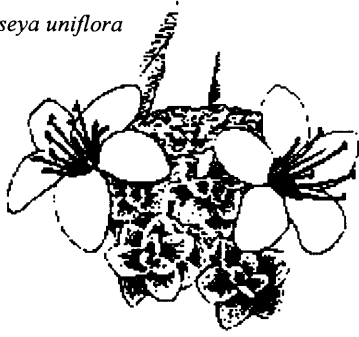




Kelseya

NEWSLETTER of the MONTANA NATIVE PLANT SOCIETY

Native Plant Museum and Educational Collection: *A Joint Project of the University of Montana and the Montana Natural History Center*

By Kathryn Warner

MISSOULA – Loss of habitat and the invasion of non-native species has led to a decline in native flora in the region. Many studies assert that increased awareness of the local natural ecosystems and native species develops appreciation and interest in conservation. Ultimately, such educational programs may lead to active public participation in prevention of further decline of native species through activities such as habitat restoration, native plant gardening, weed control and environmentally friendly

development practices. The goal of this project was to increase public awareness by developing a native plant educational collection for use in exhibits and as reference vouchers.

During the spring and summer of 1999, students from the Missoula area participated in collecting, pressing and identifying plant species from around Missoula and Western Montana. Students learned how to collect and place the plants into the plant presses for proper display. The specimens were taken to the University of Montana and placed into

drying ovens for 24 hours. Once the plants were dry, the students learned several different methods to mount the specimens. Each student mounted at least one specimen for the voucher collection and one for the educational display. After the plants were mounted, the students used field guides and taxonomic keys to identify the plant with help from teachers and volunteers. The students also used the guides to determine whether the plant identified was a native or non-native species. Throughout the summer, over six hundred specimens were collected,

consisting of over 100 different species. No endangered species were collected for this project.

The specimens collected currently are being organized into easily accessible voucher collections and an educational display at the Montana Natural History Center. The MNHC will use these collections in educational exhibits which teach the public about native plants of the region, for research projects by local students that require the identification of plants in the field and by the general public. Lastly, funding

Continued on page 3

Flora of Mount Helena Dedication

By Dennis Nicholls and Kathy Lloyd

HELENA – A project that has been in the works for three years has debuted at the Lewis and Clark Library in Helena. When the MNPS Board of Directors held a recent board meeting there, Kathy Lloyd took the group into the library to show off an excellent collection of native plants from Mount Helena. She noted that a ceremony officially dedicating the collection to the library and the community was to be held Saturday, November 13, 1999.

The Flora of Mount Helena, a collection of nearly 300 vascular plants found at Helena's premier city park, was put together by members of the Kelsey Chapter of MNPS. Though a thorough, expertly constructed display, it is not quite complete, Kathy explained. Several more plants need to be collected and added to it. But the current display is an excellent source of information about the natives to be found around our capital city.

The project was funded with monies from the Montana Native Plant Society, Westech Environmental Services, Insty Prints, and Kelsey chapter member Keith Leatherman. Kelsey chapter members have worked diligently to collect, press, mount, label and organize the specimen collection. They did a spectacular job with the collection and the Library is very pleased with the donation. It is housed in a custom-built oak cabinet in the Montana Section of the library.

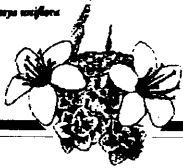
An extensive trail system crisscrosses Mount Helena, the dominant peak on the city's southwest side. It provides for great hikes at all times of the year. The vista overlooking the Helena valley and surrounding mountain ranges is superb, and wildflowers are profuse in the spring and summer. If you would like to know more about the collection, the Lewis and Clark Library and Mount Helena Park, call Kathy at (406)449-6586.

It's time to apply for the

**Montana Native
Plant Society's**

**Small
Grants
Program**

*See page 4 for more
information on how to
receive funding for
worthy projects that
promote the conser-
vation of native plants
in Montana.*



FROM THE PRESIDENT

WAYNE PHILLIPS

Camp Thunderbird

Good times at the Annual Meeting at Camp Thunderbird in June are still fresh on my mind though fall is here. The hard work that Kathy Lloyd and the Kelsey Chapter members invested resulted in a well organized meeting: comfortable and fun for the members attending. The setting in the cool aspen woods along a babbling brook was ideal. The fine conference hall, kitchen, showers, cabins and camp sites made for a perfect facility. The macro-biotic food was so outstanding that I purchased leftovers to take home. Yum! Ecologist Duncan Patten, from Bozeman, delivered a great program on the problems in the Yellowstone Ecosystem, especially development along the Yellowstone River. Thanks to all of the many Kelsey members who helped make this such an outstanding Annual Meeting.

Robyn Klein Recognized

Receiving the annual award at the Camp Thunderbird meeting was Valley of the Flowers Chapter member, Robyn Klein, from Bozeman. Robyn has been active in many aspects of plant conservation and education for years. She writes and publishes a periodical reviewing books and journals of botanical and herbal interest in "Robyn's Recommended Reading" and teaches herbalism and plant identification at her Sweetgrass School of Herbalism and the Yellowstone Institute.

According to Valley of the Flowers Chapter Representative Judy McCarthy, Robyn has been active in chapter activities, and says she has "actually been the backbone of the chapter."

Robyn was instrumental in forming the Friends of Echinacea last fall. She served as secretary and the information center for the group, keeping everyone informed as the legislation developed; worked with Doug Sternberg in drafting the bill; worked with the sponsor of the bill, Senator Linda Nelson; in gaining support for the bill; placed numerous phone calls, emails and personal contacts;

and made personal testimony before the Senate, pushing for passage of this important legislation.

Robyn has also used her reputation and contacts in the herbal community to educate and inform people of the risk to native plant species posed by commercial wildcrafting. The Society thanks you, Robyn, for your devotion to native plant conservation and especially for your spirit!

Welcome to new Directors

At the Annual Members Meeting at Camp Thunderbird, Secretary Pat Plantenberg presented the results of the elections with a hilarious rundown of the voting statistics. Elected officers for the next two years include Western Montana Director at Large Sam Culotta; Treasurer Madeline Mazurski; and President Wayne Phillips. Dennis Nicholls, Newsletter Editor and outgoing Western Representative, handed the reins of the office over to Sam in a funny tongue-in-cheek rundown of the responsibilities of the office. Also volunteering to fill the important Chair of the Small Grants Committee was Rachel Feigley. Thanks to Rachel and to Vice President Betty Kuropat and Bonnie Heidel, members of the small grants committee, who shared the responsibilities of the chairperson work while the position was vacant.

Next Board Meeting

As the sun is eclipsing on the other side of the earth and the millenium approaches, the work of the Montana Native Plant Society becomes ever more critically important!! Kathy Lloyd arranged for us to meet at the Lewis and Clark County Library on Saturday, November 6th. It was a fun and productive meeting, with 13 board members in attendance – perhaps the best turnout ever for a board meeting! As always, I would like to hear from you about issues and business items, and fun stuff that you feel are important to include in the agenda for our board meetings. Please discuss with the members in your Chapter/Area and drop

me a note so I can include on the agenda to be sent out in advance of the next meeting, which will be at the Lewis and Clark Library in Helena on Saturday, March 4, 2000. Looking forward to seeing you soon...

*"Should the perusal of this work in any degree add to the pleasure you feel in the cultivation of your favourite science, and in encouraging the efforts of others for its advancement, the utmost of the wishes are attained of your obedient and much devoted humble Servant"**

Wayne

*quote from Frederick Pursh in his dedication to Aylmer Bourke Lambert, Vice-President of the Linnean Society, upon publishing *Flora Americae Septentrionalis*; or, a Systematic Arrangement and Description of the Plants of North America, in 1814.

Jerry DeSanto

Dear Friends of Jerry DeSanto, in late August, I talked to Karen Feather, the long-time companion of Jerry. She said that Jerry was making slow, but steady progress toward full recovery from viral encephalitis. His prognosis is excellent for full or nearly full recovery, over time. He is now able to walk and speak some. He recently spent a month in treatment in Seattle, and has now returned to Montana, where he resides with Karen at PO Box 9, Coram, MT 59913. Jerry and Karen would welcome your correspondence to him at this address. Karen says that Jerry is wearing the 1999 Montana Native Plant Society tee shirt (with the bitterroot) every week and treasures his many friends in the Society. I am happy to bring you this good news of Jerry.



The trees are bare and the wind's a-blowin', but where's the snow?

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

Plant Collection

From page one

for this project helped disseminate the *Natives Are Nice* curriculum developed last year to all classes that participate in the program. This provides the teachers with in-class curriculum that continues native plant education.

This museum project helped native plant conservation efforts because students learned to identify local native plants, participate in plant identification and collection, and have opportunities to participate in the site-based student research through the MNHC. The new plant collection will be used in programs by both the MNHC and University of Montana to increase knowledge about native plants and the threats to their survival, thus developing an understanding about what can be done to protect them in a region that is facing increasing loss of habitat and consequently bio-diversity.

If you are interested in obtaining more information regarding the curriculum developed or wish to participate in an activity, please contact Kathryn Warner at (406) 243-6016) (e-mail: kwarners@selway.umt.edu) or by mail at Division of Biological Sciences, University of Montana, Missoula, MT 59801.

Kathryn Warner received a grant from the Montana Native Plant Society's Small Grants Program to help fund this project. The Board of Directors recently voted to make up to \$1,500 available for this highly successful program, awarded to meritorious projects each spring. See page 4 for more about the Year 2000 Small Grants Program.

♦

A National Strategy for Native Plant Conservation

Notes on the National Native Plant Conservation Initiative

By Angie Evenden

In the spring of 1994 over 80 botanists from across the country convened in Phoenix for a working meeting on national plant conservation issues and needs. Out of this meeting arose the desire to develop a more coordinated effort among organizations, agencies and individuals interested in plant conservation. The Native Plant Conservation Initiative (NPCI) took root. Following this meeting, a federal native plant committee and memorandum of understanding were institutes at the national level with ten participating agencies. Private and state organizations have also joined this effort as cooperators, now numbering over 120. The Montana Native Plant Society joined as a NPCI cooperator in 1996.

Based on results of working groups at the Phoenix meeting, a national NPCI strategy was developed, which included:

- Bring people and organizations together to share resources and talents to effectively conserve the nation's native plants.
- Provide opportunities for people to enjoy, understand and value native plants and plant communities.
- Ensure conservation and restoration of native plants and natural plant communities through ecosystem-based management.
- Encourage the scientific community to conduct research and technology development in support of native plant conservation.
- Encourage practices that support appropriate and sustainable uses of beneficial plants.
- Promote the development and use of coordinated databases and information-sharing to support native plant conservation.

A meeting was organized and hosted by the Lady Bird Johnson National Wildflower Research Center in Austin, TX last January, which was attended by MNPS members Angie Evenden and Steve Shelly. Working groups at that meeting focused on exotics, restoration, pollinators, public outreach and information sharing, with the goal of developing multi-year action plans for each focus.

For more about the NPCI and what has happened in the past year, visit their webpage at <http://www.nps.gov/plants/>. MNPS remains on the NPCI mailing list, and we'll keep you informed of other developments.

A New State Champion

BULL RIVER – During a field trip last summer with Pete Lesica and Peter Stickney, members of MNPS measured what will likely pass for a new state record Red Alder. Discovered the year before by Pete while conducting a survey for The Nature Conservancy on private property in the Bull River valley of northwest Montana, the tree's size eclipses the previous record submitted by Alan Lane in 1997. With a diameter of 28.1 inches (circumference of 93"), height of 41 feet and crown spread of about 40 feet, its score totaled 154 points (circumference plus height plus 1/4th the crown spread). Alan's tree tallied 133 points.

Red Alder (*Alnus rubra*) is not a very common tree/shrub in Montana. It doesn't even appear in Robert Dorn's *Flora of Montana* (1984), and Hitchcock and Cronquist's *Flora of the Pacific Northwest* says the species occurs on the west coast and in Idaho.

In fact, in adjacent Idaho, Red Alder is much more common, and grows to be quite large. Here in Montana, this tree is known from a very few locations in Lincoln and Sanders counties. The Bull River specimen will be nominated as the new state record this winter, and if it passes muster, it will appear on the year 2000 Big Tree Register of Montana's Champion Trees.

There's a flower that needs you!

Don't let your membership in the Montana Native Plant Society lapse. Send in your renewal today! There's a membership form on page 11. Every one of you are important to the conservation of native plants in Montana. RENEW TODAY!!!

A Call for Project Proposals

The Montana Native Plant Society (MNPS) announces the fifth annual small grants program for research, study and appreciation of Montana's native plants. Grants of up to \$500 each will be awarded in the spring of 2000 to fund projects or studies supporting conservation of native plants in Montana.

The grant competition is open to residents of Montana or members of MNPS. The deadline for proposals is January 30, 2000. The purpose of the MNPS Small Grants Program is to stimulate research, conservation and education activities which help foster an appreciation for Montana's native plants and plant communities. These grants are intended to promote native plant conservation through better understanding of our native flora and the factors affecting their survival.

In 1999, one grant was awarded to Kathryn Warner and Carol Brewer, Division of Biological Sciences of University of Montana – Missoula and Lisa Mills of Montana Natural History Center. The Small Grant Program funded a project entitled "Native Plant Museum and Education Collection," which included the development of an educational display of native plants with reference vouchers. This project will make a significant contribution to promoting awareness, appreciation and conservation of Montana's native plants. (See story beginning on page one).

We encourage anyone with a project they think might qualify for the MNPS small grants program to consider submitting a proposal!

Please submit an application which includes the following information:

PROJECT EXPENSES AND BUDGET:

- ♦ Direct costs of travel, meals, and lodging for research, conservation or education projects.
- ♦ Supply and service expenses used for the sole purpose of the native plant project.
- ♦ Printing costs for public outreach projects or research publications.
- ♦ Do not include expenses such as wages and



MONTANA NATIVE PLANT SOCIETY YEAR 2000 SMALL GRANTS PROGRAM

equipment, nor expenses that are non-essential to the project.

APPLICATION PROCEDURE & REQUIREMENTS:

- ♦ Submit two copies of your proposal. It should be no longer than three pages, double

spaced type.

- ♦ Include a project title.
- ♦ Identify a contact person, organization affiliation if any, and give an address, phone number, and e-mail if applicable.
- ♦ Describe the project (objectives, methods, description of final product).
- ♦ Explain how the project will benefit native plant conservation in Montana.
- ♦ Outline an overall project budget, including the amount you are requesting from MNPS (up to \$500), and show other funding sources.
- ♦ Give a time frame for completion of the project.
- ♦ Give a brief statement of the applicant's qualifications.

Project or study proposals must pertain to native plants of Montana. Preference will be given to proposals expected to generate data or public support for conservation of native plants in the wild. Proposals which demonstrate initiative and cooperation with other organizations or agencies are also preferred. Please limit small grant requests to \$500 or less.

Successful applicants will be required to submit a final report documenting the study or project accomplishments to the Montana Native Plant Society. We will also require a brief summary of the work to be published in *Kelsey*, newsletter of MNPS.

Submit your project proposal to:

Small Grants Committee
Montana Native Plant Society
P.O. Box 8783
Missoula, MT 59807-8783

Deadline for applications is January 30, 2000, and one or more grant(s) will be awarded by March 15, 2000.

The MNPS Small Grants Committee is comprised of Rachel Feigley, Betty Kuropat and Bonnie Heidell.

Money Available for Wildlife Projects

We all know how important habitat is for wildlife, and a major component of wildlife "habitat" is a healthy regime of native plants, shrubs and trees.

Montana Audubon will be offering grants totaling more than \$1,000 in the year 2000. This money, generated by an endowment fund called the Audubon Wildlife Fund of Montana, will be awarded to individuals or nonprofit organizations whose project will directly benefit wildlife in Montana. Preference will be given to projects involving non-game wildlife, from birds to invertebrates, and their habitats.

The purpose of the Audubon Wildlife Fund of Montana is to support research or other activities that focus on the preservation, enhancement and public appreciation of Montana's wildlife by providing funding for equipment for schools or nonprofit organizations, printing, and communications. Ineligible uses include salaries, stipends, per diem and personal equipment.

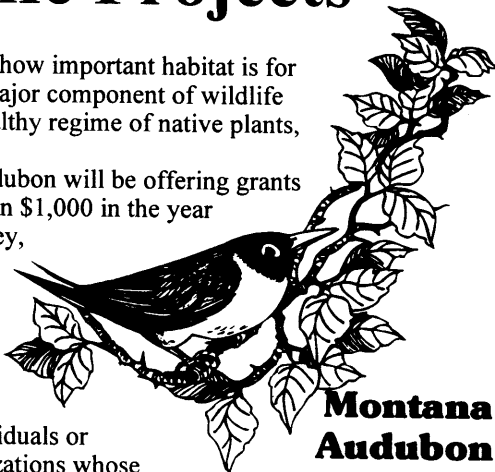
Interested applicants should prepare a brief typed proposal (a maximum of two pages) that emphasizes the significance of the proposed project in regard to its research, educational and/or recreational value. Proposals should include the following information:

- * Project title.
- * Your name, address, and telephone number.
- * Your affiliation with a school or organization, if applicable.
- * Specific project objectives.
- * Significance of the proposed project.
- * Method and materials.
- * Budget (How will the money be used? Other funding sources?).
- * Status of the project (When will you know if the project is a "go"?).
- * The schedule for implementation and completion of the project.
- * Description of the final product (Written report or presentation?).
- * A letter of reference regarding your ability to accomplish the project.

Proposals should be submitted to:
Audubon Wildlife Fund, Montana Audubon
P.O. Box 595, Helena, MT 59624

Applications must be postmarked no later than Monday, December 6, 1999.

Grant winner(s) will be announced by March 1, 2000.



New Officers and Budget Matters

A new member of the Montana Native Plant Society Board of Directors was introduced at the annual meeting last summer. Sam Culotta, of Bigfork, was elected to the position of Western Montana Director-at-large. He replaced Dennis Nicholls, who is now publishing *Kelsey* on behalf of MNPS.

Other officers include Wayne Phillips, who is continuing as President for another term; Past President Linda Iverson; Vice President Betty Kuropat; Secretary Pat Plantenberg; Treasurer Madeline Mazurski; and Eastern Montana Director-at-large Hal Vosen.

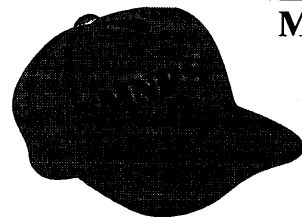
Scott Mincemoyer, of Missoula, was also introduced at Camp Thunderbird as the new director of Membership. He assumed that responsibility earlier this year at Madeline's encouragement, to ease some of the burden on the Treasurer.

Three positions will be up for election next spring: Vice President, Secretary and Eastern Montana Director-at-large. Though the three people currently serving in those positions are considering running again, nominations for any of these positions are welcome. A nominating committee was formed at the November board meeting, and

serving on that committee are Linda Iverson, Kathy Lloyd and Dennis Nicholls. If you know someone willing to serve on the MNPS board, please contact one of these committee members (find their phone numbers on the back page).

1999 has been a good year for MNPS. Madeline shared a summary of the year's budget at the November board meeting, and society accounts are all in the black. The checking account, as of November 6th, stood at \$517.00; the savings account harbors \$9,821.00; and the society's CD has invested \$10,000.00; for total assets of \$20,338.00.

The annual meeting near MacDonald Pass raised over \$3,000 and memberships have brought in more than \$4,600.00. The amount of funds in MNPS coffers have had the board discussing ways to wisely spend the money for the purpose of protecting and enhancing native plant communities and furthering educational opportunities so Montana's residents can come to a better appreciation of our native plants. If you have ideas for projects relating to these ideals, contact your local chapter representative, or call a board member and discuss your idea with them.



**MONTANA NATIVE
PLANT SOCIETY**

HATS

MNPS hats with an embroidered bitterroot design were so popular at the annual meeting that we are offering them again just in time for Christmas! If you would like to order a hat, please let your chapter president know by the end of November. If you are not affiliated with a chapter, please place your order with Kathy Lloyd at 449-6586 or DrakeKath@aol.com. The hats cost \$15 plus shipping.

CALENDAR

Get involved with an MNPS Chapter in your area, or join with other members for field trips and programs.

It's a big state. Let's share our adventures.

Be sure to write up a report of your activity and share the excitement of what you see with the rest of us.

Send your reports to:

Montana Native Plant Society, Kelsey Editor, P.O. Box 1632, Noxon, MT 59853.



DELVE INTO THE WORLD OF NATIVE PLANTS. IT'S WILD.



ARTEMISIA CHAPTER

Billings

MNPS President Wayne Phillips indicated at the November board meeting that he would be going to the Billings area next summer for a field trip. Call Clayton McCracken for information about other programs for this chapter. 252-2807.

BEARTOOTH MOUNTAINS CHAPTER

Red Lodge

Jean Redonski, 446-3907, organizes the activities for this chapter. Give her a call to find out about winter programs.

CALYPSO CHAPTER

Butte

Call Wilma Immonen for information about this chapter's programs at 494-3367, or Annie Green, 683-6594.

CLARK FORK CHAPTER

Missoula

December 9 – 6:30 pm the annual holiday potluck at University Congregational Church, 405 University Avenue, Missoula. Bring plates, utensils and food to share, and a few of your best slides.

January 13 – 7:30 pm join Scott Miles and Peter Lesica who will tell us how "Invaders come by water: Russian Olive and Tamarisk in Eastern Montana." Room L14, Gallagher Business Building, UM campus.

Flathead chapter

Kalispell

Contact Jen Asebrook (888-5104) or Betty Kuropat (892-0129) for details and updates. Business meetings are at 5:30 p.m. Programs start at 7 p.m. The locations for the December through May meetings will be decided at the November meeting.

November 17 – "Monitoring Native Plant Restoration Along Going-to-the-Sun Road, Glacier National Park." Presented by Jen Asebrook at Flathead Valley Community College conference room.

December 15 – Christmas Party at Betty Kuropat's, 6 pm. Potluck and gift exchange. 892-0129.

January 19 – "Threats of Exotic/Invasive Plants on Native Plant Communities." Presented by Maria Mantas. This program may be offered in February. Call for more info.

March 15 – "Winter Shrub Identification" with Steve Wirt.

April 19 – "Aquatic Vegetation Classification" with John Pierce.

May 17 – Herbarium Night, a hands-on evening to prepare for plant ID in the field. Location to be announced.

KELSEY CHAPTER

Helena

December 3 – 7:00 p.m. at the Lewis and Clark Library. Helen Fee will present a free program on the value,

significance and fun of tea. Bring your own tea cup for sampling!

December 11 – The Kelsey chapter annual Holiday Happening will take place on Sat. Dec. 11 at 6 p.m. The potluck dinner and "Name that Plant" slide show will be at Steve Cooper's home at 217 8th Ave. in Helena. Please bring your own table service and food and slides to share. All MNPS members are welcome.

MAKA FLORA CHAPTER

Westby

Al Joyes, who lives in an area reeling from November prairie fires, says there will be some meetings this winter, but dates and times have not been established. Please call him at 385-2579 for information.

VALLEY OF THE FLOWERS CHAPTER

Bozeman

This chapter is organizing the Annual Meeting for Year 2000. Much of their time this winter will be spent preparing for "Plants in Paradise." Nonetheless, a few winter activities are planned. They will be held at a new location – the Beall Park Art Center at 409 North Bozeman Street. Dates are all on Monday, December 13, February 21 and March 20, 7-9 pm.

"Plants in Paradise" Annual Meeting, June 23-25, 2000. Luccock Park Church Camp, nine miles south of Livingston.

If any meetings you've got planned were missed here, be sure to send announcements of meetings after January 20 to the newsletter editor by January 10th so they can get in the winter edition of *Kelsey*.

Montana Native Plant Source Guide

A booklet with sources for 583 plant species.

\$6 for MNPS members,
\$8 for non-members.

Price includes postage.
Make checks payable to MNPS.

Publications About Native Plants

A 4-page list of titles relating to gardening, medicinal uses, plant identification and technical references.
No charge. Send SASE.

Growing Echinacea

A 6-page article on starting seeds, cultivating and harvesting. No Charge.
Send SASE.

For any of these, contact Linda Iverson, HC88 Box 3733, Big Timber, MT 59011. (406)932-5840.

SOME SUMMER FUN

MELROSE – Calypso and Clark Fork chapter members met on the morning of June 5 at Brown's Crossing of the Big Hole River south of Melrose. The eight of us spent the day strolling about the bluffs above the river, playing hide-and-seek with the antelope and admiring the displays of stiff-leaf penstemon (*P. aridus*) and silky crazyweed (*Oxytropis sericea*). We also observed scattered plants of broad-keeled milkvetch (*Astragalus platytropis*) with its inflated, variegated purple and green pods. While this plant is common above timberline in California and Nevada, disjunct populations of southwest Montana and adjacent Idaho are found in low-elevation sagebrush steppe. We ate lunch on a ridge overlooking the Big Hole Valley and the foothills of the Pioneers. The Calypso members left early proving that they're just a bunch of dillontantes! - Pete Lesica

NOXON – A late June excursion into a rocky meadow on the sunny west slope of Berray Mountain turned into a day of discovery for a group of native plant lovers. Led by Pete Lesica and Peter Stickney, a wildflower new to Montana was found just above the Bull River valley floor – *Githopsis specuarioides*. A future issue of *Kelsey* will contain more about this exciting find. In addition, dozens of other flowers were seen on this spectacular day in the Cabinet Mountains. Among the more interesting plants were *Madia minima* (Small head tarweed), *Camassia quamash* (Camas), *Epilobium minutum* (Little willow herb), and about a dozen annuals from various genera specifically adapted to shallow rocky soils in exposed meadows such as this. Also, a new state record Red Alder was measured (see page 3). Thanks, Pete and Peter! - DN

The Annual Meeting: SHARING COMMON INTERESTS

BOTANY ON THE ROCKS

By Kathy Lloyd

As the Friday night storm clouds skirted by Camp Thunderbird on MacDonald Pass and teased us with just a few drops, the omen for a wonderful week-end to come was noted by approximately 85 Native Plant Society members and friends that had gathered to celebrate Montana's native plants and to renew friendships with plant buddies. The Annual Meeting for the Society, held every summer, was hosted this past summer by the Kelsey chapter.

With a theme of "Botany on the Rocks," the event kicked off on Friday night with a pot-luck and a presentation by geologist Ray Breuninger. Laying the groundwork for the field trips to come with a discussion of the underlying geological structure of the Helena Valley, Dr. Breuninger helped to add a new dimension and depth to our study of the flora of the area.

The members' meeting was unexpectedly entertaining as Pat Plantenberg, the secretary of the Society, reported late-breaking election results and the outcome of exit polls. We're sure that voter turn-out will be even higher next year as a result of Pat's painstaking study and reporting of voter trends. Wayne Phillips was elected to another two-year term as President, Madeline Mazurski was re-elected as Treasurer, and Sam Culotta will be the new Western Representative.

Saturday's field trips were a big success. Plant lists are being assembled by the Continental Divide group, led by Steve Shelly and the Blue Cloud Hills crew that trustingly followed Wayne Phillips over just one more ridge! Good thing too, as

Maria Mantas reports that she saw *Fritillaria atropurpurea* for the first time. Bonnie Heidel's trip to Hogback and Refrigerator Canyon was rewarded with displays of many wildflowers, including the state endemic, *Lesquerella klausii*.

"Speaking of endemics, the Continental Divide group saw *Phlox kelseyi* var. *missoulensis* in full glorious bloom on MacDonald Pass, and the Mount Helena trip saw almost-endemic *Oxytropis lagopus* var. *conjugens* in less glorious (but still impressive) fruit production."

The two trips to Blackfoot Meadows were rewarded with the botanical wisdom of John Pierce as well as fun fungus facts provided by mycologist Larry Evans. A table of mushroom specimens was set up in the lodge that generated considerable interest.

Rounding off a great day, the Saturday buffet, catered by MNPS member Debra Beaver of Sunflower Catering, was fabulous and the keynote address by ecologist Dr. Duncan Patten was inspiring and left us wanting to hear more. Robyn Klein was presented with a special award and the accolades of all present for her tireless work to help pass the bill creating a three-year moratorium on the harvest of Echinacea and other Montana native plants on state lands. Thank you Robyn!

The raffle, including many unique items, was lots of fun and raised money to help support the Native Plant Society's small grant program. Drake Barton's much coveted hand-crafted plant press (for the discriminating botanist), was raffled to Scott Mincemoyer who promises to give it a good home. The committee meetings generated renewed interest in the conservation efforts of the

Plants in Paradise

BOZEMAN – The first Montana Native Plant Society Annual Meeting of the new millennium is taking shape as members of the Valley of the Flowers Chapter work to bring us "Plants in Paradise." Scheduled for June 23-25, 2000, the next gathering of native plant lovers is slated for Luccock Park United Methodist Church Camp in the Paradise Valley south of Livingston. This camp was selected as the site for our year 2000 annual meeting because of its spectacular setting among the high mountain ranges of southwestern Montana and easy access. Several trailheads are located here, and the camp is just 48 miles north of Gardiner and one of the entrances to Yellowstone National Park. Constructed in the 1920s, Luccock Park UMCC is close to a wilderness boundary at an elevation of 6,000 feet. Look for more info on the next annual meeting in future issues of *Kelsey*.

Society as conservation committee chair Peter Lesica described strategies the committee has undertaken to help halt the destruction of native prairie. The landscape, education, and small grants committees also recruited new members and enthusiasm.

Many thanks to Kelsey chapter members and all who helped to make the 1999 Annual Meeting such a success. With so many good friends gathered together sharing an interest in Montana's native flora, it doesn't get much better!

The Real Flower Power

From a presentation by Ryan Meccage at Range Days, Carter County

BAKER – If you've ever wanted to pull a practical joke on an unsuspecting, gullible and perhaps an annoying sibling or friend, then you're talking to the right person. You know, I really shouldn't be giving away all my best secrets, but this one's just too good to keep to myself. It's called Echinacea. Just one bite of its potent root will send your victim into an uncontrolled frenzy of drooling and slobbering...somewhat similar to myself around Thanksgiving time! They will moan and groan and plead with you to tell them what you just made them chew, but you'll just calmly say, "Echinacea."

Your stupefied victim, without even any clue how to properly pronounce what you just said, will walk away unaware that what he just had in his mouth was the most valuable herb found naturally on Montana's landscape today.

So what is this Echinacea? What is this astounding plant that sprouts from beneath the green folds of creation? Commonly called Purple Coneflower, Black Sampson or Missouri Coneflower, Echinacea has a long history of medical usefulness. Echinacea was used by the Plains Indians for ailments more than any other herb. They would suck on the root when suffering from a variety of infections: smallpox, measles, mumps, cancer, snakebites, skin problems, and mouth and tooth ailments. The Sioux even used the fresh root to treat rabies!

Early settlers learned of Echinacea's many uses from the Indians in their area and it quickly became a mainstay in the settlers' medicine cabinets. In 1887, Echinacea was introduced into U.S. medical practice, and it grew in popularity. Indeed, in the early part of the 20th century, nearly every medicine cabinet in the country contained Echinacea. However, with the discovery of penicillin and other "wonder drugs," the popularity of Echinacea eventually waned.

The plant was rediscovered in the 1930s by Dr. Gerhard Madaus of Germany, who came to America in search of Echinacea seeds. He returned to his homeland and developed a juice from the above-ground portion of *Echinacea purpurea*. This preparation became the most studied and frequently prescribed Echinacea preparation worldwide.

Over 500 scientific studies have documented the chemistry, pharmacology and clinical applications of Echinacea. The research of Madaus and others revealed that Echinacea contains complex sugar molecules called polysaccharides that stimulate the cells of the immune system, including white blood cells. In effect, Echinacea lessens symptoms of and

speeds recovery from viruses and upper respiratory infections. Its effectiveness is not due to just one compound, but to a multiplicity of compounds that work synergistically to stimulate the growth of new tissue, kill bacteria and neutralize viruses.

"Okay," you say, "enough of the medical mumbo-jumbo. I want to know whereabouts I can find this nifty little plant!"

Well, if you're looking around here in Carter County, you'll most likely find *Echinacea angustifolia* scattered randomly about the hillsides. Reaching only 6 to 20 inches in height, the stems are covered with stiff bristly hairs. The leaves have an oblong lance shape, and are dark green with 3 to 5 nerves running the length of the leaf. The flowers also spread, instead of drooping as most of the Echinaceas do, and are quite short – about an inch, to be exact. It grows in abundance on the Great Plains from Canada to Texas with a preference for rocky side hills and weakly developed soils. This colorful herb is palatable and nutritious to all livestock and is an indicator of good range condition.

Today, Echinacea is among the safest of herbal preparations and certainly among the most popular. With such a growing demand, estimates of wild root harvesting varies wildly between 50 and 200 tons per year. Correspondingly, wild-harvested roots reached a high in April 1998 with prices of \$20 to \$23 per pound!

It is especially important that those wanting to use this herb grow it themselves because it has been badly over-harvested in the wild. Greedy wildcrafters have decimated wild populations of Echinacea, and hills once covered with this lovely flower have been all but stripped. For this reason, laws have been placed on State and Public lands forbidding the harvest of any Echinacea plants.

There is no doubt in my mind that this particular herb is God's personal gift to mankind. The vast healing potentials and the untold medical possibilities may still outweigh the fruitful benefits it has already brought us. The full healing capabilities of this herb are yet to be discovered and the dilemma of large-scale mechanical production is yet to be solved. Indeed, Echinacea has been and will be the most popular and widely used herb for days to come. With so many potential and useful applications, I feel I can honestly say that in its natural environment, bathed in all its simplicity and beauty, Echinacea is not only a cure,... it's a miracle.

This article came from Hal Vosen.

RHIZOMES

(news briefs from around the state)

Weed Plan

HELENA – Montana is developing a state weed plan and is looking for input from Native Plant Society members. If you are concerned about the proliferation of exotic species and the loss of natives, diversity and habitat, please comment. For more information call Kathy Lloyd at 449-6586 or e-mail: DrakeKath@aol.com Plant Society member Barbra Mullin, the weed specialist for the Montana Department of Agriculture may also be contacted at 444-5400 or bmullin@state.mt.us.

Membership is down

MISSOULA – Scott Mincemoyer, the Membership Committee chair, reported at the November board meeting that the society's membership is down from previous years. Whereas there have been well over 400 members in the past, his current list shows 368 members. Be sure to renew your membership, and if you know people who value Montana's native plants, encourage them to join up as well. With the encroachment of civilization, exotic species and the subsequent loss of habitat, it takes us all working together to protect our native plant communities.

Ladies and herbs

HELENA – The Great Northern Botanicals Association reported in their summer newsletter: "Another milestone in the mainstream acceptance of herbal remedies was evidenced in the August '99 issue of *Ladies' Home Journal*. This lead article featured several herbs (and) presented a positive tone and general endorsement of herbal remedies."

Masters of Change

By Bonnie Heidel

If you can't change – LEAVE! The native annual species of Montana's flora are masters of change, enduring its greatest environmental vagaries by simply avoiding them. They are adapted to windows of opportunity in the growing season, dying before the most inhospitable conditions, with nothing but seeds remaining.

Annual plants produce flowers only once, and usually reproduce within a life cycle of 12 months or less. This botanical avoidance strategy gets the species through adverse or dynamic conditions, putting a premium on seed production, dispersal, storage (seed banks), dormancy, germination, and establishment to synchronize with changes in climate conditions.

A surprising number of Montana's rarest plants practice this fine art of avoidance. These are the annual species on the 1999 Montana plant species of special concern list (54 of 334 species, or 16%). They represent a spectrum of habitats, and include:

- * Alpine annuals * Desert annuals * Wetland annuals
- * Harsh outcrop annuals * Early seral annuals

Among them are elusive species like dense-spike primrose (*Boisduvalia densiflora*), known only from one historic collection record in Montana, but common elsewhere; and a few species like Water Howellia (*Howellia aquatilis*) that are imperiled or vulnerable throughout their entire range. Both are wetland species, but the former grows as an emergent around wetland margins that quickly dry out, and the latter grows as a submergent in zones that often dry out at the end of the growing season.

Why are these annual species rare? Many of them require habitat and associated habitat processes that are specialized and/or threatened. Others among them may have merely eluded botanists to date. Annual species can be the most difficult to survey because of various traits among them that include population fluctuations from year-to-year, small stature, location shifts over the years, and critical timing constraints during the growing season.

Annuals have horticultural appeal, allocating a high proportion of their resources to sexual reproduction (including flower parts) compared to perennials, without need to store energy for spring re-growth. The dependable showiness of annuals in a well-watered garden contrasts with the often unreliable presence, numbers, and stature of native annual species in the wild where they may be inconspicuous and short-lived, avoiding adverse conditions for one or more years as seeds.

The majority of Montana's rare annual species do not and will not ever have a place in the horticultural trade. But they have unique places in Montana landscapes... and challenge us to look closer.

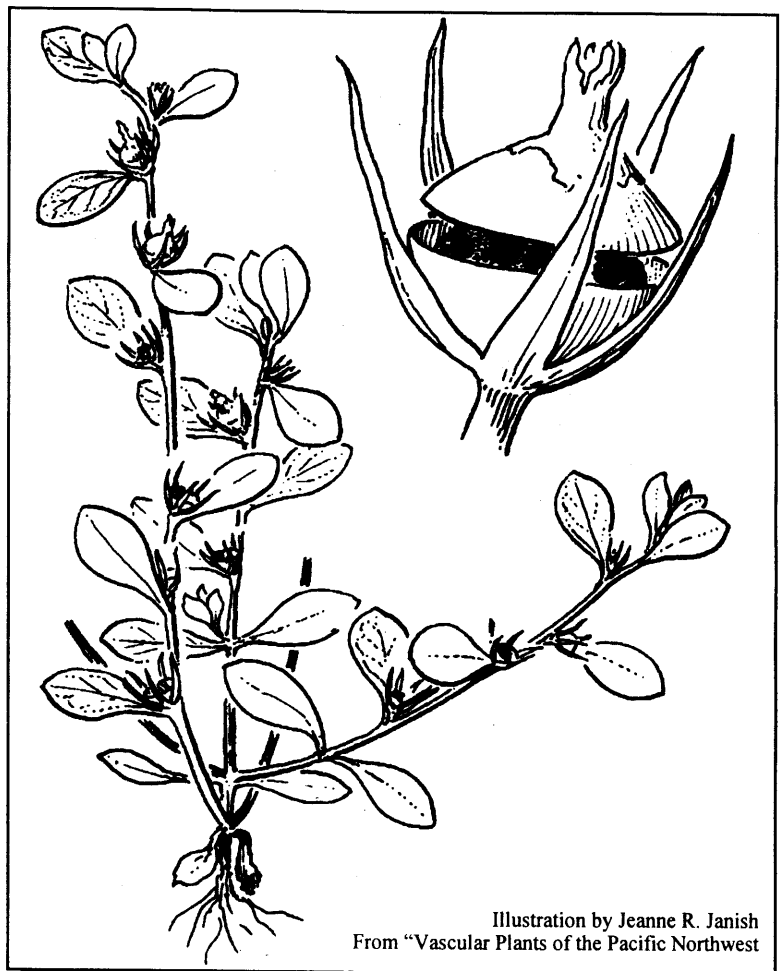


Illustration by Jeanne R. Janish
From "Vascular Plants of the Pacific Northwest"

Chaffweed (Centunculus minimus), an annual species of special concern in Montana. It is now known from six counties.

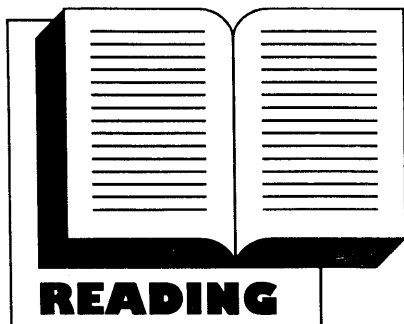
An Apology

Wondering what happened to the summer issue of *Kelseya*? And why the Autumn issue is so late? Well, there are no plausible excuses other than a busy life; but then, whose lives aren't busy in this day and age? So I must apologize for the delinquency in my duties as newsletter editor this summer. As Wayne Phillips likes to say, "You don't have an organization without a newsletter. It's how we communicate with one another."

There is great participation in the Montana Native Plant Society's newsletter, and it's a terrible loss to us all when it doesn't get done on time, or at all. I am sorry for the inconvenience it may have placed on the members of the society and each chapter organization throughout the state. I'll get it back on schedule this winter so that we can continue to share our love for Montana's native wildflowers.

The deadline for the Winter issue will be put back one month to January 10th, but we'll be back on schedule with the Spring newsletter, the deadline for which is March 10, 2000.

Thank you for your patience and understanding. - Dennis N.



Get your copy of *Dorn's Vascular Plants of Montana*

The key to Montana's flora, *Vascular Plants of Montana* by Robert Dorn, 1984, is now available from the Montana Native Plant Society. Mr. Dorn sold the books to the Society at a very good price for display and sale during the Annual Meeting in June. If you would like copies for your chapter to sell during up-coming events, or need a copy for yourself, contact the Kelsey chapter at 449-6586 or email: DrakeKath@aol.com.

Optimolocus & Rare Plant Guide

Optimolocus - a newsletter of the Montana Natural Heritage Program - is now available to report new activities, results, and services. Beginning with the premier fall 1999 issue, it will come out three times a year and is also posted on the MTNHP homepage (<http://nris.state.mt.us/mtnhp/>). If you would like to receive a mailed copy or emailed copy, please send your name and address to: Montana Natural Heritage Program, P.O. Box 201800, Helena, MT 59620-1800; or to mtnhp@state.mt.us.

The Montana Rare Plant Guide has a new illustration gallery for users to work exclusively with drawings. It is posted at: <http://nris.state.mt.us/mtnhp/> - then "plants" and "field guide." The Field Guide includes some illustration additions, and is updated quarterly with any new information on distribution, elevation, status, references, and new photographs. Any comments, and photographs to help fill gaps, are welcome (bheidel@state.mt.us).

The Flower Issue

By Betty Kuropat

The May 1999 issue of *Natural History*, called "The Flower Issue," is "devoted to one of nature's most celebrated, sung about, studied, and beautiful inventions." It has lots of interesting articles, photographs, quotes, poems, recipes, and Internet web sites. Find out some special places to see

flowers blooming. Learn about fossilized, 90-million-year-old plants and their pollinators that were found in New Jersey. Or about double fertilization in an article subtitled "Fertilization is so nice, they do it twice." Several articles deal with fragrances; how flowers use them and how humans use them. The issue is full of flower tidbits about pollinators, coloration, rare species, evolution, genetics, perfume, moods, and art. Check it out at your library.

SMALL GRANT AWARDED TO AN EDUCATION PARTNERSHIP

By Betty Kuropat

Last spring, the MNPS Board of Directors made an award of the 1999 Small Grants Competition. We received six excellent proposals encompassing a variety of education, research and advocacy projects. Choosing one was difficult because all the proposals were worthy of funding. Following is a list of proposal titles that we received:

EDUCATION

- Native Plant Museum and Educational Collection
- A Key to the Wetland Plant Genera of Montana
- Habitat Relationships of Birds using Aspen Stands at Lone Mountain Ranch (Combines education and research)

RESEARCH

- Germination Ecology of Seed Mixture Candidates for Mt. Sentinel Grassland Restoration
- Soil Influences on Whitebark Pine Cone Production in the Greater Yellowstone Ecosystem

ADVOCACY

- Working to Improve State Old Growth Procedures

The purpose of the small grant program is to support research and education activities which lead to better understanding, appreciation and conservation of Montana's native flora. The proposal, Native Plant Museum and Educational Collection, was selected for funding. Kathryn Warner and Carol Brewer of University of Montana, and Lisa Mills of Montana Natural History Center used \$500 from MNPS to create an



educational native plant collection for exhibits and reference vouchers (see related story on page one). Missoula area K-12 students worked with University of Montana students to inventory, collect and mount plant specimens from Fort Missoula grounds. The collection will be housed at Montana Natural History Center. It will be used in public exhibits and classrooms for projects that require plant identification. The project provides an opportunity for students of all ages to participate in site inventory, plant identification and collection and voucher preparation. The *Natives Are Nice* curriculum (developed last year by Susan Palermo with a MNPS Small Grant) will be distributed to each participating class.

Thanks to everyone who participated in this year's competition. We hope to hear from many of you again in the year 2000 grant programs. SEE PAGE 4!

CONSIDER A SPECIAL DONATION

Thanks to fund-raising activities at our annual meetings and individual donations, MNPS has developed a fund at the state level to support worthy projects which advance the conservation and better understanding of Montana's flora. We would like to continue this important work in future years. If you would like to support MNPS Small Grants Program or other special projects please consider a tax-deductible contribution to MNPS. You may use the donation check-off on the membership form or mail a donation directly to MNPS, PO BOX 8783, Missoula, MT 59807-8783.

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 THE 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. Additional chapters are in the planning stages for other areas. Watch for announcements of meetings 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 the Flowers)

DATE YOUR MEMBERSHIP EXPIRES. If your label reads "2/97" your membership expired February 28, 1997. 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 any address changes.

Membership in the 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 *KELSEYA*. 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.

BECOME A MEMBER OR RENEW YOUR MEMBERSHIP IN THE MONTANA NATIVE PLANT SOCIETY

DATE _____

NAME (please print) _____ Email _____

ADDRESS _____ CITY/STATE/ZIP _____

PHONE (____) _____ NEW MEMBERSHIP _____ RENEWAL _____

**STATEWIDE MEMBERSHIP WITH
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MEMBER-AT-LARGE / LIVING LIGHTLY
(No chapter affiliation)

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

___ \$12 I. Individual
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___ 30 III. Business/Organization
___ 300 IV. Lifetime member (one-time payment)

MAKE CHECKS PAYABLE TO:
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Missoula MT 59807-8783



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

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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 to the values 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 — almost anything, in fact, that relates to our native plants or the society. Please include a line or two of "bio" information with each article. Drawings should be in black ink or good-quality photocopy. If you send clippings, please note the source, volume/issue, and date. All meeting and field trip notices, field trip reports or announcements should be mailed to *KELSEYA* EDITOR, P.O. BOX 1632, NOXON, MT 59853. All items should be typed and, if possible, put on a 3.5" disk and saved in Microsoft Word, Word Perfect, or Microsoft Publisher for a PC. Please include a hard copy with your disk.

CHANGES OF ADDRESS AND INQUIRIES ABOUT MEMBERSHIP IN MNPS SHOULD BE SENT TO: MNPS MEMBERSHIP, P.O. BOX 8783, MISSOULA MT 59807-8783. GENERAL CORRESPONDENCE SHOULD ALSO BE DIRECTED TO THE MISSOULA ADDRESS.

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 plants or the interests of MNPS members.

Deadline for each issue: AUTUMN – September 10; WINTER – December 10; SPRING – March 10; SUMMER – June 10.

Want extra copies of *Kelsey* for friends or family? Call the Newsletter Editor or write to the Noxon address for more information.

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Renew your membership today to help preserve Montana's native flora. Thank You.