

March – April 2014

NEWSLETTER OF THE MISSOURI NATIVE PLANT SOCIETY

Volume 29 No.2

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

ANNOUNCEMENTS

MONPS Meetings and Field Trips in 2014 Mark Your Calendars!

Watch for directions and details in the next *Petal Pusher*. Also check MONPS Facebook page.

At their winter meeting in Columbia, on December 7th, the MONPS Board of Directors chose the following locations for meetings and field trips in 2014. At the moment, many of the details are still undetermined, so reserve the dates and look for updates in future *Petal Pushers* or check our website (<http://missourinativeplantsociety.org/>) and our Facebook page (<https://www.facebook.com/groups/251725834062/>) for the latest information. Field trips are well attended: between 30 and 70 people come to learn from the wild side of Missouri. Bring your friends and family. Don't miss these opportunities to see the state's best locations and learn from the state's best botanists! See you there.

Spring Meeting and Field Trips (May 2-4, 2014) – Potosi, MO. Possible field trip locations include Washington State Park, Hughes Mountain Natural Area, Onondaga Cave State Park, St. Joe State Park, Hickory Canyon.

Summer Meeting and Field Trips (June 13-15, 2014) – In and around Bethany, MO. Potential field locations: Chloe Lowry Marsh Natural Area, Dunn Ranch, Helton Natural Area, and Pawnee Prairie.

Fall Meeting and Field Trips (September 12-14, 2014) – Cape Girardeau, MO. We may visit Trail of Tears State Park, Sand Prairie Conservation Area, Kelso Sanctuary.

Winter Meeting and Planning Session (December 6, 2014) – Columbia, MO Dunn-Palmer Herbarium.



Don't miss out on fabulous landscapes like this with people who know how to teach you what is there.

< < Storm coming in at Doc Morton's Prairie.

Greer Spring run > >
BE photos



What do YOU want from MONPS?

What do you expect from your MONPS membership?

What activities do you expect when you join MONPS?

What additional activities and information would you participate in?

The Board invites you to take a brief survey about field trips, workshops, the *Petal Pusher* delivery and other functions of MONPS. The survey is short and will help us make sure we are best representing you!

Your participation in this survey is essential to the future of offered activities.

<https://www.surveymonkey.com/s/ZZ5ZSNC>

Thanks for your continued membership and your participation in all the activities you choose!

PETAL PUSHER BY EMAIL

From Becky Erickson PP editor.

Ninety two [of 350] MONPS members have sent me their permission to start electronic delivery and stop paper delivery. If you are receiving occasional messages about interesting ecological updates, you have signed up and do not need to renew this service. If you are NOT receiving periodic messages from me, and you use email regularly from friends and business contacts, PLEASE contact me and request email delivery of PP. If all of MoNPS members with email accounts accept E-delivery, we could save the state over nearly \$2000 per year in printing and postage costs. In addition there are 1100 miles per year on vehicles and days spent to get printing and mailing done.

In order to accomplish this transition into E-delivery of PP, I must have your permission to stop receiving the printed, mailed, paper copy from St Louis. I must receive an email from you requesting to drop the paper copy and allowing me to add your name/address to my Petal Pusher email file. PLEASE respond to these directions. beckyerick711@centurylink.net. Copy this into your email 'to' line.

With your name in this file you might occasionally receive additional messages: updates on state-wide MONPS news, and links to interesting ecological articles in addition to the PP. "Occasionally" means maybe one or two per week. Maybe none for a month. You are free to delete anything you don't want.

Members who do not respond will continue to get the paper copy. Hopefully the transition will be complete by July 2014. Be patient; old wheels turn slowly. I will post the same announcement in the March PP.

When renewing, or joining for the first time, please remember to include your contact information including email address, and your society and chapter dues preferences.

Turn screen time to green time = get outside



Information on joining Missouri Native Plant Society

<u>Society Dues</u>	Columbia = \$6
Circle all that apply	Kansas City = 5
[Chapter dues additional >]	Osage Plains = 5
Student = \$5	Ozarks = 5
Regular = 10	Southwest = 5
Contributing = 20	Perennis = 5
Life = 200	St Louis = 5
	Empire Prairie

Contribution to Hudson Grant Fund _\$ _____

All contributions are tax deductible

Make checks payable to MO Native Plant Society

CALL FOR AWARD NOMINATIONS

Nominations Needed for Annual Awards due April 1

Submitted by Michelle Bowe, Awards Chairman

Mbowe@MissouriState.edu

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

- 1) 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.
- 2) Arthur Christ Research Award, recognizing an individual's significant contribution in furthering the knowledge of Missouri flora.
- 3) 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.
- 4) The John E. Wylie Award, recognizing individuals who have provided exceptional service to the Society.
- 5) 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, Michelle Bowe, 8878 N Farm Rd 75, Walnut Grove MO 65770, or 901 S National Ave, Springfield, MO 65897, Mbowe@MissouriState.edu

Mail to: Missouri Native Plant Society
PO BOX 440353
ST. Louis MO 63244-4353

Name _____

Address _____

9-digit zip _____

Sometimes activities are changed at the last minute so we need a way to notify you.

Phone _____

Email _____

St Louis Chapter

Submitted by Rex Hill, Chapter Representative

Biodiver-City St. Louis – At our first meeting of the year in January, we were treated to a talk by Sheila Voss, Vice President of Education at the Missouri Botanical Garden. This is a St. Louis regional MOBOT-led initiative to call to action local government, industry, organizations, and private citizens to support, with specific goals and projects, the concept of urban biodiversity.

This initiative aims to develop coordinated efforts to increase urban biodiversity through public education and specific projects with visible outcomes. Issues such as watershed degradation, invasive species encroachment, reduced available attractive green space, and deterioration of parks and outdoor facilities would be high on their list of objectives that deserve attention.

We were asked as an organization what kinds of contributions we might make, and several were suggested such as identification of existing plant species, both appropriate and inappropriate, in current urban settings and suggestions for improvements to those environments. Several members were interested in specific projects being initiated such as those we've participated in such as bush honeysuckle control in Forest Park, or cedar tree removal efforts as those carried out in Kansas City by KC Wildlands. It was a thought provoking presentation. For me this kind of project presents the challenge of how to relate to citizens and get them interested and enthusiastic about their natural environment.

Hawthorn Chapter

Submitted by Ann Wakeman, Chapter Representative

December meeting was on the 8th. It was a casual potluck party at our outgoing president's home, Vanessa Melton-Silvey. She has offered us good leadership and we appreciated this last chance to receive her generosity.

January meeting was a lively discussion of officer elections, activities were planned using members' ideas. Primary activities this spring are plant sales held at MU's Bradford Farm **Sat 12 April**, and **Columbia Earth Day Sun 27 April**.

Activities throughout the year include encouragement of members to attend field trips offered by MONPS state committee and MPF, field trip to see Celandine poppies in bloom, social gatherings at member gardens/homes, wreath making workshop, native plant grants for schools, annual Christmas party.

The officers elected were: President - Denny Donnell; Vice President/program procurement - Nadia Navarette-Tindall; Secretary - Boyd Terry; Treasurer - John George agreed to continue this position; Newsletter editor and Nursery - Becky Erickson agreed to continue this position; Membership/booth inventory - Paula Peters agreed to continue this position.

2014 Nomination Slate for Board Members

The Nominating Committee is pleased to offer the following slate of nominations for 2014. The only offices up for election this year are two at-large Board Member positions whose term expires in 2014. Both have agreed to serve for another three years. They are:

Robin Kennedy – Board Member ('14 – '17)

Allison Vaughn – Board Member ('14 – '17)

Additional nominations for these two positions can be made from the membership by **submitting them to Rex Hill by 31 Mar.**

Email: RexLHill@charter.net or mail them to: Rex Hill, 4 Grantwood Lane, St. Louis, MO 63123.

Empire Prairie Chapter (St Joseph)

Submitted by Steve Buback

No report submitted. Activities will resume in Spring.

Ozark Chapter

Submitted by Liz Olson, Chapter Representative

No report submitted. Activities will resume in Spring.

Kansas City

submitted by Hilary Haley, Chapter Representative

We held our first meeting of the year on January 7th. This was a planning meeting in which we decided the dates and places of our field trips for the year. Our first event was February 8th at 10:00am. We visited the rare book room (RBR) at the Linda Hall Library, 5100 Cherry, Kansas City MO. The RBR has first editions of many early botanists such as Catesby, many with beautiful illustrations. We were thrilled to see the elephant folio of Audubon's work and many other books of interest.

Perennis Chapter

submitted by Andrew Braun

Alan Brant led a trip to Blue Pond NA on January 11. Three other members were able to attend and see the only known extant population of *Schoenoplectus subterminalis* (swaying bulrush) in Missouri. *Erianthus alopecuroides*, [syn. *Saccharum alopecuroidum*] a showy native grass (silver plumegrass), was also present around the pond. The group moved on to check out a small spring near the pond, some wild edible greens, a fungus growing on beech trees, and a few other interesting species along the way. The relatively warm weather and good company made for an excellent winter field trip and good excuse to get outside.

Osage Plains

Casey Burks, Chapter Representative

Regular chapter meetings are held on the 4th Monday evenings except for special occasions where we meet at member's homes. Chapter Field Trips during the spring, summer and fall are usually held on Saturday mornings. Send suggestions for field trips to Bernie Henehan berniehenehan@me.com or Dan Henehan danhenehan@embarkmail.com.

MONPS state field trips this year are, Friday, Saturday, Sunday, 2-4 May, 13-15 June, and 12-14 Sept. We will be exploring state parks, conservation areas, and other interesting sites around Missouri selected for learning opportunities. All are welcome; bring your family and friends to see the best wild places in the state.

Any member who would like to receive the Petal Pusher by email needs to send their request to editor Becky Erickson beckyerick711@centurylink.net. Benefits of receiving the Petal Pusher by email include: earlier receipt of Petal Pusher with color pictures; additional ecological information, savings in printing and postage costs for MONPS.

Yearly Membership is only \$15. \$10 goes to MONPS and \$5 for the Chapter and it connects you with the best botanists in the State! The best deal around! In addition we have lots of FUN! Invite anyone with a remote interest to join.

Osage Plains members wish you all a safe and warm winter.

South West Chapter

Submitted by Brian Edmonds Chapter Representative

After a two-month break from regular meetings, we emerged from hibernation to listen to Master Naturalist Bob Kipfer talk about black bears in Missouri. Bears aren't plants, obviously, but they eat plants. And we like to broaden our horizons a bit every now and then.

Bob has been involved with MDC efforts to trap and track black bears in southern Missouri. Several bears have been spotted around the Kipfer farm on Bull Creek in Christian Co MO. Although it was long thought that our Missouri black bear population was descended from reintroduced Arkansas bears, translocated from Minnesota and Michigan, recent DNA evidence suggests there might have been a small native population that persisted in the rugged Ozarks after most bears in Missouri were eliminated.

Black bears can live 20 years or more with an average age of 10-12 years. Bears are sometimes accused of killing livestock but there have been no confirmed cases of this in Missouri, save for a few chickens in one incident. Bears can run about 15 meters per second, about twice as fast as a human (or about ten times as fast as some of us), but they rarely interact with humans at all. There is no truth to the fact that bears cannot run downhill--or that snakes cannot bite underwater or that persimmon seeds can predict the weather--where do these things come from?

The chapter has decided to spend some time surveying Wire Road Conservation Area (Stone Co MO) and Lead Mine Conservation Area (Dallas Co MO). We plan to have a field trip to both areas this spring (see the calendar items). Member Max Brown has volunteered to visit one or both of these areas periodically to build up a species list.

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.



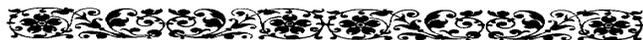
BE A CITIZEN SCIENTIST

Please sign up for Bud Burst
Monarch Watch
and

NEW Bumble Bee Watch See page 8

Keep a calendar, or diary, or "list" of when you see plants emerging, when you see trees blooming or leaves erupting, when seeds are ripe. All the instructions are on the Bud burst web site. The site starts by asking you about common garden plants, but you can add anything you want.

If you also enjoy birds and herps and Monarchs and other pollinators, there are citizen scientist data reporting sites for frog calls and for bird counts all year around. Start by looking at the Cornell Ornithology website and the MDC website. Monarch Watch and Bumble bee Watch will give you the parameters for pollinator assistance and data reporting.



Please Friend us on Facebook



And more information on our website

www.monativeplantsociety.org



**Orchid t-shirt
reprints
available.**

Same gorgeous print on a beige t-shirt. Order your size while it is available! Contact your chapter rep.

PP photo



Kansas City

Submitted by John C. Richter, Chapter President

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.

4 March Tues, 7:00 PM, Chapter meeting MDC Discovery Center: Doug Martin will present a very interesting lecture on the culture of temperate orchids. You will not want to miss this opportunity to learn from Mr. Martin's experience on this subject. No RSVP required.

5 April Sat, 10 am Dave Rock Conservation Area: just off Highway 13 between Lowry City and Osceola in St Clair County. This is a high quality sandstone glade that should abound with spring ephemerals. Bring a camera! We will meet at the northwest corner of the Home Depot parking lot on Bannister Road, between Highway 71 and I-435 and carpool. Look for us next to the street. If you want to meet us at Dave Rock, take 71 Highway south and go south from Lowry City on Hwy 13 to County Road NE 700 and turn right (west). Go a little over a mile and turn left (south) onto County Road NE 301 (gravel). The area parking lot is less than a quarter mile away on west side of the road. If we have time and feel like it, we may go to Osceola to visit a prairie remnant at Highways 13 and 82 and which will be replaced by an improved interchange this summer, and possible, a mile north of Collins, to see a pretty rare plant, *Geocarpum minimum*, on a road cut. Please RSVP with Sue Hollis ferngro@att.net if you plan to attend, or contact her via phone at 816-561-9419. Bring water and a lunch.

26 April Sat: Rocky Point Glades. No car pool required, but details on meeting time and location TBD. Contact person is Bill Fessler: fessler01@aol.com. This area is maintained by the Kansas City Missouri Parks and Recreation Dept. and has been the focus of ongoing restoration activities. Come see the beauty of this local and publically accessible natural area.

Perennis

12 April Saturday, 8:45AM: Pine Hills Ecological Area (near Wolf Lake) or Little Grand Canyon (near Etherton, IL.). Meet at the parking lot for the River Campus in downtown Cape Girardeau. We will be departing at 9AM.

26 April Saturday, 8:45AM: Sam A. Baker State Park. Meet at the parking lot for Scully, Rhodes Hall, and Dempster Hall on the campus of Southeast Missouri State University located off Henderson between Broadway and New Madrid. All fieldtrips will be led by Dr. Alan Bornstein. For more information, weather restrictions, rescheduling visit <http://www.semonps.org> or contact Allison at allisonjv@yahoo.com

Empire Prairie

We have no meetings scheduled until the Spring.

Osage Plains

Starting February 2014, regularly scheduled meetings will be changing from the 3rd Monday to the 4th Monday

Regularly Scheduled Chapter meetings are held the 4th Monday of each month, 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.

24 February Mon, 6:30pm. Our first meeting of 2014 in the Friends Room of the Henry County Library. Topic: making blue birds boxes.

24 March Mon, 6:30pm. Meeting in the Friends Room of the Henry Co. Library. Topic: TBD

28 April Mon, 6:30pm. Meeting in the Friends Room of the Henry Co. Library. Topic: TBD

Hawthorn

For folks interested in hiking and wildflower sightings around the state, See chapter newsletter for details; also available on www.columbianativeplants.org Otherwise you are encouraged to participate in outings with other MONPS chapters and MPF. Chapter meetings held on odd-numbered months on the second Monday at Unitarian Church, 2615 Shepard Blvd., Columbia: 10 March Mon 6pm; 12 May Mon 7pm; 14 July Mon 7pm

Third Thursday lunch at Uprise Bakery continues to be well attended by members for informal discussions generally centered around native plants and environmental issues. See www.columbianativeplants.org for postings of newsletters and activity details.

10 March Mon 6 PM Membership Meeting Unitarian Universalist Church, 2615 Shepard Blvd. Program TBA.

20 March Thurs Lunch with native plant enthusiasts. 11:30 at RagTag 10 Hitt Street = just south of Broadway. Good food and lively conversation.

5 April Sat, Brunch and possible mosey. Nadia and Randy's House, 2116 Grant, Columbia.

12 April Sat 10 – 2 Bradford Farm Plant Sale. Since it is our first sale, there will be much work to do to clean up and tag plants for about two weeks prior to the sale. Contact Becky.

27 Sun 9 – 6 Earth Day Booth and plant sale in Columbia. We have the same space as last year. Contact Paula to learn about volunteering.

2-4 May Fri thru Sun State Fieldtrip to wild areas around Potosi. Look for details in Petal Pusher and on the MONPS Facebook page.

12 May Mon 7 PM Membership Meeting Unitarian Universalist Church, 2615 Shepard Blvd. Program TBA. Bill Ambrose will talk about glade restoration.

Date TBA: Mosey and pot luck at Becky's; weather dependent. Spring things at Baskett Research Area.

Calendars continued . . .

Ozark

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.

18 March Tues: Dr. Ginger Allington, Seed Biologist and Seed Bank Manager at the Missouri Botanical Garden, will present a program about their new effort to collect and preserve seeds of Missouri's native flora for long term conservation and preservation purposes. Come learn how you can contribute to this effort!

15 April Tues: Susan Farrington will present a program highlighting some of the state-listed Species of Conservation Concern and other rare plants that could be found in our neck of the woods. We need more eyes on the ground looking for and reporting these rare plants! Attendants will receive a printed description of each of the species to aid in identification.

St Louis

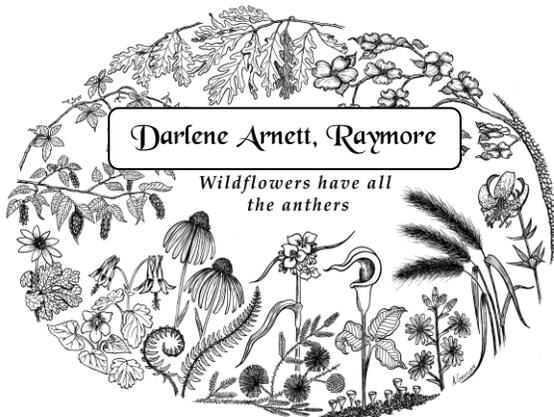
Chapter meetings are held on the fourth Wednesday of the month at the Sunset Hills Community Center, 3939 South Lindbergh Blvd., Sunset Hills, MO 63127. Google Map: <http://goo.gl/maps/K3PR>

26 March – 7:30 PM – Title and Topic tba

23 April– 7:30 PM – Title and Topic tba.



Welcome to New Members!



"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.



[BE photo]

Southwest

Greene Co Botanical Center, Spgfld, 4th Tuesday, 6pm

25 Feb Tues, Dr. Chris Barnhart, professor at Missouri State University, talk about the Emerald Ash Borers (EAB) in Missouri. Perhaps you've heard that [woodpeckers](#) and even the [polar vortex](#) might be working against them. I hope so, because I'd like to think the polar vortex was good for something!

25 March Tue 6pm: Topic TBD.

12 April Sat 9am: Accompany **Dr. Michelle Bowe** and the MSU Plant Taxonomy class on a day field trip to **Bull Shoals Field Station** in Taney Co MO. Meet at Missouri State University, Bear Park South, 3rd floor. Bring a lunch!

19 April Sat 9am: Master Naturalist / MONPS field trip, hosted by Bob and Barb Kipfer. Justin and Dana Thomas will lead the field trip through the hills and valleys of **Bull Creek**.

22 April Tue 6pm: Work in the native gardens at the Springfield-Greene County Botanical Center.

26 April Sat 9am: Accompany **Dr. Michelle Bowe** and the MSU Plant Taxonomy class on a day field trip to **Bull Shoals Field Station** in Taney Co MO. Meet at Missouri State University, Bear Park South, 3rd floor. Bring a lunch!

17 May Sat 8am: Wire Road Conservation Area. Meet at the northeast corner of the Sunshine / West Bypass Wal-Mart parking lot. Bring a lunch!

27 May Tues 6pm: Dr. George Yatskievych will talk about the Flora of Missouri Project. He'll take some time to sign copies of the newly-published Volume III of *Steyermark's Flora of Missouri*. You won't want to miss this special event. Keep your calendar open on Monday and Tuesday for a possible field trip in the area with Missouri's No. 1 botanist!

31 May Sat 8am: Lead Mines Conservation Area. Meet at the southeast corner of the Kansas Expressway Lowe's Parking lot. Bring a lunch!

7 June Sat 2pm: Missouri Prairie Foundation BioBlitz at **Gayfeather Prairie**, Vernon Co MO. Bring your camping gear and spend the night on the prairie!

21 June Sat 8am: Twenty-Five Mile Prairie. Meet at the southeast corner of the Kansas Expressway Lowe's Parking lot. Bring a lunch!

23 August Sat: Join Missouri Botanical Garden President Emeritus **Dr. Peter Raven** in Springfield MO for a Missouri Prairie Foundation Fundraiser Dinner. You won't want to miss this event!

Missouri's Most Wanted Plant List

submitted by Rex Hill – RexLHill@charter.net

Recently, I had the pleasure of attending a meeting sponsored by the Missouri Department of Conservation (MDC), hosted by Malissa Underwood, our State Botanist. The purpose of the meeting was to review the status of plants listed in the Missouri Species and Communities of Conservation Concern Checklist (SOCC report), published annually by MDC. The 2014 version of this report is available on the web at the address – http://mdc.mo.gov/sites/default/files/resources/2010/04/2014_species_concern.pdf, or you can simply ‘Google’

Missouri Species of Conservation Concern to get to the report. Many of you have seen or used this report in the past. The weather had postponed the meeting from its original date in early January, and limited attendance at the rescheduled meeting, but there were a number of MDC regional biologists and our own president, Paul McKenzie, and the author of the recently completed three-volume Flora of Missouri, George Yatskievych. With changes in botanical nomenclature finalized in Volume 3, and the experiences of persons who had done recent fieldwork, the list was due for some revisions. Plants that appear on the list are referred to as “State-Listed” and a short breakdown of codes assigned to the plants, taken from the SOCC report, is as follows: **S1 – Critically Imperiled (in the state); S2 – Imperiled; S3 – Vulnerable; etc. – more information can be found in the SOCC report**

My purpose for writing this is to encourage MONPS members to be looking for these plants in the coming year and submitting information about any observations and perhaps even collected specimens (with the appropriate collecting permits) for these listed plants to Malissa at her MDC office Malissa.Underwood@mdc.mo.gov.

In this brief report, I have included excerpts from those lists, both provided by Malissa as a follow-up summary to the meeting. One is a list of proposed changes, both in nomenclature and State-Listed status, and these changes will presumably be reflected in the 2015 version of the SOCC report. The second list comes from examining plant specimen records in the Flora of Missouri database and is a list of those species not reported in about 25 year.

The complete lists are available from me as Excel files, and you just need to Email me your request. RexLHill@charter.net

Examples of some changes:

- *Persicaria glabra*: S1S2; Name changed from *Polygonum densiflorum*



© USC Herbarium Photo by Linda Lee

Amorpha nitens: S1; New to the SOCC list

- *Primula frenchii*: S1; Name changed from *Dodecatheon frenchii*



©2000 Janet Novak

Maianthemum stellatum: Not seen since 1954

- *Houstonia rosea*: Not seen since 1931
- *Euphorbia ouachitana*: SU New to the SOCC list

Descriptions and illustrations of these plants are in George's Flora of MO or on the USDA Plant Database on line.

I wish you – **Good Hunting!**



Grab Your Camera... Bumble Bee Watch is Here!

From the PCA Listserve 22 January 14

New web site is launched to help identify and protect bumble bees. Bees and plants go together like...well, bees and plants. We're excited to announce a new website dedicated to better understanding and protecting North America's bumble bees.

Contacts:

Rich Hatfield, Conservation Biologist, Xerces Society for Invertebrate Conservation; (503) 468-8405, rich@xerces.org

Scott Hoffman Black, Executive Director, Xerces Society for Invertebrate Conservation; (503) 449-3792, sblack@xerces.org

PORTLAND, Ore---A new web site launched today allows people to be directly involved in protecting bumble bees throughout North America. BumbleBeeWatch.org enables people to connect with experts and other enthusiasts, and help build a comprehensive picture of where bumble bees are thriving and where they need help.

Furry, hardworking bumble bees are essential to wildlands, gardens, and farms, helping to deliver food security for both people and wildlife alike. Alarmingly, many recent reports suggest that we may be losing their familiar buzz from our summer landscapes due to habitat loss, insecticide use, disease, and climate change. More information is needed to determine their conservation status, and that process demands a continent-wide collaborative effort.

"We have an amazing community of citizen scientists who have helped us follow a handful of bee species," said Rich Hatfield, the Xerces Society conservation biologist who coordinated creation of Bumble Bee Watch. "Hopefully this new web site will generate greater awareness and allow us to draw more people into this community."

A smartphone or simple digital camera (and a computer) is all that's needed to start exploring BumbleBeeWatch.org. In addition to uploading photos of bumble bees, individuals can identify the bumble bees, learn about their ecology, and connect with bumble bee experts and other citizen scientists engaged in pollinator conservation.

The information gathered will help locate rare or endangered populations, as well as track species whose status is less well known. "Bumble Bee Watch will greatly benefit our at-risk pollinator conservation program," said Sheila Colla, project leader for Wildlife Preservation Canada's At-Risk Pollinator Project, a partner in Bumble Bee Watch. "By locating rare bumble bee populations and collecting information on their ecological requirements, citizen scientists can help conserve these important insects."

Bumble Bee Watch is a partnership between the Xerces Society, Wildlife Preservation Canada, the University of Ottawa, the Montreal Insectarium, the Natural History Museum in London, and BeeSpotter.

"Bumble Bee Watch unites scientists and conservation organizations in Canada and the United States in the study and protection of North America's bumble bees," said Scott Black, executive director of the Xerces Society. "We are grateful for the hard work and commitment that our partners have made. This web site will transform the way bumble bees are viewed and protected."

For More Information

Learn more about [BumbleBeeWatch.org](http://www.bumblebeewatch.org):

- Watch this video to learn how to contribute your photos, <http://www.youtube.com/watch?v=p7Kp3Awf2MQ>
- Learn how to take helpful photos of bumble bees, www.bumblebeewatch.org/contents/photo-tips/
- Meet the Bumble Bee Watch partners, <http://bumblebeewatch.org/contents/about/>

Watch the Bumble Bee Watch trailer video on YouTube, <http://youtu.be/vTLKMAAtXGnA>

Read more about bumble bees at risk on Xerces' Project Bumble Bee web page, <http://www.xerces.org/bumblebees/>

Pollinators in Chernobyl

From PCA Listserve 22 January 14

You can sign up with Plant Conservation Alliance for immediate delivery native-plants@lists.plantconservation.org

Anders Moller has done innovative research on a variety of systems.

Here's another: Moller, A. P., et al. (2012). "Ecosystems effects 25 years after Chernobyl: pollinators, fruit set and recruitment." *Oecologia* 170(4): 1155-1165.

Animals are assumed to play a key role in ecosystem functioning through their effects on seed set, seed consumption, seed dispersal, and maintenance of plant communities. However, there are no studies investigating the consequences of animal scarcity on seed set, seed consumption and seed dispersal at large geographical scales.

We exploited the unprecedented scarcity of pollinating bumblebees and butterflies in the vicinity of Chernobyl, Ukraine, linked to the effects of radiation on pollinator abundance, to test for effects of pollinator abundance on the ecosystem. There were considerably fewer pollinating insects in areas with high levels of radiation. Fruit trees and bushes (apple *Malus domestica*, pear *Pyrus communis*, rowan *Sorbus aucuparia*, wild rose *Rosa rugosa*, twistingwood *Viburnum lantana*, and European cranberry bush *Viburnum opulus*) that are all pollinated by insects produced fewer fruit in highly radioactively contaminated areas, partly linked to the local reduction in abundance of pollinators. This was the case even when controlling for the fact that fruit trees were generally smaller in more contaminated areas.

Fruit-eating birds like thrushes and warblers that are known seed dispersers were less numerous in areas with lower fruit abundance, even after controlling for the effects of radiation, providing a direct link between radiation, pollinator abundance, fruit abundance and abundance of frugivores.

Given that the Chernobyl disaster happened 25 years ago, one would predict reduced local recruitment of fruit trees if fruit set has been persistently depressed during that period; indeed, local recruitment was negatively related to the level of radiation and positively to the local level of fruit set. The patterns at the level of trees were replicated at the level of villages across the study site. This study provides the first large-scale study of the effects of a suppressed pollinator community on ecosystem functioning.

Editor's Picks:

WEB LINKS

In an effort to increase information and reduce initial newsletter volume, some web links will be included. Just because these articles are not printed in the primary document does not mean the information is any less important to know. When you make the effort to open and read these articles, you will be able to practice and intelligently teach small scale ecology.

Reasons we grow and protect native plants besides aesthetic beauty

<http://www.beautifulwildlifegarden.com/we-dont-all-eat-leaves-you-know.html>

<http://nativeplantwildlifegarden.com/help-monarchs-with-the-right-milkweeds/>

<http://nativeplantwildlifegarden.com/managing-your-native-landscape-to-support-pollinators/> Does it really matter if we get plants and seeds from Minnesota, or Texas; Lowe's or Mike's Landscaping?

<http://nativeplantwildlifegarden.com/what-is-native-what-is-not-when-does-it-matter/>

<http://nativeplantwildlifegarden.com/how-wild-ones-got-it-wrong-on-native-plant-cultivars/>

Newest pesticide – please inform your gardening friends.

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

I just spoke with a representative of Proven Winners, a horticultural plant supplier. I asked her if the PW plants were treated with neonics. She told me they send tiny plugs to over 5000 greenhouses and retailers. PW had no say on what happens to the plants after they leave their own property. Then she stated there was nothing conclusive about the effects of neonics on pollinators. Xerces Society has different data. There are more stories on their site.

Neonic product list for reference

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

Got an opinion? MONPS wants to hear it. Honest! [Click here and tell it like it is!](#)

Outstanding Scientist: The Board of Trustees of the Saint Louis Academy of Science has named **Dr. George Yatskievych**, past president of the Missouri Native Plant Society, as an "Outstanding Scientist" for 2014. Dr. Yatskievych's massive three-volume tome, "Steyermark's Flora of Missouri" was concluded in 2013 with the publication of Volume III. [Read more about it here!](#) Congratulations, George!

Field Trips in 2014: You can read about the state field trips in the [January newsletter](#). And this edition front page. Mark your calendars now! Watch for details by email and on Facebook for the May trip.

North American Orchid Conservation Center: [Check it out!](#)

Why Prairies Matter: Check out this [new video](#) produced by the [Missouri Prairie Foundation](#). Then, become a member, volunteer, or [sign up for their email newsletter](#).

Looking to get involved?: Join a [stream team](#), be a [phenology reporter](#), [report woodcock data](#) (to graduate student Cari Sebright), [educate your friends and neighbors about why natives are so important](#), [count some birds](#), or just [read about a "local couple" and how they use native plants to restore their neighborhood](#).

Plant Swamp Milkweed for Monarchs

Swamp milkweed [*Asclepias incarnata*] is the favorite for Monarch nurseries. 2007 was the last year I raised about 50 butterflies. The next year there were a few in my yard, and none for the past 3 years. I went home after the field trip at the State meeting in Fulton 27 Sept to find a monarch nectaring in my showy goldenrod [*Solidago speciosa*] the only one I saw all summer.



This was the 7-foot swamp milkweed that was stripped within ten days in July of 2007. I was so happy. There are 2 larvae and 12 chrysalis in this photo.

Please plant lots of swamp milkweed this spring.

Cultivate a spot in the sun where you can dig out a

dish or raise a small dam to collect rainwater from a draw or a downspout. Seed can be planted NOW [immediately], but they won't mature until next year. Right after planting potted plants, water until soggy, mulch well, and put up a fence that will keep deer, rabbits, and box turtles – yes really! – from eating them. Keep them wet until they go dormant.

Never, NEVER put any kind of insecticide on the plants. When you get orange aphids, it is a temptation, but NO! Gently squeeze and wipe aphids every day or so and they won't suck the life out of your plants. Lye soap spray will kill aphids. Also watch for praying mantises = kill them manually or they will eat any pollinator or bird.



Maybe you will be lucky enough to raise some of these and send them on their way.

[BE photos]

Migration of Monarch Butterflies Shrinks Again

Under Inhospitable Conditions

By [MICHAEL WINES](#) New York Times JAN. 29, 2014
<http://www.nytimes.com/2014/01/30/us/monarch-butterflies-falter-under-extreme-weather.html? r=1>

A Monarch butterfly in Mexico. The number of surviving butterflies has varied from year to year, sometimes wildly, but the decrease in the size of the migration in the last decade has been steep and generally steady. Marco Ugarte/Associated Press

Faltering under extreme weather and vanishing habitats, the yearly winter migration of monarch butterflies to a handful of forested Mexican mountains dwindled precipitously in December, continuing what scientists said was an increasingly alarming decline.

The migrating population [has become so small](#) — perhaps 35 million, experts guess — that the prospects of its rebounding to levels seen even five years ago are diminishing. At worst, scientists said, a migration widely called one of the world’s great natural spectacles is in danger of effectively vanishing.

The Mexican government and the World Wildlife Fund said at a news conference on Wednesday that the span of forest inhabited by the overwintering monarchs shrank last month to a bare 1.65 acres — the equivalent of about one and a quarter football fields. Not only was that a record low, but it was just 56 percent of last year’s total, which was itself a record low. At their peak in 1996, the monarchs occupied nearly 45 acres of forest.



Monarch butterflies near Angangueo, Mexico. Prospects of a rebound to earlier migration levels are diminishing, experts say. Kirsten Luce of Associated Press [KL Photo]

The acreage covered by monarchs, which has been surveyed annually since 1993, is a rough proxy for the actual number of butterflies that survive the arduous migration to and from the mountains.

Karen S. Oberhauser, a conservation biologist at the University of Minnesota who has studied monarchs for decades, called the latest estimate shocking. “This is the third straight year of steep declines, which I think is really scary,” she said. “This phenomenon — both the phenomenon of their migration and the phenomenon of so many individuals doing it — that’s at risk.”

Mexico is the southern terminus of an age-old journey

in which monarchs shuttle back and forth between far-flung summertime havens in Canada and the United States and a single winter home in Mexico’s Sierra Madre mountains.

An internal compass guides the butterflies each fall to a small cluster of mountains where ideal temperatures and humidity allow them to rest, clinging to trees by the millions like brilliant orange capes, until they begin the northward return trip each March.

By some estimates, a billion or more monarchs once made the 2,500-mile-plus trip, breeding and dying along the route north so that their descendants were actually the ones that completed the migration.

The number of surviving butterflies has varied from year to year, sometimes wildly, but the decrease in the size of the migration in the last decade has been steep and generally steady.

The latest drop is best explained by a two-year stretch of bad weather, said Chip Taylor, a biologist at the University of Kansas who has studied the butterflies for decades. But while good weather may help the monarchs rebuild their numbers, their long-term problem — the steady shrinking of habitat along their migratory route — poses a far greater danger.

The monarchs’ migratory freeway runs through the Great Plains. As they flew north from Mexico in early 2012, Dr. Taylor said, months of near-record heat sapped their endurance and skewed their migratory patterns in ways that limited their ability to reproduce.

Last spring, he said, the opposite happened: Unusual springtime cold in Texas delayed the butterflies’ northward migration, causing them to arrive late in areas where they would normally have bred weeks earlier.

“They have to arrive in the middle of a 40-day period to do really well,” Dr. Taylor said. “If they arrive too early, the population crashes, and if they arrive too late, the population crashes.”

A larger migration might have weathered the cold snap, but given their losses the previous year, “the butterflies really didn’t have the capacity to turn things around,” he said.

The loss of habitat is a far more daunting problem, Dr. Taylor and Dr. Oberhauser said.

Monarchs lay their eggs only on milkweed, and patches of the plant have rapidly disappeared from the Great Plains over the last decade. As corn prices have risen — spurred in part by a government mandate to add ethanol to gasoline — farmers have planted tens of millions of acres of idle land along the monarchs’ path that once provided both milkweed and nectar.

At the same time, growers have switched en masse to crops that are genetically engineered to tolerate herbicides. The increased use of herbicides has all but wiped out milkweed that once sprouted between rows of corn and soybean.

As a result, Dr. Taylor said, the monarchs must travel farther and use more energy to find places to lay their eggs. With their body fat depleted, the butterflies lay fewer eggs, or die before they have a chance to reproduce.

The monarchs are but the most visible victims of the habitat loss, Dr. Oberhauser said. A wide variety of pollinators and other insects, including many that are beneficial to farmers, are also disappearing, she said, along with the predators that feed on them.

Preview of coming Attractions!!



Hillside of wild leek



New black oak leaves



Geranium and Zizia



Spring beauty – yes, sometimes they are this pink.

Imagine being lucky enough to find a group of
Yellow Ladieslips! Or a tiny Twayblade!



Then you can come home to Sweet William by the garden wall.





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

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