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

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We would like to read about announcements, impressions, species accounts, photos, poems, links to scientific articles or other creative nature writing from you, too. Please submit during the second half of every month.

This is the 36th year Hawthorn has supplied a newsletter to chapter members.

Missouri Native Plant Society Hawthorn Chapter Newsletter

June 2021

Future Activities Calendar

Our traditional meeting time is second Mondays at 6:30. And 14 June 6:30 we will be having an outdoor meeting in person at the UU Church! We will have instruction from Erin Skorina on drawing from nature and a few chapter issues to discuss. Bring a chair.

2 June Wed, 10 am. Lea needs help at the CELN garden weeding langtrea@gmail.com 12 June Sat, 9 am. Garden tour at Lesa's house. Invitation and directions were sent last week. This is a co-activity with WildOnes.

14 June Monday, 9-11 am. Cindy needs help weeding at our adopted rain garden: Providence and Grindstone/Nifong: north on west outer road north/behind Planet Fitness.

16 June Wed 10 am. Lea needs help at the CELN garden weeding.

25 – 27 June MONPS weekend wild area tour based in Kansas City. Best recent info on first page of most recent Petal Pusher. Your May/June Petal Pusher is here! Drum roll please...we're holding a field trip in June! Also be sure to take a look at the Missouri Botanists' Big Year Contest and consider joining the fun, and note that we've extended the deadline for MONPS Award nominations to June 10th. All this and more, including really interesting articles, news and photos can be found in this issue. We hope you enjoy it!

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Announcements Thanks to Nadia for her submission this month NOW is a very good time to pull bush honeysuckle seedlings.

Missouri Native Plant Society Awards Nominations

Due June 10. The MONPS Awards Committee seeks nominations of people who have supported the preservation of Missouri's flora and have helped MONPS beyond an average effort.

MONPS offers six awards:

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

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

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

4) The John E. Wylie Award, recognizing individuals who have provided exceptional service to the Society. 5) 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. The deadline for nominations is May 15. Nominations should contain the full name of the nominee and the name of the person making the nomination, and they should set forth the contributions of the individual or organization that merits recognition. Award recipients need not be members of MONPS. Please submit nominations to Awards Committee Chairwoman, Malissa Briggler: malissa.briggler@mdc.mo.gov

GOLD LINKS

All new MPF/GN events posted here: https://grownative.org/events/

Sign up for MO Prairie Journal

https://moprairie.org/missio n/missouri-prairie-journal/ Find links to educational webinars every Wed afternoon on the MPF site.

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2020 Missouri Natural Areas Newsletter

Enjoy your 2020 Missouri Natural Areas Newsletter! This edition features articles examining Missouri's tremendous native plant diversity and its ecology. Sit back and enjoy the read as we look forward to spring's earliest wildflowers.

https://nature.mdc.mo.gov/ discover-nature/find-places-gomo/natural-areas/natural-areasnewsletter

Check out the **BudBurst** site and get ready to record spring sprouts, flowers and later, seeds https://budburst.org/ They need your data!!!

The Naturalist's Notebook used to record phenology is

available from <u>storey.com</u> for \$19.95. Here is the link to the calendar you can print yourself:

https://www.storey.com/wpcontent/uploads/2020/02/Na turalists_Notebook_Calenda r_01.pdf **VOLUNTEERING OPPORTUNITIES**

Many of you have expressed interest in helping to manage the myriad of native plant gardens around town and at Columbia Public Schools as a reason to get outside and a process of education. Doing this community service is applicable to your MMN re-pay requirements. Even if you have not had MMN training, working in these gardens will help you learn how to recognize good native plants from undesirables. Lea is the leader for this volunteer group [named Volunteer of the Month by City of Columbia this summer].

Activities are announced weekly, so sign up now to know when and where to get started. Lea knows where all the gardens are and offers a schedule, received from her by email, when group weeding parties occur. If you have confidence in your knowledge of species recognition, don't be shy! – <u>ask Lea for a garden</u> and do what you can to remove 'bad plants' when you want to work. If you need assistance with id and technique, go with a group several times before you strike out on your own. langtrea@gmail.com call or text 864-7647.

Want to help pollinators? In addition to supporting The Nature Conservancy's

work protecting and restoring habitat, the best thing you can do is to make your home, school, workplace or neighborhood pollinator friendly. Whether you live in a city high-rise, a suburban cul-de-sac or on a farm, you can create an oasis of pollinator habitat. Put your DIY skills to use with one of these simple projects that will attract birds, bees and butterflies. Before you know it, the oasis you've created will be abuzz with pollinator activity. Articles Planting for Pollinators

See many illustrations of Artist Lisel Jane Ashlock [in PP illustrations file] <u>https://www.nature.org/en-us/magazine/magazine-articles/planting-for-pollinators/</u> <u>https://www.nature.org/en-us/magazine/magazine-articles/pollinator-paradise/</u>

Trees Talk To Each Other.

'Mother Tree' Ecologist Hears Lessons For People, Too.

• • • Heard on NPR <u>Fresh Air</u> May 4, 2021, 2:39 PM ET Link to the whole article, in audio, too: <u>https://www.npr.org/sections/health-</u>

shots/2021/05/04/993430007/trees-talk-to-each-other-mother-tree-ecologist-hears-lessons-for-peopletoo?emci=70f8800d-d5b8-eb11-a7ad-501ac57ba3ed&emdi=c908eb64-99b9-eb11-a7ad-501ac57ba3ed&ceid=416351

Trees are "social creatures" that communicate with each other in cooperative ways that hold lessons for humans, too, ecologist Suzanne Simard says. Simard grew up in Canadian forests as a descendant of loggers before becoming a forestry ecologist. She's now a professor of forest ecology at the University of British Columbia.

Trees are linked to neighboring trees by an underground network of fungi that resembles the neural networks in the brain, she explains. In one study, Simard watched as a Douglas fir that had been injured by insects appeared to send chemical warning signals to a ponderosa pine growing nearby. The pine tree then produced defense enzymes to protect against the insect.

In addition to warning each other of danger, Simard says that trees have been known to share nutrients at critical times to keep each other healthy. She says the trees in a forest are often linked to each other via an older tree she calls a "mother" or "hub" tree.

In the Atlantic Ocean, Subtle Shifts Hint at Dramatic Dangers

The warming atmosphere is causing an arm of the powerful Gulf Stream to weaken, some scientists fear. *By Moises Velasquez-Manoff and Jeremy White* From NYTimes, 2 March 2021: Amazing interactive maps and explanation of how Greenland meltwater is influencing climate change. https://www.nytimes.com/interactive/2021/03/02/climate/atlantic-ocean-climatechange.html?campaign_id=9&emc=edit_nn_20210526&instance_id=31568&nl=themorning®i_id=161911183&segment_id=59023&te=1&user_id=79a1c0b004d8b63e7f1ade05c9f507a8

Missouriensis -

On Line Now! Sent from Dana our MONPS President. Great news! Not only is 2020 almost behind us, but your newest issue of Missouriensis, the journal of the Missouri Native Plant Society, is now available! Volume 38 (2020) of Missouriensis can be accessed on our website at https://monativeplants.org/ publications/missouriensis/.

This issue is packed with fascinating topics, including current research about a new (and colorful) lichen in Missouri, a new and potentially invasive *Viburnum*, new occurrences of two critically imperiled sedges, characters to help identify a confusing group of *Desmodium*, clarification of a moss nomenclatural issue, and more.

Links to two of our Chapter Autumn Zoom Presentations

Lea's Outdoor Native Plant Classrooms <u>https://ldrv.ms/p/s</u> <u>!AjscdYpHSUkgccDCmcryKA</u> <u>df1sk?e=3YWx6d</u>

Becky's Pollinator ID & Garden Plants: <u>https://ldrv.ms/p/s!AjscdYpH</u> <u>SUkgc3nMcng4S-</u> pzkVU?e=qvUOJL

(the NOTES show up in the bottom, but you might need to click "notes" at the bottom of the screen to see verbiage).

St Louis chapter presentations are posted on the state website.

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Excellent info from GN . . .

• <u>Native Landscape Care Calendar</u> -- for professionals and homeowners. We also have a brief one-page care overview as well.

• And, just added to the GN website - extensive Butterfly Host Plant list

TNNPS Offers Open Webinars

Why am I posting zooms offered by TNNPS? Because Many of the same habitats occur there as occur in MO. Although they are a long way east, they are on the same latitude. And Many similar species occur in both places. If you see the presenter focus on a plant you like, note the genus and look up the species of that genus that live in MO.

Webinar date/time: Every third Tuesday; 6:30-7:30pm **CT** No pre-registration required, no cost to attend.

More info and join link: <u>https://www.tnps.org/wp-content/uploads/2021/03/2021Seminars.pdf</u> Webinar presented by <u>Tennessee Native Plant Society</u> Duration: 1 hour

What will you learn? Speakers are drawn from their most knowledgeable membership, from professionals across the state, and from the professors and students studying Tennessee native plants. A range of topics will be covered that may include plants that are currently blooming, native plants in your yards, current research on native plants, protections for native plants, and so much more.

Presenters:

June 15: Cooper Breeden, Tennessee Plant Conservation Alliance July 20: Meredith Clebsch, Native Plant Propagation August 17: Bart Jones, Pollination Strategies of Native Orchids September 21: Pandy Upchurch, Edible Natives October 19th: TBA November 16: Margie Hunter, Invasive Plants of Tennessee January 18: Dave Walters and Dr. Cindi Smith-Walters, Winter Plant Identification

Groundnut: A Native Edible for Your Vegetable Garden.

Text and photos submitted by Nadia Navarrete-Tindall

Long before Columbus came to this continent, one of our little known native edibles, groundnut (*Apios americana*) was being consumed and even planted intentionally by indigenous people. It has been gaining popularity again in the last few years for its edible tubers, seeds and as an ornamental plant. Daniel Moerma, in his <u>Native American Food Plants</u>, mentions fourteen Native American groups that consumed groundnut. Most of them gathered it from the wild, but there is evidence that a few of them, including the Cheyenne, planted it near their settlements. It is also known as hopniss, wild potato, Indian potato, American potato, American bean, Dakota peas and sea vines.

According the USDA Natural Resources Conservation Service, groundnut is native to most Eastern United States and Canada and is found scattered across Missouri.

There are several reports that groundnut was first introduced in Europe in the 1600's, but soon forgotten and then reintroduced in the 1800's in hopes of replacing the diseased Peruvian potatoes (*Solanum tuberosum*) -wrongly known as Irish potatoes.

Groundnut has been studied extensively for its potential as a domesticated crop. At Louisiana State University by Dr. W.J. Blackmon, B.D. Reynolds and colleagues studied groundnut for more than 10 years in the 1980's to 1990's and developed better performing varieties. Very few of these varieties are still commercially available; however, more work is needed.

Groundnut is a perennial herbaceous plant that climbs over other vegetation - can pull it down - in natural stands forming dense thickets. It can be trained as a vine on an arbor or trellis in gardens. It has pinnately compound leaves with 3 to 7 leaflets and white latex which make the sap appear milky. The edible parts of the plant are the tubers and seeds. The tubers are connected by slender rhizomes, forming a necklace-like appearance. They look like potatoes but their taste is a little sweeter, and in Missouri, one has to wait two years after planting to harvest them.

Groundnuts should be cooked before eating, and they can be used in recipes calling for regular potatoes. They can be harvested any time of the year but are at their best in late fall or

To learn more about **Deep Roots KC or to view previous educational webinars,** visit https://deeprootskc.org/

Insecticides Found in Milkweed Samples

Synopsis from Xerces Society **Wings** 43:2, Fall 2020, P30.

They collected and tested 225 samples of milkweed from California Central Valley [ag field edges, wild areas, plants from nurseries, suburbs] during June of 2019. Retail nurseries and ag field samples had more insecticides. They found 64 different chemicals. 32% of the samples contained levels of harmful insecticides known to harm butterflies. Five were contained in 80% of all samples. Two which were found in 90% of the 225 samples: chloranthraniliprole and methoxyfenozide.

[Ed. Note] PLEASE!! **Take this data into consideration when purchasing plants.** If you don't get them from a reputable native plant dealer – please consider propagating natives from local-sourced wild seed or *insitu* [seed in ground].

Essay by Margaret Renkl, NY Times, 26 February 2021

Link to full article: https://www.nytimes.com/2021 /02/26/opinion/wintergardening-wildlife.html

Link to

Braiding Sweetgrass

by Robin Wall Kimmerer. If you want to assist Robin's cause with a purchase of one or more of her books, please do. If you cannot afford this purchase at this time, this is a gift of a free download: https://pdforall.com/wpcontent/uploads/2020/08/Braidi ng-Sweetgrass-PDFORALL.COM_.pdf early spring before they sprout. The foliage dies off after frost, but the tuber never freezes. The attractive salmon-pink color flowers are produced in late summer and early fall which makes it also desirable as an ornamental plant.

Deer browse on the leaves and studies in West Virginia suggest that goats may benefit with the consumption of the foliage due to the high protein content; however, the leaves are toxic for humans.

Groundnut is a member of the Fabaceae family and like many members of this family, fixes nitrogen from the air, forming nodules as a result of a beneficial association or symbiosis with rhizobia bacteria. This helps groundnut to grow well in poor soils.

Two other nitrogen-fixing native edible legumes are wild turnip (<u>Pediomelum esculentum</u>) and hog peanut (<u>Amphicarpea bracteata</u>. The Flora of Missouri by Yatskievych is a great source to learn to identify

these legumes. *Apios priceana* (Price's groundnut is a threatened species only reported in Illinois and 4 other adjacent states by the USDA). It has not been officially reported in Missouri, but there is a possibility of its existence in southeast Missouri.

Please be advised this plant reproduces aggressively so can become a nuisance in a diverse





planting if not harvested or ripped out regularly. Groundnut naturally grows near streams or lakes, in gardens grows well in moist soil with good drainage and under moderate shade. When grown in raised beds, rhizomes can find their way out of the bed, so it may be a good idea to cover the beds with a water permeable material like weed barrier. Several layers of cardboard can provide good results too. In demonstration areas at Lincoln University, groundnuts developed well and produced nice looking tubers in both pots and beds, but it was much easier to harvest in pots. During the first year, tubers grew about an inch in diameter. At year two, the largest tubers were the size of a goose egg and grew another inch in the third year.

Groundnuts can be used in any recipe calling for potatoes. When prepared as mashed potatoes, they were drier than regular potatoes. Chef Sam Pfeiffer recommends adding ¹/₄ cup heavy cream and/or ¹/₄ of a cup of chicken or vegetable broth to a cup of mashed groundnuts to improve its consistency. Kelly Kindscher in Edible Wild Plants of the Prairie and Reynolds et al. in Domestication of Apios americana report that groundnuts are a good source of carbohydrates, and the tubers and seed contain protein. It is important to mention that consuming groundnut tubers may cause severe allergies in some people. In some cases, people became allergic to this food after consuming it several times; there is still no scientific evidence to confirm the cause of this change. I have tried it at least 4 times, so far so good.

I love growing potatoes and sweet potatoes and any other kind of tuber, but since we don't have much sun in our front or backyard we can grow groundnuts as a good substitute. There is nothing more therapeutic and special than getting your hands in the soil to dig these priceless foods. I recommend it! They can feed you and give you the satisfaction of gardening them yourself.



HUMMERS

Hummingbirds are here!

Boil 1 qt of cold water with 1 cup of white sugar [or 2 and 2]. Store extra sugarwater in liter water bottles on the counter. Do not hang feeders in the sun – it will spoil fast. Rinse all feeder parts at each filling. Songbird Station has water ant traps [\$6] to hang with your feeders. I smear Vaseline mixed with neem oil and cinnamon on the feeder top.



Dodecatheon at 100AW



Comandra richardsoniana at 100AW



Ascl. quatrafolia at 100AW

Submissions for Next Petal Pusher

Submitted by Michelle Bowe, Petal Pusher Editor

They would like for members to do a little research and report on deceased naturalists and botanists who had ties to MO.

[Ed. Note: when I was PP editor, I requested identical format. Very few followed. It takes hours of extra time to "fix" submissions that do not follow requested format. PLEASE LOOK at Michelle's requested format and do your best to follow it when sending your submissions. As a college professor, Michelle does not have the time and focus that I had.]

Please consider making a submission for a future Petal Pusher! Here is some information for submissions:

A. The theme for the next issue is to <u>do research and report on deceased naturalists</u>, <u>botanists and</u> explorers who had ties to MO. Other submissions are also welcome!!

B. Send ONE email saying "here is my contribution on_____," and <u>attach</u> (don't embed) the following:

1) an article in <u>Word format</u> with photo captions at the end (<u>no photos imbedded in the Word</u> <u>document</u>) and your name in the text.

2) 2 to 3 images, preferably in JPEG format

C. Use only one space between sentences

D. Even short notes with pictures would be great!

E. Send to: mbowe@missouristate.edu

"Talking to plants is one way of talking directly to the Great Spirit" Rosemary Gladstar

Photos from outings you missed in May Thanks to Carol and Mike for their MPF organization and leadership.



Asclepias viridis



Oenothera macrocarpa



[Above] Camassia angusta

[Left] Diversity at 25-Mile enhanced in blue because white flowers are not shown in photo. *Camassia* and *Delphinium*.



Topics for This Years' Petal Pusher the state MONPS newsletter

You don't need to be an expert, but if you have good repeatable experience as a naturalist on any of these subjects, you are welcome to offer your knowledge to the rest of us.

If we have members who are experts on any of these topics, Michelle Pruitt [on masthead] is willing to do an amateur proofread for you if that would be helpful.

The submission deadline for the July/Aug issue is 20 June.

ALWAYS - 20th of even numbered months. If you don't understand subjects, parameters, or submission format, contact Michelle Bowe, PP editor MBowe@MissouriState.edu.

- Focus on a Plant Family could be used every year. Louise Flenner of Hawthorn chapter wrote a good article on this topic in 2019. Would be good to study that as a template.

- Potential Emerging Invaders. **Have you seen a new plant invader?** Someone from MoIP as contributor; Malissa Briggler volunteered. Any one of us could study invasive plants; MPF Journal featured invasives during 2020. Just search 'invasive plants' and pick one to report on.

- Favorite Natural Areas. <u>Suggested to also have chapters solicit</u> articles from their members. <u>This means YOU can write about your</u> favorite Natural Area

- Historical Botanists.

- Better Know a Genus. These are species accounts. You observe/research a species or genus and describe the whole life cycle including preferred habitat and vectors/predators.

Regular Recurring Columns:

Conundrum Corner Contributors needed! **Invasive Tip of the Month** Tips to identify and eradicate invasives, with a different species in each issue. Contributors needed!

Other Recurring Columns: **Casey's Kitchen** Casey Burks **Name Change of the Month** Justin Thomas. Other volunteers welcome.

Poetry Corner or Quotation Corner Send suggestions for poems or quotes for inclusion. Note that for poems, we must have permission from the publisher.

Where are we going Features we will see on the next field trip. Malissa Briggler?

And here's where you can become newsletter famous by submitting your questions: <u>https://monativeplants.org/ask-a-</u> question/

Ask a question Questions from website, answered. Facilitated by Jerry Barnabee.

Please Step Forward For Service Membership and Service

Please contact one of the officers 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, to man our information booth at events such as Earth Day and Bradford Plant Sale, and to care for native gardens in public places. We send communications and the newsletter by email.

State Membership Level (check all that you request):

- ____Student \$5
- ____Goldenrod \$10
- ____Sunflower \$25
- ____Blue Bell \$50
- ____Blazing Star \$100

State Life Membership: contact us via website

[monativeplants.org], navigate to

"Ask a Question": Life Time Memberships)

_____Surcharge for paper state Petal Pusher by mail \$10 Minimum required annual membership per household

is \$10 for students or \$15 for non-students [state+chapter]

Chapter membership:

____Hawthorn Chapter \$5

Hawthorn requires chapter newsletters by email = no charge _____Hawthorn life membership \$120

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* Fiscal year is July 1 through June 30.

How were you attracted to join MONPS?
Name
Address
Phone: Evening
Day or Cell
Required
Email:
As of July 2018, Petal Pusher printed on paper in grayscale,
sent by post, will cost an additional \$10 more than standard
membership. Email delivery brings you color photos, and
instant delivery. I <u>t saves natural resources, pollution, and</u> <u>MONPS' and your money</u> .