In the spring of 1977 I found myself at Red Rocks Wildlife Refuge in southwestern Montana. I happened to be with Will Kerling that day, who at the time was on the board of Friends of the Rattlesnake in Missoula. This group was trying to obtain wilderness status for a part of the Rattlesnake drainage. Will noticed that I had a plant key and asked if I would produce a plant species list for the proposed wilderness. I thought about it for a moment and said yes.

I decided to inventory the entire Rattlesnake watershed, which covers about 100 square miles just north of Missoula. Initially I had no funding for this, or even a job; however, I did eventually get $1,000 from the city.

My first trip was to buy a copy of Flora of the Pacific Northwest by Hitchcock and others; it has drawings of every species. The next step was a decision to collect a voucher specimen of each species. Initially I intended to deposit the specimens at the University of Montana Herbarium. However, the curator was not interested, so I decided to give them to the Missoula City/County Library. I was not allowed to use the herbarium at the University, and I felt the general public needed access to a collection of this sort.

After one summer of work I had 300 species. The Library expressed interest in having the collection but how to mount them? I tried many techniques such as shrink wrapping, contact paper, and dry mounting. After looking at costs and quality, I decided to use a 5-mil dry mount laminating film applied with a hand iron. The mount consists of a sheet of corrugated cardboard cut from appliance boxes. On it a sheet of 50% rag bond herbarium paper was attached. The plant specimen was placed on this, collection number written in the lower right corner, and a flower dissection was placed above the number. Dry mount film was then ironed on, then folded around and attached to the back of the cardboard. To this I glued and taped a sheet of medium-weight Manila paper, which acts as a cover for the mount and prevents the laminating film from being scratched. Inside this paper cover I taped a notebook transparency, into which I placed a collection label, notes of interest, and a photograph of the plant which Will Kerling donated.

I then had the problem of what to put them in. A herbarium case was my first thought, but I believed it would not work in a library setting, plus my mounts did not stack well and would fall out. An X-ray file cabinet turned out to be my only viable option. Had my mounts been a quarter inch longer, I would have been out of luck!

The second year I collected 350 species. Peter Stickney helped with identification and received specimens of interest. A key was written for public use and was tested by a class of fourth graders; it worked.

The collection has now been in use about twelve years. Surprisingly, no damage has occurred except for some leaves turning brown. Stop by the Missoula City/County Library some time and take a look.

John Pierce is a frequent contributor to KELSEYA. He works as a contract botanist for the Forest Service, and was one of the organizers and the first Treasurer of MNPS.

The type of reference-specimen collection which John describes would make a terrific project for each chapter to take on. Start with an area of interest close to home, and develop an intensive inventory of the plant species found there. Even in heavily-collected areas, if you visit a site at several different times of the year, the chances are that you will come up with a county record (a new occurrence for a given species) — maybe even a new state record.
MONTANA NATURAL AREAS UPDATE
New Montana Interagency Natural Areas Committee

This past spring an interagency natural areas committee was formalized through a Memorandum of Understanding among thirteen state, private, and federal organizations. The Memorandum of Understanding (MOU) is designed to coordinate efforts of participating agencies and organizations in establishing and managing a comprehensive natural areas system in Montana. This coordinated effort will facilitate the protection of representative examples of Montana's flora, fauna and landforms for education, research and maintenance of biological diversity. In addition, unique communities—including habitat for threatened, endangered, and sensitive plant and animal species—would be represented with the natural areas network.

Agencies and organizations participating in the Montana natural areas memorandum of understanding include:

- Bureau of Land Management
- USDA Forest Service
- National Park Service
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Army Corps of Engineers
- Montana Dept. of State Lands
- Montana State Library
- Montana Dept. of Fish, Wildlife and Parks
- Confederated Salish & Kootenai Tribes
- The Nature Conservancy
- Rocky Mountain Elk Foundation
- Champion International Corp.

Participating agencies and organizations will work together in inventory, evaluation, and ranking of potential natural areas, development of a natural areas database, and sponsoring statewide natural areas conferences. Leadership for coordinating natural area efforts will be shared among participating agencies and organizations. The Forest Service will provide leadership for the initial two years. Chris Risbrudt, deputy regional forester for the Forest Service Northern Region, has been selected as the first chair for the executive committee, which oversees interagency natural areas activities in the state.

In addition, an interagency coordinating group has been formed to assist the executive committee with technical developments and annual meeting organization. Angela Evenden, Natural Areas Program Manager for the US Forest Service Northern Region and Intermountain Research Station, is chair of the coordinating group.

Montana Natural Areas Conference
November 14 & 15, Missoula

The interagency natural areas committee will host the next Montana Natural Areas Conference in Missoula on November 14 and 15. At this meeting, natural-area enthusiasts will gather from all over the state to hear presentations on natural areas management, and to provide recommendations for development of the natural areas network. Several special management designations included in the statewide natural areas network are: Research Natural Areas, Botanical Areas, Zoological Areas, Outstanding Natural Areas, Wild & Scenic Rivers, Old-growth Areas, Wilderness, Areas of Critical Environmental Concern, Nature Conservancy preserves, bioregions, and biosphere reserves. Montana Native Plant Society members are welcome to participate in the statewide conference. If you are interested in attending or want more information please contact:

Angela Evenden
R1/INT Natural Areas Program Manager
Intermountain Research Station
PO Box 8089
Missoula, MT 59807
(406) 329-3485 ext. 167

YEW BARK COLLECTION DECISION APPEALED

The bark of the slow-growing yew (Taxus spp) is currently the only source of the compound taxol, in the news these days as a treatment for ovarian cancer. The July 1991 issue of the Cabinet Resource Group’s newsletter discusses the impacts and problems that demand for this plant is creating. Our thanks to them and to writer Chip Clark for this information.

Yew, though relatively abundant in moist Pacific Coast forests, is rare on the Kootenai National Forest and is found only in mesic old-growth stands. On the coast, yew often grows to 10’ diameter, but as you move east of the Cascades the species becomes more and more restricted as favorable habitats become scarce, and mature individuals are smaller.

In June 1991, Resources Unlimited and the Montana Ecosystems Defense Council appealed the decision of Kootenai Forest Supervisor Bob Schrenk to implement a large-scale yew bark collection plan. He invoked a 'categorical exclusion' clause which precluded public involvement in the decision-making process. Rights to harvest yew bark were given exclusively to Bristol-Myers, which has hired local individuals to collect the KNF. Prior to this decision, Region One Supervisor John Mumma had directed forests to use NEPA documentation in assessing yew availability, and to emphasize harvest from planned timber sales.

According to Clark, Supervisor Schrenk did neither of these things, and he comments: "The use of the 'categorical exclusion' to avoid NEPA documentation is an improper use of a regulation that is meant to permit non-NEPA work to proceed to salvage damaged timber (blowdown or disease), not to harvest a key component of wet-site old growth groves such as the yew."

A court order protecting the spotted owl has stopped yew-bark harvesting on some 66,000 acres of Pacific Coast old growth, encouraging collectors to explore more marginal yew habitats to the east. Some five thousand pounds of illegally harvested yew bark have been removed from Idaho’s Panhandle Forest alone, and 'yew-poachers' are taking the bark wherever they can find it. Supervisor Schrenk directed harvest of any yew over 3 inches in diameter, and the yew wood, a fine-grained, fine-toothed, - continued on Page 6
GUIDE TO SOURCES FOR MONTANA PLANTS AND SEEDS

The Landscape Committee, spearheaded by the efforts of Linda Iverson, is continuing to update its list of sources for native seeds and plants. Some of you may have picked up a copy of the draft list at the Annual Meeting last May. If you did, and you know of a nursery in your area that is not listed on it, please ask them to send Linda a list of the natives they carry. If you didn’t, you could still ask your local nurseries for a list. Even if they don’t know for sure which species they carry are natives, a list sent to Linda can have the non-natives “weed out.” Send (or ask the nursery to send) plant lists to Linda at PO Box 1397, Big Timber, MT 59011.

The Source List will be available early this winter - details to follow in the next KELSEYA. Cost of the list is expected to be in the $1-1.25 range. But please... don’t write Linda requesting the list before we announce that the final version is available.

FOREST SERVICE REGION ONE RESTRUCTURES TES PROGRAM

Late this summer, Ronald Haag of the FS Region One Range, Air, Watershed and Ecology (RAWE) Group announced the reorganization of programs relating to Threatened and Endangered Species (TES) plants, botany, and natural areas. Regional Botanist Dr Angela Evenden has transferred to the Intermountain Research Station, to the newly-created position of R1/INT Natural Areas Program Manager [see FROM THE PRESIDENT, Page 2]. This new position, jointly sponsored by the Region and Station, is designed to increase emphasis on natural areas in the Region’s overall efforts to maintain biological diversity.

Structure and responsibility for the Botany and TES Plant Program has been reorganized. The TES Plant portion of the botany program has been consolidated with the overall TES program under the Wildlife and Fisheries Staff Unit (W&F). With this organizational change, botanist Steve Shelly has been moved from RAWE to W&F. Steve is a botanist with The Nature Conservancy and is assigned full-time to the Regional Office, where he provides technical support to the TES Plant Program. Overall program leadership for TES plants is the responsibility of TES Program Manager Bill Ruediger.

The RAWE Staff Unit will continue to provide leadership and coordination for the overall botany program (excluding TES plants) as part of the Ecosystem Management Group. The botany program is designed to increase our understanding of the native flora of the Northern Region, and to provide expertise and tools in the field including training sessions, databases and technical references. The RAWE Staff Unit is also responsible for overseeing the Northern Region Herbarium which is housed at the Forestry Sciences Lab in Missoula. Angela Evenden serves as the assistant curator for the herbarium.

WORK UNDERWAY ON A FLORA FOR NORTH AMERICA

The Flora of North America Project is a collaborative, bi-national effort of more than 20 major botanical institutions to compile the first comprehensive description of all plants growing spontaneously in the United States and Canada. About 17,000 species of vascular plants grow in this area, and of the native genera, 38% are found only in North America.

The first volume of this 12-volume series is scheduled to appear in late 1991. The Flora will be the single authoritative reference for theoretical work in plant studies, but also for general reference in biology, conservation, wildlife management etc.

Questions should be addressed to the Missouri Botanical Garden, P O Box 299, St Louis MO 63166.

THE REST OF THE STORY (or, The Perils of Field Work)

Have you ever wondered after whom the Douglas Fir is named? David Douglas, Scottish botanist (1798-1834) worked for the Horticultural Society of London and provided some of the earliest knowledge of the California flora through his exploration thereof in 1831-32. Mr Douglas met his untimely death in the Sandwich Islands, as the Hawaiian Islands were then called. Tragically, he fell, while collecting, into a pit constructed to trap wild animals. “His body was mangled by a wild bull which had previously or just afterward fallen into the same pit. A passer-by was attracted to the place by seeing Douglas’s pet dog standing guard over a bundle of plants left on the ground by his master shortly before he stepped to his death.”

- from Edmund C Jaeger, 1941, Desert Wildflowers, Stanford University Press; submitted by Juanita Lichthardt

NWRC WILDFLOWER HANDBOOK

The National Wildflower Research Center, Austin, TX, has put together a guide to landscaping with native plants. Topics covered include wildflower seed mixes, prairie restorations/re-creations, and seed collecting guidelines - all presented in a non-technical manner. The publication also lists conservation and restoration organizations, sources for wildflower seeds and native plants throughout the country, and includes a bibliography.

Cost of the paperback guide is $9.95; order from the National Wildflower Research Center, 2600 FM 973 North, Austin TX 78725-4201.

PROCEEDINGS ON ORCHID PROPAGATION


17-MILLION-YEAR-OLD MAGNOLIA LEAF FOUND - STILL GREEN!

Late in 1990, an article in the New York Times reported the discovery of a magnolia leaf of Miocene age that was still green when it was located, embedded in the sediment of an ancient lake near Moscow, ID. The remains of flowers, stems and leaves - along with insects and fish - occur in layers of clay sediments and are exceptionally well-preserved due to the low temperatures and oxygen content of the water. A recently-developed lab technique, polymerase chain reaction, has enabled geneticists to extract DNA strands from the leaf, allowing them to compare the genetic makeup of the ancient leaf with those of modern magnolias.
MEETINGS

WEDNESDAY, OCTOBER 2, VALLEY OF THE FLOWERS
CHAPTER: 7:30 pm, Plant Growth Center loft, on S 11th Av, MSU Campus. NOTE NEW MEETING DAY (first WEDNESDAY of each month). This is a get-acquainted, organizational meeting. Bring 5-10 35mm slides from your summer's outings to share with others. We will plan for the native plant seeding on the Kaye Blvd road cut on October 18, and for other activities for the year.

THURSDAY, OCTOBER 3, KELSEY CHAPTER: 7 pm, Lewis & Clark Public Library, Last Chance Gulch, Helena. Jim Searles, author of Garden of Joy, will discuss "Gardening with Natives." Other Kelsey Chapter meetings will be announced later this fall - watch the newspaper for details. General topics will include mosseis, Research Natural Areas, biological control, forest succession, and "Strange Things that Plants Do." Call Val Jaffe for more information, 449-7034.

THURSDAY, OCTOBER 10, CLARK FORK CHAPTER: 7:30 pm, Room 307, Natural Science Bldg, UM Campus. Missoula videographer Blue Tantarti will show a video she recently made for the Missoula County Conservation District entitled "Montana Weeds: Spotted Knapweed and Leafy Spurge." NOTE: Clark Fork Chapter is starting a seed exchange. At meetings this fall, members should bring species lists and/or seeds to share.

WEDNESDAY, OCTOBER 16, FLATHEAD CHAPTER: 7 pm, Fish, Wildlife & Parks Bldg, 490 N meridian, Kalispell. Bring photos/slides of summer activities/flower finds. Discussion of programs and activities for '91-'92, including fall and winter field trips. Slides and talk by Peter Lesica on the ecology of Howelia aquatilis and how it relates to status of endangered species. Discussion and review of Peter's letter proposing Endangered Species classification for this endemic harebell relative.

SATURDAY, OCTOBER 26, STATE BOARD OF DIRECTORS' MEETING, 10 am, Lewis & Clark Public Library, Helena. All members are invited to participate. Bring a sack lunch. For more information call Angela Evenden, 329-3485 ext. 167 (daytime).

WEDNESDAY, NOVEMBER 6, VALLEY OF THE FLOWERS CHAPTER: 7:30 pm, "Hands-On in the Greenhouse" work session in the small greenhouse in front of Cooley Lab & Lewis Hall, east of S 11th and north of Garfield, MSU campus. Repotting, pruning, general spiffing up are on the agenda. Bring small hand tools and gloves. Call Sharon Eversman, 994-2473(w), if you need more information.

THURSDAY, NOVEMBER 14, CLARK FORK CHAPTER: 7:30 pm, Rm 307, Natural Science Bldg, UM campus, Missoula. Peter Achuff, botanist for the Montana Natural Heritage Program, will present a slide show from his conservation work in Asia: "Natural Features of the Northern Tibetan Plateau."

WEDNESDAY, NOVEMBER 20, FLATHEAD CHAPTER: 7 PM, Fish, Wildlife & Parks Bldg, 490 N Meridian, Kalispell. Program TBA.

WEDNESDAY, DECEMBER 4, VALLEY OF THE FLOWERS CHAPTER: 7:30 pm, Herbarium classroom, 4th Floor of Lewis Hall, MSU campus. Matt Lavin, curator of the MSU Herbarium, will discuss using family characteristics to recognize Montana's native plants, with slides and herbarium specimens for participants to compare.

THURSDAY, DECEMBER 12, CLARK FORK CHAPTER: 6:30 pm - The annual Christmas potluck supper will be held at the home of John Pierce, 737 Locust in the Lower Rattlesnake. Bring a salad, dessert or main dish and a few slides of warm places you visited this past summer. Call John at 542-2640.

FIELD TRIPS

SATURDAY, SEPTEMBER 28, IS THERE LIFE AFTER FROST AT KIRK HILL? Join Jan Nixon from 1-4 pm to explore the ecology of the Kirk Hill Nature Area and learn more about how our native vegetation prepares for winter. Trip is limited to 15 people; please make reservations with Bonnie at the Museum of the Rockies' Education Department, 994-5282 (small fee).

FIELD TRIP REPORTS

FLATHEAD AREA GARDEN TOURS

On Sunday, April 28, the few folks who braved the blustery weather were treated to excellent displays of alpine and other rock garden plants. Jerry and Caroline Berner gave us an extensive tour of their Four Winds Nursery, Polson, as well as their gardens and wildlands. A great variety of plants was available for purchase, including an exception selection of rhododendrons. Greg Fraser's rock garden in Ronan contained a wonderful collection of dwarf cushion plants, and it was very informative to see his meticulous propagation beds.

The turnout for the May 26 joint field trip tallied 3 MNPS members and 16 Audubon members. Jeff Wilson, Swan Hill, showed us how large concrete rings (3-6' diameter, 1-2' high) can be artistically grouped into islands of raised beds to pleasingly introduce exotic plants into a native scene and minimize maintenance. The garden was also enhanced by Jeff's large pots, water basins and other ceramic sculptures. As an added bonus that afternoon, our group got to watch as Jeff pulled a firing of raku pottery glowing from the kiln. The "Garden of Precious Harmony" was as subtle and serene as its name implies, and in its design, Sam Culotta was clearly inspired by the stroll gardens of ancient China and the natural beauty of Montana. A delicate balance was evident in the combination of native and exotic flora. Among the features we leisurely enjoyed in this five acre riverfront garden were: the turtle pond and reedgrass marsh, a rhododendron collection, the meditation garden, the enchanted ginseng forest, and the Swan River.

- Sam Culotta

JEWELS ON THE PRAIRIE

On June 1 we met in Big Timber, then drove 12 miles northeast to the LaFond Ranch to see what was blooming on the prairie. The trip had been postponed for two weeks due to the cool, wet weather. Luckily, this particular day turned warm and clear. Matt Lavin came from Bozeman with his two young aspirin-botanist children to help us identify the range plants. Peter Lesica also attended to see if Big Timber grew more than large Pontiacs.

 Armed with all this expertise, we found and identified about 40 species, many of which were blooming. Almost all were growing in sparsely-vegetated, semi-arid to arid habitats, on soils dominated by shales and clays. Along with sagebrush and junipers, Arnica fulgens and Senecio crassulus were two plants new to me which had made a comeback because of the moisture. Other wonderful flowering species seen were - continued next page
Leucocrinum montanum (sand lily or gumbo lily), Erysimum asperum (wallflower), Lesquerella alpina, Lupinus sericeus (silky lupine), Astragalus missouriensis and A. spatulatus. We found two carrot-family members, Lomatium foeniculaceum and Musineon divaricatum, near each other and discussed their different characteristics.

Especially nice were the Castilleja sessiliflora in many shades of pink and green. We saw the native Euphorbia robusta, which I'd often mistaken for the nasty Leafy Spurge. Then, because all the plant observation and discussion had worked up our appetites, we had lunch at my cabin on Sweet Grass Creek. Many of the same species seen earlier were growing in my rock garden there.

Later in the afternoon, a few of the diehards walked through the pine-covered hills on the east end of the ranch. We saw another 20 new plants to identify. One little thrill was a Fritillaria atropurpurea (leopard lily) along a draw. We also discovered a nice Coryphantha vivipara, and last but not least, a bright little Physaria didymocarpa (twipnod, a mustard relative) was seen on a dry, rocky hillside. Sharing my "back yard" with the Plant Society was really exciting and I look forward to leading future trips in this area.

- Linda Iyerson

PACKER MEADOWS, SATURDAY JUNE 22

Virginia Vincent led a dozen people on a hike to the moist grounds of Packers Meadow near Lolo Pass. A beautiful sunny day for observing the spectacular display of Camassia quamash in the meadow - "a real sea of blue." Virginia encouraged all to consult their copies of Dorn [Flora of Montana] to name species for certain, and Dodecatheon jeffreyi and Lonicer a caerulea were among the ones seen.

- Anne Garde

ALPINE SLOPES OF ST MARYS PEAK

On what should have been a hot and sunny June 30th, but wasn't, Steve Shelly led a group of down-jacketed hikers ("I wish I'd brought my gloves" one said) up the trail to St Mary's Peak in the Bitterrooots, to observe the alpine flora. Our special goal was to see the mustard Lesquerella humilis which is found only on this mountain and St Joseph's Peak. Unfortunately, we were too early - spring was so late this year that no flowers were blooming at all at the elevation. Steve valiantly carried into the cold his copy of the new publication Vascular Plants of West-Central Montana, by Klaus Lackshewitz (see Page Seven). Steve was able to identify all the plants we saw simply by their leaves, and then read us the description from Lackshewitz's flora. Big snowbanks and strong winds finally discouraged us and we turned back before reaching the top.

- A. Garde

SHOO-FLY MEADOWS, JULY 20

Several MNP's, including a visiting Bozeman member, accompanied John Pierce to Shoo-fly Meadows northwest of Missoula. They walked - not waded - to a bog (not a fen) to watch the carnivorous sundew plant at work devouring flies. Some folks even caught the flies (which were legion) and fed them to the plants. Fascinating but gruesome, one member reported. But the shrubs were lovely, with fragrant Labrador tea (Ledum glandulosum) and grousweleberry (Vaccinium scoparium) everywhere on the drive down the mountain, roadside botanizing provided great entertainment.

- A. Garde

MT SIYEH, AUGUST 3

Sam Culotta led a group of ten adventurous folks to the top of Glacier Park's Mt Siyeh on a day when the weather was unusually cooperative - some beautiful clouds to lessen the effects of the sun, and almost no wind at 10,014 feet! They wearily but exhilarated climbers enjoyed the indescribable views from the top for an hour and a half, before finding that the descent was perhaps more difficult than the climb. Everyone completed the trip safely, exhausted but with exalted spirits!

- Sam Culotta

ANNOUNCEMENTS

PLANTING HELP NEEDED

On Saturday, October 19, at 10 am, MNPS Valley of the Flowers members and friends are invited to congregate on the Kagy Boulevard road cut between Sourdough Road and Highland Boulevard. A mix of native plant seed has been obtained from Blake Nursery in Big Timber. Helpers will need to bring some tools: pick-ax, rakes, spades, and a sack of good grassland top-soil to help the seeds along by providing some native microflora and fauna. Some of the junipers from last year survived, especially those on the north-facing slope, so we shouldn't be completely discouraged. This wretched road cut will take perseverance to improve. We can do it! Call Sharon Eversman (994-2473 wk) for more info.

OCTOBER 15-18, NATURAL AREAS IN THE WESTERN LANDSCAPE

Eighteenth Annual Natural Areas Conference
Natural Areas Association, Estes Park, Colorado. Request information from Natural Areas Conference Coordinator, PO Box 260550, Lakewood, CO 80226-0550.

OCTOBER 29-30, IDAHO NATURAL AREAS CONFERENCE
Boise Convention Center, Boise. Two day session with presentations and panel discussions on natural area management. For more information contact: Susan Bernstas, Forestry Sciences Lab, 316 E Myrtle, Boise, ID 83702 (208) 364-4363.

NOVEMBER 14-15, MONTANA NATURAL AREAS CONFERENCE
University Center, U of Montana Campus, Missoula. Presentations on natural area identification and designation. Working groups will review priority sites for protection. For more information contact: Angela Evenden, Intermountain Research Station, PO Box 8089, Missoula, MT 59807. (406) 329-3485 ext 167 (more details in FROM THE PRESIDENT, Page Two).
richly-colored wood (used in furniture making) is often left to rot once the bark is removed.

It takes tons of yew bark to make a pound of taxol, and unless synthethic forms of the compound are developed, virtual extermination of mature yew will occur long before any general-use cancer cure can be developed. Clark notes that other companies, critical of the exclusive harvest rights given to Bristol-Myers, point out that a very similar compound is found in yew needles. Research should emphasize extracting and testing taxol-related components, permitting a self-sustaining program - not yew extinction. Studies have shown that some yew has 25 times as much taxol as others, and groups trying to protect old growth stands oppose heavy harvest of Kootenai NF bark until testing of taxol concentrations in various populations is conducted.

The Cabinet Resource Group Board voted to join the appeal of Supervisor Schrenk's yew-harvest policy, but the appeal was tossed out. The appellants have asked Forest Service Chief Dale Robertson to review the case. CRG and the other appellants would like to see a greatly restrained approach to yew harvest that includes a prior inventory of yew stock and a NEPA assessment as to its value to old growth habitat. Only then, they say, can a truly wise decision be made as to what quantity of yew - if any - can be removed from the Kootenai NF. For more information or an update on this issue, you can contact the Cabinet Resource Group at P O Box 3013, Troy MT 59935.

PROTECTING ECOSYSTEMS OF THE NORTHERN ROCKIES AND PACIFIC NORTHWEST

The "Northern Rockies Ecosystem Protection Act of 1991* seeks to protect all remaining significant wild areas in the Northern Rockies by designating 13 million acres of new wilderness in Idaho, Montana, Oregon, Washington and Wyoming. It also seeks a system of corridors to allow migrations between protected areas. The bill is expected to be introduced during this session of Congress. For more information, call Alliance for Wild Rockies, (406) 721-5420. Write Montana's Congressional delegation (Baucus, Burns, Marlenee and Williams) to express support or opposition.

BIODIVERSITY OF OUR FORESTS VS CLEARCUTTING PRACTICES

The "Forest Biodiversity and Clearcutting Prohibition Act of 1991 (House Bill 1969) would ban clearcutting on all federal lands and require federal agencies to maintain native biodiversity. The Ancient Forest Protection Act of 1991 (House Bill 842) would create an ancient forest reserve system in western Washington, Oregon and California, and prohibit logging and road building in these areas. Write Montana's Congressional delegation (Baucus, Burns, Marlenee and Williams) to express support or opposition.

OIL/GAS DRILLING IN THE ARCTIC NATIONAL WILDLIFE REFUGE

Senate Bill 1220 would allow oil and gas drilling in the Arctic National Wildlife Refuge, resulting in construction of an industrial area in the heart of the only protected area in North America that includes a full spectrum of fragile Arctic and subarctic ecosystems in an undisturbed condition. This bill - which encourages off-shore drilling in Oregon and Washington, and the use of dirty coal and nuclear power - comes up for a vote this fall. Write Baucus, Burns, Marlenee and Williams to express support or opposition.

OUR THANKS TO Silent Auction Donors

The Silent Auction at last May's Annual Meeting was the most successful ever. Our thanks to the many businesses, organizations and individuals who donated items!

AUGUSTA
Larry and Leita Dickman

BIGFORK
Eva Gates Preserves
Kootenai Gallery
Sandy Early
Shirley MacLaughlin
Sam Culotta
Electric Avenue Books
Electric Avenue Gifts
Martin's Peat

BIG TIMBER
Linda Iverson
Blake Nursery - Sandy Blake
Sally Orr

BOZEMAN
Patagonia Catalog Sales
Gretchen Rupp
Cashman Nursery

CALGARY, ALBERTA
Dana Bush

COLUMBIA FALLS
Dick and Judy Howell
Montana Earth Pottery
Dee Strickler

CONRAD
Timeless Seeds - "Seeds for Sustainability"

HUNGRY HORSE
The Huckleberry Patch

GREAT FALLS
Wayne Phillips

KALISPELL
Blue Star Gardens and Blue Star Enterprises - Dick Yeo
Rocky Mountain Outfitter
Tami DeGrosky
Hoopers Nursery
Bruce and Yvonne McCallum
Books West
Valley Glass, Inc - Robb Hatton
Mat and Miter - Karen Shepard

MISSOULA
Peter Stickney
The Book Exchange
Marchies Greenhouse & Fencing
Mountain Press
Butterfly Herbs
The Birds Nest Inc
UC Bookstore, UM campus - Bryan Thornton, general manager

MONTANA FARM AND GARDEN
Debra Tarlon
Woods Farm and Garden
Ilene Fraser

... AND A FEW DONORS FOR WHOM WE HAVE NO ADDRESS:
Debra Tarlon
Woods Farm and Garden
Ilene Fraser

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**MONTANA NATIVE PLANT SOCIETY**

**MEMBERSHIP APPLICATION/RENEWAL**

Date ____________________

New ________ Renewal ________

NAME ____________________

ADDRESS ____________________

**CITY/STATE/ZIP**

**STATEWIDE MEMBERSHIP WITH CHAPTER AFFILIATION**

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**MEMBER-AT-LARGE** (Statewide membership only)

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**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/MNPS roster.

Your mailing label tells your

- **CLASS OF MEMBERSHIP** (I, II, III, IV - see above)
- **CHAPTER AFFILIATION**, if any (CF = Clark Fork; F = Flathead; K = Kelsey; VF = Valley of the Flowers)

**DATE YOUR MEMBERSHIP EXPIRES:** If your label reads "x2/91" your membership expires February 28, 1991...please send in your renewal today! New memberships received since July 1, 1991, are good through 2/28/93, and your label should read "x2/93." Please drop us a note if any information on your label is incorrect.

**MAKE CHECKS PAYABLE TO:**

MONTANA NATIVE PLANT SOCIETY

**NEW PUBLICATION AVAILABLE ON SENSITIVE, THREATENED AND ENDANGERED PLANT SPECIES**

The long-awaited update of the 1984 book Vascular Plants of Limited Distribution in Montana is finally off the presses! This 88-page, soft-cover book, titled Sensitive, Threatened and Endangered Vascular Plants of Montana, is authored by Peter Lesica and Steve Shelly.

It's the first in a series of Occasional Publications planned by the Montana Natural Heritage Program. Copies may be ordered for $5.00 postpaid from: Montana Natural Heritage Program, State Library, 1515 E 6th Av, Helena MT 59620.

**UPDATE ON XANTHOPARMELIAS IN MONTANA**

I became interested in the vagrant lichens Xanthoparmelia chlorochroa and *X. wuomingensis* after reading Bruce McCune's "Montana Lichens: the Big Picture" in the Fall 1989 KELSEYA. In "A Bitterroot Valley Refugium for Dryland Species" (spring 1990 KELSEYA) I stated that *X. wuomingensis* was not commonly found west of the Divide. I have since done more field work on this species and have found it to be quite common in the Bitterroot Valley. It is found in most undisturbed dryland sagebrush habitats that I have explored here. I have been unable to find *X. chlorochroa* here; however, it is very common in eastern Montana. I did find the two lichens growing together at a site 20 miles east of Billings, Montana.

- Judy Hoy
MONTANA NATIVE PLANT SOCIETY
KELSEYA Editor
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ADDRESS CORRECTION REQUESTED

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NEW FLORA FOR THE BITTERROOT RIVER DRAINAGE

Recently the Northern Region and Intermountain Research Station co-produced a new flora for western Montana by Klaus Lackenschwitz, a well known Montana botanist who has spent 20 years intensively studying the flora of west-central Montana.

Several years ago the opportunity arose to develop and present unusually detailed information on the distributions and ecological characteristics of all vascular plants inhabiting the Bitterroot River drainage in western Montana. This area includes the Bitterroot National Forest and much of the Missoula Ranger District of the LoLo National Forest.

The first installment of this information was published as an annotated checklist of the more than 1,500 species (taxa), categorizing the abundance, habitat relationships and geographic distribution of each. The remainder of this information is presented in the new flora, and consists of keys and illustrations and brief descriptions of each species. Peter Lesica and Steve Cooper were the technical editors for this book and wrote all of the technical keys.

Copies of the flora may be obtained from: Publications Distribution, Intermountain Research Station, 324 25th Street, Ogden, UT 84401.