



Missouri Native Plant Society Hawthorn Chapter Newsletter

Volume 34, Number 6
Hawthorn Chapter Officers:
President
Cindy Squire
cysquire@me.com

Vice President
Nadia Navarrete-Tindall
nativeplantsandmore@gmail.com

Secretary
Becky Erickson
657-2314
beckyerick711@centurylink.net

Treasurer and Membership
Paula Peters
2216 Grace Ellen Dr
Columbia, MO 65202
pieridae1@gmail.com

Chapter Representative
John George
573-777-0394
John.George@mdc.mo.gov

Web Master
Doug Miller
thedesign@bigthe.com

Web site:
<http://columbianativeplants.org>

The Hawthorn Chapter of the Missouri Native Plant Society Newsletter is published monthly. Send submissions by the 26th of every month to:

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

We would like to read about announcements, impressions, species accounts, photos, poems, links to scientific articles or other creative nature writing **from you, too.**

June 2019

Future Activities Calendar

Dues are Due in June

For those who renew annually, it is time to send in your membership fee. **Print the last page of this newsletter and send to our treasurer, Paula.** If you are tired of renewing each year, consider becoming a life member. **The State Board meeting in May discussed raising life membership in 2020.**

2 June Sun, Noon to 3pm Pollinator Day West Ash Neighborhood Assn is offering an open house recognizing Pollinator Day at Columbia Montessori School: 3 Anderson Ave, just north of West Broadway. Activities offered: plant and seed swap, snacks, garden tours, children's activities.

20 June Thur 11:30 Lunch at RagTag. 10 Hitt St.

21, 22, 23 June: Fri pm, Sat all day with dinner, Sun am: State field trips based from Fulton. Reservations for 40th anniversary and awards dinner due before 14 June. Open <https://monativeplants.org/> to get updated information We strongly urge attendance to these field trips since they are local and we need to show some presence in the state organization.

8 July Mon, 6:30 UU Church Monday 6:30pm Members Meeting Unitarian Universalist Church, 2615 Shepard Blvd, Columbia. Program: Eathan Miller's presentation will focus on modern agriculture from a production standpoint that builds soil health, and discuss the SWCD and what it does through cost-share and outreach/education to assist producers with conservation and soil health.

July is the Best Month to see Prairies in Bloom. There has been some interest in exploring 2-3 in Pettis County. Sometimes weather cools for a few days in mid-summer. When it does, expect an announcement regarding this activity. There is a very good Mexican restaurant in Sedalia for lunch.



Tell Nadia About Speaker Opportunity Nadia Navarrete-Tindall is taking on the duties primarily of finding speakers for our meetings. If you talk to anyone who has an interesting expertise related to soils, wild plants, invasive species control, ecological restoration, , , oh goodness the list is too long – please get their contact info and let Nadia know so she can get them scheduled. We are especially interested in people who have done research. Contact Nadia here: nativeplantsandmore@gmail.com



The editor wants to thank Joanna and Eric, Brian, Karen, Nadia, and Jan for their submissions this month. We all enjoy reading personal articles about your experiences and new knowledge about nature.

Your input is important to all of us.
Please submit during the second half of every month.

This is the 34rd year Hawthorn has supplied a newsletter to chapter members. Thanks to Doug Miller for keeping the chapter website up to date.



Announcements

State Field Trips 21-23 June

June 21 Fri pm, 22 Sat all day with dinner, 23 Sun am: State field trips based from Fulton. Reservations for 40th anniversary and awards dinner are due before 14 June. Open <https://monativeplants.org/> to get updated information. Dana just announced locations on 29 May. We strongly urge attendance to these field trips since they are local and we need to show some presence in the state organization.



Lunch at RagTag Thurs 20 June

Meet our group for lunch 11:30 at RagTag, 10 Hitt St [Just south of Broadway]. Last lunch [18 May] was attended by eight members with lively discussions about fungi, seeding, weather challenges and good ideas about future activities. Hope to see you there next time.



Deer Repellant

Every year I hear very disappointed comments: “I planted that, but it was gone the next day.” Deer and Rabbits are VERY aware of the vegetation in their territory because that is the way they stay alive. They will try anything new. They even pull up bright marker flags.

Commercially available RTU repellants are ridiculously priced. You are paying for packaging and convenience. The following recipe is a concentrate – tried and true – which costs less than \$10 and will remain viable for several years if refrigerated.

Pull out your blender

Separate several eggs: 7-10. Put the WHITES in the blender: buzz quickly to break up the protein.

Add 1 teaspoon wintergreen oil, 1 teaspoon rosemary oil, 2 tablespoons guar gum powder.

As blender is running on med-low, add water to fill blender. Pour this into an empty jug; WRITE THE RECIPE on the jug! In a hand sprayer, pour this concentrate to about 20-25% [= 1/5 – 1/4]. Add hot water and shake hard. Sprayed directly on the tasty plant, it will deter most herbivores. Application needs to be repeated every two weeks AND after a hard rain.

If you are experiencing diggers, buy some cheap HOT sauce. Use an old small squirt-top [not a sprayer because pepper particles clog sprayers] dispenser bottle. Mix hot sauce 1/2 with water. Squirt all around the base of your new plant.



Local volunteer opportunities with Lea.

Contact Lea to be added to her mail list.

[573-864-7647](tel:573-864-7647) langtrea@gmail.com

Missouri Master Naturalist

Columbia Outdoor Classroom Volunteer



LINK UP!!

New links from PCA

☐ Alien Plant Working Group has moved the Weeds Gone Wild website to www.invasive.org/alien/index.htm

☐ USGS recently published the First Comprehensive List of Non-Native Species Established in Three Major Regions of the United States, the publication is USGS OFR 20181156 and is available online

(<https://pubs.er.usgs.gov/publication/ofr20181156>)

☐ North American Pollinator Protection Campaign (NAPPC) is soon publishing this year’s pollinator poster – and it’s all about endangered pollinators and their habitats! You can soon order copies on the Pollinator Partnership website here <http://pollinator.org/shop/posters>

☐ The Pollinator Partnership is proud to announce that June 17-23, 2019 has been designated National Pollinator Week. There will be several events during Pollinator Week held across the country, find an event near you here <http://pollinator.org/pollinator-week> More information about various events will be distributed on the PCA listserv.

☐ We encourage PCA cooperators to post meetings, webinars, and research on the PCA listserv as we continue our collaborative mission to protect native plants by ensuring that native plant populations and their communities are maintained, enhanced, and restored. Listserv information can be found at <http://lists.plantconservation.org/mailman/listinfo>

Biota of North America. The distribution maps are fascinating! <http://www.bonap.org/>

iNaturalist is a world-wide site used by 300G people who have made 10M observations. Have a great time exploring! <https://www.inaturalist.org/>

Nadia’s Yard: a blog by Randy Tindall
<http://nadiasyard.com/>

Bush honeysuckle removal – contact Eric Bohle ebohle4@gmail.com

Hawthorn website www.columbianativeplants.org

MONPS website www.monativeplantsociety.org

Big Sky Mosey 19 May

On Sunday May 19 John and Mike of Green Belt Land Trust guided 15 of Hawthorn members through Big Sky Nature Preserve which sits in the bluffs of the Missouri River overlooking Easley.

Geology (and birds) of the Big Sky Nature Preserve

Submitted by Joanna and Eric Reuter
who are avid naturalists [JG photo]

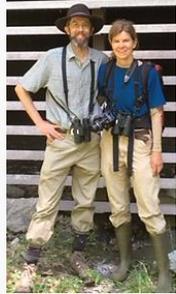
The May 19 field trip visited a ridge-top savanna overlooking the Missouri River at Easley that is underlain by bedrock from the Burlington and Chouteau Formations (Mississippian age, ~325–360 million years ago), though soils derived from wind-blown loess (fine-grained glacier-derived sediment) cover the bedrock to various depths. These fertile and well-drained soils are common along the hilltops lining the Missouri River in central Missouri and are capable of supporting rich vegetation from mature forests of impressive trees to orchards and vineyards. The Burlington is exposed on the bluff face just below the savanna, showing its typical composition as a grey limestone full of crinoids and other marine fossils with occasional nodules of chert (the raw material for stone tools and points, known as flint once worked by humans). This formation forms sites of geologic interest in many parts of Boone County, including at Rock Bridge State Park and the Pinnacles. Descending the bluff face to the level of a former mine entrance, the fossils disappear and the rock transitions to a fine-grained carbonate representing the Chouteau Formation.

According to Unklesbay's Geology of Boone County, Missouri (1952), this mine started as an open quarry to provide rock for management of the Missouri River. Later, underground tunneling began to supply material for the production of rock wool, a fluffy material that was used as insulation. This required rock of a specific composition (met by the upper 21 feet of Chouteau Formation), which was melted and processed at a manufacturing plant below the mine. For additional information and a photo of the rock wool plant, see this site:

<https://boonehistory.blogspot.com/2009/10/guardian-rock-wool-plant-easley-mo-ca.html>.

A 1966 map of the mine's internal layout, along with a geologic cross-section, is available here: <https://dnr.mo.gov/geology/mining/Boone/maps/00131.jpg>.

[continued next column]



Rocks of older Devonian age are not exposed in the section visited as they are below the level of the mine, but the Devonian Cedar Valley Limestone is present in the valley near Easley according to geologic mapping (<https://dnr.mo.gov/geostrat/>, 1:24,000 bedrock map).

While absorbing in awe the broad expanse of the Missouri River and bottomland, we were delighted by kingfishers, turkey vultures and some swallows swooping below us. The bird list from the afternoon is available on eBird:

<https://ebird.org/view/checklist/S56512003>

Impressions from Inspired Members

From Karen: I had a great walk at Big Sky, the view IS big sky and big river on the bluff. The movement of the river is mesmerizing. Going from the woods to the open woodland and seeing the view is a good memory.

From Brian: I am grateful for the trip to "Big Sky" today. It is a special place and I'm glad it is protected by Green Belt LT.

From Nadia: I live in the city and it is always a thrill for me to see four-leaf milkweeds (*Asclepias quadrifolia*) in bloom, they are so precious because I don't get to see them that often. Other species we observed in the woodlands were paw paws, chinkapin oak, and a few spring wildflowers. I think I heard Mike from Greenbelt Land Trust mention that one of the chinkapins on this land is the second largest in the state.

The cliff top had a magnificent view of the Missouri River, and Plowboy Bend CA, and Eagle Bluff; however, one have to be very careful to walk there because it ends on a cliff. It has been managed with fire for about 15 years by previous owners and the effects are very noticeable, the glade on the cliff face and most of the woods are mostly free of invasives.

Among a strong stand of little blue stem that covers about 2 thirds of the steep cliff face and ridge end, we observed several desirable species like a big patch of blooming horsemint (*Monarda bradburiana*) in the wooded ridge and extensive areas covered with pussytoes (*Antennaria parlinii*), in the woods and in the glades. Ohio spiderwort flowers (*Tradescantia 3hiensis*) added colorful touches to the glade. I was glad to learn that 14 acres that include the glade are now protected for years to come under the management of the Greenbelt Land Trust, for me this is the best way to protect areas from development or any disturbance, especially in cities like Columbia.

From Jan: I enjoyed the trip to Big Sky, which was my first NPS event. It was a treat to see the beautiful site and to hang out with such a friendly and knowledgeable group. I learned to watch for painted lady caterpillars in the folded leaves of pussytoes (If I remembered the plant name right!)

I've attached one photo of the group admiring the view. And here's a link to some of the other photos I took. Feel free to share this too: <https://photos.app.goo.gl/6BkTr4eaum5p1Tix8>

Photos on Page 5



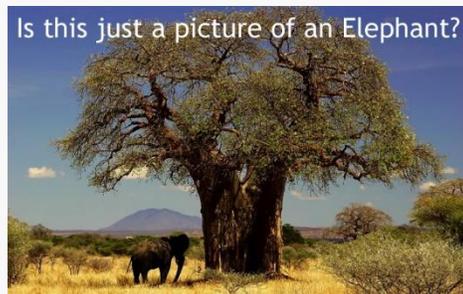
What is Plant Blindness?

Submitted by Becky Erickson; inspired by a recent email from Plant Conservation Alliance inserted at the end.

The propane company sent a man with very little sense except for the job he was supposed to accomplish to my house on 20 May to paint my gas tank. There was zero warning of his unexpected arrival. If there had been warning from the gas company, I would have ‘cleared’ the tank before he came.

In mid-morning I realized he was already about his work. I went to see and was horrified to find he had not just cut the woodland wildflowers from around the tank and the entrance path, he had ripped them out of the ground. He had to clear the vegetation so dirt wouldn’t get into the paint. I asked him if there were grass growing, would he scrape it down to bare earth. He said no, he would cut it short. I made some other statements including that he and all other workmen were ‘plant blind’ and wallow all over the plants I work hard to nurture. But at that point there was nothing I could do. And when he turned his giant truck around to leave, it rutted the wet yard.

Please teach your family and friends how to walk thru wild places and how to not abuse our fragile Earth. So much of life on this planet is disappearing because of the lack of knowledge and realization from people like this man.



Is this just a picture of an Elephant?

<Photo credit: La Plumeria, September 27, 2016
In 1998, American botanists James Wandersee

and Elisabeth Schussler defined Plant Blindness as “the inability to see or notice the plants in one’s own environment,” which leads “to the inability to recognize the importance of plants in the biosphere and in human affairs.” Plant blindness also comprises an “inability to appreciate the aesthetic and unique biological features” of plants and “the misguided, anthropocentric ranking of plants as inferior to animals, leading to the erroneous conclusion that they are unworthy of human consideration.” In addition, “Plant Blindness is a factor in the ongoing declines in university botany programs, herbaria, and other plant science facilities.”

[William Allen. Plant Blindness. BioScience \(2003\) 53 \(10\): 926.](#)

Plant Blindness Links

- [Plant blindness and the implications for plant conservation](#) – Conservation Biology Article (July 2016)
- [Plant Blindness](#) – American Institute of Biological Sciences
- [We need a cure for plant blindness](#) – The Guardian (September 17, 2015)

This disturbing recent [United Nations assessment](#) which found that about 1 million species are currently at risk of extinction, putting life on earth, including humanity, at unprecedented risk. (See [NPCC News on the UN Extinction Crisis Report](#))



Low-Growing Natives for Groundcover

From the Western Nursery & Landscape Association newsletter

What makes a ground cover?

This is always a difficult question to answer, because it is not a botanical term, but a poorly defined practical one. More often than not, when the term is used, people are looking for the Holy Grail: adapted to all conditions, evergreen, and zero maintenance. While there are commercially available species that come close, the easiest ones to find are introduced exotics that contribute as much to the environment as artificial turf, but are worse because they are typically also invasive.

[Ed note: The full articles give species lists – Remember not all species suggested are native to MO.]

Part 1

<https://mailchi.mp/izelplants/pizzo-2698805>

Part 2

<https://mailchi.mp/izelplants/part-2?fbclid=IwAR3YRlnHulouXLOJVV6BBiUSOPcF9ZtjTTArw2BVbaZPae9vC9W4qgX1cTM>



True Native Plants for Wildlife

It cannot be said more strongly from all evidence that our bird and insect numbers have declined by close to 50% because of declines in native plant numbers and diversity in the broad landscape. It is up to us to rehab more of our turf lawns to a diverse mix of true native plants. Please corroborate with members of your chapter to ask about the correct sources of native plants. Please purchase true native plants from local native plant nurseries – not Nativars from the big box stores. Hawthorn chapter has a native nursery. Contact beckyerick711@centurylink.net for info.

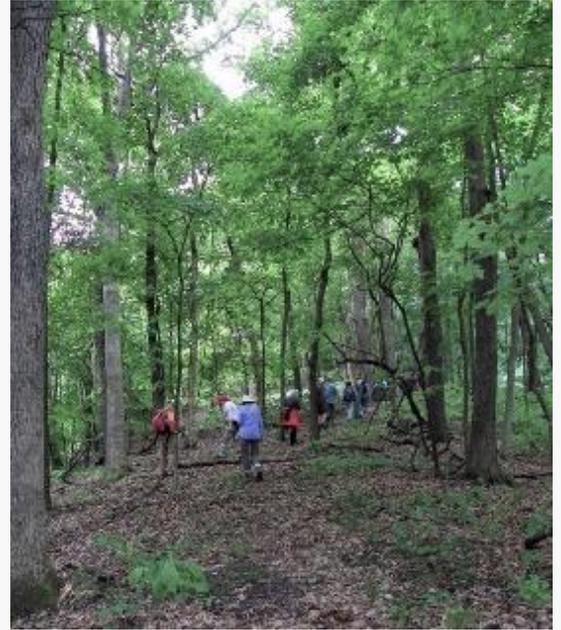
Grow Native resources: www.grownative.com Find Resource Guide

Plant identification: USDA plant database <http://plants.usda.gov>



Above: Delicate *Asclepias quadrifolia*: named for the four whorled leaves in the middle of the stem
BE photo.

Below: *Arisaema triphyllum* Jack in the pulpit seedlings usually found in woodland draws/creek bottoms. *BE photo*



Big trees, little people on ridge to the Point. *BE photo*
Amazing view from the Point *JanH photo*



Hawthorn group exploring native diversity at the Point of Big Sky private reserve.
Thanks to John and Mike and Green Belt for this opportunity
BE photo



NEW MEMBERS!

**We want to recognize new members:
Diane, Paul, Emily and Ben.**

We hope you attend some of the activities we offer. We are always open to new ideas; we will consider whatever you offer. We have recently made it a policy to not include last names in our newsletter unless it is authorized.



Program at Hawthorn Membership Meeting 13 May 2019

Andy Heaslet spoke on the importance and success through compromise for speaking up for virgin wild areas. He gave an example of a subdivision encroaching on fragile bluffs near St Louis. He expressed the importance of contacting and visiting your representatives in Jefferson City and Washington DC.

Minutes are published separately and available only to members.



Report & Birds and Bees Festival at Arrowrock State Park 11 May

Submitted by Becky Erickson

Our original idea was to take small groups onto the trail for a short walk to point out wildflowers and teach them how to use Dennison.

It was a good idea to go scout the park before setting up. When Cindy, Sarah, and I arrived for the scouting trip, we were totally crestfallen, nearly to tears. The woods around the old town and visitor center is almost smothered with a long list of alien invasive species. We had to look hard to find any natives. So we took a deep breath and regrouped.

I keep a few aliens in pots at the nursery to take to Earth Day for education. I brought those and we cut a few more so we could set up the booth to explain about invasive species and the damage they can do. To our amazement, more than one person asked "what is an invasive plant?"

The day was cool and damp, and there was another activity at nearby Blackwater. Therefor the visitor number was thin. But we did enlighten several people, amused a few more who already got it, and signed up a new member. It was worth the adage: when life gives you lemons, make lemonade.

Please Step Forward For Service

Please contact one of the officers ready to volunteer a little time to a very good environmental and educational service. We need people to serve as officers, to grow plants for fundraising and we need people to man our information booth at events such as Earth Day and Bradford Plant Sale. There are opportunities to volunteer caring for native gardens in public places. We don't deliver printed copies by mail unless you insist. Please consider requesting email delivery; it saves us money.

___ Regular (\$16.00)*

___ Student (\$11.00)

___ Contributing (\$26.00)* designate chapter or state

___ Paper postal service (\$10)

___ State Lifetime (\$200) Might be raised for 2020

___ Chapter Lifetime (\$120 – you must also be a member of the state organization to utilize this option)

___ Chapter only (\$6.00 – this is for members who already belong to State and another chapter).

*Includes both Chapter (\$6) and State (\$10) dues.

Make check payable to:

**Native Plant Society. Send check and this form to:
Paula Peters, 2216 Grace Ellen Dr., Columbia, MO 65202**

MEMBERSHIP FORM

Missouri Native Plant Society-

Hawthorn Chapter

July 1 through June 30. Dues are Due NOW!

Name _____

Address _____

Phone: Evening _____

Day or Cell _____

Email: _____

Method of receiving chapter newsletter:
(circle preference)

Email

Regular mail

As of July 2018 edition of the Petal Pusher printed on paper, sent by post, will cost an additional \$10 more than standard membership. Email delivery brings you color photos and it saves NPS money.