



KELSEYA

NEWSLETTER of the MONTANA NATIVE PLANT SOCIETY

A PRIMER ON COTTONWOODS

— Mike Merigiano

Cottonwood forests are a striking example of the connection between stream dynamics and plant adaptation. The seed biology and general physiology of cottonwood allows it to colonize and thrive in frequently disturbed environments and on nutrient-poor sites. Until recently, cottonwoods were either taken for granted or purposely removed. Ornithologists were among the first to recognize cottonwood's habitat value. During the last decade, land managers have increasingly recognized this value for fish and wildlife and, at the same time, realized the threats to many cottonwood ecosystems throughout the west.

There are four cottonwood or poplar species in Montana. Two sections within the genus *Populus* (*Aigeiros* and *Tacamahaca*) contain these species and several hybrids. Within *Aigeiros* is plains cottonwood (*Populus deltoides* Marsh.), which is more common east of the continental divide. *Tacamahaca* includes black c. (*P. trichocarpa* Torr. & Gray), narrowleaf c. (*P. angustifolia* James), and balsam poplar (*P. balsamifera* L.). Black cottonwood is mostly west of the divide, balsam poplar has boreal affinities, and narrowleaf is more common along foothill streams east of the divide.

Cottonwood identification can be difficult due to hybridization which occurs between sections, differences in early-season and late-season leaf shape on a given tree, and a general fade in leaf shapes across hybrids and species. Plains cottonwood has broader leaves that tend

to have a concave base, while the other three species have lanceolate leaves with a convex base.

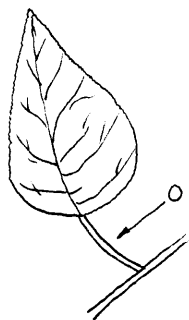
There are physiological differences across these sections, especially concerning vegetative reproduction. Balsam poplar, narrowleaf and black cottonwood have higher sprouting potential than plains cottonwood. Mature stands of *Tacamahaca* species can have many root suckers without any apparent past disturbance, while plains cottonwood has much lower potential. The older the parent tree, the less suckering potential. Few cottonwood suckers themselves live to maturity, and it is difficult to find mature root suckers that are unattached to live parent trees.

The cottonwood's namesake derives from the wispy tufts or trichomes attached to its seed. Seeds are tiny (about 500,000 per pound), extremely abundant, and can disperse widely via wind and water. Seed trapping studies show copious amounts of dispersed seeds. Although seed dispersal of individual trees is staggered, extending 3 to 5 weeks, there is usually a peak within this time. In a natural setting, seeds remain viable for about 2 weeks, with 400 to 6,000 seedlings per acre surviving at the end of a growing season where site conditions are adequate.

Bare, moist mineral soil in full sunlight create ideal sites for cottonwood seedling germination and establishment. Shade and competition from established plants limits cottonwood regeneration, no matter how wet the site. Extensive seedling mortality occurs on bare sites that dry rapidly.

Cottonwood is famous (or maybe infamous to irrigators) for its high water use or transpiration rate, resulting in continued photosynthesis. Most plants close their stomates when air humidity becomes too low, even if soil moisture is high. Black cottonwood's stomates apparently remain open under these conditions, even at night. Unless a particular tree is acclimatized to water stress, black cottonwood keeps on transpiring until the leaves wilt. Cottonwood's inefficient water use — a disadvantage on sites prone to drought — is an advantage on infertile, continually

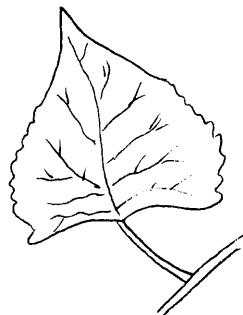
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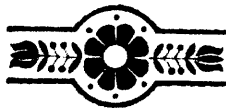
Populus trichocarpa
black cottonwood



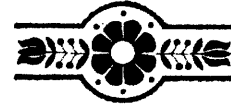
Populus angustifolia
narrowleaf cottonwood



Populus deltoides
plains cottonwood



From the President



Green sprigs of grass are starting up in Big Timber, I'm dreaming of tiny Easter Daisies, Hood's Phlox and Sand-lilies that will dot the landscape in April. There must be many of you who are anxious to get even a glimpse of bare ground after a record winter for snow accumulations. For starters, don't miss our annual meeting this year, June 27-29, at Makoshika State Park outside of Glendive. Articles in this issue will give you some background information about plant communities we'll be seeing "back east." Our '97 Field Trip List should be out around early June, and the chapters are busy planning their field outings. Contact a chapter rep if you have a location you'd like to explore.

Winter Board Meeting

March 10th was yet another clear and mild day for traveling to Helena. We had a very productive meeting, centered around state meetings, money matters, and newsletter. Treasurer Madeline says renewals are flooding the post office box in Missoula. Thanks for supporting MNPS for another year!! And please don't forget that your '97 DUES ARE DUE!!

New Editor

We woefully listened to the announcement that our long-time newsletter editor, Jan Nixon, is retiring. Jan just has more commitments than time. We will miss her at the Kelseya helm after TEN years, but we're happy to announce her successor is Tulli Kerstetter, also of Bozeman. Tulli is currently the calendar coordinator, state vice-president, and active in the Valley of the Flowers Chapter. We thank her for taking on this challenging position. We can all help by being on the lookout for potential newsletter material and submitting text on time. In appreciation of Jan's countless hours of service to our society, we gave her an honorary life membership. We simply can't thank you enough, Jan!!

Investing in Montana's Botanical Future

In the words of our treasurer, "The MNPS is in the enviable position of being able to cover our expenses and have dollars left for funding worthwhile projects." The Board decided to deplete part of our surplus funds by giving money towards three very worthwhile chapter funding requests and two \$500 Small Grant awards. You can read about these in this edition of Kelseya. We're pleased to know of so many native plant-related research, public awareness, education and conservation activities, as demonstrated by the numerous proposals to the Small Grants Program. We look forward to hearing about the recipients' work in upcoming *Kelseyas*.

We also adopted a new strategy to divide our budget into two categories. The first is general administrative costs and services (including the newsletter) to our members balanced by membership dues and interest income. The second portion of our budget would include both raising funds for MNPS and distributing funds for worthwhile projects, including the Small Grants Program. The fund-raising projects would include the annual meeting auctions and sales, notecards, and publications like the Source Guide. We hope that by restructuring our treasury, we will have a better feel for how much we can allocate towards funding projects each year.

Officer Elections

I feel very fortunate to have served as president with such a fun, committed, and inspired Board of Directors over the last four years. My term ends after the annual meeting. I leave feeling satisfied that I have accomplished a lot of what I had hoped to (still shaky with Roberts Rules of Order, however!) and am especially excited about the future leadership and direction of MNPS. Please send in the ballot enclosed, and thanks to the great candidates for their involvement in MNPS.

See you on the eastern side in late June! It will be a worthwhile trip for us all.
Linda Iverson

<<CONSERVATION BULLETS>>>>

FOREST SERVICE SOLICITS INPUT ON NATURAL AREAS

The Northern Region of the Forest Service is conducting an environmental assessment to establish 19 new research natural areas and two botanical areas on six National Forests in Montana: Gallatin NF, Helena NF, Lewis & Clark NF, Lolo NF, Flathead NF

and Kootenai NF. An environmental assessment will be available for public review and comment for a 30-day period beginning in early April. If you are interested in receiving a copy of the environmental assessment please contact: Dr. Angela Evenden, Natural Areas Program, Intermountain Research Station, PO Box 8089, Missoula, MT 59807 or phone (406) 542-4173.

MNPS AWARDS TWO SMALL GRANTS

The MNPS Board of Directors is pleased to announce that it has selected two \$500 proposals for funding in the 1997 Small Grants Competition. We received 15 excellent proposals encompassing a variety of education and scientific projects. The purpose of the small grant program is to support research and education activities which lead to better understanding, appreciation and conservation of Montana's native flora. All proposals were worthy of funding and making a choice was difficult. The following is a list of proposal titles that we received:

Education

Looking Back, Looking Forward - Native Plant Educational Trunk

Gates of the Mountains Multimedia Kiosk

Sprunger-Whitney Interpretive Nature Trail

Native Plants of the Evaro Region: A Guide to the Area's Native Plant Species, their Ecological Value and Conservation

Natural History Guide to Schoolyards in Western Montana

Research

Effects of Cryptogamic Soil Crusts on the Native Plants

Festuca idahoensis and *Artemisia tridentata* in the Sagebrush Steppe of Western Montana

Morphological and Physiological Effects of Chlorine Gas Exposure on Conifers

Grizzly Bear Digging in Subalpine Meadows: Influences on *Erythronium grandiflorum* Physiology

Survey and map *Orchis rotundifolia* near Chief Mountain area in Glacier National Park

Neurochemical Investigation of Montana Native Plants Employed for Headache Treatment

Astragalus molybdenus: higher taxonomic relationships and identity of constituent species

The Effect of Spotted Knapweed on Rodent Distributions on Mt. Sentinel, Missoula, MT

Field water relations of *Arabis fecunda*,

Penstemon lemhiensis: Genetic differences between populations

Macrofungi of four ecosystems

The proposals selected for funding include one educational and one research proposal. Carla Wambach, MNPS member from Helena will use \$500 from MNPS to develop a native plant education trunk and associated curriculum for distribution to schools, teachers, community groups and clubs across Montana. The overall goal of the trunk is to create a device to pique interest and pleasure in the subject of native plants. The trunk will be fitted with an array of materials to help users learn about Montana's native plants.

The second successful proposal was submitted by Wendy Ridenour, a graduate student at the University of Montana, Division of Biological Sciences. In her study Wendy will examine the effects of cryptogamic soil crusts on nutrient and water relations of native grass species associated with sagebrush steppe habitats of western Montana. These community types have been altered by livestock grazing and are threatened by invasion of non-native plants such as spotted knapweed. This study will contribute to a better understanding of these important ecosystems, and ultimately contribute to their conservation. Wendy will use \$500 from MNPS to cover travel costs associated with this research project.

Both Carla and Wendy will prepare an article on their work to be published in a future issue of *Kelseya*.

Thanks to everyone who participated in this year's competition. We hope to hear from many of you again in future-year grant programs.

Angela Evenden
MNPS Small Grants Chair

BRYOLOGICAL EXCURSION, SATURDAY, MAY 10, IN THE SWAN VALLEY

A bryological excursion day led by Drs. Dale Vitt of the University of Alberta and Lars Soederstroem of the University of Trondheim, Norway, is planned near Bigfork. The object of the trip is to bring together people with interest in mosses and liverworts to meet and exchange ideas and information while inventorying the bryoflora of the Porcupine Creek drainage just southeast of Bigfork. This is an area with high species diversity and unique phytogeography, including boreal and coastal elements, with several calcareous fens. Excursion participants will

meet at the Forest Service Ranger Station in Bigfork at 8 am and carpool to field sites. Bring raingear and rubber boots, lunch, collecting bags, and hand lenses.

Registration is free of charge but the organizers would like you to register in order to anticipate turnout and plan for specific activities. To register, please contact Toby Spribille by Phone (882-4451), FAX (882-4835), or e-mail (fswa/s=t.spribille/ou1=r01f14d03a@mhs.attmail.com). Accommodations and restaurants are plentiful in Bigfork and nearby Kalispell.



CALENDAR

MEETINGS

MONDAY, MAY 19, KELSEY CHAPTER: 7 pm. "Wild or Weedy" with Department of Agriculture weed specialist and Kelsey member Barbara Mullin. Get an overview of the weed situation and native plant implications. Slides and discussion. Lewis & Clark Library.

WEDNESDAY, MAY 21, FLATHEAD CHAPTER: Flathead Valley Community College, SAT building, Room 148. 5:30 pm, general meeting (everyone's welcome). 7 pm, Bruce Boody, landscape architect, Eileen Sagan of Gardens Etc., and Joyce Lapp of Glacier National Park will give a joint presentation on the use of native plants for landscaping and restoration.



FIELD TRIPS

MAY DAY WILDFLOWER WALK, THURSDAY, MAY 1.

For children and their families, led by Nancy Breuninger and Sue Newell. Meet at 6:30 pm at the Mt. Helena parking lot. Call Sue at 442-8142 for more information.

REVEGETATION WORK AT WHITE'S GULCH, SATURDAY, MAY 3

Meet with Keith Leatherman of the Helena National Forest to do revegetation work at White's Gulch. Call Keith at 443-1920 or Kathy at 449-6586 for more details. Help further this joint reclamation project.

FLATHEAD FORESTRY EXPO, SCHOOL WEEK, MAY 5-9

The Forestry Expo hosts a week of natural resource education for fifth graders. The Flathead Chapter will have a station presenting plant ID, natural history, and interesting stories about local plants. Volunteer to spend a day at the station helping present this program and learn a few things, too! Call Mary Sloan (862-3360) or Betty Kuropat (862-0877) to sign up.

MOUNT SENTINEL, THURSDAY, MAY 15.

Peter Stickney will point out the common and lesser known wildflowers. Meet at 6:30 pm in the parking lot adjacent to the start of the "M" trail. For more details, call Peter (549-0063).

WILDFLOWERS OF THE BRIDGER FOOTHILLS, SUNDAY, MAY 18

The south-facing slopes and ridges of the Bridger foothills offer early-season viewing of many of the Gallatin Valley's typical wildflowers in a variety of habitats. Join Judy McCarthy for a stroll along the base of the Bridgers from 1 pm to around 4 pm. Meet at the "M" picnic area parking lot on Bridger Canyon Rd. Make reservations with Museum of the Rockies, 994-6616, for the trip. There's a small fee.

MOUNT JUMBO, WEDNESDAY, MAY 21.

Celebrate Wildflower Week with Annie Garde and Angie Evenden. Join them for a walk on Missoula's famous mountain. Meet at the east end of Cherry Street at 6:30 pm. Call Anne (721-7627) for more information.

CROWN BUTTE, SATURDAY, MAY 24.

Field trip jointly sponsored by M.W.A. and Kelsey Chapter, and led by Michael Lee. Crown Butte is located between Cascade and Hwy 200 and is held by the Nature Conservancy. Join us for a spectacular view of the Eastern Front and wildflowers galore! Call Michael at 443-1126 or Kathy at 449-6586 to register.

PARK CITY HIKE, SUNDAY, MAY 25.

Jointly sponsored by the Helena National Forest and the Kelsey Chapter, and led by Keith Leatherman. Join us for an easy walk along part of Mount Helena and a chance to see lots of spring wildflowers. Meet at 9 am in the parking lot across the street from the library.

LOWER BLACKFOOT RIVER CANYON, THURSDAY, MAY 29.

Meet at the northeast end of Eastgate parking lot in Missoula at 6 pm. We'll continue our exploration of this beautiful canyon with Peter Lesica. Call Anne (721-7627) if you have questions.

PARADISE VALLEY/MISSION CREEK, SATURDAY, MAY 31

This is a joint MNPS/Sacajawea Audubon field trip — c'mon out, you earlybirds! Meet at Museum of the Rockies in Bozeman, at 6:45 am to carpool. Second meeting place: Buttrey's parking lot, Hwy 89 at I-90 exit in Livingston, at 7:45 am. Bring lunch, water, binocs, notebook, and dress for the weather. Trip leaders are Andy Stolzenburg and Jan Nixon. Call Andy at 333-4393 for information.

CALENDAR

LONE PINE PARK SPRING WILDFLOWERS, THURSDAY, JUNE 5.

Meet at 7 pm at Lone Pine State Park, 4 miles from Kalispell, for an evening of flower-watching. Call Rachel Potter (892-2446) for more information.

JOHNSON MOUNTAIN TERRACES, SATURDAY, JUNE 7.

Meet at 10 am at the Tally Lake Ranger Station in Whitefish. An easy, off-trail, three-mile round-trip hike to a mossy bedrock terrace with a variety of diminutive plants. Call trip leaders Mary and Gary Sloan (862-3360) for more information.

CLARK FORK PRAIRIE WEED PULL, TUESDAY, JUNE 10.

John Pierce will orchestrate the destruction of thousands of nasty exotics in this well-known prairie restoration. Meet in the parking lot at the east end of Fourth Street at 6:30 pm. For information call John (542-2640).

SPRUNGER-WHITNEY NATURE TRAIL, SATURDAY, JUNE 14.

Meet at 10 am at the Nature Trail in the Swan Valley. Bring lunch and water. To get there from Bigfork: Go south on the Swan Hwy #83. Turn right at the Point Pleasant Campground sign, approximately 9 miles south of Swan Lake. At the first switchback, there is a sign to the trail, turn right into the parking area. Call Anne Morley (886-2242) for more information.

BIOREGIONAL HERBALISM, SATURDAY, JUNE 21.

With author and herbalist Gregory Tilford. This will be a one-day class/field trip focusing on native plants as medicines. Call Kathy at 449-6586 for more information and to register.

PEET'S HILL STROLL, SATURDAY, JUNE 21

Join Matt Lavin — local chronicler of Peet's Hill flora — for a morning tour of early and midsummer wildflowers. Meet at the corner of Story and Church in the dirt parking lot at 9 am for a 2-3 hour reconnaissance of this popular Bozeman attraction.

FLOWERS OF THE FOREST, SATURDAY, JUNE 28.

For those not at the Annual Meeting, spend a day with Steve Wirt finding wildflowers in a forest habitat near Whitefish. Call Steve (862-5452 or 758-5376) for time and meeting place.

[Watch for FIELD TRIPS flyer covering July, August, and September, which will be mailed in late May or early June.]

CHAPTER ACTIVITIES

HANDS-ON FLORA

Kelsey Chapter

This project will develop a reference set of Mount Helena plant specimens to be featured in the reference section of the Lewis & Clark Library and available for loan to schools and other groups. Each entry of the approximately 250 vascular species will contain a pressed plant specimen under durable cover, a collection label with identification data, and will be housed in a custom-built oak cabinet. The project also includes data entered onto the Lewis & Clark Library's World Wide Web site and features photographs and additional text information for each species. The project has garnered the enthusiastic support of the Lewis & Clark Library, the Independent Record (information from past wildflower series articles will be attached as appropriate) and the Carroll College Biology Department that is interested in presenting the project to biology majors as an honors project. The project provides opportunities for the public to appreciate Mount Helena and the local flora which it represents, to build an interest and appreciation for wildflowers in general and fosters identification skills. With the Internet connection, this information will be widely available and opportunities to use this project as a prototype for other communities are many.

CONFERENCE REPORT

Thanks to all participants at the 1997 Montana Plant Conservation Conference! YOU collectively made it a great success. It featured an array of 23 edifying presentations, demonstrations, meetings, and a tour, plus countless spirited discussions.

We have two years to brainstorm and enlist organizers and group sponsors for the Conference in 1999. Meanwhile, a limited number of 1997 program/proceedings are available. Contact Bonnie Heidel, c/o MTHP, 1515 E. 6th Ave., Helena, MT 59620-1800, for your copies.



*Spiranthes
diluvialis* Sheviak

© Crawford

CHAPTER ACTIVITIES (Cont'd)

MANUAL OF GLACIER PARK FLORA

Flathead Chapter

The proposed manual of Glacier Park Flora will be the first manual describing the flora of Glacier National Park since one was written in 1921, which has long been out of print and out of date. Over 120 species have been discovered in the park since that printing. The MNPS grant, which will help pay for illustrations, stipulated that the illustrations would then also be available for MNPS use.

The book will contain text with keys, illustrations, and descriptions of 350 of the most common species. Each individual entry will include: (1) scientific name, common names, and synonyms; (2) morphological description, with measurements in metric and English units; (3) habitat data; and (4) distribution within the park as well as globally. In addition to individual entries, a bibliography and dichotomous keys to the families, genera, and species will be included. Field work for the past four years has been funded by Glacier Park and is now complete. Remaining work includes herbarium research, illustrations, peer review, editing, layout, and publication. Peter Lesica will write the text and conduct the research for the manual. The

Flathead Chapter will contribute another \$200 towards illustration costs and has committed 40 hours of volunteer time in herbarium research.

A CABINET FOR THE UM HERBARIUM

Clark Fork Chapter

The Herbarium at the University of Montana contains over 120,000 specimens and is used by students, scientists, and amateur botanists alike. For many years now the Clark Fork Chapter has held herbarium nights – short classes for which the herbarium is used for educating our members. The collections are currently housed in 62 cabinets meant to hold no more than 100,000 specimens. Although specimens are prepared to last at least 200 years, overcrowding has caused damage to specimens by compression. The Friends of the UM Herbarium is raising private funds to purchase new cabinets, and the Clark Fork Chapter along with the state Native Plant Society have agreed to share the cost of purchasing a cabinet (\$900 total). A plaque will be placed on the cabinet by MNPS dedicating the cabinet to the memory of Klaus Lackschewitz.

A PRIMER ON COTTONWOODS (Cont'd from page 1)

moist sites. By keeping its stomates open and drawing more CO₂ into its leaves, cottonwood species can make sugars with limited available nutrients.

With its millions of seeds, miserly nutrient requirements, and need for water and sun, it is not surprising that cottonwoods dominate streamside environments. When standing in a mature cottonwood stand, it may be hard to imagine that the site was once a stream channel. New stream deposits suitable for cottonwood establishment must remain stable. In-channel features such as riffles and bars are scoured down and filled back nearly every year. Like a surfer's wave, the bars remain in about the same place from year to year, but the sediment that makes them up moves downstream. Cottonwoods are not very good surfers, and they need stable ground to take hold. What matters for cottonwood regeneration is not so much where the water goes, but where the sediment is deposited. Channels adjust to the normal range of flows, and although sediment moves within the channel nearly every year, bank cutting and new deposition are usually minimal. Significant bank erosion and deposition occurs during large, infrequent floods. Because normal, more frequent flood waters don't reach these higher "Big Kahuna" deposits, they are suitable for seedling establishment.

Once cottonwood saplings are established, they are remarkably resilient. Even though they are often pushed over by high water levels and variously covered with sediment, buried stems can sprout new branches and unburied parts continue to grow. This is called flood training. Young cottonwoods, an important part of beaver diets, can sprout several times after repeated beaver cuttings.

Tough as they are, many cottonwood forests are in peril. With human society's penchant for stability and the economic value of flood plains, many forests are a mere shadow of what they were historically. Although cottonwood is not high on the palatability list, cattle and wild ungulates can limit regeneration by trampling or browsing young seedlings. A good indicator of the impact of

herbivory is extensive flood plain areas devoid of cottonwood or willow at the same elevation as flood plain areas with cottonwood.

Natural flow regimes of many larger streams are affected by dams and/or diversions, while flood control can limit the channel migration and sediment deposition important for regeneration. Sometimes the timing of events is changed, as when power-generating dams alter flows. The full range of flows still allowed can recur every week rather than over a season. Undammed streams with irrigation diversions may experience large peak flows followed by quick drops in water levels due to irrigation demands, drying out stream deposits and killing seedlings. In extreme cases, perennial streams are dried up during the summer by irrigation demands, severely stressing or killing mature trees. Even the Yellowstone – the longest free-flowing river in Montana – is not without threats. Levees in many places limit channel migration, and much of the flood plain has been cleared.

Many of the cottonwood forests we see today are a legacy of the pre-development period. It will take much effort and re-thinking to perpetuate cottonwood forests.

SELECTED REFERENCES

- Eckenwalder, J. E. 1984. Natural intersectional hybridization between North American species of *Populus* (Salicaceae) in sections *Aigeiros* and *Tacamahaca*. II. Taxonomy. Canadian Journal of Botany 62:325-335.
- Everitt, B. L. 1968. Use of the cottonwood in an investigation of the recent history of a flood plain. American Journal of Science 266:417-439.
- Rood, S. B. and J. M. Mahoney. 1990. Collapse of riparian polar forests downstream from dams in western prairies: probable causes and prospects for mitigation. Environmental Management 14(4):451-464.

Mike Merigliano is a plant ecologist associated with the University of Montana. He spends much of his time in Idaho. He is not a surfer

MONTANA NATIVE PLANT SOCIETY *** Membership Application/Renewal

Date _____

New _____ Renewal _____

PLEASE PRINT:

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

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(Statewide membership only)

___ \$ 8 I. Individual
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___ 150 IV. Lifetime member (one-time payment)

PLEASE NOTE: For Canadian subscribers, add \$4.00 to each category to cover additional mailing costs.

Additional Donation \$ _____ (donations may be specified toward a particular project or the general operating fund)

*AREAS COVERED BY CHAPTERS:

ARTEMISIA CHAPTER - Yellowstone and Carbon Counties; southeastern/south-central Montana

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

FLATHEAD CHAPTER - Flathead and Lake Counties plus Glacier National Park

KELSEY CHAPTER - Lewis & Clark and Jefferson Counties

MAKA FLORA CHAPTER - Richland, Roosevelt, McCone, Sheridan and Daniels Counties

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

All MNPS chapters welcome members from areas other than those indicated - we've listed the counties just to give you some idea of what part of the state is served by each chapter. Additional chapters are in the planning stages for other areas; watch for announcements of meetings in your local newspaper. 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 October each year will expire the following February; those processed after November 1 will expire in February of the year after. Membership renewal notices are included in the Winter issue of KELSEYA. Anyone who has not renewed by the time the Summer KELSEYA is ready to mail will be dropped from the mailing list/MNPS membership roster.

Your mailing label tells your

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

CHAPTER AFFILIATION, if any (ART = Artemisia; CF = Clark Fork; F = Flathead; K = Kelsey; MF = Maka Flora; VoF = Valley of Flowers)

DATE YOUR MEMBERSHIP EXPIRES: If your label reads "2/97" your membership expired February 28, 1997. Use the above coupon to renew your membership **immediately**. Please drop us a note if any information on your label is incorrect.

MAKE CHECKS PAYABLE TO:

MONTANA NATIVE PLANT SOCIETY

MAIL TO:

MNPS Membership

P.O. Box 8783

Missoula MT 59807-8783

CONSIDER A SPECIAL DONATION TO MNPS

As you will notice in this issue of *Kelsey* MNPS is funding a number of special projects this year that will advance the conservation of native plants in Montana. This is an exciting time for the Society. Due to the success of fundraising activities at our annual meetings and through individual donations we have developed enough of a funding base

at the state-level this year to fund worthy projects which support better understanding and appreciation of Montana's flora. We would like to continue this important work in future years. If you would like to support MNPS Small Grants Program or other special projects please consider a tax-deductible contribution to MNPS. You may use the donation check-off on the membership form or mail a donation directly to the address listed above.

MONTANA NATIVE PLANT SOCIETY

The Montana Native Plant Society is a 501-C-3 (not-for-profit) corporation chartered for the purpose of learning more about plants native to our state and their habitats, and of sharing that knowledge. Contributions to MNPS are tax deductible, and may be designated for a specific project or chapter, for the Small Grants fund, or may be made to the general operating fund.

Your yearly membership fee includes a subscription to *KELSEYA*, the newsletter of MNPS, published quarterly. We welcome your articles, clippings, field trip reports, meeting notices, book reviews - almost anything, in fact, that relates to our native plants or the Society. Please include a line or two of "bio" information with each article. Drawings should be in black ink or good-quality photocopy. If you send clippings, please note the source, volume/issue, and date. All meeting and field trip notices, field trip reports or announcements should be mailed to *KELSEYA*, ATTN: CALENDAR, P O BOX 6444, BOZEMAN MT 59771. All items should be typed and on 3.5" diskette in Microsoft Word for Windows or in a generic ASCII file.

CHANGES OF ADDRESS AND INQUIRIES ABOUT MEMBERSHIP IN THE MONTANA NATIVE PLANT SOCIETY SHOULD BE SENT TO MNPS, ATTN: MEMBERSHIP, P O BOX 8783, MISSOULA MT 59807-8783. GENERAL CORRESPONDENCE SHOULD ALSO BE DIRECTED TO THE MISSOULA ADDRESS. Do NOT send to the Kelsey editor.

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 SUMMER issue is JULY 15; please include meeting/field trip notices through mid-October, 1997. The SUMMER issue of *KELSEYA* will be mailed in early August.



**IF YOU MOVE, PLEASE NOTIFY US AT:
MNPS MEMBERSHIP, P O BOX 8783
MISSOULA MT 59807. Do NOT send
renewals to the Kelsey Editor!**

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Western Montana - Dennis Nicholls	Trout Creek	847-2040

CHAPTER REPRESENTATIVES

Artemisia Chapter - Jean Radonski	Red Lodge	446-3907
Clark Fork Chapter - Anne Garde	Missoula	721-7627
Flathead Chapter - Mary Sloan	Whitefish	862-3360
Kelsey Chapter - Kathy Lloyd	Clancy	449-6586
Maka Flora Chapter - Al Joyes	Westby	385-2579
Valley of Flowers Chapter - currently vacant		

STANDING COMMITTEES

Conservation - Peter Lesica	Missoula	728-8740
Education - Blue Tanttari	Missoula	728-7417
Landscaping/Revegetation - John Pierce	Missoula	542-2640
Newsletter/Publications - currently vacant		
Small Grants - Angela Evenden	Missoula	549-0040

MONTANA NATIVE PLANT SOCIETY
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