

Kelseya

Newsletter of the Montana Native Plant Society

WILDCRAFTING IN MONTANA

By Robyn Klein

Mushroom harvesters can make a lot of money. On a good day, dried morels go for \$50 a pound. (Ed. Note: fresh morels sold for \$5 or less a pound in 2001). For most of June, 40,000 pounds of morels came off the Bitterroot National Forest alone, the scene of some of the most intense forest fires last year.

But mushrooms aren't the only profitable commodity found in the wilds of the Pacific Northwest. In 2000, a man was charged with poaching \$250,000 worth of bear grass leaves (weighing an estimated 7,000 pounds) from National Forest and private lands in Oregon. According to news reports, crews had been harvesting up to a ton of bear grass daily while working seven days a week. Bear grass, (*Xerophyllum tenax*), is shipped in refrigerated containers to Amsterdam and marketed for floral arrangements and basket making. Bear grass leaves are very profitable,



especially when permits and sustainability are ignored, and dishonest techniques are used to force new buyers out of the market. After researching what it would take to sustainably harvest bear grass from Forest Service lands, one Montana business found poachers could harvest it cheaper and the bear grass industry would lower the price, effectively forcing sustainable harvesters out of the market.

Montana became alerted to similar problems with the mass harvest of *Echinacea angustifolia* in eastern Montana in the late 1990s. A temporary moratorium on the harvest of medicinal plants on state lands was set, along with creation of the governor's task force.

The Task Force on Wild Medicinal Plants estimated that the state was losing millions of industry and natural resource dollars every year to poachers. They found the state had been remiss in assessing damage and theft of wild plant property from Montana lands. It also discovered that resident wildcrafting industries concerned with sustainability were competing with poachers who had no such objective and could therefore undercut their prices. It became clear that catching poachers in Montana was almost impossible because of the immense land acreage. With an ignorance of industries seeking wild plant resources, few law enforcement officers, and no strong state law to deter poachers, Montana was a sitting duck.

These problems have now been addressed with legislation that was overwhelmingly passed by the state legislature. The Governor signed Senate Bill 197 into law in April of 2001. This law requires all commercial wildcrafters to obtain written permission or a permit in order to harvest.

The key strength of this law is the strict penalties. The first offense is a criminal misdemeanor and the second offense is a felony. This might seem excessive, but civil penalties are extremely difficult to enforce. A criminal offense, however, allows county law enforcement to assist federal as well as private landowners. Violations must be costly in order to encourage commercial wildcrafters and buyers to comply.

(Continued on page 4)

2002 Calendar

The 2002 noxious weed—native plant calendar is at the printer and is nearing completion. The Montana Native Plant Society, in conjunction with the Montana Noxious Weed Awareness and Education Campaign and other conservation groups, worked diligently to maintain high standards and complete the calendar on time. The calendar will help us spread the word about conservation of Montana's native plant communities to people we might not otherwise reach. Chapter representatives should plan to pick up calendars from their local weed district to distribute at MNPS events.



President's Platform

Betty Kuropat



2001: Plant Odyssey

Our annual meeting at Bull River in July was wonderful, as always. A huge "Thank You" goes to the western members who organized the weekend. It takes a lot of work over many months to have things come off as planned. We had nice, sunny weather and very few mosquitoes—welcome conditions for a camp-out near the river. After everyone got settled into their campsites and had a chance to visit and eat supper Friday evening, Roland and Jane Cheek entertained us with campfire stories about bears and other backcountry adventures. The field trips on Saturday took us to many different parts of the Bull River valley and the Cabinet Mountains. The hike I took went to Dad Peak, the site of an old lookout, where there were lots of views and lots of blossoms. We watched the North Fork of the East Fork Bull River group hike and slide down a ridge across the valley. I wonder if they know they spooked up some mule deer that were feeding just below? Saturday night we heard Jack Nisbet tell campfire stories about David Thompson and other

early, western Montana explorers. He is so knowledgeable and engaged with the history that the audience was riveted. Several people went away with prizes of wild ginger plants (*Asarum caudatum*) for their skills at the Plant ID Contest. Congratulations!

The membership meeting on Saturday had some noteworthy decisions. We heard the suspenseful election results from Secretary Patrick Plantenburg. Among other interesting findings, it seems the farther from Washington D. C. you live, the more likely you are to cast a vote. We re-elected Madeline Mazurski as Treasurer, Sal Culotta as Western Montana Director at Large, and you elected me as President. Thanks. Pattie Brown was nominated and elected, on the spot, to finish my term as Vice-President. Thank you and welcome, Pattie.

Several people offered to serve on our standing committees. We really appreciate your interest and commitment. Our committees are where the real work happens. Without members willing to put in a little time and fresh ideas, we cannot grow. If you are interested in learn-

ing more about how you can contribute, please talk with your chapter representative, a committee chair, or me.

2002 Annual Meeting

We can already start looking forward to next year's meeting. The Flathead Chapter agreed to host it on the Rocky Mountain Front, somewhere near Choteau. As of September, the chapter is already making plans and has almost settled on a location and date. Look for details in the winter *Kelseya*.

Fall Board Meeting

Summer is turning to fall and leaving us with only memories and seeds of the native plants we saw blooming. The fires are out or at least not smoky anymore. That means chapters that are active in the winter are gearing up for interesting programs to help make those memories last until spring. And it means the fall Board meeting is right around the corner on October 27, at 10:00 a.m., in the Lewis and Clark Library, Helena. If you have any concerns or ideas for our Society, please talk to your representative so we can make sure you are being heard.

Betty can be reached at 2688 Witty Ln. Columbia Falls, MT 59912 (406) 892-0129 e-mail: edk@digisys.net

BOTANY POSITION AVAILABLE

The Montana Natural Heritage Program (MTNHP) in Helena, Montana's clearinghouse for biodiversity information, is recruiting for a Botany Manager. This is one of three core scientist positions in MTNHP, and has responsibility for developing, analyzing and disseminating information on Montana's plant species of concern.

Duties include collecting and managing biological and related information; designing, conducting and securing support for field surveys and applied research on priority species; building collaboration with agency biologists, data contributors, and data users; developing reports and disseminating information; and providing consultation and expertise on species status, management, research and conservation. The Botany Manager is supervised by the Director of MTNHP, and supervises part-time or seasonal employees and contractors as needed.

Requirements: Master's degree in botany or plant sci-

ences, including both plant taxonomy and ecology and four years progressively responsible professional experience; working knowledge of the flora and plant communities of Montana; demonstrated proficiency in field inventory, monitoring, research design, and sampling methods; demonstrated experience analyzing and applying inventory and research results to ecological management and conservation planning; proficiency with statistical methods and with managing and analyzing data; success generating financial support for projects; strong communication skills and demonstrated ability to build effective partnerships.

Salary range is \$35,000 - \$40,000. A full position description can be viewed at: <http://nhp.nris.state.mt.us/employ/index.html>

Send resume, cover letter and references to: Joy Lewis, Montana Natural Heritage Program, Box 201800 Helena, MT 59620-1800; e-mail: jolewis@state.mt.us

Silene spaldingii

We're still waiting!

The Pacific Environmental Advocacy Center (PEAC) and Earthjustice Legal Defense Fund (ELDF) sued the U.S. Fish and Wildlife Service (USFWS) on behalf of the Flathead Chapter of the Montana Native Plant Society and other petitioners to make a final decision regarding listing Spalding's catchfly (*Silene spaldingii*) as a threatened species under the Federal Endangered Species Act. Late in August lawyers from both sides reached an out-of-court settlement. USFWS agreed to make a listing determination on or before November 9, 2001, and to publish the decision in the Federal Register. Most likely USFWS will decide in favor of listing, but no one knows for certain. Stay tuned; we should know for sure by Thanksgiving. Thanks to Stephanie Parent of PEAC and Neil Levine of ELDF for their good work on our behalf.

Peter Lesica

Noxious Weeds After Wildfire

The ecological effects of wildfires are often beneficial given the natural role of fire in perpetuating ecosystems. Depending upon fire intensity and plant characteristics, many native plants will survive and reinitiate growth soon after a fire. The ability of these plants to reestablish, thrive, and reseed in subsequent years can be greatly affected by the presence of noxious weeds.

Burned areas can contain high nutrient levels, exposed ground surfaces, and reduced shade. These conditions favor weed invasion and exponential weed growth, which can prevent reestablishment of native vegetation and displace already established native plants. If permitted to reach large infestation levels, the resulting weed population will be very difficult and expensive to manage.

Burned and adjacent areas should be managed under a burned area weed management plan. A properly formulated and implemented plan can prevent weed establishment into burned and adjacent unburned areas and maintain healthy, native plant communities.

Burned areas may have inadequate competitive vegetation cover (below 30 percent). In such cases, it will be necessary to provide a desired plant community that can suppress weeds through resource competition. Revegetation, when necessary, can be a first step in the implementation of a burned area weed management plan.

A seed mix should contain a diversity of aggressive, quick-establishing grasses and forbs. This mix should be able to effectively occupy available burned area niches. Such a plant community is likely to be weed-resistant, because few soil resources are available to a potential invader.

The most successful burned area revegetation efforts have been observed with a fall-dormant broadcast seeding directly into the ash layer immediately after the fire. Burned area revegetation conducted the year after fire will benefit from seed placement with a no-till drill if the ash layer is absent. If the site is inaccessible to such equipment, doubling or tripling the broadcast seeding rate based upon drill seeding or plowed ground will enhance establishment success.

Integrated weed management (IWM) is an ecological approach to prevent and manage weed populations. A burned area IWM plan includes: prevention and monitoring strategies, effective in precluding spread and establishment into weed-free areas; eradication of small patches; a cumulative approach in

large infestations and management towards reestablishment of healthy plant communities.

Preventing weeds from spreading through seed dispersal is the most effective and least costly method of weed management. Because of this, use only certified noxious weed-free seed mixes, forage and mulch; thoroughly clean vehicles and equipment before entering weed-free burned areas; and eradicate or contain adjacent weed populations.

Surveying burned areas to locate and eradicate new weeds through an organized monitoring plan is essential to preventing weed establishment. Monitoring should occur at least three times (spring, summer, fall) and concentrate where weed infestations often begin: along fire lines, roadways, railways, and waterways.

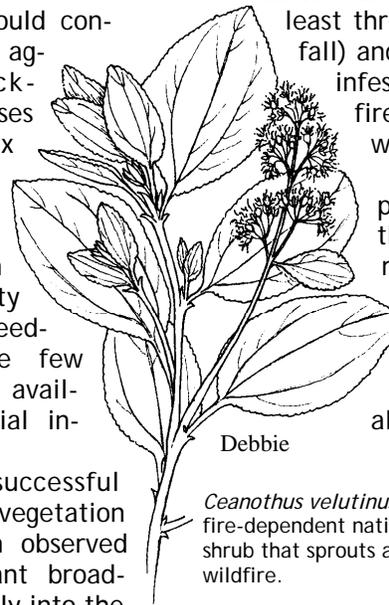
Newly established patches or those smaller than 100 square feet are most responsive to eradication. Individual weeds must be removed and steadily replaced with desired vegetation until all viable seeds are depleted from the soil.

Seed dormancy and longevity mean that long-term management is required for eradication. If

eradication is to succeed, reproduction must be stopped completely.

No method or integration of methods can achieve eradication for large weed populations. Management towards reestablishing healthy plant communities is the most practical management option. This involves shifting the competitive balance from the infestation to the desired plants by revegetating, if necessary, after the infestation has been weakened through an integration of mechanical, chemical, cultural and/or biological controls.

Kim Goodwin and Roger Sheley



Ceanothus velutinus is a fire-dependent native shrub that sprouts after wildfire.

... Wildcrafting (Cont. from page 1)

An important distinction is that this law relates to commercial wildcrafters only, not to those harvesting for personal use. The law clearly defines wildcrafting for commercial purposes as "the harvest of wildcrafted plant material for the purpose of selling, trading, or otherwise exchanging the material for profit." Specifically excluded is "plant material used for a campfire or amounts intended for personal consumption."

Non-commercial harvesters are not at risk of being charged with the stiff penalties of the new wildcrafting law. However, this exclusion does not let them off the hook. Those harvesting for personal use still must obtain permission from the Forest Service, tribal or state agency, or private landowner. To do otherwise would be a violation of other permit and trespass laws already in place.

The law does not specifically define amounts of plant material in order to determine commercial or personal intent. This determination is left up to the individual landowner. Simply put, the law suggests that landowners know their particular situation best and have the right to make decisions concerning resources on their properties. It was recognized that in order to deter commercial poachers, while not endangering personal harvesters, the law needed to be directed specifically at commercial intent.

And while state law cannot easily legislate ethical wildcrafting techniques, it can specifically affirm an intent that can guide law enforcement and industry alike. The stated purpose of this law is to "encourage the growth of a statewide sustainable wildcrafting industry that encourages stewardship of the wild plant natural resources of the state." Thus, the intent is clear—to encourage sustainable practices and stewardship of these valuable resources.

The herb market is not the only focus of commercial wildcrafters. It would have been unwieldy and unwise to direct this legislation towards only specific species or specific industries, as some laws in other states

have done. The culinary, floral, academic and scientific markets are others that seek wild plant resources. Therefore, this law equally addresses wildcrafting of all wild plants. 'Wildcrafted plant material' is defined in this law as "any plant or part of any plant species that is not cultivated and that is growing wild on any lands in Montana."

This law also specifically addresses private landowners, who usually have no permit requirements. Now, wildcrafters must request the landowner sign a form they provide, to protect them from violation of the law. But the law also allows private landowners to give verbal permission in lieu of a signed permit. While causing a sort of loophole, it was a necessary inclusion in order to grant private landowners a choice. However, if a commercial wildcrafter insists they had obtained verbal permission, when in fact they had not, they would be in violation of the law. Basically, it is now unlawful for any person to commercially wildcraft or transport wildcrafted plant material without having in the person's possession a bill of sale, a signed, written permission form, or a permit from a landowner.

The law also requires the buyer of wildcrafted plant material to keep records of purchases or acquisitions of wildcrafted plant material for a period of three years, including the number or a copy of the permit used. That is, it is unlawful to purchase or acquire material that has not been permitted. This closes a possible loophole and encourages buyers to work only with responsible wildcrafters.

A very helpful provision is that landowners will not be held liable if a wildcrafter, with or without his/her permission, is injured while on their property. This important inclusion assists commercial wildcrafters because it adds new lands that had been closed because of the fear of being sued.

Surely, good laws are only part of the solution to problems inherent in industries that rely on wild plant resources. There is still a great need for education throughout Montana to encourage residents to harvest sus-

tainably, guide them on how to enter the industry, and how to alert law enforcement of suspicious activities that may be stealing jobs and resources. Achieving such educational goals will take a strong commitment on the part of the state and its residents. However, this new law provides a solid foundation for developing a sustainable wildcrafting industry in Montana.

For more information on wildcrafting concerns in Montana, contact Robyn Klein at robyn@rrreading.com or (406) 585-

Prairie Conservation Forum Website

The Prairie Conservation Forum in Alberta has updated its website. Lots of information is available. For instance, you can query the native prairie database to find out to the nearest 5% the amount of native vegetation in each of 6 cover classes in every quarter section in the 1000 Township Grassland Natural Region.

The address is:
www.albertapcf.ab.ca



Debbie

Elymus spicatus (*Agropyron spicatum*)

2002 SMALL GRANTS PROGRAM

The Montana Native Plant Society (MNPS) announces the seventh annual Small Grants Program for research, study, and appreciation of Montana's native plants. Grants of up to \$500 each will be awarded in 2002 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 31, 2002. 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 its survival.

This year, the Small Grants Program helped fund a workshop in the Flathead Valley held to promote interest and learning regarding the prevention and control of noxious weed spread and the importance of preserving Montana's native plant heritage. The program is also funding the rehabilitation of a native wildflower garden and interpretive information at the MSU Arboretum in Bozeman. These projects will make a significant contribution to promoting awareness, appreciation and conservation of Montana's native plants.

We encourage anyone who has a project that might qualify for the MNPS Small Grants Program to consider submitting a proposal!

Please submit an application that includes the following :

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 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 that 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 that a brief summary of the work be published in *Kelsey*, the newsletter of MNPS.

Submit your project proposal to:

Chair, Small Grants Committee

Montana Native Plant Society

P.O. Box 8783

Missoula, MT 59807-8783

Remember the deadline for applications is January 31, 2002 ! Grants will be awarded by March 15, 2002.

Rachel Feigley

Plant Species of Concern

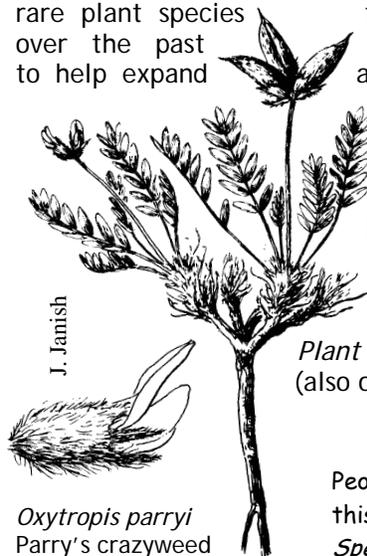
new report available

The Montana Natural Heritage Program has released an updated report on Montana *Plant Species of Concern*, replacing the 1999 publication. Eleven vascular plant species of concern have been added, and seven deleted or dropped to Potential Concern (formerly the Watch list). Also included are preliminary Heritage ranks for 111 bryophyte species and—new this year—114 lichen species considered rare in Montana, based on recent and ongoing studies by experts on these groups. This publication is available on-line in download-able (Adobe pdf) format on the web at: <http://nhp.nris.state.mt.us/plants/index.html> or on request from the Montana Natural Heritage Program: (406) 444-5354 or mtnhp@state.mt.us

These revisions were completed by Bonnie Heidel just before she left MTNHP to join our sister program in Wyoming. A great deal of credit for the updates also goes to the many MNPS members who contributed information on rare plant species over the past two years. Please continue to help expand and improve our collective

knowledge of Montana's rare plants by submitting your observations on species of concern to the Heritage Program. Whenever possible use the MTNHP Rare Plant Survey form at the end of the *Plant Species of Concern* report (also on the MTNHP website).

Sue Crispin



Oxytropis parryi
Parry's crazyweed

People are going nuts looking for this crazyweed listed in *Plant Species of Concern*.

Doing the Dew on Bull River

Dennis Nicholls

The slogan for a popular soft drink is, "Do the Dew." Well, if you were present at the MNPS annual meeting up Bull River in July, you know that we did the real dew that weekend. Though it had been hot and dry for several weeks and the weekend unfolded cloudless and continued warm, we found out one reason why the Cabinet Mountains have such lush vegetation. The morning dew was as heavy as if a drenching rain shower had passed by during the night.

More than 80 people registered for the three days and two nights at the historic Bull River Ranger Station, and for the Saturday night keynote speaker, Jack Nisbet, nearly 100 people were on hand to hear about the travels of David Thompson. The weekend extravaganza was packed with interesting presentations and a wide variety of easy, difficult and strenuous field trips. From canoeing on Bull Lake to bouncing along the Chicago Peak Road for two hours in order to reach the high Cabinets, dozens of people set off into the forest to see what kind of wildflower show Mother Nature had prepared for our searching eyes.

As it turned out, the lateness of the meeting (scheduled that way to miss the usually miserable June rains) coupled with an unusually dry winter and parched early summer, resulted in a less than spectacular display of wildflowers. But that failed to dampen the enthusiasm of those exploring the canyons and ridge tops of the Cabinet Mountains for the first time or the 100th time. Many participants got their first look at the eerie blossom of the wild ginger (*Asarum caudatum*), our mascot plant for the weekend.

Special thanks go to Jill Davies, Dennis Nicholls and Sam Culotta for organizing the rustic campout on Bull River. Of course, some chose not to camp and took advantage of

the fine accommodations at Bighorn Lodge and elsewhere in the area. We must also acknowledge the marvelous cooperation and assistance of Brian Avery and his staff at the Cabinet Ranger Station. They were helpful beyond the call of duty in allowing us the use of the historic area around the old log building that was the first Forest Service structure on the Kootenai National Forest.

Friday night's speakers were Roland and Jane Cheek of Columbia Falls, and they imparted some humorous and interesting stories about guiding in the Bob Marshall Wilderness. Then Saturday night, Terry Hightower, a Forest Service archaeologist, told us the history of Bull River. He was followed by a captivating presentation from Spokane's Jack Nisbet about the early explorations of David Thompson, the first white man to travel the lower Clark Fork River valley. Our gratitude goes to each of these folks for taking the time to join us. Appreciation also goes out to each of the field trip leaders for taking groups into what was often strange country for them. The Cabinets are not a particularly easy range of mountains to get around in, and it was terrific that everyone was so easygoing on some of the more difficult hikes.

2001: A Plant Odyssey was a memorable experience of old friends gathering together in the great outdoors and folks making new friends



Harvey

At the annual meeting, a couple of fellas modeled the latest in fashionable head gear while measuring a western white pine on White Pine Creek as a possible candidate for the Big Tree Program.

with others who share a common love for wild and native things. The organizers were grateful for the exceptional turnout and trust everyone enjoyed themselves.

Illustrated Keys Now Available

The interactive keys for computer produced by Flora ID Northwest are now available with color images for virtually all species. Many folks from around the northwest deserve thanks for allowing their slides to be copied to make this possible. Coincidentally, the Windows software that the keys run in has been completely rewritten, resulting in keys that are much easier to use. The prices have been lowered, so that keys for an entire state are \$100, or \$300 for the entire northwest. Keys are available ("statewide" only) for Southern British Columbia, Washington, Oregon, Idaho, Montana, Wyoming, Utah and Colorado. The distributor is The New York Botanical Garden Press, 200th Street and Kazimiroff Blvd., Bronx, NY 10458-5126, (718) 817-8842, nybgpress@nybg.org. For more information contact: Bruce Barnes, Flora ID Northwest, 731 NW 5th, Pendleton, OR 97801 PH: (541) 276-5547 FAX: (541) 276-8405 <http://www.xidservices.com/FID>

Nomenclatural News

Here is a site that provides a wealth of information about nomenclature, including an electronic text version of the *International Code for Botanic Nomenclature*, a glossary of type terminology, an explanation of how the authority citation works and much more. The address is: <http://fp.bio.utk.edu/mycology/> then go to/nomenclature then to/tech.htm and then to "Links"

A good read! Well, at least a long read!

DB

Big Sky Sketches

By Spencer Shropshire

COMMON JUNIPER



Juniperus communis

Common juniper, sometimes called dwarf juniper, is a low-lying evergreen with a bristly countenance. It may have the widest natural range of any tree, and is native to both Europe and North America. Although reaching significant heights in the Mediterranean Basin, and some areas of the eastern United States, in our region it is significantly less than the necessary thirteen feet for tree status, and is therefore classified as a shrub. Its stems may creep outward in a circumferential fashion, dying at the center, and accounting for its Old English name, fairy circle.

Junipers prefer dry climates, and have leaves that are small, sharp, and needle-like, or scale-like, rendering them indistinguishable, to the untrained eye, from cedars (which they are frequently called). Like other members of the conifer group, they do not produce true flowers; but instead of the cones characteristic of pine, spruce, fir, and cedar, fruits of the juniper fuse into dense, fleshy, blue-black berries, by which they are, therefore, best identified.

The berries are consumed by ruffed and sharptail grouse, bobwhite, partridge, pheasant, whitetail deer, moose - and man. In the sev-

enteenth century, Franciscus Sylvius, a professor of medicine at the University of Leyden, distilled juniper berries with spirits, attempting to produce an inexpensive medicine with the diuretic properties associated with juniper oil. The product became instantly and widely popular as gin. (Genievre is French for juniper berry.)

While the wood of the larger trees is prized, the shrubs are only practical as firewood. An eighteenth century lexicographer commented: "When women chide their husbands for a long while together it is commonly said they give them a juniper lecture, which, I am informed, is a comparison taken from the long lasting of the live coals of that wood."

In our area there are two prevalent native junipers: Rocky Mountain juniper (*Juniperus scopulorum*), which is taller, with thin, scaly, thread-like twigs; and common juniper (*Juniperus communis*), distinguished by the distinct whitening of the groove on the upper surface of its needle-shaped leaves. Examples of each are available in the Flora of Mount Helena collection at the public library.

This article was reprinted from the Helena Independent Record where it was originally published on June 14, 2001.

GLOSSARY

Apiculate—with a short, sharp, flexible point at the tip
Ciliate—fringed with hairs
Denticulate—with very small, sharp teeth directed outward at a right angle to margin

Key to Montana Junipers

Adapted from *Vascular Plants of Montana* by Robert Dorn

1. Leaves in whorls of three, needle-like, whitish on upper side
J. communis
1. Leaves mostly opposite and scale-like, usually not whitish above
 2. Plants shrubby, rarely over 12 inches high; leaves strongly apiculate
J. horizontalis
 2. Plants usually tree-like, mostly



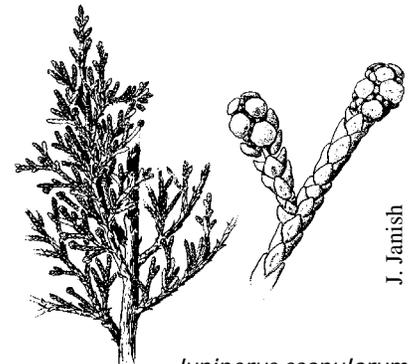
Juniperus horizontalis

over 12 inches high; leaves usually not apiculate

3. Leaves mostly longer than wide, margins entire

J. scopulorum

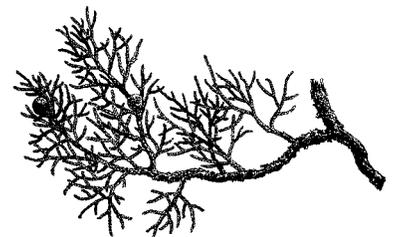
3. Leaves mostly about as long



Juniperus scopulorum

as wide, margins minutely ciliate or denticulate

J. osteosperma



Juniperus osteosperma

CALENDAR

ARTEMISIA CHAPTER

Hal Vosen 232-2608

BEARTOOTH MOUNTAIN

Jean Radonski 855-4500

CALYPSO CHAPTER

Annie Greene 683-6594

CLARK FORK CHAPTER

Thursday October 11, 7:30 p.m.
Steve Arno, U.S. Forest Service ecologist, will present findings of his international collaborative research, "Aboriginal Use of Pines in Montana and Lapland." Rm L114 Gallagher Business Bldg, UM Campus.

Thursday November 8, 7:30 p.m.
Come and learn about "Northwest Penstemons" with Dee Strickler. Dee is an excellent photographer and author of several wildflower guide books. Rm L114 Gallagher Business Bldg, UM Campus.

Friday, December 14, 6:30 p.m.
Our annual Christmas Potluck at a new location, the Wild Ground Learning Center, 702 Brooks, just north of the Rose Garden. Bring plates, utensils and a dish to share. Also bring a few of your favorite slides from the past summer.

Thursday January 10, 7:30 p.m.
Learn how rural residents and land management agencies are coping in the aftermath of wildfire. Join Peter Kolb, Extension Forester, for "Vegetation Restoration after the Fires of 2000." Rm L114 Gallagher Business Bldg, UM Campus.

EASTERN MONTANA

Fay Benton 264-5465

FLATHEAD CHAPTER

All Flathead Chapter meetings are at the Montana Logging Association Building, 2224 Highway 35, east of Kalispell, across and just east of Hooper's nursery (except December

party). The conference room door is at the back of the building. Everyone is invited to the 5:30 general meeting. Programs start at 7:00. Call Rachel Potter (892-2446) for more information.

Wednesday, October 17

Come share your botanical and other excursions of the past summer. This is a great chance to catch up, chat about plants, and learn more about the MNPS.

Wednesday, November 14

Steve Wirt, of the Flathead National Forest will give a program on "Wildland Fire" at 7 p.m. We're meeting the 2nd Wednesday in November only.

Wednesday, December 21

Christmas Party at Edd and Betty Kuopat's in Columbia Falls. Come at 5:30, potluck at 6:30. Bring a recycled or under \$5 gift.

Wednesday, January 16

Cathy Schloeder will give a program on her work with "Vegetation Dynamics of Ono National Park in Ethiopia".

KELSEY CHAPTER

Kelsey Chapter programs will be held throughout the fall and winter. Members will be notified by e-mail or telephone and by a notice in The Independent Record. For more information call Kathy at 449-6586.

Saturday, December 8, 6:00 p.m.

Our annual holiday potluck at the home of Debra and John Beaver, 1806 N. Harris in Helena. Bring a dish to share, your own table service and slides of your summer outings.

MAKA FLORA CHAPTER

Aldon Joyes 385-2579

VALLEY OF FLOWERS

Valley of Flowers Chapter meets the

second Monday of each month. Programs will begin at 7:00 p.m. in room 108 of the Agbioscience Building on south 11th. Parking is available in the lot to the north of the building. Members will be notified about programs by post card and a notice in The Chronicle. For more information call Joanne Jennings at 586-9585.

WESTERN MONTANA

Sam Culotta 837-4298

Chapter Reports

Wildflowers and Wildfire

The Wildflowers and Wildfire excursion to the Nine Mile, thoughtfully guided by Peter Stickney, yielded new insights and experiences into what has happened after the fires of 2000. An astonishing number of survivors (besides fireweed) were identified, such as arnica, beargrass, lupine, and shrubs such as serviceberry Rocky Mountain maple, Oregon grape, snowberry, kinnikinnick, ninebark and others.

Mary's Frog Pond

Darlene Lavelle from the Forest Service was our guide for a stroll around Mary's Frog Pond, a little, magical place hidden behind the road to Elk Meadows, which is full of memories for me. This time it was not my children, but my 4 grandchildren who came along to fish for tadpoles, frogs and leeches, while the adults discovered the rich, and in our area, rare flora around the pond.

Native Plant Garden

Work on the expansion of the Native Plant Garden at the University of Montana is in the planting stage. Among other plant donors, Bitterroot Restoration Project has

donated valuable native plant material, notably a limber pine. We have room for more. The garden is also in need of volunteer help for a few hours of weekly maintenance.

Clark Fork Education Committee

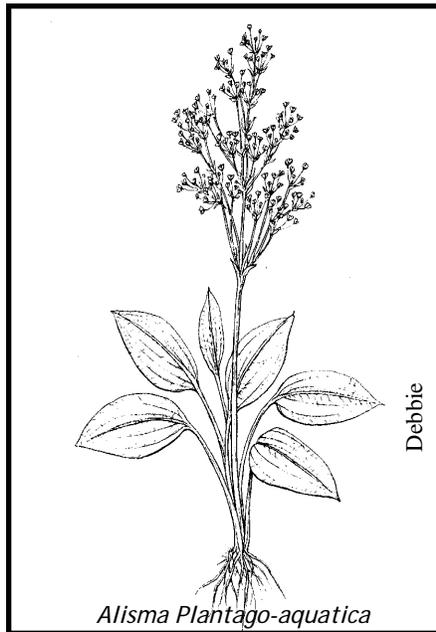
A new project for the Clark Fork Chapter is the establishment of a local Education Committee. It is to help science teachers in three ways: 1. Give occasional classroom talks on native plants. 2. Guide field trips. 3. Give advice for the establishment of small native gardens in schools (there actually have been requests for that). Lisa Hendricks, herself a science teacher, heads the committee. The gathering of suitable teaching materials will be the next task. Let us know if you can help.

Gertrud Lackschewitz

Annual Canoe Trip

Saturday, August 25 was sunny and warm, a perfect day for the Flathead-Clark Fork Chapter's annual canoe trip. Four canoes and four kayaks put into the lower Flathead River west of Pablo and floated about 12 miles to Moiese. This stretch of river is relatively fast and channelized. There were few cottonwoods; instead, the banks are lined with Rocky Mountain juniper. We stopped for lunch in their shade and took the opportunity to identify a *Polygonum* and a *Veronica* growing on the stony shore. Later we saw two members of the Waterplantain Family in flower in a shallow backwater: *Alisma Plantago-aquatica* and *Sagittaria cuneata*. We were also surprised to see arrowgrass (*Triglochin maritima*) in this same habitat. Several of us got sunburned, and Kelly learned about membranous sheaths.

Peter Lesica



Does this plant have membranous sheaths?

Artemisia Chapter Checks In

On June 23rd, thirteen Artemisia and Valley of Flowers members met at Wilsall and caravanned to Dan and Candy DeBar's country home. There we saw Missouri iris, fairy slippers, bog orchids, death camas, and many other plants. A list was compiled by Gerald Moore who can be reached at joy-jerry@earthlink.net We were able to see northern twayblade, mistletoe, and the last of the blooming glacier lilies. We plan to repeat this field trip. On July 28th, seven Artemisia members drove to the lookout near Beartooth Butte and were greeted by 75 elk! The flora was affected by drought and foraging wildlife, but we saw some brilliantly colored flowers and plants well-adapted to alpine conditions. We saw more death camas, a large larkspur, a tiny blue-flowered *Astragalus*, and many others included on a list compiled by Gerald Moore. On August 16th, five Artemisia members met with BLM guide Keith Mosbaugh and toured the Meteetse Spires. We saw bog birch, mountain maple, Douglas-fir, and kelseya on our trip. Dr. Clayton McCracken kept a list of plants and can be reached at chmc@mcn.net. Near

the end of the hike, members picked up and hauled out trash from the parking lot and campground. Members are asked to suggest locations for 2002 field trips and hikes. Hal Vosen's new e-mail address is htrees@midrivers.com

Hal Vosen

Native Plants are in the News

Our weekly column of newspaper articles on native plants in The Missoulian ran from April through September. It has been well received by readers and supported by the paper. I am deeply grateful to the many fine writers who contributed their time and effort.

Gertrud Lackschewitz

The Kelsey Chapter published a series of 10 native plant articles in The Independent Record during the spring and summer. The articles always generate calls and questions about MNPS and our activities and are a great public outreach vehicle. Many thanks to the dedicated authors and photographers who make the series possible.

Native Plant Propagation and Restoration Strategies Conference

December 12-13, 2001, in Eugene, OR. Contact Richard Zabel, Western Forestry Conservation Association, (503) 226-4562, or e-mail: richard@westernforestry.org

Plant Talk—a plant conservation magazine

Published by the National Tropical Botanical Garden, *Plant Talk* is a quarterly publication devoted to international plant conservation. It provides information and a forum for the exchange of ideas to all those interested in plant and habitat conservation. For a free copy contact: Plant Talk, P.O. Box 354841, Palm Coast, FL 32135-4841 or www.plant-talk.org

NOTEWORTHY COLLECTIONS: MONTANA

Agrimonia gryposepala Wallr. (Rosaceae). Big Horn Co. Collected in Aug. 1999 by B. Heidel. This primarily eastern species was previously reported for Montana from Fergus Co. and these reports reaffirm the presence of this species in Montana.

Alnus rubra Bong. (Betulaceae). Lincoln Co. Collected in Jun. 1998 by T. Spribille & M. Arvidson. This primarily coastal species has a limited distribution in the interior. This is the first report for Montana, representing the eastern limits of the species.

Azolla mexicana Presl. (Azollaceae). Ravalli Co. Collected in Sep. 1999 by W.E. Albert. The species is widespread across the western states but this is the first report for Montana. The species was probably introduced with recent disturbance.

Botrychium pedunculatum W.H. Wagner. (Ophioglossaceae). Lincoln Co. Collected 1996-1999 by J. Vanderhorst and R. Ferriell. This is a rare species of northwestern North America and these are the first reports for Montana, representing a range extension.

Carex chalciolepis Holm. (Cyperaceae). Ravalli Co. Collected by Mooers & Mooers. This is a species of subalpine to alpine meadows in the southern and central Rocky Mountains. This is the first report for Montana, representing the northern limits of species distribution.

Carex deflexa Hornem. var. *boottii* L.H. Bailey. (Cyperaceae). Beaverhead Co. Collected by various workers from 1968-1989. Although previously reported for Montana as *Carex brevipes* this species was subsumed under *Carex rossii* by C.L. Hitchcock et al. (1969, *Vascular Plants of the Pacific Northwest*, Vol. 1), and has since escaped mention in the floras of Montana. These reports reaffirm

the presence of this species in Montana.

Carex lacustris Willd. (Cyperaceae). Lake Co. Collected 1989-1992 by P. Lesica and J.S. Shelly & S. Chadde. This is a species of the Great Lakes and Great Plains and these are the first reports of this species for Montana.

Carex pallescens L. (Cyperaceae). Ravalli Co. Collected 1997-2000 by W. E. Albert and B. Heidel. An eastern species, these are the first reports for Montana, and represent a range extension.

Carex prairea Dewey. (CYPERACEAE). Flathead Co. Collected in 1995 by F.J. Triepke and T. Spribille. A widespread species of the boreal forest, *Carex prairea* has been reported from the western cordillera in Idaho and Wyoming, although we have been unable to locate vouchers for these reports. These are the first reports for Montana, representing a range extension.

Carex vaginata Tausch. (Cyperaceae). Lincoln Co. Collected 1996-1998 by T. Spribille & F.J. Triepke and T. Spribille & R.S. Wirt. A widespread pan-continental species of the boreal forest, these are the first reports for Montana and the western contiguous United States.

Centaurium erythraea Rafin. (Gentianaceae). Sanders Co. Collected in Aug. 1997 by T. Spribille. A Eurasian meadow species with medicinal uses reported as established in northwestern North America, this is the first report for Montana and represents the most inland station in western North America.

Eriogonum visheri A. Nels. (Polygonaceae). Carter Co. Collected in 1997 by B. Heidel and J. Vanderhorst. A regional endemic of the Great Plains, previously known only from North and South Dakota, these are the first reports for Montana and represent a range extension.

Lesquerella douglasii S. Wats.

(Brassicaceae). Lincoln Co. Collected 1999-2000 by F.J. Triepke and A. Stachurska. A Columbia Basin species of Washington, Oregon and British Columbia, these are the first reports for Montana.

Mimulus ringens L. (Scrophulariaceae). Choteau Co. Collected in Jul. 2000 by B. Heidel. This primarily eastern species is known only from widely scattered western stations in Colorado, Idaho, California and Washington and this is the first report for Montana.

Ribes laxiflorum Pursh. (Grossulariaceae). Lincoln Co. Collected 1997-1998 by E. Pederson and M. Arvidson & L. Ferguson. A Pacific coastal species known inland from scattered stations in the Rocky Mountains, these are the first reports for Montana representing a range extension.

Senecio congestus (R. Br.) DC. (Asteraceae). Roosevelt Co. Collected in Jun. 1992. A pan-continental boreal wetland species, this is the first report for Montana representing a range extension.

Ventenata dubia (Leers) Coss. & Dur. (Poaceae). Ravalli Co. Collected in Jul. 1995 by W. E. Albert This is a southern European species of dry grasslands introduced in western and northeastern North America. This is the first report for Montana.

Viola selkirkii Pursh ex Goldie. (Violaceae). Lincoln Co. Collected in Jun. 1999 by T. Spribille & A. Stachurska. This circumpolar boreal species is found in North America primarily in the eastern deciduous forests. This is the first report for Montana, representing a range extension.

Contributors include:

Toby Spribille, Bonnie Heidel, F. Jack Triepke, Wallace E. Albert, Jim Vanderhorst, and G. Michael Arvidson

The complete text of Noteworthy Collections Montana will be published in 2002 in "Madrono".

MNPS Chapters & the Areas They Serve:

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

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Your yearly membership fee includes a subscription to *Kelsey*, the newsletter of MNPS, published quarterly. We welcome your articles, clippings, field trip reports, meeting notices, book reviews or anything that relates to native plants or the Society. Please include a line or two of "bio" information with each article. Drawings should be in black ink or a good quality photocopy. If you send clippings, please note the source, volume/issue, and date. All meeting and field trip notices, field trip reports, articles or announcements should be mailed to *Kelsey* Editors, 314 Travis Creek Rd., Clancy, MT 59634. All items should be typed and if possible put on a 3.5" disk and saved in Microsoft Word or rich text format (rtf.) for a PC. Please include a hard copy with your disk. They can also be sent electronically in the same format as above.

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