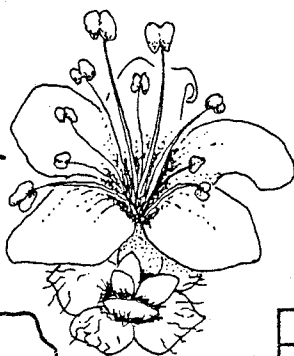


Kelseya uniflora



Kelseya

Fall 1990
Vol. 4, Number 1

KELSEYA UNIFLORA, THE MNPS "MASCOT"

This issue marks the beginning of the fourth year of the Montana Native Plant Society. In response to many requests - and for the benefit of those new to the organization in the past year or two - we are reprinting articles on our "mascot plant," *Kelseya uniflora*. The description of the genus *Kelseya* appeared in Volume 1, Number 2, the Winter 1988 issue of this newsletter, and the biographical material on Francis Kelsey was in the summer '88 issue, Vol 1, #4. Both were written by Peter Lesica, one of the hardworking organizers of MNPS and a frequent contributor to KELSEYA. Peter was one of two members who nominated *Kelseya* as our newsletter's mascot, along with Greg Fraser of Ronan, back in early 1988.

Kelseya uniflora (Watson) Rydberg is an intricately branched, mat-forming, partially evergreen shrub in the Rose family (Rosaceae). It has small reddish purple flowers which are produced very early in the spring. *Kelseya* is most often found growing from cracks in limestone cliffs where it forms mats which cover the cliff faces like patches of thick green tapestry.

Kelseya is locally common in the mountains east of the Continental Divide from the Little Belt Mountains near Great Falls and the Front Range west of Augusta south to the Centennial Mountains and the Beartooth Mountains on the southern border of the state. It is currently known from Beaverhead, Big Horn, Broadwater, Carbon, Gallatin, Lewis & Clark, Meagher and Teton counties in Montana.

It also occurs in four counties in northwestern Wyoming and two counties in south-central Idaho. *Kelseya* is a monotypic genus, which means that this one species is so unique that it must be placed by itself in a separate group.

Almost all species of plants in our state are in genera which are more widely distributed elsewhere, but *Kelseya* is found mainly in Montana....

The genus *Kelseya* was named in honor of Francis Duncan Kelsey, who first discovered the plant along the Missouri River northeast of Helena in 1888. One of

Montana's first resident botanists, Francis Kelsey was born in Indiana in 1849 and spent most of his early years in Ohio. He received a Bachelor's degree from Marietta College in Ohio and attended Andover Theological Seminary in Massachusetts, then served as a Congregationalist minister in Maine and Massachusetts before moving to Montana in 1885.

Kelsey served as a minister in Helena from 1885 to 1893. From 1887 to 1890, he was also a lecturer at the College of Montana in Deer Lodge. During this time, Kelsey studied the flora and collected nearly 500 fungi and over 650 vascular plant specimens. Twenty-three of the fungal specimens and 18 of the vascular plant specimens were nomenclatural types. He discovered at least five plant species that were new to science. These include Kelsey's milkvetch (*Astragalus atropubescens*), small shooting star (*Dodecatheon conjugens*), kelseya (*Kelseya uniflora*), white-margined phlox (*Phlox albomarginata*), and Kelsey's phlox (*Phlox kelseyi*).

Most of these plants he discovered within a few miles of Helena. The majority of his collections were made in Lewis & Clark, Jefferson and Powell counties, but he also collected in Cascade, Deer Lodge, Gallatin, Granite, Madison, Park, Sweet Grass and Yellowstone counties. Kelsey's collecting and teaching of the local flora did much to arouse interest in botany throughout the state. He directed the assembly of a collection of Montana plant specimens for display at the 1893 World's Fair. This collection is now housed at the herbarium at Montana State University in Bozeman. The remainder of his collection (eventually totalling over 6,000 specimens) is at the herbarium of Miami University in Ohio.

Francis Kelsey left Montana in 1893 to accept the first professorship of Botany at Oberlin College in Ohio. During this time, he organized his herbarium and published a dozen professional papers, many of them dealing with his Montana experiences. In 1897, he accepted a pastorate in Toledo, Ohio, and was a lecturer in botany at the Smead School for Girls until his death in 1905.

- Peter Lesica

FROM THE PRESIDENT

It's been three years now since the Montana Native Plant Society was formed and - thanks to our members' enthusiasm and dedication - we are winding up a third season full of interesting field trips and workshops. This summer's activities ranged from "botanizing on horseback" to poisonous and medicinal plants to making concrete planters. Through field trips, programs and this newsletter we have made great strides toward our goal of increased knowledge and appreciation of Montana's native plants - and we've had a lot of fun doing it! We've also found out that Montana's flora has many friends from a wide diversity of backgrounds. There is still much that we as an organization can do to educate the public and preserve our botanical heritage.

FOCUS ON CONSERVATION

In coming years we hope to be a source of information, through the newsletter and our conservation committee, about current issues that affect native plants and their habitats. Decisions are constantly being made that can have significant effects, both positive and negative, on native plants and plant communities. Public comment plays an important role in these decisions. We need to support recent efforts by Federal agencies to give higher priority to biological diversity and natural areas in the management of our public lands.

We also need to speak up for our interests on issues that affect the viability of native plant communities. You can help by making us aware of activities occurring in your area. Allen Cook heads up our conservation committee and is a great source of information and contacts (his phone number is on page 8). Comments on proposed actions, or issues to be considered by MNPS, should be funneled through Allen and his committee.

COMPUTER CAPABILITIES

We have renewed efforts to obtain our own computer for producing the newsletter, maintaining membership information and mailing lists, storing lists of plants observed on field trips, and for organizing other information on plants and MNPS. I'm happy to report that two companies have responded to our request for computer equipment. Through a generous donation by Borland of Batavia, IL, we now have a powerful spreadsheet program, Quattro-Pro, that retails for \$370. We have also received a scanner from Logitech, Inc, of Fremont, CA, (retail value around \$340) which will make it much easier to incorporate illustrations into the newsletter and other publications.

However, these capabilities remain a dream until someone answers our request for a computer to run them, or until we raise enough money through special projects. You may have the opportunity to help by

participating in a National Forest revegetation project next summer - watch the spring KELSEYA for details. Also, private donations can be earmarked specifically for our computer fund.

OUR EASTERN CONTINGENT

MNPS is still not represented by a chapter in Eastern Montana. One of the advantages of having a local chapter is the continuity of programs throughout the year, and the ability to tackle local projects in your community. A group of ten or more members can organize to form a chapter.

Your Eastern Montana representative on the Board of Directors is Linda Iverson of Big Timber. If you would like to organize a field trip or program in the eastern part of the state, Linda would be happy to help you. Penny Latham of Troy is representative for Western Montana, and also welcomes trip/program ideas for that part of the state.



HOT OFF THE PRESS

Restoration '89: the New Management Challenge
Proceedings of the First Annual Meeting
of the Society for Ecological Restoration,
January 16-20, 1989, Oakland, CA. 593 pp.

The Proceedings contain a wealth of information in 62 papers covering the following topics: (1) The role of restoration in parks, wilderness and natural reserve management; (2) Restoration philosophy, analysis and theory; (3) Wetlands/riparian; (4) Restoration procedures and techniques; (5) Restoration of disturbed and modified lands; (6) Restoration of animal populations - sensitive species' management; (7) Hardwood forest restoration and activity; (8) Standards for restoration and management projects; (9) Evaluation methods for restoration; (10) Stream and lake restoration; (11) Endangered plant restoration; (12) Mycorrhizae in restoration; and (13) Sand dune restoration.

Copies are \$25 for Society for Ecological Restoration members, or \$30 for non-members, plus \$3 shipping and handling. Available from: 1989 Proceedings of the Society for Ecological Restoration, 1207 Seminole Hwy, Madison, WI 53711

- Rachel Potter



RESEARCH NATURAL AREAS - NATURAL YARDSTICKS

Regional Forester John Mumma recently announced the establishment of 16 new Research Natural Areas (RNAs) in the National Forests of the Northern Region (Region One), including the Ulm Peak area in the Kootenai NF. Region One includes Montana, northern Idaho and North Dakota.

"Last year, a Northern Region RNA Directory was published with brief descriptions of established and proposed RNAs," reports Dr Angela Evenden, Regional Botanist and coordinator for RNAs in the Forests of Region One. Evenden explained that the goal of the Research Natural Areas program is "to protect a representative array of physical and biological features on National Forest lands. RNAs include examples of terrestrial and aquatic ecosystems, geological features, and rare plant and animal communities. They are maintained as ecological reference sites, and are protected from human-caused disturbance."

Evenden characterized RNAs as "measuring sticks against which we can monitor our management activities. They allow us a means of judging the health of the environment. Baseline monitoring done now can help us estimate productivity of different types of forests, and how ecosystems respond to climatic fluctuations, disease or other influences."

The RNA program is a joint effort by the Region and the Forest Service's Intermountain Research Station and Rocky Mountain Research Station. Special studies have been cooperatively funded for the past several years. Ecological baseline evaluations are being conducted on RNAs in Montana by Dr. James Habeck, University of Montana Division of Natural Sciences, as well as other researchers in Montana and Idaho.

RNAs have both local and global significance. Scientists have begun to recognize the importance of biological diversity in maintaining ecosystem health. Communities with a diversity of species and species with a large genetic pool may be more likely to survive unfavorable conditions. This may be of increasing importance if predictions of global climate change are realized. Each year the world loses more plant and animal species. It is imperative that we protect surviving species. Managing for the naturally-occurring diversity

of plants and animals on National Forest lands will help ensure a more viable resource base in the future.

"Although RNAs are managed primarily as reference areas, they provide an important educational tool for the public," Evenden points out. Native Plant Societies, local Audubon Chapters and other interested public groups conduct field trips or sponsor additional studies in the various areas.

The Regional RNA program operates under a very limited budget. As a result, the major focus of the program is currently on the formal establishment of RNAs proposed in Forest Plans. Volunteers play an important role in the establishment and monitoring of RNAs, and program goals include expanded monitoring and education efforts both within and outside the Forest Service.

To sum up, Evenden likens RNAs to "outdoor laboratories where we can improve our understanding of natural ecosystem structure and function. We can think of them as a sort of savings bank. As the famous naturalist Aldo Leopold said, 'the first rule of intelligent tinkering is to save all the pieces.' RNAs protect the pieces so we can understand the effects of changes in our environment now and in the future."

The Northern Region of the Forest Service currently has 36 designated RNAs, including the following in Montana:

- Cliff Lake Bench, Beaverhead NF, 2,291 acres;
- Cottonwood Creek, Beaverhead NF, 128 acres;
- Coram, Flathead NF, 839 acres;
- Poker Jim, Custer NF, 363 acres;
- Petty Creek, Lolo NF, 310 acres;
- Sheep Mountain Bog, Lolo NF, 105 acres;
- Carlton Ridge, Lolo NF, 920 acres;
- Pyramid Peak, Lolo NF, 520 acres;
- Plant Creek, Lolo NF, 258 acres; and
- Ulm Peak, Kootenai NF, 360 acres.

The newest-designated RNA in Montana, Ulm Peak, is in the Cabinet Ranger District of the Kootenai NF. It lies along the Montana-Idaho border, a little over three miles west of Trout Creek, MT. Ulm Peak (6,444 feet) is its highest point; lowest elevation is 4,200 feet. Mature mountain hemlock forest is this RNA's primary feature. Some large western white pine with diameters up to 36 inches are also present. Mountain hemlock is a Pacific coastal species; its occurrence in northwestern Montana marks its easternmost limit of distribution.

The Ulm Peak RNA, a part of the Coeur d'Alene Range, is composed of Precambrian sedimentary rock. Mudstones in the area exhibit mudcracks, ripple marks and raindrop splash-marks. Local mountain glaciation during the Pleistocene scoured out the basins now

continued on page 7



CALENDAR

MEETINGS

THURSDAY, OCTOBER 4, VALLEY OF THE FLOWERS CHAPTER: Everyone please note: instead of an evening meeting this month, we will have a Saturday WORK DAY at our Chapter's project on the Kagy Hill (see "Planting Power Needed" in the Announcements section) on October 13 at 10 am.

THURSDAY, OCTOBER 11, CLARK FORK CHAPTER: 7:30 pm, Room 307, Natural Science (Botany) Bldg, UM Campus. Dr Robert Pfister, Professor of Forestry at UM and Director of the Lubrecht Experimental Forest, will talk about "Plants, Communities and Management Conflicts of Riparian Zones."

MONDAY, OCTOBER 22, FLATHEAD CHAPTER: 7 pm, Biology Lab, Glacier Hall (old campus of Flathead Valley CC). Rachel Potter will present a grass identification workshop.

SATURDAY, OCTOBER 27, MNPS BOARD OF DIRECTORS: 10 am, Lewis & Clark Public Library, Last Chance Gulch, Helena. Bring a sack lunch. Any MNPS member is welcome to attend any meeting of the Directors - you need not be on the Board.

THURSDAY, NOVEMBER 1, VALLEY OF THE FLOWERS CHAPTER: 7:30 pm, 2nd floor of the Plant Growth Center, MSU Campus. Bring 10-15 slides of interesting plants (or plant habitats) you've seen this past summer. Program TBA.

THURSDAY, NOVEMBER 8, CLARK FORK CHAPTER: 7:30 pm, Room 307, Natural Science (Botany) Bldg, UM Campus. Bill West, US Fish & Wildlife Service Assistant Manager of the Northwest Montana District and the National Bison Range will speak on "Purple Loosestrife in the Flathead Valley."

WEDNESDAY, NOVEMBER 14, FLATHEAD CHAPTER: 7 pm, Fish, Wildlife & Parks Bldg, Meridian Av, Kalispell. Program TBA.

THURSDAY, DECEMBER 6, VALLEY OF THE FLOWERS CHAPTER: 7:30 pm, 2nd floor, Plant Growth Center, MSU Campus. Program TBA.

THURSDAY, DECEMBER 13, CLARK FORK CHAPTER: 6:30 pm, Annual Holiday Potluck Supper, at the home of Leo Joron, 545 Beverly, Missoula (543-3417). Bring a dish of your choice. After supper, Leo will show videos of some of our past field trips.

WEDNESDAY, DECEMBER 12, FLATHEAD CHAPTER: 7 pm, Annual Christmas Party, Pattie Brown's home (560 Wolf Creek Dr), Bigfork. Call Pattie at 837-5018 for more info.

CHECKLIST OF MONTANA PLANT BOOKS TO BE COMPILED

Flathead Chapter member Anne Morley has been working in a bookstore recently, and receives a lot of requests from people looking for books about Montana flowers. She has volunteered her time to compile a list of such books which could be circulated to Montana bookstores, and is asking for your help. Please send her titles and publication information (publisher, date, length) if you know of some books that might be appropriate for such a list. If they're not in general circulation, a brief synopsis would be helpful.

Ideally such a list will include publications at all levels of difficulty or technicality, from the most basic, non-technical picture books to local or regional floras. Mail to: Anne Morley, P O Box 147, Swan Lake, MT 59911...and thanks for your help!

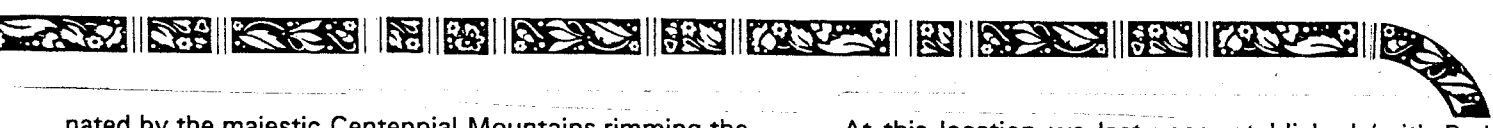
FIELD TRIP REPORTS

CENTENNIAL VALLEY: ASPEN GROVE TO SANDHILLS

Red Rock Lakes National Wildlife Refuge lies in one of the truly beautiful valleys of southwestern Montana, the Centennial. Eighteen people - including both present and former Refuge personnel - gathered at the Upper Red Rock Lake Campground on Saturday, July 21. The morning was spent exploring the lakeshore and aspen thicket vegetation that lie near the campground, then following lunch we car-pooled to the north side of the valley which features sandhills. Don't picture a Death Valley or Sonoran Desert-type sand dune, however - these are much gentler, and in many cases are nearly covered with vegetation, and thus are somewhat stabilized. In fact it was this very covering of vegetation that led to a thought-provoking discussion of whether Refuge policies limiting grazing or preventing it altogether might be changing the makeup of the plant communities of these dune areas, possibly squeezing out plant species that are less tolerant of competition. Small circular to elliptical openings, called blowouts, continue to provide opportunities for those less-crowding-tolerant members of the community to maintain a toehold.

The Centennial Valley flora contains a number of endemic species - those that are found nowhere else - and also several plants whose only occurrence in Montana is in this valley. The endemics include a buckwheat, *Eriogonum ovalifolium* var *celsum*, a crazyweed, *Astragalus ceramicus* var *apus*, and a sedge, all of them found in these sand dune/blowout areas on the north side of the valley. Whenever we looked up from scrutinizing the vegetation, our view was domin-





nated by the majestic Centennial Mountains rimming the south edge of the valley. As the group broke up at the end of the afternoon, those of us heading home by the eastern road out of the valley stopped at Red Rocks Pass to view still another plant community, with some interesting similarities and differences from those of the valley floor.

- Jan Nixon

BOTANIZING ON HORSEBACK

On Saturday, June 24, MNPS sponsored a field trip on which we all had a unique perspective for viewing wildflowers - from horseback. We rented horses from Clarks' X-A Dude Ranch (23 miles south of Big Timber on the Boulder River). From the ranch we climbed 1500 feet elevation and rode seven miles. The valley floor and lower slopes featured many dryland species of *Astragalus* and *Artemisia*. Even a broomrape (*Orobancha fasciculata*) was spotted, and Jan Nixon explained the relationship of this parasitic, non-chlorophyll-producing species with members of the sagebrush genus.

As we rode upward, the plant life gradually changed to fields of Idaho fescue, *Arnica*, *Artemisia ludoviciana* - plus looking up once in a while to some incredible mountain scenery and occasional herds of antelope. Our destination was a lovely high meadow with a cabin near Nurses Lakes, where we had lunch. Exploring the aspens surrounding the cabin, we discussed the very different vegetation found there compared to the open grasslands through which we had ridden that morning. Camas (*Camassia quamash*) had been reported in the moist meadow west of the cabin, but our search for it was unsuccessful, though we found many other early spring flowers: shooting star, springbeauty and buttercups.

The trip down took us on a Forest Service trail, much of which lay under dense pine/Douglas fir forest. This route was much shorter than the morning's, which a lot of the less seasoned riders were grateful for! We all appreciated the friendly horses and the wranglers from the ranch who came along to make sure everyone got along with their transportation. And special thanks to the Clarks for making the horses available at the start of their busy season. I hope we can do it again sometime.

- Linda Iverson

FIRE RECOVERY: THE SECOND YEAR

On Saturday, July 14, Valley of the Flowers Chapter visited the site they selected last year to serve as a "living laboratory" to track recovery of the forest from 1988's seemingly-devastating fires. This site is located in the northwest corner of Yellowstone National Park, in the upper portion of the Grayling Creek drainage, west of Highway 191 and 14 miles from West Yellowstone.

At this location we last year established (with Park permission, of course) permanent photo points in habitats ranging from open meadow to lodgepole pine/Douglas fir forest, including one site with aspen. The sites show a range in fire severity from unburned through lightly and spottily burned to COOKED. In addition to the photographic record, we are collecting coverage data from each location, to show the increase in density of vegetation from bare soil/ash to (eventually) a complete coverage.

On our 1989 visit, the only plant which showed the "mass-blooming" effect often seen following fire was pinegrass, *Calamagrostis rubescens*. This year heart-leaf arnica (*Arnica cordifolia*) was the dominant plant in much of the (former) lodgepole understory, while blue-eyed Mary (*Collinsia parviflora*) had bloomed by the hundreds of thousands a little earlier than our mid-July visit. We had hoped to observe some of the plants described in Peter Stickney's article "After Forest Wildfire, Then What?...Masses of Flowers!" [KELSEYA, Summer 1989] - especially *Geranium bicknellii* and *Dracunculus* (dragonhead, a member of the Mint Family). So far, however, we've not spotted either of these at our site. Fireweed is plentiful along the edges of an abandoned road, but so far has not appeared in numbers in the "understory" of the burned forest, where many (probably most) of the dead lodgepole pines are still standing.

The aspen trunks that occur at one of the sites - though they do not appear charred or even singed in many cases - are mostly dead, and are sprouting from the bases, often quite vigorously. Both last year and this they carried the so-called "juvenile" foliage: leaves which are 3-5 times larger than their normal adult size. This is a typical response to fire, and the increased leaf size undoubtedly helps the tree grow rapidly by providing greater photosynthetic surfaces.

The moist meadow area, in particular, has developed an amazingly dense vegetative cover this summer - to the point where we could not easily locate the "stake-chasers" with which we marked the outer end of each photo site! The meadow was very spottily burned, and good-sized open charred areas may still be seen, now surrounded by rank grasses and forbs. This meadow is also home to a very pretty pale salmon- to coral-colored paintbrush, *Castilleja gracillima*. This meadow's colony is part of a population which occurs from Snowflake Spring just north of the Park boundary (on Hwy 191) to the Grayling Hill outside the Park's south boundary. This species is on the Forest Service Region One Sensitive Plant List, and the portions of the population which occur on Forest Service lands were relocated just last year based on collection data from many years ago.

-JN

FIELD TRIP REPORTS, continued

STATEWIDE FIELD TRIP: PINE BUTTE PRESERVE TO GIBSON RESERVOIR

Our first-ever statewide field trip (aside from those held in conjunction with the Annual Meetings) was a roaring success! Over 40 people from all over the state gathered at the Nature Conservancy's Pine Butte Preserve on June 30-July 1 for a weekend of learning plants and habitats which were unfamiliar to most of us. After meeting at the Preserve Manager's residence, we car-pooled to a grassy hillside where we learned how the Pine Butte Preserve came into existence and what its aims and goals are. Two of the many interesting plants we saw at this first stop were yellow flax (*Linum australe*), a small, annual Great Plains relative of our more familiar blue flax, and Buffalo plum (*Astragalus crassicaarpus*), whose juicy, greeny-pink "pods" (legumes, actually) were nibbled by some of our braver members, after Wayne Phillips' assurance that they are not only edible but tasty. Al Brown, from Livingston, commented that he had used the fruit as slingshot ammunition as a young boy in eastern Montana!

The Rocky Mountain Front is one of the few places in the Lower 48 where the grizzly bear still leaves the mountains to forage on the plains, as it did before the coming of European settlers. Grizzlies regularly are seen in all parts of the Preserve, especially the fen (sometimes called "Pine Butte Swamp"), which was our next destination. A fen differs from a bog in that a bog is an area with no external drainage, where water becomes stagnant and is often very acidic. The water of a fen, on the other hand, is in motion, flowing through the fen; this results in a very different chemistry, and many fens are neutral to slightly alkaline. Not surprisingly, this enables a fen to support a very different array of plants than an acidic bog. The Pine Butte fen is a vast mat of accumulated moss and other vegetation which has become compacted but not decayed, and which floats on the water percolating out of the glacial moraine which lies to the west and north. It was necessary for us to follow the Pine Butte personnel single file, in order to stay on paths where the accumulation was thick enough to support our weight. Walking on this spongy mattress is not too different from bouncing on a waterbed!

Several plants make their homes here but are uncommon elsewhere in the state or region: *Betula glandulosa* (bog birch) and *Triglochin maritima* (arrowgrass). The presence of the limestone-loving Lady's-slipper (*Cypripedium calceolus*) is an indicator of how non-acidic this environment is.

After the fen, most of the group hiked to the top of Pine Butte for an entirely different perspective on the Preserve and surrounding countryside. Toward the end of the afternoon, many of the group also visited the Conservancy's Egg Mountain paleontology dig, which is

operated in cooperation with Bozeman's Museum of the Rockies. Thanks to Preserve personnel Mary, David and Ralph for an outstanding and enjoyable day!

Hiking up to one of the passes near our campground, Wayne Phillips and a few other hardy souls discovered a previously-unknown population of Barratt's willow (*Salix barratiana*), whose extremely large aments (catkins) help distinguish it from other, more common members of this genus.

On Sunday morning the group (plus a few who hadn't made it for the Saturday session) met in the small town of Augusta to follow Wayne to the Gibson Reservoir area to view a number of orchid populations he has documented as part of the Sensitive Plant inventory for the Lewis and Clark National Forest. A hybrid population of two Lady's-slipper species (*Cypripedium calceolus* with *C. passerinum*) showed a range of characters from its respective parents, particularly in the various shades of yellow of the blooms. This population, which grows on the bank of a well-used gravel road, has been greatly depleted by people digging up the orchids.

Another stop took us to a swampy area near the Reservoir where another orchid on the Sensitive Plant list resides: *Epipactis gigantea*, the Giant Helleborine. This same area also is home to several rein-orchids, including *Habenaria dilatata*.

Lunch was in a shady location called a "spruce/horsetail" community, after its dominant plants. This is home to still another uncommon orchid, the Round-leaved Orchid (*Orchis rotundifolia*). Also present among the mossy mats were the Single-leaf Rein Orchid, *Habenaria obtusata*. Dappled sunshine and cool breezes helped make this an ideal lunch spot. The group indulged in a perfect ORGY of orchid-picture-taking - and even video-taping.

Thanks to everyone who put so much time and effort into planning and executing this very successful trip - we're already hearing cries of "Let's do it again!"

- JN



PLANTING POWER NEEDED

All MNPS members and other interested persons are most cordially invited to a plant-in on the Kagy Boulevard roadcut in Bozeman, on Saturday, October 13, 10 am. This is the hill between Sourdough and Highland Blvds. Idaho fescue was planted at one time, but the bunches are sparse and erosion of the soil between the remaining tufts of grass and weeds has become serious.

The City of Bozeman has given permission - and a few funds - to the Valley of the Flowers Chapter for replanting some cover. We will start with junipers and grasses, plus a few native flower species. Bring forks, spades, trowels, rakes, and some muscles to help replant the roadcut. For more information, call Sharon Eversman at 586-6788 evenings.

MONTANA NATIVE PLANT SOCIETY *** MEMBERSHIP APPLICATION/RENEWAL

Date _____ New _____ Renewal _____
 NAME _____ ADDRESS _____
 CITY/STATE/ZIP _____ PHONE _____

STATEWIDE MEMBERSHIP WITH CHAPTER AFFILIATION*

- ___ \$12 I. Individual
- ___ 16 II. Family
- ___ 28 III. Business/Organization
- ___ 4 IV. Yearly chapter dues for Lifetime Members

MEMBER-AT-LARGE (Statewide membership only)

- ___ \$ 8 I. Individual
- ___ 12 II. Family
- ___ 25 III. Business/Organization
- ___ 150 IV. Lifetime member (one-time payment)

*AREAS COVERED BY CHAPTERS:

CLARK FORK CHAPTER - Lake, Mineral, Missoula, Powell and Ravalli Counties

FLATHEAD CHAPTER - Flathead and Lake Counties plus Glacier National Park

KELSEY CHAPTER - Lewis & Clark and Jefferson Counties

VALLEY OF THE FLOWERS CHAPTER - Gallatin, Park, Madison and Sweet Grass Counties plus Yellowstone National Park

All MNPS chapters welcome members from areas other than those counties indicated - we've listed the counties just to give you some idea of what part of the state is served by each chapter. More chapters are in the planning stages for other areas; watch for announcements of meetings in your area. Ten paid members are required for a chapter to be eligible for acceptance in MNPS.

Membership in the MONTANA NATIVE PLANT SOCIETY is on a calendar-year basis, March 1 through the end of February of the following year. New-member applications processed before the end of June each year will expire the following February; those processed after the first of July will expire in February of the year after. Membership renewal notices are included in the Winter and Spring issues of KELSEYA. Anyone who has not renewed by the time the Summer edition of KELSEYA is ready to mail will be dropped from the mailing list/Society roster.

Your mailing label tells you

CLASS OF MEMBERSHIP (I, II, III, IV - see above)

CHAPTER AFFILIATION, if any (CF = Clark Fork; F = Flathead; K = Kelsey; VoF = Valley of the Flowers)

DATE YOUR MEMBERSHIP EXPIRES: If your label reads "x2/90" your membership expired this past February 28...please send in your renewal today! If you mailed a renewal (for 1990 membership) by September 20, your label should read "x2/91." New memberships received since July 1, 1990, are good through 2/28/92, and the label reads "x2/92." Please drop us a note if any information on your label is incorrect.

MAKE CHECKS PAYABLE TO:
 MONTANA NATIVE PLANT SOCIETY

MAIL TO: Montana Native Plant Society
 P O Box 992
 Bozeman MT 59711-0992

SEED STORING TIP

To store dry seeds, put the equivalent of a one-inch layer of desiccant in the bottom of a gallon jar, then cram the jar full of seed packets and secure the top. If you're using zip-lock bags, a teaspoon of desiccant in the bag should keep the contents dry for months. For more information, contact Bruce Bugbee, Plant Soil and Biometerology Department, Utah State University, Logan, UT 84322-4820.
 - Reprinted from Small-Scale Agriculture Today, Winter 1990, newsletter published by the USDA Office for Small-Scale Agriculture.

RNAs, continued from Page Three

occupied by two small lakes. The area exhibits steep, rocky cliffs and talus slides, which support whitebark pine and lodgepole pine along the margins of the rocky sites. Subalpine fir, Engelmann spruce and western larch are also common.

For more information about the RNA program or specific areas in Montana, northern Idaho and North Dakota, contact Dr Angela Evenden at USDA Forest Service Region One, Federal Building, Missoula, MT 59807, or call (406) 329-3141.

PLEASE WELCOME THESE NEW MEMBERS

MONTANA

BOZEMAN

Ben Stein

CHOTEAU

Mary Sexton & David Carr

KALISPELL

Lora M Boyce

Cecily McNeil

MISSOULA

Arlene Doyle

REEDPOINT

Rod L Maclean

SULA

Betty Wickert

WHITEFISH

Michele Hand

CALIFORNIA

PACIFIC PALISADES

Harvey and Sheila Bjornlie

IDAHO

BOISE

Nancy K Cole

KENTUCKY

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PLEASE NOTE:

If your label reads x2/90 your membership expired the end of February. If your label reads COMP2, this is your LAST FREE ISSUE. We don't want to lose you...won't you send us your check today?

Peter Lesica
P O Box 8944
Missoula MT 59807

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Montana Native
Plant Society



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MONTANA NATIVE PLANT SOCIETY

The Montana Native Plant Society is a 501-C-3 (non-profit) corporation chartered for the purpose of learning more about plants native to our state and their habitats, and to share that knowledge. Contributions to MNPS are tax deductible, and may be designated for a specific project or chapter, or may be made to the general fund.

Your yearly membership fee includes a subscription to KELSEYA, newsletter of MNPS, which is published quarterly. We welcome your articles, clippings, field trip reports, meeting notices, book reviews, cartoons or drawings - almost anything, in fact, that relates to our native plants or the Society. Please include a one- or two-line "bio" sketch with each article.

Drawings should be done in black ink with a fine-point pen. If you send clippings, please note the source, volume/issue and date. We especially need short (one to three paragraph) items which can be tucked in anywhere. Changes of address and inquiries about membership or MNPS should be sent to MNPS, PO Box 992, Bozeman, MT 59771-0992. All newsletter material should be mailed to Jan Nixon at the same address.

Advertising space is available in each issue at \$5/column inch. Ads must be camera-ready, and must meet the guidelines set by the Board of Directors for suitable subject matter: that is, be related in some way to plants or the interests of MNPS members.

Deadline for the Winter 1991 issue is DECEMBER 10; the issue will be mailed right after Christmas. Please include meeting/field trip notices through March 1991.

1990-91 AHS NATIONAL GARDENING CALENDAR

The American Horticultural Society (AHS), a non-profit educational organization, announces the first and only guide in North America to the wide assortment of horticultural and gardening events occurring between July 1990 and December 1991.

The 18-month, 32-page National Calendar of Gardening Events provides time, place and contact information on events and activities scheduled by hundreds of North American plant societies, state and regional horticultural societies, major garden clubs and federations, conservation organizations, and other related garden, horticultural and extension groups.

The Calendar includes sidebars and panels with specific information and resources for individual involvement with the millions of Americans currently participating in organized societies and events. Additional support is available to calendar users through a toll-free number to AHS' Garden Information Service,



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a database/networking service offering complete garden and horticultural information.

Copies of the calendar are available for \$3 each postpaid (1-9 copies). Send payment or inquiries to AHS, 7931 East Boulevard Drive, Dept PR-490, Alexandria VA 22308. For information on the discount schedule for non-profit or multiple-copy orders, call 800-777-7931.

The AHS this spring has also published its first Garden Book catalog, listing more than 700 titles from the United States and Britain on every aspect of gardens, gardening and horticulture. Topics of interest to MNPSers include water gardening, wildflowers, natives and natural gardens, nature photography, and plant hunting history and biographies. Also available is a listing of dealers in rare, antique or hard-to-find garden and horticultural titles. To obtain this free listing of garden titles and antiquarian booksellers, write the address given above.