

# Kelseya

Newsletter of the Montana Native Plant Society

## 2001: A Plant Odyssey

*MNPS Annual Meeting, July 13-15, 2001*

by Dennis Nicholls

**BULL RIVER** - Montana's a big state - a really big state. If you live east of the Continental Divide and plan on attending this summer's annual meeting near Noxon (and we sure hope you are), you'll find out just how big a state it is when you journey to the Cabinet Mountains. Distances will easily exceed 300 miles for many of you. But we promise it will be well worth the trip!

*2001: A Plant Odyssey* is the theme for our annual gathering, and this year it'll take place in the fabulous Bull River Valley, a darkly timbered drainage flanked by the east and west Cabinets. The site for our camp will be the Historic Bull River Ranger Station, a location the Cabinet District of the Kootenai National Forest has graciously approved for our careful use. This log structure was the first building erected on the Kootenai N.F. in 1908, and is nestled near the confluence of the East Fork Bull River with the stream's main stem deep in the heart of the valley. It is among the wettest areas in the state, with the high country subject to 100+ inches of precipitation a year. In the valley bottom, snowfall averages close to 150 inches each winter along Bull River.

Because of our abundant moisture, this part of western Montana boasts some of the most luxuriant plant life and densest forests in the Rockies. That's what we want to show off for you July 13-15. From mosses and lichens to giant cedars and hemlocks, you'll be introduced to a stunning array of native plants.

The enclosed flyer contains much of what you need to know to register for the annual meeting. The summer issue of *Kelseya* will contain a complete description of all the great hikes that will be offered.

Though the spring rains (or snows) typical of western Montana are usually done by mid-July, it will be wise to have rain gear with you for the weekend. Also be prepared for mosquitoes. Keep in mind, as well, that our camp and all of the hikes are in grizzly country, so special precautions need to be taken with food and garbage.

Our camp at the Historic Ranger Station will be rustic, but those who prefer more modern accommodations can find them within 15 miles. Reservations should be made

early as the limited spaces fill up fast in summer.

At camp, we aim to do something a little different during the evenings. There will be a community campfire, and as long as the weather is good, we'll gather round it each night for friendly chat and storytelling. It would be terrific to hear about some of the more extraordinary hikes you have been on, and we'll all share in the laughs and frights of pursuing native plants across Montana's spectacular landscape.

It will be a real treat to have our guest of honor on Saturday night, Jack Nisbet. He has visited our area several times to give presentations on David Thompson, and he is an excellent speaker. Thompson is generally believed to have been the first white man in the lower Clark Fork Valley. Lewis and Clark never saw the Cabinets, but Thompson and his men explored this country extensively. Jack has authored a book entitled *Sources of the River: Tracking David Thompson Across Western North America*. There will be opportunity to purchase his book as well as others at the book table in camp.

Oh, by the way, be aware that there is construction on Highway 200 for a 12-mile stretch between Dixon and Perma. By July, it may be near completion, but just in case, plan for a short delay if you come that way.

So there you have it. We're a long ways from most of you, but don't let distance keep you from visiting the Cabinet Mountains and Bull River in July. We're looking forward to hosting our first annual meeting and seeing all of you there.

### "PLANTS AND PEOPLE"

A botanical symposium is scheduled for August 12-16, 2001 in Albuquerque, New Mexico. The conference will feature meetings of various botanical groups and a scientific program that is currently requesting abstracts. To find out more about the conference visit:  
<http://www.botany2001.org>



# President's Platform

## Wayne Phillips



### PLANT RELATED WEBSITES

In the Autumn 2000 *Kelseyia* I wrote the article "Flowers in Space" to call your attention to plant related sites on the web. According to Kim Goodwin, co-chair of the MNPS Education committee, we should have our own Montana Native Plant Society website soon!! Look for it at [www.mtnps.com](http://www.mtnps.com)

Other cool plant related sites include:

The Internet Directory for Botany provides a comprehensive search of all botany web sites at <http://www.botany.net/IDB/> Just click on USA and an alpha letter for a listing of all sites that begin with that letter.

For a comprehensive listing of medicinal plant sites go to Medicinal Botany Links [http://www.mobot.org/MOBOT/research/applied\\_research/links.html](http://www.mobot.org/MOBOT/research/applied_research/links.html)

Missouri Botanical Garden [www.mobot.org/welcome.html](http://www.mobot.org/welcome.html) is a wonderful, many faceted site. Click on "plants in bloom" for beautiful pictures and "other links" for amazing botany/plant related web sites. Click on "w3tropicos" to search the plant database.

Want to see pictures of Tibetan lady-slippers? Then go to the Flora of China, <http://flora.huh.harvard.edu/china/>

home.html and click on images and the 3 plant pictures that appear.

While surfing don't forget our own Robyn Klein's website, Robyn's Recommended Reading <http://www.rrreading.com> Here you can download a free wildflower screen saver and link to other herbal sites, including the Southwest School of Botanical Medicine <http://chili.rt66.com/hrbmoore/HOMEPAGE/>

This site has thousands of beautiful photos of flowering plants.

For those of you who don't have a computer, web access is available at most public libraries. The information that is readily available on the world wide web is truly remarkable and worth the effort to seek out.

### MARCH BOARD MEETING

The March Board of Directors meeting was a busy one as usual. The Board approved two small grant proposals to add support to "Native Wildflowers of the Gallatin", a wildflower garden and display in Bozeman, and "Noxious Weeds - The Bandits in our Woods", an educational workshop sponsored by the Glacier Institute and other organizations. See page 9 for a closer look at the Small Grants for 2001.

The big news is that Kathy Lloyd and Drake Barton have agreed to be your new *Kelseyia* newsletter editors. Many thanks to Dennis Nicholls for the three years he has been our newsletter editor. The consistently good quality of the *Kelseyia* under Dennis' hands has made our newsletter an outstanding feature of the Society. Thanks Dennis!

### FUNDS AVAILABLE for the CHAPTERS

In the 2001 budget approved at the March board meeting there are funds allocated for supporting the chapters in their activities and projects. I encourage each chapter to consider submitting a project proposal, if they need help in funding activities or projects. Simply send your proposal to me or Betty Kuropat in a letter or e-mail message stating the amount needed and a brief description of the project or activity (for chapter funding we don't need the kind of detail that we ask for in the Small Grant proposals). Contact Wayne Phillips at the address or e-mail listed below or Betty Kuropat, 2688 Witty Lane, Columbia Falls, Montana 59912, or e-mail Betty at: [edk@digisys.net](mailto:edk@digisys.net)

SEE YOU AT THE ANNUAL MEETING AT BULL RIVER, July 13-15.

Wayne can be reached at 2601 Third Ave. North, Great Falls, MT 59401 (406) 453-0648 e-mail: [mtwayne@juno.com](mailto:mtwayne@juno.com)

### RESOURCES

To order the following publications please send a SASE for each (except Source Guide and note cards) to: Linda Iverson, 1270 Lower Sweet Grass Road, Big Timber, MT 59011 or e-mail: [jliverson@mcn.net](mailto:jliverson@mcn.net)

*Source Guide for Montana Native Plants*, 97 edition. This is a photocopy that will be mailed upon request. Lists sources of plants and seeds for over 500 native trees, shrubs, forbs and grasses. \$6.00 includes postage. Make checks payable to MNPS.

*Wildflower note cards*: \$6.00 a set. Checks to MNPS.

*MNPS brochure*: a color brochure with information about the Society and membership.

*Guidelines for Collecting Native Plants*: Guidelines

for scientific, educational and garden/commercial collecting of native plants.

*Publications about Native Plants*: List of native plant related books. A wide variety of subjects included.

*Growing Echinacea*: 6 pages of information on germination, growing, harvesting, processing and storing *Echinacea angustifolia* and *E. purpurea*.

### YOUR HELP IS NEEDED

The Source Guide is being updated. We welcome any additions or corrections to our 1997 edition. Contact Linda Iverson at 932-5840, or email: [jliverson@mcn.net](mailto:jliverson@mcn.net)

## LISTING OF SPALDING'S CATCHFLY STALLED AGAIN

Spalding's catchfly (*Silene spaldingii*) is arguably the most globally endangered vascular plant in Montana (see *Kelsey* Vol 12, No. 2; 1999). In 1995 the Washington Native Plant Society (Northwest Chapter) and the Montana Native Plant Society (Flathead Chapter) petitioned to list Spalding's catchfly as threatened under the Federal Endangered Species Act (ESA). After four years and a lawsuit by Earthlaw on behalf of the petitioners, the U.S. Fish and Wildlife Service (USFWS) proposed to list Spalding's catchfly as a threatened species. Comments were accepted by USFWS until February, 2000. Under the Endangered Species Act USFWS is required to make a final decision within 12 months after the comment period. That deadline has passed.

USFWS recognizes that a threatened listing is warranted for Spalding's catchfly, and biologists in Boise and Portland completed their work on the final listing by the end of last year. However, listing of Spalding's catchfly is not on the front burner, according to Patrick Leonard of the USFWS in Washington D.C., because court-ordered listings take precedence. Leonard stated that he hoped Spalding's catchfly would be listed by the end of summer, but he's not making any promises. This situation prompted Stephanie Parent of the Pacific Environmental Advocacy Center to file, on March 16, a 60-day notice of intent to sue. Eventually a lawsuit would force USFWS to comply with the ESA-mandated time frame. Although the legal process is slow, it may be the only way to attain final listing for Spalding's catchfly.

Peter Lesica  
Conservation Committee

## WILDERNESS PROJECTS

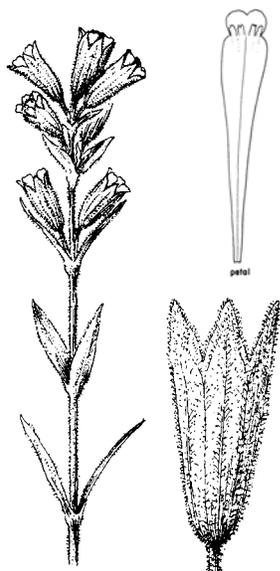
The Plant Society has an opportunity to help the Forest Service rehabilitate heavily impacted sites in the Bob Marshall Wilderness. Volunteers from Montana Wilderness Association, The Bob Marshall Foundation, and others are also invited to help. The projects include site evaluations, collecting native plant materials for future revegetation projects, and rehabilitation of impacted campsites. Volunteers will be provided food, cooking supplies, and shelter (either tents or cabins.) Volunteers should plan to hike with their personal packs and gear to the project sites. For a more complete itinerary, including other work projects and dates, and to sign up, contact Beth Hodder at Hungry Horse/Spotted Bear Ranger Station, 387-3800.

July 26-30: Shaw Cabin on the Gordon Creek Trail #35 - site evaluation and seed collection.

August 9-13: Big River Meadows Trail #322 and #105 - site evaluation and seed collection.

August 30 - September 3: Sunburst Lake Trail #218 - plant native plants and rehab campsites.

September 6 -10: Black Bear Trail #80 - plant native plants and rehab campsites at Hodag Flats.



*Silene spaldingii*

Illustration: Jeanne R. Janish, *Vascular Plants of the*

## 2002 NATIVE PLANT- WEED CALENDAR

The Montana Native Plant Society is hard at work designing the 2002 noxious weed calendar. The well-known calendar has been widely distributed in Montana since the early 1990s; last year 38,000 were printed and distributed. The Montana Noxious Weed Awareness and Education Campaign has been the driving force behind the creation and dissemination of this valuable resource and this year we have a chance to work with the Education Campaign to make the tie between native plants and plant communities and invasion by exotic species. The design of the 2002 calendar is still under discussion and we are looking for your input. We are considering focusing on various landscapes - riparian, peatland, urban-interface, mixed grass prairie, etc. Large pictures displaying native landscapes and species would be featured with smaller pictures of the invaders and threats to those areas. Other ideas include a page on natives and kids, before and after shots, weed-native plant heroes, the tie between native communities and wildlife (the Montana Department of Fish, Wildlife and Parks is also involved) and cultural plants. Text would accompany the pictures on each monthly page. There is also the opportunity to include lots of extra text in the back of the calendar along with membership information about MNPS. We need your help! If you can provide slides or negatives, stories about natives and weeds, or information of any sort that would help fill in the text spaces, please contact Kathy Lloyd at 449-6586 (DrakeKath@aol.com) as soon as possible. We are under very strict time deadlines in order to have production of the 2002 Native Plant - Weed Calendar completed on schedule. This is a great opportunity for us to get our message out to a broader audience.

KL

# CARNIVORES TURN TO GARDENING

by Peter Lesica

**I** often lead field trips to wetlands. One of the high points of these trips is finding a bladderwort (*Utricularia* spp.). Bladderworts are Montana's most common carnivorous plants. These aquatic plants produce pinhead-size traps on their leaves that capture small crustaceans or other invertebrates. At least that's been the common knowledge and what I've always told people. However, some recent research is going to make me change my story.

More than one-third of all species of carnivorous plants on earth are bladderworts, and species of *Utricularia* occur from the tropics into the arctic. Some species of these rootless plants grow in mud or even as epiphytes in rainforest trees, but most, like Montana's three species, are aquatic. They all produce bladder-like traps with doors that open and close. Touching the hairs around the door causes it to open and suck in whatever is just outside.

capturing prey, a reason related to the fertility of their surroundings.

Recently Jennifer Richards at Florida International University made some observations that may help explain the Wisconsin findings. Richards examined 1,400 traps from *Utricularia purpurea* in the Everglades. She found that 63% had something in them. Of these only 8% contained dead prey items, but all contained algae, diatoms or other photosynthetic organisms. I have made the same observation here in Montana. All the old bladders have green stuff in them, but it's devilishly hard to show people a trap with a dead bug in it.

Richards proposes that bladderwort bladders act not so much as traps but as tiny microcosms, absorbing the waste products produced by their photosynthetic and bacterial occupants. This hypothesis may also explain the Wisconsin finding that bladderworts produce more traps in nutrient-rich water but not in prey-rich water. Algae grow better in nutrient-rich water, so a bladderwort's captive algae



Illustration: Jeanne R. Jamish, *Vascular Plants of*

*Utricularia vulgaris*

these little ecosystems directly into specialized cells at the base of the leaves.

More research needs to be done to prove that algal waste products are contributing to bladderwort nutrition. Still, it seems likely that bladderworts are really omnivores, obtaining more of what they need from gardening than from carnivory. It's just another case of "whatever works." So it looks like I lost my cool story about bladderwort carnivory. But that's okay because the real story is even more fascinating.

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## *Richards proposes that bladderwort bladders act not so much as traps but as tiny microcosms*

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The traps are capable of capturing small animals and absorbing nutrients from them. But there's more to the story; it seems that bladderworts may be more gardeners than carnivores.

Several years ago researchers at the University of Wisconsin made a confusing discovery. They found that *Utricularia macrorhiza* (the same as our most common species, *Utricularia vulgaris*) grown in water with a high density of invertebrates (potential prey), did not respond by producing more traps. However, they did produce more traps when the water was higher in nutrients. Apparently bladderworts produce traps for a reason other than just

gardens will be more productive. In addition the bladders may also absorb nutrients directly from the water. This is an unusual strategy to compensate for a lack of nutrient-absorbing roots, but it is not unique.

Certain tropical epiphytes called tank bromeliads obtain nutrients in a similar fashion. These plants live in tree canopies and are unable to absorb nutrients through their roots. Instead they hold water at the base of their leaves. These miniature "ponds" support all manner of aquatic life including mosquito larvae and even frogs. The bromeliads absorb the waste products from

Further Reading:

Knight, S.E. and T.M. Frost. 1991. Bladder control in *Utricularia macrorhiza*: lake-specific variation in plant investment in carnivory. *Ecology* 72: 728-734.

Richards, J.H. 2001. Bladder function in *Utricularia purpurea* (Lentibulariaceae): is carnivory important? *American Journal of Botany* 88: 170-176.



# Big Sky Sketches

by Jim Habeck

## MOUNTAIN PINK GIVES SPRING WAKEUP CALL



*Douglasia montana*

Illustrations: Jeanne R. Jamish, *Vascular Plants of the*

One of the earliest spring flowers in western Montana and along lower elevations east of the Divide is the mountain pink, also called *Douglasia* (*Douglasia montana*, member of the primrose family). This plant, when its population is in full bloom, presents a pinkish-purple or rose-violet colored glow on the ridge line that is a part of Waterworks Hill, north of the city center in Missoula, and elsewhere.

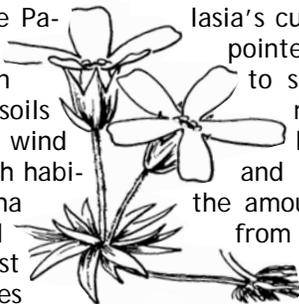
Mountain pink's genus name, *Douglasia*, was assigned to it in honor of the famous early plant explorer David Douglas (1798-1834), who traveled and collected native plants throughout the Pacific Northwest. Mountain pink is found on coarse, rocky or gravelly soils that are often severely wind swept. Ecologists call such habitats "fellfields." Montana botanists have collected mountain pink in most western Montana counties as well as Glacier Park; *Douglasia*'s range extends east to the Continental Divide and beyond to the Yellowstone Park region. The range of habitats include not only the wind-swept ridge line on Missoula's Waterworks Hill at 3400 feet, but many alpine-timberline fellfields, just under 10,000 feet.

Newly germinated *Douglasia* seedlings are very small and easily missed if not flowering. Over a period of years each plant is capable of expanding into a nearly circular, pin cushion-shaped growth up to 5 to 6 inches across, and 1 to 2 inches high. Each cushion may exhibit dozens of bright pink or lilac colored blossoms. In many spring seasons a

patch of thousands of flowering cushions, with ten thousand blossoms, may collectively appear as a purple glow, noticeable several miles away.

*Douglasia* has a slender, slightly woody stem, and is perennial. This means the plant lives for many years. Each vertical stem within a cushion supports a single (sometimes two) flower. Each flower has five petals, with the petal lobes spreading, forming a tubular funnel form. The leaves are a quarter inch in length, sharp pointed, stiff textured and crowded along the stems. *Douglasia*'s cushion shape and narrow, pointed leaves equip this plant to survive in harsh environments where water is limited. Both life form and leaf shape help reduce the amount of water evaporated from the plant.

At low elevations, *Douglasia* flowers and completes its life cycle in April. At high alpine elevations in Glacier Park, for example, mountain pink may not flower until August when winter snows have melted away. Textbooks claim that *Douglasia* can make a suitable rock garden addition. Some species of cushion plants found in windy, alpine habitats may survive when transplanted into gardens having coarse, rocky soil, but unless the harsh conditions of the fellfield habitat are maintained, the cushion shape may be lost and the plants eventually perish. Perhaps it's best to enjoy mountain pink in its natural habitat during its brief burst of color in early spring.



*Dr. James R. Habeck is a retired professor of plant ecology, University of Montana. He has studied the forest and grassland plant communities in western Montana since 1960 when he arrived in Missoula.*

### DAVID DOUGLAS

David Douglas had two productive trips to western North America: 1825-1827 and 1829-1833. This industrious botanist found himself in a very diverse flora that had been only sparsely collected. He was the right person in the right place at the right time. Douglas sent to England pressed plants, live plants and many seeds. Due to his efforts, a substantial number of plants were introduced to science and his name is woven throughout *Vascular Plants of the Pacific Northwest*. He collected many *Lupinus*, *Penstemon*, *Mimulus*, etc. and is credited with discovering 20 species of conifers: ponderosa pine, lodgepole pine, whitebark pine, and grand fir included. Douglas-fir is the common name for a tree we all know. It was first collected in 1791 by Archibald Menzies. After going through the nomenclatural maze it emerged in 1950 as *Pseudotsuga menziesii*, honoring the first collector, Menzies. Douglas sent seeds back to England and set the stage for what has become a very valuable timber tree in that country. He also collected the specimen from which wild ginger (*Asarum caudatum*) was described. Given the huge contributions made by David Douglas, it is interesting that the genus that bears his name, *Douglasia*, is a lowly cushion plant; but it makes up in beauty and early delight what it lacks in stature.

DB

# LIVING ON THE EDGE

by Toby Spribille

Most people do not associate sand dunes with northwestern Montana, but indeed, in a small section of the Tobacco Valley near Rexford, sand dunes - sifted deposits from the last glaciation - line the banks of what was once the Kootenai River. Granted, they do not conjure up images of the Sahara, they are not active dunes, but dunes they are, hills of sand left by a retreating ice sheet, shifted in the winds and then colonized by sand-stabilizing vegetation. After the initial sand stabilizers arrived thousands of years ago, there was likely a wave of sagebrush scrubland - as indicated by pollen analysis of nearby peat cores - which later developed into ponderosa pine woodland, *Purshia* scrublands and specially adapted dry tussock grassland plant communities. The next major change for these dunes came in 1976: the low-lying portion of the area was flooded by the Lake Koocanusa reservoir, carving whitish-brown sand bluffs into the hillsides which can now be seen from miles away (and from Highway 37 near Rexford, if you look north).

Today, the Rexford sand dunes are home to perhaps the greatest concentration of plants from east of the Continental Divide in northwestern Montana. These may be, in part, relicts from the dry sagebrush period after the retreat of the glaciers. Plants which could not persist anywhere else clung onto an existence in the inherently dry, well-drained sands on the sunny, west-facing slopes. Evidence of drier times is scattered in small quantities all along the bluffs: prickly pear cactus (*Opuntia polyacantha*), prairie sandgrass (*Calamovilfa longifolia*), rush-like skeletonweed (a native! *Lygodesmia juncea*), spring crocus or pasque flower (*Pulsatilla patens* or *Anemone patens*), and Indian ricegrass (*Oryzopsis hymenoides*), just to name a few -

species otherwise very rare in northwestern Montana. Rare mosses and lichens are represented as well: *Pterygoneurum subsessile*, *Fulgensia bracteata*, *Squamarina lentigera* .... Not only are there extraordinary species highlights, the plant communities themselves are veritable gardens, particularly during the spring flowering aspect: the dry balds provide a home for spectacular displays of native dry grasslands and provide for some of the richest species assemblages of this type in northwestern Montana.

The real specialty of the area, however, is the Douglas' bladderpod (*Lesquerella douglasii*), a small rosette-forming perennial from the mustard family, so far known from only a single small patch of less than 100 plants, the only location known in Montana. Douglas' bladderpod is a low-growing, decumbent species with a taproot, oblanceolate leaves, yellow flowers and inflated, roundish seed pods. It is found in the dry steppe of Washington and British Columbia, mostly in the Okanogan region, and only recently was found in the Rocky Mountain Trench growing on sand bluffs. It is at the eastern extremity of its range.

Despite all their richness, the dune plant communities at Rexford are, quite literally, falling by the wayside, and all but unnoticed. Every year, large chunks of dry grassland slough off into Lake Koocanusa as the reservoir pool levels are dropped, then raised again, then dropped again. Wave action at high water eats away at the soft substrate and teases away ever more pieces of the vegetation. As if this were not enough, the area is also a popular retreat for off-road recreationists. Dirt bike trails criss-cross the open ponderosa pine forests and balds, and where they do, they churn up soil, creating fresh seed beds for noxious weeds and nixing the fragile microbiotic soil crusts which hold the sand in place. Winds carry the sands and weed seeds over short distances and deposit them on otherwise pristine

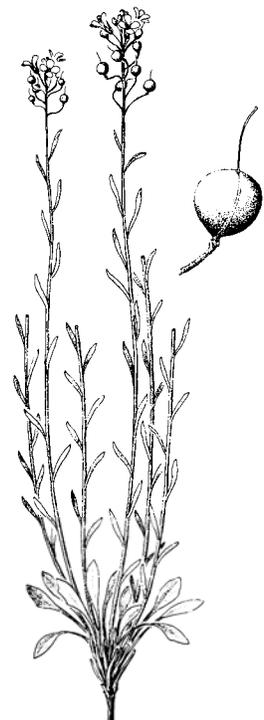
sites. In fewer and fewer places can one find the richly colored moss and lichen soil crusts which likely were commonplace here before this disturbance began.

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*Rare plant communities along Lake Koocanusa are crumbling - literally - as erosion eats away at what is left of them*

At present, none of the sand dune plant communities are provided any kind of formal recognition or protection. A protection scheme should be developed which protects the native plant communities from mechanical disturbance and aims to preserve what is left of the dry balds from being lost forever into the silty bottom of Lake Koocanusa. As a first step, the rare plant communities need to be inventoried and mapped - a project which progresses slowly as a volunteer effort.

For more information about the Rexford sand dunes and the ongoing botanical inventories in that area, contact: toby.spribille@gmx.de



*Lesquerella douglasii*

Illustration: Jeanne R. Janish, *Vascular Plants of the*

# CALENDAR

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## **ARTEMISIA CHAPTER**

Hal Vosen 232-2608

## **BEARTOOTH MOUNTAIN**

Jean Radonski 855-4500

## **CALYPSO CHAPTER**

Annie Green 683-6594

## **CLARK FORK CHAPTER**

**Thursday April 12, 7:30 pm.**  
Warm up for spring! Join Sheila Morrison, Peter Lesica and other wildflower photographers who will show slides and refresh our memory on western Montana's flora. Rm L13 in the Gallagher Business Building on the UM Campus.

**Thursday, April 26, 6:30 p.m.**  
Lower Rattlesnake shrub & wildflower evening stroll. Led by Scott Mincemoyer, 251-7099. Meet at the Rattlesnake Trailhead.

**Thursday, May 10, 6:30 p.m.**  
Our annual spring potluck at Greenough Park Pavilion at the end of Monroe St. Bring utensils and a dish to share.

**Saturday, May 19, 9-12 a.m.**  
Annual Farmers' Market Montana Native Plant Sale at Missoula Farmers' Market at the north end of Higgins Ave. Natives grown from seed by members.

**Thursday, May 24, 7:00 p.m.**  
Wildflower Week Wildflower Walk at John Toole Park. Meet at the Waterwise Garden off south 4th East, east of the Missoulian. Led by John Pierce, 542-2640, and Madeline Mazur-ski.

**Tuesday, May 29, 7:00 p.m.**  
Dyer's woad weed-pull on Mount Sentinel. Led by Marilyn Marler, 243-6642. Meet at Mt. Sentinel trailhead.

**Tuesday, June 12, 7:00 p.m.**  
Dyer's woad cleanup weed-pull on Mount Sentinel. Led by

Marilyn Marler, 243-6642. Meet at Mt. Sentinel trailhead.

**Saturday, June 16, 8:00 a.m.**  
Lewis & Clark Trail. Join Wayne Phillips for a 5-mile hike from Lee Creek to Packer's Meadow along the actual Lolo Trail. Meet at the southwest corner of the Wal-Mart parking lot on the south side of Missoula. Bring lunch and water. For more information call Kelly, 258-5439.

**Sunday, June 17, 10:30 a.m.**  
History and wildflowers of Lewis & Clark Pass. Led by Wilbur Rehmann in conjunction with the Montana Wilderness Assoc. Meet at the Alice Creek parking area. Reservations required and space is limited. Call 443-5677 evenings for information and to register.

**Thursday, June 21, 7:30 p.m.**  
Clark Fork Prairie weed-pull at John Toole Park. Call John Pierce at 542-2640 for information.

**Saturday, June 30, 9:30 a.m.**  
Wildflowers and Wildfire: looking at the ecology of the fires of 2000 with Peter Stickney. Meet at the N.W. corner of the Field House parking lot. Bring lunch and a hand lens for this relaxed day hike. Call 549-0063.

## **FLATHEAD CHAPTER**

**Wednesday, April 18**  
Peter Stickney will talk about post-fire plant regeneration and succession. Meet at Montana Logging Association Bldg. 2224 Hwy. 35, east of Kalispell, across from Hooper's Nursery. Business meeting at 5:30, program at 7:00 p.m. Everyone is invited to both.

**Wednesday, May 16, 5:30 p.m.**  
We will meet at the Dire Wolf Pub in Whitefish at 5:30 for our business meeting over pizza and beer. Then we will visit the Central School native garden with Jan Metzmaker, recipient of a MNPS 2000 Small Grant, to see and talk about what she and the students have done so far and what more could be done with the garden.

**Tuesdays, May 1 - June 17**  
Bigfork Wild Mile Corridor Wildflower and Bird Hikes. Join Neil Brown and Anne Morley for a gentle morning of wildflower and bird identification. Each walk will be about 2 miles along the Swan River adjacent to Bigfork. Meet in front of Showthyme restaurant in downtown Bigfork. The hikes are held every Tuesday from May 1 until June 17, from 10 a.m. until noon.

**Saturday, June 2, 9:00 a.m.**  
Johnson Mountain Terraces easy, 3-mile hike. Meet at the Tally Lake Ranger Station. Call Mary or Gary Sloan, 862-3360 for information.

**Saturday, June 9, 9:00 a.m.**  
Lost Trail National Wildlife Refuge. We will be starting a plant list. Call Betty Kuropat, 892-0129 for info.

**Tuesday, June 12, 7-9 p.m.**  
West Glacier Evening Stroll. Meet Glacier Park Ecologist Tara Williams for a 1-mile easy walk through moist forest habitat where we'll learn to identify a number of species including striped coralroot and mountain lady's slipper orchid. Meet at the old West Glacier Post Office (next to the new Post Office) at 7 p.m. Call Tara at 888-5039 (h) or 888-7919 (w) for more information.

**Wednesday, June 20, 6:00 p.m.**  
Potluck at Joe Schletz's. Join Flathead Chapter members for a spring social! Following the potluck we'll tour Joe's property, a potential site for a restoration project and native garden. For directions call Joe at 752-5555. Bring your favorite dish and utensils. We'll provide plates and napkins.

**Saturday, July 7, 9:00 a.m.**  
Mollman Lakes. Wildflowers, water and wilderness everywhere! This Mission Mountains Wilderness hike is a steady climb along Mollman Creek to Mollman Pass at 6900 ft. elevation. The hike is co-sponsored by the Montana Wilderness Assn. and reservations are required. This is a strenuous, 9-mile round-trip hike with group size limited to 10 people. Reserve by calling trip leader Sam Culotta by July 1, at 837-4298.

## GREAT FALLS AREA

**Monday, March 19, 7:00 p.m.**  
Get ready! The wildflower season is here. Refresh your botanical memories with this month's presentation by Fay E. Benton. Giant Springs Fish, Wildlife, and Parks meeting room.

**Monday, April 23, 7:00 p.m.**  
Join us for an evening stroll on the River's Edge Trail to see if we can find any early bloomers. Meet Fay at the Lewis and Clark Overlook located near River's Edge Trail mile marker 7.

**Sunday, May 20**  
Birds, wildflowers, and other natural history topics will be the focus of a Wilderness Walk led by a wildlife biologist and a wildflower enthusiast. Hikers will follow a rocky, but easy trail along the Sun River for a short distance to enter Wagner Basin. Group size is limited. To reserve your place, call Kristi DuBois 761-3394 (evening) or e-mail: kdubois@montana.com or call Fay E. Benton at 264-5465. Co-sponsored with Montana Wilderness Association and Upper Missouri Breaks Audubon.

**May (date unknown)**  
Revegetation planting at the Boone and Crockett Conservation Education Program. Contact Lisa Flowers at (406) 466-2078. You can plan to stay overnight as there are bunkhouse accommodations available. A hike on the Rocky Mountain Front may be scheduled after the planting.

**June 20-24**  
The Great Falls Lewis and Clark Festival will offer botanical walks each day. Wear sturdy hiking shoes, dress for the weather, and bring drinking water for this event. Call Fay at 264-5465 for more information.

**June 20- August 16**  
The traveling exhibit "Plants of the Lewis and Clark Expedition" will be on display at the Great Falls Lewis and Clark Interpretive Center. A reception for the creators, Fay E. Benton and Steve Schaller, will be held on

the evening of June 21 at the Interpretive Center.

**June 30**  
The Montana Wilderness Association and The Montana Native Plant Society are sponsoring a Wilderness Walk to Clary Coulee. Leaders Dan Bennett and Fay E. Benton will guide hikers north in search of orchids. Group size is limited. For details contact Fay at (406) 264-5465.

**June, (date unknown)**  
A field trip to Lonesome Lake located southwest of Havre is planned for sometime in June once the road dries out. For information call Fay in late May.

## KELSEY CHAPTER

**Wednesday, April 11, 7:00 p.m.**  
Wayne Phillips will present a free public program on Montana's Orchids at the Lewis & Clark Library. The program is jointly sponsored with Wild Divide Chapter of the Montana Wilderness Association.

**Saturday, April 21, 9:00 a.m.**  
Mount Helena moss and lichen hike. This exploration of the non-vascular species on Mount Helena is led by Lyn Baldwin, Drake Barton and Andrea Pipp. Meet at the Mount Helena parking lot. Bring a hand lens, lunch and water. 449-6586 for info.

**Saturday, April 28, 10:00 a.m.**  
A tour to discover *Kelseya uniflora* in bloom. Meet in the Safeway parking lot near the recycling bin. Bring lunch, water and cameras. Call 449-6586 for information.

**Saturday, May 12, 10:00 a.m.**  
Weed n' Wildflower Walk. An easy stroll to identify weeds and wildflowers in early spring. Sponsored by Kelsey Chapter, the Lewis & Clark County Weed District and the Extension Service. Meet on Davis Gulch at the old quarry. Call 449-6586 for more information.

**Friday, May 18, 9-12 a.m.**  
National Wildflower Week Mount Helena hike for kids. Call Kathy Martin, 443-1712, for information and to volunteer to lead a group.

**Saturday, June 9, 9:00 a.m.**  
Meet at the west end of Hastings parking lot for a driving tour of spring blooms on Hogback. Led by Drake Barton, 449-6586. Bring

lunch, water, and camera.

**Sunday, June 17**  
Lewis & Clark Pass hike. Jointly sponsored by MNPS and Montana Wilderness Association. Call Wilbur Rehmann, 443-5677, to register (required) and get information.

## MAKA FLORA CHAPTER

Al Joyes 385-2579

## VALLEY OF FLOWERS

**Monday, April 23, 7:00 p.m.**  
Bruce Maxwell, MSU professor, will speak about "Weeds, Viewed by an Ecologist". Meetings are held in the Agricultural Bioscience Building on south 11th Avenue, Room 108. Parking is available in the lot north of the building.

**Saturday, April 28, 8:00 a.m.**  
A tour to discover *Kelseya uniflora* in bloom. Meet at the parking lot north of the HBS Bldg. Bring lunch and water. We will carpool to Helena to join the Kelsey Chapter.

**May (dates unknown)**  
Two Saturday work times will be scheduled in May for work on the native plant garden at Wally Byam Park on the MSU campus at 11th and College Ave.

**Saturday, June 16**  
National Trail Day and we will continue our project on the Kagy Blvd. cut east of Church Avenue. Knapweed digging requires tools and gloves. Call 586-9585 for info.

## WESTERN MONTANA

**Friday, Saturday, July 6-7**  
Wayne Phillips and Wilbert Fish will teach "Native Plants and the Blackfoot People". Contact the Glacier Institute, (406) 755-1211, or glacinst@digisys.net for more information.

### FIELD TRIP FLYER

For a more complete listing of hikes and events see the Field Trip Flyer which will be out the first week of May. The deadline for submission is April 10.  
*See you on the trail!*



# 2001 SMALL GRANTS AWARDED

## UNIQUE EDUCATIONAL PROJECTS FEATURED

The MNPS Board of Directors, in conjunction with the Small Grants committee, is pleased to announce the recipients of the 2001 Small Grants competition. The purpose of the small grants program is to support research and/or educational activities that lead to better understanding, appreciation and conservation of Montana's native flora. We received excellent proposals encompassing education and conservation projects. Choosing which proposals to fund was difficult because all the proposals were worthy of funding!

Small Grants committee members ranked the proposals on the basis of how well the project would foster significant native plant conservation, education, and research in Montana, and reflect on and be meaningful for Montana Native Plant Society. Other considerations include what kind of local or state-wide influence and visibility the project may have and whether or not objectives are clearly defined.

Recipients will provide a final report and an article to be published in a future issue of the *Kelsey* newsletter. Thanks to everyone who participated in this year's competition! We hope to hear from many of you again during future grant proposal requests.

Two proposals were selected for funding at \$500 each. These include education projects in the Whitefish and Bozeman areas. A description of the projects is listed below. *Congratulations to the recipients!*

### Native Wildflowers of the Gallatin

This project will rehabilitate the wildflower garden collection originally established for the MSU Arboretum interpretive pavilion and picnic area located on the corner of 11<sup>th</sup> Avenue and College Streets in Bozeman. It will also create informative displays about wildflowers of the region. Plants will be purchased or collected to complete the wild-

flower display. Identification markers will be provided. Volunteer labor will control and remove exotic weed species from the collection. Full color, laminated posters will be prepared illustrating and describing some of the common wildflowers of the area, how to identify them and where to find them. In addition, a lighted display case diorama of wildflowers will be created to simulate a three dimensional enlarged view. Objectives of the project are to help visitors understand the beauty and diversity of common native wildflowers, demonstrate the success of incorporating native plants into valley gardens, and inform the public about proper procedures and difficulties in collecting plants from the wild.

### Noxious Weeds: The Bandits in our Woods

This proposal will help fund a one day workshop in the Flathead Valley for up to 60 educators, land owners, land managers, recreationists, and others who are interested in learning about the importance of preserving Montana's native plant heritage by preventing and controlling the spread of noxious weeds. A slide show and power point presentations by botanists from Glacier National Park, the Flathead National Forest, and the Flathead County Weed District are expected. Field trips to selected sites are also planned. There is no registration fee. The workshop is sponsored by Glacier Institute, a private, non-profit outdoor education organization dedicated to promoting an understanding of the natural world and the role of humans in it.

*Rachel Feigley*

### SPECIAL DONATIONS FOR GRANTS

MNPS has developed a fund to support worthy projects that advance conservation and understanding of Montana's flora. Donations for Small Grants may be mailed to MNPS in Missoula.

### GET INVOLVED IN THE SMALL GRANTS COMMITTEE

If you would like to become more involved in Montana Native Plant Society, there are many avenues for you to try. Why not volunteer to participate on the Small Grants committee? If you are interested, please call Rachel Feigley, Small Grants committee chair at 266-3094.

### Native Plant Garden in Pablo *Report from 2000 Grant Recipient*

The Salish & Kootenai College's (SKC) Native Plant Nursery and the People's Center are joining efforts in the creation of a native plant educational garden located on North Highway 93 in Pablo, Montana. The garden will be used as an educational module to inform local and international visitors of the scientific and traditional uses of native plants. Under supervision of Dawn Thomas, SKC Native Plant Nursery Technician, student interns and volunteers began work on the site during the fall of 1999.

With support and financial assistance from the Montana Native Plant Society, native plant species were purchased from Bidesign 2000, an organic native plant garden in Stevensville, Montana. SKC Native Plant Nursery provided seed cone germination, and the salvage of *Festuca scabrella*. A variety of native plant species that were adaptable to dry, sandy loam soil were planted in the spring of 2000. Additional aesthetic props were brought to the site, such as old logs, boulders to provide a visitor path, and a 40 foot teepee that will provide a central attraction. Name plates posted next to native species provide scientific and traditional names and uses of the plant.

*(Continued on page 10)*

## GWEN VAUGHN-RHYS MC BRIDE, 1927-2001

Montana Native Plant Society lost a valuable friend when Gwen McBride of Hughesville died in February after a brief illness. Many of you may wonder where Hughesville is. You are not apt to find it on a map. It is an old mining district in the Little Belt Mountains. Gwen was its sole



Photo: Harvey Bjornlie

full-time resident for the last two decades. She spent a great part of her childhood there, as well, while her father was a mining engineer. She was educated as a geo-chemist in the east, married, and became the mother of two sons, Donald and James. Montana and the Little Belts beckoned, and they returned to finish raising their family. She continued managing her mining properties after she became a widow in 1980. She took a knowledgeable delight in the natural world around her, and especially in plants. She particularly liked to observe the soil chemistries and how they influenced the flora. She was always ready to explore and photograph at a moment's notice. Montana Native Plant Society activities were a priority of hers. She recently expressed her disappointment at not being able to come to our annual meeting this summer. Her gentle delight in life and the knowledge and documentation she has shared is a gift many of us carry when we participate in Native Plant Society activities.

...SKC (Continued from page 9)

The purpose of the native plant garden is to provide information to visitors of the People's Center and to offer a research study project for Environmental Science students who attend SKC. Plans for this spring and summer include continued study of succession on the site with the use of restoration monitoring guidelines.

A web-page is currently under construction that depicts the mission, goals and purpose of SKC Native Plant Nursery, as well as on-going projects. The Salish & Kootenai Native Plant Nursery greatly appreciates the contribution of the Small Grant award provided by the Montana Native Plant Society.

For more information, contact the SKC Native Plant Nursery, (406) 675-4800 ext. 311. Also, look for a link on the College's website for the upcoming SKC Native Plant Nursery web-page <http://www.skc.edu>.

Janine K. Burns

### Native Plants Journal

A new, full-color, twice-a-year journal from the University of Idaho provides an eclectic forum for dispersing practical information about planting and growing native plants. *Native Plants Journal* needs two things:

- (1) Subscribers. Only \$30.00 for individuals; \$60.00 for libraries. (See URL below)
- (2) ARTICLES/AUTHORS. NPJ accepts both general manuscripts (informative articles about techniques, cultivars, habitat restoration, etc.) and refereed research papers with scientific method, experimental design, statistics, etc.

For more information, please check out NPJ's website at:

<http://nativeplants.for.uidaho.edu>

Mary Yurlina

### DON'T BE EXTIRPATED FROM MNPS's MAILING LIST!

Membership in Montana Native Plant Society is good for one calendar year, March 1 through the following February 28. If you have not already done so, please use the membership renewal form on page 11 to renew your membership in MNPS today. Montana's native plants and plant communities are depending on you for support!

We would like to welcome all new MNPS members to our organization. Your enthusiasm and ideas will be put to good use. Contact your chapter president, committee chairs, or MNPS president to find out how your talents can help benefit Montana's native plants.

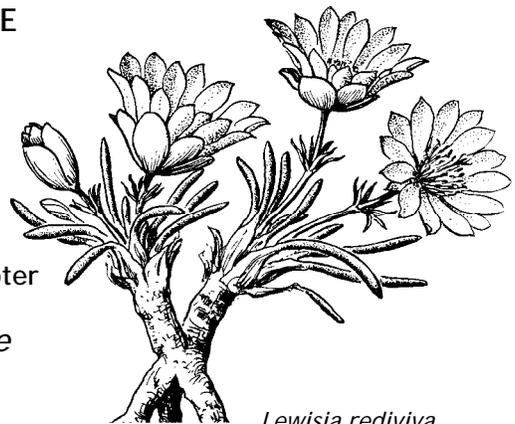
### MONTANA NATIVE PLANT SALE

SATURDAY, MAY 19 9-12 A.M.

FARMERS' MARKET IN MISSOULA  
(NORTH END OF HIGGINS AVE.)

Beautiful natives grown from seed  
by members of the Clark Fork Chapter

*Here is your chance to spruce  
up your native garden!*



*Lewisia rediviva*

Illustration: Jeanne R. Janish, *Vascular Plants of the*

**MNPS Chapters & the Areas They Serve:**

- ARTEMISIA CHAPTER - Yellowstone and Carbon Counties; southeastern/south-central Montana
- BEARTOOTH MOUNTAIN CHAPTER - South-central Montana; the Beartooth Plateau country
- CALYPSO CHAPTER - Beaverhead, Madison, Deer Lodge, Silver Bow Counties; southwestern Montana
- CLARK FORK CHAPTER - Lake, Mineral, Missoula, Powell, Ravalli Counties
- FLATHEAD CHAPTER - Flathead and Lake Counties plus Glacier National Park
- KELSEY CHAPTER - Lewis & Clark and Jefferson Counties
- MAKA FLORA CHAPTER - Richland, Roosevelt, McCone, Sheridan and Daniels Counties
- VALLEY OF FLOWERS CHAPTER - Gallatin, Park, Sweet Grass Counties plus Yellowstone National Park

All MNPS chapters welcome members from areas other than those indicated. 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.

Your mailing label tells you the following:

CLASS OF MEMBERSHIP: See I, II, III, IV below

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

DATE YOUR MEMBERSHIP EXPIRES: If your label reads "2/99" your membership expired February 28, 1999. Use this form to renew your membership TODAY! Please drop us a note if any information on your label is incorrect. Please notify us promptly of address changes.

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 included in the winter issue of *Kelsey*. 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**

DATE \_\_\_\_\_

NAME (please print) \_\_\_\_\_ E-MAIL \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY/STATE/ZIP \_\_\_\_\_

PHONE \_\_\_\_\_ NEW MEMBERSHIP \_\_\_\_\_ RENEWAL \_\_\_\_\_

**STATEWIDE MEMBERSHIP WITH CHAPTER AFFILIATION**

- \_\_\_ \$18 I. Individual
- \_\_\_ \$22 II. Family
- \_\_\_ \$35 III. Business/Organization
- \_\_\_ \$300 IV. Lifetime Membership (one-time payment)

**MEMBER-AT-LARGE (No chapter affiliation) or LIVING LIGHTLY**

- \_\_\_ \$12 I. Individual
- \_\_\_ \$18 II. Family
- \_\_\_ \$30 III. Business/Organization
- time payment) \_\_\_ \$300 IV.

MAKE CHECKS PAYABLE TO:  
 Montana Native Plant Society  
 P.O. Box 8783  
 Missoula, MT 59807-8783



Canadian subscribers please add \$4.00 to cover mailing costs. Additional donations may be specified for a particular project.

## 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 may be made to the general operating fund.

Your yearly membership fee includes a subscription to *Kelseya*, the newsletter of MNPS, published quarterly. We welcome your articles, clippings, field trip reports, meeting notices, 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. If you send clippings, please note the source, volume/issue, and date. All meeting and field trip notices, field trip reports, articles or announcements should be mailed to *Kelseya* Editors, 314 Travis Creek Rd., Clancy, MT 59634. All items should be typed and if possible put on a 3.5" disk and saved in Microsoft Word or rich text format (rtf.) for a PC. Please include a hard copy with your disk. They can also be sent electronically in the same format as above.

Changes of address, inquires about membership in MNPS and general correspondence 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: Autumn—September 10;  
Winter—December 10; Spring—March 10; Summer—June 10.

If you want extra copies of *Kelseya* for friends or family, call the Newsletter Editors, write to the above address or e-mail: DrakeKath@aol.com

## BOARD OF DIRECTORS

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If you move, please notify MNPS Membership, P.O. Box 8783, Missoula, MT 59807-8783

## Montana Native Plant Society

*Kelseya* Editors  
314 Travis Creek Rd.  
Clancy, MT 59634

## CHANGE SERVICE REQUESTED

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