

# Kelseya

Newsletter of the Montana Native Plant Society



*Kelseya uniflora*  
Ill. by Bonnie Heidel

## New MNPS President: Continuing the Mission



New MNPS President, Robert Pal, working with students at Montana Tech, photo by Lou Mason

In the fall of 2024, Robert Pal assumed the role of president of the Montana Native Plant Society, succeeding Dave Hanna. Robert is a professor and the Director of Restoration at Montana Technological University in Butte, where he leads the Master's Program and Certificate in Ecological Restoration. Additionally, he serves as the director of the Montana Tech Native Plant Restoration Program, guiding efforts to restore native plant communities in the Butte area.

Originally from Hungary, Robert holds an MS in Agriculture and a PhD in Botany/Plant Ecology. His research has long focused on the flora and vegetation of disturbed habitats, such as agricultural and urban areas, which naturally led him to explore

### IN THIS ISSUE:

- ☞ New MNPS President profile
- ☞ History & evolution of the Montana Native Plant Conservation Strategy
- ☞ 1<sup>st</sup> Bumblebee Atlas season results
- ☞ Help make a difference with plant conservation
- ☞ Gardener's Notebook: purple prairie clover
- ☞ Fasciation in the Beaverhead-Deerlodge Forest
- ☞ Outstanding Service Awards
- ☞ 2025 Annual Meeting: sneak peak



# Chapter Events

## Artemisia Chapter

Info: Jessica Callahan at 507-696-5467; [artemisiamnps@gmail.com](mailto:artemisiamnps@gmail.com).

## Calypso Chapter

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

## Clark Fork Chapter

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

**Monday, January 13, 7:00 p.m.** This year our annual meeting with Five Valleys Audubon will feature **Dr. Tabitha Graves showcasing studies of interactions among plant and wildlife communities in Glacier National Park**, with examples highlighting wildflowers, bees, birds, and bears. Room 110 of the Interdisciplinary Science Building at the southwest end of UM campus. **Please note the different day and place!**



*Senecio integerrimus*, photo by Matt Lavin

**Tuesday, January 14, 7:00 p.m. Herbarium Night** *Senecio* (groundsel, ragwort) is one of the largest genera in Montana and the world. We will look at some herbarium collections and key out a few with Peter Lesica. Room 303, Natural Science Building, UM Campus. Limit is 10 persons.

Email [Giovanna.Bishop@mso.umt.edu](mailto:Giovanna.Bishop@mso.umt.edu) to reserve a place.

**Thursday, February 13, 7:00 p.m.** Lichens and Bryophytes are often the most diverse yet understudied members of cliff ecosystems. Come hear **Giovanna Bishop**, curator of the UM Herbarium, speak on **Lichen and Bryophyte Cliff Floras: Diversity, Ecology, and Human Impacts**. Rocky Mountain Exploration Center, 1075 South Avenue West, Missoula.

**Thursday, March 13, 7:00 p.m.** Kelly Chadwick and Beth Judy went **Plant-Hunting in Patagonia**. Come see the odd and unusual beauties they found, including species of violet, pocketbook plant and orchid, iconic monkey puzzle trees, and some familiar invasives. Rocky Mountain Exploration Center, 1075 South Avenue West, Missoula.

**Thursday, April 10, 7:00 p.m.** For the past 98 years, the DNRC Conservation Seedling Nursery has produced seedlings for conservation projects across the state. **Ashley Mattson**, Nursery Operations Specialist, will inform us about **Seed, Seedlings, and Conservation in Montana**. Rocky Mountain. Exploration Center, 1075 South Ave West, Missoula.

## Eastern At-Large

Info: Kelsey Molloy at 406-654-4566; [kelsey88@gmail.com](mailto:kelsey88@gmail.com).

## Flathead Chapter

Info: Tara Carolin at 406-607-7670; [mnps.flathead@gmail.com](mailto:mnps.flathead@gmail.com).

Please send us your questions and suggestions!

**Sunday, March 12, 2:00 p.m. Mushrooms!** With Julia Smit, former State Park Ranger and Glacier Institute Instructor. Lone Pine State Park, Kalispell. **Please note new day and time.**

## Kelsey Chapter

Info: Elena Johnson (president) or Jane Fournier (secretary) at [kelseychaptermnps@gmail.com](mailto:kelseychaptermnps@gmail.com).

## Maka Flora Chapter

Info: Libby Knotts at 406-774-3778; [libbyknotts@gmail.com](mailto:libbyknotts@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](mailto:beesgrmt@gmail.com).

The events listed for the Valley of Flowers Chapter are live, in-person, and are not recorded. For indoor events, folks are encouraged to bring treats to share.

**Coming This Winter: Plant Trivia Evening**, at a local brewery, hosted by Bryce Pease and Jared Trilling. Details TBA.

## Western At-Large

Info: Jon Reny at 406-334-0459; [jreny@kvis.net](mailto:jreny@kvis.net).

## MNPS Presents! Online Programs

Watch for Zoom registration details for upcoming programs in your inbox - or find them on our [MNPS website](#) or [Facebook page](#).

Watch video recordings with topics covering native plant landscaping, ethnobotany, ecological research, conservation, natural history and more. Please visit the [MNPS YouTube channel](#), where all of our past MNPS Presents! programs are available. For details, please contact Alexandra Brown at [alexandra.l.brown@gmail.com](mailto:alexandra.l.brown@gmail.com).

## MNPS Presents!

- **JAN 21** The Remarkable Diversity of Monkeyflowers
  - DR. LILA FISHMAN Professor, University of Montana
- **FEB 18** The Montana Native Plant Conservation Strategy
  - ANDREA PIPP Program Botanist, Montana Natural Heritage Program
- **March 18** TBD

Programs occur on the third Thursday of each month from 7 - 8:30 pm via Zoom.

MONTANA NATIVE PLANT SOCIETY

(Robert Pal, continued from page 1)

ecological restoration and plant invasions. Over the years, Robert has been recognized with prestigious research grants, including the Fulbright and the Marie Curie Research Fellowships to the University of Montana in Missoula.

As a botanist and plant ecologist, Robert is driven by a fundamental question in ecology: what interactions determine the distribution and abundance of plants? This inquiry underpins his research in plant ecology, much of which involves large-scale field experiments. His research seeks to understand how abiotic and biotic conditions along with human activities influence the diversity and composition of plant communities. In the past four years, Robert performed research in around 80 hot springs of Yellowstone National Park to characterize hydrothermal plant communities.



Native Silky Lupine (*Lupinus sericeus*) and non-native Yellowtuft (*Alyssum murale*) dominated grassland near Butte, Montana, photo by Robert Pal

A significant aspect of Robert's work also focuses on invasion biology, where he investigates evolutionary changes in invasive plant species such as *Centaurea stoebe*, *Solidago gigantea*, and *Conyza canadensis*. His research explores novel interactions among plants, soils, microorganisms, and herbivores that emerge from transcontinental studies, contributing to a deeper understanding of invasion dynamics on a global scale.

Robert's contributions to restoration ecology are extensive and diverse, encompassing both upland and riparian systems. In upland habitats, he investigates the effects of mining-induced habitat fragmentation on plant reproductive success, evaluates how reclamation techniques influence pollinator diversity, and assesses the potential of phytoremediation for mitigating heavy metal contamination. In riparian environments, his work focuses on the restoration of heavy metal-impacted river corridors, studying the recovery of microbiomes, vegetation, and habitat health following clean-up and rehabilitation efforts.

Beyond his academic pursuits, Robert is actively engaged in hands-on ecological restoration projects. These initiatives include diversifying vegetation on hard rock mine caps, designing native seed mixes tailored to local conditions, engineering site-specific, locally adapted mycorrhizae, and applying bioengineering techniques to stabilize steep

slopes in areas impacted by smelting. He led the Montana Tech Native Plant Restoration Program that installed over 65,000 native plants to the Butte Hill.

With his extensive expertise and dedication to plant ecology and restoration, Robert brings a wealth of knowledge and passion to his new role as president of the Montana Native Plant Society, continuing the organization's mission to promote the understanding, appreciation, and conservation of native plants and their habitats.

### ***Here's Your Chance: Your Society Needs You!*** **The Montana Native Plant Society Needs New Talent on the Board of Directors**

MNPS is primarily a volunteer organization and could not function without smart, energetic, engaged volunteers! In 2025, we must elect a President, Western At-Large Representative, and Treasurer, each for two-year terms. The nominating committee is accepting nominations and self-nominations until February 15.

If you would like to see a description of what's involved with any of these positions, please contact Patrick Plantenberg at 406-431-4615, [m2andp2@mt.net](mailto:m2andp2@mt.net); Peter Lesica at 406-728-8740, [lesica.peter@gmail.com](mailto:lesica.peter@gmail.com); or Gretchen Rupp at 406-586-8363, [beesgrmt@gmail.com](mailto:beesgrmt@gmail.com).

## **WELCOME NEW AND RETURNING MEMBERS!**

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

### **Artemisia Chapter**

Mike Baker, Patti Bangert, Renee Dwyer  
Kate Sophia

### **Calypso Chapter**

Dorothy Dehart, Nicholas Tucci

### **Clark Fork Chapter**

William Andrews, Karen Blackwood,  
Dalton Brantley, Christine Carson, Grace  
Davenport

### **Flathead Chapter**

Serene Munroe and David Rinker

### **Kelsey Chapter**

Ligia Arango, Hannah Goveia, Lacey  
Gunther

### **Valley of Flowers Chapter**

Justus Baldwin, Meghan Mutch, Michelle  
Roller, Julie Tesky, Rick & Jona Visser



# Conservation Corner



By Elizabeth Bergstrom, MNPS Core Team Member

## Montana Native Plant Conservation Strategy, Part 1: The History and Evolution of the Montana Native Plant Conservation Strategy

In 2024, the first edition of The Montana Native Plant Conservation Strategy (MNPCS) became available as a web-based document hosted by the Montana State Natural Heritage Program. This represents a landmark effort contributing to the stewardship of Montana’s Vascular Plant Species of Conservation Concern, Unique Habitats of Conservation Concern and Plant Communities of Greatest Conservation Need. The Strategy focuses on seven elements which are foundational to retaining and enhancing an educated, informed and coordinated botanical network across the state of Montana (MNPCS, Executive Summary).

### *The Germination of an Idea*

The idea of developing a Plant Conservation Strategy was initially inspired six years ago at the 2018 Plant Conservation Conference. At the Conference, discussions lead to the formation of an ad hoc committee tasked with initiating development of the Strategy. The committee included Andrea Pipp, State Natural Heritage Program Botanist; Maria Mantas, our MNPS membership chairperson and professional botanist who has worked for the U.S. Forest Service and conservation nonprofits within Montana; Steve Shelly, then Regional Botanist with the U.S. Forest Service; and Wendy Velman, Bureau of Land Management State Botanist for Montana and Dakotas districts. Andrea, Maria, Steve, and Wendy then began the arduous process of contacting relevant individuals from county/ state/federal agencies, along with non-profit and consulting botanists. This led to the first meeting of the Partners Group, a collection of agencies, organizations, and interested parties seeking to promote a plant conservation strategy for Montana. The meeting was a resounding and well-attended success.

Following the Partners Group meeting, Andrea developed a presentation for the Plant Society Board of Directors which emphasized the need for a Montana-specific Plant Conservation Strategy. MNPS donated \$5,000 as seed money to start the project. Later, the U.S. Forest Service, Bureau of Land Management and Montana Natural Heritage Program provided monetary

contributions, employee hours or both towards the effort. All Partners involved with the MNPCS development provided significant contributions of time and/or funds.

State Plant Conservation Strategies across the U.S. often become part of the State Wildlife Action Plans, a document required to secure federal funding for prioritized wildlife conservation projects (that often include at-risk plants and habitats). These Plant Strategies can also highlight the need for protective legislation within each respective state, and serve as a communication tool with state legislators. The MNPCS was written for all Montanans, especially working professionals, private landowners, and all of us as native plant enthusiasts.

### *Growing the Concept*

The Partners Group meetings were a springboard for determining the direction that the MNPCS would take. Topics such as pollinators, specialized plant habitats, and plant communities which provide important habitat for wildlife in need of prescribed management intervention to persist in a healthy condition, were discussed. Elements of the successful rare plant strategies from Colorado and New Mexico were considered for inclusion, along with the status of Montana’s herbaria (essential tools to the understanding of botany), which, like rare plants and habitats, were identified as essential

components of a Montana Strategy.

From the larger Partners Group meetings, a smaller and very determined core team was identified with Andrea Pipp as the lead editor and project manager. This group met at least weekly, and then individually, with networks of others specialized in the conservation topic under development. There was meeting coordination and writing, and the inevitable rewriting, as concepts were formed and reformed to best fit the evolving MNPCS.

### *Continued Growth and Seed Dispersal*

The Conservation Strategy is dynamic, and designed to be modified and updated over time. For example, additional plant community profiles need to be completed. To date, only a few templates are developed for specific Unique Habitats of



---

Greatest Conservation Need and Plant Communities of Greatest Conservation Need.

Each of the MNPCS Components includes Recommended Actions with Objectives. Goals are organized by Information Needs, Protection and Regulation, Outreach and Education. As you read through the document, note how many times MNPS is mentioned or our sponsored programs, such as associated with Citizen Botany and Important Plant Areas. It's a lot! The second day of our upcoming MNPS Plant Conservation Conference provides a forum for further development of the Strategy Components and a chance to discuss early successes associated with the MNPCS. Our Native Plant Society is inextricably linked

to the Strategy and this is an opportunity for all MNPS members to participate. Your MNPS comprises a diverse and dynamic group of individuals that are capable of advancing the conservation of Montana's native plants.

On one of our cold winter nights, please start browsing the MNPCS, beginning with Andrea's very artfully written Executive Summary. This grassroots effort represents much work by a diverse group of people. You can find this document at <https://mtnhp.org/plants/NativePlantConservationStrategy.asp>.

Should you have comments on the MNPCS please email Andrea Pipp, our Editor and Project leader, at [apipp@mt.gov](mailto:apipp@mt.gov). Thank you.

---

## Exciting Finds from the First Montana Bumble Bee Atlas Season

Michelle Toshack, Conservation Biologist, Xerces Society, Contact info: [michelle.toshack@xerces.org](mailto:michelle.toshack@xerces.org)

With at least 29 species of bumble bees in Montana, the state has the highest diversity of bumble bees in the U.S.! The Xerces Society's Montana Bumble Bee Atlas launched its first field season this past June as a community science project to track and conserve bumble bees. Thanks to the efforts of participants across the state, we continue to make new discoveries about bumble bees. I'm excited to share a few of those finds from the first field season.

### Is the two-spotted bumble bee moving west?

In North America, bumble bee species are often classified as either "eastern" species (known from the east coast to the plains) or "western" species (known from the west coast through the Rocky Mountains). But bees don't know these boundaries, and sometimes they are found further east or west than previously documented. It is possible that these species have always had larger ranges than we realized, or that ranges are shifting. Either way, it's exciting (and valuable to our understanding and bee conservation!) when we find species in unexpected places.

One species that surprised us this summer is the two-spotted bumble bee (*Bombus bimaculatus*). In 2014, when *The Bumble Bees of North America* was published, records of this species were documented only as far west as central Nebraska and the Dakotas. Since then, it has been seen further west, in Montana, Wyoming, and Colorado.

This year, we found the two-spotted bumble bee in Livingston. This is the furthest west this species has been seen! Although a few observations aren't enough to say for sure that this bee is moving west (and how far it might go), it is an important step. As our

amazing volunteers continue to monitor where *B. bimaculatus* shows up in the future, we'll continue to piece together this puzzle.

### Western bumble bee found across different habitats and ranges

The western bumble bee (*Bombus occidentalis*), once widespread across the western U.S., has faced alarming declines over recent decades, leading to its petition for listing under the Endangered Species Act. Interestingly, Montana seems to provide

a refuge for this species, with populations still in decline but not as severely as other locations throughout the west. We want to understand why western bumble bee populations are stronger in Montana, so we can help populations of this species across the west recover.

This past field season, Bumble Bee Atlas participants documented 31 individuals across the state, including a notable detection south of Lewistown—further east of its typical range in western Montana. These bees were observed visiting a diverse array of flowers, including white spiraea (*Spiraea betulifolia*), bee balm (*Monarda fistulosa*), and Eaton's aster (*Symphotrichum bracteolatum*). Such findings highlight the role of community science in uncovering key ecological insights. We have a lot more to learn!



### Will you join the Atlas?

This community science project is vital for filling data gaps and informing conservation efforts. If you are interested in joining the Bumble Bee Atlas, sign up for our newsletter at [bumblebeeatlas.org](https://bumblebeeatlas.org) and you will hear from us as we launch the field season in June 2025!



# Make a Difference: Become Part of the Conservation Effort

By Elizabeth Bergstrom, Outgoing Conservation Committee Chair, Valley of Flowers Chapter  
and Carol Goffe, New MNPS Webmaster, Clark Fork Chapter

Conservation is at the heart of what the Montana Native Plant Society is all about - and the Conservation Committee needs new blood and energy to keep its vital work moving forward. Fortunately, our Society is rich in members with extensive backgrounds in botany, ecology and land management. You may be retired but want to keep your hand in, you may be mid-career with a particular passion, or you may be just getting started and could use the professional experience and contacts. Whatever your circumstance, we need you now.

Elizabeth Bergstrom & Jennifer Lyman have spearheaded the Conservation Committee for the past three years, but both have compelling new circumstances that leave them with too little time to keep all these projects moving forward. If you would take on just one, that would be incredibly helpful.

∞ **CITIZEN BOTANY:** This has been an important outreach to MNPS members by engaging them in re-validating the occurrences of rare plants statewide. This effort is essential to understanding rare plant status within Montana. A subcommittee has formed to address the next steps to further the program, but clearly it needs someone to manage the citizen botanists.

∞ **NATIVE PLANT CONSERVATION CONFERENCE:** The next two-day conference is scheduled for April 2026 in Missoula. The conference provides a forum to exchange information among land managers, universities and students. The second day is a vehicle for field botanists to work with rare plant species lists, Important Plant Area nominations, and the Conservation Strategy. We receive resource agency support from the USFS, NRCS, and BLM, as well as from nonprofits like The Nature Conservancy. Organizing this conference is a primary responsibility of the Conservation Chairperson, with the local chapter providing valuable logistical support. Former State Heritage Botanist Scott Mincemoyer has committed to help with the second day in 2026. This program needs an event organizer.

∞ **MONTANA NATIVE PLANT CONSERVATION STRATEGY:** The Strategy is available on the Montana Natural Heritage Program website; it is not a static document. More write-ups need to be developed for “Plant Communities of Greatest Conservation Need” and “Unique Habitats of Greatest Conservation Need.” “Vascular Plant Species of Greatest Conservation Need,” which also requires periodic review, will be further developed on the second day of the 2026 Conservation Conference. This program needs a professional to lead the way, a person who can coordinate with and accommodate others.

∞ **LAND MANAGEMENT ACTION REVIEWS:** The Conservation Committee writes letters addressing proposed land management activities statewide that affect rare plants, plant communities of concern, and/or invasive species. It's important for someone to keep on top of the agency contacts, changes to agency planning processes & policies, and the like. It's better if local issues are addressed by local chapters, but someone needs to keep on top of all this and make sure things aren't falling through the cracks. This program needs a coordinator who also can help keep our comments consistent and professional.

∞ **KELSEYA CONSERVATION CORNER:** Since conservation issues are key to our Society, the Conservation Corner needs to be a regular feature in our newsletter. Our last article was about recovery efforts for the Spalding's Catchfly. The person taking on this task doesn't need to write all the articles but does need to keep on top of a list of potential topics and authors to make sure the articles keep coming. This role would be to coordinate and possibly also write articles.

The following tasks are new efforts that the committee thinks are worthwhile:

∞ **A POLLINATOR SUBCOMMITTEE:** A group could be formed to coordinate MNPS activities with other pollinator efforts in the state. To some extent, coordination is already happening. For instance, the Valley of Flowers chapter encourages its members to participate with the Western Bumblebee Atlas program, and our state Society has promoted pollinator gardens. Now may be the time to choose a representative from each chapter to form objectives for a pollinator subcommittee and to find ways to involve members.

∞ **MINING RECLAMATION:** We could focus on bringing in speakers for MNPS Presents! to talk about using native plants in mining site restoration. Perhaps our Society could also be instrumental in developing a manual of techniques and plants useful for mining reclamation, something that is sorely lacking.

Please contact Elizabeth Bergstrom at [dodecatheon16@gmail.com](mailto:dodecatheon16@gmail.com) or 406-581-6571, Jennifer Lyman at [jencylyman@gmail.com](mailto:jencylyman@gmail.com) or 406-860-0223, Robert Pal at [rpal@mtech.edu](mailto:rpal@mtech.edu) or 406-496-4725, or anyone you know on the Board if you are willing to breathe new life into one of these projects that are at the heart of our organization.

We need you! Thank you.

# 2024 Activities of the Montana Native Plant Society

The Montana Native Plant Society continued its vigorous program of conservation and education through 2024. The Society is proud to report the following achievements from the past year:

## Education, Communication & Community

- ☞ Conducted 70 field trips from one corner of the state to the other.
- ☞ Sponsored 11 in-person workshops or presentations concerning native plants, all free and open to the public.
- ☞ Hosted 10 online presentations on native plant topics, drawing more than 600 participants.
- ☞ Distributed educational materials at several events.
- ☞ Sponsored a slate of Earth Day events in Bozeman.
- ☞ Co-hosted a week-long plant identification “station” for all Flathead Valley 5th graders.
- ☞ Convened in the Blackfoot Valley for our annual meeting featuring presentations, field trips and fellowship among 125 members.
- ☞ Published *Kelsey*, a quarterly compendium of articles and news on plant conservation, biology and education.
- ☞ Made financial gifts to Montana Audubon and Montana academic herbaria.

## Conservation

- ☞ Conducted seven weed-pull events.
- ☞ Commented on plans or projects of several public land management agencies.
- ☞ Worked with the Montana Natural Heritage Program to bring the pilot Montana Citizen Botany project to a successful conclusion. That project had trained more than 100 citizen scientists, who visited previously reported locations of rare plants, documenting their presence and coverage.
- ☞ Organized and hosted the biennial Montana Plant Conservation Conference, that drew 130 participants.
- ☞ Worked with partners to develop the Montana Native Plant Conservation Strategy, that will shape the actions of land-management agencies for decades to come.

## Gardening & Landscaping

- ☞ Designed or maintained three native plant demonstration gardens.
- ☞ Updated our online guide to sources of Montana native plant material.
- ☞ Grew native plants from seed and conducted a plant sale in Missoula.

## Nominate an MNPS Hero

It is time again to send in nominations for MNPS’ two periodic Awards: **The Outstanding Service Award** goes to MNPS members for extraordinary contributions to the Society. The **Special Achievement Award** is given to an individual— member or not— whose work exemplifies the mission and goals of the MNPS, namely, to “preserve, conserve, and study the native plants and plant communities of Montana, and to educate the public about the values of our native flora.” Nominations are due by April 1<sup>st</sup> and must include (1) which Award your nomination is for, (2) a description of the nominee’s contributions to the MNPS and/or the MNPS mission, and (3) what makes their work outstanding and worthy of recognition. Awards will be presented during the Annual Meeting, June 20-22, 2025, at Camp Needmore near Ekalaka MT. Send nominations to the Awards Committee via Karen Porter at [karenwporter44@gmail.com](mailto:karenwporter44@gmail.com).

## It’s MNPS Membership Renewal Season

It’s January, and that means it’s time to renew your annual membership to MNPS. If your membership is due, you will receive a reminder via email and/or postcard. If you don’t receive a reminder, it means you are either a lifetime member or you are already paid up for the next year. Please note, we are no longer accepting multiple year membership payments, so any payment above dues will be considered a donation. To avoid paying annually, you may wish to consider a lifetime membership. If you have any questions, please contact us at [mtnativeplantmembership@gmail.com](mailto:mtnativeplantmembership@gmail.com) and we can let you know your membership status. Please also let us know if there have been any changes in your contact information.

## MNPS Grants and Giving Program

**Scholarships** (new in 2025): We plan to offer one or more academic and professional scholarships in the spring. Please check the website in January or February for an announcement and application.

**Grants:** We are remodeling the old “Small Grants” program and plan to have this program available by fall. Please stay tuned.

## Donations

The Montana Native Plant Society greatly appreciates our members, donors, and volunteers who support the programs we deliver. We are now an eligible charity within the PayPal Giving Fund. Donations to MNPS through the Fund are received without service fees (at least 3%), which means that 100 percent of your donation comes directly to us. You can donate through the PayPal Giving Fund by clicking the donate button at the top of our website. FYI - It will be an anonymous donation unless you check the box below the donation amount to share your information with us. Thank you for your continued support!



# Gardener's Notebook

## Using Native Plants in Backyard Landscaping

### Purple Prairie Clover

*Dalea purpurea*, Vent. (Syn. *Petalostemum purpureum*)  
Fabaceae (pea family)

By Denise Montgomery, Valley of Flowers Chapter, Manager, Native Plants Dept., Cashman Nursery, Bozeman

Purple prairie clover is among my favorite native plants. The first time I saw them years ago, the flowers looked like sparkling pink jewels above the bunchgrasses, in a mountain grassland at 5,000 feet elevation in central Montana.

It is a perennial in the legume family native to the prairies, grasslands, sagebrush steppe, and roadsides of the Northern and Great Plains, from Canada south through the central U.S. (USDA-FS). Montana is at the western edge of its range, where it is distributed east of the Divide, mainly in the central and eastern regions of the state (Lesica, p. 306).

Thriving in areas with at least 15" of annual precipitation, it is adaptable to a variety of soils, provided they are well-drained, deep, gritty, or sandy loam to clay loam. It does not grow in heavy, compacted or wet soil. Because it establishes well in bare, disturbed soils and has moderate tolerance for metals and salinity, it is used in strip-mining reclamation, roadside re-vegetation and erosion control. Its drought tolerance may be attributed to its woody taproot, which can extend to 6' deep (USDA-FS).

*Dalea* is susceptible to encroachment from dominant grasses, weedy forbs, and woody species (it doesn't tolerate shade). It has evolved with the ecology of fire. Light grazing, and periodic, low-intensity fire can reduce competition. Though not currently listed as threatened or endangered in Montana (Montana Field Guide), its habitat faces threats from development, cultivation, encroachment, overgrazing, and prolonged drought.

High in nutrition, it provides good summer forage for pronghorn and livestock. Birds and small animals eat the seeds. Flowers depend on insects for pollination, flowering for four to six weeks, time and duration is influenced by temperature rather than precipitation. Plant associations include bluebunch wheatgrass, prairie Junegrass, blue grama, little bluestem, globemallow, dotted gayfeather, wavy-leaf thistle, curl-leaf mountain mahogany, juniper and ponderosa pine (USDA-FS).

Purple prairie clover is also a valuable and beautiful plant in the garden. Erect, single or multiple, lightly branched stems rise in a spray from a woody crown. Alternately arranged, compound, pinnate leaves with three to seven narrow lanceolate leaflets give

the plant an airy appearance. Each stem bears a dense, cylindrical cone-like spike encircled by a skirt of tiny, bright purple-pink, perfect flowers with exerted (protruding) orange-gold stamens. Flowers open from the bottom of the cone upward.

In my water-wise garden, among prairie dropseed, Munro's globemallow, prairie Junegrass, cutleaf daisy fleabane, dotted gayfeather, lead plant and penstemon, purple prairie clover's dazzling bright magenta flowers command attention from passersby and pollinators. Visitors include butterflies, beetles, wasps, and an abundance of various bees.



Bumble bee on *Dalea purpurea*

In September, seeds develop within bearded hulls. There are no special mechanisms to aid dispersal, so seeds tend to cling to the cone until disturbed by wind or brushed off, falling near the parent plant. Afterward, bare spikes persist, delicate, ash-white, slightly curved and punk-like. I find these attractive and leave them for fall interest. Seeds provide food and stems provide cover for birds and small wildlife, so I wait until spring to cut the plants back.

Purple prairie clover is easy to grow in full sun, in well-drained, aerated, deep soil, with moderate water. Grow with non-aggressive, generously spaced companion plants requiring similar soil and water needs. Little maintenance is required. As it fixes its own nitrogen, do not apply nitrogen fertilizer. Excessive nitrogen can destroy mycorrhizae. Don't fertilize during the first year. Fertilization is rarely needed, unless soil tests indicate deficiencies of phosphorus and potassium, then fertilize in spring and not at all after July 4. Usually free of pests and disease, weeding, clearing leaf litter, and watering is generally all that is needed. Do not mulch.

Plants and seeds are available from ethical, knowledgeable suppliers. Choose ecotypes from as near to your region as possible. Don't choose cultivars; they are bred for traits such as form, size, or color, at the expense of other, valuable traits. They often have reduced cold and drought tolerance, altered fragrance or color - the reflected wavelengths of light that attract pollinators - or lack nutritious, abundant nectar and pollen.

Never dig purple prairie clover plants from the wild: even small plants have deep taproots and won't survive transplanting.

# An Unusual Flower Morph

By Dalton Brantley, PhD Student, Ecology and Evolution Program,  
Division of Biological Sciences, University of Montana

If collecting seeds, follow the Montana Native Plant Society Guidelines for Collecting Native Plants ([mtnativeplants.org](http://mtnativeplants.org)). Select healthy potted plants with developed roots, but not root-bound or girdling. Vegetative top growth may be comparatively small, which is of little importance, but should be free of pests and diseases. Note: handle plants carefully; the taproot and lateral roots break easily.

Seed should be fully formed and plump, free of mold and undamaged by insects. For fall-sowing, it is not necessary to remove the hulls, and no special pre-treatment is required. Seed stored for spring or future planting must be cleaned (hulls and debris removed), placed in labeled glassine envelopes or jars, and kept in a cool, dry, dark place. Properly cleaned and stored seed can remain viable for over two years.

Some sources indicate that seeds planted in spring must first be cold stratified for 60 days, then scarified\* to break dormancy before sowing. Some recommend that only scarification is required; others say that neither is required, that seed only needs to be cleaned. Plant seed ¼" deep in moist soil in May. Don't mulch as it keeps soils too cool. Warm soils (60-70°F) are needed for germination. Keep the soil moist, not overly wet.

Soil: Remove weeds, leaf litter, mulch, and weed-barrier fabric. Loosen the soil of a large area, at least the width of a mature plant (about 18" wide) and least 14" deep. Break up clods, remove rocks. Amend if needed with large particle compost free of pesticides and herbicides. Don't use manure. Add a small amount of grit (I use coarse builder's sand and chicken grit), blending it first with the compost before incorporating into the soil.

Water evenly around the plant: never on the crown. Water thoroughly and deeply without over-saturating the soil - which should never be waterlogged. Watering frequency is variable through the growing season and depends on soil, precipitation, aridity, heat, sun, and wind. Water when the soil feels dry at several inches deep, and in the morning hours.

\*Scarification: Abrade the seed coat by rubbing the seed between two sheets of sandpaper.

## References:

Field Guide, Montana Natural Heritage Program, Montana State Library, Helena, MT: [fieldguide.mt.gov](http://fieldguide.mt.gov).

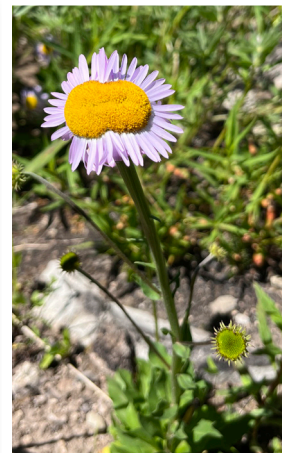
Manual of Montana Vascular Plants, Lesica, Peter, Brit Press, 2012. USDA-Forest Service Plants Database: [plants.usda.gov](http://plants.usda.gov).



Dalea purpurea, photos by Matt Lavin



This past summer while conducting research in the Beaverhead-Deerlodge National Forest, our field crew came across the glacial daisy, *Erigeron glacialis* Nuttall, pictured at right. Besides being quite a stunning member of Asteraceae, the morphology of the flower stood out against the surrounding *E. glacialis* population; this morph had what appeared to be two merged disc flowers, unusual compared to the typical flower arrangement of asters. As the crew's lead botanist, I was puzzled and didn't have the faintest idea what sort of physiological mishap would result in a flower like this. After spending far too long flipping through plant physiology textbooks, horticulture guides, and perusing images of double flowers, I discovered this individual was fasciated.



Fasciation is the technical term that describes a plant part that has abandoned normal symmetrical growth and instead grows rapidly in a single plane (Gorter 1965). In this *E. glacialis* specimen, rapid linear growth had distorted the capitulum, or flower head, and resulted in the disk flowers appearing merged. Equipped with a name and definition for this phenomenon, I learned that there is not a sole cause for fasciation, but rather any number of environmental stressors, pathogens, or even genetic mutations can be to blame (Geneve 1990). Fasciation is not even limited to flowers; this distorted growth can occur anywhere in the plant where meristems, the cells responsible for growth, are disrupted.

In this individual plant, the shoot apical meristem, which gives rise to leaves and flowers, was disrupted. The overall impact of fasciation on a plant's health and ecology is minimal, as fasciated organs differ from normal ones only in shape and a greater volume of tissue. In fact, after senescence, plants with fasciated flowers generally revert to their normal growth in the following growing season. Certainly, fasciation is an intriguing example of the amazing diversity of plants.

I hope you learned something new about some funky flowers, as it was quite the head scratcher figuring it out for myself. As I continue to monitor this site for the next couple of years, stay tuned to see if there are any more fascinating individuals to be found!

## References:

Geneve, R. 1990. Fascinated with fasciations. *American Horticulturist* 69(8):26-31.

Gorter, C.J. 1965. Origin of fasciation. p. 1977-1998 in *Differenzierung und Entwicklung/Differentiation and Development*. Berlin, Heidelberg: Springer.



# Jenny Tollefson and Shannon Kimball Receive 2024 Outstanding Service Award

By Peter Lesica, Clark Fork Chapter

Starting in the summer of 2010, Jenny Tollefson took the financial reins of the Montana Native Plant Society by becoming the treasurer. She managed all aspects of the society's finances. With the help of her two children, she took over the task of collecting the mail and opening dozens and dozens of envelopes and depositing the checks within them, recording the payments and paying the bills. But that's just the start. The treasurer is also in charge of creating an annual budget and continuously tracking income and expenditures to present to the Board of Directors twice each year. They file all required federal and state tax documents and business reports. They rectify the bank and PayPal accounts to the penny. And the treasurer serves as an advisor to chapters and committees. Jenny and her family took on this arduous and tedious task for five years. Then in 2015 she convinced her good friend, Shannon Kimball, to become the co-treasurer. Shannon, who was



Jenny Tollefson presented award by Peter Lesica

the financial manager for her mother's business, hit the ground running and went a long way to lifting the burden from Jenny's shoulders. Jenny and Shannon kept MNPS financially afloat for more than a decade, retiring in 2021.

Both Jenny and Shannon have a history of plant conservation work beyond the Native Plant Society. Jenny was a technical writer for the U.S. Forest Service Fire Lab followed by doing land stewardship work for several conservation organizations. Starting in 2011 she has been the Stewardship Manager and then Stewardship Director for Five Valleys Land Trust. Shannon was the curator of the University of Montana Herbarium from 2015 through 2022. Prior to 2015 Shannon worked for the Montana Natural Heritage Program. After that, she worked for the U.S.

Forest Service Rocky Mountain Research Station helping assemble information on Region One research natural areas. At the turn of the century, she gathered field data for Glacier National Park's vegetation inventory. MNPS is honored to present Jenny and Shannon with the 2024 Outstanding Service Award.



Teagan Hayes presenting award to Shannon Kimball

## Sneak Peek: 2025 Montana Native Plant Society Annual Meeting

The Maka Flora Chapter will host the 2025 Annual Meeting of the Montana Native Plant Society, June 20-22, 2025 at Camp Needmore on the Sioux District of the Custer National Forest, Ekalaka, Montana. The chapter is excited to welcome you to southeastern Montana and its diverse habitats and plants. Field trips will include Forest Service, BLM, and private lands to see a wide variety of plant species including several that are rare and/or unique to the area such as multi-stemmed goldenwood (*Oönbspis multicaulis*, regional endemic), Dakota buckwheat (*Eriogonum visheri*, regional endemic), plains frostweed (*Crocianthemum bicknellii*, new species and family for Montana in 2019), double bladderpod (*Physaria brassicoides*), Wyoming Ipomopsis (*Ipomopsis congesta ssp. pseudotypica*), and bur oak (*Quercus macrocarpa*, Montana's only native oak, occurring only in Carter County in MT).

Forest Service District Ranger and MNPS member Kurt Hansen will address the group Friday night, sharing insight on the history of the Sioux Ranger District and surrounding area and its botanical riches. Kurt has been instrumental in updating the district's plant list, including the addition of several species he has documented.



Saturday night we will open the floor (or fire pit) to the membership for a variety show. Please plan to share your talent, or otherwise entertaining ability, with the group...song, dance, poetry, impersonation, mime, comedy, recitation, skit, etc. - botany-related or not!

The setting will be rustic, with dormitory-style cabins, tent and RV camping on site, and limited motel accommodations and RV sites in Ekalaka (8 miles) or Baker (35 miles). Meals will include catered dinners on Friday and Saturday nights, and continental breakfasts on Saturday and Sunday mornings.

Because of the long distance to Ekalaka from much of Montana, we are encouraging chapters to explore possibilities for shared travel to the meeting, e.g., group van or RV rentals. We are also soliciting silent auction or raffle items for our annual fundraiser, so please let us know if you have a donation you can bring to the event. Registration materials will be available in April 2025. Contact Maka Flora president Libby Knotts at [libbyknotts@gmail.com](mailto:libbyknotts@gmail.com) or 808-238-4902 if you would like more details, have questions, or have something to contribute to the meeting.

*Penstemon angustifolius*, Medicine Rocks, 2011 Annual Meeting, photo by Bob Person

# MONTANA NATIVE PLANT SOCIETY MEMBERSHIP

Name (please print) \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

E-Mail \_\_\_\_\_





Phone \_\_\_\_\_

**JOIN, RENEW, OR DONATE  
ONLINE AT:  
[www.mtnativeplants.org](http://www.mtnativeplants.org)**

Please notify us promptly of address changes (physical or email) at [mtnativeplantmembership@gmail.com](mailto:mtnativeplantmembership@gmail.com)

<input checked="" type="checkbox"/>	Membership Type	Dues
<input type="checkbox"/>	Individual	\$30
<input type="checkbox"/>	Family	\$50
<input type="checkbox"/>	Business/Organization	\$75
<input type="checkbox"/>	Living Lightly/Student	\$20
<input type="checkbox"/>	Lifetime-Individual Only (one-time payment)	\$1,000
<input type="checkbox"/>	Paper Kelseyia Fee Add \$10 if you wish to receive a paper copy of our quarterly newsletter Kelseyia, otherwise an e-version of Kelseyia will be delivered via email	\$10

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 *Kelseyia*\*. You can select from the following giving categories:

	<input type="checkbox"/> Kelseyia — \$50	
	<input type="checkbox"/> Bitterroot — \$100	
	<input type="checkbox"/> Lupine — \$250	
	<input type="checkbox"/> Ponderosa Pine — \$1000	
	<input type="checkbox"/> Other — \$ _____	

- \*Check if you wish your donation to be anonymous  
 Check if you wish to be contacted for volunteer opportunities

## MNPS Chapters and the Areas They Serve

Members are welcome to affiliate with any chapter. Please select  your chapter affiliation.

- Artemisia** (Yellowstone, Golden Valley, Musselshell, Rosebud, Treasure, Big Horn, Carbon, & Stillwater Counties)
- Calypso** (Beaverhead, Deer Lodge, Silver Bow & parts of Madison Counties)
- Clark Fork** (Mineral, Missoula, Powell, Granite, Ravalli & parts of Lake Counties)
- Flathead** (Flathead & parts of Lake and Lincoln Counties)
- Kelsey** (Lewis & Clark, Cascade, Pondera, Teton, Chouteau, Judith Basin, Meagher, Broadwater & parts of Jefferson Counties)
- Maka Flora** (Richland, Roosevelt, McCone, Sheridan, Daniels, Dawson, Prairie, Wibaux, Custer, Fallon, Powder River & Carter Counties)
- Valley of Flowers** (Gallatin, Park, Sweet Grass and parts of Madison Counties)
- Eastern-at-Large** (Glacier, Toole, Liberty, Hill, Blaine, Phillips, Valley, Garfield, Petroleum, Fergus, & Wheatland Counties)
- Western-at-Large** (Sanders & parts of Lincoln Counties)

**Total Enclosed \$** \_\_\_\_\_

Make checks payable to: **Montana Native Plant Society**  
Please mail this form with your check to:

**MNPS  
PO Box 8783  
Missoula, MT 59807-8783**

**Welcome to the  
Montana Native Plant Society!**

Membership in MNPS is on an annual basis, March 1<sup>st</sup> to February 28<sup>th</sup>. Memberships processed before November 1<sup>st</sup> will expire the following February 28<sup>th</sup>. Memberships processed after October 31<sup>st</sup> will expire February 28<sup>th</sup> of the year after.



# MONTANA NATIVE PLANT SOCIETY

P.O. Box 8783  
Missoula, MT 59807-8783

PRSR STD  
US POSTAGE  
PAID  
Plains, MT  
59859  
PERMIT NO. 3

© Copyright 2025  
Montana Native Plant Society  
Printed on recycled paper

## 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.

Your yearly membership fee includes an electronic 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. All items should be emailed to [scottguse@yahoo.com](mailto:scottguse@yahoo.com) and [jenhintzguse@gmail.com](mailto:jenhintzguse@gmail.com), or mailed to: Scott and Jennifer Guse, *Kelsey* Editors, 725 Twin Lakes Road, Whitefish, MT 59937.

### Spring issue submission deadline is March 10

Please send web items to our webmasters:

**Bob Person and Carol Goffe** at [mnpswebmaster@gmail.com](mailto:mnpswebmaster@gmail.com)

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](mailto:scottguse@yahoo.com) or [jenhintzguse@gmail.com](mailto: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](http://www.mtnativeplants.org)

## MNPS BOARD OF DIRECTORS

<b>Co-Presidents</b>	Robert Pal	Butte	496-4725
	Dave Hanna	Choteau	788-4938
<b>Past-President</b>	Patrick Plantenberg	Townsend	431-4615
<b>Vice President</b>	Kenda Herman	Clancy	683-2737
<b>Secretary</b>	Camie Westfall	Helena	363-8295
<b>Treasurer</b>	Laurie Kurth	Frenchtown	626-4462
<b>Administrative Asst.</b>	Leah Grunzke	Bemidji, MN	493-0544
<b>Newsletter Co-editors</b>	Scott Guse	Whitefish	998-7638
	Jen Hintz Guse	Whitefish	270-7028
<b>Directors At-Large</b>			
Eastern Montana	Kelsey Molloy	Malta	654-4566
Western Montana	Jon Reny	Libby	334-0459
<b>Chapter Representatives</b>			
Artemisia Chapter	Jessica Callahan	Billings	507-696-5467
Calypso Chapter	Catherine Cain	Glen	498-6198
	Karen Porter	Butte	498-9728
Clark Fork Chapter	Teagan Hayes	Missoula	920-979-9009
Flathead Chapter	Tara Carolin	Kalispell	607-7670
Kelsey Chapter	Elena Johnson	Helena	459-2987
Maka Flora Chapter	Libby Knotts	Lambert	774-3778
Valley of Flowers Chapter	Gretchen Rupp	Bozeman	586-8363
<b>Standing Committees</b>			
Conservation	Elizabeth Bergstrom	Ennis	581-6571
	Jennifer Lyman	Red Lodge	860-0223
Landscaping/Reveg.	Patrick Plantenberg	Townsend	431-4615
Membership	Maria Mantas	Bigfork	407-2045
Grants & Giving	Annie Garde	Missoula	721-7627
	Betty Kuropat	Troy	295-7143

Moving? Please let us know at [mtnativeplantmembership@gmail.com](mailto:mtnativeplantmembership@gmail.com)