



NOVEMBER MEETING

Boone's Lick Chapter of Missouri Master Naturalists will meet at 6:30 p.m. Thursday, November 9, at the Boone County Extension Center. Jeff Briggler, MDC herpetologist, will present a program on Missouri's amphibians and reptiles. If you have items for the agenda, send them to Suzanne Wright at suzwright@centurytel.net

PRESIDENTIAL PONDERINGS

Ever since Richard Louv's book *Last Child in the Woods* was published, talk of nature deficit disorder among children is popular in environmental circles. To me, it seems pretty clear that you can't talk about children's disconnection from the natural world without considering that same disconnectedness among the adults who interact with them. In my other incarnation as coordinator for the Alliance of Natural Resource Outreach & Service Programs, I spend a lot of time questing for grant money. Invariably, I get all excited when I see a program that funds increased environmental education, only to realize that once again it is focused exclusively on the K-12 crowd. Now, I fully support environmental education for school kids, but it's just as important, if not more, to continue that teaching throughout an individual's lifetime—and after all, that's what the Master Naturalist program is all about. As Eric Hoffer, American social philosopher, said: "The central task of education is to implant a will and facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents, and children are students together."

Case-in-point for perpetual student-ship—a few weeks ago I was at the MDC Resource Science Center, staring into a microscope at stream insects, as is my habit, when the wet lab door opened and in marched a pair of elderly gentlemen with a Folger's jar and a palpable aura of excitement. The men said they had found an animal neither of them had ever seen in a lifetime of living in Missouri ("And I'm 78 years old—I'm not ashamed to admit it!"), and they were determined that the Conservation Department was going to tell them what it was.

Their jar held two fat, pale orange caterpillars with large eyespots on the back of the thorax. I had just seen the same creature at Lake of the Ozarks State Park and was able to inform them that they had captured spicebush swallowtail caterpillars on the verge of pupating. The fellow who actually nabbed the specimens revealed with amazement that when he poked one to see if it was alive, it had shot out a forked "tongue" that had a bad odor. This is a pretty good description of the larval osmeterium, a forked organ behind the head that can be protruded to excrete a strong-smelling substance to repel predators (or in this case, two elderly farmers).

The man was fascinated by his catch, and wanted to know what he could do to keep them alive over the winter, and when he should expect to see the adults emerge. I told him everything I could, including fun trivia like the fact that younger larvae use their resemblance to bird pooh as protection, while older larvae turn bright green but develop large black and yellow eyespots on the back of their broad thorax to fool birds into thinking they've

PONDERINGS Cont.

stumbled across something much larger and scarier than a caterpillar (it doesn't say a lot for the birds that, over untold millennia of evolution, continue to fall for this trick). When ready to pupate, they turn a lovely pale apricot and spin their cocoon for the winter. It was pretty cool—this fellow was genuinely excited by his find and didn't want to stop asking questions. One thing I couldn't answer, though, was why he had never seen one in all of his 78 years. So keep on learning, and keep on teaching, because when you stop learning, stop listening, stop looking and stop asking questions, then it is time to die. Go, adult environmental education!—*Celeste Macazzano*

FLORAL TIMEPIECE

Students at Truman State University in Kirksville tell time by a sundial and floral clock during the growing season and when the sun is shining. The floral clock garden includes *Gazania* hybrid cultivars that open in the 9 a.m. to 10 a.m. section of the garden and Missouri native rock pink (*Talinum calycinum*) that begins unwrapping its bud in the 2 p.m. to 3 p.m. section like, well, clockwork. Also featured in the garden clock are Missouri natives' passionflower (*Passiflora incarnata*) and evening primrose (*Oenothera macrocarpa*). The gnomon, which indicates time by casting its shadow across "hour lines" that radiate across the site, is milled from Eastern red cedar, another Missouri native.

KNOW MORE

Learn how to use native plants and landscaping projects at *Landscape Design with Missouri in Mind*, a day-long workshop offered Jan. 12 and 13 at the Missouri Department of Conservation's Springfield Nature Center.

Dave Tylka, who literally wrote the book on using native plants to beautify property, is the keynote speaker and will use his book, *Native*

Landscaping for Wildlife and People to step workshop participants through the steps necessary to integrate native plants into yards and small acreages. Tylka's approach to using native plants is practical and systematic, an approach that will appeal to landscape professionals and home gardeners alike.

Other sessions include native plant basics; an introduction to landscape design elements; an overview of native plants used in landscaping; an overview of the natural habitats of southwest Missouri; and a session that explains how to install and maintain native plants.

In addition, Ann Wakeman, a native plant enthusiast with extensive experience will tell how she converted her property from fescue to prairie and share her success stories and what she would do differently.

Landscape Design with Missouri in Mind is sponsored by Grow Native!, a joint program of Missouri Department of Conservation and Missouri Department of Agriculture, along with these partners: City of Springfield Public Works Department, Show-Me Yards & Neighborhoods, Springfield/Greene County Choose Environmental Excellence, Missouri State University and University of Missouri Extension.

HAVE A BERRY HOLIDAY

When you hear the words "Deck the halls with boughs of holly," your mind likely conjures up visions of American holly (*Ilex opaca*) and its leathery, evergreen leaves laced with shiny red berries, truly a Yuletide tradition. You may be interested in knowing that American holly is one of three hollies native to Missouri and the only evergreen one. The other two are deciduous and are the favorite hollies of many plant enthusiasts because of their spectacular winter display. American holly also is the only Missouri holly that includes the word holly in its common name. The others have rather unglamorous names: possum haw (*Ilex decidua*) and winterberry or black alder (*Ilex*

verticillata var *padifolia*). While these plants may not sound like candidates to “deck the halls,” don’t be fooled, they are. Once their leaves drop, the scarlet fruit that clings to their branches presents a knock-out show that on a crisp, sunny December day can literally stop traffic.

While American holly ranges from Florida to Texas and as far north as New York, in Missouri, its natural range is limited to the Southeastern portion of the state. There it thrives in the low, moist woodlands where Crowley Ridge meets the lowlands. And it does thrive—a specimen in Dunklin County has a circumference of 5 feet, 9 inches and a height of 40 feet. While possum haw and winterberry can be small trees, they more often appear as shrubs. Possum haw is widely distributed through the state, while winterberry is found only along the streambeds and sandstone bluffs of the St. Francois Mountains in southeast Missouri.

All the Missouri hollies provide valuable wildlife habitat, with at least 48 species of birds feeding on the fruit. Bluebirds, mockingbirds, American robin, bobwhite quail, cedar waxwing and ruffed grouse are among the birds attracted to the showy berries. Small mammals also feed on the fruit, among them—you guessed it—the possum.

Hollies are good additions to home landscapes, both for their wildlife benefits and their attractiveness. For best success, they should have growing conditions similar to those where they occur naturally. Winterberry prefers moist conditions and will do well in poorly drained areas, as well as in ordinary garden soil. You won’t see its best growth and fruiting in drought conditions. Possum haw is more tolerant of drought and dry soil and tolerates cold better than winterberry.

If you decide to include hollies in your landscape, remember there are male and female plants. To have spectacular fruit, you must have both (females bear the fruit). One male will supply pollen for numerous females.

While the brilliant berries are attractive to wildlife, there is no evidence that Native Americans used them as a food source, which gives credence to the possibility they are poisonous if consumed in large numbers. Even birds avoid the bitter, astringent fruit until late in the winter when it typically has gone through a series of freezing and thawing cycles.

Therefore we are guaranteed a feast for the eyes throughout gloomy, winter days. There is another upshot of having fruit remain on branches as temperatures rise. “On warm, early spring days, intoxicated robins and mockingbirds are sometimes seen after they have eaten the fermenting fruits,” Don Kruz writes in *Shrubs and Woody Vines of Missouri*. To ensure that your hollies don’t become a pub for birds, clip some of the berry-filled branches and use them to bring a berry Holiday to your home.

TAKE ACTION

If you want to learn more about native plants *and* help restore plant communities where you live and work, check out Wild Ones, a non-profit organization dedicated to advocating native plants in natural landscapes, preservation and restoration of natural communities, and promoting environmental education. Visit the national web site at <http://www.for-wild.org/> for links, tips, publications, membership forms, and discussion groups; or the Mid-MO chapter at <http://wildones.missouri.org/> to see what’s happening in and around Columbia. If you want to get involved, attend the next meeting 10 to 11 a.m. Saturday, November 18, at the MDC Resource Science Center at the corner of College and Stadium. The group will be planning events for 2007. Usual activities include installing, weeding and thinning demonstration gardens around the city (a great way to take home free plants!), invasive plant removal, a monthly garden video brunch, public displays and outreach, and garden and prairie tours. For more information, contact Celeste Mazzacano at cmazzacano@gmail.com or (573) 239-4267. Restoring native communities, getting

opportunities for more volunteer hours *and* walking away with free plants—how can you lose?????

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| <p style="text-align: center;">NOVEMBER VOLUNTEER OPPORTUNITIES</p> |
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Volunteer Opportunities

Here are the volunteer opportunities for November. Contact the person indicated for more detailed information on any of the projects.

Any time 5 a.m. to 6:30 p.m.

Saturday, November 11, and Sunday, November 12

Hunter Information Tables at Units of the Big Muddy National Fish and Wildlife Refuge

Volunteers are needed to staff an information table for deer hunters using refuge units and can pick whatever hours they wish to work during the two days, although we prefer a minimum of a two-hour commitment.

Opportunities are available at all the refuge units. Volunteers should dress warmly, as they will be sitting outside the entire period.

Contact Troy Gordon at friends@friendsofbigmuddy.org or 573-424-9051. Project is approved.

9 a.m. Monday, November 13

Bird Banding Training

Audubon Missouri will be banding birds using mist nets around feeders and shrubby areas at Brad Jacobs' house, 10600 Vemers Ford Road (Southeast of Columbia near Bradford Farm, off of Rangeline Road).

Contact: Andy Forbes at 573-447-2249 or Andrew.Forbes@mdc.mo.gov.

Project is approved.

Saturday, November 18

Marker Trees

Sponsored by Friends of Rock Bride Memorial State Park

See ongoing opportunities for more information.

Ongoing Opportunities

Fire Line Installation at Grand Bluffs Conservation Area

Flexible hours until completed

Sponsored by the Missouri Department of Conservation

Volunteers needed to run a leaf blower for at least six hours to install fire line in forested landscape. Work will be physically demanding as it will be on uneven terrain with a 20-pound backpack blower.

Contact Josh Stevens at

Josh.Stevens@mdc.mo.gov or 573-592-1412.

Project is approved.

Fire Line Clearing at

Rock Bridge Memorial State Park

Late October to early November on your own time or during office hours if using park tools

Volunteers will remove branches and wood debris from fire lines along the Grassland Trail area in preparation for fall and winter burns.

Project should take one to three hours to complete. Contact: Kathryn DiFoxfire at

rock.bridge.memorial.state.park@dnr.mo.gov

or Roxie Campbell at

roxie.campbell@dnr.mo.gov or 573-449-7402.

Project is approved.

Prescribed Burns at Rock Bridge Memorial State Park

Select weekdays between 8 a.m. and 3:30 p.m. (call for specific dates)

Volunteers will assist in prescribed burns in restored native grassland or in woodland units within the park. The exact dates are determined by weather, wind direction and staff and volunteer availability.

Contact: Kathryn DiFoxfire at

rock.bridge.memorial.state.park@dnr.mo.gov

or Roxie Campbell at

roxie.campbell@dnr.mo.gov 573-449-7402.

Project is approved.

Prairie Fork Conservation Area Field Trip Naturalists

Sponsored by Missouri Department of Conservation, the University of Missouri and the Prairie Fork Trust.

Prairie Fork CA has a need for volunteer naturalists to staff environmental education stations during field trips for school students. Programs take place between 9 a.m. and 2 p.m. Monday through Friday. Most programs will be Tuesday or Friday.

Contact Benedict Nagy at (573)254-3262, or benedict62@yahoo.com.

Project is approved

Prairie Fork Conservation Area Program Development for fall semester

Sponsored by the Missouri Department of Conservation, the University of Missouri and the Prairie Fork Trust.

Prairie Fork needs volunteer naturalists to help develop exciting and innovative outdoor environmental education programs. These programs *must* be designed to help teachers meet goals described in State of Missouri and national educational standards. Emphasis is being placed on elementary students, particularly fourth graders.

Contact Benedict Nagy at (573)254-3262, or benedict62@yahoo.com.

Project is approved.

Friends of Rock Bridge Memorial State Park Explore Rock Bridge third Saturday of each month

Sponsored by Friends of Rock Bride Memorial State Park

Volunteers needed to assist with hike each month; volunteer needed to assist in selecting topic and speakers for future programs that provide public with opportunities to explore the resources of the park and to participate in occasional service projects. November Program: **Marker Trees** will identify and measure several trees to be monitored annually.

Contact: Meredith Donaldson at Mjdonsn@aol.com or 815-9255.

Project is approved.

Landowner Contacts Database Flexible hours until completed.

Sponsored by the Missouri Department of Conservation

Volunteer needed to log landowner contact folders by location. Files date back to the 1940s. By recording the assistance provided on specific properties in the past, MDC will have an account of historical management and will be better able to assess the needs for the property. Location: Fulton.

Contact Josh Stevens at Josh.Stevens@mdc.mo.gov or 573-592-1412.

Project is approved.

Friends of Big Muddy Activities Ongoing dates throughout the year.

Most opportunities are on the units of the Big Muddy National Fish and Wildlife Refuge, projects are sponsored by Friends of Big Muddy.

Check <http://www.friendsofbigmuddy.org> for current opportunities or sign up for list serve announcements of activities by e-mailing FriendsofBigMuddy-subscribe@yahoogroups.com. Contact Troy Gordon at friends@friendsofbigmuddy.org or call 573-424-9051.

Projects are approved.

Raptor Rehabilitation Project Ongoing

Sponsored by Raptor Rehabilitation Project
Volunteers need to care for sick or injured raptors, to feed and provide activities to captive animals, to create, improve and deliver excellent presentations about these feathered wonders.

To learn more about the project or to start training, contact: Erin West at eed76@mizzou.edu.

Project is approved.

2006 OFFICERS

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|------------------|-------------------------------------|
| President | Celeste Mazzacano (573) 499-1913 |
| Vice-President | Suzanne Wright (573) 446-2217 |
| Secretary/Treas. | Sally Swanson (573) 874-2043 |

COMMITTEES

| | |
|------------------|----------------|
| Program | Suzanne Wright |
| Communication | Barb Fairchild |
| Project Approval | Carolyn Broun |
| New Class | Vacant |

NEXT MEETING

Thursday, November 9, 6:30 p.m
at the Boone County Extension Center
Jeff Briggler, MDC herpetologist,
will present a program on Missouri's amphibians and reptiles.



*To promote awareness and citizen
stewardship of natural resources
through science-based education and
community service*