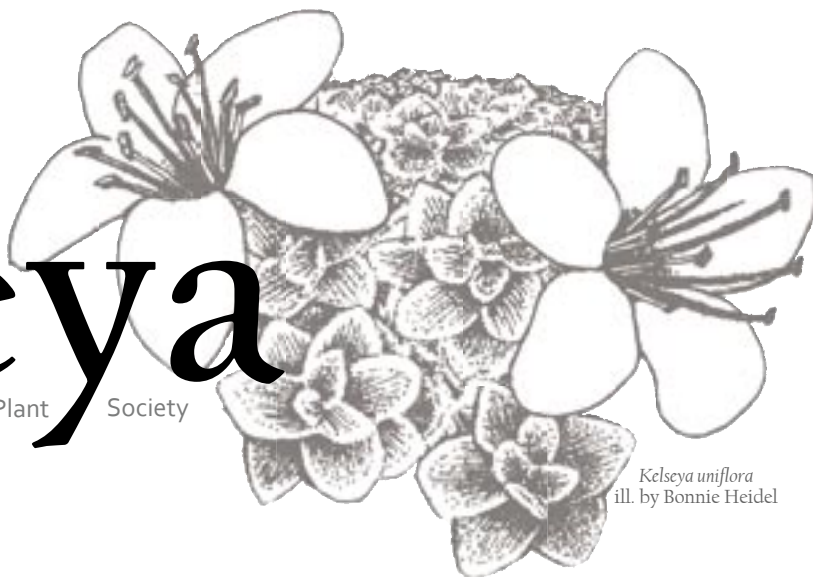


# Kelseya

Newsletter of the Montana Native Plant Society



*Kelseya uniflora*  
ill. by Bonnie Heidel

## Frozen Fall: Early Frost Kills Western Montana Fall Colors

By Paul Alaback



*Freeze-dried leaves on black locust tree. Photo by Paul Alaback*

In the fall we often don't have much in the way of showy native wildflowers to enjoy, other than a few late asters, rabbitbrush or some golden asters, but at least we can look forward to some spectacular colors before our deciduous trees and shrubs lose their leaves for good. But not in 2009! An epic frost hit most of western Montana in early October, before most species even had begun to come into color. This was an event that really showed the true Montana natives. As of early December, many ornamental plants still had not lost their leaves, pointing out how sensitive plants can be to changes in the timing of seasons, and how much you can learn by keeping careful records of phenological changes.

Some data suggest that plants can become more sensitive to early frost damage with climate change, just

because they are not as well prepared (not hardened off) for these temperatures when mild temperatures or shorter winters prevail. For many parts of the world, peak fall colors are occurring as much as a week or two later than they have historically, suggesting a possible connection with global climate change. But there is no much good information on the timing of fall colors and leaf fall for Montana.

How trees prepare for winter varies by species, and for ornamentals with where they were bred. The process generally starts when night length exceeds 12 hours, or after the fall equinox in mid September. Cool nighttime temperatures, normally in the 40 degree range, can hasten the process of hardening, in which plants change their chemistry and withdraw their sap deep into their trunks. This enables them to withstand progressively colder temperatures without tissue damage. Plants continue to harden off from the beginning of fall all the way into the dead of winter, when some trees can tolerate temperatures of -30 degrees F or more without visible damage. The ability of trees to tolerate these extreme temperatures, in fact, explains the northern distribution of many tree species, and also why conifers dominate the northern or highest elevation forest regions (they can withdraw more water from outer areas of their trunks than hardwoods, preventing cell damage from expanding ice crystals).

So while here in Montana temperatures of 5 or 10 degrees are something that all our plants should be tolerant of in the dead of winter, when these temperatures occur all of the sudden, and in early October, they can cause a lot of damage! For Missoula, the 30-year normal, first hard frost is in late October or early November. We had our first frost, which was a hard frost (28 degrees F or colder) on October 6, following

*continued, page 5*

---

# Chapter Events

## Calypso Chapter

The Calypso Chapter had a Christmas Potluck Brunch December 12, 2009 in Butte at the home of Kriss and Rick Douglass.

Upcoming meetings:

February -- TBA

March -- TBA

April -- Third Annual Gardening Workshop

There will be field trips in May, June and August. The Chapter is hosting the MNPS Annual Meeting July 16-18 at the Birch Creek Center. For more information, contact Linda Lyon at [L\\_lyon@hotdawg.umwestern.edu](mailto:L_lyon@hotdawg.umwestern.edu) or 683-2878, or Catherine Cain at [ecotour@montana.com](mailto:ecotour@montana.com).

## Clark Fork Chapter

Evening Lectures: Thursdays, 7:30 pm, Room Log Gallagher Business Building, UM Campus, unless otherwise noted:

January 14—Biologist Kristi Dubois and her husband Bert Lindler talk about their trip and the natural history of The Gambia.

February 11—"The Bee Stands Alone: Montana's Solitary Bees and their Relationships with Native and Introduced Plants," presented by Jennifer Palladini, MNPS Small Grant recipient.

March 8 (MONDAY)—"What Birds and Spiders and Mice Tell Us About the Natural History of Exotic Plant Invasions," presented by Forest Service Ecologist Dean Pearson. Joint meeting with Montana Audubon. Meet in Room 14, Gallagher Business Building.

April 8—"Montana's High Mountain Wildflowers," photos by Clark Fork Chapter members, taken in and around Glacier National Park during last summer's annual meeting.

Herbarium Nights: Tuesdays, 7:30 pm, Room 303, Botany Building, UM Campus

January 26—Peter Stickney talks about "Hydrophyllaceae: An Acquaintance with Montana's Waterleaf Family."

February 23—Scott Mincemoyer, MT Natural Heritage Program botanist, introduces the genus *Juncus*, Montana's rushes.

March 30—Find out what cinquefoil means when Peter Lesica presents the genus *Potentilla*.

## Flathead Chapter

Monthly meetings are the 3rd Wednesday of most months, October through May at Discovery Square, 540 Nucleus Ave. in Columbia Falls (the old First Citizen's Bank). Programs start at 7:00 pm unless otherwise noted. Members are encouraged to attend the 5:30 general meetings to discuss and plan chapter activities and business. Feel free to bring your supper.



January 20—"Noxious Weeds and Cooperative Management," presented by restoration biologist Joyce Lapp and Dawn La Fleur, Glacier National Park resource staff. Learn basics about noxious weeds and a cooperative effort to pull federal, state and county weed managers together with local gravel pit operators to improve weed management.

February 17—"Siyeh Pass Virtual Field Trip." Shake off your winter blues and follow Glacier National Park's Jen Asebrook and her camera to the remarkably diverse and spectacular wildflower habitats of Siyeh Pass. This program will follow a short video on conserving the Transboundary Flathead, presented by Dave Hadden.

March 17—"Nature Journaling," with Karin Connelly. A little drawing, a little painting, a little outside the box. For novice or veteran journal keepers.

April 21—"Discovering the Jewels in the Crown: A Century of Botany in Glacier National Park," by Peter Lesica.

May 19—Talk or field trip with Steve Wirt. Time and subject TBA. Stay tuned!

## Kelsey Chapter

Meetings are free and open to the public. The following meetings will be held at the Lewis & Clark Library. For more information, call Kathy at 449-6586.

January 19—John Beaver from Westech will present a program on the results of restoration work he has been involved with and his thoughts on restoration strategies.

February 16—Chris Smith from Montana Fish, Wildlife and Parks will discuss plans for the Montana Outdoor Education Center at Spring Meadow Lake. The center will establish a native plant garden as one of several outdoor features. Jointly sponsored with Last Chance Audubon.

March 24—Loren Bahls presents "Exploring the Little World of Diatoms: Montana's Smallest Native Plants." Learn why diatoms are plants, even though they don't have leaves, stems, roots or flowers. Bahls explains why diatoms are important, and will discuss some current work he's doing in Glacier National Park and at Indian Meadows Research Natural Area.

## Valley of the Flowers Chapter

Chapter meetings are the second Tuesday of each month at 7:00 pm in Room 108, Plant BioSciences Bldg, MSU Campus.

January 12—"Master Gardener Program," presented by Toby Day, Extension Horticulture, MSU

February 9—"Sagebrush Steppe Communities: Documenting Plant Biodiversity," by Matt Lavin, Dept of Plant Sciences & Plant Pathology

March 9—"Biomimicry: Borrowing Ideas from Plants," by Robyn Klein, Biomimicry Institute, Missoula, MT

April 13—"Wildflowers of the Southwest," presented by Sharon Eversman

## Botanists, Biologists, Ecologists & More

The Northwest Scientific Association (NWSA) is holding their annual meeting in Centralia, WA, March 24-27, 2010. The theme is "From Mount St. Helens to Oak-Prairie Lowlands: Disturbances, Biological Legacies and Conservation." The NWSA is made up of agency resource professionals, academicians and consultants. Sessions focus on geology, biology, botany, hydrology, forestry, anthropology and more! If you have a paper or poster presentation you'd like to submit, abstracts are due to northwest.science@gmail.com no later than February 16. For more information, go to [www.vetmed.wsu.edu](http://www.vetmed.wsu.edu).

## Forest Botanist Position

The Beaverhead-Deerlodge National Forest has a job opening for a Forest Botanist (GS-0430-11). This position is permanent, full-time in Dillon, Montana.

Applications must be submitted by close of business January 15, 2010. For more information, contact Rob Gump at [rgump@fs.fed.us](mailto:rgump@fs.fed.us), or call 683-3965.

## Free from MNPS Publications:

- MNPS membership brochures
- Plant Collection Guidelines for Teachers brochures
- Echinacea Cultivation Information
- Plants Collected in Montana During the Lewis & Clark Expedition. Please send a SASE to 1270 Lower Sweet Grass Road, Big Timber, MT 59011 to request any of these publications.

More available online at [www.mtnativeplants.org](http://www.mtnativeplants.org)

## Welcome New Members

The Montana Native Plant Society welcomes the following new members:

**Clark Fork Chapter:** Leah Grunzke

**Eastern-at-Large:** Lisa Carnicom

**Flathead Chapter:** Evelyn Gillespie, Barbara Boorman.

**Kelsey Chapter:** Eleanor Vargas, Susan Palermo VanLieve

**Maka Flora Chapter:** Linda Nevins

**Valley of Flowers Chapter:** Helen H. McCarty (lifetime member)

## Native Seed Collection Opportunities

The Wyoming Bureau of Land Management (BLM) has funding and opportunities for intern and contract assistance with collecting native plant seed through its Native Plant Materials Development Program ([www.blm.gov/wy/st/en/programs/plant\\_conservation.htm](http://www.blm.gov/wy/st/en/programs/plant_conservation.htm)). Seed collection will focus on all local genotypes, but especially those suitable for use in reclamation and restorations (e.g., sage grouse habitat). The Wyoming BLM will hire up to eight interns for the 2010 field season and also will offer seed-collecting contracts through [www.grants.gov](http://www.grants.gov). For more information, contact [Adrienne.Pilmanis@blm.gov](mailto:Adrienne.Pilmanis@blm.gov), or call (307) 775-6035.

## President's Platform

Well, it's winter here in Montana again, whatever that means these days. The latest data from the climate scientists shows that the global climate is continuing to heat up but, as we all know, short-term weather predictions are a pretty tough business. Where I live we just got our first blast of below zero temperatures, although it seems like overall it has been fairly mild and dry recently. I hear that moderate El Nino conditions are currently in place, which affect our seasonal weather and often mean a drier and warmer than average winter in the Northern Rockies. This can have a big impact on our snowpack conditions, which can have a big impact on a lot of our native plants. It will be interesting to see how the weather plays out this winter and what our plants do next spring and summer as a result.

Another effect of El Nino often is wetter than average conditions in the southwest deserts, especially in southern California. If you're thinking of heading south early this spring to see the desert bloom, it may be a good year. But nothing is guaranteed with short-term weather, so you'll have to pay attention over the next couple of months to see what actually happens.

So wherever you're thinking of traveling, or even if you're just staying home, keeping track of the weather can be pretty useful for understanding what's going on with native plants. And no matter what, there are sure to be surprises!



~ Dave Hanna



---

# Teaching Gardens: Versatile Tools for Community Education

by Leah Grunzke

Our affinity for gardening runs deep. We grow backyard vegetable gardens, befriend neighbors with seed swaps and rhizome divisions, enter our prized “Dolly Parton” tea rose hybrid in the county fair, generally and puzzle our way through life’s hardships with our hands in the dirt.

The idea of gardens as teaching tools – “outdoor classrooms,” – has been generating a lot of excitement in recent years, and is one of the fastest growing trends in environmental education today. Throughout history, in families and communities, one generation has guided the next in the art of cultivating plants. What elders didn’t have to contend with, however, was the competition from 3D video games and instantaneous access to unlimited information and entertainment.

According to the Children and Nature Network, children spend an average of 45 hours a week in front of a screen. They will only spend an average of 30 minutes engaged in unstructured play outdoors. Troubling statistics like these make us stop and think, what sort of outdoor opportunities are we offering our children? Teaching gardens offer one practical solution, providing safe places for kids to engage hands-on with the world around them.

Native plant gardens, in particular, are great places to begin reconnecting kids with nature. They demonstrate our regional biodiversity, affirming and building on our sense of place in the world. Learning to identify some common species, and later recognizing them in natural areas, is a source of pride and delight at any age. Native plant communities also provide needed habitat, bringing local wildlife ecology right into our backyards. Many of us have practically stopped noticing robins, grasshoppers, squirrels and other such mundane animals, but up-close encounters with these creatures is what shapes our world when we’re young.

In a native garden, there is more to learn than just “how to grow plants.” Garden planning, installation and caretaking all offer opportunities for real world lessons in math, literature, art, economics and more. A diverse collection of native plants is a living history of our natural world, and a starting point for exploring human culture. And within the garden, you’ll find a ready-made science

lab, teeming with experiments to be performed, measurements to be collected and observations to be recorded.

While any garden can offer opportunities for learning and discovery, there are some key elements to consider when designing a teaching garden. First, consider your audience. Is this a public space that adults will use? If so, interpretive signs, plant labels and sources for more information will enrich the experience. Quality interpretive materials can transform an ordinary garden into a model for homeowners and other organizations interested in developing their own native gardens. Is this a space primarily for kids? Kids see the world a little differently, and taking the time to look at things from their point of view can make all the difference. Most importantly, kids like to play; it’s how they gather information about the world. Places to hide, climb and run are essential. Plants should be sturdy and relatively trample-proof, or protected by obvious barriers. Clearly defined boundaries will create a “safe zone” where kids can move about as they choose.

To enhance the educational potential, think about dividing the garden into thematic areas. Groups of wetland plants, prairie habitat or plants that attract particular pollinators all demonstrate distinct, interesting and observable characteristics. Focusing on how these plants form habitat for wildlife also is appealing, and snags, fallen logs and nesting boxes can enhance this.

Creating native gardens is a great way to promote regional biodiversity. It is a fortunate benefit that these gardens might also cultivate future generations’ relationships with their environment.





---

## Nominations Needed

It's time to get your nominations in for MNPS Board of Directors, and for Achievement and Service Awards to be presented at the Annual Meeting.

The following Board positions are up for election: Vice-President, Secretary and Eastern Director-at-Large. If you would like to nominate yourself or someone else for one of these positions, contact Kathy Lloyd at drakekath@hughes.net or Susan Winslow at susan213@msn.com. The deadline for nominations is February 15 and the ballot will be included in the spring issue of *Kelsey*.

Lifetime Achievement Award nominees need not be MNPS members but should have contributed significantly to Montana botany, botany education or conservation. The MNPS Outstanding Service Award goes to a member who has made a great contribution to the society, usually at the statewide level. Please send nominations to peter.lesica@gmail.com by April 15.

---

### Frozen Fall, cont'd



The first hard frost came almost a month early, on October 6. Photo by Paul Alaback.

weeks of mild weather. We had hard frosts every day for over a week, including the worst on Oct 13 at 3 degrees F! Three more days with temperatures below 10 degrees continued to hit our plants over the next two weeks.

In our area, the main effects of several days of severe frost were most obvious in the gray, brown or black colors and the curled up leaves of native plants, which held firmly onto their twigs and branches weeks after they normally do. So why were there few colors on the leaves of native plants, and why didn't the leaves fall when they normally should?

Although cool (but not freezing) temperatures can accelerate the process, most temperate plants use day length to determine when to start hardening off, and when to start cutting off the flow of water to leaves and the flow of sugars from leaves to stems. If a severe frost occurs before leaves have begun to turn colors, it is likely that they have not completed growing an "abscission layer," or a corky growth that cuts off the flow of liquids between the base of the leaf and the stem. So, in essence, leaves were "freeze dried" to stems this year.

A few native plants, such as ninebark (*Physocarpus*

*malvaceus*) and quaking aspen (*Populus tremuloides*), had developed their abscission layer before the frost, and so lost their leaves close to the normal calendar date. Western larch, a deciduous conifer, turned colors close to its normal date (but with much less vibrance), presumably because it also was more hardened off when the frost occurred. But most of our common native species, such as chokecherry, snowberry, serviceberry, cottonwood, elderberry and mountain ash, had stiff brown leaves, some of which persisted for weeks after their normal drop-off dates.

Of course, for native Montana plants, this is something most of them have survived before. The crazy variation in weather, in fact, has been a powerful force in selecting for the few species that can thrive in our state. Some tender twigs may have been damaged, but overall our shrubs and trees should still put out a healthy flush of green leaves next spring whenever the soils thaw out and the air warms up enough for them.

As scientists have become more interested in how weather affects plants, the old science of "phenology," or the study of the timing of nature's events, has become re-invigorated. All over the world, scientists are working with naturalists, native plant enthusiasts, gardeners, school children and others so that we can have better observations and data on when leaves and flowers come out in the spring, and when leaves turn colors and fall off in the autumn. Every year is different, so it is especially interesting and valuable to document these patterns in Montana over time. Please visit the website for Project BudBurst ([www.budburst.org](http://www.budburst.org)) and register your favorite walking spot and wildflowers, trees or shrubs so that you can help with this effort next spring. For more information, contact Paul Alaback ([palaback@gmail.com](mailto:palaback@gmail.com)), or call 493-1842.



# Dodder: Hardly Doddering

by Peter Lesica



*Cuscuta epithymum* by Jeanne Janish;  
Vascular Plants of the Pacific Northwest

Dodders (*Cuscuta* spp.) are surely among the world's most unusual plants. They are parasitic on other flowering plants and lack leaves or any photosynthetic tissues. This is odd enough, but unlike most other parasitic plants, such as broomrapes (*Orobanche* spp.), paintbrushes (*Castilleja* spp.) or even mistletoes (*Arceuthobium* spp.), dodders have no roots. They can be annuals or perennials that overwinter in stem segments. Our Montana species have yellow or orange twining stems.

Dodders are closely related to morning glories,

but the flowers are inconspicuous though sometimes with intricately ornamented corollas. There are about 150 species of dodder worldwide, most common in subtropical and tropical America. Only four or five species have been reported in Montana, where they often have been collected parasitizing native and introduced legumes, as well as spotted knapweed and other members of the Aster family.

In some ways, dodder acts more like an animal than a plant! Other parasitic plants, such as broomrape, have seeds that germinate only when they are contacted by host root exudates, but not dodder. Dodder seeds germinate on the surface of the ground and then forage for their host. The stems grow outward, waving around until they reach a host plant. The juvenile stems can reach up to 6 cm (2.4 inches), but they must find a host within a few days or die trying. The way dodder is able to choose a host is reminiscent of an insect herbivore or parasite. Researchers have demonstrated that dodder stems will orient toward a tomato plant or even a vial of tomato extract as long as the odor can be detected. Other studies have shown that dodder can locate a host by the quality of light reflected off the host's leaves and will even preferentially move toward hosts with higher chlorophyll content, which presumably contain more sugars.

As soon as a dodder stem twines around its host, it begins to form haustoria, specialized short stems that tap into the host vascular tissue. Dodder develops two different extensions from its haustoria: a hand-like form that surrounds the phloem and a straw-like form that pierces the xylem. In this way

dodder can obtain everything it needs from its host.

Most species of dodder can parasitize many different host plants, but studies have shown that dodder grows better on some hosts than others. Furthermore, several studies have shown that dodder is able to infect preferentially those hosts that provide the most benefit. Colleen Kelly, from Oxford University, found that the choice is based on chemicals in the bark that dodder can detect before forming haustoria. Kelly also found that having two different hosts was better than one, although a second independent study failed to confirm this result.

The effects of dodder go beyond just individual host plants. By the end of a growing season a single dodder plant may form thousands of haustorial connections with many different host species and cover an area the size of a small house. Of course this can have significant effects on plant communities. Since they are somewhat host-specific, dodders can alter community structure by preferentially damaging some species more than others. For example, University of Montana's Ray Callaway and his collaborators found that dodder reduced the dominance of glasswort (*Salicornia*) in favor of sea-lavender (*Limonium*) in California coastal marshes. Dodders also may damage commercial crops, such as tomato, pumpkin and alfalfa. Indeed, this is why we know so much about dodder ecology. Dodders' negative impacts also extend beyond simple parasitism. For example, they can be conduits between host plants for viruses, including disease-causing pathogens. Some diseases can spread more quickly through a crop field infested with dodder than one without.

On the positive side, a native Chinese dodder has been used to control bittervine (*Mikania*), a serious invasive weed in China as well as Puerto Rico. The native dodder causes a decline in the invader, resulting in greater nutrient availability to native members of the community.

Although it might seem like host plants are defenseless against the wily dodder, this may not always be the case. Recently researchers have found that some host plants transfer messenger RNA (mRNA) into their dodder parasites. Some of these mRNAs can incapacitate dodder's genetic machinery, thereby reducing its ability to make proteins and grow. This discovery has spawned an interest in genetically engineering crop plants that produce dodder-destroying mRNA. With luck agriculturalists may be able to turn dodder's voracious appetite against it.

*Runyon, J. B., M. C. Mescher & C. M. DeMoraes. 2006. Volatile Chemical Cues Guide Host Location and Host Selection by Parasitic Plants. Science 313: 1964-67.*

*Koch, A. M., C. Binder, & I. R. Sanders. 2004. Does the Generalist Parasitic Plant Cuscuta campestris Selectively Forage in Heterogeneous Plant Communities? New Phytologist 162: 147-155.*



## MNPS Chapters & the Areas They Serve

- CALYPSO CHAPTER - Beaverhead, Madison, Deer Lodge, and Silver Bow Counties; southwestern Montana
- CLARK FORK CHAPTER - Lake, Mineral, Missoula, Powell, and Ravalli Counties
- FLATHEAD CHAPTER - Flathead and Lake Counties plus Glacier National Park
- KELSEY CHAPTER - Lewis & Clark, Jefferson, and Broadwater Counties
- MAKA FLORA CHAPTER - Richland, Roosevelt, McCone, Sheridan, and Daniels Counties
- VALLEY OF FLOWERS CHAPTER - Gallatin, Park, and Sweet Grass Counties plus Yellowstone National Park

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

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

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

**Use this form to join MNPS only if you are a first-time member!** To renew a membership, please wait for your yellow renewal card in the mail. **Moving? 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 mailed to each member in January. Please renew your membership before the summer issue of *Kelseya* 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

Name (please print) \_\_\_\_\_ E-mail \_\_\_\_\_

Address \_\_\_\_\_ City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

If you wish to be affiliated with a chapter (see above), list it here \_\_\_\_\_

*You will receive membership acknowledgement by email, as well as a pdf of the most recent Kelseya. Future newsletter issues will arrive by mail.*

| Membership Level         | Dues w/affiliation  | Dues w/o affiliation |
|--------------------------|---------------------|----------------------|
| Individual               | \$20                | \$15                 |
| Family                   | \$25                | \$20                 |
| Business/Organization    | \$40                | \$35                 |
| Living Lightly           | \$15                | \$15                 |
| Lifetime (one-time pymt) | \$300 per household | -----                |

**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 or the general fund.*



## About Montana Native Plant Society

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

Your yearly membership fee includes a subscription to *Kelsey*, the quarterly newsletter of MNPS. We welcome your articles, field trip reports, book review, or anything that relates to native plants or the Society. Please include a line or two of "bio" information with each article. Drawings should be in black ink or a good quality photocopy. All items should be typed, saved in Microsoft Word or rich text format (rtf), and sent electronically to: carokurtz@gmail.com or mailed to Kelsey Editor, 645 Beverly Avenue, Missoula, MT, 59801.

Changes of address, inquiries about membership, 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 Fall—September 10; Winter—December 10; Spring—March 10; Field Trip Guide—April 10; Summer—June 10. Please send web items to our webmaster concurrent with these dates.

If you want extra copies of *Kelsey* for friends or family, call the Newsletter Editor, write to the above address, or email: carokurtz@gmail.com. No part of this publication may be reprinted without the consent of MNPS. Reprint requests should be directed to the Newsletter Editor.

**Visit our website at: [www.mtnativeplants.org](http://www.mtnativeplants.org) or contact our webmaster Bob Person at: [thepersons@mcn.net](mailto:thepersons@mcn.net)**

## MNPS Board of Directors

|                   |                     |                           |          |
|-------------------|---------------------|---------------------------|----------|
| President         | Dave Hanna          | Choteau                   | 466-3661 |
| Past-President    | Susan Winslow       | Bridger                   | 668-9112 |
| Vice President    | Karen Shelly        | Missoula                  | 542-0620 |
| Secretary         | Patrick Plantenberg | Townsend                  | 266-5265 |
| Treasurer         | Marlene Renwyck     | email: mrenwyck@gmail.com |          |
| Newsletter Editor | Caroline Kurtz      | Missoula                  | 239-2695 |

### Directors At-Large

|                 |                |             |          |
|-----------------|----------------|-------------|----------|
| Eastern Montana | Wayne Phillips | Great Falls | 453-0648 |
| Western Montana | Judy Hutchins  | Heron       | 847-2717 |

### Chapter Representatives

|                           |                  |                |          |
|---------------------------|------------------|----------------|----------|
| Calypso Chapter           | Linda Lyon       | Dillon         | 683-2878 |
| Clark Fork Chapter        | Mike Young       | Missoula       | 721-7615 |
| Flathead Chapter          | Betty Kuropat    | Columbia Falls | 892-0129 |
| Kelsey Chapter            | Kathy Lloyd      | Helena         | 449-6586 |
| Maka Flora Chapter        | Rebecca Kallevig | Sidney         | 488-5455 |
| Valley of Flowers Chapter | Joanne Jennings  | Bozeman        | 586-9585 |

### Standing Committees

|                   |                     |          |          |
|-------------------|---------------------|----------|----------|
| Conservation      | Peter Lesica        | Missoula | 728-8740 |
| Membership        | Cathie Jean         | Ennis    | 599-9614 |
| Landscaping/Reveg | Kathy Settevendemie | Bonner   | 244-5800 |
| Small Grants      | Linda Lyon          | Dillon   | 683-2878 |

Moving? Please let us know! MNPS Membership, 398 Jeffers Road, Ennis, MT 59729

## Montana Native Plant Society

*Membership Chair*  
398 Jeffers Road  
Ennis, MT 59729

CHANGE SERVICE REQUESTED

© Copyright 2009  
Montana Native Plant Society  
Printed on recycled paper

