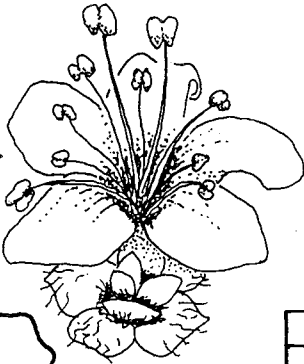


Kelseya uniflora



Kelseya

Vol 7, No 2
WINTER 1994

Newsletter of the Montana Native Plant Society

Growing Hardy Ferns in Montana

- Jean Parker

When walking through fern-lined streams or woods, my eye is always caught by these simple, elegant plants. Plants with such distinct beauty, yet flowerless and seedless, add intrigue to a gardener's senses. The urge to try to propagate the native varieties overcame me several years ago, and many trials later the spores of ten of our Montana hardies have developed to a mature (if still very small, for some) stage.

The learning how-to has been aided by two Seattle fern growers, Maureen Kruckeberg of MSK Nursery and Judith Jones of Fancy Fronds. There is, of course, some difference in how easily ferns grow in the Pacific Northwest compared to our more arid Montana climate. Propagation can be tedious and it may take several years before the ferns grow large enough to plant in the garden. However, as few of our natives are available commercially, it seems worth the patience required.

It begins with collecting spores. If you are unfamiliar with ferns, look for elongated to circular dark or rusty growths on the backs of fronds. Occasionally a species will roll under the leaf margin and hide the spore capsule inside the curl. Spores are contained inside these capsules and may be collected by cutting off a few pinnae of a large blade or the whole frond of a small fern then pressing between paper. As the frond dries the spores will be released as a fine dust. If picked at the proper time - preferably before all the sporangia are fully mature - the spores will fall out in a few days. They are usually visible to the naked eye, or at least with a 10x magnifying glass.

Germination of the spores can be done by a variety of methods, indicating that a number of these will work. Some involve a high degree of sterilization and the use of agar, some are as simple as spores sown on a flower pot under glass. I have settled for a process using a terrarium-type, covered glass casserole using as growing medium a base of

washed vermiculite covered by a mix of sphagnum peat, sand and sifted organic soil. The containers with media are sterilized for several hours at 250° F. Add boiled water to moisten completely and, after cooling, sow spores lightly on the surface.

Put the culture under lights with temperature around 70° F. A show of green indicates the first stage of growth of prothalli, tiny green threads that attach to the medium. Depending on

the species, the time for this emergence can be from a week up to a month. As the prothalli continue to grow, they spread out to become flat and heart-shaped. Sufficient moisture is necessary to the plant to proceed through the water-borne fertilization and to the development of the sporophytes (or fernlets).

As the shallow rhizomes spread and the plants grow, the several transplants ease these tweezer-lifted small

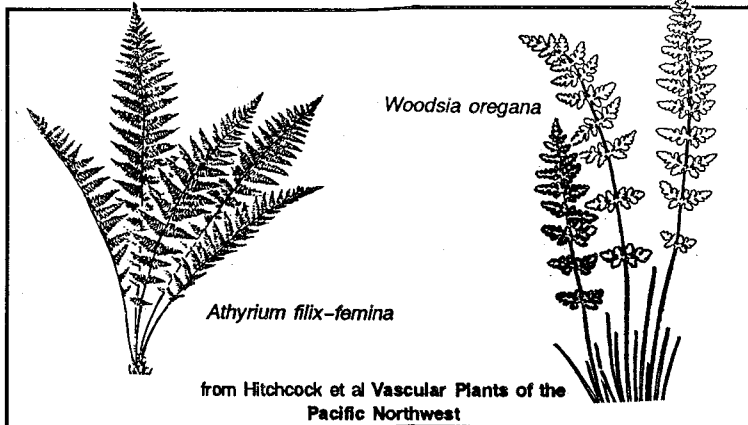
ferns into ones mature enough to be planted in the garden. The entire procedure involves a year and a half to two-and-a-half - or more. But then there they are! Like their parents they are now plants of the spore-bearing generation!

Ferns have for landscapers several strong appeals. They will grow where flowers will not bloom. They will fill gaps, make backgrounds or foregrounds, or they can be featured in mass single-species plantings.

Gardening with the native ferns is easier than one would think. Their greatest needs are for moisture-retentive soil and an even supply of moisture. Many will do well planted near or between moisture-retaining rocks. All need shelter from wind. And though our native varieties obviously survive frigid winters, mulching to maintain soil moisture and prevent heaving is important for these shallow-rooted plants.

Many species don't have to have ideal conditions. Most like shade, but think of **shade** as not being synonymous with

- continued on Page 5



From the President

Native plants in their winter condition have their own special beauty. I enjoy seeing the sharp contrasts and fine silhouettes. How dull it would be if it were always green!

Winter is a good time to get plans made and projects done. Remember all the ideas that came up last year for trips? It's not too early to get those trips written up for our spring newsletter (deadline April 1), which will include a pull-out Field Trip list of spring and summer trips.

Fall Board Meeting Report

Officers and directors gathered in Missoula in early November for our Fall Board of Directors' Meeting. We had a great turnout, and I thank everyone for their participation. I'll summarize the main topics covered below.

We are currently taking nominations for Vice President, Secretary, and Eastern Montana Member-at-Large Representative. Positions are for two years (through spring 1996). The Nominating Committee is Don Heinze of Billings, Sheila Morrison, Missoula, and myself. Please let one of us know if you have any interest in these positions or if you would like to nominate someone (phone numbers are on the back page). The ballot will be mailed in the spring KELSEYA.

The Membership...Hey, That's You!

As of November 7, 1993, we have 342 annual and 17 lifetime memberships, for a total of 359. This is up 37 members from last year. Jan Nixon mailed renewal notices to try to retrieve our "lost" but not forgotten Feb '93 nonrenewals. Remember that our membership year runs from March 1 through the end of February. Included in this issue is a complete membership list, as well as a renewal coupon to fill out and a pre-addressed envelope for your convenience. And thanks to those of you who've already mailed in your 1994-95 renewals without our prompting!

A big discussion item was streamlining our mail and membership recording. Jan has done it all in the past, but now she has the help of a volunteer in Bozeman, and Madeline Mazurski (our state Treasurer) in Missoula, who is obtaining some new software on which to maintain our membership records. We hope to answer your inquiries faster and lessen the load on Jan. Thanks to all these people for their generous donation of work for MNPS. You should continue to use P O Box 992, Bozeman MT 59771-0992 as the main mailing address for MNPS correspondence.

We will publish an annual financial report and budget for 1994 in the spring newsletter.

The Chapters...That's You Too!

We all enjoy hearing what each chapter is planning and has done. Kelsey Chapter had a wonderful talk on the plants of the Lewis and Clark Expedition by Wayne Phillips in costume! Robyn Klein showed slides of Alaskan medicinals for Valley of the Flowers, as well as Jennifer Lyman's colorful talk on botanizing in Mexico and the Bahamas - a great winter theme. Clark Fork Chapter heard about landscaping with natives from Bitterroot Native Growers, had lots of field trips this summer, and participated in many gardening projects, including their on-going maintenance of a native plant garden on the U of M campus. Flathead Chapter published several articles on natives in the *Hungry Horse News*. We may get to read a few of these in our upcoming newsletters. The annual canoe trip with the Clark Fork Chapter was a big success - no rain! Our westside rep,

Dennis Nichols, is continuing efforts to have programs in the Noxon area. The ongoing work done by the chapters in providing a multitude of interesting programs, field trips and activities is a lot of what we're all about.

And I must mention our newest chapter, Artemisia, is hard at work preparing the 1994 Annual Meeting in the Pryor Mountains (more information next page). We are inviting members of the Wyoming Plant Society to join us in exploring "Montana's Desert."

And Last But Not Least...Committees

Conservation: I am pleased to hear of many instances where Plant Society members are involved with specific conservation situations in their own areas. The Spring KELSEYA will carry an article with more details of successful involvements. Meanwhile the Committee is commenting on the Federal Register Notice of Review and the Reauthorization of the Endangered Species Act, both of which are weak in the area of plants. Please keep Chair Sally Orr updated on any new happenings.

Education: As you might remember, one goal this Committee has is getting the word out on weeds, and Chair Blue Tantari is doing it! She attended meetings of the Montana Conservation Districts and the Montana Environmental Education Committee, presented her weed video and distributed info on MNPS. The Clark Fork Chapter is working on a display and the other chapters should follow suit so that travel cost and wear and tear are minimized.

Landscape/Revegetation: Work is underway on the list of gardeners and gardens of native plants. If you want to be included but missed getting the questionnaire in the Fall KELSEYA, please ask your local chapter for a copy, or write Rachel Potter at 2145 Witty Ln, Columbia Falls 59912. We are still distributing the **Source Guide for Native Plants**, also, at \$3 a copy.

If you want to participate in any of these committee projects please call the chairperson (numbers on back page). I hope by continued reporting on the workings of the committees and other aspects of the Society you will realize their importance and vitality and be encouraged to get involved.

Many apologies to Jean Pfeiffer. She was the talented artist that did the drawing on the Clark Forks' T-shirt for the 1993 annual meeting. I mistakenly gave the credit to Jean Parker [author of our lead article this issue]. So sorry, Jeans!

And believe it or not we are still at work on a poster. And possibly note-cards. I hope to have more to report in the next newsletter. Stay warm.

- Linda Iverson

WINTER NEWSLETTER...but wait, Isn't winter almost over? Yes, gang, you're right - winter *is* almost over! Due to unforeseen complications I've been unable to produce the Winter Issue at the time I'd intended - but here it finally is!

Because this issue is so late, we've moved the deadline for the Spring newsletter back nearly a month, and will combine the Field Trip list with it rather than doing a separate, late-spring mailing of field trips.

My apologies to everyone for the inconvenience!

- Jan Nixon

1994 MNPS ANNUAL MEETING, JUNE 10-11-12

"The South Pryor Desert"

The Artemisia Chapter is excited about hosting the 1994 MNPS State Meeting to explore a little-known but very interesting area, the South Pryors, which straddle the Montana/Wyoming border in the central part of the state. Home base for the weekend will be the Bighorn Canyon National Recreation Area near Lovell, Wyoming. The Bighorn Canyon is a unique botanical area and there is a lot to see and do, including spotting wild horses, visiting Yellowtail Dam and Bighorn Lake, touring the Pryor Mountains and Devil Canyon. The weekend promises to be fun for the whole family.

Don Heinze comments: "We hope to show off several rare plant species in what may be the most unique botanical area in Montana."

Scheduled events include:

Slide show

Presentation by Robert Dorn, author of **Vascular Plants of Montana and Vascular Plants of Wyoming.**

Field trips into the nearby South Pryor Mountains

State and Committee meetings

Several Artemisia members are busy putting together a booklet with background information about the area sites, geology, native plants. This book will be available to participants during check-in for \$3.00. Decals will also be sold for \$2.00.

There are motels, restaurants and grocery stores in Bridger, Montana, and Lovell, Wyoming (which is about ten miles from Horseshoe Bend). Camper hookups and tent camping are available at Horseshoe Bend.

Breakfast will be provided on Saturday morning, but you should plan on providing the rest of your food and drinking water. Other good things to bring: rain gear, bug repellent, binoculars, hand lenses, plant identification books, bird books, sun block.

A preliminary schedule will appear in the Spring KELSEYA. A Registration Form is included with this mailing, and needs to be returned to Artemisia Chapter by May 1. Registration fee is \$10 per person.



CALENDAR

MEETINGS

TUESDAY, MARCH 29, CLARK FORK CHAPTER HERBARIUM NIGHT: 7:30 pm, Rm 303, Botany Bldg, UM campus. Professor Charles Miller, UM Division of Biological Sciences, will present an "Introduction to Montana's Ferns."

WEDNESDAY, APRIL 6, VALLEY OF THE FLOWERS CHAPTER: 7:00 pm, loft of the Plant Growth Center, MSU campus, Bozeman. Sara Mathews will discuss her investigations into the genetics and affinities of our region's species of indian paintbrush, *Castilleja*.

MONDAY, APRIL 11, ARTEMISIA CHAPTER: 7 pm, Rm 109, Bair Science Center, Rocky Mountain College campus, Billings. Program TBA.

THURSDAY, APRIL 14, CLARK FORK CHAPTER: 7:30 pm, Rm 307 Botany Bldg, UM campus. Wayne Phillips, ecologist for Lewis & Clark National Forest in Great Falls, will speak on "Botany of the Lewis and Clark Expedition."

WEDNESDAY, APRIL 20, FLATHEAD CHAPTER: 7 pm at the Fish, Wildlife & Parks Bldg in Kalispell. Board meeting at 5:30. Program TBA.

TUESDAY, APRIL 26, CLARK FORK CHAPTER HERBARIUM NIGHT: 7:30 pm, Rm 303, Botany Bldg, UM campus. Peter Stickney, U S Forest Service Intermountain Research Station, will give us some pointers on "The Heath Family."

FIELD TRIPS

WORK DAY AT THE UNDERPASS REVEG PROJECT - SATURDAY, MARCH 29

Linda Iverson and a number of MNPSers in the Livingston area have undertaken a revegetation project for the "B" St underpass. The area was planted to native shrubs and forbs two seasons ago, and your help is needed for a weeding, spruce-up and planting day on Saturday, March 26. Meet at the underpass at "B" St and Park Av at 10 am. Bring rake, shovel, small hand tools (if you have them). Seed will be provided.

WINTER PLANT ID WORKSHOP SATURDAY, APRIL 2

Valley of the Flowers Chapter in Bozeman offers a workshop on identifying native shrubs and trees in winter condition. Enhance your enjoyment of the outdoors by learning to recognize our native plants without the "clues" of leaves and flowers. On Saturday, April 2, starting at 11 am, an hour's overview session at the Bozeman Public Library Meeting Rm (not at Museum of the Rockies as previously announced) will examine plant features and characteristics useful in winter recognition. Following a brownbag lunch, we'll carpool on a 3-4 hour field session to learn the plants in their native habitats. Size of the class is limited, and there is a \$1 fee. Bring lunch, water, a hand lens (if you have one), and a notebook. Winter plant keys will be available. Register by calling Jan Nixon at 585-9959.

SATURDAY, MAY 7, TWO MOON PARK

Meet in the parking lot of the Centennial Ice Arena, at 427 Bench Blvd, Billings, at 9 am. This will be a short hike along the Yellowstone River. We will see a beautiful riparian area that is being seriously degraded by noxious weeds. The trip will take approximately 3 hours. Call Don Heinze (255-2925, 256-1624) for more info.

SATURDAY, MAY 28, MEETEETSE SPIRES

Meet at the Billings Area Chamber of Commerce parking lot, 815 S 27th St, Billings, at 7:30 am to carpool. Second meeting spot: U S Forest Service Ranger District in Red Lodge at 9:30 am. The District Office parking lot is at the south edge of Red Lodge on Highway 212. With any luck, we will view a spectacular bloom of spring wildflowers at the base of the precipitous Meeteetse Spires. This beautiful area on the northeast shoulder of the Beartooth Mountains has been designated an Area of Critical Environmental Concern (ACEC) because it is one of the most biologically diverse areas in Montana. Little walking will be

- continued next page

FIELD TRIPS, continued:

required, but 4x4 vehicles are necessary if the weather was wet during the previous week. Trip will take three hours (from Red Lodge). Call Don Heinze (255-2925, 256-1624) for info.

IT'S NOT TOO EARLY...

...for **you** to be planning a 1994 spring or summer field trip! Artemisia Chapter already has four or five lined up (details of the first two given above) - in **addition** to the field-trip-oriented 1994 Annual Meeting. New members in the far eastern part of the state have plans underway for at least two interesting trips out their way.

You don't have to be affiliated with a chapter in order to propose a field trip, just be willing to organize it (where to meet, length of trip, what to bring - such as lunch etc). Deadline for the Spring KELSEYA is **April 1**; that issue will include a "pullout" list of 1994 Field Trips through late summer.

FIELD TRIP REPORTS

FLATHEAD LAKE MUSHROOM FORAY

The Flathead Lake Foray turned into the Swan Valley Foray as a large group of mushroom seekers roamed the cottonwood stands near Swan Lake campground on May 22. The hot, dry spell of early May had ended with a period of cold and rain two days before - not long enough to give most of the mushrooms time to pop.

But the number of species we uncovered was incredible. Patti Brown has a complete list of the species, which included morels, oysters, and purple-hole-in-the-grounds (PHIGs). PHIGs grow under the duff until they get about the size of a tennis ball, then poke through the surface and start blasting out spores. PHIGs are also known as *Sarcosphaera coronaria*, an unfortunately-long and unpronounceable name almost as bad as PHIG.

The Forayers also turned up *Suillus lakeii*, *S. tomentosus*, and *Leccinum scabrum*. The *tomentosus* threw me for a loop, because we had turned up a couple of *S. lakeii* already, and suddenly here was a *lakeii* staining blue!! These two are similar, but the blue stain was the characteristic that separated them.

The *Leccinum* was also a surprise to me. I'm used to seeing *L. insigne* or *L. auranticum* in this habitat, but much later in the season. Again it was the stain that identified the mushroom, but in this case the **lack** of a stain. *L. scabrum* is about the only scabrous-stalked non-blue-stainer we have out here. It is also not usually seen this early in the year.

Several people found specimens of *Pluteus cervinus*, the fawn mushroom, one of the few pink-spored species we have here, found exclusively on rotting wood. We also turned up several species of *Cortinarius*, *Inocybe*, and *Polyporum*, including an old specimen of *P. sulfureus*, the delightful edible mushroom that grows on larch in August.

We unearthed a unique sort of hypogeous fungus in the duff under a dead Douglas fir. Its round white shape and trailing rhizomes made me suspect that it was a *Scleroderma*, but when cut in half it had a grayish, jelly-like center with fibrous connective strands, somewhat like a *Phallus impudicus* when still in the "puffball" stage. This unusual fungus had a papery-thin skin and bruised reddish when handled. This one will go to Jim Trappe at Oregon State University, who identifies strange truffles for free. He asks you to fill out a short form concerning where and when the truffle was found, under what sort of tree or bush, and what not.

Call Larry Evans at 543-6630 for more information.



**BOTANICAL SOCIETY OF AMERICA
HONORS MATT LAVIN**

At the Annual Botanical Society of America banquet, held in conjunction with the 42nd Annual American Institute of Biological Sciences (AIBS) meeting last August at Iowa State University, Montana State University's Matt Lavin was honored.

The Henry Allan Gleason Award was presented to Matt for his publication of "Biogeography and Systematics of *Poitea*, (Leguminosae), in Vol 37 of Systematic Botany Monographs. Congratulations, Matt!

FLATHEAD CHAPTER MEETS "FROGWATCH"

Sam Manno, who first crossed our path at the Ninepipes Purple Loosestrife Pull in August, was guest speaker at the November Flathead meeting. Sam is the amphibian and reptile expert at the Craighead Institute in Missoula, and founder of "Frogwatch." Sam has a contagious, inspiring passion for these animals and cares for about 150 at home. He didn't bring any slides for the program - instead he had his frogs, toads, lizards, snakes and tortoises.

As Sam started taking the animals out of the boxes and passing them around, the children all moved up to the front, and soon the adults were right behind them, equally eager to hold an animal. Most impressive were the huge, poisonous Cane Toad from Surinam, the gorgeous iguana, which felt like a beaded purse, and the 60-pound boa constrictor which draped over the shoulders of seven children at one time.

Sam is being forced to learn botany as he studies ecological conjunction of the timing of amphibian egg laying with plant blooms. This year was so wet, however, that plants bloomed all season! In our area, loss of habitat has had the greatest impact on the leopard frog. Once abundant in the Ninepipes Refuge, they are now rare, following a rapid decline in numbers in the 1970s. It was delightful to have so many young children at a meeting. We all learned a lot, and had more than a normal amount of fun! If you want more information on "Frogwatch," contact Sam at: Craighead Wildlife/Wildlands Institute, 5200 Upper Miller Creek Rd, Missoula MT 59803, or call 251-3867.

**NPSO OFFERS POSTER:
OREGON'S RARE WILDFLOWERS**

The Native Plant Society of Oregon has produced a striking poster of the Columbia River Gorge area. One side depicts Punchbowl Falls and three of the Gorge's rare endemic wildflower species; the other discusses ecology of the Gorge and the NPSO mission.

Order one at \$12/poster plus \$3/order for shipping. The 20"x26" poster will be shipped rolled. Order from: Stu Garrett, 21663 Paloma Dr, Bend OR 97701. Purchase of this beautiful poster supports NPSO's conservation and educational missions.

Montana Recycling Hotline ** 1-800-823-MEIC

Toll-free number for information on what/where/how to recycle your household and office waste, hazardous waste, composting etc.

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)
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Additional Donation \$ _____

***AREAS COVERED BY CHAPTERS:**

- ARTEMISIA CHAPTER** - Yellowstone and Carbon Counties; south-eastern/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
- 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 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 September each year will expire the following February; those processed after the first of October will expire in February of the year after. Membership renewal notices are included in the Winter issue of KELSEYA. Anyone not renewed by the time the Summer 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 (ART = Artemisia; CF = Clark Fork; F = Flathead; K = Kelsey; VoF = Valley of the Flowers)

DATE YOUR MEMBERSHIP EXPIRES: If your label reads "x2/94" your membership expires February 28, 1994...renewal notices are included in this issue. New memberships received after November 1, 1993, are good through 2/28/95, and the top line of your label will read "2/95." Please drop us a note if any information on your label is incorrect.

MAKE CHECKS PAYABLE TO:

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MAIL TO: Montana Native Plant Society
 P O Box 992
 Bozeman MT 59771-0992

GROWING HARDY FERNS, continued from Page 1:

dark. Dappled shade where sun filters through is ideal for the more delicate varieties (maidenhair, oak fern). Some can tolerate a partial day of bright sun if the soil holds moisture (parsley fern, fragile fern, even the lady fern).

While most of our natives prefer a low pH, some prosper on calcareous soil and like the pH found on limestone (*Asplenium trichomanes-ramosum*, *Cryptogramma stelleri*, *Cheilanthes feei*, and *Pellaea breweri*). From a gardener's point of view, these would be candidates for a limestone cobble.

Have you noticed that most of our ferns disappear with the first hard frost? Several that remain evergreen are worth considering: the *Polystichums* and the small *Polypody*.

Here are ten hardy ferns that have been propagation successes for me and which make desirable garden plants:

Athyrium filix-femina (lady fern), a large graceful fern that grows in moist to bog-like places. Will tolerate early and late day sun. Can form dense patches.

Dryopteris filix-mas (male fern), a large fern of classic beauty with darker leaves than the woody fern. Found both in swamps and in higher, drier woodlands. Semi-evergreen. Makes vase-shaped clumps or will mix and compete in many shaded garden spots.

Adiantum pedatum (maidenhair), tall shade-lover found near moist seeps. Needs fine soil, rich with humus. Will spread on creeping root-stock. One of the prettiest and especially responsive to cultivation.

Woodsia (both *oregana* and *scopolina*), both medium-small, grow on rocky outcrops, crevices and ledges. Cultivates well in moist garden soil. Takes partial sun. Good in rock garden setting.

Ceptopteris fragilis (fragile fern, bladder fern), medium-small, grows on rocks and in woods. Unfussy to cultivate. Colonizes and is a rapid competitor in the right place. Partial sun.

Gymnocarpium dryopteris (oak fern), small and delicate, grows in wet - sometimes riparian - places. Broadly triangular fronds. Does well and spreads in gardens along creeping rhizomes.

Cryptogramma crista (rock brake, parsley fern), medium to small, clustered, found in rocky places. A slow grower, but sturdy and does well between rocks or in a rock wall. Will tolerate sun.

Polystichum lonchitis (mountain holly fern), medium-small, grows in rocky places and moist woods. Slender and shiny evergreen fronds. Grows slowly and tends to slow down after a transplant, so pick a permanent spot.

Polystichum munitum (western sword fern), likes shade and moist places. Medium tall with long spear-shaped dark green fronds. Evergreen. Harder to establish than *P. lonchitis* but well worth it.

Also coming along now, though still in the fernlet stage, is the *Polypodium vulgare* (polypody), a small evergreen fern that is reputed to do well in cultivation.

Suggested references:

- F G Foster, **Ferns to Know and Grow**, Timber Press, 1984
- D Jones, **Encyclopedia of Ferns**, Timber Press, 1987
- B J Koshiazaki, **Fern Growers' Manual**, New York, 1987
- J Mickel, **The Home Gardener's Book of Ferns**, Ridge Press, 1979

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 of sharing 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**, 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 one- or two-line "bio" sketch 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.

Changes of address and inquiries about membership in MNPS should be sent to MNPS, P O Box 992, Bozeman MT 59771-0992. All newsletter material should be mailed to Jan Nixon at the same address, and may be typed or on disk (prefer 3.5") in WordPerfect 4.2 or better.

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 Spring issue is APRIL 1; please include meeting/field trip notices through early August '95. The Spring issue of **KELSEYA** will be mailed the last week of April.

IF YOU MOVE, PLEASE SEND US YOUR CHANGE OF ADDRESS!

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Botanical browsing...

BITTERROOT

Jerry DeSanto
1993, LERE Press, Babb MT
\$13.00 softcover

Jerry DeSanto, who spent many years as a park ranger in Glacier and Yellowstone National Parks, has written a handsome book detailing the natural history and human usage of Montana's state flower.

Excellent color photographs and nicely-done color illustrations help demonstrate the many color phases of this variable species. Cover artwork is by Janet McGahan of Arlee. DeSanto recounts Native American traditional usage, drawing from ethnographic records and discussions with users in present-day tribes. He assembles an impressive bibliography of its mention in American and European literature, from the first written account by the Lewis and Clark Expedition, when it was recognized as a species new to science, through its burgeoning popularity as a rock garden and "alpine" specimen in English and European gardens, to present-day interest, including the

annual Bitterroot Festival held in Stevensville, Montana, each summer when the species is in bloom.

There is a chapter on the botanical classification of the plant, and another on the plant itself, detailing the growth and blooming pattern and how those differ among populations.

DeSanto recounts his attempts to cook the roots up in various ways, for bitterroot isn't just another pretty face, but was an important food staple for several tribes; it also had some ceremonial uses. Early settlers and travellers also ate the roots.

If you're interested in growing our state flower in your own garden, the information contained in the Cultivation chapter alone makes the book worth its cost.

Two extensive addenda add to the book's value: Ethnobotany of the Lewis and Clark Expedition, and Lewis & Clark's Travellers Rest (the site at which they first observed the plant we now call bitterroot).

I commend **Bitterroot** as a worthwhile addition to your library.

- JN