

Kelseya

Newsletter of the Montana Native Plant Society



Kelseya uniflora
Ill. by Bonnie Heidel

At MNPS: Every Season is Field Trip Season!



INSIDE:

- A conversation on fern taxonomy with Susan Fawcett
- Conservation Corner: Protecting thick-leaved bladderpod
- A winter field trip to learn about forest disease & pests
- Gardener's Notebook: *Agastache* bee magnets

- Small Grant Reports: Lake County's Pollywog Park restoration; Hopa StoryMakers distribute books to children with limited reading resources
- Clark Fork Chapter's Annual Native Plant Sale
- President's Platform: Let's get involved!



Chapter Events

For more field trips across the state, please refer to the 2022 MNPS Summer Field Guide.

Calypso Chapter

Info: Catherine Cain at 406-498-6198; nativeplants@montana.com or Karen Porter at 406-498-9728; karenwporter44@gmail.com.

Clark Fork Chapter

Info: Teagan Hayes at 920-979-9009; teagan.hayes@gmail.com or Paul Buck at 970-901-2418; paul7703@gmail.com.

Thursday, October 13, 7:00 p.m. Grow Native Plants from Seed for our Annual Plant Sale.

Join plant sale maven Clare Beelman to learn how to stratify, scarify and prep seeds for germination. Strategies for maximizing seedling survival and establishing healthy native plants will be covered. Contact Clare at clare.beelman@gmail.com for more information. UM Campus, Natural Sciences Bldg., Room 202.

Eastern At-Large

Info: Kelsey Molloy at 406-654-4566; kelseym88@gmail.com.

Flathead Chapter

Info: Tara Carolin at 406-607-7670; mnps.flathead@gmail.com.

Volunteer at the Glacier National Park Nursery: Due to an overwhelming response, the nursery is not taking any more new volunteers this season. Please check back next year. Thank you to everyone for their help and interest.

Saturday, July 9, 8:30 a.m. to 4:30 p.m. North Fork Forests & Fire. Join Steve Wirt, retired USFS forester and fire manager, where he will discuss fire history over the past 30 years. Emphasis on plant response, identification, and forest succession before and after fires. There may be an opportunity to view the Hay Creek fire of 2021. Hiking the Hornet Lookout trail will be the highlight of the day! Wear sturdy shoes, bring a sack lunch and plenty of water. Meet at Super One parking lot in Columbia Falls at 8:30 a.m., to carpool up the North Fork of the Flathead River. Trip is limited to 15 people. To sign up contact Steve at: 406-261-2542.

Wednesday, July 13. Mount Aeneas Whitebark Pine Ecology. Join Melissa Jenkins and Robin Jenkins to learn about Whitebark pines, which are proposed for listing under the Endangered Species Act. Co-sponsored by the Whitebark Pine Ecosystem Foundation and Wild Montana. Registration at: wildmontana.org/walks.

Thursday, July 14, 6:00 p.m. to 8:00 p.m. Rain Garden Walking Tour. Come and learn all about the Flathead Rain Garden Initiative. You'll explore four existing residential rain gardens in downtown Kalispell where you will hear from each owner about the design, installation process, and their beauty.

These gardens have many benefits of using native plants, from helping protect our local waterbodies to supporting pollinators. This walking tour will be limited to 25 people and cover 2.5 miles. Come prepared in your walking shoes. Registration required at: <https://www.eventbrite.com/e/rain-garden-walking-tour-tickets-360532872527>. Contact Emilie Henry at: 406-461-6831 or by email at: emilie.henry@mt.gov for more information.

Friday, July 15, 6:30 p.m. Chasing *Mentzelia decapetala* (Ten-petal Blazing Star). Join Caroline Kruckeberg-Clemans and Jim Boyer for an evening trip to view the *Mentzelia decapetala* plots at Selis Kasanka (formerly Kerr Dam). These night blooming flowers should begin to open once in the shady side of the hoodoos. This is the land of the Confederated Salish and Kootenai Tribes, and the gates will close at sunset. This trip will be limited to five vehicles for parking along the road. Please register by contacting Caroline at: jbck@centurytel.net.

Friday, July 15. Yeager Flats. Dave and Genevieve Shea will lead participants through limber pine savannah, cottonwood groves, sagebrush, and an old burn before ending in a vast high-elevation native fescue prairie near the base of Ear Mountain. This walk is sponsored by Wild Montana & co-sponsored by MNPS. Registration at: wildmontana.org/walks.

Saturday, July 16, 10:00 a.m. Lost Trail National Wildlife Refuge. You can expect to see Spalding's Catchfly, a federally protected species, while touring this unique and diverse refuge. LTNWR biologist, Beverly Skinner, will also highlight the extensive restoration work that has taken place the last few years. Bring sturdy footwear and supplies for the day. Meet at 10:00 a.m. at LTNWR headquarters. Registration is required by emailing: pjaquith07@gmail.com.

Tuesday, July 19, 10:00 a.m. to 4:00 p.m. Glacier National Park Weed Blitz. Help remove invasive plants from priority sites in GNP. Park biologist, Dawn LaFleur, will train participants on identification and effective hand-pulling techniques for targeted weed species. The morning will focus on learning about invasive plant ecology, issues, and identification. We will head into the field during the afternoon. Bring some muscles, water, and gloves. Glacier National Park Conservancy will provide lunch. RSVP by July 12th by emailing: glac_citizen_science@nps.gov or calling 406-888-7986.

Wednesday, July 27, 6:00 p.m. to 8:00 p.m. Columbia Mountain Garden Tour. Join Forestation, Inc. on this unique tour of a private residence that has been transformed into a beautiful and diverse landscape with hundreds of species and thousands of plants. Participants will learn all about the process from soil health, landscape design principles, plant selection, irrigation, and maintenance. The native wildflowers will be at peak bloom, and you'll experience why this garden is truly a one of a kind in the Flathead Valley! This tour will be limited to 25 people and participants are asked to sign up by emailing: hailey@centerfornativeplants.com. Meeting location will be disclosed after required registration is complete.

Saturday, July 30th, 9:00 a.m. to 2:00 p.m. New Date!
Mosses of Columbia Mountain. Join Dr. Joe Elliot, botanist and renowned moss expert of Montana, in the various habitats along the Columbia Mountain Trail. Expect to examine and identify various moss species on correlating substrates. A list of mosses will be provided to participants and will include characteristic structural features helpful in identification and substrate affinities. Bring a hand lens, notebook, sack lunch and your curiosity while exploring the Bryophyta world! Sturdy footwear advised. Meet promptly at the Columbia Mtn. Trailhead. This walk will be limited to 15 participants. Please register by contacting William Schlegel at: wischlegel@gmail.com or 406-224-8430.

Thursday, August 4th, 6:00 p.m. to 8:00 p.m. Integrated Noxious Weed Management. Center for Native Plants (5605 HWY 93S, Whitefish), will host the Montana Biocontrol Project & Flathead County Weed District for an in depth look at noxious weeds. You will learn more about each of these organizations, the important work they do, and the best management practices for state and county listed noxious weeds. Please bring your own chair! Call 406-862-4226 for questions.

Kelsey Chapter

Info: Mark Majerus (president) or Jane Fournier (secretary) at kelseychaptermnps@gmail.com.

Waterwise Gardening. Mark Majerus, of the Kelsey Chapter, joined forces with local garden center Gardenwerks this spring to help local Helena gardeners select native grasses for beautiful lawns and accents that don't require as much water as many of the commonly-used landscape grasses.

Native Plant Signage. Comprehensive identification signs for native plants in Spring Meadow Lake Park near Helena are being deployed throughout the summer. This area is a favorite swimming, fishing, and walking park for city residents and the signage will help highlight the native plants.

Wildflower Walk. Following a long-standing tradition, Kelsey Chapter members once again participated in the annual Wildflower Walk on Mt. Helena in late May. This program introduces many of the city's fourth-grade students to the wonders of the wildflowers in our own "backyard", giving them an initial appreciation for the importance of native plants and their conservation.

6th Ward Garden Park. Work is continuing this spring on the Native and Medicinal gardens. The Native Garden (encompassing 50 species), established last year, is doing well and the Medicinal Meadow has been cleaned and has 30 new species already established.

Wednesday, July 20, 6:00 p.m. Potluck. The Kelsey Chapter is gathering for a potluck at the large pavilion at Spring Meadow Lake Park, Helena. This event includes a presentation by Shane Sater titled The Insect-Plant Connection and a plant and seed exchange.

Maka Flora Chapter

Info: Fraser Watson at 703-509-0152 or Dfw9sb@gmail.com.

Valley of Flowers Chapter

Info: Contact Gretchen Rupp for program details or to be added to the Valley of Flowers Chapter "Friends" e-mail list, at 406-586-8363, beesgrmt@gmail.com.

Please see the 2022 MNPS Summer Field Trip Guide for upcoming events.

Western At-Large

Info: Kris Boyd at 406-295-9414, boyd.kristina@yahoo.com.

SMALL GRANT REPORT:

Lake County Conservation District Restoration Project POLLYWOG PARK:

"Teamwork Makes the Dream Work"

By Sarah Klaus, Conservation Coordinator, Lake County Conservation District

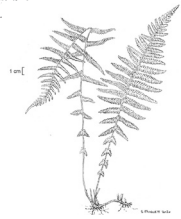
In the middle of the Mission Valley, on the Flathead Reservation, in the small town of Ronan, you'll find an interpretive park located behind K. William Harvey Elementary School (KWH). This park, Pollywog Park, was first established 20 years ago as a place for students to connect and familiarize themselves with the native plants of Montana. The park was a wonderful teaching tool for about ten years before it was abandoned for unknown reasons.

In January of 2021, LCCD (Lake County Conservation District) teamed up with AmeriCorps members and Flathead Reservation's MSU extension office to restore this park to its former glory. With the help and generosity from the Confederated Salish and Kootenai Tribes, the Montana Native Plant Society, the Whole Kids Foundation, and the Ronan school district the park has been restored and serves as place-based learning space for the school and community.



*Sarah (LCCD)
installing trails.*

Continued on page 6



A Conversation on Fern Taxonomy with Susan Fawcett

By Andrew Smith, Flathead Chapter



Susan Fawcett is a PhD Research Botanist at the University and Jepson Herbaria at UC Berkeley, specializing in fern evolution, and one of the authors of a new monograph on the fern family Thelypteridaceae. The book, *A Generic Classification of the Thelypteridaceae*, is available from BRIT press for purchase in print or as a free digital download.

I spoke with her recently about the book and life as a taxonomist. The conversation has been edited for length.

Andrew Smith: What is taxonomy and why do you think it's important?

Susan Fawcett: Taxonomy is the art and science of naming biodiversity. It is a crucial way to relate to the natural world, and communicate about it with one other. My personal philosophy is that taxonomy should reconcile evolutionary history with the human capacity for recognition - a classification is only useful if it can be applied by the people who need it, yet also reflects the nuanced relationships of the organisms. This is always a balancing act.

AS: What makes the Thelypteridaceae a difficult family, and why did you decide to tackle it?

SF: The Thelypteridaceae is one of the most diverse fern families, with about 1,200 species, representing about ten percent of global fern diversity. To the untrained eye (and without a microscope) many species appear superficially similar, and previous classifications have not always united monophyletic groups (that is, a group of species who share a common ancestor). Furthermore, some species may grow to five meters in height, so they are not always easy to collect and convert into an herbarium specimen. Also, they are often narrow endemics, and in some genera as many as $\frac{1}{4}$ to $\frac{1}{5}$ of species are known only from the type collection or the type and one or two other collections (and many of these are not digitized). I decided to take it on in part because it was a final frontier in fern taxonomy, and we are experiencing a special moment historically when generating and analyzing DNA sequence data at a grand scale is becoming more affordable. My mentor and closest collaborator, Alan Smith, has spent his career identifying ferns at UC Berkeley, so we had access to an unparalleled arsenal in the form of accurately identified and well-curated herbarium specimens to serve as DNA vouchers.

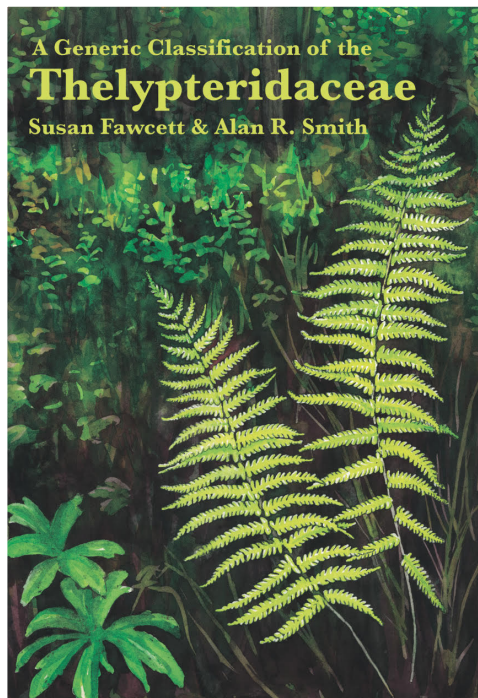
Lastly, my colleagues at the University of Florida (the GoFlag Consortium) had funding for DNA sequencing, so everything sort of fell into place in a remarkable way, resulting in a fruitful collaboration involving authors from Taiwan, Switzerland, Vermont, Florida, and California.

AS: What does your work look like? Are you out in the field collecting samples or working mostly from herbarium specimens?

SF: There is nowhere I'd rather be than in the field, collecting specimens. The nature of taxonomic work makes it impossible to collect all the species of interest in a large group, so there is a lot of sharing that goes on - when I'm in the field I try to collect all ferns (and some other things) to share with anyone and everyone, and participate in exchange programs with various herbaria who share or loan Thelypteridaceae to me. People have been amazingly generous with sharing their tissue and specimens with us, and I always do my best to return the favor by collecting duplicates to share. There is always a lot of time spent in the herbarium at the microscope, and behind a computer performing phylogenetic and coalescent analyses, and in the library searching the literature. Fortunately, I had collaborators who helped with the lab work, and the bioinformatics.

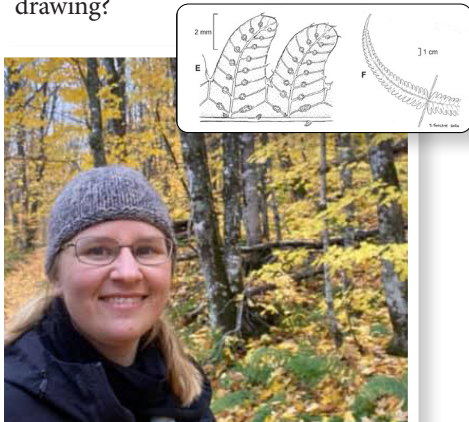
AS: How have new technologies and genetic testing changed systematics?

SF: Any classification is a set of hypotheses to be tested. An excellent foundation has been laid by earlier authors using morphological, biogeographic and cytological data. Molecular phylogenetic data provide an additional powerful, independent line of evidence for hypothesis testing. In many cases, this corroborates earlier work - in other cases it may elucidate problems. This is a call to get back in the herbarium and study the morphology more carefully. These approaches are reciprocally informative, and by having multiple lines of evidence, we have a fighting chance of working out the evolutionary relationships of some challenging groups, identifying the morphological features that unite them, building on and refining earlier classifications.



Illustrations at top by Susan Fawcett

AS: One of the best parts of the book is the set of illustrations showing key details of a couple dozen species. How did you go about making these illustrations, and what do you think makes for a good botanical drawing?



Susan Fawcett, Research Botanist, UC Berkeley, and her illustration of *Pakau pennigera*.

SF: Thanks! Working on the illustrations is always fun for me, and most of those in the book were done during the pandemic lockdown. I was able to take some specimens on loan from the Pringle Herbarium at the University of Vermont to work from. I am old school - I dip a quill pen in a well of ink and try to minimize the amount of time I spend on the computer (but I add scale bars and do some composing of plates in Photoshop). I try to accurately capture distinguishing features of the plant that may not be easily seen in a photograph - I try to capture the features that I highlight in the description and diagnosis.

AS: Do you have any advice for people who are excited to go out and try to identify ferns? How would you recognize that you've found a member of Thelypteridaceae?

SF: My advice to anyone wanting to get in the field and identify plants or animals of any kind is to use iNaturalist. It is my favorite way to interact with strangers on the internet. By uploading observations, you are also contributing valuable scientific data on distribution, phenology, habitat, etc. That said, most species of Thelypteridaceae are not easily identified from photographs. In temperate North

America, there are few enough species that they can be learned one by one. Once you get into more tropical habitats, some more technical characteristics are useful - first, if you cut the petiole near the rhizome there will be two vascular bundles (this distinguishes it from Dryopteridaceae, another diverse family), secondly, Thelypteridaceae almost always have highly characteristic "hyaline, acicular" (translucent, needle-shaped) hairs. This is a hand-lens character, but is really informative once you learn to recognize it.

AS: The Eleventh Montana Plant Conservation Conference, at the end of March, was themed "Monitoring for the Effects of Climate Change". Do you think your work ties in to this theme?

SF: Understanding the impacts of climate change on biodiversity requires an understanding of species diversity, abundance and distribution. Providing a taxonomic framework helps to identify and document species distributions through space and time, in the form of specimens and observations. The more data we have now, the more complete our understanding of change will be in the future. So, this gets back to the last question - get out there and document biodiversity by using iNaturalist and collecting specimens!



Phegopteris connectilis, a species of concern in Montana, in Michigan's Upper Peninsula. Photo courtesy of Susan Fawcett.

WELCOME NEW MEMBERS!

The Montana Native Plant Society would like to welcome and thank new members from the following chapters:

Calypso Chapter

Morgan Schultz

Clark Fork Chapter

Stephanie Berry, Anne Binninger, Carol Brooker, Mary Coar, Amy Gannon, Gabby Kapa, Caroline Lonski, Karen Mathieson & Anne Lee, Pamela Mcsloy, Cynthia Swidler, Diana Wall

Flathead Chapter

Jessica Beaulieu, Constance Cohen, Kathy Colucci, Janine Dawley, Julia Higgins, Karen Nichols, Marylane Pannell, Michael Raymond, James Rogers & Sherry Jones, Katherine Thomas, Ryan Whyte, Faye Woltz

Kelsey Chapter

Ashley & Joshua Bibeau, Mae Clark-Gardenwerks, Kim Dodd, Sher Ehret, Bryan Flynn, Paulette Kohman, Devon Malizia, Gabrielle Ostermayer, Gordon Pearse- Bruce Seed Farm, Jeana Ratcliff, Sherry Turner, Andy Wanta

Maka Flora

Alexandra Morphew, Jennifer Muscha, Fraser Watson

Valley of Flowers Chapter

Brock Disanti, Mary & Pat Holmes, Debi Naccarto -Wild birds Unlimited, Meta Orvis, Cindy Pickens, Aleski Rapkin & Kevin Barre, Chris Saenz & Christopher Riti, Sharon Williams

Eastern Montana at Large

Paula Ciniero, Paige Colburn, Stephanie Leenknecht, Darin & Rebecca Newton, Kelly Parks, Loretta Todd

Western-at-Large

Mary Kujawa, Roxi's Greenhouse & Nursery, Bruce Schuette, Michael Skeels



Conservation Corner

By Peter Lesica, Outgoing Conservation Committee Co-chair



The Pryor Mountains, south of Billings, is one of the most significant botanical hotspots in Montana. The area provides habitat for approximately twenty species of rare plants as well as three plant communities considered globally rare. As a result, the Montana Native Plant Society dedicated the Pryors as one of Montana's Important Plant Areas (IPA). (<https://www.mtnativeplants.org/wp-content/uploads/2018/07/IPA-Pryor-Mountains.pdf>). Many of the rare plant populations and plant communities occur in the low-elevation portion of the IPA referred to as the Pryor Mountains Desert. One species, thick-leaved bladderpod (*Physaria pachyphylla*), occurs nowhere else on earth. Shortly after MNPS dedicated the Pryor Mountains IPA, the Bureau of Land Management approved a management plan that established a portion of the Pryor Mountains Desert as an Area of Critical Environmental Concern (ACEC). Native American cultural sites also occur in portions of the Pryor Mountains Desert. The area is truly a state treasure.

In the summer of 2020, a Mexican mining company proposed to conduct exploration for a gypsum mine in

the Pryor Mountains Desert. Even though the proposed drilling would be on the ACEC, including a portion of the bladderpod's occupied habitat, the BLM conducted an "environmental analysis" and found there would be no significant impact (remember who was president of the United States in 2020). MNPS joined forces with the Pryors Coalition and the Center for Biological Diversity to protest the finding of no significant impact and to petition the U.S. Fish and Wildlife Service to list thick-leaved bladderpod under the Federal Endangered Species Act in March 2021. A year later, the USFWS had not yet issued a finding on our petition as required by law, so our coalition issued a 60-day notice of intent to sue in order to force the issue.

But then a surprise. The mining company stopped its immediate plan to explore for gypsum in the Pryor Mountains Desert. This does not mean that they won't try again in the future, but it does give conservation groups some breathing room. We hope that at least the ACEC can be permanently withdrawn from mineral leasing. If the thick-leaved bladderpod is listed under the Federal ESA, then mining will cease to be a threat. MNPS and our allies will keep on it.



Physaria pachyphylla

Photo by Peter Lesica

Pollywog Park (continued from page 3)

Park Improvements:

- Noxious Weed Removal and Dead/Dangerous Tree Removal
 - Bridge Replacement
 - 20 Native Shrubs and Forbs Planted
 - Trails Widened and Extended
- 100 square foot Pollinator Plot Installed
 - Debris Pile Removed
 - Native Bee House Installed
- 8 Informational Signs for Plant Species Created

Place-based Learning:

The funding from the Montana Native Plant Society helped with the purchasing of native shrubs and enclosures for plantings, funded MCC trail crew leaders to help expand and widen trails in the park, aided the purchasing of interpretative signs and materials for select species in the park, and covered the cost of renting a



BSWC Members Abby and Jill with newly installed pollinator plot

rototiller for planting site prep. With the addition of these native plants and informational interpretative signs the park will be a place to help students identify and become familiar with some of the culturally significant plants of the Séliš, Qlispé, and Ktunaxa tribes of the Flathead Reservation. Teachers will be able to use Pollywog Park in their science, social studies, math, and Salish language classes. The existing summer conservation and garden

camps can aid in maintenance and utilize the area in activities.

Additional improvements to the park include: the installation of new bridges and creek crossings, removal of invasive weeds and dead or diseased trees, the installation of a wildflower pollinator plot from LCCD, and the planting of bitterroot and other native plants donated from the tribal nursery. A native bee “hotel” was installed by MSU extension.

Pollywog Park has already provided a natural reprieve for LCCD to host it's Jr. Conservationist lesson on building mason bee houses and as an outdoor location for the MSU extension mentorship program.

“Pollywog Park will encourage stewardship and conservation in the next generations of kids that grow up enjoying this park”

-Lauren Hadley, FoodCorps Member,
Partner for Park Restoration

Teachers often bring kids out to explore the park's plants as a reward for good behavior in the classroom. Kids are ecstatic to be in a natural environment

exploring the native plants in this small ecosystem. LCCD is excited to continue its Jr. Conservationist Program in this park, teaching kids about the importance of these plants and how they can help promote and protect them.

LCCD would like to thank Montana Native Plant Society for its Support in this successful the successful restoration of Pollywog Park.

Adapted from a poster created by LCCD's BSWC member Saige Jibben in partnership with BSWC member Jill Henrichon. Translations to Salish and Kootenai names provided by Rose Bear Don't Walk.

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A WINTER FIELD TRIP: LEARNING ABOUT FOREST DISEASE & PESTS

By ANNIE GARDE, CLARK FORK CHAPTER; PHOTOS BY BRACE HAYES

Everyone knows you can't look at woodland posies in winter, so on a cold afternoon in January, nine intrepid members of the MNPS Clark Fork Chapter met in Missoula's Pattee Canyon for an unusual field trip. Our leaders were two women from the Department of Natural Resources & Conservation, Amy Gannon, and Jill Hautaniemi. The topic: Tree Diseases and Pests. Amy is the Forest Pest Management Program Manager and Jill handles Forest Pathology. Oh boy-serious business, we thought. But we'd only walked a little way when Gannon stopped and pointed into the forest. “Oh look!” she said, clearly excited. “There's a perfect example of larch dwarf mistletoe!”

Serious business, tempered by the wonderful passion, enthusiasm, knowledge, and humor that Gannon and Hautaniemi bring to their work. We were treated to a great afternoon, a beginner's guide to some of the pests and diseases that plague trees in our forests.

We learned, for example, that dwarf mistletoe species are parasitic plants, getting their nutrients from the tree. They are mostly host specific, and the berry-like fruits burst

brown sawdust in the bark of a tree and at its base is a sign that the tree has a beetle and that these beetles make distinctive larval galleries under the bark.

Pine beetles, bud worms, blister rusts, gall rusts – you name it, Gannon and Hautaniemi knew all about it and

what they could do about it. Trees are hardy beings. They survive harsh climates, fires, borers, and leaf eating insects, parasitic plants, and diseases caused by fungi, bacteria, and viruses. With Amy Gannon and Jill Hautaniemi coming up with intelligent management treatments, the trees have valuable allies.

Thanks to Amy and Jill for an enlightening afternoon and for their work in our forests.



Keying out larch dwarf mistletoe

explosively, hurling their seeds as far as 35 feet, but more usually, 10 feet from the parent plant. The seeds have a sticky seed coating that allows the seed to stick to what it hits, often the needles of nearby trees, and the process begins on a new tree. Who knew? Now we did.

Gannon and Hautaniemi showed us, too, that reddish



Attendees gander at witches' brooms formed by Douglas fir mistletoe



Gardener's Notebook

Using Native Plants in Backyard Landscaping

The *Agastache* Bee Magnets

By Robyn Klein, Valley of Flowers Chapter

Three of the seven North American species of *Agastache* can be found here in Montana. The most common is giant hyssop, *Agastache urticifolia*. It's native to the foothills and forests of western North America, from British Columbia and all the way down into California, Nevada, Utah, and Colorado.

Giant hyssop will bloom between June to September for at least a month, drawing bees, butterflies, and hummingbirds to its light purple flowers. It grows to 2-4 feet, so add it to the back of your garden. It spreads slowly by creeping rhizomes,

but occasionally from seed as well. Giant hyssop is very hardy and will grow in just about any soil. With a 50-70% germination rate, it will germinate easily. It has one drawback, though. If you crush the leaf and sniff it, you might find the fragrance a little musty. I guess the deer think so too because they don't usually touch it. It's really the perfect native garden plant.

Another species of *Agastache* is found on talus slopes at high elevations in Beaverhead County is *Agastache cusickii*. This species probably wandered in from central Idaho or Nevada, where it is more common.

The third species is one that many gardeners will recognize. Lavender giant-hyssop, *Agastache foeniculum*. This species is found in the Central United States and is a favorite of garden nurseries. The licorice-tasting leaves were used by the Arikara, or more accurately "Sahnish," a northern Great Plains tribe now living on the Fort Berthold Indian Reservation in central North Dakota. Because of the sweet smell, the plant was used

for perfuming their clothing "as lavender is by White people" (Kindscher, et al., 2020). Other Indigenous tribes used the leaves and flowers to make a pleasant, cooling drink during the summer, to help in fevers and to relieve gas as a carminative.

If you want to be adventurous, I highly recommend another sweet-tasting species from China, *Agastache rugosa*. I grew it from seed last year and once it flowered, the bees covered the purple spikes in seeming ecstasy.

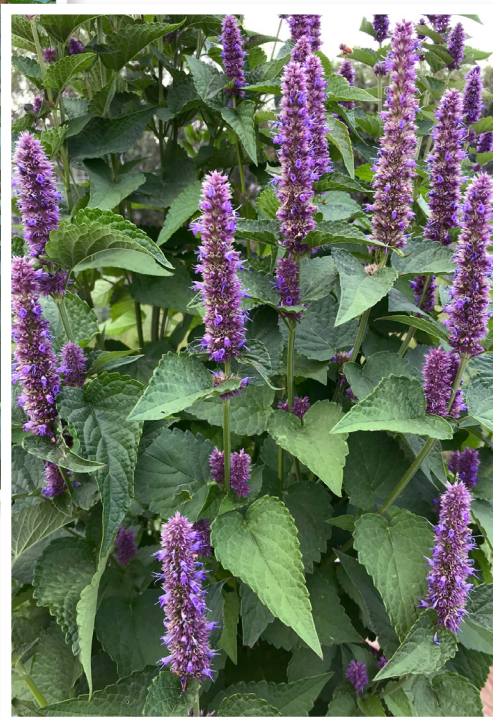
Like thyme and mint, *Agastache* is in the Mentheae tribe of the mint family, Lamiaceae. The leaves and flowering spikes of all these species can be dried and made into beverage tea. Harvest

whole stems and hang upside-down out of direct sunlight in late July after the dew has dried off the plants. To maintain the essential oils, strip off the leaves and flowers but leave as whole as possible. Before making into tea, crush the dried leaves to break open the tiny trichome hairs that hold the fragrant essential oils.

Planting native species helps support pollinators and gives them more habitat in which to flourish, something our dwindling wild habitats need very much right now.



Agastache urticifolia, Photo by Robyn Klein.



Agastache rugosa, Photo by Robyn Klein.

References:

Grinnell, George Bird 1905 Some Cheyenne Plant Medicines. *American Anthropologist* 7:37-43 (42).

Kindscher, Kelly, Yellow Bird, Loren, Yellow Bird, Michael, and Sutton, Logan. 2020. Sahnish (Arikara) Ethnobotany. Society of Ethnobiology. Tacoma:WA.

Love, S.L., and Akins, C.J. 2018. Summary of the native seed germination studies of Norman C Deno: species with names beginning with letters A and B. *Native Plants Journal* 9(3):260-280.

Tilley, D., and T. Pickett. 2019. Plant Guide for nettleleaf giant hyssop (*Agastache urticifolia*). USDA-Natural Resources Conservation Service, Aberdeen Plant Materials Center. Aberdeen, ID. 83210

Annual Native Plant Sale

By Clare Beelman and Paul Buck, Clark Fork Chapter

The 2022 Annual Native Plant Sale Fundraiser for the Montana Native Plant Society, Clark Fork Chapter, was held at the Clark Fork River Market, in Missoula on Saturday, June 4th. Cool, damp, and misty weather greeted us at the 6:30 a.m. setup time. The weather did not hamper the enthusiasm of buyers. People showed up before the 8:00 a.m. opening. It was a fantastic day to talk about native plants and share the joy of growing them in our gardens.

Clare Beelman and Peter Lesica led 13 volunteer growers and Clare and Janet Simms organized 14 plant sale workers for this year's sale. Many of the species' seeds were collected from across the state by Peter. For some of us newbies, the growing experience required much patience with an almost vertical learning curve. Donated plants were also received from the UM Division of Biological Sciences plant greenhouse through UM professor Lila Fishman. Forty-eight different species were available at the sale with most being grown from seed. Many packets of *Cleome serrulata* were given out and hopefully there will be an abundance of flowers for pollinators come next summer.



Even though there were fewer plants for sale (due to germination difficulties) the Chapter still netted about \$2,000. All but 18 plants were sold so it was difficult to say if there were any favorites. Clare said she thinks it is quite clear that the demand for native plants to use in home landscaping is as high as ever, if not higher. Future discussion will be needed to determine how to help fill the demand as it grows.

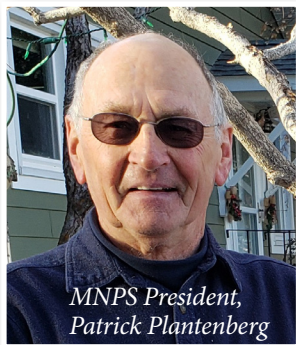


Left to right: Kelly Chadwick, Tarn Ream, Glenda Scott and Clare Beelman identifying and arranging plants for sale.

President's Platform

What a great Spring for MNPS and native plants! April was designated by Congress again as National Native Plant Month! Many groups including MNPS are pushing planting natives.

MNPS has begun a successful marketing program. We



MNPS President,
Patrick Plantenberg

have had MNPS banners printed for each Chapter to use at our outreach events. I presented a talk highlighting Doug Tallamy's work on identifying native keystone species to help preserve biodiversity twice this spring in Helena and Billings. We need to continue to get the word out about the value of our native plants.

Field Trips – The Annual Field Trip Guide is out. The MNPS Annual Meeting, hosted by the Flathead Chapter and the Western-at-Large members, in the Libby area June 24-26 offered lots of field trips and a talk by Jack Nisbit. I am glad to hear the Annual Meeting sold out! Members keep telling me they want to go on field trips and see examples of native landscaping! Please consider leading a trip in your area for those members that want to get out and see native plants. Contact your local Chapter and set one up.

Helping Native Plants – The Conservation Committee's 11th Plant Conservation Conference on March 30-31 via Zoom was a huge success. The Committee met at the Annual Meeting on Sunday June 26th. Contact us if you would like to help conserve our native plant communities.

Educating our Members – Our Winter Zoom Programs were highly successful thanks again to Beth Madden. The last one on April 27 on Native Plant Landscaping was attended by over 150 people. The pilot Citizens Botany Program is almost ready to roll out. Andrea Pipp led a Citizen Botany Program workshop at the Annual Meeting. Please let us know what type of programs and speakers you would like us to organize for next fall and winter. Beth would like a co-chair to help her over the fall and winter of 2022-2023.

The Small Grants Committee continues their great work reviewing and awarding grants to aid native plant education and research. The committee met on Sunday June 26 in Libby at the Annual Meeting. Contact us if you would like to help in the small grant selection process.

Landscaping with Natives – The Landscaping and Revegetation Committee is active! The committee met on June 26 in Libby at the Annual Meeting. Contact us if you would like to help with landscaping and revegetation efforts.

Let us know what you want from your Society. Looking forward to meeting and working with all of you in person this year. Please call me anytime with questions or concerns 406-431-4615.

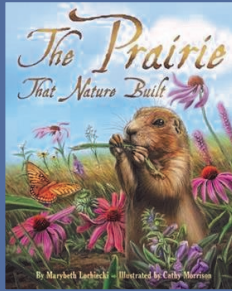


SMALL GRANT REPORT:

EXPERIENCING THE PRAIRIES THROUGH HOPA MOUNTAIN'S STORYMAKERS

With support from the Montana Native Plant Society, Hopa Mountain, a Bozeman-based nonprofit, was able to purchase and distribute 300 copies of *The Prairie That Nature Built*, by Marybeth Lorbiecki, to Montana children with limited reading resources.

Winner of six national awards for excellence in children's literature and nature and ecology, *The Prairie That Nature Built* helps to connect Montana children to the ecosystem that covers two-thirds of our state. The prairie ecosystem is less accessible and subtler than, for example, forests, because much of the ecological activity takes place underground. This book does an excellent tour of the underground – sharing the intricacies of plant



For Younger Readers

- ☼ Your baby loves the sound of your voice, especially when you read rhyming books like this one. Yours is their first and most special relationship! Thank you for reading to them and building this bond.
- ☼ As this book shows, there are many lovely plants and animals in our world – even the soil is special. Try and take your little one outdoors every day to touch, feel, smell, and experience the natural world.
- ☼ Look at all the beautiful colors of the flowers and animals in the book with your baby. Name the colors as you point to them.
- ☼ Tell your little one about your favorite animal in the book, and show them the picture. You might like to use playful animal sounds and repeat them with your child.

hopamountain.org

Bookmark distributed with books to children with limited reading resources


roots, soil, and micro (and macro) organisms living there, as well as highlighting the natural processes of fire and grazing. And it does this in a fun way using an engaging rhyme based on "This is the House that Jack Built."

Hopa Mountain also developed an accompanying bookmark through their early literacy program, StoryMakers, that provides children's books and resources to rural and tribal families. With well-established StoryMakers Teams in rural and tribal communities in 37 Montana counties, Hopa Mountain was able to deliver this beautiful book to families during the pandemic. Having access to engaging reading resources at home is especially important now with children's schooling often being disrupted. Books like *The Prairie That Nature Built* help parents assume active roles in preparing their children to become engaged readers while also connecting them to nature.

A Sampling of Pollywog Park Interpretive Signs: *(Continued from page 7)*


SILVERLEAF BUFFALOBERRY

Salish: sḡ'wōsm
Kootenai: kupa'tiḡ



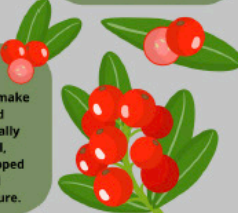
Fun Facts!

Indigenous groups used the plant as food, dye and medicine. The berries were often cooked into a flavoring sauce for buffalo meat- inspiring the common name.




Did you know?

These berries are used to make a popular Salish dish called "Indian Ice Cream." Not really resembling ice cream at all, fresh soapberries are whipped with sugar and water until they achieve a foamy texture.



SERVICEBERRY

Salish: siyeyē?
Kootenai: squmu'wu'k



Fun Facts!

This plant loves growing in moist places near streams, known as "riparian habitat."

The fruit was an important staple berry for the Salish! It could be harvested in high amounts and eaten or dried for the winter. Sometimes was mixed with dried meat as pemmican.

Tasty Treat!

This plant's flowers blossom in early spring, followed by the fruit ripening in late June through July.

The fruit looks like a large blueberry. They are sweet and can be eaten raw.





Photo courtesy of Terry Glase

CHOKECHERRY

Salish: ix'wō
Kootenai: a'ki'makwu'k



Wildlife!


Butterflies, honeybees, and ants rely on nectar from this plant's early spring flowers.

This shrub is also an important food source and habitat for birds, rabbits, rodents, and bears.

Did you know?

Important staple berry of the Salish! Could be picked in high amounts and eaten or pounded into patties to be dried for the winter.

The leaves and stone pit inside the berry are toxic, however the flesh of the berry is not toxic- although it is very bitter.



Photos courtesy of Sally and Andy Koscowski, Lady Bird Johnson Wildflower Center

Cover photos, clockwise from top: Denise Montgomery, North Fork Dupuyer Creek; Using High Country Apps to identify plants; Rachel and Jack Potter leading Huntsberger Lake Field Trip; Dave Shea leading North Fork Dupuyer Creek Field Trip; North Fork Dupuyer Creek Field Trip; Calypso Chapter's "Ski and Botanize" across Maverick Mountain Ski Area; Center photo: *Sphaeralcea coccinea*, scarlet globemallow; (North Fork Dupuyer Creek photos by Tarn Ream).

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An **additional donation** to MNPS helps support conservation action, educational programs, and botanical research. Donors will receive acknowledgement of their contribution in the spring issue of *Kelseya**. You can select from the following giving categories:

	<input type="checkbox"/> Kelseya — \$50	
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Membership in MNPS is on an annual basis, March 1st to February 28th. Memberships processed before November 1st will expire the following February 28th. Memberships processed after October 31st will expire February 28th of the year after.

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Members are welcome to affiliate with any chapter.

Please select ☒ your chapter affiliation.

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- ☐ **Eastern-at-Large**
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Please mail this form with your check to:

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PO Box 8783
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**Welcome to the
Montana Native Plant Society!**

Memberships are processed on a quarterly basis so you may experience a slight delay in membership recognition and benefits. We appreciate your patience with our all-volunteer organization.



MONTANA NATIVE PLANT SOCIETY

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About Montana Native Plant Society

The Montana Native Plant Society (MNPS) is a 501(c)(3) not-for-profit corporation chartered for the purpose of preserving, conserving, and studying the native plants and plant communities of Montana, and educating the public about the value of our native flora. Contributions to MNPS are tax deductible, and may be designated for a specific project or chapter, for the Small Grants Fund, or the general operating fund.

Your yearly membership fee includes a subscription to *Kelsey*, the quarterly newsletter of MNPS. We welcome your articles, field trip reports, book reviews, or anything that relates to native plants or the Society. Please include a line or two of "bio" information with each article. Drawings should be in black ink or a good quality photocopy. All items should be emailed to scottguse@yahoo.com and jenhintzguse@gmail.com, or mailed to: Scott and Jennifer Guse, *Kelsey* Editors, 725 Twin Lakes Road, Whitefish, MT 59937.

Fall issue deadline is September 10

Please send web items to our webmaster at:

Bob Person at: thepersons@mcn.net

Advertising space is available in each issue at \$5/column inch. Ads must be camera-ready and must meet the guidelines set by the Board of Directors for suitable subject matter; that is, be related in some way to native plants or the interests of MNPS members.

If you would like extra copies of *Kelsey* for friends or family, contact the Newsletter co-editors at: scottguse@yahoo.com or jenhintzguse@gmail.com. No part of this publication may be reprinted without the consent of MNPS. Reprint requests should be directed to the newsletter co-editors.

Changes of address and inquiries about membership should be sent to MNPS Membership, P.O. Box 8783, Missoula, MT 59807-8783.

Please visit our website at: www.mtnativeplants.org

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