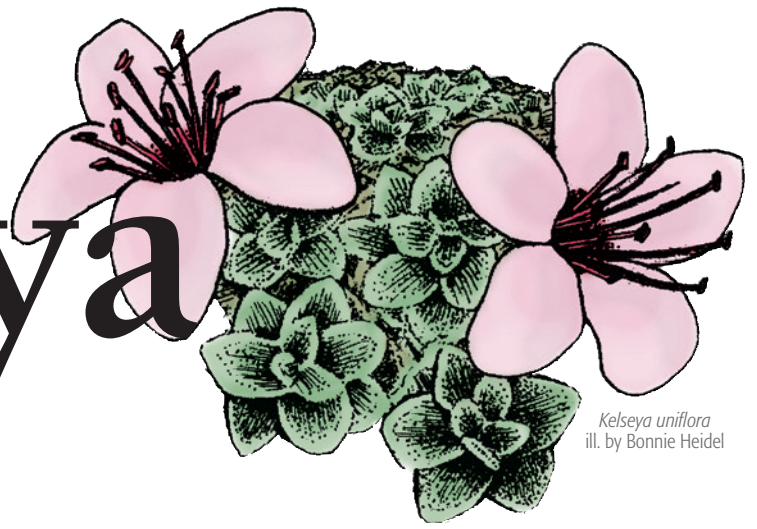


Kelseya

Newsletter of the Montana Native Plant Society



Kelseya uniflora
ill. by Bonnie Heidel

Spring Beauties



Clockwise from upper left: Expanse of, possibly, upland larkspur (*Delphinium nuttallianum*), meadow death camas (*Zigadenus venenosus*) and buttercup-leaved suksdorfia (*Suksdorfia ranunculifolia*); pygmy bitterroot (*Lewisia pygmaea*); violet suksdorfia (*Suksdorfia violaceae*); stonecrop (either *Sedum stenopetalum* or *S. lanceolatum*); arrowleaf balsamroot (*Balsamorhiza saggitata*); and one-flowered broomrape (*Orobanche uniflora*), parasitic on many hosts.



On June 2, Viktoria Wagner from the University of Alberta led a group from the Flathead Chapter to visit the unique flora of Johnson Terraces. These shallow, moss-covered soils over argillite bedrock are flooded in spring, giving rise to some beautiful species. Viktoria also shared insights from her research project on this habitat, supported by a MNPS Small Grant.

Photos by Tammie Lee.



Chapter Events

Calypso Chapter

Info: Catherine Cain at 498-6198, nativeplants@montana.com.

Sunday, October, Date/Time TBA. Dyeing with Native Plants.

Learn to use native plant materials to dye yarns and fabrics. We'll have several native dyes available free of charge at the event, but feel free to bring your own concoctions as well. A limited number of silk scarves will be on hand for purchase. Presented by Jessie Salix, botanist, Beaverhead-Deerlodge National Forest. For details about date, time and place: Jessie at 683-3749.

Clark Fork Chapter

Info: Anne Garde at 721-7627, anniegarde@yahoo.com.

Saturday-Sunday, July 20-21, Time TBA. High Altitude Flowers in the Snowcrest Range. Wayne Phillips will lead this overnight trip, consisting of a Saturday afternoon hike, for those who arrive by noon, and a Sunday morning hike for all. Either or both outings will provide tremendous wildflower diversity, from the sagebrush up to the alpine on the summit of Sunset Peak at 10,581 feet. Going all the way to the summit may or may not be part of our experience but, for those who are able, the summit is a walk-up type climb. Registration is required. Contact: Paul Buck at (970)901-2418, paul7703@gmail.com, or visit [Facebook.com/MNPSClarkForkChapter/events](https://www.facebook.com/MNPSClarkForkChapter/events) for a map and details.

Saturday, August 10, 9:00 a.m. Late Summer Wildflowers of the Montana-Idaho Divide. Hike the Lost Creek Trail with Peter Lesica to just below the Montana/Idaho Divide. It's a 50-mile drive from Missoula on I-90 and then 12 miles on gravel road to the trailhead. This is a three-mile hike with 1,800 feet of vertical gain. Meet at the MacKenzie River Pizza parking lot at I-90 and Grant Creek Rd. Group size is limited to 20 people; sign-up required. Info: Peter at lesica.peter@gmail.com. Visit [Facebook.com/MNPSClarkForkChapter/events](https://www.facebook.com/MNPSClarkForkChapter/events) for a map and details.

Saturday, September 21, 9:00 a.m. Trees of the Bitterroot Valley. Join forest-expert Steve Arno on the Bass Creek Trail to view a variety of native trees, including some big old-growth conifers, and observe the effects of fire exclusion and recent restoration forestry using prescribed burns. This outing involves only a half mile of very easy walking; we'll spend most of our time on discussion. This site is accessible via a paved road and is only about 45 minutes by car from Missoula. Meet at 8:15 a.m. at the southwest end of the Walmart parking lot at Highway 93 and Miller Creek Rd. to carpool. Info: Paul Buck at (970) 901-2418, paul7703@gmail.com, or visit [Facebook.com/MNPSClarkForkChapter/events](https://www.facebook.com/MNPSClarkForkChapter/events) for a map and details.

Thursday, October 10, 6:30 p.m. The State of Montana Arboretum, which is the University of Montana Campus, has the largest collection of different woody plants in Montana. Stroll through this wonderful resource with UM horticulturalist Kelly Chadwick. Meet in The Root, directly north of Main Hall and south of our Montana Native Botanic Gardens. Note earlier time.

Eastern At-Large

Info: Jennifer Lyman at 426-1227, jencylyman@gmail.com

Saturday, July 13, 9:00 a.m. Alpine Plants of the Beartooth Mountains. Join us for a field trip to enjoy alpine plants of the Beartooth Mountains south of Red Lodge. Bring water, lunch, and appropriate clothing for alpine walking on uneven ground. Raincoats are a good idea in case of afternoon storms. Meet at the US Forest Service parking lot (Highway 212) at the south end of Red Lodge. Info: Jennifer Lyman at 426-1227, jencylyman@gmail.com.

Flathead Chapter

Info: Tara Carolin at 260-7533, mnps.flathead@gmail.com.

Tuesdays through August 27, 9:00 a.m. Glacier National Park Nursery. Volunteer to help with seeding, transplanting, weeding and cleaning, or work on a research or experimental project. Bring a sack lunch, your favorite work gloves, and clothes that can get dirty. Drop in and work an hour or stay the entire day. Meet at the GNP Native Plant Nursery in West Glacier. Info: Glacier Native Plant Nursery at 888.7835, or visit the GNP Facebook page and look for Volunteer Tuesdays.

Saturday, July 13, 10:00 a.m. Medicinal Plants of Lone Pine State Park. Join Robyn Klein, medical botanist, and Derrick Rathe, park ranger, on this one-of-a-kind hike to learn about the edible and medicinal plant history of the flora here. Expect an easy, two-hour stroll with frequent stops for discussion. Robyn is a western herbalist and teaches plant identification and ethnobotany at Montana State University. Meet at Lone Pine State Park Visitor Center, 300 Lone Pine Rd., Kalispell. Group size is limited to 30; registration required. Info: hailey@centerfornativeplants.com.

Sunday, July 14, 8:00 a.m. Whitebark Pine Ecology on Mt. Aeneas. Whitebark Pine is a fascinating keystone species that provides multiple benefits to alpine ecosystems. They are under threat, however, which could lead to problems for species that depend on them as a source of shelter and food. Join the Montana Wilderness Association and the Whitebark Pine Ecosystem Foundation on this hike to discuss Whitebark pine ecology and restoration on the way up to the summit of Mt. Aeneas. Expect a strenuous, seven-mile hike with approximately 2,000 feet of elevation gain. We'll stop for lunch at the summit and enjoy the fantastic views! Registration required at wildmontana.org/walks.*

**This trip currently is full but you can join the wait list at wildmontana.org/walks.*

Friday, July 19, 10:00 a.m. Glacier National Park Weed Blitz. Join fellow citizens in removing invasive plants from priority sites in Glacier National Park. 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; the afternoon will be in the field. Bring water and gloves. Lunch will be provided by the Glacier National Park Conservancy. Please RSVP by July 15 at glac_citizen_science@nps.gov or by calling 888-7986.

Sunday, July 21, 9:00 a.m. Red Meadow Lake/Lake Mountain. Join plant ecologist Maria Mantas to search for the rare slim larkspur

(*Delphinium depauperatum*) in subalpine meadows near Red Meadow Lake in the Whitefish Range. If we are lucky, we may even re-locate a population of sweetgrass (*Hierochloa odorata*) that was found in the same location more than 35 years ago. Afterwards, we'll hike to the Whitefish Divide and climb Lake Mountain, with scenic views into Glacier National Park and the North Fork of the Flathead. This hike is moderately difficult. Group size is limited to 12 people; sign-up required. Info: Maria at 407-2045.

Sunday, July 21, 9:00 a.m. Ear Mountain Natural Area and Yeager Flats Hike. The moderately difficult, five-mile round-trip hike led by Dave Shea passes through limber pine savannah, narrow-leaved cottonwood groves, sagebrush, Douglas-fir/Englemann spruce forest, and a portion of the 2000 lightning-caused Ear Mountain fire. In these varied habitats grow a great variety of shrubs, grasses, and forbs, including bitterroot and several orchids. Some archaeology and history, as well as Rocky Mountain Front geology, wildlife, and management issues will be discussed. Meet at the Chateau Information Center parking lot at the north end of town on Hwy 89. This hike is co-sponsored by the Montana Wilderness Association; registration required at wildmontana.org/walks.
**This trip currently is full but you can join the wait list at wildmontana.org/walks.*

Saturday, August 3, 11:00 a.m. Introduction to Native Solitary Bees. Join Leah Grunzke at the Center for Native Plants in Whitefish for an introduction to native solitary bees. Leah will show us the different types of solitary bees, and how they differ from honeybees and bumblebees. She'll offer gardening tips to encourage native pollinator conservation and how to establish and care for wild bee nesting sites. Leah is a botanist and educator based in Lewistown, Montana. Bring a lawn chair as seating is limited. Co-sponsored by and located at Center for Native Plants, 5605 US HWY93 S, Whitefish.

Thursday, August 29, 6:30 p.m. To Bee or Not to Bee? Creating Pollinator Habitat in Your Backyard. Join the Flathead Conservation District for a free, two-hour workshop on backyard pollinator conservation. We'll focus on how to use native plants to provide forage, nesting, and overwintering habitat for our native pollinators — no matter how big or small your garden is! This workshop will take place at the Flathead Conservation District's newly constructed demonstration garden, funded in part by a grant from the Montana Native Plant Society. Meet at Flathead Conservation District Office, 133 Interstate Lane, Kalispell. Info: Hailey Graf at 752-4220, hailey@flatheadcd.org.

Kelsey Chapter

Info: Bob Person at 443-4678, thepersons@mcn.net.

The Kelsey Chapter hosted this year's Annual Membership Meeting, June 21-23, in the Cypress Hills of southern Saskatchewan. Look for field trip reports, election results, and award announcements in the fall issue of *Kelsey*.

Maka Flora Chapter

Info: Dave Branson at 489-0463, dhbranson@gmail.com.

Valley of Flowers Chapter

Info: Beth Madden, 224-1012, bethmadden64@gmail.com.

Saturday, July 13, 9:00 a.m. An Intro to Habitat Types & Plant Communities of Montana's High Plains. Montana State University plant ecologist Tad Weaver leads this visit to the Headwaters State Park vicinity, an area representative of Montana's High Plains. We will observe and compare plant communities with respect to composition, processes, and environmental differences. During short walks at a few sites we will observe dominant species, and environmental and successional relationships. The tour will take much of the day, particularly for participants who want to extend it to the nearby Madison Buffalo Jump, so bring lunch, water and anything else you might want. Meet at Museum of the Rockies parking lot for carpooling. Info: Tad Weaver at 586-3270, tweaver@montana.edu.

Wednesday, July 17, 6:00 p.m. Tour of the Cannery District Landscape. Linda Iverson, landscape designer for the Cannery, will walk us through areas of the landscape that were seeded with native grasses and forbs to look at plantings in beds and bioswales. Meet in front of the Daily Coffee Bar at Oak and Rouse. After the tour we are planning to have dinner at one of the restaurants in the Cannery District. Info: Linda Iverson at 930-1682, lilandscape@mtintouch.net.

Saturday-Sunday, July 20-21. Centennial Valley Explorations. In preparation for hosting the 2020 MNPS Annual Meeting, we will camp and explore in the Centennial Valley. Anyone thinking of leading a field trip during next year's event are especially encouraged to take advantage of this opportunity. Join us for all or part of this weekend. For field trips, we will meet at Red Rocks Lake National Wildlife Refuge headquarters at 9:30 a.m. on both July 20 and July 21 for carpooling. Camping is on your own. Some members plan to camp at Red Rocks Lakes National Wildlife Refuge. There is also lodging/camping at Elk Lake Resort. Be prepared for the remoteness of the valley: fill your vehicle's fuel tank before leaving the paved highways (it's nearly 50 miles to the nearest gas station); dirt and gravel roads are rough and flat tires are not uncommon. Info: Beth Madden at 224-1012, bethmadden64@gmail.com.

Sunday, August 4, 9:00 a.m. Deep Creek, Paradise Valley. Join us on a visit to the habitats of the South Fork of Deep Creek via a Forest Service trail that begins in the foothills of the Paradise Valley. We will start with a moderate half-mile climb through open grassland and shrub-dotted hills. The trail then drops into a forested canyon as it crosses the South Fork of Deep Creek and heads into the Absaroka-Beartooth Wilderness, climbing from approximately 6,000 feet to more than 9,600 feet elevation over five miles, reaching an alpine pass into Davis Gulch. This area was thoroughly burned during the 2012 Pine Creek Fire so we will be observing post-fire plant succession and ecology. This trip is rated moderate to difficult (depending on how far we make it toward the pass). Meet in the Albertson's parking lot in Livingston. Info: Jeff Copeland at 539-6029, jouzelcopeland@gmail.com.

Monday, August 5 6:30 p.m. Bird-Friendly Gardens Walk. This pleasant stroll includes two in-town yards that have been designed to attract birds, pollinators, and other wildlife, as well as inviting

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MNPS News

President's Platform

What needs are served by the Montana Native Plant Society? Should we continue on our current path? Can we? What challenges and opportunities are we facing? What follows is my thinking about current roles our organization plays that I think are absolutely fundamental to our purpose. In the next issue, I'll discuss some trends that hold both promise and challenge. As always, I welcome your feedback. You can find my contact information on the back page of the newsletter.

So, does there need to be a Montana Native Plant Society? Not in any formal sense. There's no rule that each state must have an organization dedicated to the "preservation, conservation and study of native plants and plant communities" of that state. MNPS didn't exist 35 years ago, and it might cease to exist at some point in the future should volunteer enthusiasm run out. But it ought to exist for as long as there is a Montana, in my view.

Obviously, the activities of MNPS give to members the sheer pleasure of mingling with like-minded folk and the satisfaction of learning about our surroundings. But this "study" component of our mission directly supports our "preservation" and "conservation" goals as well.

For example, no one else fosters the propagation of native plants statewide, and their appreciation in domestic landscapes. Native-plant landscaping is becoming an important trend in our growing, water-stressed communities. Western Montana is experiencing an ongoing influx of newcomers, many of whom don't know a noxious weed from a pretty garden plant. But they're enthusiastic and willing to learn! Education – especially in the company of other curious folk – leads to appreciation and the development of a conservation ethos.

Furthermore, in MNPS, young biologists have the opportunity to meet and collaborate with more-seasoned colleagues, which helps launch the next generation of Montana botanists.

Other of our activities do take place on a more official basis. For example, land management agencies are always under pressure to allow (and even conduct) land-disturbing activities that are detrimental to native plant communities. As a statewide, 700-member organization, the comments and suggestions of MNPS on agency proposals can have substantial impact in discouraging these activities and in steering agency plans in positive directions. At the broadest scale, MNPS is uniquely suited to lead the development of an overall strategy for conserving Montana native plants and their habitats, and we've taken this on. This rather abstract and bureaucratic undertaking is likely to have profound positive outcomes for generations to come.

These activities show the Montana Native Plant Society to be a strong, positive force in our state. Will our successors be doing the exact same things a generation from now? Most likely not – but hopefully the Montana Native Plant Society will continue to be the leader in the study, preservation and conservation of our native plants and plant communities.



– Gretchen Rupp

Passing the Torch

Cathie Jean Retires from Long Run on the MNPS Board

If you pay attention to the small print in your *Kelseya*, you may have noticed that Cathie Jean has played an active role in the leadership of the Montana Native Plant Society for nearly two decades. Cathie chaired the Small Grants Committee from 2002 through 2009, then assumed the Membership Chair from 2009 until this spring. She was instrumental in awarding more than a dozen MNPS Small Grants to local native plant gardens and university research projects. As Membership Chair she ushered us through the transition to digital newsletters and the option of paying membership for more than one year at a time. She created a complex and highly functional database to track our growing and diverse membership, and worked closely and easily with other MNPS board members to make the membership process run smoothly. She has also contributed vitally to her local Valley of Flowers Chapter.

After a long run of service, Cathie Jean has decided to step down from her position on the board to enjoy time with her family, turning over her position as Membership Chair to Maria Mantas of the Flathead Chapter. We congratulate and thank Cathie for her outstanding service on the board of directors. She surely will be missed at our board meetings. *Thank you Cathie Jean!*

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outdoor living spaces. Join Paulette Epple from Sacajawea Audubon as we visit Marlena Renwyk's and Mary Keck's gardens. Marlena's gardens feature an entire front yard beautifully planted with native, drought-tolerant plants that are also pollinator and bird friendly. Mary's yard is a mature landscape of trees, shrubs, vines, berries, perennials, and ground covers that combine to create a multi-layered, dense habitat so valuable to birds. Meet on the north side of Beall Park (E. Short Street). Info: Paulette Epple at 580-6186, conservation@sacajaweaudubon.org.

Wednesday, August 7, 7:00 p.m. Story Mill Park Wetland Walk. Stalk wily wetland plants in Story Mill Park during the prime wetland plant ID season with retired NRCS biologist Pete Husby. We'll take a look at willows, sedges, rushes, and forbs growing here. Bring a hand lens and Montana flora guide if you have them. Meet at the Story Mill Park Trailhead parking lot, on Story Mill Road approximately 0.2 miles south of the old Story Mill Elevators and next to the new West Paw Dog Park. Info: Pete Husby at 451-1521, peterohusby@yahoo.com.

Western At-Large

Info: Pat McLeod at (575) 687-3335, pat_mcleod@yahoo.com.

Trembling Aspen Leaves Could Save Future Mars Rovers

From *ScienceDaily*, 3/18/19

Researchers at the University of Warwick in England have been inspired by the unique movement of trembling aspen leaves to devise an energy harvesting mechanism that could power weather sensors in hostile environments, and could even be a back-up energy supply that could save and extend the life of future Mars rovers.

Third-year engineering undergraduates have in recent years been set the puzzle of why aspen leaves quiver in the slightest breeze. University of Warwick Engineering researchers Sam Tucker Harvey, Dr Igor A. Khovanov, and Dr Petr Denissenko were inspired to look more closely at what they were asking of their students, and to take the question one step further.

They decided to investigate whether the underlying mechanisms that produce the low wind-speed quiver in aspen leaves could efficiently and effectively generate electrical power, simply by exploiting the wind-generated mechanical movement of a device modeled on the leaf. Their answer, published in a paper entitled "A Galloping Energy Harvester with Flow Attachment" in the March 18 edition of *Applied Physics Letters*, is a resounding, Yes.

Lead author of the report, Sam Tucker Harvey, said:

"What's most appealing about this mechanism is that it provides a mechanical means of generating power without the use of bearings, which can cease to work in environments with extreme cold, heat, dust or sand. While the amount of potential power that could be generated is small, it would be more than enough to power autonomous electrical devices, such as those in wireless sensor networks. These networks could be utilised for applications such as providing automated weather sensing in remote and extreme environments."


Dr. Petr Denissenko further noted that one future application could be as a backup power supply for future Mars landers and rovers whose solar panels and other components are vulnerable to planetary-scale dust storms.

The key to aspen leaves' low-wind but large-amplitude quiver isn't just the shape of the leaf but, more importantly, relates to the effectively flat shape of the stem. The researchers used mathematical modeling to come up with a mechanical equivalent of the leaf. They then used a low-speed wind tunnel to test a device with a cantilever beam, like the flat stem of the aspen leaf, and a curved blade tip with a circular arc cross-section to act like the main leaf.

The blade was then oriented perpendicular to the flow direction, which allows the harvester to produce self-sustained oscillations at

uncharacteristically low wind speeds like the aspen leaf. The tests showed that the air flow becomes attached to the rear face of the blade when the blade's velocity becomes high enough, hence acting more similarly to an aerofoil rather than to the bluff bodies that have typically been studied in the context of wind energy harvesting.

In nature, the propensity of a leaf to quiver is also enhanced by the thin stem's tendency to twist in the wind in two different directions. However, the researchers modeling and testing found that they did not need to replicate the additional complexity of a further degree of movement in their mechanical model. Simply replicating the basic properties of the flat stem and main leaf was enough to create sufficient mechanical movement to harvest power.

The researchers will next examine which mechanical-movement-based power generating technologies would best be able to exploit this device and how the device could best be deployed in arrays. 



Quaking aspen (*Populus tremuloides*) Photo by Matt Lavin

Science Daily is an online resource that aggregates and publishes lightly-edited press releases about science, similar to Phys.org and EurekAlert!. For the original story, go to www.sciencedaily.com.

WELCOME ABOARD!

The Montana Native Plant Society welcomes the following new members:

Calypto Chapter:

Jen Cowardin, Sandra Love, Marianne Schappek, Steve Sherman, Debbie Sporich, and Susie Williams

Clark Fork Chapter

Joe Baker, Nancy Heil, Jayne Kashiwaeda, Mary Lake, Nancy Marmont, and Pamela Murphy

Eastern-At-Large

Jason Comer, Hillary Maxwell, and Cheryl Pickett-Gies

Flathead Chapter

Christine Dye, Leslie Kermath, and Gunnar Rocksund

Kelsey Chapter

Shannon Banwell, Gretchen Bingman, Winifred Horne, Jeff Stone, and Michael Willing

Maka Flora

Kathie Gabel

Valley of Flowers Chapter

Kelsey Brickell, Kevin Brustuen, Carol & Jeff Carpenter, Julie Cleary, Paulette Epple, David Kembel, Mark Lusch, Patricia Simmons, Nonnie Thompson, and Shana Wood



Gardener's Notebook

Using Native Plants in Backyard Landscaping

Arrowleaf Balsamroot *Balsamorhiza sagittata* (Asteraceae)

By Denise Montgomery, Valley of Flowers Chapter

In Montana, we know that spring truly has arrived when slopes are awash with the gold of sunny arrowleaf balsamroot blooms! Long-lived and hardy, this iconic plant of the mountain west is a robust perennial found on plains, foothills, and sunny open parks to 9,000 feet in areas of low annual rainfall (from 12 to 25 inches).

Its habitat includes sagebrush communities (primarily basin and mountain big sage), mountain scrub, openings in Rocky Mountain juniper, ponderosa and limber pines, Douglas-fir, and open aspen stands. Deer, elk and livestock eat the flowers and young leaves in spring and early summer. The plant is used by mule deer year round, and provides nutritious seeds for birds and small mammals, and nectar and pollen for bees and butterflies. The deep taproots of balsamroots are fire resistant; stems can re-grow after a burn.

Though tough and resilient, and even common on the hillsides around us, finding plants or seed for garden use can be hard due to the challenges of growing this plant in a nursery. Balsamroot requires time to mature enough to produce flowers — as long as three to five years or more — but for the patient gardener, they are worth the wait. Once established, balsamroot plants can live and flower for 30 years or more. Success begins with selecting the proper site, and resisting the temptation to “love” the plants too much with excessive watering and fertilization.

Choose a site with deep, loose, well-drained soil in full sun, where plants will have little competition from aggressive neighbors. Take advantage of slopes and berms for best drainage. Natural companions include Lupinus species, low larkspur (*Delphinium bi-color*), sage (*Artemisia tridentata tridentata*; *Artemisia tridentata subsp. vaseyana*), as well as bunch grasses.

A single plant makes a beautiful specimen, but for seeds to develop you will need to plant several for cross-pollination. Arrowleaf balsamroot is insect-pollinated, especially by bumblebees and other native bees, so beware of pesticide use.

Select plants that have been as locally grown as possible from a reputable nursery. Choose young plants with healthy leaves. Young plants are more easily transplanted: a three-year-old potted plant may have only one or two leaves but a taproot of eight inches or more (eventually, taproots can grow to 4 inches in diameter and more than 6 feet long!). NEVER dig arrowleaf balsamroot from the wild; even very small plants are deeply taprooted and any breakage of the root will kill the plant.

Best success might be achieved by starting from seed rather than potted plants. Sow fully-filled, ripened seed onto a loosened soil surface in the fall and barely cover them. Seeds need several months of winter cold (stratification) to break dormancy and germinate in spring. Mark your locations well, as seeds may not germinate the first spring and may require a year or two to break dormancy. Be aware that arrowleaf balsamroot seed has a short storage life. If you are collecting from wild plants, take small amounts of ripened seed from various plants within a large population and with appropriate permission from the landowner or agency.

Rosettes of leaves emerge in spring after the snow recedes. Flowers of established plants open in early May to June (later at higher elevations).



Balsamorhiza sagittata (arrowleaf balsamroot)
Photos by Denise Montgomery

Height: 16 to 20 inches

Width: Clumps 18 to 30 inches

Light: Full sun; tolerates a very little bit of light shade

Soil: Well-drained; sandy, gravelly to loamy, fine to medium textured

Water: Moist in spring, dry in summer. Avoid overhead irrigation during pollination. When leaves brown and the plant goes dormant in the heat of summer, reduce watering to only once every few weeks. NEVER water directly on the crown or over-saturate the soil.

Planting: From a pot, dig a hole several inches deeper than pot and two or three times the pot width. Take care not to damage the tap root. Set the plant just above the surrounding grade and fill the hole with loosened soil; make sure the root is covered up to the crown. Do not cover the crown or tamp the soil. Water-in to settle the soil around the roots. Do not use mulch or weed fabric.

MONTANA NATIVE PLANT SOCIETY MEMBERSHIP

Name (please print) _____ Phone _____

Address _____ City/State/Zip _____

E-mail _____ Chapter Affiliation (optional) _____

Delivery preference _____ paper by USPS* _____ digital by email

**JOIN OR RENEW ONLINE at
www.mtnativeplants.org**

You will receive membership acknowledgment by email, as well as a pdf of the most recent Kelsey. Future newsletter issues will arrive according to your preference indicated above.

or mail application to:
Montana Native Plant Society
P.O. Box 8783
Missoula, MT 59807-8783

* Canadian subscribers asking for paper copy of the newsletter, please add \$4.00 to cover mailing costs

**Additional donations may be specified for a particular project or the general fund

Membership Level	Dues with affiliation*	I am paying for _____ years	Donation**	Total amount enclosed
Individual	\$20			
Family	\$25			
Business/Organization	\$40			
Living Lightly	\$15			
Lifetime (one-time payment)	\$300 per household	-----		

MNPS Chapters and the Areas They Serve

CALYPSO CHAPTER - Beaverhead, Madison, Deer Lodge, and Silver Bow Counties; southwestern Montana

CLARK FORK CHAPTER - Lake, Mineral, Missoula, Powell, and Ravalli Counties

FLATHEAD CHAPTER - Flathead and Lake Counties plus Glacier National Park

KELSEY CHAPTER - Lewis & Clark, Jefferson, and Broadwater Counties

MAKA FLORA CHAPTER - Richland, Roosevelt, McCone, Sheridan, and Daniels Counties

VALLEY OF FLOWERS CHAPTER - Gallatin, Park, and Sweet Grass Counties plus Yellowstone National Park

All MNPS chapters welcome members from areas other than those indicated. Alternatively, you may choose to be a member At-Large. We've listed counties just to give you some idea of what part of the state is served by each chapter. Watch for meeting announcements in your local newspaper. Ten paid members are required for a chapter to be eligible for acceptance in MNPS.

Moving? Please notify us promptly of address changes at mtnativeplantmembership@gmail.com.

Your mailing label tells you the following:

CHAPTER AFFILIATION: CAL=Calypso; CF=Clark Fork; F=Flathead; K=Kelsey; MF= Maka Flora; VOF=Valley of Flowers

AT-LARGE AFFILIATION: EAL=Eastern At-Large; WAL=Western At-Large

YEAR YOUR MEMBERSHIP EXPIRES: Memberships expire in February of the year listed on your mailing label.

Use this form to join MNPS only if you are a first-time member!

To renew a membership, please wait for your yellow renewal card in the mail.

Membership in Montana Native Plant Society is on a calendar-year basis, March 1 through the end of February of the following year. New-member applications processed before the end of October each year will expire the following February; those processed after November 1 will expire in February of the year after. Membership renewal notices are mailed to each member in January. Please renew your membership before the summer issue of *Kelsey* so your name is not dropped from our mailing list. Your continued support is crucial to the conservation of native plants in Montana. **THANK YOU!**



MONTANA NATIVE PLANT SOCIETY

MEMBERSHIP CHAIR

P.O. Box 8783

Missoula, MT 59807-8783

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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 review, 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: carokurtz@gmail.com or mailed to *Kelsey* Editor, 645 Beverly Avenue, Missoula, MT, 59801.

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

The deadline for each issue is Fall–September 10; Winter–December 10; Spring–March 10; Field Trip Guide–April 10; Summer–June 10. Please send web items to our webmaster concurrent with these dates.

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