CALL FOR STATE AWARDS

Submitted by Malissa Briggler Awards Committee Secondary

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

The deadline for nominations is May 10. 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.

Michelle Bowe, 515 E Bennett St., Springfield MO 65807, MBowe@MissouriState.edu

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) 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.

6) 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.

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 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.

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

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.

WORKSHOPS THIS WINTER/SPRING
Installing Native Gardens for Pollinators:
besides hands-on garden installation, garden planning and appropriate plant identification are included. Taught by Becky Erickson Sign up through 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 are on line 1 Jan 16. 4/4/16, 5-8pm Location: Columbia Center for Urban Agriculture http://w23.columbiaurbanag.org/columbiaurbanag/index.html google for location = near Business Loop and College

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.

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

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:
• 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).
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/

Kansas City
Mary Nemecek, Kansas City
St. Louis
Cynthia Rill, St. Louis
Southwest
Joseph Johnson, Ozark
State Level Membership
Lester & Ina Gill, Ash Flat, AR

Common Grounds Café in Warsaw
From Casey Burks
For those attending the Butterfly and Skipper Workshop
Monday May 23rd through Wednesday the 25th, Larry Lewis, Theresa Cline, Casey Burks and many others in this area
heartily recommend the Common Grounds Café in Warsaw as a
great place to eat. Located in the beautifully remodeled Osage
Hotel in downtown Warsaw (145 W Main St), they feature a
limited specialty menu of homemade soups, salads, sandwiches,
desserts and healthy drinks. In case you arrive the day before the
workshop, Sunday hours are Noon to 4pm. Hours Monday
through Thursday are 10:30am – 8pm. If a large group is going,
it would be helpful to give them a call the day before (660 438
2581) so they can make extra bread and cheesecake.

Both photos are tiger swallowtails B. Erickson

From Butterflies workshop continued
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!
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.

There are approximately 170 species of butterflies and
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!
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.
St Louis

Submitted by Rex Hill Chapter Representative

Our January 27 meeting, the first since last October, featured Doug Ladd, the Missouri Director of Conservation for The Nature Conservancy. Doug has worked in conservation for over 35 years, 30 with the Conservancy, and is well known throughout the United States as an accomplished conservation biologist and botanist. He is a former state President of the Missouri Native Plant Society, the author of two plant field guides, North Woods Wildflowers and Tallgrass Prairie Wildflowers, and coauthor of Discover Natural Missouri and Distribution of Illinois Vascular Plants. Doug is also a leading lichenologist and has researched lichens in the Midwest, the Great Plains, and northeast Canada. He is currently collaborating with Richard Harris of the New York Botanical Garden on a study of Ozark lichens, which has resulted in the discovery of several species and genera new to science.

Doug’s presentation was titled “When Fungi Discovered Agriculture.” He never disappoints with one of his talks. It began with the basics of what constitutes a lichen (the not necessarily symbiotic relationship and merger of fungi and algae) and moved to the various types of lichens: foliose, fruticose, and crustose, and how to distinguish them. He had many photographic examples of Missouri (and elsewhere) lichens, including some of the more recently identified and named.

As usual, he had interesting historical references complete with a picture of Squirrel Nutkin from Beatrix Potter literature and the story of her natural history interests and exquisite illustrations of lichens from a time when women were not readily accepted as peers in the world of science. His enthusiasm for this not well studied organism was infectious and will inspire all of this to take a closer, more thoughtful look at lichens as we explore Missouri. It was good to start up the new year of chapter meetings with such a large attendance of about 50 persons, many from the Webster Groves Nature Study Society attracted to a talk by Doug Ladd.

Perennis

Submitted by Andrew Braun Chapter Representative

Members of the Perennis chapter traveled to Ferne Clyffe State Park near Goreville, Illinois on January 17. The group met with several members of the Illinois Native Plant Society from the area.

While hiking the Round Bluff trail, the group found at least six species of fern, including Asplenium trichomanes (maidenhair spleenwort) and Polypodium virginianum (rock polypody). Other interesting plants that were found include Tipularia discolor (cranefly orchid) and Opuntia humifusa (low prickly pear cactus). Many interesting lichens and liverworts were also found. Ferne Clyffe SP proved to be a fine location for winter botanizing.

No. Andrew’s Prickly Pear wasn’t blooming in January, but this is what the leaves produce about 20 June every year. BE photo

Reports

Kansas City

Submitted by Harold Draper, Secretary and Hilary Haley, Chapter Rep

Our annual planning meeting was held on January 5th to discuss officer elections and to lay out plans for our upcoming field trips and events for the year. We have several exciting trips planned for this spring and summer. Please check out the listings in the upcoming events section of the Petal Pusher.

Other chapter business included a note from Vice President, Lance Jessee that Johnson County (Kansas) Parks and Recreation Department has partnered with KC Wildlands to create a seed processing and storage facility, which will be used for prairie restoration. President, John Richter stated that Lance Jessee was awarded volunteer of the year by the Missouri Prairie Foundation (MPF). Congratulations to Lance!

It was also noted that MPF recently purchased Snowball Hill Prairie in Cass County, which is noted for a good diversity of native plants including prairie phlox in drier areas and bunchflower in wet areas. Because of the importance of the purchase, John Richter recommended that the chapter contribute $500 to the MPF in support of its land conservation activities. The motion was seconded, and approved by voice vote.

Following the business meeting, Cécile Lagandré provided an illustrated talk on recent plant inventory at Feaster Glade near the Cole Camp Creek confluence with Lake of the Ozarks. The presentation was organized according to the classification system of the Angiosperm Phylogeny Group and (http://www.mobot.org/MOBOT/Research/APweb/). This classification is designed to reflect what is known about the evolutionary tree of life. In this classification the main plant groups are the basal angiosperms, monocots, and eudicots. The eudicots are further divided into rosids and asteriids. In the Feaster Glade, Rosids (legumes), Asteriids—Campanulidae (lobelia, ironweed), and Asteriids—Lamiidae (penstemons, Indian paintbrush) are well represented.

Osage Plains

Submitted by Casey Burks, Chapter Representative

Our chapter gratefully received $205 in memorial contributions from Jim Harlan. He and Dorothy were both longtime sparkplugs and fonts of knowledge for our Chapter. Last year we voted to give this money to the Hudson Fund in Jim’s honor. In January our president Elizabeth Middleton and treasurer Bernie Henehan sent the check to Bob Siemers.

Ozark

Submitted by Liz Olson Chapter Representative.

No report was submitted at this time.

Southwest

Submitted by Michelle Bowe, Chapter Representative.

No report was submitted at this time.

Empire

No report was submitted at this time.
Hawthorn
Submitted by Boyd Terry Secretary and Becky Erickson

We accomplished allot this winter in spite of the weather being so wet. Our January meeting was for annual planning; 18 members came to give their opinions on the activities they want to do. We decided to participate in the usual plant sales: 9 April at Bradford Farm, 24 April at Earth Day, 21 May at BassPro, and Chestnut Festival in October at HARC. We have speakers scheduled for the March meeting. Everyone agreed to keep their radar up for other possible speakers for later meetings. Several mosey destinations were discussed. Going to any would depend on weather. Notice would be sent by email. Our third-Thursday lunches continue to draw from 6 to 14 members for informal discussion on garden/habitat management, love of special species, invasive alien control, bird reports, recipes] and planning for upcoming activities.

Hawthorn partnered with Columbia Audubon Society [CAS] for the last two years to collect seed for their grassland planting at Bonnieview Nature Sanctuary aka Columbia Audubon Nature Sanctuary in Columbia south of Fairview Park and School.

Ann Wakeman and Becky Erickson stood as consultants in the steering committee with Bill Mees and John Besser from CAS. Becky stored all the seed collected during the last 5 months of 2014 throughout 2015; keeping the stuff cool during summer heat.

This fall was a flurry of activity because we were not only collecting seed with a few other members, but processing it. Ann has a small hammermill which we used to beat the dried vegetation to a size that would fit through a seeder. After many hours over several days on the hammermill, we weighed all the processed material. We weighed about 150# which was about 15# of seed which was enough to seed 15% of the area. Let it be highlighted at this point that the total resources [time, autos, knowledge, equipment] used in the effort were far more expensive than any dollars that could have been spent on the same 15# of seed. Our biggest benefit of this personal work was being assured that some of the seed we were using was local source.

All photos by Bill Mees

We had to wait until mid-January to spread seed because of the soggy, muddy ground in December. Ann arranged to borrow an empty hoop house so she and Becky and the two CAS members could mix a truck full of sawdust with our processed seed and purchased seed. Then we re-bagged it and waited for the ground to freeze.

FINALLY! 20 January, ground was frozen solid and two inches of snow made it perfect for the seeder to get perfect coverage. Merv Wallace let us borrow his little seeder. Duncan brought it. In spite of the rough ground and loss of some bolts, got the whole 15 acres done in one day.

The next Sunday afternoon was just warm enough for 10 volunteers from both Hawthorn and CAS to broadcast and hand-plant specific habitats. We all felt the relief of the accomplishment.

Now we wait. Columbia Parks has offered to mow the site in July to knock back the inevitable foxtail and ragweed. By 2018, we can see which areas need help.
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 [RagTab] 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. We will email chapter members interested in outings.

18 Feb Thurs - 11:30 am: Lunch at Uprise Bakery.
14 March Mon - 6 pm: Members Meeting, UU Church, 2615 Shepard Blvd., Columbia. Thurs - 11:30 am: Lunch at Uprise Bakery.
17 Mar Thurs - 11:30 am: Lunch at Uprise Bakery.
4 Apr Garden workshop at CUAC 5 to 8pm
9 Apr Plant Sale Bradford Farm 10 to 2
24 Apr Plant Sale Earth Day 9th & Elm Columbia 10 to 7
13 – 15 May State field trips Poplar Bluff
19 May Thurs - 11:30 am: Lunch at Uprise Bakery.
23 – 25 May Butterfly workshop ACE Warsaw
16 June Thurs - 11:30 am: Lunch at Uprise Bakery.
24-26 June State field trips Poplar Bluff

Perennis from Andrew Braun
Possible field trip locations for early spring include Ketcherside Mountain CA, Black Island CA, or Horseshoe Lake. Watch for announcements by e-mail, the MONPS Facebook page, or the MONPS website. Watch for announcements by e-mail, Facebook, and the MONPS website. - www.monativeplantsociety.org

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@one.com, or cell phone 913.217.0432. Please RSVP with the field trip leader or John Richter for all field trips. We use RSVP 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.

March 1, 7:00 PM, MDC Discovery Center: Chapter meeting: Tom Schroeder will give a presentation on native bees in garden. No RSVP needed. All are welcome to attend!

Southwest from Michelle Bowe
Meetings are usually held at Greene Co Botanical Center, Spgld, 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.

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

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
All Friends and newcomers are welcome at meetings.

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


12 & 19 Apr, with fieldtrips on 16 & 23 Apr – “Spring Flowering Weeds in Missouri” – a class in the Master Naturalist Series taught at St. Louis Community College – Meramec by members of the St. Louis Chapter of the Missouri Native Plant Society. To get complete information and register for the class, go to their website at www.stlcc.edu and click on the “Continuing Education” link.

27 Apr – 7:30 PM – Dr. Kyra Krakos and/or Students of Maryville University; Topic to be announced.

6 & 7 May – Spring plant sale at Shaw Nature Reserve. The St. Louis chapter will be setting up its booth on Friday about 3:00 PM and again Saturday about 8:00 AM. If you can help with manning the booth, contact Rex Hill at RexLHill@charter.net. The event runs from 4:00 PM until 7:30 PM on Friday and from 9:00 AM until 4:00 PM on Saturday.

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. Our February meeting on the 22nd will kick off the new year with a craft project: making suet for our winter bird feeders. We will be planning the year’s programs and field trips and look forward to another year of sharing the learning adventure.

Empire Prairie from Steve Buback:
Nothing submitted at this time.
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

Curator’s Corner:
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.

Michelle was too busy at this time to write another column for this space. She will be back with more timely news about her work in the future.

From Casey’s Kitchen
Angel biscuits with wild berries

1 package dry yeast; dissolve in ¼ c lukewarm water.
In separate bowl, mix together: 2 and ½ cups all-purpose flour, 2 tablespoons sugar, 1/2 teaspoon baking soda, 1 teaspoon baking powder, 1 teaspoon salt.
Cut in ½ cup buttery Crisco
Mix the dissolved yeast-water into 1 cup buttermilk; And gently stir into flour-Crisco.

Pour onto well floured surface; add extra flour to top and pat out to desired thickness. Avoid stirring more flour into the dough, just have enough on top and bottom for the cutter to work. This is a very soft dough.

Cut biscuits and place in greased, floured pan. Let rise in warm area 30 minutes or more until doubled. Preheat oven to 400 deg.
Bake biscuits 20-25 minutes until golden brown.

Combine the first five ingredients, mix well. Combine dry ingredients and add to first mixture, stir in wild berries or 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.

This dough can be made ahead and kept in the refrigerator several days, just punch down each day.

Ozark Calendar 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: topic to be determined.
15 March: Erin Tuttle, Naturalist at Twin Pines Nature Center in Winona will present a program entitled “Pollinators: small but mighty.”
19 April: Aaron Stevenson, MDC Fire Ecologist. “Plant response following 15 years of controlled burning in a glade-woodland landscape.”

LINK IN!
Share with friends and neighbors
Missouri Native Plant Society: our own website
http://monativeplants.org/

Monarch Larva Monitoring Project video
www.mlmp.org
Missourians for Monarchs
http://missouriansformonarchs.blogspot.com/
Xerces Society: nfp-ngo for invertebrate conservation
http://www.xerces.org/
http://www.pollinator.org/

Article on the effects of neonics on insects in Sept 2015 Wild Ones! Journal
http://wildones.org/Neonics.pdf

Why we need backyard biodiversity to replace wild areas by Tallamy
http://www.americanforests.org/magazine/article/backyard-biodiversity/

Plant information database
http://plants.usda.gov/java/
Grow Native: Missouri’s native resources organization
www.grownative.org

Linda Hezel’s organic farm emphasizing biodiversity to maximize production.
http://www.prairiebirthdayfarm.com/learning/resources.html
Naturalist’s blog on the wild lands of southern MO
http://allisonjvaughn.blogspot.com/
Naturalist’s blog on a native garden in the suburbs
http://nadiasyard.com/

WildOnes! Website full of articles on native habitat restoration
http://www.wildones.org/
https://millpondplants.wordpress.com/
Simply put, this book is about restoration ecology. Paddy Woodworth is an investigative journalist who writes in a very readable style with beautiful prose fit for a novelist. But this is no novel. It is a well-researched book that covers its topic in countries around the world. Mr. Woodworth travels personally to the extensive restoration sites and talks to the scientists, politicians, and citizens who have become involved in the large scale enterprises designed to restore degraded landscapes. While reading the book I learned the catchphrase to Think Globally, Act Locally. This was my guiding tool for translating some of the material from a large landscape to my own small scale restoration. One common denominator is the attempt to create ecological health and diversity in degraded landscapes.

Each chapter covers a restoration project that has contributed to the body of knowledge that is helping define the relatively new science of ecological restoration. As an investigative journalist, he is not pushing his own agenda, but is trying to present a balanced view of each project. I really liked his presentation of the people involved, and the strong personalities that emerged to speak and teach about restoration. In a chapter called Future Shock, he explores the influence of climate change on these long range projects. Can an oak forest restored with seedlings still have the right habitat for oaks 100 years from now? Some of the projects covered included restoring the Whooping Crane (think Fly Away Home); prairie restoration in Cook County near Chicago; Working for Water in South Africa; restoring grape arbors in Italy; destroying opossum and black rat in New Zealand to bring back the plants and birds that suffer reduced numbers and probable extinction from these introduced invasive species; restoring bogs in Ireland where peat-fired stations produced electricity, but degraded the Irish bogland. Each vignette is fascinating and expanded my understanding of the many facets of restoration.

I came away from the book with a far broader understanding of restoration practices, the history of restoration ecology, and the financial, political, and scientific challenges it faces. Mr. Woodworth attempts to categorize the current scientific thought about the goals of restoration. He sees three dynamic and divergent schools of thought. One is ecocentric restoration that attempts to restore degraded land to a previous state of a “classic landscape” that has distinctive ecological value. An example is prairie restoration. A second school of thought believes that restoration must consider the human factor as always a part of the equation. Restoration must enhance human wellbeing and socio-economic development. The third trend involves the creation of “novel eco-systems”. The argument here is that it is impossible to successfully restore and maintain the ecosystem to any point within its historical range of variation. A novel ecosystem attempts to develop a biodiversity that “realistically” involves the presence of a variety of species which may not all be native and indeed some may be invasive.

Paddy Woodworth spent seven years in the making of this book and trying to answer the question, Why restore? His answer is “We should restore because there is something badly off-kilter in our relationship with the rest of the natural world, and ecological restoration offers unique and refreshing perspectives for setting that relationship on a better course”. He expounds on this reflection in his final chapter. I encourage anyone who is interested to read this book. It would make for good discussion.

One More Reason . . .
Written by Julia McGuire on IANPS list serve
Submitted by Leslie Limberg
I received a prairie point in November. I was listening to someone talk about her clayey lawn, its pitiful looking turf grass, and the way the rain would run off, make puddles, and carry away other plantings. When she decided to convert her lawn to prairie as a way to eliminate mowing during her frequent job travels and the way the new plants changed the soil to absorb water -- no more puddles on the sidewalk and driveway, no more rivers running between the neighbor and her. I was sold.

And more information on our website
www.monativeplants.org
www.monativeplantsociety.org
New Invasive Exotic: Heavenly Bamboo - *Nandina domestica*

Submitted by Susan Farrington

Hardly “heavenly”, *Nandina domestica* has been observed naturalizing in the Springfield, MO area, and will likely be a problem throughout much of the state soon (already widespread in Arkansas and other southern states).

*Nandina* berries contain cyanide and have been documented to kill birds. Since it is from Asia, American birds did not evolve with it and don’t recognize it as toxic. Acute toxicity is related to the amount of berries consumed: cedar waxwings were killed by it because of their voracious eating habit. When birds eat only a few berries, they survive and spread the species. Also dangerous for pets and livestock (or children!) if they eat too much of it.

It grows in sun or shade and will become thick in the forest understory, like bush honeysuckle. It grows 6-8 feet tall, or 3-4 feet for dwarf varieties. It is commonly used in the landscape trade because of its pretty red berries and generally evergreen form. Please discourage anyone from using it and kill it if you see it escaped.

[PCA] The World Checklist of Hornworts and Liverworts

Sent through Plant Conservation Alliance. Editor suggests you sign up for this free, non-invasive service. Lindsey Riibe, Land Management Intern, BLM Wash, DC.

7485 species from across 396 genera and representing 92 families of hornworts and liverworts. Makes me wonder how many more species could be added to the list if botanical capacity was greater.

"Assembling a working digital list of all known plant species is a staple within the Global Strategy for Plant Conservation, a framework whose ultimate goal is to halt the loss of plant diversity, which, unfortunately, is already a widely recognized fact. Without such a list, few other targets from the strategy would be met, since there would be a lack of baseline information. There would not be accessible and accurate botanical name information to utilize in researches, conservation and sustainability projects. Eventually, it would be impossible for taxonomists to stand their ground in the atmosphere of real-world politics."

Botanical Capacity Report CBG & BGCI

http://www.bgci.org/usa/bcap/


Photos by Chris Evans, University of Illinois, Bugwood.org

CONTROL:

*Nandina* is very hard to remove manually: roots are very difficult to pull up and even a tiny piece of root left will re-sprout. Shrubs can be foliar sprayed with Glyphosate when other plants are dormant. Triclopyr is also effective as a foliar spray (though probably not during the dormant season) or can applied to cut stems any time except during spring sap rise.

If you have it planted, please remove it and tell your friends to do the same!

Blog on Frost Flowers

By Tonya Smith

I know frost flowers have been around for a long time, but I'm only three years new to the discovery of them. I have walked the same trail year round since 2003 and it wasn't until 2013 that I happened upon the frost flower gardens one morning after a hard freeze at the end of October. Now I watch the weather closely in late Fall, so I can be sure not to miss a walk among nature's most delicate white flowers which disappear quickly with the rising sun's warmth. Nature giveth and nature taketh away. Probably a good thing as I had more than enough sticky seeds and burrs to pick off my clothing from laying on the ground to get the pictures. Frost flowers are just one of the many things I am thankful for.

Their scientific name is *Crystallofalia* which was coined by Botanist Bob Harms from the University of Texas. This is from Latin *crystallus*, ice, [itself from Greek κρυσταλλος; cf. κρυος 'frost'] and *folium* leaf. These elegant formations have been given many names, metaphorical in nature, most commonly ‘frost flowers’ (or ribbons), a formation which is neither frost nor a flower. These common names, however, are easily confused with terms describing true frost from condensation on a cold surface as well as any picturesque ice formation.

Read the rest and see several excellent photos

http://springfieldmn.blogspot.com/search?q=frost+flowers
Guerilla Gardening in the Open
Text and photos submitted by Mary McCarthy, Southwest Chapter
As a fairly new native plant enthusiast, I am quite evangelical in my mission to turn other people on to the joys and benefits of growing native plants. As a renter I have no yard, so I garden in very public spaces. This has given me the opportunity to share the beauty of this flora with the Rountree neighborhood in the middle of Springfield.

This mission began in 2009 when I had a Purple Coneflower that needed a home. The Rountree neighborhood has a small commercial district at the intersection of Cherry and Pickwick. One of the businesses, Homegrown Food, had a handful of Daylilies planted on the city easement between the street and the sidewalk. I asked the owner if I could plant my Echinacea in that little plot which, at the time, was not much bigger than 8' x 4'. The owner enthusiastically agreed. After planting that first seedling the bug bit me, and I started purchasing more plants and expanding the bed. It is now 8' x 20' and includes thirteen species of grasses and forbs.

While that project was satisfying, it did not completely satisfy my craving to plant more. Everywhere I go I look for little areas which could support a few plants. The top consideration is: can I take care of this by myself? Therefore I focus on areas I know I can maintain, and for me that means elementary schools within a bike-ride of my apartment.

Schools provide wonderful opportunities for butterfly gardens, but not without challenges. The administration of the school must be on board with the project. Resistance often revolves around the focus on mandatory academics, and the lack of funds and manpower to maintain a garden. I have the advantage of working for the school system, and I am fully aware of the obstacles involved. A principal can make or break the project.

My first butterfly garden was planted at my neighborhood school. I am friends with a teacher there who integrates environmental education into his curriculum. He got permission from the principal and suggested planting in the area where a large tree had been removed and the stump ground down. That space, 100 square feet, was perfect. It is on the playground, next to the school vegetable garden. That sunny location is now a Monarch Waystation with six plant species and a shrub. My friend and his class utilize it and maintain it regularly.

My principal gave me permission to do whatever I wanted at the school where I work. Over several months I cleared out three overgrown, untended beds. They vary in size from 25' x 5' to 6' x 4'. This year our classroom raised and released a Monarch from the Common Milkweed I'd planted in the spring.

Over the years I’ve learned the importance of sharing my passion with others, and social media is the best tool for spreading the word. In 2014 and 2015 I organized several events to highlight the importance of native pollinators and native plants. All the events were well attended, and over the past two years I’ve given away nearly 200 native plant seedlings, most of which I dug up from my own gardens!
More work at Bonnieview
In Memory of Linden Trial

Linden trial was a MONPS member for many years. She realized the word ‘education’ in our bylaws and persuaded Hawthorn to build a display booth for public venues to help educate the public. This idea was embraced and grew into a major production such as this set up at Columbia’s Earth Day 2011.

She was an entomologist, but realized the importance of wildflowers for all insects and became a very good botanist.

Linden died a few years ago. Her brother Mike Trial was inspired to take advantage of a 2 acre area at Bonnieview Park in Columbia which is completely framed by a walking path. Columbia P&R agreed that a native planting could be nurtured there in Linden’s name. Lea Langdon with her undying urge for volunteerism, agreed to steer the work for Mike for Linden’s Prairie Patch. She worked on it all year, getting help from school children and advice from Becky and Ann. With a deep breath, Sat 30 Jan she sent a 24-hour email notice that she needed hands to distribute seed on the area Sunday afternoon.

About 20 people showed up and it was done in ½ hour. Some left before we could organize for the photo. Mike Trial in the red shirt and Lea Langdon in the fuzzy hat and long braids. The rest are friends and neighbors in CAS, MONPS, MMN.

Mike and Lea thank everyone who helped.

Reflections

Monday-morning snow
melted into water puddles
dripped off eaves and into more puddles
caught the turquoise sky and the crystal sun-dog.

Sheepy gray . . . drifted through the mirrors only
to be blown and rippled away by a warmer breeze which sang through the bare string-branches of the lonely willow

by the happy, catch-me stream.
"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

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

VICE PRESIDENT
Dana Thomas
Rt 4 Box 946
Salem MO 65560
mail@botanytraining.com

SECRETARY
Malissa Briggler
10297 CR 171
New Bloomfield, MO 65063
573-301-0082
Malissa.Briggler@mdc.mo.gov

TREASURER
Bob Siemer
74 Conway Cove Drive
Chesterfield, MO 63017
636-537-2466
aee623@prodigy.net

MEMBERSHIP
Ann Earley
P.O. Box 440353
St. Louis, MO 63144-4353
314-963-0103
aee623@prodigy.net

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

BOARD MEMBERS
Justin Thomas (’14 - ‘17)
Rt 4 Box 946
Salem MO 65560
jthomas@botanytraining.com

Mike Skinner (’16 - ’19)
167 South Peachtree
Republic, MO 65738
417-268-5704
Mike.Skinner6680@gmail.com

Bruce Schuette (’13 - ’16)
678 St. Route 147
Troy, MO 63379
636-526-7247 (w)
bacs@centurytel.net

Rick Gray (’15 - ’18)
6 Montauk Court
St Louis MO 63146
314-993-6088
rgray@seilerinst.com

Steve Buback (’15 - ’18)
MDC NW Regional Office
701 James McCarthy Dr
St. Joseph, MO 64507
816-271-3111
Steve.Buback@mdc.mo.gov

Position vacant (’16 - ’19)

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

WEBMASTER
Brian Edmond
8878 N FR 75
Walnut Grove, MO 65770
417-742-9438
brianedmond@gmail.com
www.monativeplants.org
www.monativeplantsociety.org

PETAL PUSHER EDITOR
Becky Erickson
PO BOX 496
New Bloomfield, MO 65063
660-528-7247 (w)
bere@lizolson.net

DISTRIBUTION MANAGER
Leslie Limberg
636-398-8809
LLimberg@aol.com
Assistants: Emily Horston
And Joan Featherston

EDITORIAL COMMITTEE
Lisa Hooper
Jay Raveill and Tim Smith

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

ENVIRONMENT & EDUCATION
John Oliver [also President]

CHAPTER
REPRESENTATIVES
SOUTHWEST
Michelle Bowe
907 S. National
Springfield MO 65806
417-836-6189
mbowe@MissouriState.edu

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

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

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
TREASURER
6 Montauk Court
beckyerick711@centurylink.net
914 SE Hwy ZZ
Deepwater, MO 64740
74 Conway Cove Drive
Bob Siemer
314-936-0088
bobsiemer@co.richland.mo.us

PETAL PUSHER EDITOR
Becky Erickson
PO BOX 496
New Bloomfield, MO 65063
660-528-7247 (w)

DISTRIBUTION MANAGER
Leslie Limberg
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LLimberg@aol.com
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204 South 15th Street
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bhaley@tnc.org

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Liz Olson
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6 Montauk Court
beckyerick711@centurylink.net
914 SE Hwy ZZ
Deepwater, MO 64740
74 Conway Cove Drive
Bob Siemer
314-936-0088
bobsiemer@co.richland.mo.us

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KANSAS CITY
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bhaley@tnc.org

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