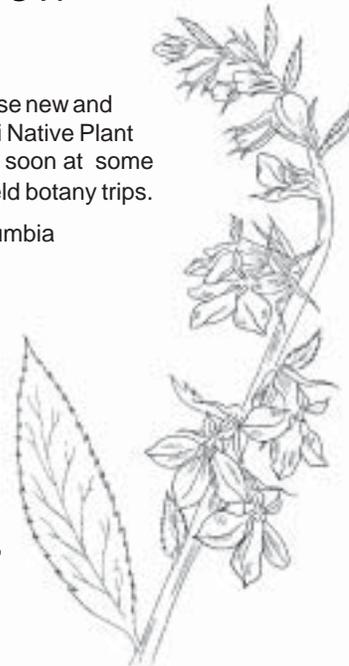
Karen Fine, Festus

Linda Strunk, St. Louis

Daniel Marsh, Greenwood, AR

Henry "Rob" Robison, Magnolia, AR

Matt and Claudia Marcus-Gurn, Winona



SPRING WILDFLOWER SALE

SHAWNATURE RESERVE, Gray Summit, MO

Saturday, 7 May 2005, 9:00^{A.M.} to 4:00^{P.M.}

Sale is free to the public

All native plant aficionados will find hundreds of varieties of wildflowers, ferns, trees and shrubs for home landscaping, including a wide diversity of native plants to attract birds and butterflies, available for purchase during this annual must buy event.

Local nurseries, offering the widest selection of native plants in the St. Louis area, are Hamilton Seeds and Wildflowers, Missouri Wildflowers Nursery, A Blooming Paradise Native Plants, Whiskey Creek Farm, Bowood Farms, Grace Hill Native Plants, American Native Landscapes, Pan's Garden, Shaw Nature Reserve, Earth Mirrors Native Plants, Prairie Hill Farm, and Forrest Keeling Nursery. All plants sold are nursery propagated and not harvested from the wild.

Some of showiest and hardiest native plants, for sun or shade, will include butterfly milkweed, rose turtlehead, pale purple coneflower, dwarf crested iris, cardinal flower, compass plant, wild phlox, maidenhair fern, bottle-brush buckeye, fringetree and short-leaf pine—to name a few. Missouri native seed and plants of the prairie, wetland, woodland and savanna may also be purchased.

DIRECTIONS: Gray Summit is about 30 miles west of St. Louis. Take the Gray Summit exit (#253, second exit west of six flags) off Interstate 44. Follow signs to Shaw Nature Reserve and special signs leading to the Spring Wildflower Sale.

For more information please call Shaw Nature Reserve at 636-451-3512 (toll free from St. Louis area).

Local Boy & Girl Make Good; Become Botanists

By Nels Holmberg

Remember the articles on keying out vegetative goldenrods and Muhlenbergia grasses that appeared in the 2002 and 2003 issues of Missouriensis? The person authoring these was some guy from Ohio named Justin Thomas. Who is this person who can show us how to tell vegetative plants apart that we can hardly distinguish even with flowers and fruits?

It turns out that both Justin and his wife, Dana, are Missourians with deep roots in this state. They just happen to be at Miami University of Oxford, Ohio, now getting their MSs in botany. They come from Osage Beach and Centralia, respectively, and did their undergraduate work at MU and SMS respectively. Both have worked as botanists for The Nature Conservancy, MO Department of Conservation, and the National Park Service at Ozark Scenic Riverways.

Now, they are setting up their own botany business, Institute of Botanical Training, to teach plant identification workshops and to provide identification from pictures sent in by e-mail. The latter service was put to the test by Martha Younkin in February, when she found an interesting blue-gray colored plant sprouting from a rock crevices in Iron County. Their answer: *Linum striatum*, Stiff yellow flax.

Check out their website at [www.botanytraining.com].



Calendar of Events

SPRING PLANT SALE AT POWELL GARDENS, Kingsville, MO

Saturday, 7 May, 10^{A.M.} to 5^{P.M.} and Sunday, 8 May, 12^{NOON} to 5^{P.M.}

This huge event boasts great native plants in the beautiful setting of Powell Gardens. *Proceeds benefit the Kansas City Chapter of the Missouri Native Plant Society.*

LOOKING BEYOND THE BACKYARD, Wildwood, MO

Saturday, 21 May 2005, 8:30^{A.M.} to 3:00^{P.M.}

This daylong workshop will outline the benefits of a rain garden, introduce participants to suitable plants and provide construction tips. There is a \$25 registration fee. Scott Hamilton will explain the role rain gardens play in watershed management. Scott Woodbury will describe the role the gardens play in developing wildlife habitat. A how-to session, under the leadership of Cindy Gilberg, will provide practical advice on rain-garden construction, and Perry Eckhardt will guide participants through rules and regulations when planning a rain garden. Lunch will be provided.

GROWNATIVE! KNOWHOW-THE WILDSIDE OF FOREST PARK, St. Louis, MO

Thursday, 23 June 2005

Full day of interactive workshops for both the native plant professional and enthusiast on effective native landscape techniques in the beautiful setting of Forest Park. Check the Grownative! website for coming details at [www.grownative.org].

GROW WILD GARDEN TOUR

Sunday, 26 June 2005, 9:00^{A.M.} to 3:00^{P.M.}

Shaw Nature Reserve, the Green Center, and the WildOnes Nativescaping Organization have partnered to offer St. Louisans a Garden Tour of seven private gardens *plus* the Green Center's prairie and wetland gardens.

Private gardens on the tour include: *Nathan Pate's* lawn-free native plant garden, Ballwin; *Janet & Joe Williamson's* woodland garden, Town & County; *Chan Mahanta's* prairie & perennial garden, Florissant; *Tom Terrific's* butterfly garden, Sunset Hills; *Ann Case's* Sculptured Tree & woodland garden, Ladue; *Susan & Wureen Lammert's* woodland & prairie, Ladue; *Linda Virga's* wildlife-friendly wildflower garden, South County.

Avid gardeners will find many creative colorful ways to incorporate native plants and wildflowers into their own gardens, but one does not need to be a gardener to enjoy the restful and unique refuge these gardens offer their owners.

All ages are welcome, and children 12 and under must be accompanied by an adult. Advance tickets are \$10.

An order form is available on the Green Center website, [www.thegreencenter.org], by clicking on the Grow Wild Garden Tour in the calendar of events. Once you purchase your ticket(s), you will receive a map showing all garden locations, and you may start the tour anywhere.

On the day of the tour, tickets will be \$15, and available at the Green Center, 8025 Blackberry Avenue, University City, MO, 63130. For more information, call the Center at 314-725-8314 or e-mail <events@thegreencenter.org>.

Hawthorn Chapter Activities for January, February, March, April 2005

Submitted by Judy Turner, Chapter representative

JANUARY ACTIVITIES

The program for January was another wonderful video about the hidden universe of insects entitled "MicroCosmos."

Chapter officers were elected for the new year: Nadia Navarrete-Tindall, president; Christine Angelo, vice-president; Jean Graebner, secretary; Sandra Kubal, treasurer; Judy Turner, chapter representative.

FEBRUARY ACTIVITIES

This year's seed propagation workshop led by Ann Wakeman was a joint MONPS/Wild Ones activity.

Thanks to all who provided seeds, pots, and soils for this annual success.

MARCH ACTIVITIES

Hawthorn Chapter members have greeted the arrival of spring with a variety of activities.

The first of which was a great wildflower slide show presented by new Chapter members Alan and Laurie Hahn. Alan has taken hundreds of pictures all over the country during their last six years of full-time travel.

As a result of our Chapter's March field trip, Alan has now added the Snow Trillium (*Trillium nivale*) and a rare wild leek to his portfolio. Both of these plants were found on Jim and Joann Whitley's property north of Columbia.

Several Chapter members participated in the monthly bird and plant survey at Bradford Farms being conducted by our president Nadia Navarrete and Brad Jacobs of MDC. The purpose of this survey has been to observe and record the relationships between native plants and wildlife. Surveys are being done monthly for 12 months.

APRIL ACTIVITIES

We had several spring wildflower field trips in April.

The first was a visit to one of the most beautiful parks in Missouri, Ha Ha Tonka.

Another trip was to visit Merv Wallace's Missouri Wildflower Nursery south of Jefferson City. This nursery is a native plant heaven for all of us!

Trip members also stopped at the Runge Nature Center in Jefferson City to view the butterfly photo exhibit by Donna Brunet. Several chapter members took part in Donna's project to count the numbers and species of butterflies seen in Columbia yards last year.

As usual for this time of the year, many members participated in the Wednesday evening wildflower walks in Rock Bridge State Park with Randal Clark.

Columbia's annual Earth Day celebration concluded a very active month for us.

Thanks for Becky Erickson and other chapter members who grew, transplanted and potted all the plants.

In addition to selling plants, books and T-shirts, we had educational poster displays and literature available to the public.

FUTURE ACTIVITIES

May 9: Regular meeting.

May 15: Graham Cave/Danville Area Field Trip. Bruce Shuette, park naturalist, will lead the morning hike, and John George, MDC regional biologist, will lead the afternoon hike. Bring a sack lunch.

June 12: Trip to visit a glade restoration in Callaway Co.

Nursery Stock Regulation Changes Under Consideration

U.S. Department of Agriculture-Animal and Plant Health Inspection Service

According to a February notice sent by Patricia S. De Angelis, Ph.D., Botanist - Division of Scientific Authority, Chair of the Plant Conservation Alliance-Medicinal Plant, the U.S. Department of Agriculture-Animal and Plant Health Inspection Service was receiving comments on an advanced notice of proposed rulemaking regarding their Nursery Stock Regulations until 10 March and extended it once until 11 April 2005.

This pertained to imports of propagative material with an eye toward, among other things, preventing imports of plant pests or invasive species.

The Department was asking for comments on whether and how it should amend the regulations that govern the importation of nursery stock, also known as plants for planting.

Under the current regulations, all plants for planting are allowed to enter the United States if they are accompanied by a phytosanitary certificate, and if they are inspected and found to be free of plant pests, unless their importation is specifically prohibited or further restricted by the regulations.

The Department is considering several possible changes to this approach, including establishing a category in the regulations for plants for planting that would be excluded from importation pending risk evaluation and approval; developing ongoing programs to reduce the risk of entry and establishment of quarantine pests via imported plants for planting; combining existing regulations governing the importation of plants for planting into one subpart; and reevaluating the risks posed by importation of plants for planting whose importation is currently prohibited.

The Department is also considering how to best collect data on current imports of plants for planting so they can accurately ascertain the volume, type, and origin of such plants entering the United States.

To read the Department's reports visit [<http://www.aphis.usda.gov/ppd/rad/webrepor.html>].

To receive timely updates on topics of botanical interests, subscribe to the Plant Conservation Alliance-Medicinal Plant e-mail list by visiting [<http://www.nps.gov/plants/medicinal/mpwglst.htm>] and following the directions.

Dues Are Due

By Ann Earley, Membership Chair

Membership renewals for the July 2005-June 2006 year are now due. Please check the top line of your mailing label. If it shows the date 20050630, your dues are now payable.

To renew please look for the renewal envelope in the upcoming July-August *Petal Pusher*, or renew today by using the form below. Please remember to complete your contact information, and your society and chapter dues preferences.

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

We value our members and urge you to renew today!

What's for Dinner Tonight? Weeds!

By Jil M. Swearingen, Invasive Species and Pest Management Coordinator, National Park Service

Check out this new addition to the Mid-Atlantic Exotic Pest Plant Council web page that will inspire you to get out there, pull those nasty exotic invaders, and put 'em on the dinner table tonight. "Weed Recipes" provides a sampler of various yummy salads, salsas and other tasty dishes that you can make with garlic mustard.

The recipes were selected from winning recipes from the past several years of the "Garlic Mustard Challenge" [<http://ma-epcc.org/weedrecipes.html>].

2005 MONPS Meeting & Field Trips

- ◆ **May 20, 21 & 22:** Joint MONPS and Illinois Native Plant Society Spring Field Botany Trips, on both sides of the Mississippi River. See Page 6.
- ◆ **June 24, 25 & 26:** Summer Field Trip, Annual Meeting and Board Meeting to the Kirksville Area. We will visit a local prairie and possibly a savanna restoration site. See Page 7.
- ◆ **September 16, 17 & 18:** Fall Field Botany Trip and Board Meeting to Prairie State Park and vicinity. Visits to southwest Missouri prairies where we will see warm-season grasses and late-blooming composites.
- ◆ **December 3:** Winter Board Meeting at the University of Missouri Dunn-Palmer Herbarium, Columbia.

Tim Smith will be planning the specifics of these adventures in the coming months so stay tuned for more details.



Illustration by **Paul W. Nelson**, reprinted with permission from the Missouri Department of Natural Resources, originally published in the book **Spring Wildflowers of Missouri State Parks** by **Bruce Schuette**.

Pussytoes

Antennaria plantaginifolia, most often known by this common name because of its fuzzy flowerheads, is an indicator of acid soil.

Flower stems grow up to 10 inches tall, and flowerheads are either male or female in tight clusters of white or off-white. Female floret styles are often crimson.

A densely hairy plant, its few cauline leaves (on the stems) are short and almost linear, while the paddle-shaped basal leaves have long stems with three prominent ribs and appear most often after flowering has begun.

Look for this plant statewide in dry, rocky, acid soil, and usually along wooded slopes.

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
Kansas City	\$5.00
Osage Plains	\$5.00
St. Louis	\$5.00
West Plains	\$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: Missouri Native Plant Society
PO Box 20073, St. Louis, MO 63144-0073

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

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

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-

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Missouri Native Plant Society Officers and Board Members

PRESIDENT

Kathy Thiele
4 Rodelle Woods
Weldon Spring, MO 63304
636-300-9290
thiele6336@aol.com

VICE-PRESIDENT

Jay Raveill
Biology Department
Central MO State University
Warrensburg, MO 64093
660-543-8812(w)
jar8812@cmsu2.cmsu.edu

SECRETARY

Kimberlie McCue
MO Botanical Garden
PO Box 299
St. Louis, MO 63166
314-577-9497
kimberlie.mccue@mobot.org

TREASURER

Bob Siemer
74 Conway Cove Drive
Chesterfield, MO 63017
636-537-2466
rivis42@prodigy.net

IMMEDIATE PAST PRESIDENT

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

BOARD MEMBERS

Pam Haverland ('02-'05)
6901 Ginlet Lane
Columbia, MO 65201
573-443-2189
pamela_haverland@usgs.gov

Paul McKenzie ('03-'06)
2311 Grandview Circle
Columbia, MO 65203
573-445-3019
paul_mckenzie@fws.gov

Robin Kennedy ('02-'05)
University of Missouri Herbarium
Columbia, MO 65211-3170
573-882-6519
umoherb@missouri.edu

John Oliver ('04-'07)
4861 Gatesbury Dr.
St. Louis, MO 63128
314-487-5924
joliver02@earthlink.net

Bruce Schuette ('04-'07)
678 St. Rt. 147
Troy, MO 63379
636-528-7247 (w)
baessch@nothnbut.net

Max Towler ('03-'06)
7906 Hwy 23 N
Eureka Springs, AR 72631
479-253-8137

ARCHIVES

George Yatskievych
See *Missouriensis*

ENV. AND EDUC.

John Oliver
(see board members)

FIELD BOTANY

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

MEMBERSHIP

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

PUBLICITY

Vacant

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
Betty Walters
413-B Hanna Road
Manchester, MO 63021
636-527-4194
bettyluvsinsects@yahoo.com

DISTRIBUTION MGR.

Nathan Pate
1148 Fairview Dr.
Ballwin, MO 63011-2225
JKNP@att.net

EDITORIAL COMM.

David Castaner
Paul Redfearn
Tim Smith
Stephen L. Timme

CHAPTER

REPRESENTATIVES
COLUMBIA
Judy Turner
jtejasrgv@yahoo.com

KANSAS CITY

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

OSAGE PLAINS

Marlene Miller
949 NE Hwy C
Calhoun, MO 65323
660-694-3581
jwmiller@iland.net

ST. LOUIS

Nels Holmberg
530 W. Whiskey Creek Rd.
Washington, MO 63090
636-583-4551
nholmbrg@fidnet.com

WEST PLAINS

Pat French
MDC Ozark Regional Office
PO Box 138
West Plains, MO 65775
417-255-9561 Ext. 222 (w)
Patricia.French@mdc.mo.gov