



March - April 2015 NEWSLETTER OF THE MISSOURI NATIVE PLANT SOCIETY Volume 30 No.2

“ . . . to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri. ”

ANNOUNCEMENTS

Nominations Sought for Vacant MONPS Officer and BOD Positions

Submitted by Paul McKenzie, President

The MONPS Nominating Committee (Paul McKenzie, Larry Morrison, Emily Horner) is seeking additional input on possible officer and Board of Directors positions. Below is a list of positions and nominees to date who have agreed to run for the various vacancies.

Officers:

President: Paul McKenzie's current two-year term expires in June 2015 and he will not run for a 3rd term; nominees who have agreed to run for this position: John Oliver

Vice President: John Oliver's current two-year term expires in June 2015 and is running for President; nominees who have agreed to run for this position: Dana Thomas

Secretary: Casey Burks stepped down from her position and Malissa Underwood agreed to fill out the remainder of Casey's term; she was nominated by Paul McKenzie and approved by the BOD via email vote. Malissa has been nominated and agreed to run for a two year term following the end of the current term that expires June 2015.

Two BOD positions: Steve Buback's position which will expire in June 2015, and a vacancy created when Malissa Underwood agreed to replace Casey Burks as Secretary when Casey stepped down- nominees who have agreed to run for these two vacant positions: Steve Buback and Rick Gray.

Any member of the MONPS who would wish to nominate another member for one of the vacant positions listed above should send the nomination to Paul McKenzie by email at paulbeckymo@mchsi.com or by regular mail at 2311 Grandview Circle Columbia MO 65203. The nomination should include a short justification why the nominee should be considered and his/her agreement to run for that position. In the event there is more than one nominee for various positions, a ballot committee will be developed and a ballot sent out to the membership for a vote.

Petal Pusher Distribution Manager. For more information about this volunteer opportunity, contact Rex Hill or George Yatskievych [contact info on masthead]. The short description is that you need to pick up the paper copies from the printer, put on labels and edge tags, sort, and deliver to, for now, a Post Office in St Louis. This needs to be done during the third or fourth week of every even numbered month. When this contract runs out, mailing method or location could be changed.

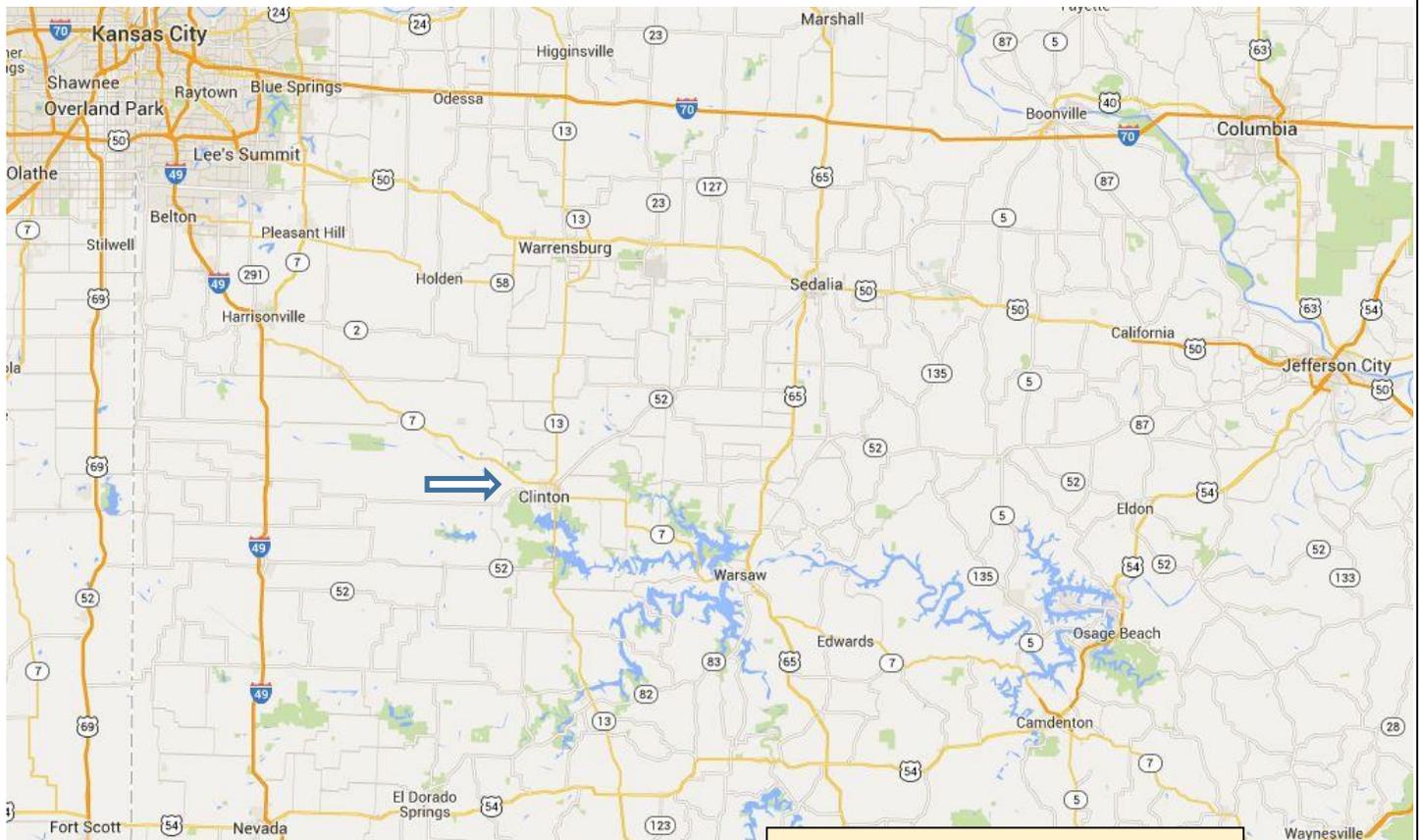
Social Media Coordinator Job Description

Introduction

The Social Media Coordinator position with the Missouri Native Plant Society is an appointed position. This person is responsible for the maintenance of all social aspects of the Society's internet presence. The Social Media Coordinator is similar to the newsletter editor position except that "publication" of material occurs on our various internet outlets rather than in printed form. The Society maintains an internet presence primarily on a WordPress web site (www.monativeplants.org) and Facebook, but also on Twitter , Google+ , and Project Noah . Technology guidelines, including basic instructions for these sites, have been developed, and basic instructions for using WordPress have been created for www.monativeplants.org . The **Social Media Coordinator** is expected to manage and supervise the Society's presence on the internet, but they are *not* expected to do the job alone. In particular, representatives from each chapter should directly contribute news and event posts concerning their chapter. The webmaster is expected to do maintenance of the WordPress site, including upgrades, implementation of new features, troubleshooting problems, and strategizing about the Society's online presence. All Society members, especially board members, are responsible for suggesting content for distribution online, just as they are responsible for providing content for the printed newsletter.

Primary Duties

- Post news content ("Posts") about the Society to the web site (www.monativeplants.org). Content can originate from basic research, emails, posts on Facebook or other social media sites, *etc.*, but should be restricted to news of general interest to the Society, *not* just individual chapters.
- Post meeting and field trip content ("Events") about the Society to the web site (www.monativeplants.org). Events should be restricted to statewide activities and those of general interest to the Society, *not* individual chapters.
- Manage various documents, photographs, video, and other media on the web site.
- Monitor all content on the web site to ensure it meets publication standards, is free from typos and grammatical errors, misspellings, and formatting errors.
- Manage post and event categories and tags, ensuring they do not proliferate unnecessarily and are set appropriately for content generated by chapter representatives and others.
- Make *ad hoc* changes to static web pages on the web site (*e.g.* , changes in Board of Directors, new award winners, *Petal Pusher* editions, *etc.*).
- Monitor comments on both the web site (www.monativeplants.org) and Facebook , approving non-spam comments and removing spam and other abusive posts.
- Approve membership on Facebook. Criteria for this basically includes anyone with an obvious tie to Missouri or someone interested in natural history topics. Members can be easily removed if they post spam or other abusive comments so giving a membership request the benefit of a doubt is best policy.
- Ensure content posted in one medium is generally available in other media. Tools such as IFTTT can be used to accomplish this mostly automatically.
- Use various media to drive interested persons to sign up for a paid membership, contribute to the Hudson fund, participate in various Society activities, and other actionable items.
- Work with the newsletter editor to ensure all relevant content is published in the newsletter and posted online.
- Work with the webmaster to create online strategy, discuss issues, and manage the infrastructure of the web site.
- Work with the board to develop a desirable public image for the Society to display on its web site and other social media outlets.



Locator Map to Clinton, MO

Here are the important details about the April meeting and field trips. Some of the locations and logistics are not complete and will have to be updated on the websites, but the lodging and directions with a few GPS coordinates are included.

Information on events and lodging for the MONPS meeting April 10-12, 2015

The **Missouri Native Plant Society Spring Meeting and Field Trips** will be held April 10-12, 2015 in and around **Clinton, Missouri**. Our meetings will be held in the Missouri Department of Conservation Meeting Room in Clinton, and we will also have a brief introduction and orientation program in the same location Friday night. Please join us! Our Field Trips will include some Missouri glade and prairie treasures and unique sandstone habitats.

Directions:

From the West (Kansas City): via Google Maps (<http://bit.ly/2015SpringMONPS>; click box "Directions from Kansas City")

Take **US-71 S** 10.5 mi; Continue onto **I-49/US-71 S** 27.0 mi

Take exit 157 for **MO-7 S** toward **Clinton** 0.2 mi

Exit 157 turns left and becomes **MO-7 S/E 275th St**; follow **MO-7 S** to **Clinton** 35.7 mi

From the East (St. Louis):

via Google Maps (<http://bit.ly/2015SpringMONPS>; click box "Directions from St. Louis")

Take **I-64 W** 39.0 mi > **US-40 W/US-61 N** 0.552 mi

Take the exit on the left onto **I-70 W/US-40 W** toward **Kansas City** > 132 mi

Take exit 78A South on **US-65 S** toward **Sedalia** 30.8 mi

Turn right onto **MO-52 W** 30.4 mi

Turn left to merge onto **MO-13 S/MO-52 W/MO-7 S/Rte 13 S**

to **Clinton**

From the SW (Springfield):

via Google Maps (<http://bit.ly/2015SpringMONPS>; click box "Directions from Springfield")

Take **MO-13 N/N Kansas Expy/Rte 13 N** > 51.7 mi

Straight on **MO-13 N/Rte 13 N** 34.2 mi to **Clinton**

Tentative Schedule:

(We will optimize field locations and timing based on conditions; updates, as well as printable maps of field locations and plant lists, will appear on the websites.)

Friday, April 10

Early Bird Field Trip – TBA

Friday April 10, 2:00 P.M. at the MDC Office (see map above; directions and GPS coordinates below)

Directions: (From Parkfield Inn)

South on **Kansas Ave** toward **Deer Run Ave** 0.2 mi

1st left onto **Deer Run Ave** 302 ft

Right onto **Rte 13 S** 0.7 mi

1st right onto **Charles E Calvird Dr (Bus. 13)** 1 mi

Left onto **S 2nd St** 0.2 mi

Left into MDC Office Drive: **GPS: 38.348436, -93.773375 or 38° 20' 54.4"N, 93° 46' 24.2" W**

7:00 P.M. – Paul McKenzie will present a program on Missouri's federally listed plants and animals at the MDC Clinton Office.

Saturday, April 11, 8 a.m.

Meet at Parkfield Inn Clinton parking lot. Field trip – Wah'Kon Tah Prairie

Directions:

South on **Kansas Ave** toward **Deer Run Ave** 0.2 mi

1st left onto **Deer Run Ave** 302 ft

Right onto **MO-13 S/Rte 13 S** 23.5 mi

Right onto **MO-13 BUS N/MO-82 W** 21.8 mi: **GPS: 37.905969, -94.000232 or 37° 54' 21.5"N, 94° 00' 00.8"W**

You may eat on your own or plan a picnic lunch.

1:00 PM – Afternoon field trip – Location TBA

7:00 PM – MONPS Board Meeting at MDC Office (see directions above)

Sunday, April 12, 8 am
Meet at Parkfield Inn Clinton Parking Lot
Morning Field Trip – Feaster Glade (This is private property, details TBA)
Directions: GPS: TBA on location

See also the Google Map Page for this event which is self-updating: <http://bit.ly/2015SpringMONPS>

Motels in the Clinton area:

Prices shown are the lowest available online.

(Note: “Advance Purchase” rates are billed when booked and are not refundable.)

Parkfield Inn – Clinton [\[Google Local Info\]](#)
506 Kansas Avenue, Clinton, MO 64735
Phone: (866) 376-9939; Website: Parkfield Inn
GPS: 38.364171, -93.752993 or 38° 21' 51.0"N, 93° 45' 10.8"W

Advance Purchase (online):
\$84/night (Single or Double)

Hampton Inn Clinton [\[Google Local Info\]](#)
900 Kansas Avenue, Clinton, MO 64735
Phone: (660) 885-4488; Website: hamptoninn3.hilton.com
GPS: 38.360862, -93.753239 or 38° 21' 39.1"N, 93° 45' 11.7"W

AAA or AARP (online):
\$87/night (Single or Double)

M Star Hotel [\[Google Local Info\]](#)
106 South Baird Street, Clinton, MO 64735
Phone: (660) 885-2206; Website: mstarhotelclinton.com
GPS: 38.368945, -93.751274 or 38° 22' 08.2"N, 93° 45' 04.6"W

Advance Purchase (online):
\$63/night (Single or Double)

Additional rooms if necessary:

Parkfield Inn Warsaw [\[Google Local Info\]](#) [note: Warsaw is 30 miles from Clinton]
151 N Dam Access Rd Truman Dam Access Road, Warsaw, MO 65355
Phone: (660) 438-2474; Website: parkfieldinn.com
GPS: 38.2646, -93.372667 or 38° 15' 52.6"N, 93° 22' 21.6"W

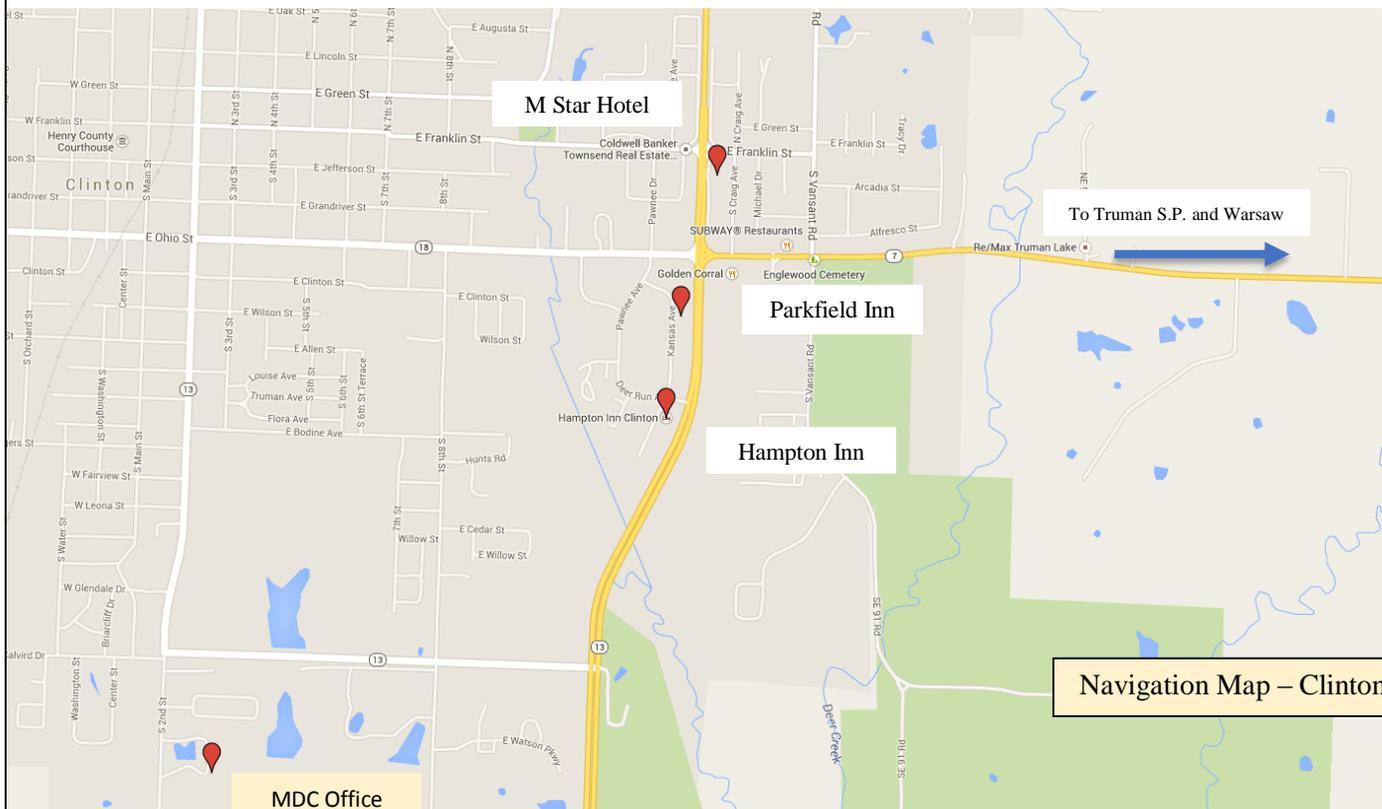
Advance Purchase (online):
\$94/night (Single or Double)

**Check back later
for updated
information and
maps to the field
trip locations.**

For the most accurate and up-to-date details, please visit The Missouri Native Plant Society website and our [Facebook Page](#). (or go to Facebook.com and enter Missouri Native Plant Society in the search box.)

Camping is available at:

Harry S. Truman State Park (26.0 miles from Clinton) – reserve sites using the [Central Reservation System](#) (Bonus: the campsites are comfortable, and in a botanically rich/interesting area!)



Navigation Map – Clinton

CHAPTER

Kansas City

Submitted by Hilary Haley, Chapter Representative; John Richter, President; Harold Draper, Secretary

The Kansas City Chapter held their first meeting of the year in early January. Officer elections were held and ideas for field trips were discussed. We have a full year of fun activities and hikes planned. Please check the events calendar for more information.

St Louis Chapter

Submitted by Rex Hill, Chapter Representative

Our January meeting, the first since last October, featured Richard Abbott of the Missouri Botanical Garden who gave a presentation on **Hiemal Hemicryptophytes**. This unfamiliar title name can be loosely, and descriptively, translated to “green plants near ground in winter”. Hiemal being of the winter, and Hemicryptophyte coming from a life form classification system developed by a Danish botanist, Christen Raunkiaer, where Hemicryptophytes are those plants with buds at or near soil level. Google his name if you are interested in more about his system which divides plants based on the location of growth centers, meristems, and how they survive the non-growing season like winter, hot summers, or drought periods. The classification accounts for the whole range of survival strategies from leaf drop in winter to simple survival of an annual as a seed underground and can provide a technique for statistical plant distribution over wide climactic ranges.

His talk, however, was not a technical description of Raunkiaer’s system, but more about the green that we see when taking a nature walk in the winter. While Richard is a master at observing plant characters and assigning them to an appropriate plant or group of plants, he made the point that many times there is simply not enough development of those characters in this period of the plant’s life and sometimes imprinting takes over as the identification technique. As usual, he provided many, many photographic examples and prompted us all to be a little more observant and curious as we pass through nature in winter in our part of the globe.

Ozark Chapter

Submitted by Liz Olson, Chapter Representative

We didn’t meet this winter. See chapter calendar for spring activities.

Please Friend us on Facebook



And more information on our website

www.monativeplantsociety.org

REPORTS

Hawthorn Chapter

Submitted by Ann Wakeman, Chapter Representative

January 12 at 6pm meeting at the Unitarian Universalist Church. The January newsletter issue posted relevant sections of the chapter by-laws, namely, officer information and elections in preparation for officer elections. These have been staggered for President and Treasurer in odd numbered years and Vice-president, Secretary and Chapter Representative in even numbered years. All officers present agreed to continue in their current terms. Denny Donnell will continue as President until their impending move from Columbia, at which time a new president will need to be elected. Since it has been a number of years since the by-laws were revised, the chapter will be looking into this.

In lieu of a program, the January meeting is always for planning activities. Members were urged to attend and bring ideas for field trips and other activities. Booth activities for Earth Day and the Bradford Farm spring plant sale were set. In addition to education, these booth venues are major income for our chapter with plant sales along with books and MoNPS merchandise. Field trips to see shooting stars and lady slipper orchids were tentatively set. And several are looking forward to Spring Creek Gap in Sept with the state group. Members are urged to offer suggestions for walking destinations so those may be posted.

The big event at the January meeting was presenting



Lea Langdon the Blazing Star Award for her years of persistent and attentive work with the children and teachers of Columbia Public Schools.

Randall Clark brought a proposal to the chapter regarding setting up a wetland memorial for Jim and JoAnn Whitley. Discussions included where Jim had planted aquatics, various management dilemmas and signage. A meeting with city officials is planned later in the month for further discussion and planning. *Randall also reminded us of his 35th year of spring wildflower walks every Thursday evening at 5:30 starting 26 March for 6 weeks. Meet at RBSP Devil’s Icebox parking.*

Lunch at Uprise was 15 January with informal discussions and chatting with friends. Becky Erickson gave a wildflower propagation workshop 24 Jan for 9 attendees; and will also be hosting *Native Plants for Pollinators 31 March.*

Perennis Chapter

submitted by Andrew Braun Chapter Rep

See calendar and Facebook page for upcoming activities
Members of the Perennis chapter met for a field trip at Horton Farm Conservation Area near Weingarten, Missouri on December 20. This area features the LaMotte sandstone geology characteristic of western Ste. Genevieve County, and is near other floristically interesting areas such as Hawn State Park, Hickory Canyon Natural Area, and Pickle Spring Natural Area. The group hiked to a woodland/glade area, where they found *Cheilanthes lanosa*, *Opuntia humifusa*, and several other species. Alan Brant pointed out a sterile hybrid of *Carex crinita* and *C. torta* he had previously found on the area growing in a small stream. The state-listed species *Tipularia discolor*, *Dennstaedtia punctilobula*, and *Lycopodium tristachyum* were found at a nearby sandstone cliff. Other interesting species found that day included *Malaxis unifolia*, *Rhododendron prinophyllum*, and *Goodyera pubescens*. The group hiked to a seep to examine a population of the state-listed fern *Woodwardia areolata* before finally heading back to the parking lot. A short discussion about possible locations for future field trips was had before the group parted ways.



From Casey's Kitchen:

Submitted by Casey Burks

There are only four types of wild mushrooms that I feel confident enough with identification to gather and eat: turkey tail, puffball, morel and wood ear mushroom *Auricularia auricula*. I pretty much gave up gathering morels because once I got a miserable case of poison ivy which involved several doctor office visits and also because of the ticks. During late fall/early winter is when I especially enjoy hunting for mushrooms. I relish sliced and fried fresh puffballs and have used turkey tails in soups. In December and January when I'm hunting for firewood, I often pick up a branch that has been under wet leaves and find the rubbery wood ear which is a



type of jelly fungus. Recently I found a large hickory tree on the ground in a bed of leaves that was a wood ear bonanza. I easily gathered a quart and returned a week later to pick several more cups from the same tree.

Wood ear mushrooms don't look like they would have any nutritional value but they have some protein, they're high in iron and also have some of the antioxidant riboflavin (vitamin B-2).

A friend from China taught me about wood ears several years ago and how to make a fried rice dish using them. With the abundance of wood ears I've been finding, fried rice with eggs and vegetables or quiche has been on our table a lot lately. My husband, who usually turns up his nose at non grocery store items, really likes these dishes with the wood ear mushrooms.

Osage Plains

Casey Burks, Chapter Representative

There are no Osage Plains meetings scheduled during December and January (and August). Starting February 2015, regularly scheduled meetings are held the 4th Monday of the month at 6:30 pm at the Friends Room of the Henry County Library. Programs are open to the public and our purpose is to enjoy learning about and sharing information about native plants. For further information please contact President Elizabeth Middleton Elizabeth.Middleton@MDC.gov or Chapter Representative Casey Burks mobugwoman@gmail.com.

Important Reminder: Members who would like to receive the Petal Pusher by email need to send a request to editor Becky Erickson beckyerick711@centurylink.net.

Benefits of receiving the Petal Pusher by email include: earlier receipt of information; color pictures; savings in printing costs for MONPS.



Southwest Chapter

Submitted by Michelle Bowe

We did not meet in November, December or January, but that does not mean we have been inactive. We've enjoyed the sight of hundreds of frost flowers (on the Bowe-Edmond property), and I have heard of several successful prairie and forest burns in the area. Our upcoming activities include taking care of our native plants at the Springfield Botanical Center, lots of field trips and a talk on winter seed sowing. We also hope to form alliances with other groups in the area (such as the organic gardening club, the Master Naturalists and the mycological society).

On a sad note, Brian Edmond has resigned his position as a chapter representative, so we will be looking for a new representative. The main qualifications are interest and the willingness and ability to attend the State meetings (and carpooling is usually an option).

Check the calendar section for other upcoming events. Be sure to watch the Facebook Events page and your email inbox for details about upcoming trips and events! In case of bad weather, watch Facebook for cancellations or call ahead of time and we'll call back with more information.



[Wood ear mushrooms cont]

Of course I am so glad to be able to enjoy nature's bounty even in winter.

Here's my favorite quiche recipe:

Bacon, Spinach, Mushroom Quiche

1 lb. bacon fried and crumbled
2 C chopped spinach, wilted and drained
1 C cleaned, chopped and sauteed wood ear mushrooms
Mix together and stir into:
6 lg eggs beaten, 1.5 C cream, 1.5 C grated cheese.
Pour all into 10" pie pan lined with unbaked pie crust
Bake 45 min at 375 deg.



CHAPTER

Kansas City *from Hilary Haley, Chapter Representative*

For questions about upcoming field trips contact the field trip leader, otherwise contact John Richter via e-mail: jrichter@ene.com, or cell phone 913.217.0432. Please RSVP with the field trip leader or John Richter for all field trips. We use RSPV information to plan car pool logistics and if a field trip will have any attendance. This is important for making decisions based on severe weather, etc.

3 March Tues, 7:00 PM, MDC Discovery Center: Chapter meeting. John Richter will teach others about the methods he uses for collecting and pressing plants, including mounting them on herbarium paper. No RSVP required.

11 April Sat, 10 – 12: Rock Creek Trail, Independence.

This is an easy 1.5 mile urban hike that will have some spring ephemeral wildflowers, native shrubs and understory trees, and large bur oak trees viewable from the trail which connects Rotary Park to Country Club Park. We will be meeting 10 am at Rotary Park, Independence, which is south of the intersection of E. Westport Rd and E. 23rd St South, and walking the trail to Country Club Park to see the bur oak trees. Please RSVP with Catherine Bylinowski cbylinowski@hotmail.com if you plan to attend, or contact her at 816-753-4220 for more information.

25 April Sat 10 am: Isley Park Woods Natural Area, Excelsior Springs. This is an easy access wildflower area that is open to the public, owned and managed by the City of Excelsior Springs. This area consists of a large north facing slope with an abundance of spring ephemeral wildflowers, including bloodroot, trout lily, and Dutchman's breeches. For car pools meet at 10 am at the Wal-Mart parking lot: I-35, Exit 16, Liberty. Please RSVP with John Richter jrichter@ene.com if you plan to attend, or contact him at 913-217-0432. Suggested items to bring are a camera, water, and snacks.



St Louis *from Rex Hill*

Chapter meetings are held on the fourth Wednesday of the month at the Sunset Hills Community Center, 3915 South Lindbergh Blvd., Sunset Hills, MO 63127. Google Map: <http://goo.gl/maps/K3PR>

February 25, 2015 – 7:30 PM – Speaker Jonathan Meyers, Washington University.

March 25 7:30 PM – Speaker will be Kyra Krakos, Maryville University.

April 22 7:30 PM – Speaker and Topic to be announced.

May 8 & 9 – Spring plant sale at Shaw Nature Reserve
Friends and newcomers are welcome at meetings.



CALENDARS



Osage Plains *from Casey Burks*

There are no Osage Plains meetings scheduled during December and January (and August). Chapter meetings will begin again February 23rd, 2015.

Regularly scheduled meetings will be 4th Monday of February through November. 6:30pm, at the Henry Co. Library, Clinton. Meetings are open to the public and our purpose is to enjoy learning about and sharing information about native plants. For further information please contact President Elizabeth Middleton Elizabeth.Middleton@MDC.gov ; past President Emily Horner Emily.Horner3@yahoo.com , or Chapter Representative Casey Burks mobugwoman@gmail.com Contact Bernie Henehan berniehenehan@me.com or Dan Henehan danhenehan@embarqmail.com for fieldtrip information.

Reminder: Any member who would like to receive the Petal Pusher by email needs to send their request to editor Becky Erickson Becky Erickson@centurylink.net. Benefits of receiving the Petal Pusher by email include: earlier receipt of information; color pictures; savings in printing costs for MONPS.



Hawthorn *from Ann Wakeman*

Chapter meetings held on odd-numbered months on the second Monday at Unitarian Church, 2615 Shepard Blvd., Columbia. Third Thursday lunch at Uprise Bakery [RagTag] continues to be well attended by members for informal discussions about native plants and environmental issues. See www.columbianativeplants.org for postings of newsletters and activity details. For folks interested in hiking and wildflower sightings around the state, see chapter newsletter on the website for details. Otherwise you are encouraged to participate in outings with other MONPS chapters and MPF.

Randall Clark will host his 35th year of spring wildflower walks every Thursday evening at 5:30 starting 26 March for 6 weeks. Meet at RBSP Devil's Icebox parking.

9 March Monday 6 pm Members Meeting Unitarian Universalist Church, 2615 Shepard Blvd, Columbia.

Program tba.

19 March Thursday: Lunch with native plant enthusiasts. **11:30 am.** RagTag.

31 March Tuesday. 6- 9 pm Location TBA. Becky will be teaching "Native Plants for Pollinators" Lists of best plants for all pollinators, plus garden installation.

<https://secure.career-center.org/wconnect/ShowSchedule.awp?&Mode=GROUP&Group=AGR&Title=Garden++Agriculture>

10 – 12 April. State Field trip to Osceola/Clinton. West central MO prairies and glades in Spring = not to be missed!! Look for details in Petal Pusher.

11 April Sat, 10am – 2 pm. Native Plant Sale at Bradford Farm. Our biggest sale of the year. Contact Becky last of Feb for opportunities to help with nursery in Mar & Apr

19 April Sun, 10am – 6pm. Booth at Columbia's Earth Day Fair. Sign up with Paula. See announcement in chapter newsletter www.columbianativeplants.org .

Ozark *from Liz Olson*

The Ozark Chapter meets at 6:30 pm on the third Tuesday of each month at the Missouri Department of Conservation, Ozark Regional Office, 551 Joe Jones Blvd, West Plains, MO 65775. For more information, contact chapter president Susan Farrington at 417-255-9561.

We take suggestions for speakers at our meetings. Contact Chapter President Susan Farrington for more discussion: 417-255-9561.

February 17 As we look forward to the coming growing season, we are excited to have member and chapter secretary Betty Queen share her rain barrel system to water her gardens.

March 17: We welcome back Pat French, one of the founding members of our chapter. She will visit from Arkansas to present a program on wild edibles that are native to the Ozark region. Come join us for an entertaining and informative evening!

April 21: We'll host Mike Doyen, President of the Ozarks Rivers chapter of the National Audubon Society, based in Rolla, MO. He will tell us about birds that migrate to the Ozarks each spring and how to attract birds to our backyards. Mike is passionate about birds and protecting our natural communities to provide the best habitat for them.



Perennis *from Andrew Braun*

Watch for announcements in your email or on the Facebook page.

Contact Andrew Braun for information apbraun1s@gmail.com

14 March Sat: Native Plant & Garden Seminar; MDC Cape Girardeau Nature Center is host. Six sessions are planned, with the topics including herbology, environmental gardening, plant propagation, Missouri's natural communities and garden planning, pest control, edible mushrooms, and community restoration. Several vendors will also be present at the Nature Center. For more information and a registration form, visit the MONPS Event Page:

<http://monativeplants.org/events/>



Southwest *from Michelle Bowe*

Meetings are usually held at Greene Co Botanical Center, Spgfld, 4th Tuesday, 6pm. In case of bad weather, watch Facebook for cancellations or call ahead of time and we'll call back with more information.

24 Feb, Tues 6:30 at the Library Center. The title of the talk is "Successful Winter Seed Sowing" by Christine Chiu from the SW Chapter.

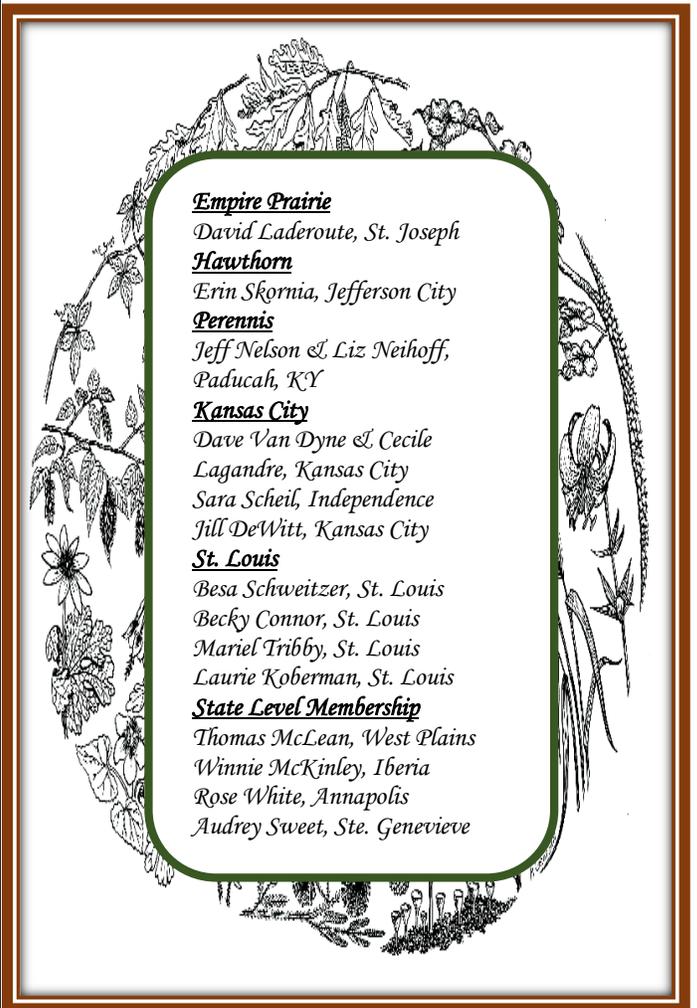
24 March, Tues 6 pm Meet in our native garden at the Botanical Center, and then come indoors for a plant identification mini-workshop and business meeting. Please bring (wild) plants with flowers if you have them!



"Go my Sons, burn your books. Buy yourself stout shoes. Get away to the mountains, the valleys, the shores of the seas, the deserts, and the deepest recesses of the Earth. In this way and no other will you find true knowledge of things and their properties."

Peter Severinus, a 16th Century Dane educator.

Welcome to New Members!



Empire Prairie

David Laderoute, St. Joseph

Hawthorn

Erin Skornia, Jefferson City

Perennis

Jeff Nelson & Liz Neihoff,
Paducah, KY

Kansas City

Dave Van Dyne & Cecile

Lagandre, Kansas City

Sara Scheil, Independence

Jill DeWitt, Kansas City

St. Louis

Besa Schweitzer, St. Louis

Becky Connor, St. Louis

Marief Tribby, St. Louis

Laurie Koberman, St. Louis

State Level Membership

Thomas McLean, West Plains

Winnie McKinley, Iberia

Rose White, Annapolis

Audrey Sweet, Ste. Genevieve

Empire Prairie *from Steve Buback*

9 March, Mon 7pm MDC Regional Office.

Since this is our first meeting this year, we will come up with some field trips for the year and determine future meeting times and dates. For more information, contact Steve at steve.buback@mdc.mo.gov.



Web Links

See our own newly rebuilt website! www.monativeplants.org
Thanks to Brian Edmond

Nadia's Yard: best place to start local resource searches.

<http://nadiasyard.com/>

Musings about suburban native gardening and links

Plant identification www.plants.usda.gov

Xerces Society: Information on Bees, Monarchs, and most other insects. www.xerces.org

Ozark Highlands of Missouri

Observations from the hills to the back yard

<http://allisonjvaughn.blogspot.com/>

Wren Song: Weekly newsletter with links to several articles

<http://www.ecosystemgardening.com/wren-song>

Page 8

Curator's Corner:

The fourth in a series about herbarium curation by Michelle Bowe who is an Instructor and Curator of the Ozarks Regional Herbarium (SMS) at Missouri State University in Springfield, Missouri. She is also President and Treasurer of the SW Chapter of MONPS and is on the state MONPS Board. This is a regular column on herbaria and herbarium curation, written from her small, warm, windowless office next to the herbarium in Kings Street Annex. E-mail: mbowe@missouristate.edu.

The song column #1

Sometimes when I am looking at plant specimens, I find myself humming along (singing a song) side by side with a particular species. So, I thought I'd dedicate this Curator's corner to the top ten botany songs that have come to mind in recent times (parody, of course). [Ed note: not all ditties are illustrated. All photos from B. Erickson]



10. (tune of Sounds of Silence)
Hello Ozarks, my old friend
I've come to talk with you again
Because a vision softly creeping
Left its seeds while I was sleeping
And the rhizome that was planted in my yard
Still remains
Within the sound of *Silene*.

9. In my life there's been heartburn and pain
I don't know if I can try it again
Can't stop now, I've traveled so far, to change this tasty stew.
I want to know what lovage is, I want you to show me
I want to feel what lovage is, I know you can show me...



8. How does it feel, how does it feel?
To be without a stop
Like a complete in-op
Like a rolling stonecrop?

7. Hot tree, sumac in the city
Back of my leaves getting dirty and gritty
Bent down, isn't it a pity?
Doesn't seem to make a shadow in the city.



6. So goodbye yellow puccoon
Where the dogs of society howl
You can't plant me in your greenhouse
I'm going back to my plough
Back to the howling old owl in the woods
Hunting the thorny blackberry plants
Oh I've finally decided my future lies
Beyond the yellow puccoon.

5. (tune of La Bamba)
To the sound of the breezes that blow...
In order to plant the bluebells
In order to plant the bluebells
You need a little bit of grace
A little bit of grace
I am not a grower, I'm a botanist
I'm a botanist, I'm a botanist
Blue, blue, bluebells
Blue, blue bluebells, blue.



4. Wake up, black-eyed Susan, wake up
Wake up, black-eyed Susan, wake up
We've both been about to tilt, wake up, little Susan, and wilt
The day is over, there's four o'clocks, and we're in trouble deep
Wake up black-eyed Susan, wake-up!

3. I once had a spruce, or should I say, it once had me...
It showed me a branch, isn't it good, Norwegian wood?

2. You are the sunflower of my life
That's why I'll always be around,
You are the achene of my eye,
Forever you'll stay in the ground...

And, this month's number one botanical hit....

1. Well, it's a marvelous night for a moonseed
With the vines up above in your eyes
A fantabulous night to make flowers
'Neath the cover of September skies
And all the leaves on the vines are falling

Virginia Pennywort

Submitted by Andrew Braun Perennis Chapter

This past December, as I was hiking through Trail of Tears State Park, I spotted a small, green speck from the corner of my eye. Besides Christmas fern and the occasional sedge, there isn't a lot of green stuff out in the winter here, so it caught my attention. The little speck turned out to be *Obolaria virginica*, known commonly as Virginia Pennywort. This inconspicuous little plant is known from Trail of Tears and only a few other locations in Missouri, though it is more common in the eastern states. Because of its apparent relative rarity in Missouri, it has been designated an S2 species ("imperiled") by the Missouri Natural Heritage Program. The name *Obolaria* is probably derived from *obolus*, meaning "coin" in Greek. *O. virginica* is the only species in the genus, but the common name "pennywort" is shared with at least five other plants, three of which are found in Missouri.

Obolaria can be hard to spot, even when searching specifically for it, because of its small size and relatively inconspicuous flowers and foliage. Usually less than six inches tall, *Obolaria* features small white flowers, and small, rounded, greenish-purple leaves. Like other "spring ephemeral" species, it usually emerges in the early spring, flowers shortly afterwards, and dies back by late spring, though it sometimes sprouts much earlier, as in the specimens I found in December.

The small leaves with low chlorophyll content, as well as its simplified root system, suggest that *Obolaria* may not obtain all its nutrients on its own (Cameron and Bolin 2010).

Obolaria is known as a "mixotrophic" species, meaning that it can obtain nutrients not only by its own photosynthetic processes, but also by way of a relationship with soil fungi, which in turn obtain their nutrients from decomposing forest litter (Cameron and Bolin 2010, Johansson 2011). At Trail of Tears, *Obolaria* can often be found in the relatively dark, mesic, heavily forested areas within the deep dissections of the terrain (though it pops up in other habitats as well). Perhaps mixotrophy is clever way for these plants to obtain nutrients in a low-light environment?

In their study of *Obolaria*, Wood and Bornstein (2011) suggested that this little plant may be overlooked by collectors, and therefore may be more common in Missouri than is currently realized. Next time you're in southeast Missouri, take a careful look around the forest, and maybe you can find a few of these interesting, odd little plants.

- Cameron, D.C. and J.F. Bolin. 2010. Isotopic Evidence of Partial Mycoheterotrophy in the Gentianaceae: *Bartonia virginica* and *Obolaria virginica* as Case Studies. *American Journal of Botany* 97(8):1272-1277.
- Johansson, V.A. 2011. Interactions Between Plants and Fungi: Costs and Benefits of Having a Mixotrophic or Mycoheterotrophic Life Style. Department of Biology, Stockholm University.
- Wood, D.L. and A.J. Bornstein. 2011. Notes on the Biology of *Obolaria virginica* (Gentianaceae) in Southeast Missouri, and the Effects of Leaf Litter on Emergence and Flower Production. *Castanea* 76(2):157-163.

More Web Links

Wild Ones Landscaping: Healing nature one yard at a time

<http://www.wildones.org/>

Local ecotype guidelines

<http://www.wildones.org/learn/local-ecotype-guidelines/>

Plant Conservation Alliance

Info from every agency and most botanical gardens

Edibles, aliens, ecosystems, fire, landscape mitigation, and more. www.nps.gov/Plants

Groton Open Space News

News from a community Nature park in CT

http://gosaonline.org/wp-content/uploads/2014/03/GOSA-News-Spring-2014.Final_1.pdf

Neonicotinoids please inform your gardening friends.

<http://www.xerces.org/2013/06/21/pesticide-causes-largest-mass-bumble-bee-death-on-record/>

Before you buy, ASK if plants were treated with neonics. Please do not purchase garden plants from nurseries who cannot tell you if plants are treated with neonics. They probably were.

Please explain this issue to your friends who are avid gardeners.

Neonic product list for reference

<http://www.xerces.org/neonicotinoids-and-bees/>



Obolaria virginica, A. Braun photo
< < <

Book Reviews

David Shilling

It will not speed up spring's arrival but on the New Books shelf at our local library is an excellent new botany book entitled Wildflowers of the Eastern United States by John Eastman. A field guide it is not. But rather a work offering fairly thorough entries on each of about 130

popular wildflowers.

The author organizes the plant bio's by habitat: Field and Clearings; Wetlands; Woodlands. Each entry describes flower and growth characteristics, habitat preferences, historical taxonomy, folklore, herbal uses, and more. It weighs in at a slight 280 pages, reads easily, and I believe you will find it most informative.

Another New Book nearby is The University of Illinois Press "Exploring Nature in Illinois: A Field Guide to the Prairie State". This work by Michael Jeffords and Susan Post has 49 chapters. Each chapter being a different Natural Area, State Park, State Forest, or Conservation Area in the state. Good inset maps show its location. Easy reading paragraphs tell of the area's history, geology, biology, and ecology - complete with encouraging pictures.

On towards Spring! And if you heard about those El Nino storms battering the California coast, some of that precipitation is making it far inland to the Mojave and the Sonoran Deserts. There just might be one glorious bloom of annuals out there come March and April. Have you ever seen the "desert in bloom"?

Missouri Native Plant Society Awards

Submitted by Malissa Underwood, Awards Committee Chair

Award nominations due April 1

The MONPS Awards Committee seeks nominations of people who have supported the preservation of Missouri's flora. MONPS offers six awards:

Erna Eisendrath Memorial Education Award, recognizing individuals who, through teaching, writing, or other activity have conveyed to others a significant appreciation and knowledge of Missouri's native flora.

Arthur Christ Research Award, recognizing an individual's significant contribution in furthering the knowledge of Missouri flora.

Plant Stewardship Award, recognizing an individual or organization for the preservation of important elements of Missouri's flora through purchase, registry, and/or management practice.

The John E. Wylie Award, recognizing individuals who have provided exceptional service to the Society.

Plant Conservation Award, recognizing an individual or organization for outstanding contributions to the conservation or preservation of native plants or plant communities in Missouri. This award differs from the Plant Stewardship Award in that it is not tied to direct acquisition or management of tracts of land, but instead may recognize various types of outstanding achievements or efforts, such as conservation planning, advocacy, or new ways of looking at old problems.

Julian A. Steyermark Award, the Society's highest award, given to an individual who has made outstanding contributions to any and all aspects of Missouri botany.

The deadline for nominations is April 1. Nominations should contain the full name of the nominee and the name of the person making the nomination, and they should set forth the contributions of the individual or organization that merits recognition. Award recipients need not be members of MONPS. Please submit nominations to Awards Committee Chairwoman, Malissa Underwood.

Malissa Underwood

P.O. Box 180

Jefferson City, MO 65102

malissa.underwood@mdc.mo.gov

Deep Rooted Wisdom

A book review submitted by Ann Wakeman

'Tis the season for catalogs. They started arriving before Thanksgiving with their glossy photos and promises. Yea, we can have as glorious a garden as we can only imagine this time of year with everything, except houseplants, sleeping during these cold and short daylight hours. Even book, seed and perennial companies now are in the enticing game with email offerings.

However, one crossed my inbox that caught my attention. **Deep Rooted Wisdom: Skills and Stories from Generations of Gardeners** written, rather, narrated by **Augustus Jenkins Farmer**. He answers to "Jenks". Critiqued as a 'treasure trove of homespun botanical advice will remind growers why they fell in love with gardening in the first place'. Liberally sprinkled with photos and side bars, this book is filled with folksy, down to earth advice and wry humor.

Do you remember starting to garden and really felt a budding kinship with the soil and plants you were tending? Nowadays, the gardening industry's steady stream of new products, new advertising, new rules creating unneeded complexities that intimidate future gardeners which can obscure the joy of gardening. Through stories of older gardeners as friends and mentors, Jenks shows us glimpses of his philosophy of gardening. Take the seemingly simple act of 'watering-in'. A phrase nearly every gardener knows and understands. Where did you first hear it? How did you come to understand the concept and what it meant?

This book is not a primer on gardening with native plants, Jenks lives and gardens in South Carolina's low country with many old homestead and pass-along plants. What we can take from his narrative is how to garden 'soulfully'. He shares tips from saving heirloom seed to building structures from natural materials all the while weaving in stories with knowledge from his gardening mentors. Their little secrets, their unwritten, unstudied bits of wisdom are being lost as we urbanize and younger generations are not well connected to these people. All these ideas take me back to what I have been practicing, now with native plants as they are what belongs here along with a few non-native I have come to admire.

A sampler of chapter titles: Handmade Trellises & Structures; Watering by Hand; Finding the Spirit of a Place; Root Your Own Plants; Building Fertile Soil; Pest Philosophy.

I will relish this book these winter months with tea in hand and cat on my lap. Hope you can join me at the upcoming lecture in our area: [Deep Rooted & Crinum for Cold Climates](#) February 17, 2015, 8:00 am - 5:00 pm [Unnamed Venue, Saint Louis, MO United States+ Google Map](#) Saint Louis Garden Club

Seeking out the Elusive Wild Phlox

I initially saw this title and thought he was looking for new phlox species [cool]. Well yes – BUT this is what we need to be wary of when we plant our gardens: “nativars or nybrids”. Be aware of the difference in nativars and true natives and the detrimental effect nativars have on the native environment. [BE editor] . . .

[Jim Ault](#) — December 6, 2014 [Website](#)



Dr. Jim Ault is director of ornamental plant research at the Garden. He is also chair and manager of the [Chicagoland Grows®](#) plant introduction program, a corporate partnership of the Chicago Botanic Garden, the Morton Arboretum, and the Ornamental Grower's

Association of Northern Illinois, a network of wholesale nurseries located in northeastern Illinois.



Recently I had the pleasure of speaking at a symposium on plant exploration that was held in Des Moines, Iowa. The audience was enthralled following the plant collecting exploits of such luminaries as Dan Hinkley, one of the founders of the renowned (alas, no more) Heronswood Nursery, to far-flung locales such as Vietnam, China, and Bhutan.

Much of my presentation focused on plant collecting a tad closer to home—not as exotic perhaps, but still crucial in support of my research as the Chicago Botanic Garden’s plant breeder. So let’s go seek out the elusive wild phlox.

Phlox is predominantly a North American genus (one species sneaks into Siberia) best known for its gaudily—some

say garishly colored—harbinger of spring, the moss phlox (*Phlox subulata*), and for that summer stalwart, the garden phlox (*Phlox paniculata*). For an idea of the diversity of the garden phlox, you can see Richard Hawke’s [latest evaluation report on *Phlox paniculata* cultivars](#). The woodland phlox (*Phlox divaricata*) and the meadow phlox (*Phlox maculata*) also have their selections and garden advocates. It’s likely that every midwestern gardener has a phlox or two in their landscape.

Most of the remaining 60-plus phlox species are relatively unknown to horticulture, yet can delight the senses with their almost infinite variation of flower color and fragrance. The underutilized species are admittedly a persnickety group to cultivate, with many of them inhabiting harsh habitats from baking desert valleys to frigid alpine rock outcrops. So phlox breeding efforts in the past have focused (and rightly so) on the more amenable-to-cultivate species mentioned above.

[My breeding work at the Garden](#) has always focused on developing new garden plants from interspecific hybridization, or crossing different species in the same genus. I’ve used this approach to develop new [coneflowers](#) (*Echinacea*) and [false indigos](#) (*Baptisia*), to name a few. In 2006, I started assembling a collection of phlox with the intent of testing my luck in creating novel hybrids between the species here as well. The botanical and horticulture literature wasn’t too encouraging on this front, with perhaps about a dozen authenticated natural and man-made interspecific hybrids known to date. But my perseverance led to two interspecific hybrid phlox, which

gardeners may be able to purchase in 2015: [Phlox x procumbens ‘Pink Profusion’](#) and [Phlox ‘Violet Pinwheels’](#).

You may ask, “And where is the plant exploration in this story?” I’m getting there!

Most of the phlox species simply aren’t available in the horticulture trade, yet I desired them for my breeding program. So commencing in 2011, I started my own plant collecting efforts to locate, study, and collect species phlox in the wild. Weeks were spent pouring over old taxonomic literature, maps, herbarium records and the like just to find out where phlox *may* yet exist in the wild. I say “may,” as the earliest records I located were from the 1940s—never a good harbinger, as urban sprawl, agriculture, and the like all too often swallow up such older stands of native plants. But records from recent years gave me strong hope that some phlox species are still “out there.” Modern collections



Phlox ×
procumbens ‘Pink
Profusion’ PPAF



Phlox ‘Violet
Pinwheels’ PPAF

invariably include GPS coordinates in their notes. Google Earth became my friend at this time, helping to locate potential collecting sites and plan out my trips.

On a trip a few years ago, a bit further afield: an expedition in Russia with colleagues

Finally: boots on the ground! I've made local trips around northern Illinois and Indiana, and trips further afield to South Dakota, Idaho, Montana, Wyoming, and Nevada. I've settled into a now-familiar routine. Do my research ahead of time, as above. Then go locate the plants in bloom, which translates into days of cruising bumpy, muddy, delightfully scenic and isolated dirt roads out west with one eye on the curves and drop-offs ahead and the other on the disturbed road edges, where so many phlox tend to congregate. Phlox as a rule are resentful of heavy plant competition, and so ironically, often thrive on road edges where the occasional mower or bulldozer damage clears out the competitors. It is that or scramble up steep cliffs and talus slopes, or venture out on to harsh alkaline flats, where yet again the plant competition is light, allowing phlox to thrive.

Another project in vitro: *Haemanthus aliblos* specimen Photo by Jim Ault



As I find populations with plants that appear promising for cultivation, I record field notes and GPS readings, then return in another month or year with collecting permits in hand to collect seed or cuttings. Slowly, I have been building collections of several phlox species, with the hope of ultimately combining through breeding their traits of varied flower shapes, color, and fragrance, plant habits, and adaptability for cold, heat, drought, moisture, high pH, and salinity. Phlox typically take two years from a rooted cutting or a germinated seed to grow into a flowering-sized plant, so the process of growing the species and then using them in breeding is taking time. But this year marked the first I saw a significant number of plants bloom that were hybrids made between garden cultivars and wild-collected plants. As is typical in plant breeding, most of the plants were “dogs” with terrible flowers or habits, or poorly adapted to our local garden conditions. These all got the heave-ho to the compost pile. But a few gems stood out. Stay tuned for future updates!

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In [Behind the Scenes, Horticulture & Display Gardens Chicagoland Grows](#), [Jim Ault](#), [phlox](#), [plant breeding](#), [plant evaluation](#)

Tropical Milkweed and Monarch Parasites

Q&A about related research

20 January, 15 7:29am Wendy Caldwell [Migration](#), [Recent Research](#)

Contributed by: Sonia Altizer, Karen Oberhauser, Dara Satterfield, Candy Sarikonda

A recent scientific study ([Satterfield et al., 2015](#)). Article is available [here](#). This research shows **very clearly that monarchs breeding on tropical milkweed throughout the winter have higher levels of protozoan infection** (caused by *Ophryocystis elektroscirrha*, OE) compared to monarchs in the migratory cycle. This result is not debatable. However, the implications of this for monarchs are more complicated. Concerned monarch advocates have raised many important questions. As scientists familiar with this research, we address below several of these questions with our best understanding of the science to date.

1) **Will infected butterflies at winter-breeding locations affect the monarch population as a whole?** The truth is that we don't really know. This depends on the abundance of non-migratory monarchs relative to the whole population, and the degree to which migratory and winter-breeding monarchs come into contact. Many of the winter-breeding locations occur along the migratory route in the southern U.S., so winter-breeding monarchs could spread parasites to migratory monarchs if they mate with each other or lay eggs on the same milkweed plants. (OE parasite spores are transmitted from infected adults to milkweed to caterpillars; spores can also be passively transferred from adult to adult during mating). As the overall monarch population in eastern North America becomes smaller, it is possible that winter-breeding monarchs will make up a larger proportion of the population. This could lead to a population-wide increase in infection rates. The potential mechanism for impact is clear, and we are strong believers in precautionary principles when it comes to conservation, so it seems prudent to err on the side of caution and avoid anything that could lead to a decline in monarch health.

Asclepias curassavica can be all yellow and confused with yellow varieties of *Asclepias tuberosa*.



[tropical milkweed continued . . .]

The availability of tropical milkweed (*Asclepias curassavica*) on the landscape in the U.S. is likely increasing as people become more aware of monarchs and their plight and seek to plant milkweeds that are sold in local garden stores. Tropical milkweed itself is not “bad.” Rather, it is winter-breeding that leads to increased parasitism, and tropical milkweed planted in warm areas of the U.S. enables monarchs to winter-breed. It's important to understand the effects that increased planting of this particular milkweed might have for monarch migration.

Is it going to drive monarchs to extinction? No. Could its proliferation lead to greater fall and winter-breeding and increased disease? We think that the risk is real enough and there are enough milkweed species that *don't* have this effect that it makes more sense to plant natives. **If people want to keep planting the non-native tropical milkweed, they should understand and be comfortable with the likely consequences [= compromising viability of existing monarch populations].**

2) Isn't it normal for some monarchs to encounter milkweed and lay eggs on milkweed in the fall and winter as they move through Texas (i.e., is the problem really new)? While native milkweed plants are sometimes green and available during the fall as monarchs are moving through Texas, this generally only happens in years with significant rainfall during the late summer and early fall. And the native milkweed generally does not stick around all winter. The vast majority of sites that reported monarchs during the winter in Texas (through the Monarch Larva Monitoring Project) had tropical milkweed, and that monarch eggs were much more likely to be found on tropical milkweed. So, it is quite clear, as the authors of a recent study point out, that tropical milkweed frequently supports monarchs breeding during the winter, whereas native milkweeds do so only in extremely rare circumstances.

In spite of tropical milkweeds being sought for egg-laying straits, it cannot be emphasized enough that tropical milkweed does not 'cure' monarchs of infection. If this were true, we would not see such high levels of infection in monarchs sampled in the winter-breeding tropical milkweed patches in the wild. In some of these patches, every single monarch was heavily infected. Tropical milkweed, like other toxic milkweed species, reduces disease severity (spore load) in infected monarchs – sometimes by half – and thus allows infected monarchs to live longer. But living longer can give infected monarchs more time to spread parasites. In other words, feeding on toxic milkweeds is beneficial to *individual* infected monarchs because they have a better chance of surviving long enough to mate and lay eggs; but if they do reproduce, their offspring will also become infected. In this way, tropical milkweed could lead to high levels of infection in the wild.

Winter top-dead plants provide a parasite-free feeding and egg-laying environment for monarchs returning in the spring.

6) Are gardeners to blame? No. Gardeners who have planted tropical milkweed are not at fault. A challenge for gardeners is the limited supply of native milkweeds available for purchase in some parts of the country. Gardeners have been helping – not hurting – monarchs by planting milkweeds and nectar flowers. And many gardeners and monarch enthusiasts have collected crucial scientific data on monarchs for this and other studies. Thanks to these citizen science efforts, we now know that native milkweeds support healthier monarchs in the southern U.S. Gardeners have been and continue to be imperative to monarch conservation.

7) What can gardeners do to support healthy monarchs? Now that we understand that monarchs are healthier when milkweed is seasonal and not year-round, we can work to improve monarch habitat. Below are recommendations for gardeners interested in reducing monarch disease and non-migratory behaviors:

- Plant **native** milkweeds whenever possible.

*We recognize that native milkweeds can be challenging to find for sale in some parts of the country. We hope this will change eventually. A few helpful resources are below.

- If you have tropical milkweed, cut it back from October-February to within 6" of the ground (unless it dies back naturally on its own). Also remove any new plant growth at the base of the plant. If you live in a warm coastal area in the southern U.S. or California, cutting the milkweed back is especially important and it will be necessary to prune frequently (every 3 weeks) as it quickly re-grows.
- Consider gradually replacing your tropical milkweed with native species.
- Learn to identify native milkweeds and protect them.
- Ask local growers to produce native milkweeds.
- Participate in research efforts. There are several citizen science programs dedicated to studying monarch ecology and conservation, including: *Monarch Health*, where participants test wild monarchs for the protozoan parasite OE (<http://monarchparasites.org/>); *Monarch Larva Monitoring Project*, where citizen scientists monitor a milkweed patch for eggs and larvae (<http://mlmp.org/>); *Monarch Watch*, for which participants tag monarchs (<http://monarchwatch.org/>); and *Journey North*, where you can report monarch and milkweed sightings (<http://www.learner.org/jnorth/monarch/>).

Missouri Department of Conservation's
Springfield Nature Center presents:

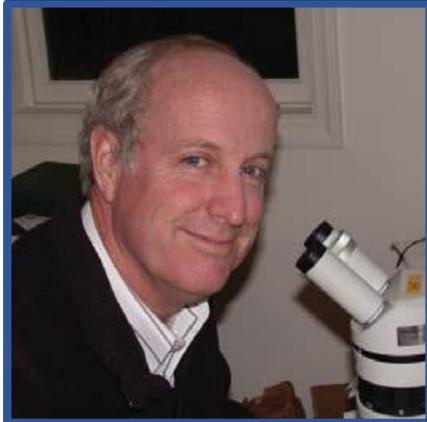
Douglas Tallamy

author of *Bringing Nature Home*, and co-author with
Rick Darke of the new book, *The Living Landscape*.

Tallamy is currently
Professor and Chair of
the Department of
Entomology and
Wildlife Ecology at the
University of Delaware
in Newark, Delaware.

Saturday March 28

Programs are
cosponsored by: City of
Springfield-Department of
Environmental Service,
and Missouri Wildflowers
Nursery [Merv Wallace]



Chances are, you have never thought of your garden, yard, or acreage as a wildlife preserve that represents the last chance we have for sustaining plants and animals that were once common throughout the United States. But author and Professor Doug Tallamy believes this is precisely the role our suburban landscapes are now playing and will play even more in the near future. Learn more about why native plants are so important and which ones will be the most helpful for wildlife by attending one or both of his programs. Books will be available for purchase and signing after each program.

Bringing Nature To Your Home

Saturday • March 28 • 10–11 AM

Specialized relationships between animals and plants are the norm in nature rather than the exception. Plants that evolved in concert with local animals provide for their needs better than plants that evolved elsewhere. Tallamy will explain why this is so, why specialized food relationships determine the stability and complexity of the local food webs that support animal diversity, why it is important to restore life to our residential properties, and what we can do to make our landscapes living ecosystems once again.

Creating Living Landscapes

Saturday • March 28 • 1–2 PM

Once you have decided to share your property with other species, how do you go about doing that? Can we bring life into urban areas? How do you reconstruct complex food webs in your yard? How can we get more plants into your landscape without it looking wild and messy? Will living landscapes be more prone to insect damage and vermin? Are they higher maintenance? Tallamy will answer these questions and more to help you make your yard a fascinating part of nature.



Native Plant Sale at the Springfield Nature Center

Saturday, April 4

The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). Call the nature center at 417/888-4237 if you have questions.

9:30-10:15am Making Rain Barrels

Tiffany Frey, Project Manager, James River Basin Partnership

Using a rain barrel is a perfect way to provide nice soft water for your plants, conserve fresh water, and reduce storm water pollution. Join Tiffany Frey, Project Manager with James River Basin Partnership, and learn how to make your own rain barrel. RainReserve diverter kits will be for sale during the plant sale at the James River Basin Partnership exhibit table.

10:30–11:15am Native Trees and Shrubs for Your Landscape

Cindy Garner, Urban Forester, MDC

Find out which native trees and shrubs are recommended for urban landscapes, how they benefit wildlife, and what it takes to keep them looking great.

Exhibitors and Plant Vendors: Andy's Native Plants, Steelville, MO; Friends of the Garden; Greater Ozarks Audubon Society; James River Basin Partnership; Master Gardeners of Greene County; Missouri Wildflower Nursery, Jefferson City; Pans Garden Native Plant Nursery, Mountain View, MO; Show-Me Yards and Neighborhoods, City of Springfield; Smiling Sun Landscaping, Springfield, MO.

Malissa Underwood, MDC State Botanist and MONPS Secretary, has an announcement:

ATTENTION TO MEMBERS RECEIVING HARD COPIES OF THE PETAL PUSHER!

The MONPS Board of Directors is currently reviewing the cost of sending hard copies of the Petal Pusher through regular mail. As printing and postal fees continue to rise, members who would like to continue receiving their copy on paper in the mail will be assessed a \$5 surcharge in the future. However, members can elect to receive electronic copies of the newsletter as an email attachment in PDF format and with the added advantages of full color photos and earlier delivery. Petal Pushers can also be viewed on the MONPS website: www.monativeplants.org

It is very important that members interested in receiving only the electronic version of the Petal Pusher give permission for the delivery conversion from paper to electronic. To make this conversion it is imperative to contact PP Editor Becky Erickson at beckyerick711@centurylink.net. Fortunately, about half of the members using email are already taking advantage of this opportunity, and they will continue receiving electronic version of the newsletter.



Missouri Native Plant Society

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St Louis, MO 63144-4353

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It is wrong when it tends otherwise." Aldo Leopold**

PRESIDENT

Paul McKenzie
2311 Grandview Circle
Columbia, MO 65203
573-445-3019
naulbeckvmo@mchsi.com

VICE PRESIDENT

John Oliver
4861 Gatesbury Dr.
St. Louis, MO 63128
314-487-5924
joliver02@earthlink.net

SECRETARY

Malissa Underwood
10665 CR 381
Holt's Summit, MO 65043
573-301-0082
Malissa.Underwood@mdc.mo.gov

TREASURER

Bob Siemer
74 Conway Cove Drive
Chesterfield, MO 63017
636-537-2466
aec623@prodiav.net

PAST PRESIDENT

George Yatskiyevch
Missouri Botanical Garden
PO Box 299
St. Louis, MO 63166
314-577-9522 (w)
george.yatskiyevch@mobot.org

BOARD MEMBERS

Justin Thomas ('14 - '17)
Rt 4 Box 946
Salem MO 65560
ithomas@botanvtraining.com

Robin Kennedy ('14 - '17)
University of Mo Herbarium
Columbia, MO 65211-3170
573-882-6519
kennedyr@missouri.edu

Bruce Schuette ('13 - '16)
678 St. Route 147
Troy, MO 63379
636-528-7247 (w)
basch@centurytel.net

Steve Buback ('12-'15)
MDC NW Regional Office
701 James McCarthy Dr
St. Joseph, MO 64507
816-271-3111
Steve.Buback@mdc.mo.gov

Michelle Bowe ('13 - '16)
901 S National Ave
Springfield, MO 65897
417-836-6189
Mbowe@MissouriState.edu

MISSOURIENSIS

CO-EDITORS
George Yatskiyevch
314-577-9522 (w)
george.yatskiyevch@mobot.org

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

PETAL PUSHER EDITOR

Becky Erickson
PO BOX 496
Ashland MO 65010
573-657-2314
beckyerick711@centurylink.net

DISTRIBUTION MANAGER

EDITORIAL COMMITTEE

Lisa Hooper
Jay Raveill
Tim Smith

ARCHIVES

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

MEMBERSHIP

Ann Earley
P.O. Box 440353
St. Louis, MO 63144-4353
314-963-0103
aec623@prodiav.net

SOCIAL & MEDIA

Steve Buback

WEBMASTER

Brian Edmond
8878 N FR 75
Walnut Grove, MO 65770
417-742-9438
briannedmond@gmail.com

ENVIRON. AND EDUCATION

John Oliver [also Vice President]

**CHAPTER REPRESENTATIVES
SOUTHWEST**

KANSAS CITY

Hilary Haley
204 South 15th Street
Bethany, MO 64424
(660) 867-3866
hhaley@tnc.org

PERENNIS

Andrew Braun
abraun1s@gmail.com

EMPIRE PRAIRIE

Steve Bruback [also on Board]

OZARKS

Liz Olson
MDC Ozark Regional Office
551 Joe Jones Blvd
West Plains, MO 65775
417-255-9561 Ext. 296 (w)
Elizabeth.Olson@mdc.mo.gov

OSAGE PLAINS

Casey Burks
914 SE Hwy ZZ
Deepwater, MO 64740
515-291-1550
mobugyoman@gmail.com

HAWTHORN

Ann Wakeman
5798 Windy Meadows Lane
Fulton MO 65251
573-642-6927
mike-ann@socket.net

ST. LOUIS

Rex Hill
4 Grantwood Lane
St. Louis, MO 63123
314-849-1464
RexLHill@charter.net

www.monativeplants.org
www.monativeplantsocietv.org



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