



January-February 2016 NEWSLETTER OF THE MISSOURI NATIVE PLANT SOCIETY Volume 31 No.1
 "... to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri."

ANNOUNCEMENTS

Announcing the 2016 MONPS State Meeting and Field Trip Schedule

Mark your calendar and save these dates for next year, so you can join us for our great schedule of field activities. In order to maximize affordable rooms, we will use Poplar Bluff as our base for both the Spring and Summer meetings. Spring field trips will focus on the "swamp-east" side of town, visiting Mingo National Wildlife Refuge, Otter Slough Conservation Area, Holly Ridge Natural Area or similar sites. Then, our Summer meeting will visit the Van Buren area on the west side of Poplar Bluff to see Pump Hollow, Blue Hole and other nearby and very special locations. Our Fall trips will include some unique Loess Hills preserves, and Missouri River sandbars in the Mound City area; a probable added experience is the Timberhill [Sibylla Brown] Savanna Restoration in Iowa. *This destination is 2 hours from Mound City. This is in Sept so we have time to decide.* [Doug Ladd made a strong recommendation for the trip.](#) Let Dana know if you want to go or don't want to go mail@botanytraining.com so she can arrange the trip schedule.

Because you are a MONPS Member, you value the native environment and you want to learn more about it. Consider these weekend trips as vacations and as college level ecology courses for only the cost of gas and a motel room. Make plans now to join us for in-depth education on natural history in Missouri: MARK YOUR CALENDAR NOW.

| Date | Base of Operations | Highlights may include: |
|----------------------|--------------------|---|
| May 13-15, 2016 | Poplar Bluff, MO | Mingo NWR, Otter Slough, Holly Ridge, and more |
| June 24-26, 2016 | Poplar Bluff, MO | Blue Hole, Pump Hollow, Big Spring, other targets in the Van Buren area |
| September 9-11, 2016 | Mound City, MO | Loess Hills of NW MO, Star School, Brickyard Hill, Timberhill Oak Savanna in Iowa, and Sand Communities near the Missouri River |
| December 3, 2016 | Columbia, MO | U.S. Fish and Wildlife Service Office, 101 Park DeVile Dr., Columbia, MO |



**Missouri Native Plant Society
 Minutes of the Quarterly Meeting, Jefferson City – 19 September 2015**

John Oliver called the meeting to order and determined that a quorum was present. Minutes from the previous meeting were approved. Ann Wakeman reported that she has not been receiving e-mails so the google groups meeting needs to be updated. Dana Thomas was appointed assignment recorder.

TREASURER'S REPORT

Bob Siemer presented the Treasurer's Report. The report still does not show checks that need to go out to the Chapters and that will still affect the report for this year. This was the first time MNPS has had more revenue come in through PayPal than through regular mail. However, it is more work on Ann's part to keep track of membership lists. The Treasurer's Report was approved.

PUBLICATIONS & MEDIA

1. Petal Pusher – Becky Erickson stressed the importance that the DEADLINE FOR PETAL PUSHER ARTICLES is September 27th, including Chapter Reports! John mentioned the importance of submitting a report for each chapter. Even if there's not a lot going on, there should be something from each chapter to report.
2. Missouriensis – John Oliver provided a report that Missouriensis was recently sent out. George Yatskievych is resigning as editor. Doug Ladd has expressed interest in continuing on as sole editor but there was discussion that seeking another co-editor would be a good idea. Some suggestions for potential co-editors were discussed. It would be only slightly less money to send out the

Attending:
 John Oliver,
 Dana Thomas,
 Justin Thomas,
 Bob Seimer,
 Ann Early,
 Andrew Braun,
 Becky Erickson,
 Michelle Bowe,
 Theresa Cline,
 Steve Turner,
 Bruce Schutte,
 Liz Olson,
 Malissa Briggler,
 Hilary Hailey,
 Casey Burks,
 Rex Hill,
 Ann Wakemann,
 Clair Ciafre

Missouriensis with the permit as opposed to sending it out first class mail. Also, the permit has to be paid ahead of time, so if the Missouriensis does not get published one year, we've paid the permit for no reason. Also, in the future, the Missouriensis could be mailed out electronically and wouldn't even need to be sent via regular mail. It was decided that the permit would be allowed to expire.

3. Distribution Chairman – Rex Hill gave a report that distribution has been going well. The number of hard copies of the Petal Pusher mailed out continues to decline as more people have opted to receive it electronically.
4. Website and Social Media – Dana Thomas provided a report on the website and social media. Brian Edmond has continued to provide help regarding the website. Dana has been posting meeting updates to the website. Chapter updates have been posted recently. Total Facebook contacts consist of approximately 4,700 people. Dana stressed the importance of keeping the website updated. New awards, newsletters, alerts to board members, individual chapter pages and links to pages are all very important and constantly in need of updating. John mentioned the importance of putting up photos that would be of interest to a larger group of people than the awards, board member alerts, etc.
5. Roadside Flower Poster, Malissa Briggler provided a report. Communication with MODOT indicates that the posters should be printed this fall.

COMMITTEES & TASK FORCES

1. Membership – Ann Earley provided a report on membership. There are currently 387 members, 71 of which are life members. Renewals have picked up over the last few weeks. Ann has asked chapter reps to contact the members that have not yet renewed. There are 25 life members still getting hard copies of the PP but have not paid the \$5. Life members will continue getting the PP for free and John will call and ask if they would prefer getting the PP over e-mail. Several institutions that have paid life dues are getting the PP for free. It was decided that a letter would be sent to the life member institutions to see if they are still interested in receiving the PP.
2. Archives – Rex Hill provided a short report. Jack Harris continues to be very helpful in managing archives.

SOCIETY BUSINESS

1. Successor for George Yatskievych on the Board – John is currently receiving suggestions for ideas of a successor for George's position on the Board.
2. T-shirts, Inventory and Status – Rex Hill was happy to report that MNPS is now getting to the point where T-shirts sales have exceeded the cost of purchasing them.
3. Hudson Fund – A new chairperson for the Hudson Fund Committee will be needed to replace George Yatskievych. John is currently receiving suggestions for consideration.

CHAPTER REPORTS: Chapter reports were in the process of being submitted to the Petal Pusher.

MISCELLANEOUS ANNOUNCEMENTS

Winter Meeting – Columbia, MO, 5 December 2015 USF&WS Office, 101 Park DeVill Drive, Suite A, Columbia, MO 65203-0057. New location this year!

Bob Siemer reminded everyone to use Amazon Smile!

The Board unanimously passed a motion to pledge a donation for a memorable bench at Emmenegger Nature Park, Kirkwood, MO in honor of the contributions George Yatskievych has made to MO botany and his leadership in botany tours.

Dana reviewed the assignments:

John Oliver will write an article about George Yatskievych's award.

Steve Turner and others will get pictures to John for George's article.

Dana Thomas will send a list of website updates to John Oliver or Michelle Bowe and post an Amazon Smile reminder on the Facebook page.

Rex Hill will write a letter to institutions who are receiving the Petal Pusher.

Chapter reps need to contact members who have not yet renewed their membership.

John Oliver will send out a request for papers for the Missouriensis

MEETING WAS ADJOURNED



Petal Pusher Editor's Note: Please be thoughtful of your volunteer editor and follow [submission guidelines](#) posted in Jan, Mar, May 2013. PLEASE ADD: *Change plain text to Italics* when using scientific nomenclature for any biological being. Editor does not appreciate spending hours to make format changes [font, size, spacing, style, page layout].

Editor thanks all who submit articles and reports for publication in MONPS Petal Pusher. Special thanks to those who submit articles and reports early and in requested format. This kind of cooperation is a team effort to make our newsletter readable and interesting.

For Holiday Shopping, Please use Amazon Smile

The easiest way to support the Missouri Native Plant Society!

Please consider using Amazon.com's charitable site to do your Christmas shopping.

On your first visit to AmazonSmile (smile.amazon.com), you need to select a charitable organization to receive donations from eligible purchases before you begin shopping. Choose Missouri Native Plant Society Inc. Amazon remembers your selection, and then every eligible purchase you make at smile.amazon.com will result in a donation. Every dollar you spend on the site generates a half cent for us. They gave us \$38 last year. It doesn't seem like much, but every little bit helps, **and the money comes from Amazon, not you!** It is up to you to make the donation higher next year. Thanks for thinking about us.

Welcome New Members!

Is your friend's name here?

If you read us on Facebook – is your name here?

Membership is easy and very low cost see <http://monativeplants.org/membership/>



WORKSHOPS THIS WINTER/SPRING

Propagating Native Wildflowers - 1/23/16, 12-3:30pm
finding seed, artificial stratification methods, planning gardens. Columbia Area Career Center 4203 S. Providence, Columbia MO 65203 573-214-3803 <http://career-center.org/adults-courses> You must click on 'enroll now' to see class lists. They won't be on line until 1 Jan 16.

Installing Native Gardens for Pollinators: besides hands-on garden installation, garden planning and appropriate plant identification are included. Sign up through CACC above. 4/4/16, 5-8pm Location: [Columbia Center for Urban Agriculture](http://w23.columbiaurbanag.org/columbia-urbanag/index.html) [<http://w23.columbiaurbanag.org/columbia-urbanag/index.html> google for location = near Business Loop and College]

Both are taught by Becky Erickson

Butterfly and Skipper Workshop

Submitted by Paul McKenzie

Here ye! Hear ye! I am pleased to announce that a butterfly and skipper id workshop will be held May 23-25 at the Army Corps of Engineers' Harry S. Truman Visitor Center in Warsaw, Missouri. This workshop is being sponsored by the Missouri Natural Areas Committee and in partnership with the USFWS, MODNR, MDC, USFS, NPS, TNC, the Army Corps of Engineers, Truman State Park, the Illinois State Museum.

The class will be taught by butterfly and skipper expert Jim Wiker of Springfield, IL. If you have not experienced Jim's skill in identification and his knowledge of butterflies and skippers, you are in for a treat! Jim has been studying butterflies and skippers for going on 50 years and is considered by his peers to be one of the leading experts on butterfly and skipper identification in the Midwest.

In addition to being an expert on butterflies and skippers, he is also an expert on several groups and species of moths, especially those in the genus *Papaipema*. Most people know about Jim's recent discovery of the rattlesnake master borer moth (*P. eryngii*) in MO and KS. He is one of the 3 leading world authorities on this genus.

The workshop will include lecture and field trips to areas surrounding Warsaw. You may wonder why we picked this locality of all possible locations in the state? The main reason is that this is the type locality for *Papilio joanae* - the Ozark or Missouri Woodland Swallowtail that has not been seen in many years. Additionally, it is a historical site for Linda's roadside skipper (*Amyblyscirtes linda*) a native Missouri species that the FWS has been petitioned to list. It is hoped that we may be able to find both species during the workshop. The date was picked as this is the flight season for both species. Finally, the site is within a certain radius of multiple butterfly and skipper habitats.

Logistics:

Times: we will start at noon on May 23 at the Harry S. Truman Visitor Center and end around noon on May 25.

Hotel: You will need overnight accommodations. We have not set up a block of rooms but we contacted the recommended Parkfield Inn (660-438-2474) in Warsaw to check of room availability. Currently they have ~ 54 rooms available and this winter they will transition into a completely smoke free facility. Rooms will be available on a first come, first serve basis so I recommend securing your reservation ASAP (yes, I have already made mine). Our hotel contact is Felicia Davis who is the Manager of the Parkfield Inn.

If you plan to attend the workshop, please let me and Steve Buback, MDC Natural History Biologist for NW Missouri know by email so we can make a list of participants. I predict that this will be a very popular workshop so put in your name so it can be put on the list.

Field trips will be to the surrounding areas including forests, glades, prairies and a fen so we should see a wide array of butterflies and skippers.

Required books:

Two books will be required for this class:

- Jeffords, M.R., S.L. Post, and J.R. Wiker. 2014. Butterflies of Illinois- a field guide. Illinois Natural History Survey Manual. 14, Champaign, IL. 409pp.
- Bouseman, J.K., J.G. Sternburg, and J.R. Wiker. 2006. Field guide to the skipper butterflies of Illinois. Illinois Natural History Survey Manual 11.

Both are available on Amazon.com for about \$24 a book. The butterfly book was just recently published in 2014. The skipper book was published in 2006 but still available. While there are some other helpful field guides for Midwestern states such as Butterflies of Iowa by Schlicht & Dwoney (2007), Michigan Butterflies & Skippers by Nielsen (1999), Butterflies of Indiana by Belth (2012).

I think the Illinois books cover the largest number of species that we have in Missouri and in my opinion the two books are by far the best I have read. Of course we have the Butterflies and Moths of Missouri by Heitzman and Heitzman (1996) but I can not see the detail on some species and it does not have key field marks outlined, side by side comparison of all species and life history information provided by the Jeffords et al. (2014) and Bouseman et al. (2006) books. Betros' Photographic field guide to the butterflies in the Kansas City region (2008) has some great photos but it does not cover many species known from other parts of the state. The J.R. Wiker listed as the co-author of both books above will be the instructor of our workshop!



Both are tiger swallowtails B. Erickson photos

There are approximately 170 species of butterflies/skippers in MO but I would predict that we are not likely to see more than 40-50 species during the 3 day event but that is a guess on my part. Jim will cover all groups of butterflies and skippers known from Missouri and provide identification field marks useful in separating some of the more confusing species.

Please be aware that if you plan to collect specimens you will need an MDC permit for MDC areas, and special use permits for the state park and the COE property. Contacts for permits: for MDC- contact Steve Buback, for MODNR-State Parks, contact Chris Crabtree, and for the COE contact Park Ranger Erin Cordrey.

Depending on response, we may need to divide folks up into different field trips but I have copied some on this email who have some experience with field identification (e.g. Donna Brunet, Dr. Tim Cashatt, Richard Day, Michael Denoux, Phil Koenig, Tim Vogt, etc.). Jim Wiker will be the instructor of the course but we may need assistance with field trips depending on how many sign up to take the workshop.

Please forward this to others interested who I may have missed but be sure they are aware of limited lodging at the Parkfield Inn and the need to let me and Steve Buback know if they want their name on the attendees list.

Looking forward to improve my identification skills on butterflies and skippers!

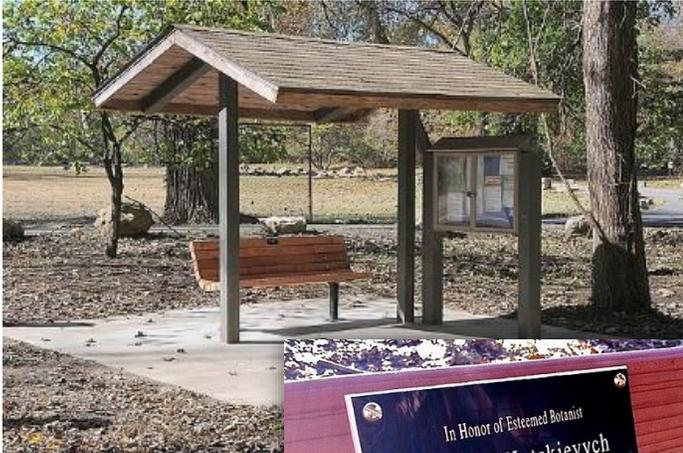
Chapter Reports

St Louis

Submitted by Rex Hill Chapter Representative

Our meeting in October was the last of the year as our fourth Wednesday of the month meeting time is in conflict with the Thanksgiving and Christmas holidays. At the October meeting, our tradition is to share photographs of plants seen on outings during the year; some from Missouri and some from wherever our members have traveled in the past year. This year we were treated to photographs from Wayne Clark, Steve Turner, and John Oliver.

One other piece of news from the St. Louis Area is the installation of a bench at the Emmenegger Nature Area adjacent to the MDC Powder Valley Nature Center in St. Louis County. The bench was funded by contributions from the Missouri Native Plant Society, the Webster Groves Nature Study Society and a number of individual members of those organizations in order to honor George Yatskievych for his contributions to Missouri Botany. George has recently departed from the Missouri Botanical Garden for his new position at the University of Texas in Austin. The photos show where the bench was placed at the entrance to the hiking trail through Emmenegger. He will be missed by all of us and we thank Steve Turner for organizing and facilitating this tribute to George.



Kansas City

submitted by Hilary Haley, Chapter Representative

On September 1st, the Kansas City chapter held their fall meeting. For the program that night, John Richter provided general approaches and shortcuts to identifying plants in the field. Groups of plants used in this exercise included trees, sunflower like plants, and also grasses and sedges. By looking for distinctive characteristics of certain groups of plants, it is possible to take shortcuts in identifying plants and either avoid using plant keys or skip to the right part of a plant key first.

Ozark

Submitted by Liz Olson Chapter Representative.

October 20, 2015: The Ozark Chapter long-time member and secretary, Betty Queen, presented a program about her elaborate rain barrel watering system. After a neighbor's water use put more pressure on her well, she decided to take advantage of abundant rainwater to support her gardens. Betty has a slanted metal roof on her home, and no gutters to divert rain. Rain pours off the roof and into a series of large plastic tubs lined along the side of the house. When these are full, she uses pumps and hoses to transfer the water to large storage containers. Through trial and error, Betty has perfected her system and only ran dry one year. All of the materials were inexpensive and easy to find at home and garden stores. Betty's resourcefulness was very inspiring to our members who had many questions about the details of her system.

November 17, 2015: Our final meeting of the year will be an open group discussion about any topic related to native plants and nature. Despite a stormy day and the threat of flash flooding, six members met for a cozy potluck meal and discussion about natural events, gardening, and plant-focused books and movies.

Perennis

Submitted by Andrew Braun Chapter Representative

The Perennis chapter was joined by members of the Ozark and St. Louis chapters on October 4th at Hickory Canyons Natural Area. The group explored the area and found many of the interesting fern species known from Hickory Canyons, including lobed spleenwort (*Asplenium pinnatifidum*), lady fern (*Athyrium filix-femina*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), and common polypody (*Polypodium virginianum*). The group also found other uncommon species such as winterberry (*Ilex verticillata*), green adder's mouth (*Malaxis unifolia*), and rattlesnake plantain (*Goodyera pubescens*). In addition, numerous mosses and liverworts were found along the sandstone cliffs. Hickory Canyon's dramatic cliffs and interesting flora are a treat any time of the year.



Lady fern

Ann Wakeman photo

Hawthorn

Submitted by Ann Wakeman Chapter Representative and Boyd Terry Secretary

The bi-monthly membership meeting held at the Unitarian Church November 9 at 6pm. The program this month, Wedge Watkins with the U.S. Fish and Wildlife Service discussed monitoring for native bees in restored native habitat at the Overton Bottoms Wildlife Refuge. His program included the results of Midwestern Bees Monitoring by USFW, 2012 to 2014 and data from 12 locations of the Big Muddy Nat'l Fish and Wildlife Refuge system from MN to LA. Restoration of the native flood-plane to native habitat requires the bees as the major pollinators. He reviewed the process of bowl-trapping and netting. After trapping, he explained the process to clean, separate, and identify about 1000 collected bees. About 1/2 hour was invested in each bee to make it ready for microscopic evaluation and preservation. Of 50 bee experts in the US, only 2 are in Missouri. Just like not all children in a family are identical, not all bees of the same species are precisely identical: some are minutely larger or smaller; some have a paler or darker spot compared to the yellow spot on most of their cohorts. These variations make identification difficult.

Bees don't migrate. Several bees require specific plant [see chart >]. These bees are dormant most of the year, timing their emergence to coincide with their favored flower species when it blooms. Discussion brought up the point that Climate Change would make bloom time of plants earlier than the bee species emergence. Both species would suffer population decline if the bees couldn't adjust. The same reason is important to use local seed which is genetically adapted to local conditions and will bloom at the correct time for bee emergence.

Of 450 species identified in the US, 270 are found in Missouri. Most are solitary, a few have hives. Offspring are fed with pollen and nectar. Discussion brought up facts that both pollen and nectar of flowers of plants treated with any of the new generation systemic insecticides would carry traces of these insecticides. Just like traces of toxins in your food make you sick or malformed, so do these traces in the bee food. Over time insecticides weaken and kill whole hives which feed off insecticide-treated plants such as soy, alfalfa, apple, almond, cucumber, the list is very long.

Data from all of this hard field work shows native bumblebee numbers on the whole are on the decline, only a few exotics have been seen and happily all the characteristic Missouri bees are present. **The website "Beespotter" or "Xerces" will help with bee identification.**

Becky E unveiled the freshly printed Wildflowers of Missouri poster – at long last!! The poster gained a round of applause, and all were eager to post their own copy at home.

The Chapter's booth at the Chestnut Roast Festival October 17 was very successful bringing in \$772 from plant and book sales. We had a lovely day for the festival which was well attended by about 1500 people this year.

[Hawthorn cont.] November 15, Nancy Brakhage hosted the annual Wreath-Making workshop. This year several gorgeous wreaths will adorn the front doors of members who made theirs using cedar sprays and various dried seed pods, grasses and other native materials.



This year the Holiday Party was hosted by Paula Peters on December 6. Members of the chapter pre-ordered MDC Natural Events calendars and picked them up at the party. The Native Enthusiasts lunch on third Thursdays are

well attended. Topics range from native plants and issues to landscape maintenance to other hot topics at that time. Attendance is open to all.

Bee Species Associated plant species and habitat

8/16/14, Mike Arduser

http://jarrodowler.com/specialist_bees.html

- *Andrena gardineri* *Senecio* spp. [ragwort, squaw weed] prairies, glades
- *Andrena helianthiformis* *Echinacea simulata*, *E. pallida* [pale and glade coneflower] Osage Plains, Ozarks: prairies and glades
- *Calliopsis nebraskensis* *Verbena* spp., esp. *V. hastata* and *V. simplex* [Vervain]
- *Colletes brevicornis* *Triodanis [Specularia] spp.* [Venus looking glass] prairies, glades, savannas
- *Colletes robertsonii* *Amorpha canescens*, [lead plant] Osage Plains: prairies
- *Hylaeus nelumbonis* *Nuphar* and *Nymphaea* [waterlilies] wetlands and shallow lakes
- *Megachile campanulae* *Campanula Americana* [tall bell flower] moist woodlands
- *Megachile integra* *Strophostyles* spp. [a bean] open sandy areas, open mesic woodlands
- *Nomia universitatis* *Psoralea tenuiflora* and related spp. [scurfy pea] prairies, savannas, glades
- *Osmia distincta* *Penstemon* spp. [beard tongue] prairies, glades, open woodlands
- *Osmia illinoisensis* *Onosmodium* [false gromwell] prairies, glades
- *Panurginus potentillae* *Potentilla simplex*, probably other spp. [cinquefoil] field edges, old pastures, prairies, glades
- *Perdita obscurata* *Diospyros* [persimmon] fallow fields and woodlands
- *Protandrena passiflorae* *Passiflora lutea* [passion flower] woodland openings and edges



Osage Plains

Submitted by Casey Burks, Chapter Representative

October 10th Prairie Days at Cole Camp, MO. President Elizabeth Middleton, Sondra Raper, Theresa Cline, Wayne Morton and I sold t-shirts, shared persimmon cookies and promoted our OP Chapter from our table at Wayne's prairie, a few miles north of town. The Hi-Lonesome Prairie Master Naturalists bring together people who are passionate about sharing various aspects of nature: reptiles, basket weaving (using roots from buck brush), astronomy, trapping, outdoor cooking, spinning wool dyed with native plants, primitive tool carving etc. There are tours of the prairie where one can see exquisite purple gentians. Also, there was a huge bale of hay for people to throw at darts. I have an atlatl but had never gotten the hang of how to throw it. With tips from other throwers, I finally hit the bale! A personal triumph! In the evening, Prairie Foundation program speakers awarded people who have put their hearts into preserving precious native prairie ground. Along with the art show and Octoberfest celebration in the town of Cole Camp, this celebration certainly has something for everyone to enjoy.

October 26th O.P. Chapter meeting. MDC Botanist Jessica Aery led us again on using her revised dichotomous key to identify the oak species in our area. Using branches with leaves and acorns, she interpreted what "hairy terminal buds" and other botanical terms actually look like. It was great to actually figure out these species! Thank you Jessica!

November 23 O.P. Chapter meeting. President Elizabeth Middleton asked for a vote on the most fitting use for the money we received from Jim Harlan's memorial. The majority vote was for making a donation to the Hudson Fund to encourage a budding botanist. Wayne Morton told about seeing invasive Japanese knotweed and how we need to watch out for it. He also encouraged us to attend the North American Prairie Conference July 17-21 in Illinois.

Our program was given by Judith Rodgers, an Arkansas botany teacher, who worked many years for Sharp Bros. She spoke on our top invasive species and the difficulties involved with trying to fight them. Bradford Pear is still being sold from the big box stores; teasel spreads like wildfire; tall fescue and sericia [*Lespedeza cuneata*] have allelopathic roots which kill other species trying to grow close by; Autumn olive make bushels of tiny fruits with seeds that are eaten then spread by birds; Japanese honeysuckle, kudzu covers/smothers native plants etc. The chemicals that seem to work best on sericia are "Pasturegard" in July and August, then "Garlon" or "Remedy" for woody stems later in the season. Ms Rodgers passed around a thick 10' vine which none of us recognized. It was a piece of an Asian bittersweet that was taking over the area she had planted it. She had ordered a native honeysuckle from a nursery but they shipped Asian bittersweet instead.

On a personal note, I enjoy gathering persimmons and especially prefer the plump extra juicy ones from a few favorite trees in our area.

This year, early November, I went to gather persimmons from my favorite trees and they were totally gone. I think they dropped extra early and the deer ate them all or perhaps possums or raccoons got them all. I finally gathered some that are mostly seeds and squished out a few cups of the extra thick pulp. For cookies and bread the batter was so thick I finally added some mango juice to it in order to get dry ingredients worked in. Every so often I wonder how I would survive the winter without Walmart so it is interesting that two of our very nutritious plants, dandelion and chickweed, are still nice and green. Wood ear mushrooms, pecans, hickory nuts, acorns are available. Also I'm going to try my luck making flour from white oak acorns this winter. Most of the ones I've picked up so far have weevil larvae in them.....are they an extra source of protein for the flour?

Osage Plains Chapter Wishes everyone a year of good health, peace, joy and abundance in 2016.

From Casey's Kitchen: A different persimmon recipe. Sondra's glazed persimmon bars

1 cup mashed ripe persimmon pulp, 1-½ teaspoons lemon juice, 1 cup sugar, 1 egg, ½ cup vegetable oil

Combine the first five ingredients, mix well.

Combine dry ingredients and add to first mixture.

1-¾ cups all-purpose flour, 1 teaspoons baking soda

1 teaspoons salt, 1 teaspoons ground cinnamon

1 teaspoons ground nutmeg, 1-½ cups raisins, 1 cup

pecans. **Stir in raisins and nuts.**

Spread in a 15" x 10" x 1" baking sheet. Bake at 350 degrees for 20 to 25 minutes or until a toothpick inserted in center comes out clean. Cool in pan on a wire rack and drizzle the glaze on.

Glaze: stir together until creamy:

1 cup confectioners' sugar [powdered]

2 tablespoons lemon juice



Southwest

Submitted by Michelle Bowe, Chapter Representative.

This fall, we had a lively group "cook in" at the Lovett Pinetum in Springfield Missouri. Due to the time change, while we did tour the property, it was pretty dark by the time we got back to the lodge for dinner. Bob Lovett's goal for his Pinetums (Pineta?) is a pretty lofty one: to grow all gymnosperms possible (e.g. from all over the world). He's done a pretty good job, and apparently, Missouri is a good place for conifers. There are long-leaf pines, pinyon pines, ponderosa pines, Macedonian white pines, bald cypress, dawn redwood (and *Sequoiadendron*—"big tree"). If it can grow in Missouri, and it's a conifer, it is there.

We also had a work day out at our regular meeting place (The Botanical Center in Springfield)—they recently hired a new official grounds/gardener person who is really interested in native plants.

We received a very nice note from Dorothy Harlan thanking us for our tribute to her husband Jim.

Chapter Calendars

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] 10 Hitt St, Columbia 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.

6 December – 1 pm: Holiday Party. At Paula Peters' house

17 Dec Thurs - 11:30 am: Lunch at Uprise Bakery.

11 Jan Mon - 6 pm: Members Meeting. Planning meeting for the coming year. New officer election.

21 Jan Thurs - 11:30 am: Lunch at Uprise Bakery.

18 Feb Thurs - 11:30 am: Lunch at Uprise Bakery.

14 March Mon - 6 pm: Members Meeting. UU Church, 2615 Shepard Blvd., Columbia.

Perennis *from Andrew Braun*

Possible field trip locations for late fall/winter include Ferne Clyffe State Park or Giant City State Park in Southern Illinois, or Trail of Tears State Park near Cape Girardeau. Watch for announcements by e-mail, Facebook, and the MONPS website. - www.monativeplantsociety.org

Empire Prairie *from Steve Buback:*

Nothing submitted at this time.

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.

December – no meeting.

26 Jan 6pm: Springfield Botanical Center. Karen Richardson will speak on Monarchs.

23 Feb 6pm: Springfield Botanical Center. Program TBA.



Learn about this skipper at the butterfly workshop. Learn how to garden for them at the garden installation workshop.

Skipper on pickerel weed
Pontederia cordata
B. Erickson photo

Upcoming Events

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>

Friends and newcomers are welcome at meetings.

27 Jan – 7:30 PM: Doug Ladd of The Nature Conservancy, Topic to be announced.

24 Feb – 7:30 PM: Justin Lee of the Missouri Botanical Garden; Propagating and Growing Missouri Native Plants and Other Rare Species.

Osage Plains *from Casey Burks*

Regularly scheduled meetings are held the 4th Monday of the month at **6:30 pm at the Friends Room of the Henry County Library.** However, no meetings are held during the months of August, December or January. Programs are open to the public and our purpose is to enjoy learning about and sharing information about native plants. Current information available from President Elizabeth Middleton Elizabeth.Middleton@MDC.gov or Chapter Representative Casey Burks mobugwoman@gmail.com. Field Trip coordinators are Bernie Henehan berniehenehan@yahoo.com and Dan Henehan danhenehan@embarqmail.com

22 Feb. Come make suet to help our feathered friends.

Ozark *from Liz Olson*

The Ozark Chapter meets at **6:30 pm on the third Tuesday of each month** except December and January at the **MDC, 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 Susan Farrington for more discussion: 417-255-9561.

The Ozark chapter does not meet in December or January.

16 Feb – We will resume our monthly meetings: topics to be determined.

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.

5 Jan 7:00pm at the Discovery Center in Kansas City. Our annual planning meeting. All are welcome!
Please bring ideas for field trips in 2016!

Curator's Corner: Winter sets in. AKA: How do I deal with this mess?

The ninth 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.

Winter may be one of the most active times in the herbarium because suddenly, there are all of the plants that have been collected all year (potentially), and they all need to be checked, fixed and/or filed. There are piles of specimens and there are boxes (brought over from a botanist's office who retired many many years ago (yes, it takes a while to get things cleaned out after someone leaves - especially if they pass away - because no one knows what to do with their stuff.)

I will say this: Paul Redfearn, who founded the herbarium, and only left for Kansas City recently (relatively) did NOT leave a mess. He was organized.

But most biologists leave behind a legacy. I know this is off topic [well, not completely], but when my Ph.D. advisor moved into his lab (1991), there were some very old and/or dangerous (sometimes unlabeled) chemicals just sitting around. Luckily mercury is easy to recognize without a label. Anyway, it took a whole work crew to remove and detoxify the lab area.

Anyway, the downside to winter cleaning is that you're also involved in holiday preparations, etc. And, maybe you're exhausted from the semester. In any case, my goal this year is to have every loose herbarium specimen (whether it be in a pile or box) put away in its proper place. And all my teaching fruit specimens organized instead of scattered over all the tables. The chaos is getting to me...

The Battles Against Japanese Beetles

Submitted by Becky Erickson with help from Paula Peters

I have 4 horticultural Peace rose bushes. If the damned Japanese beetles would leave them alone they would bloom beautifully. They get good sun and apparently soil moisture drains right under them. So with the onslaught of beetles this summer I ignored the rose bushes; they looked 'gone': stripped of buds and foliage.

Beetles also stripped *Rosa setigera*, *Parthenium virginianum*, a common tall *Oenothera*, *Hybiscus* flowers are a favorite, and I found many beetles on many *Cassia fasciculata*.

One day in September I walked by there looking for something else and low and behold = A ROSE! A really nice autumn rose. So I brought it in the house. Really!! a beetle snuggled down between the petals!!! WHAT CAN I DO!!!! to reduce the beetle population. I have put out traps 4 years. I put out 3 traps this year. Yes I was too lazy to empty the bags.

I witness a friend's orchard stripped: Apples were leaf denuded; peaches had ALL the fruit eaten to the pit [GROSS!!]. I never bothered to look for ripe fruit on my peach tree. It seems this is a serious food problem. If the damn beetles eat peaches they will eat wild cherries and wild plum fruits - wild animal food. They will also destroy fruit crops that are used for human consumption. This means orchard keepers will use stronger systemic insecticides to keep Japanese beetles from destroying crops. THEREFORE pollinators will be killed, too. And what about us?

Advice from Paula Peters: The most important thing is to not have sod - [which I don't]. 2nd is to get out there in early June and start watching for them. Knock the early ones into soapy water before they have a chance to call any more in. Do that every day that you can, for a couple of weeks, depending on how many you have. **Seriously!! I don't have the focus or energy over 2 months to knock off several thousand beetles into water buckets every day. I'll just be more diligent about dumping the trap bags.**

Are the peach trees near any sodded lawns, golf courses, or sod farms? Do they put out traps? Sod? Oh Yes. Most of the neighbors to my friend with the orchard have many flat acres of fescue which they can't seem to mow enough. **** NO!! no one cares to put out traps! I don't have more than a postage stamp of vegetation I cut short, I can hardly call it sod. The dominant plants are *Polygonum*, *Digitaria*, plantain, and chickweed in the spring. Some neighbors have a bit more that they cut, but there are no great expanses of 'sod' near me.

So Paula told me about a wasp! *Scolia dubia* - google for more pictures and then watch for these guys.



They parasitize Japanese beetles and love Goldenrods. Goldenrod Photo: Greg Hume Cincinnati, OH
OH GOODIE!! All the photos show them nectaring on native flowers. They have accounts of MANY in Alabama and Arkansas. Looks like they might

move up here. I hope it is not too cold for them here. 'Come-on-down!!' do I ever have a deal for you! How do I send a gilded invitation?!

Paula said: I think I saw one of these in my garden last week. OH let me do a happy dance!! What was it feeding on? Goldenrod! Oh yes - I see - thanks.

From Wikipedia: *Scolia dubia*, also known as the **blue-winged wasp**, is a 2.0–2.5-centimeter (0.8–1.0 in) long wasp that ranges from [New England](#) to [Florida](#) and west to the [Rocky Mountains](#) in North America.^[1] The head, thorax, and first two abdominal segments are black, while the remainder of the abdomen is red with two bright yellow spots on the third abdominal segment. The [distal](#) section of the blue-black wings has longitudinal wrinkles. These wasps nectar on flowers in late summer and early fall.^[2] Females burrow into ground in search of grubs, particularly those of the green June beetle, *Cotinis nitida*, and the Japanese beetle, *Popillia japonica*. The wasp stings the grub and frequently burrows farther down to construct a cell and lay an egg on the host. The larva pupates and overwinters inside the body of the host.



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**"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community.
It is wrong when it tends otherwise." Aldo Leopold**

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