

PETAL PUSHER

March--April 2019 Newsletter of the Missouri Native Plant Society Volume 34 No.2

“... to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri.”

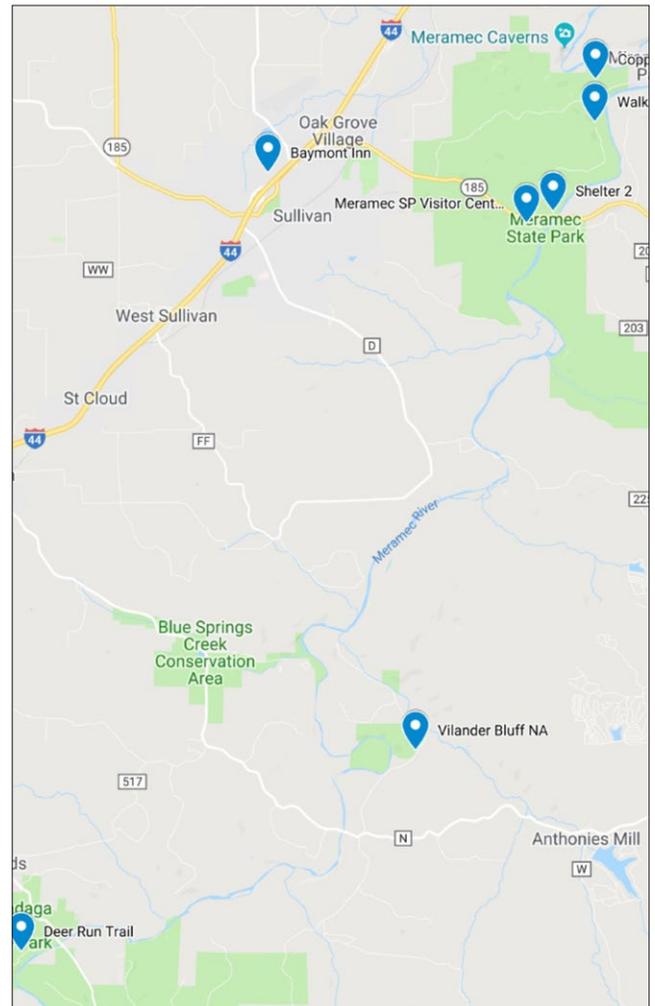
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2019 MONPS Spring Field Trip - Sullivan, MO vicinity

We'll start the 2019 season by visiting some state parks in the northeast Ozarks near Sullivan, Missouri. These parks have good examples of glades, woodlands, and other natural communities characteristic of this region. Brian Wilcox, interpretive resource specialist, will present “What Makes Meramec State Park So Special?” as an introduction to the area on Friday evening at 6:00 p.m. at the Meramec State Park Visitor Center.

You are welcome to join in for all of the field trips, or just come to the ones that fit your schedule. If you'll only be attending some of the forays, it's best to join the group first thing in the morning, as we can be difficult to locate if you attempt to join during the middle of the day. Please note: Bring your own lunch, water and folding chair on Saturday and we'll picnic in the field. Changes to the schedule could occur! Keep an eye on the following links for



the most current info and for detailed maps to each site.

Lodging is available with a group discount (\$75) at the [Baymont Inn](#) in Sullivan (275 S. Service Rd W, Sullivan, MO 63080; (573) 367-2211). The reservation deadline to receive the discount is April 26. [Lodging](#) and [camping](#) are also available at Meramec State Park (115 Meramec Park Drive Sullivan, MO 63080; (573) 468-6519). **Please visit the following links for detailed driving directions and itinerary:**

[Facebook event page](#)

[MONPS website event page](#)

[Google Maps page](#)

| Spring 2019 Field Trip Itinerary | | | |
|----------------------------------|---|---|--|
| | Friday, May 3 | Saturday, May 4 | Sunday, May 5 |
| 8:00 a.m. | | Copper Hollow Meramec SP 38.235976, -91.083991 | Deer Run Trail Onondaga Cave SP 38.05636, -91.234019 |
| 12:00 p.m. | | Lunch at Shelter 2 Meramec SP 38.208819, -91.094995 | |
| 1:00 p.m. | Vilander Bluff NA Onondaga Cave SP 38.097793, -91.131033 | Walking Fern Trail Meramec SP 38.227185, -91.084101 | |
| 6:00 p.m. | Evening Presentation Meramec SP Visitor Center 38.206345, -91.102012 | | |
| 7:00 p.m. | MONPS Board Meeting Meramec SP Visitor Center 38.206345, -91.102012 | | |



Restored glade. Photo by Rex Hill.

Upcoming Spring Field Trip to Meramec State Park

By Rex Hill

As many of you know, Martha and I travel to places in Missouri and elsewhere to see things, some of which may be plants, but most of which we hope to be surprises. Meramec State Park holds a dear spot in my heart. It's where I first met Dan Drees when he was the naturalist at the park. I was just starting my second career and did some work for him on his ginseng monitoring project. At that time Brian Wilcox was his assistant and is now the park naturalist. Brian is an expert on fresh water mussels found in the Meramec River basin. The park has many interesting, some off the beaten path, areas and Martha and I have spent many delightful hours hiking and exploring them. We have backpacked the Wilderness Trail, camped in Copper Hollow and refilled our water bottles at the spring located there. On a snowy winter day, we hiked along an old road to the sinkhole area that supplies that spring and found a cave opening, unknown to us, and marked with a sign to stay out because of the



Copper Hollow Spring (and Martha Hill). Photo by Rex Hill

white nose syndrome threatening bats in our state. In the southwest part of the park, beyond the Natural Wonders Trail we discovered several restored glade areas that Penny Holtzmann is familiar with, and as I understand she became good friends with Dan when working on the restoration process. Near Fisher Cave, there are two very interesting areas, the Walking Fern Trail, and an old deteriorating spur MO 185 road that takes you past a few colonies of yellow lady's slipper orchids. Other trails in the park, the River Trail, the Bluff View Trail, and the steep and slippery-when-wet Deer Hollow Trail present a variety of habitats and scenery in the park. Across the Meramec River from the main part of the park is Hamilton Hollow where an old iron furnace is located and a little-used path that takes you down the hollow past several small springs. Eventually, for the more adventurous, you can continue up a hill overlooking the Meramec River and above the entrance to Green's Cave, mainly accessible from a canoe. That hill above Green's Cave can be approached from the other direction through Sleepy Hollow which takes you past some curious construction artifacts from the time when a dam was to be built on the river but was thankfully thwarted by public opinion. So, you see, we have a very interesting spring fieldtrip ahead of us. Grab a map at the Visitor Center when you get there and see where some of these places are located. We will not get to all of them in the short time that we have there, but we will know where Meramec State Park is, and can return over and over to explore and enjoy.



Lady slipper orchid. Photo by Rex Hill.

Nerdy About Natives

by Paula Díaz

Have you ever started doing something in a small way, and then you careened down a slippery slope, with more and more and more and...suddenly you're a hoarder? That's how I slid into gardening with native plants. It all started with a neighbor who had a butterfly garden and shared plants with me when we first bought our HOA beige subdivision house. And from there, I decided to take the MU Master Gardener course. Our class just happened to choose native plants as our topic for the open week. Sue Bartelette provided to our class the basics of the connection between pollinators and host plants and that started my slide.

Everyone loves butterflies right? Learning about host plants and nectar plants sent me straight to our local native plant nursery. And there the lust began. Budget was tight, so I had to really weigh my choices---of course I started with milkweeds, buying every variety they had available. There was so much to learn! All butterflies have their own host plants? Bees aren't going to chase me if they're busy eating? Hummingbirds love these same plants? Who KNEW all this? Soon I was attending every workshop, horticultural event and presentation where I could get more knowledge! All the while, adding one more, or three more, or five more plants, making beds bigger, and building a rain garden to control all the beige runoff that flooded our driveway. That hillside I was always afraid the mower would tip over on? Native plants fixed that. That gushing river running through the turf grass to the sewer? Native plants fixed that. And I was rewarded with tons of butterflies, bees, birds and hummingbirds to enjoy. Native plants were the answer to so many gardening challenges.

But my lust was never satisfied. There was always a new plant and a new ecological interaction to learn about, more classes and workshops to take, and more books to read! And there were friends who wanted help transforming their gardens. And neighbors getting bouquets when their children came to enjoy the caterpillars and butterflies and textures and colors and LIFE that their own yards lacked. The kids all congregated in our yard on summer evenings to catch lightning bugs because their own yards didn't have any. Then, one friend built a new home and asked me to design her landscaping for her using native plants.

Wait---I could actually be paid to plant flowers?! And that money could feed my own plant hoarding? Now I'm diving headlong down that slope.

The thing with native plant gardening is that the more you learn, the more there is to learn. Feeling cocky because you know *Asclepias tuberosa* is butterfly milkweed? Here then, let me introduce you to the 16 additional species of *Asclepias* in Missouri. So many plants to learn about! And then, just when you feel like you're getting a grasp on a good sized group of plants, Dr. Doug Tallamy comes to Lincoln University and presents his humorous yet fact-filled big picture



Photo by Paula Díaz

of ecology based on the building blocks of native plants. And now the logic of native plants and the fauna which depends on them adds a jetpack to your dive down the slope.

Native oak trees support 548 kinds of Lepidopteran caterpillars. Ninety-seven percent of North American terrestrial birds feed caterpillars to their nestlings. One nest of 4 black capped chickadees need 6,000-9,000 caterpillars between hatching and fledging. Cardinals

are less red because of invasive bush honeysuckle offering little protection from predation. North American bird populations are down approximately 30% since 1966. Studies show up to 75% decline in insect biomass from just a few decades ago. As of 2015, turf grass was the largest single crop in the United States.

Playing connect the dots leads to one logical conclusion: we can no longer think of nature as somewhere other or separate from humans. We must provide help for the flora and fauna whose spaces we have usurped. Our managed spaces can not be only about aesthetics without regard for sustainability of resources and ecological benefit--they must be shared with other creatures. Most of us don't have the means to purchase and preserve large tracts of pristine undeveloped spaces. What can we do on a smaller scale to improve the chances for declining numbers and diversity of flora and fauna? Again, logic tells us using native plants in our developed spaces is something we can do that is not just reduce, reuse, recycle (lessening our impact) or carbon neutral, but is actively ecologically beneficial.

We can achieve aesthetically pleasing spaces. We can achieve beneficial spaces for the fauna. We can achieve healthy spaces for our families and friends. Native plants are the key to all of these achievements. They are the basis of the food web of all life and allow us to bring some of the creatures we have harmed back from the brink to which we've shoved them. Native plants are lushly beautiful. For some, their beauty may be different from what has traditionally (for the last 70 years or so) been considered beautiful. But walk into a museum and you will see many different kinds of beauty. Look at the clothing fashions of that same time period and you will see many different kinds of fashion. Everything about human homes has changed aesthetic properties since 1950---except the exteriors. Bringing native plants, plants with purpose, back into our developed spaces is a natural evolution from the cookie cutter spaces to which we have become accustomed. The slippery slope need not be mown, rather, plant deep rooted native plants which provide nutrition and shelter for our native fauna, color and texture in all seasons for beauty which is lush and evolving instead of boringly static. Heed the expression, "Right plant, right place", which means you should research plants before you buy, regardless of place of origin. Plan transitions from season to season, balance the weight of mature sizes, eradicate invasive

species. All the same design rules apply to natives.

The reasons to use native plants in our planned spaces are as myriad as the plants themselves. My own basis has evolved from simply desiring pretty, to butterflies, to all pollinators, to all fauna, to general conservation and now is taking on a new reasoning. While awaiting the birth of my first grandchild, Olivia Grace, I now recognize that my perspective is changing again. As I used to be joyful of sharing my flowers and my flying and crawling visitors with my neighbors and friends, with classrooms, with passersby who waved and commented on colors surrounding our beige home, now in our small home on a couple of acres I will plant and maintain with the focus of sharing these beautiful, purposeful plant friends with my little baby girl. She will dig in the dirt with me. I will teach her to love the caterpillars and bees and butterflies and birds, even the squirrels, but I draw the line at Japanese beetles! She will have a place to catch lightning bugs, and see how our ecosystem is interconnected. And hopefully Olivia Grace will learn to care for our world and know a way of interacting that does not involve a screen. My goal of being ecologically beneficial for her world will continue. It is hard work that requires lots of learning, but that results in the great joy of watching my tiny piece of land provide habitat and respite for the creatures with whom we co-habit this world. Since the chickadee parents must find those 6,000-9,000 caterpillars within a span of 2 football fields, we can link our small spaces into a habitat chain, so we can share our space with future chickadees. And future humans. We must continue evolving developed spaces to benefit our ecosystem and preserve life's treasures for future generations. Enjoy the slide!

Find many native landscaping resources, including a searchable native plant database, at www.grownative.org.



Photo by Paula Díaz

Chapter Events

Hawthorn

03-21, 04-18: Chapter Lunches, 11:30 a.m.

Chapter lunches are held on the third Thursday of each month just south of Broadway Street in downtown Columbia at Uprise Bakery inside the lobby of the RagTag Theatre, 10 Hitt Street, Columbia, Missouri.

03-11, 05-18: Bimonthly Chapter Meeting, 6:30 p.m.

Chapter meetings are held on odd-numbered months on the second Monday at the Unitarian Church, 2615 Shepard Boulevard, Columbia, Missouri. Newcomers and friends are welcome to attend.

Educational Events

04-13: Mizzou Bradford Farm/MPF Plant sale 10-2

04-28: Columbia Earth Day Festival 10-6

05-11: Arrow Rock Garden Festival 10-4

05-18: Columbia Bass Pro Shop/MPF Plant Sale 10-2

See www.columbianativeplants.org for updated postings of newsletters and activity details.

Kansas City

03-05: Chapter Meeting, 7:00 P.M.

Our chapter meetings are held on the first Tuesday of odd-numbered months except July at the Anita B. Goldman Conservation Discovery Center, 4750 Troost Ave., Kansas City, Missouri. For more information, please contact John Richter, RichterJC@BV.com.

Osage Plains

03-25: Meet at the Clinton Library 6:00 p.m.

Program TBD. This month we also usually have a field trip to see spring ephemerals.

04-22: Meet at the Clinton Library 6:00 p.m.

Program TBD.

05-03 – 05-05:

Several members plan on attending the MONPS meeting/field trips May 3rd-5th at Sullivan.

05-27:

Meet at the Clinton Library 6:00 p.m. Program TBD.

Ozarks

03-19: At 6:30 p.m.

Gail Rowley will give a presentation exhibiting her beautiful photographs of the diverse native life at her property in Texas County. MDC Regional Office. 551 Joe Jones Boulevard, West Plains, MO 65775.

04-16: At 6:30 p.m.

A program to be determined. MDC Regional Office. 551 Joe Jones Boulevard, West Plains, MO 65775.

Paradoxa

Paradoxa schedules meetings and walkabouts at a variety of locations in the Rolla area. Watch our chapter page on the monativeplants.org website for updates, or email us at paradoxarolla@gmail.com, and ask to be added to our email list, as dates and locations may change. Workdays for the Bray CA Botanical Collection and Herbarium Project are generally held on the first and third Thursdays of the month. Please contact us at the above email if you would like to join the crew.

03-28: Chapter Field Trip, 5:30 p.m.

We will meet in the parking lot at Beaver Creek Conservation Area, located just off Highway 63, 3 miles south of Rolla. With any luck, we'll find some spring ephemerals in bloom; if not, it will be a nice walk across the creek and through the woods, and we're sure to find something interesting.

04-13: Gardening with Native Plants Workshop, 1:00 p.m.

This 2-hour workshop will be held at Bray Conservation Area, 3 miles south of Rolla on Bridge School Road. Topics will include the importance and advantages of using native plants, selecting plants for every season, how to get started and maintain your garden, milkweeds for Monarchs, and solutions for soggy spots: establishing rain gardens. We will view the design for the native plant beds around the Bray house and learn what will be planted and why.

Perennis

Watch for announcements by e-mail, the MONPS Facebook page, and the MONPS website.

Saint Louis

03-27: At 7:30 p.m.

Our speaker will be Dr. Paige Mettler-Cherry, Professor of Botany at Lindenwood University who will discuss her research on the genus *Schoenoplectiella*

04-24: At 7:30 p.m.

Title and Topic to be announced.

Chapter meetings are held on the fourth Wednesday of the month at the Sunset Hills Community Center, 3915 South Lindbergh Boulevard, Sunset Hills, Missouri.

Southwest

04-06: Nature Center Plant Sale and seminars 9 a.m.-2 p.m.

04-06 (1:30-4:30 pm) and 04-27 (1-4 p.m.): Bull Mills Wildflower walks (field trips)

Please contact Michelle Bowe at mbowe@missouristate.edu for more information, or if you would like to speak at our meetings or have ideas. Thanks!

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AmazonSmile is an easy way to support MONPS. Every time you shop on smile.amazon.com, the AmazonSmile Foundation donates 0.5% of your purchase of eligible products to MONPS.

Simply visit smile.amazon.com and search for Missouri Native Plant Society Inc. After you finish shopping, Amazon will automatically donate to MONPS. You may also click the AmazonSmile link on monativeplants.org.

Make sure to navigate to smile.amazon.com each time you shop. The default amazon.com will not result in a donation, and your smart phone application may not support AmazonSmile.

Visit [About AmazonSmile](#) to read more about the AmazonSmile Foundation.



Spring beauty. Photo by Casey Burks



Mertensia virginica, photo by Felicia Ammann

Natives for Every Season

By Felicia Ammann

Our Missouri native plants have fascinating qualities. Throughout every season, there is a spectacular showcase, from grasses to trees, groundcovers to shrubs, and everything in between. Some plants are showy in only one season while some shine throughout the entire year. Let's look at a couple of examples of native plants that will catch your eye in each season.

Spring

I love the spring in Missouri. Green begins to come through the frozen surfaces, making way for a new beginning. Swollen buds begin to open and flower. Leaves emerge from the waking trees. A new cycle is beginning.

Tulip tree (*Liriodendron tulipifera*). The tulip tree in my yard just happens to be the tallest in the neighborhood—a thing of pride for me. These trees are known for their very straight trunks and large, tulip-shaped leaves, not to mention their reputation as a wonderful shade tree. When I moved in, I hadn't realized just how beautiful the flowers were. Now, extending over my deck every spring are tufts of sweet-smelling green-orange-white blooms, inviting many pollinators to buzz around. When the petals fall, the cups stay throughout the season, really showing off in winter until it all begins again.

Virginia bluebells (*Mertensia virginica*). Every year I wait patiently for the Virginia bluebells to poke their purple-white leaves up through the rested leaf bed. It's a sure-

fire sign that spring has finally arrived. They come up and hang their heads down in a kind of shy state, almost like a whisper to the rest of the world...wake up! It's time to come alive. Their delicate blue blooms add a spark to the open woods. Springtime is here!

Spicebush (*Lindera benzoin*). Another favorite of mine is spicebush with its vibrant yellow blooms adding color to a waking woodland. These yellow bursts surround woody stems and almost look like an explosion. These firework-like blooms have a great fragrance, along with the spicy scent of the leaves and twigs. Many lovers of native edibles crush these twigs and make a wonderful tea. Spicebush also has vibrant red fruit and a beautiful yellow foliage in the fall.

Summer

Our summers here in the Midwest can be so unpredictable, but these Missouri native plants thrive regardless.

Prairie dock (*Silphium terebinthinaceum*). The gigantic rough leaves of this plant slowly become bigger and denser as the summer progresses, but the slender spike of stunning yellow flowers appearing in the fall seems to shoot up in no time. These stalks shoot up to around 10 feet, inviting all sorts of pollinators to stop by. I love the way prairie dock looks in each season. The green leaves become dotted with brown speckles, eventually turning to crispy dark brown. Leaving the flower stalks throughout the winter brings great interest to the garden with its upright stature.

Indian pink (*Spigelia marilandica*). This early summer bloom always turns heads in the garden. Bright scarlet and yellow blooms appear atop erect stems in shaded woodland areas. These plants are hummingbird magnets! Ruby-throated hummingbirds get nectar from the flowers and cross-pollinate. Because of toxicity in the leaves and roots, this plant is avoided by most herbivores.

Happy hour plant/rock pink (*Phemeranthus calycinus*). This beautiful and delicate pink flower begins to bloom each day around 3pm, hence the name. It is one of my favorite natives because of this unique quality. I used to joke that it was time to go home when I saw the striking pink open up in the garden! This plant does not require a lot of maintenance and thrives in hot, dry conditions. Also, it is beautiful in containers.

Autumn

As the trees begin to forfeit their leaves and brace for colder weather, a number of plants are just starting to come alive.

Aromatic aster (*Symphyotrichum oblongifolium*). Aromatic aster is one of the last species to bloom, even after frost hits---sometimes even into December! It is a bee magnet, providing for many of our native bees late in the season. Bright purple compound flowers with yellow discs densely pack the bushy branches. When crushed, these flowers and leaves have a balsam-like aroma, hence the name. These asters are easy to identify because of their many ray florets and large flower heads.

Blackgum (*Nyssa sylvatica*). Blackgum trees are underutilized in our landscapes. These trees have enormous ecological benefits. Young blackgum trees are pyramidal in shape, transforming into an attractive drooping, oval shape with age. Blackgums have lovely spring blooms and would be happy in wetter areas where some other tree species could rot. There is no match for the striking scarlet fall color, which comes fairly early in the season.

Little bluestem (*Schizachyrium scoparium*). Little bluestem takes the medal for my favorite grass because of its stunning array of colors throughout the year. It spans from green to blue to red, orange, and yellow, eventually turning a copper color in the late fall and winter. This fairly short, clump-forming grass sways gracefully in the wind, sending its seeds across the land to expand its presence.

Winter

Most everything has gone to rest, but some natives still make a stand. These plants have great winter interest, showcasing their unique qualities for all to enjoy during a seemingly long and dark time. All of these plants bloom during the warmer months, yet they have something to offer throughout the whole year.

Prairie dropseed (*Sporobolus heterolepis*). Prairie dropseed has such great winter interest. These clumps of grass lose their green and turn to a light brown color, but also shoot up fragrant plumes in the summer, which show off their wonderful shape in the winter. Most of the spherical seeds fall to the ground or are eaten before winter hits, which causes

the grass to have a light, wispy look. Plenty of critters take shelter from the cold months under the umbrella of this sprawling grass. In the spring, tiny, stiff green blades poke out through the clump, starting the process again.

Post oak (*Quercus stellata*). The mighty post oak is a stately tree that has such a charismatic shape. In the winter, in particular, the eerie branches extend out in a twisted and contorted fashion. When I was young, I nicknamed these trees “Halloween trees,” because of their ominous nature. Although a wonderful specimen in all seasons, the post oak always seems to catch my eye in the winter months most.

Ozark witch hazel (*Hamamelis vernalis*). The Ozark witch hazel shines in late winter, showing off its drooping yellow and red flowers that hang off the ends of its branches from January to about April. It is a pleasant sight for an otherwise gray, drab winter landscape. I always make a trip out to the Missouri Botanical Garden during this time to see the brilliant fireworks display of the Ozark witch hazel. Its golden yellow fall color is a show-stopper as well.

Every season brings something new. Our native plants have so much to offer throughout the year. Pay attention during each season to our great Missouri native plants—there is always something spectacular to see!



Spigelia marilandica, photo by Felicia Ammann

Intelligent Design: Creating Formality with Function

by David Middleton, Ozark Soul Native Plants, Ava

Planning a native plant garden can be very exciting when daydreaming about all of our region's plant diversity. At Ozark Soul, we believe native plants belong in every garden and landscape situation, not just the "back-forty" garden far removed from the safety and security of the front entryway. Boxwoods, burning bush, and yews have dominated our formal foundation plantings for decades. These shrubs and other exotic species fill countless acres of prime real estate around our homes – the perfect place to exhibit the formality with function of native plants!

Consider using the following three design elements when planning your next native plant garden:

MASS

Grouping several plants of a single species together will create a stronger design, bolder statement, and signify intention. The use of masses or drifts gives instant design appeal and will be interpreted as a single element. This simplifies what your eye experiences and gives your planting movement or flow, helping to lead to a destination or focal point. When you design with a "one-of-this-one-of-that" approach, it leads to distraction, leaving you unsettled. Consider a lower number of species in your overall design. Our homes are large in



Large masses of contrasting textures make a strong design with a bold statement. Pennsylvania sedge (*Carex pensylvanica*) and sensitive fern (*Onoclea sensibilis*). Garden design Jenny Middleton, Photo David Middleton

comparison to the immediate landscapes, and the hard lines of architecture are not natural. Using large masses will soften the stark transition from human development to the natural world, integrating home and garden. The old cliché holds true when it comes to formal design – "less is more".

REPETITION

This element is self-explanatory, but you may accomplish repetition in many different ways. Repeating a single species, color, texture, or shape organizes and ties spaces together, again invoking intention and strengthening the overall design. This provides consistency and balance between man-made architecture that most likely surrounds the garden space. Repetition keeps your garden from looking messy or chaotic. Repeat a formal species like prairie dropseed (*Sporobolus heterolepis*) along the entire border of your rain garden. Use the same color of wildflowers blooming at the same time as a backdrop in two adjacent planting beds. Duplicate specific shapes of hardscaping throughout your garden such as adding a flagstone path or using character-boulder accents in multiple locations. Get creative with repetition! It does not have to be as boring as the word implies. Mimicking small details refines the overall presentation and separates the mediocre from the outstanding.

TEXTURE

Contrasting texture is the one element that is sure to set your next planting apart from all of your past projects. Texture describes the surface quality of each plant and ranges from delicate and fine to bold and coarse. Most of our native flora do not have a long bloom time to provide color during the entire growing season. Relying on different textures will give your garden a dynamic feel and will add interest, even in the midst of the "Green Lull", when there are not a lot of blooms occurring amongst our native flora. This element is especially helpful during the depths of winter when our gardens go into dormancy. The incorporation of well-placed, four-season plants provide interest and texture giving structured formality year-round. Grasses, sedges, and rushes are among our favorite fine-textured genera. A few of our favorite coarse-textured species include American spikenard (*Aralia racemosa*), foxglove beardtongue (*Penstemon digitalis*), and golden groundsel (*Packera aurea*).

While there are more garden design elements that you can consider, we feel that mass, repetition, and texture are the most important when designing a native plant garden. A garden designer with any level of experience will see success if they consider these three elements. Those who might consider native plants inappropriate will benefit from seeing good examples of natives used in formal settings. Undoubtedly, we have all planted a native garden that has not met our expectations. Incorporate these three design elements to insure your next project has a great start!



Repetition of hardscape pillars in adjacent beds create a formal element. Garden design Jenny Middleton, Photo David Middleton

Chapter Updates

Hawthorn

By Cindy Squire, Chapter President

Our holiday wreath workshop was held on Sunday, December 16th at Hillcreek Fiber Studio. Carol Leigh Brack-Kaiser graciously hosted this event. Native plants were used to decorate wreaths and a holiday table centerpiece. A second date on December 20th was added to accommodate busy schedules. Warm cider and creative minds crafted beautiful works of art.

The January 14 planning meeting was cancelled due to bad weather. February 11th was re-scheduled as the planning meeting.

The Hawthorn Chapter educates and sells native plants at various events in Mid-Missouri. The Mizzou Bradford Farm/MPF Plant sale will be our first event on Saturday April 13th from 10 a.m. to 2 p.m. Our second event will be at the Earth Day Festival in downtown Columbia on Sunday April 28th from 10 am to 6 pm.

Our third event will consist of guided native plant walks given at the Arrow Rock Garden Festival from 10 am to 4 pm on Saturday May 11th. Our fourth event will be a MPF plant sale on Saturday May 18th from 10 am to 2 pm at the Columbia Bass Pro Shop. We sell hardy natives at great prices thanks to the effort of Becky Erickson and her native plant growing skills.

Monthly lunches at the Uprise Bakery on 10 Hitt Street in Columbia are fun. The food at the Uprise Bakery is hearty and filling. Conversation is focused on native plants and their care. Please join us for lunch!!



Osage Plains

By Casey Burks, Chapter Representative

On December 9th, Janetta Smith invited the Osage Plains chapter to her home for a football party. She cooked for us like she used to cook for threshing crews. We hadn't been together since our farewell with Elizabeth Middleton and there were business items to take care of, namely the election of a president! With the hope that when there is a new MDC botanist to share knowledge with us, Janetta agreed to be Chapter President. The other officers remain constant. The group also made a list of possible program presenters and best places for field trips in different months. Lots of great ideas waiting for a date. We also decided to return to meeting at the Friend's Room at the Clinton Public Library. Our meetings will be there at 6:00 pm on the fourth Monday evening of each month beginning with February 25th.

No meetings are held during December, January or August. Programs are open to the public and

our purpose is to enjoy learning about and sharing information about native plants. Please contact President Janetta Smith jans@iland.net or Chapter Representative Casey Burks mobugwoman@gmail.com for the latest information on meetings. Sometimes change happens. Bernie Henehan berniehenehan@yahoo.com and Dan Henehan henehandan0@gmail.com are our trip coordinators.

Paradoxa

By Pam Barnabee, Chapter President

Paradoxa Chapter had no meetings in January or February, but we look forward to Spring with an outing in March (see Chapter Events).

Saint Louis

by Rex Hill, honorary Chapter Representative

[The Chapter Representative position is currently vacant]

Our January meeting brought out a large group of members obviously suffering from cabin fever. A full room of 35 people, including four past presidents and our current state president, turned out to hear Ted MacRae give a fascinating talk titled “The Botanists Among Us: Host Plant Specialization in Insects”. Ted had many excellent photographs of insects and the plants that they were frequenting. They ranged over many of the insect orders and gave us all things to look for when we are in the field. I think we all tend to associate lepidoptera (moths and butterflies) with host plant specialization, but Ted expanded that notion to include several other insect orders. Another point that I took away from the talk is that many times we see insects in the larval stage on plants, but because of difficulty making an identification, it’s necessary to rear the larva to adulthood for clear identification, a tedious process. He also had many observations about insect contribution to plant pollination and presented many examples of aposematic coloration in insects to warn potential predators. He has obviously honed his botany skills to enable him to better search for specific insects. You can learn a lot more about Ted and his interests by looking at his comprehensive and informative blog, Beetles in the Bush. Just google that name.

Southwest

by Michelle Bowe, Chapter Representative

In January, we had a nice crowd of students, Master Naturalists, and other members of MONPS for a workshop on winter twig identification. Many twigs were identified, and we discussed smells, textures, buds, color, and other attributes used to identify them. Sassafras, for example, is green and has a nice, fruity smell, while sugar maple is brown, with opposite, pointed buds. I believe that everyone learned a lot and managed to avoid the icy tornadoes on the way home!

New Members

St. Louis Chapter, Jack Hambene, Clayton

Paradoxa and St. Louis Chapters

Anne Chida, Ballwin

State-Level Membership

Marsha Holloway, Cape Girardeau,

Mike Doyen, Rolla

From the Editor

March comes in like a lion, or something like that, so the saying goes. Well, I don't know about a lion, but this winter sure has been a strange animal. We had extra-early blooming red maples (not to be confused with the normally early blooming Ozarks witch hazel) and lots of non-natives blooming in January (Veronicas, Lamiums, Chickweeds, Cardamines)--all in between ice storms and tornadoes.

And now, we look forward to all the planting, the field trips, and all of the exciting things that Missouri native plants have to show this spring!

Thank you to Erin Skornia and our proofreading team, including Malissa Briggler (who also put together the Chapter Reports and Events), John Oliver, Dana Thomas, and board members. Thank you to our authors, chapter representatives, and other contributors. Thank you for your time, dedication, collaboration and support.

Your humble editor, Michelle Bowe

Conundrum Corner

by Malissa Briggler

Oh, look at the dogwood...

What a thrill it is each year to begin spotting white flowering shrubs and trees in early spring. They seem to jump out from the drab, dormant woods to say, "spring is here!" Many Missourians immediately identify these shrubs as 'dogwood'. After all, flowering dogwood (*Cornus florida*) is our state tree, it is a common and widespread species, and easy to spot, even along roadsides going 60 mph. However, there are many other native and exotic shrub and tree species that also have showy white flowers during the spring. Some can be identified from the view of your car window and others require a closer look. Whether you fall as a confused victim to white flowering shrubs, or cringe when someone says "Oh, look at the dogwood", as they drive past a patch of wild plum, these identification tips might come in handy.

Flowering dogwood:

Picking out a flowering dogwood among the other white flowers you encounter is easy from a distance when you look for the layered, horizontal branches, with space between



Flowering dogwood can be distinguished from other species of white flowering shrubs by the horizontal branching and layered appearance. Photo courtesy of MDC



Service berry has dense clusters of flowers that are separated along the branches. Photo courtesy of MDC

them. If you are close enough to see individual flowers, they look different from any other bloom you would find this time of year. What look like four big white petals are actually bracts, and at the center of them are the flowers which are small and yellow.

Serviceberry:

Serviceberry (*Amelanchier arborea*) is a widespread native and one of the first woody plants to bloom. The plants are usually less than 12 feet tall. An easy way to identify this species from a distance is to look for dense flower clusters that are spaced out along the branches. The flower clusters on this plant appear more scattered and separated than the layered look of flowering dogwood or the dense flowering of wild plums, cherries, and pears. The flowers of serviceberry have long strap-like petals compared to the round petals of similar looking species.

Wild plums, ornamental cherries and pears, oh my:

Here's where it gets tricky. Common native woody plants that produce white flowers

before leaves begin to grow include wild plum (*Prunus americana*), big tree plum (*P. mexicana*), and wild goose plum (*P. munsoniana*). There are also several species of escaped ornamental shrubs that have become invasive. Determining the identification of these species will require a closer look at the flowers and bark. However, callery pear (*Pyrus calleryana*) can often be detected from a distance by its pyramidal shape and often dense colonies. Callery pear is a cultivated ornamental shrub that is sold in the nursery industry under several different names according to specific cultivar (Bradford Pear, Aristocrat, Autumn Blaze, Capital, Cleveland Select, Whitehouse, etc.). It has now become a highly invasive component of our landscape and is most visible while flowering in the early spring. While cultivars of callery pear typically do not have thorns, escaped plants revert to their wild form and produce sharp thorns. They also produce a putrid odor. As with most escaped ornamentals, callery pear invasion is most prevalent in urban areas, but is quickly becoming a rural problem as well.



Callery pear has a pyramid shape. It has escaped cultivation and is rapidly invading areas particularly along roadsides and near urban locations. Photo courtesy of MDC



Sinkhole in the snow at Meramac State Park. Photo (left) by Rex Hill

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

—Aldo Leopold