



Missouri Native Plant Society Hawthorn Chapter Newsletter

Volume 34, Number 11

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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.**

November 2019

Future Activities Calendar

9 Nov Sat, 8:30 to 3:30. GrowNative! Workshop at Bradford Farm near Columbia. All Hawthorn members may go. See article inside.

10 Nov Sun 2pm; Wreath Workshop hosted by Carol Leigh at Hillcreek Fiber Studio 7001 Hillcreek Rd, Columbia. Bring a wreath base, craft wire and plant clippers, and dried native plants from your garden or nearby wild areas.

11 Nov Mon, 6:30 UU Church Monday 6:30pm Members Meeting Unitarian Universalist Church, 2615 Shepard Blvd, Columbia. Cristina Macklem is the MDC Wildlife Biologist that works in the furbearer program She is going to give us a presentation about the current status of Black Bears in Missouri.

13 Nov Wed GrowNative! Membership Conference in Columbia 8:30 to 3:30. All Hawthorn members may go. See article inside.

21 Nov Thurs 11:30 to 1pm Lunch at RagTag/Uprise. Just south of Broadway at 10 Hitt Street.

7 Dec Sat 11am Holiday party hosted by Elena at Guitar mansion 2815 Oakland Gravel Road. Ham is provided by host; please bring appropriate dish to share.

19 Dec Thurs 11:30 to 1pm Lunch at RagTag/Uprise. Just south of Broadway at 10 Hitt Street.

Announcements

We need a Chapter Rep to attend State Meetings, and write reports. Expenses reimbursed. Please volunteer. We need a member to apply to be the Chapter Representative to Four state board meetings for 2 years. This person must take notes at state board meetings and report to the chapter. Then attend chapter activities and report to state 6X/year for publication in Petal Pusher.



Lunch at RagTag Thurs 21 Nov

Meet our group for lunch 11:30 at RagTag/Uprise, 10 Hitt St [Just south of Broadway].



Meetings are the second Monday:

11 Nov program: MDC Biologist Cristina Macklem to speak about bears.

Dec and Jan are cancelled due to possible weather problems.

10 Feb meeting will be open again with program by

MDC Botanist Malissa Briggler.

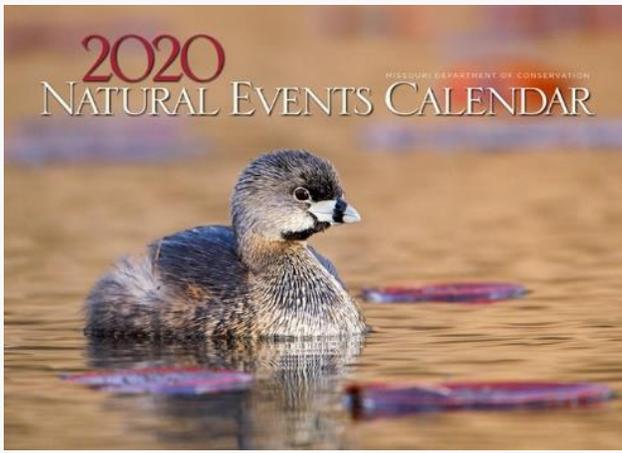


The editor wants to thank Michelle for editing and photos, Paula, Michelle, Cindy, Nadia, and Louise for their submissions this month.

We all enjoy reading personal articles about your experiences and new knowledge about nature.

Please submit during the second half of every month.

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



MDC Calendars for Sale – Nov 15 Deadline

The Hawthorn Chapter will be ordering MDC Natural Events Calendars for the upcoming year. These make great holiday

gifts and will be available by Christmas, but you must place your order by November 15. A sign-up sheet will be available at both the October and November meetings. If you cannot make one of the meetings and would like to pre-order you can email Paula Peters at pieridael@gmail.com. They will be available for pick up at the Dec lunch, Dec holiday party, or from Paula Peters. Not sure what they will sell for, but they retail for \$9 plus tax and we will get a discount on that, plus no tax.

BOOKS AT DISCOUNT

Hawthorn chapter is committed to educating the public about native plants and the ecosystems that support them. One of the ways we do this is by buying books in bulk and passing the savings on to members and the public via our booth sales throughout the year.

Below is a list of available books and their price. If anyone is interested in purchasing a book, **send me an email at lfenner@hotmail.com**. Put Hawthorn Books in the subject line in case I need to retrieve it from my spam folder. **Arrangements can be made to pick up the books long before the next meeting, Nov. 11 or at the third Thursday lunch, Nov. 21.** Books have always made good Christmas presents. Checks can be made out to Native Plant Society and should be handed to our treasurer, Paula.

Missouri Department of Conservation Publications

Price	Title
\$8	Discover Missouri Natural Areas by Michael Leahy
\$15	Amphibians and Reptiles of Missouri (2nd Ed.) by TR. Johnson
\$9	Missouri Orchids by Bill Summers (only one left)
\$7	Trees of Missouri Field Guide by Don Kurz
\$7	Shrubs and Woody Vines of Missouri Field Guide by Don Kurz
\$7	Show Me Bugs by Michael Reinko
\$7	Show Me Herpes by John Miller
\$6	Tried and True Missouri Native Plants for Your Yard
\$7	A Paddlers Guide to Missouri (2013 Edition)
\$6	Water Plants for Missouri Ponds: Whitley, Bassett, Dillard, Haefner
\$14	Missouri Wild Mushrooms by Maxine Stone
\$14	Missouri Wildflowers (6th edition) by Edgar Denison
\$14	Cooking Wild in Missouri by Bernadette Dryden

Books from Other Sources

\$15	Field Guide to Insects of North America by ER Eaton, KKaufman
\$17	Bringing Nature Home by Douglas Tallamy
\$17	Ozark Wildflowers by Don Kurz (Falcon Guide)
\$17	Prairie Wildflowers by Don Kurz (Falcon Guide)
\$19	Hiking Missouri 2nd edition by Kevin M Lohroff
\$26	Nature Provides Dyes for Rainbows by Brack-Kaiser (soft)
\$32	Nature Provides Dyes for Rainbows by Brack-Kaiser (hard)

Nuggets of Gold Links

Michelle just ran across these amazing photos and thought you might like to share these links: 2019 Audubon Photography Awards - Youth Honorable Mention overall winners category: Taken at Dunn Ranch Prairie, Missouri (scroll down)

<https://www.audubon.org/magazine/summer-2019/the-2019-audubon-photography-awards-winners>

Audubon Photography Awards - Plants for Birds category: <https://www.audubon.org/plantsforbirds> Native Plants Share the Spotlight In These Stunning Bird Photos:

<https://www.audubon.org/news/native-plants-share-spotlight-these-stunning-bird-photos>

The Missouri Invasive Plant Task Force

(MoIP) is a resource of Grow Native!—a 19-year-old native plant marketing and education program serving the lower Midwest. For more information about MoIP, visit www.moinvasives.org

Does education influence wildlife friendly landscaping preferences?

Your reading the abstract and discussion gives you the full picture. From abstract: Our findings suggest that residential support for native plant landscaping is higher than is reflected by typical residential landscaping practices, and that dissemination of information regarding the benefits of native plant landscaping to birds could alter public preferences for native plant landscaping. **Talk to your neighbors!**

<https://drive.google.com/file/d/0B9x5Ahn-zXr7SC1JeXkzUDctYzJ6SGdmUjhYbWluNUZUU29r/view?ts=5d11801d>

Native Plant Conservation Campaign:

<https://plantsocieties.cnps.org/index.php> feature native plant societies all over USA.

Newsweek **Monarchs101**: <https://www.newsweek.com/monarch-butterflies-extinct-1302838>

For those who admired Rick Darke's Pennsylvania garden in the book Living Landscape by Darke and Doug Tallamy, Garden Design magazine has a feature on his garden this month:

https://www.gardendesign.com/pennsylvania/sustainable-strolling.html?utm_source=article-newsletter&utm_medium=email&utm_campaign=Sustainable-Strolling-Garden-9-26-19

Center for Plant Conservation:

<https://saveplants.org/> features best practices for saving endangered plants.

Restoring the American elm:

https://blog.nature.org/science/2019/09/11/recover-y-restoring-the-floodplain-forest/?src=e.cgs.eg.x.loc_b&lu=4439630&autologin=true

National Science Foundation – Native plants needed to support bee populations essential for our food supply:

Personal Impression of Chestnut Festival at HARC

Submitted by Cindy

Yesterday was a lovely day. The booth went quite well. The weather cooperated. We got to work with kind intelligent plant folks. The customers were fun to work with. Not too many but just enough. The food was great (especially my soup!!). There was learning all around us. And I didn't get my van stuck!! Thank you all for making my day so nice!!!



Nancy teaches future naturalists [MPruitt photo]

[GN! Offers the Membership Conference](#)

We invite you to [register for the 2019 Grow Native! professional member conference](#), held at the MU General Services Building in Columbia, **9 a.m. to 3 p.m., Wed 13 Nov.** We have a great speaker lineup this year, featuring Dr. Alice Tipton and Dr. Liz Koziol as keynote speakers, presenting on soil mycorrhizal fungi and native plant production. The cost is \$20 for members and their guests, Includes light breakfast items as well as lunch. [The link below shows the itinerary.](#) If on line registration doesn't work call this phone number: 888.843.6739. When registering, say you are a Hawthorn NPS member.

https://www.moprairie.org/GrowNative/GrowNative/GN_Events/EventDisplay.aspx?EventKey=646de2f4-d022-4508-8a72-fe232894aa36&WebsiteKey=bcf187dc-ff08-4847-bf41-52aa6bcdd052

Grow Native! Workshop in Columbia, 9 Nov

From a MPF/GN announcement by Carol Davit sent 18 Sept.

During the workshop, five experts will present information on how native plants provide benefits to farm revenues, livestock health, **pollinators, wildlife, water quality**, and more. The day-long event will also feature information on specific NRCS cost-share programs to which attendees may apply to help offset the cost of incorporating natives into their agricultural or land management practices, **and a session on invasive plant control.**

The workshop begins at 8:30 a.m. and ends at 3:30 p.m. The University of Missouri's Bradford Research Center, at 4968 Rangeline Road, Columbia, MO is the workshop host. Registration is \$14 per person for Missouri Prairie Foundation members, and \$17 per person for non-members. Registration includes morning coffee and lunch. Register online at www.grownative.org, by calling 888-843-6739, or by mailing a check, payable to the **Missouri Prairie Foundation, and sending it to: Missouri Prairie Foundation, P.O. Box 200, Columbia, MO 65205. Registration deadline is November 5.** [Ed note: Hawthorn is a GN member. When registering, say you are a Hawthorn member for the \$3 discount.]

https://nsf.gov/discoveries/disc_summ.jsp?cntn_id=295868

TNC on native bees. Fabulous large photos:

https://blog.nature.org/science/2019/08/19/focus-on-native-bees-not-honey-bees/?src=e.cgs.eg.x.loc_b&lu=4439630&autologin=true

Smithsonian study backs all of Tallamy's work on birds:

<https://nationalzoo.si.edu/news/new-smithsonian-study-links-declines-suburban-backyard-birds-presence-nonnative-plants>

[Greta Thunberg Rips World Leaders at the U.N. Over Climate Change:](#)

German Centre for Integrative Biodiversity Research Plant diversity increases insect diversity:

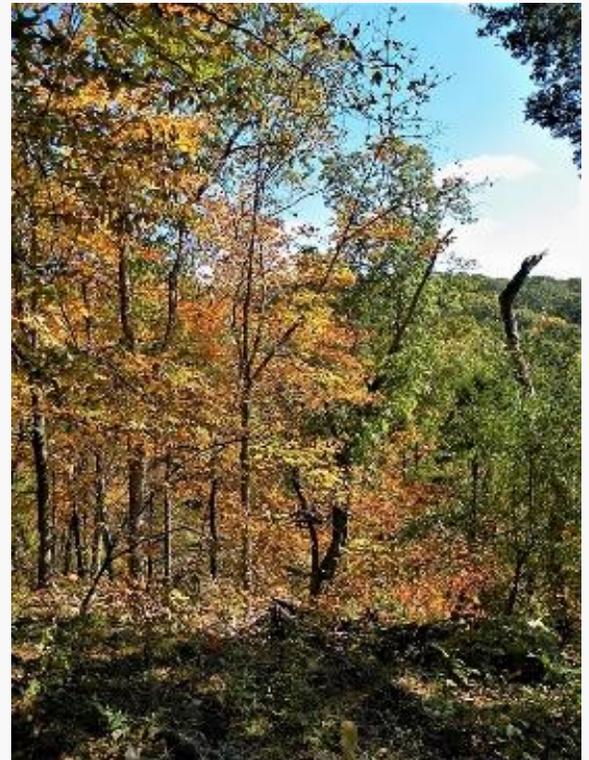
https://www.idiv.de/en/news/news_single_view/1496.html

Refer to past editions of our newsletter for other important resource links.

Hawthorn website www.columbianativeplants.org

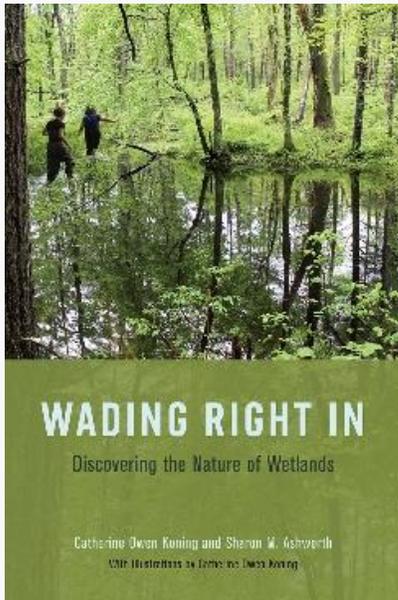
MONPS website www.monativeplantsociety.org

Mosey at 100 Acre Woods



View from bluff at the south end. [BE photo]

John took us on a tour of the south half of 100 Acre Woods on 20 Oct. It was a glorious autumn afternoon for about 20 members and friends to gather and learn about the diversity of microhabitats this small plot holds. More photos on P5.



A New Book About Wetlands

Written in the vein of Tallamy

[Ed note: This came to me just as I was about to put this edition to bed. I felt it was important enough to hold publication an extra day.]

[Wading Right In: Discovering the Nature of Wetlands, Koning, Ashworth - press.uchicago.edu](http://press.uchicago.edu)

“Wading Right In explores the wondrous nature of wetlands through the rich and personal stories of scores of wetland scientists. Written for a lay reader, Koning and Ashworth’s engaging prose is packed with information regarding the incredible diversity and amazing adaptations of wetland species.”
press.uchicago.edu

Suggestion from **Frank Nelson**

MDC Wetland Ecologist

This book could be shared as a fun read for any outdoors enthusiast or a valuable resource for teachers looking to highlight nature in their classrooms.

A few years ago I was contacted by a professor who was compiling a variety of wetland stories for a book. She wanted something that the general public could enjoy and convey how fascinating these places are. Below is a synopsis of the book’s preface.

Although you can find a variety of technical resources and guidebooks on wetlands, there are fewer books on the topic that are just fun to read. Recent studies show that people are moved more by stories than stats. With this in mind a book was compiled by pulling together a range of stories from scientists, explorers, and advocates sharing their passion for wetlands and the fascinating things they’ve experienced in these places. “*Wading Right In: Discovering the Nature of Wetlands*” traverses through a range of wetland types primarily located in the Midwest and Northeast United States. It makes the case for folks to have an emotional connection by covering the fun and fundamentals of these unique and critical areas.

This spot is waiting for your submission

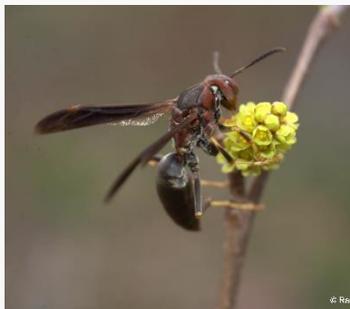
Spicebush, an Aromatic Native Edible for People and Butterflies

Submitted by Nadia Navarrete-Tindall



Photo by Nadia Navarrete-Tindall

Spicebush swallowtail on common milkweed NN-T photo



Paper wasp on spicebush flowers NN-T photo



© Randy Tindal / Nadia's Backyard

Spicebush caterpillar in leaf R Tindall photo

Spicebush is a very aromatic plant. Its flowers, twigs, seeds and leaves contain compounds that have a distinct pleasant odor when crushed and contribute flavor to foods and beverages. In fact, that is one way to help identify it. Those nice-smelling leaves and twigs can be used for tea and the bright-red berries are good to substitute in recipes that call for allspice with a hint of peppercorn flavor.

Spicebush is common in Missouri and is naturally found in more than half of the southern and east-central counties, growing as an understory shrub-tree in woodlands, especially in moist bottomlands. Visit Meramec State Park for a great display of the red berries in early fall.

If you are familiar with avocados, a tropical fruit, you may find it interesting to learn that spicebush, as well as the native sassafras, belong to the same family, the Lauraceae. Oddly enough, the tropical avocado may be recognized by those who appreciate salads and Latin-American cuisine but chances are that spicebush is not well known by many in Missouri, at least as an edible plant.

The flowers in early spring provide nectar and pollen to native bees and the leaves provide nourishment to the spicebush swallowtail butterfly caterpillars. The attractive berries are consumed by more than 24 species of birds and nibbled by deer, rabbits and humans. Spicebush swallowtail caterpillars fold their leaves to protect themselves from predators like birds or wasps; they usually leave their 'tents' at night to feed as another way to protect themselves from being munched.

Because of its short stature (10 to 18 ft.) and attractive appearance, this tree has ornamental value, especially in shade gardens. It performs better in fertile and moist soils with lots of organic matter. It can be easily grown from seed collected in the fall and exposed to a 6-week period of cold-moist-stratification or from cuttings collected in the summer. It is also available from local native plant nurseries in Missouri.

Since male and female flowers are in separate trees, to guarantee fruit production, plan to establish one male and one female plant. To assure this, you may need to establish grafted trees or those grown from cuttings or plant several to assure having both.

Rabbits and deer chew on spicebush so it is a good idea to protect seedlings until the plants are completely established and mature.

To prepare the tea, gather a handful of leaves (check carefully for spicebush swallowtail eggs or caterpillars before collecting). Cut the leaves in small pieces. For 3 cups of water add 2/3 cup minced leaves. Boil for 15 minutes, let the infusion sit for a few minutes, strain and serve. Add honey and more water if desired. Leaves can also be dried and stored in containers.

To prepare the allspice substitute, dry the fleshy fruits (pulp and seed) and grind for use in recipes that call for allspice. The fleshy pulp of the fruit can be dried separately from the seed, if preferred, although it's more work. The pulp has the allspice flavor and seeds have a stronger flavor like pepper. [NN-T photo >>>]

In the article '7 Herb foods that grow in shade' published by the Mother Earth News Magazine (<http://www.motherearthliving.com/gardening/7-herbs-that-grow-in-shade-spicebush>), Leda Meredith provides other options to use spicebush including preparing an ice cream with spicebush berries. In his book 'Eating Appalachia' Darrin Nordhal mentions beer and gin flavored with spicebush by local brewers. Use your imagination and experiment!!

Spicebush swallowtail hibernates as a chrysalis and finds shelter in dead stalks of wildflowers and grasses so it is a good idea to clean your garden in spring, instead of fall

Add spicebush to your garden for its uses in cooking and for its beauty and, as a bonus, let the spicebush swallowtails find you! Everyone wins!



Milwaukee Journal-Sentinel Micro prairies: No yard is too small to go with earth-friendly native plants

<https://www.jsonline.com/story/life/home-garden/garden/2018/05/25/turn-your-yard-into-micro-prairie-native-plants/607727002/?fbclid=IwAR1LHvKmDDGYfbxuD0LcuP2h10JftDydAtGEe7OFliWlhgK3Y-IBKCgQHK0>

ARTICLE: Population extinctions driven by climate change, population size, and time since observation may make rare species databases inaccurate

From: PLOS ONE

By: Thomas N. Kaye, Matt A. Bahm, Andrea S. Thorpe, Erin C. Gray, Ian Pfingsten, Chelsea Waddell October 17, 2019

> Link to full article:

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0210378>

> Link to blog post: <https://appliedeco.org/rare-orchid-fading-fast-and-climate-change-may-be-part-of-the-problem/>

Loss of biological diversity through population extinctions is a global phenomenon that threatens many ecosystems. Managers often rely on databases of rare species locations to plan land use actions and conserve at-risk taxa, so it is crucial that the information they contain is accurate and dependable. However, small population sizes, long gaps between surveys, and climate change may be leading to undetected extinctions of many populations. We used repeated survey records for a rare but widespread orchid, *Cypripedium fasciculatum* (clustered lady's slipper), to model population extinction risk based on elevation, population size, and time between observations.

Population size and elevation were negatively associated with extinction, while extinction probability increased with time between observations. We interpret population losses at low elevations as a potential signal of climate change impacts. We used this model to estimate the probability of persistence of populations across California and Oregon, and found that 39% -52% of the 2415 populations reported in databases from this region are likely extinct. Managers should be aware that the number of populations of rare species in their databases is potentially an overestimate, and consider resurveying these populations to document their presence and condition, with priority given to older reports of small populations, especially those at low elevations or in other areas with high vulnerability to climate or land cover change.



Members emerging from prairie at 100 Acre Woods [BE photo]



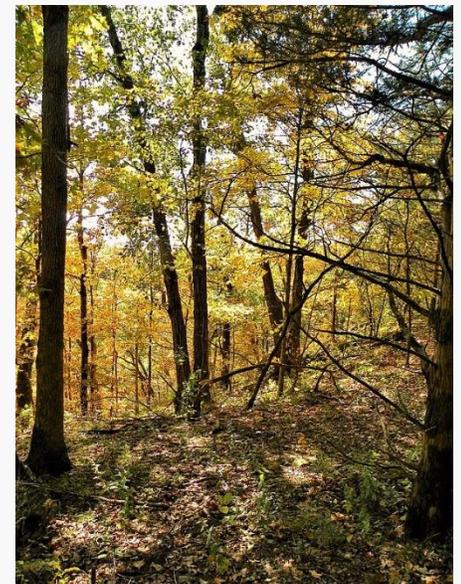
Personal observation from Becky: The idiot who built my house scraped off about 1/4 acre of virgin land, piled it up level and built a tract house instead of digging a half-basement in the hillside and leaving local dirt alone. The cost would have been close to the same. The bright side is that my little scraped 1/10 acre 'prairie meadow' is surrounded by undisturbed native land with native mycorrhizae.

After 22 years of treating the land right - meaning no chemicals, adding a diversity of natives, and 5 fires - I now have fringed orchids, Indian paintbrush, yellow loosestrife, fringed and bottle gentian, yellow and purple false foxglove, and chanterelle mushrooms! Some had long-dormant seed and some grow from healed roots. All bloom several years apart - none of which could grow without their native mycorrhizae. This diverse fungi grew in from the surrounding undisturbed soil giving rare/high-quality plants a way to communicate and feed from their neighbors and the soil nutrients. Learn about this natural activity at the GN Conference 13 Nov.

We ecologists and restorationists must learn to understand it took a hundred thousand years to develop our ecosystems. It took *Homo sapiens* only 8000 years to till them up for agriculture and cut the forests to build cubes to live in. In North America it took invading Eurasians 300 years to make the massive ecosystems they thought were endless - unrecognizable. Reconstruction doesn't happen in a few years. If we add the right native seeds from remnants and occasional fire near virgin land where mycorrhiza is still vital, we can rebuild functioning ecosystems. It takes study, understanding, work, patience, possibly a lifetime. 70 years is so short compared to geologic time.



Bluff at the south end of 100 Acre Woods



Award Ceremony at Gustin Golf Course

[composite from 9 September meeting notes]

BLAZING STAR AWARD:

Jack Harris MONPS President Emeritus and Hawthorn member initiated the presentation of a Blazing Star Award to Isaac Breuer superintendent of - and the [MU] Gustin Golf Course for the expanse of replanting of native plants for all wildlife and for carbon and expense reduction. After the presentation Isaac lead us on a tour by electric carts to the far end of the course to see the expanse of native meadows.

From the Blazing Star Award text:

Under Isaac’s direction, several large meadows outside the direct needs of the golf course have been planted with asters, bee balm, sunflowers and milkweeds focusing on season-long needs of pollinators. This oasis has been created by implementing management practices including removal of bush honeysuckle and other invasive species and periodic prescribed burns with support from many volunteers and state and local agencies.

Isaac explained during our tour: He consulted with Tim Reinbott at MU Bradford Farms about how to prep plots for seeding native meadows; the first spraying and seeding was done in 1990. He learned about alien invasive plants, and has worked hard to remove acres of bush honeysuckle, Bradford pear, Serecia lespedeza and tall fescue. Isaac pled his objectives and gained assistance from MDC and Quail Forever so he could get money to buy native seed and assistance for burning maturing meadows. Isaac influenced Columbia Public Schools to allow third and fourth graders to come to broadcast seed over snow. Since 1996 bird houses have been erected for Purple martins and Eastern bluebirds. Some modifications were needed to reduce predation. Since the start of the birdhouse program, over 2840 birds were fledged form the golf course houses. 2018 fledged 160 bluebirds; 2019 count has not been announced. There has been no way to count the influence of grassland birds in the native meadows.

Isaac has been a speaker at many regional golf course management meetings where he emphasizes the plantings are acting as a barrier to erosion and are filtering nutrients and chemicals used on the courses that would otherwise be added to local watersheds. The plantings also create a sense of privacy and momentary contact with nature missing from urban environment for the golfers as they use this area.

The course is a fantastic teaching site for folks trying to reconstruct a prairie. There are prairie patches from 1 year to over 19 years within walking distances. Isaac’s insight to landscape and management is an unusual occurrence and provides learning opportunities that are unparalleled within the Columbia City Limits.

We parked the electric carts about 7:30. The dusk and waxing moon allowed us one last gaze over a very progressive landscape of pristine golf course and native meadows.

Cindy stated weeks later: I have had a lot of positive feedback and inquiries from this meeting and folks had a lot of fun while touring this area!!

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 for the Grant Program.

___ 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, 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 it saves NPS money.