

A Weed is a Weed?

Montana researchers unearthing secrets of invasive ecology

by Leah Grunzke

What exactly is a weed? This can be tricky to pin down, even for the most well-versed floraphiles among us. We tend to think of broadleaf dandelions in the lawn or tenacious quackgrass in the vegetable patch. But then there's the welcome sunflower from last season, whose forgotten head of seeds yielded a few hundred less-welcome offspring this year. Common yarrow (Achillea millefolium) is a delight in a naturalized garden area but is the bane of a rose garden's formal borders. Common plants like lambsquarters (Chenopodium) and chickweed (Cerastium) are delicious and loaded with vitamins, yet we unapologetically yank them out of gardens in favor of their more "cultivated" edible cousins. Taken together, it seems that one person's weed is another's prized plant.

In Montana, where plant life is so important to wildlife habitat and the economy alike, we hear a lot about certain types of weeds – those whose identities are not so loosely defined. Plants known as invasive weeds evolved elsewhere and have been introduced into new regions, where they have large negative impacts on native systems. Noxious weeds, which are almost all also invasives, are those legally-defined species that render land unfit for agriculture, forestry or livestock, alter habitat in detrimental ways for native wildlife, change fire frequency or intensity, or reduce native plant abundance.

Invasive weeds wreak havoc on our economy and environment by reducing farm and ranch productivity, affecting quality and quantity of forage for wildlife, displacing native species and decreasing plant diversity, degrading water quality through increased soil erosion and sedimentation, and threatening outdoor recreation. Direct and secondary impacts of knapweed

alone are estimated to cost the Montana economy \$57 million annually, while the state spends more than \$21 million each year on weed management.

The Montana Weed Control Act establishes the list of our state's noxious weeds, and legally requires landowners to control these species on their property. Traditional weed control methods include preventing new introductions of weed seeds and plants, rotating crops to minimize weed impacts, introducing insects or pathogens that specifically target invasive weed species, using herbicides, and physically removing weeds by pulling or mowing. But the best defense against this invasive onslaught is our growing understanding of weed ecology.

Not all the same story

Many of our weedy species arrived here from Europe and Asia. These exotic invaders, freed of the natural population checks of their native ranges, aggressively compete with our own indigenous species. But there are scores of common plants that originally were brought

here from overseas that have no detrimental effect on our ecosystem (think of the European mountain ash (Sorbus aucuparia), Asiatic lily



Continued on page 3

Chapter Events

Calypso Chapter

For information about upcoming Chapter events, call Karen Porter at 494-0606.

Clark Fork Chapter

Meetings are held the second Thursday of the month in Room Log, Gallagher Business Building, UM Campus at 7:30 pm, unless otherwise noted.

Thursday, 10/13. From 20 years of studies for the U.S. Forest Service, Elaine Sutherland tells the story of "How Surprising Complexities in Historical Fire Patterns Shaped Today's Forests."

Thursday, 11/10. Neil Snow lived for many years in Australia and Hawaii. Come listen to some of his adventures in "Ihe Wild Worlds of Wherever: The Discovery of New Plant Species in the Myrtle family."

Thursday, 12/8, 6:30 pm. Molly Galusha, long-time MNPS member, is hosting our Annual Christmas Potluck at the Buttercup Café, just off the UM Campus at 1221 Helen Ave. (between University & McLeod). Bring plates, utensils and a dish to share. Alcoholic beverages are okay! Don't forget to bring a few of your favorite digital pictures from the summer. Info: Peter at 728-8740 or Kelly at 258-5439.

Monday, 1/9. Madeline Mazurski has been designing native landscapes for nearly two decades. She will show us how "Native Plants Bring Birds to Your Yard." Room 123, Gallagher Business Bldg, UM Campus. This will be a joint meeting with Montana Audubon (note different day and place).

Flathead Chapter

Monthly meetings are held the third Wednesday of the month, starting in October, at Glacier Discovery Square, 540 Nucleus Ave., Columbia Falls. Programs start at 7:00 pm unless otherwise noted. Members are invited to attend the 5:30 general meetings beforehand to discuss and plan chapter activities and business. Feel free to bring a sack supper.

Wednesday, 10/19. Potluck planning meeting. We'll be sharing adventures from the summer and planning events for the coming year. With no program, this evening gives us more time for socializing, getting to know other members and catching up. Bring dishes, utensils and some food to share.

Wednesday, 11/16. Maria Mantas, Western Montana
Science Director for the Nature Conservancy, will present a
program on the Montana Legacy Project and how it
affects botanical resources and has protected rare
plant and other native habitats.

Wednesday, 12/14, 5:30 pm. Annual Christmas Party, starting with visiting and refreshments and followed by a potluck supper. The gathering is at Edd and Betty Kuropat's house, 2688 Witty Lane, Columbia Falls. Bring a potluck dish, beverages, and an inexpensive or recycled gift. Watch your email for directions. Info: Betty at 892-0129

Kelsey Chapter

Saturday, 12/3, 6:00 p.m. Our annual holiday potluck and showand-tell will be hosted by Bob and Toni Person at their home, 223 S. Rodney, Helena. Bring your own table service, a dish to share, and a native plant show-and-tell item.

Maka Flora Chapter

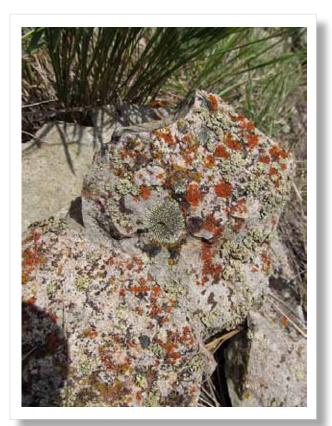
For information about upcoming Chapter events, call Beth Madden at 789-7266.

Valley of Flowers Chapter

Meetings are held in Room 108, Plant Biosciences Building, MSU campus at 7:00 pm unless otherwise noted. Parking is available in the lot to the north of the building. For more information, call Joanne at 586-9585.

Tuesday, 10/11. Whitney Tilt, a Bozeman resident and consultant on natural resource issues, will discuss his new book, *Flora of Montana's Gallatin Region: Greater Yellowstone's Northwest Corner.*

Tuesday, 11/8. MSU Associate Professor Cathy Cripps, an expert on fungi in extreme environments, will introduce us to "Mushrooms on the Prairie."



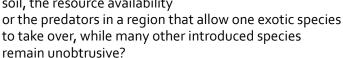
Lichens at Chalk Buttes. Photo by B. Persons.

Weeds, cont'd

(*Lilium sp.*), or Russian sage (*Perovskia atriplicifolia*), to name just a few). What enables some plants to be so destructive while others remain in check?

Invasive plants often produce a huge amount of seed throughout the growing season and may spread through vegetative propagation as well, meaning they reproduce without seeds through existing plant structures like roots or offshoots. Invasives that are adapted to a wide variety of adverse soil and climate conditions are able to compete well for water, nutrients and sunlight. These characteristics give certain species

an obvious advantage when it comes to reproduction and survival, but some interesting puzzles remain. Why and how do these plants dominate here, yet populations in their native ranges have little impact on other species? Some invasive species are able to thrive in soils and climates that differ from those they evolved in. What are the mechanics of this success? What factors control the geographic expansion of a species? What is it about the soil, the resource availability



The key to answering these questions, according to University of Montana scientists John Maron and Ray Callaway, lies in taking a biogeographic approach to studying invasive plant populations. People say that, in order to know where you are, you must first understand where you've been. The same principle can be applied to plant ecology; studying what factors control the populations of these exotic invaders where they are native may very well reveal the secret to their success where they are introduced. This requires an innovative approach to scientific research that crosses both geographic and cultural boundaries.

Back to their roots

It generally is believed that invasives thrive because their new ranges lack the biological control factors that evolved alongside the species back home. This "Natural Enemies" hypothesis suggests that freedom from attack by certain insects or pathogens allows exotics to gain a competitive advantage over native species. Exotic plants "behave differently" in invaded areas compared to in their native communities. In order to discover the how and why of this behavior shift, we need to compare

plant interactions with natural enemies in both their native and introduced ranges.

Ecologists Maron and Callaway are at the forefront of this movement, having been involved in biogeographic research efforts for more than a dozen years. Their labs have teamed up with scientists from across Europe and Asia in a cross-continental comparison of two of our most threatening weed species, spotted knapweed (*Centaurea stoebe*) and leafy spurge (*Euphorbia esula*). Their studies currently focus on the role pathogenic soil fungi play in facilitating or hindering exotic invaders' spread.

Soil microbes that suppress North American native plants' growth often have no effect on, or may even benefit, knapweed and leafy spurge. In contrast, Eurasian soil microbes seem to have a significantly negative effect on these species in their native range. How can this be? And does this account for their vastly different success rates in Europe and North America? By comparing the interactions between soil biota and plants in their native and introduced ranges, Maron and Callaway hope to pinpoint exactly what role these microbes play.

This biogeographic approach has benefits beyond a better understanding of invasive plant ecology. Working alongside scientists from foreign countries gives UM researchers a unique perspective into how science is practiced around the world. It gives lab collaborators and students an opportunity to participate in large-scale studies with genuinely valuable implications. Perhaps most importantly, it unites people from different backgrounds in the common pursuit of conserving biodiversity and protecting the livelihood of our communities. This integrated approach to understanding exotic invaders will certainly be a key tool in future efforts to understand, and hopefully manage, this threat to our local plant and wildlife systems.

This article originally appeared in the Fall 2011 issue of Montana Naturalist. Leah Grunzke is a Montana native plant enthusiast and currently lives in Dillon, wher she develops educational programming for community food and pollinator gardens.



Leafy spurge infestation in Missoula. Photo by Dan Atwater.



Annual Meeting Highlights

Sunshine and Blossoms at "Needmore Prairie"

By Beth Madden, Maka Flora Chapter

MNPS's 2011 Annual Meeting, aptly titled "Needmore Prairie," featured sunshine, green grasslands, and a great venue for a mix of MNPS business and pleasure. Ninety-seven people convened at Camp Needmore on the Custer National Forest near Ekalaka, Montana for the three-day event in mid-June.

Camp Needmore, originally a Civilian Conservation Corps camp, provided a rustic setting in the ponderosa pines of the Ekalaka Hills. Wayne Phillips presided over Friday evening's campfire entertainment, which featured a variety of botanical poetry and prose with audience participation. Wayne's local flora demonstration also was a hit, as usual.

On Saturday, field trippers scattered in every direction to scour the prairies and pines for flowering treasures. We explored Long Pines, Capitol Rock, Bell Tower Rock, Chalk Buttes, Medicine Rocks State Park, Finger Buttes, Powderville and several area ranches. For a great visual tour of the field trips and the flora, visit the MNPS website, click on Annual Meeting, then click on the 2011 Photo Album. Due to the cool, wet spring, some plant phenology was a bit behind but our emblem plant, narrow-leaf penstemon, was in full show throughout the area.

After Saturday night's dinner and business meeting, we enjoyed readings from our guest speaker Linda Hasselstrom, and awarded raffle and auction prizes. Thanks to all those who donated items for our successful fundraiser, and to all who made the long trip to enjoy the meeting. We look forward to next year's event hosted by the Clark Fork Chapter at Lubrecht Experimental Forest near Missoula.



Peter Lesica's field trip featured 4.5 miles of botanizing in the Chalk Butttes. Photo by B. Person.



Bison trailing in to greet MNPS field trippers at the Crazy Woman Bison Ranch. Photo by B. Harris.



As promised, USFS District Ranger Kurt Hansen produced flowering yellow lady slipper orchids for the group. Photo by B. Heidel.

No Place Like [a Prairie] Home

Linda Hasselstrom's Inspiration



Guest speaker Linda Hasselstrom reads prose and poetry to the group after Saturday evening's banquet. Photo by D. Sullivan.

Author and rancher Linda Hasselstrom was the featured speaker at the MNPS Annual Meeting, reading a number of excerpts from her writings, including from her latest book *No Place Like Home*. Among other ideas, she emphasized learning to live responsibly and sustainably upon the land, understanding the environment and our place in it, and being keen observers of the nature around us. To learn more about Linda and her books, go to her website at www. windbreakhouse.com or inquire at local booksellers. Here are some samples of what she read:

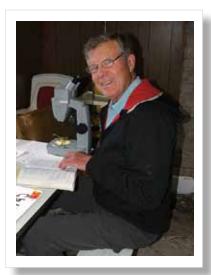
"...I thought of the history of grass. Seeds formed of this summer's heat and rain will wait through dry years to sprout, wait perhaps beyond the end of my lifetime. In some rainy season far in the future, ancient grasses will wake to cover these hills once more. People disappoint themselves and others. People die. But the genesis of grass is assured. I believe in the resurrection of the grass and its life everlasting." Feels Like Far, p. 186

"Grazing animals go where grass grows. Predators follow, including nomadic tribes. On the prairies, over 25 million years, aridity combined with other natural conditions to create an intricate community of native grasses like grama, needle grass, and buffalo grass that cured on the stem. Though leaves wither during dry seasons, deep root systems help these grasses survive drought and prairie fires." Bison: Monarch of the Plains, p. 25

"To find ourselves in the land, we don't need to buy a farm.... We are all creatures born to soil and wilderness; the outdoors, not an air-conditioned office or schoolroom with windows that can't be opened, is our natural habitat. Night or day, walk out into the grass or woods alone, sit down and listen. Dig in the earth; plant something. Walk and watch any living thing except another human." *Land Circle*, p. 241



Capitol Rock is the prominent landmark in the Long Pines, Custer National Forest. Photo by D. Sullivan.



Wayne Phillips prepares for his plant ID demonstration.
Photo by B. Madden.

More Annual Meeting Highlights



Narrow-leaf penstemon at Medicine Rocks State Park. Photo by R. Person.



Maka Flora's Mary Lou and Lawrence Heppne, showing the piece Mary Lou created for our fundraiser auction. Photo by B. Madden.

Doug Smith Honored at Annual Meeting

Doug Smith, one of the founding members of the Maka Flora Chapter in northeastern Montana, received an Outstanding Service Award from MNPS at the Annual Meeting. The award was presented to Doug in appreciation for "making a difference" through selfless and tireless commitment to the MNPS and native plants.

Doug is always there whenever the Maka Flora Chapter needs help. He's been called the chapter's "idea man," coming up with inspirations on where to host Annual Meetings, field trip venues and other initiatives. He has donated many of his famous handmade baskets to our annual silent auctions and other MNPS fundraisers. His passion for the prairies and all our natural resources, along with his cultural and historical knowledge, have

made him a great ambassador for MNPS over the years. Thank you Doug for your many contributions, and congratulations!



Beth Madden and Dave Hanna present Doug Smith with an annual meeting logo print. Photo by D. Sullivan.

Meet the Neighbors

We were fortunate to have Cindy Reed and Moe Lamphere of the Great Plains Native Plant Society join us at the Needmore Prairie meeting. Cindy filled us in on the vision of GPNPS and their efforts to establish the Claude A. Barr Memorial Great Plains Garden. This botanical garden is a 350-acre prairie conservation and education center located on Linda Hasselstrom's ranch near Hermosa, South Dakota. The group currently is remodeling a historic cabin into a visitor center at the site, and will soon begin marking trails for self-guided tours. Eventually they plan to design informal plantings and install specimens of Great Plains plants for the public to learn about and enjoy. Reed and Lamphere started the GPNPS after being inspired by Claude Barr, a South Dakota rancher who attained international



GPNPS members at work restoring the cabin. Photos courtesy of Gallatin Valley Native Plant Society.

acclaim as an eminent native plant horticulturist of the plains. Barr's lifework is depicted in his posthumously-published book, "Jewels of the Plains," which is one of the best references there is to plains wildflowers and their cultivation. The society



Claude Barr, horticulturalist and author.

also hosts plant hikes and an annual native seed swap for members. Financial support is greatly needed for the Great Plains Garden project, and you can lend a hand by becoming a member. Visit www. gpnps.org to learn more about them or to join.

MNPS 2011 Election Summary: Needmore Votes!

by Patrick Plantenberg

The 2011 MNPS election results were reported at the MNPS Annual Meeting. New officers, elected almost unanimously, included incumbents Dave Hanna (President), Jenny Tolllefson (Treasurer) and Judy Hutchins (Western-At-Large Representative).

This year's gracious host, the Maka Flora Chapter, won the \$100 prize for the chapter with the highest percentage of votes—again. Maka Flora has won the contest seven out of the last nine years. The 2010 winners, the Kelsey Chapter, came in second.

Overall membership in the MNPS was down slightly from 2010, dropping from 698 to 686 members, and down from the record high 833 members in 2008. Much to the dismay of the MNPS Election Committee, the number of voters was down in 2011 with only 99 members voting, compared to 111 in 2010. The voters east of the divide beat the western voters. West-of-the-divide voters have never won this competition. Helena continues to be the city with the most voters—an honor they may never lose.

Jeanette Barnes from Butte; Karen Shelly, Beth Wright and Mary Lawrence from Missoula; and Sara Toubman from Helena cast the first ballots on April 9. Norm and Cathy Weeden from Bozeman were the last members to vote on June 14.

MNPS members from California asked for more detailed analysis of out-of-state "votering" in a "posthumorous" letter submitted to the Election Committee from a former governor of California and President of the LLS

Much to the delight of the MNPS Public Perception Committee, MNPS members again used plant stamps more than patriotic stamps in 2011. The MNPS Electoral College thanks all MNPS members who voted. See you in 2012!

News & Notes

Tell Us Your Preference!

by Cathie Jean, Membership Chair

This coming spring will mark the first anniversary of an electronic, as well as printed, version of *Kelseya* and distribution to members via email. The good news is that this is working and the color photographs are fantastic! Thanks for your cooperation and patience during this transition.

As of September 2011, one-third of MNPS members have chosen to receive the newsletter via email. But many members haven't made their preference known. If you receive a printed copy of this newsletter but would rather get an email with *Kelseya* attached, please send a note to the membership chair at mnpsmembership@gmail.com. You can always switch back if you change your mind.



Geum triflorum fruits observed on the Long Pines daytrip at MNPS Annual Meeting. Photo by D. Sullivan.

Welcome New Members

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The Montana Native Plant Society welcomes the following new members:

Flathead Chapter:

Rosella Mosteller and Linda Nelson

Clark Fork Chapter:

Kathy Haffernan, Donna Moses and Olivia Macarthur-Waltz

Valley of Flowers Chapter:

Mary Swanson, Peter Murray and Lou Ann Harris

Kelsey Chapter:

Neil W. Snow

Calypso Chapter:

Sharon Dupuis

Eastern State-At-Large:

Wendy Velman (and family), Joseph Charboneau and Ann Boland

Save the Date: Montana Plant Conservation Conference

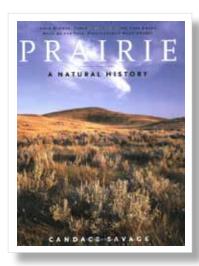
The 7th Montana Plant Conservation Conference will be held in Helena, February 15-16, 2012. The first day will be a symposium on the effects of climate change on vegetation, and strategies to mitigate these effects on public and private natural areas. There will be speakers from the Park Service, U.S. Forest Service, Bureau of Land Management, universities and the private sector. The second day will be devoted to reviewing the status of Montana Natural Heritage Program species of concern and nominations for Important Plant Area designation.

Small Grant Competition Opens

The Montana Native Plant Society (MNPS) announces the 16th annual Small Grant competition, open to residents of Montana and all members of the MNPS. The deadline for proposals is February 14, 2012. For details and requirements, please see the enclosed insert.



Books for Native Plant Lovers



A revised and updated edition of *Prairie: A Natural History* by Candace Savage is now available (Greystone Books, 2011; www.candacesavage. ca). With chapters about the geography of grass, water, what lives on the range, prairie woodlands, soil and more, this awardwinning guide presents a comprehensive, nontechnical (yet scientifically up-to-date) look at the

biology, ecology and conservation of the Great Plains grasslands. The text is richly illustrated with color photos and line drawings that help her demonstrate threats to these ecosystems while inspiring us with their splendor and a "sense of the miraculous in nature" (Globe and Mail).

Savage is the author of more than 20 books on subjects ranging from popular culture to natural history and science. She has been honored by the Canadian and American Library Associations and the Children's Literature Roundtable, among others. She lives in Saskatoon, Saskatchewan.

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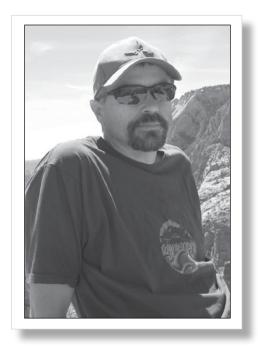
For Valley of Flowers chapter members, or anyone with an interest in the Gallatin area, the Gallatin Valley Land Trust has the field guide for you. The Flora of Montana's Gallatin Region: Greater Yellowstone's Northwest Corner by Whitney Tilt is an easy-to-use reference for the more than 250 species of wildflowers, grasses, shrubs and trees readily found in the region. The guide presents an overview of each species, with photos and illustrations, botanical descriptions, preferred habitats and tidbits on ecology and cultural use.

The Flora of Montana's Gallatin Region is available from GVLT, as well as area booksellers and other retailers. Proceeds benefit GVLT and help to expand their community trails and land conservation programs.

President's Platform

We appreciate our native plants for a multitude of reasons. The chokecherries in my yard are beautiful and maintenance-free. In the winter, they are thick enough to block the wind and provide some privacy. In the spring, their profuse blossoms stand up to the weather and sweeten the air. Come summer, they host aphids and numerous other insects, including the ants that milk the aphids and the ladybugs that prey on them. Waxwings and chickadees glean insects among their branches, and occasionally a cat sleeps in their shade. Now in the fall, birds and other wildlife fatten on the berries and disperse seeds in the process. Throughout the year, these chokecherries host nature's drama, right off the porch. You could spend a lifetime following the stories and always have more to learn. However, on this early fall evening, I am enjoying just eating fresh, sweet chokecherries. And for now, amidst all the busy-ness we manufacture for ourselves, that is enough.

~ Dave Hanna



Source Guide Seeks Input

The Landscape/Revegetation Committee is seeking input for the next update to the Montana Native Plants Source Guide. Please contact Kathy Settevendemie if you have information on a plant nursery in your area that may have begun to carry more natives, or a new nursery that sells native plants. You can send information to Kathy at Blackfoot Native Plants, P. O. Box 761, Bonner, MT, 59823; www.blackfootnativeplants.com; or 244-5800.

First American Prairie Reserve BioBlitz: 480 Species in 24 Hours

APR blogpost by Michael Wainwright

[Mycologist Cathy Cripps will be giving a talk at the Valley of Flowers chapter meeting on November 8. APR news release reprinted with permission.—Ed.]

Four hundred and eighty species were documented from American Prairie Foundation's first-ever BioBlitz on American Prairie Reserve, which occurred Friday, June 24 through Saturday, June 25.

A BioBlitz is a 24-hour event in which a team of scientists and volunteers conduct an intensive biological inventory of all species in a given area. The data collected during BioBlitz will help American Prairie Foundation understand the baseline health of ecosystems and wealth of biodiversity on the grasslands of the Reserve. APF's event was the fourth BioBlitz to occur in Montana.

More than 60 scientist and volunteer participants came from six states and 16 Montana towns, including communities as close to the Reserve as Malta and Lewistown and states as far away as Minnesota and



BioBlitz participants slept in yurts at American Prairie Reserve. Photo by Dennis Lingohr.

Colorado. Participants camped on American Prairie Reserve at Yurt Camp and worked in field teams to document species from various taxonomic groups including plants, birds, mammals and others.

Dr. Cathy Cripps, a mycologist at Montana State University, focused on fungi. Her team discovered 28 species of fungi, including the tiny "prairie polypore," which occurs on the rhizomes of grasses throughout the prairies of Russia, Mongolia and Argentina, but is rarely reported in North America. The BioBlitz discovery of prairie polypore on American Prairie Reserve may mark the first discovery of the fungus in Montana. Dr. Cripps is investigating the legitimacy of a 1917 report of prairie polypore in Montana.

"This fungus is well-known in other prairies of the world, but we don't know it well," Dr. Cripps said. "This is exciting because prairie polypore is really a global fungus in terms of its presence in other prairies worldwide."

Dragonflies basking in the sunshine. Photo by Dennis Lingohr.

While 480 species were documented at BioBlitz, many other species are still being indentified. A final report of all documented species will be available in the coming months. All BioBlitz data will be submitted to the Montana Natural Heritage Program, Montana Fish, Wildlife & Parks and the Encyclopedia of Life, an online reference and biological database founded by prominent American biologist E.O. Wilson, who was one of the first scientists to organize BioBlitz events. American Prairie Foundation will also retain copies of complete data sheets as a permanent record.

Grants in support of BioBlitz were provided by The Cinnabar Foundation, The Leonard Tingle Foundation and The John and Kelly Hartman Foundation. The next BioBlitz on American Prairie Reserve is scheduled for 2013. APF plans to host a BioBlitz every other year.

For additional information on BioBlitz, including photo galleries and results, please visit www.americanprairie.org.

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 at mnpsmembership@gmail.com.

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

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Address	City/State/Zip	
Phone	Chapter Affiliation (optional)	_
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•	o acknowledgement by email, as well as a pdf of the most recent Kelseya. Fu to your preference indicated above.	ture newsletter

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	

JOIN OR RENEW ONLINE at www.mtnativeplants.org

or by mail at 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 *Kelseya*, 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 Kelseya Editor, 645 Beverly Avenue, Missoula, MT, 59801.

Changes of address, inquiries about membership, and general correspondence should be sent to MNPS Membership, 398 Jeffers Road, Ennis, MT 59729. 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 Kelseya for friends or family, call the Newsletter Editor 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 or contact our webmaster Bob Person at: thepersons@mcn.net

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