

# **Borealis**

the newsletter of the



PO Box 141613, Anchorage, Alaska

March-April 2005

## **Join us at our NEXT meetings!**

**Campbell Creek Science Center**

**Monday, March 7, 7:30 p.m.**

**Topic**

"Butterflies & The Plants They Love"

**Speaker**

Carole Lloyd  
Eagle River Nature Center

**March Plant Family Study**

**Dryopteridaceae**

**Lady Fern/Wood Fern Family**

**Presenter: Verna Pratt**

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**April Meeting**

**Monday, April 4, 7:30PM**

**Topic: To Be Announced**

**April Plant Family Study**

**Adiantaceae/Maidenhair Family  
Cryptogrammaceae/Mountain Parsley**

**Presenter: Anjanette Steer**

## **WE are On-Line!**

The Alaska Native Plant Society has a web site! It is barely out of the shell, so there is not a great deal of content yet, but there is so much potential! Check it out! <http://AkNPS.org>

A committee that includes Andy Smith, Sue Jensen, Glenn Brown, Frank Pratt, and Ken Johnson has been formed to develop some content. If you have any donations for the site such as photos or text, or you would like to write a paragraph or two about some subject and have it put on a page, email it to Andy at [andersonsmith@gci.net](mailto:andersonsmith@gci.net). Also look at the menu items on the home page and let us know if there is something that should be there that isn't.

Meanwhile, check back at the site as it grows. Tell us if you notice any bugs. Use the Members Comment section to post suggestions for the site so everyone can see them (and to make sure the comments section is working!)

To log in to the Member area, you will need to register a username and password on the site. The registration link is on the same page as the login box. The link for both login and registration for ANPS Members is the last link in the left hand column.

In the near future we'll be adding archived editions of the Borealis newsletter as well as other pertinent information and materials you'd like us to keep track of for your future reference. Keep in mind, though, that the pertinent word is "pertinent". We won't keep your list of family birthdays, but we would be interested in your lists of the first blooming dates for flowers in various locations, or sightings of rare plants – indigenous or invasive.

# Alaska Native Plants For Commercial Markets

*At a recent conference for commercial greenhouse vendors, Verna Pratt gave a presentation on Alaska native plants that could be commercially grown. Although there has been some effort made to grow Alaska natives for commercial use, more is needed.*

Many people want to landscape or add to their landscape with native plants. They may think native plants are easier to grow and can take care of themselves, or they may believe that natives are wild and therefore free (this is only true if you are rescuing them from a construction site!). Better reasons for using native plants are to mimic nature in an attractive landscape, to restore a damaged area with plants that are somewhat resistant to local diseases and insects, and to grown cold-hardy plants.

Many people are growing native plants and selling their excess at plant sales and a few are wholesaling to nurseries. Some landscapers are propagating plants (mostly woods) or rescuing them from construction sites. Unfortunately most landscapers would rather buy from suppliers from the lower 48. This is easier and more plants are offered, but they won't necessarily be as hardy, since they were most likely grown in warmer climates. These plants also tend to bring more diseases and insects into Alaska, that then attack our local plants.

Growing plants in Alaska is of course much slower, as our ground is cold and the season much shorter. I have been experimenting with extending the season by growing herbaceous plants from seed in a greenhouse during the winter. This does shorten the time to maturity by at least a year, but many plants are still very small in the spring. It is difficult to extend the season much with cuttings as the plant's internal clock says winter is a rest period. This also appears to be true when plants are divided.

We all need to encourage landscapers and nurserymen to set aside space and time for this project. We can help by propagating natives ourselves. The ANPS seed sales are a great way to encourage people to grow native plants and they also provide a small source of native plants for local nurseries. Excess seed from our seed sales often is used along trails and roadways, where appropriate.

The Plant Material Center in Palmer collects and germinates native plant seeds. They also offer seeds to individuals who are willing to grow them and provide them to the appropriate audience.

Perhaps someday our roadsides will be seeded with native plants rather than weedy, introduced species.

## MORE INFORMATION

Usually, regulations require any business that disturbs the land to reseed with native plant material. Logging companies, mines, oil and pipeline companies all fall under this jurisdiction. The State of Alaska's Department of Transportation uses tons of wild seed each year. The U.S. Fish & Wildlife Service, Alaska Department of Fish & Game, Bureau of Land Management and other state and federal agencies, buy seed and/or require their contractors to do so as well.

Sources of native plant seed are limited, and the prices show this. Some highest per pound prices are for wild flower seeds, ranging from twenty-five dollars per pound for lupine, *Lupinus nootkatensis*, to five hundred dollars per pound for harebell, *Campanula rotundifolia*. It is important to remember that this is for certified, clean seed, which requires special equipment to gather and package.

Certified seed comes from plants grown from what is known as "foundation seed." It is necessary to plant foundation seed to get a crop of certified seed. One source for foundation seed is the Alaska Seed Growers Association in Palmer, Alaska. Certified seed commands a higher price than non-certified.

Wild collections of seed cannot be certified at this time. However, this problem is being addressed. One grower expects that within two or three years there will be a method to certify wild collected seed. The Seed Grower's Association and several growers and collectors are working on regulations and methods.

## Salamatof Seeds Project

The Salamatof Native Tribe received technical assistance from the Native American Fish & Wildlife Society to begin the Salamatof Seeds Project. Some of the technical support was provided by Richard L. Baldwin, owner of "*Seeds of Alaska*." Mr. Baldwin has many years of experience with native plant cultivation and harvest in Kenai, Alaska. He compares wild seed cultivation, also known as agribusiness, to commercial fishing, saying that "fishing and farming are much alike. Both occupations are subject to wild gyrations of production and price that are completely beyond our control. Both occupations are undertaken by people who love the work and are willing to tough out the bad years, to hang in there until conditions improve. Make no mistake. You will have bad years in agriculture." Mr. Baldwin and Mr. Segura have worked closely together to establish a strong project that is showing good potential to assist the Salamatof Tribe toward its goal of sustainable economic development.

Mr. Baldwin recommended the cautious approach to beginning a seed growing enterprise. He said that a strong commitment is vital to the project's long term success, as seed growing requires a large investment in equipment and land preparation. By starting small, the expensive harvesting equipment and other specialized items may wait for three or four years. Also, interested cultivators should look for opportunities to lease equipment, reducing their financial risk.

One advantage of wild seed cultivation is the ability to store seed until market conditions are favorable. "The product keeps, usually, for several years, requiring only simple refrigerated storage. In Alaska, that is easy. For the longest storage life, seeds should be stored below 40 degrees F."

He recommended grass seed as the initial crop, as it is the easiest to grow, and the market is well established. The other types of plants, forbs and wetland plants require a greater degree of skill and knowledge for successful production.

A wide range of plant types could overwhelm employees and managers. First, establish the grasses, then start thinking about other plants. This

gives managers and employees a chance to grow with the plants.

Jim Segura, President of the Salamatof Native Association, Inc. (SNA) said that they planted about 12 acres, two years ago, have cleared another 25 and planted them. Now, the SNA, inc. has built new partnerships and is leasing additional land for planting. In total, they will have about 50 acres of land under cultivation. So far, they have followed Mr. Baldwin's advice and planted grass seed. Their land is planted with Beringhare grass, which is in demand for planting along new airstrips. Currently, the certified seed wholesales for about \$12 per lb. Beringhare grass needs two years before it is ready to harvest. Some of SNA's land that was planted last year will bloom for the first time next summer. Then, the grass seed will be harvested in the fall. Mr. Segura is planning for another harvest in the fall of the year 2000. As Mr. Baldwin said, this is a patient business.

To date, the SEEDS project appears like it will make its expenses back in just the first few years, and it has provided employment opportunities for the summer youth crew of about ten students. It is reclaiming land used for other purposes, while providing what may be a valuable source of sustainable economic development for the Salamatof tribe.

### Contacts:

**Alaska Seed Growers Association in Palmer, Alaska**  
Pat Mulligan  
Phone:

**State of Alaska's Plants Materials Center in Palmer**  
Phone:  
Fax:

**Pat Holloway**  
Chair of Horticulture at the U.A.A., Fairbanks  
Phone:  
Fax:

**Carol Sanner**  
D.O.T. Anchorage  
Phone:  
Fax:

**Growing Alaska Natives**  
By Richard L. Baldwin  
Box 3127  
Kenai, Alaska 99611 (\$18.50)



## The Dryopteridaceae /Wood Fern Family

Presenter: Verna Pratt

NOTE: The ferns we'll be studying this month have had a confusing taxonomic heritage. While they are listed in Hultén's "Flora of Alaska" as members of the Athyriaceae/Lady Fern family, they are sometimes listed under various other families. It appears that at present the most accepted taxonomic grouping for all of the ferns discussed below is the Dryopteridaceae family.<sup>1</sup>

The Dryopteridaceae /Wood Fern Family is represented in Alaska by 3 genera which include 9 species and subspecies. These are all are terrestrial ferns. Rhizomes are short, erect or creeping, often thick and covered with papery scales. Sterile and fertile fronds are sometimes different. Frond blades undivided or severally divided, mostly membranous; ribs mostly grooved on upper surface; veins usually free. Sori usually elongated along the veins, sometimes paired. Indusium narrow and elongated generally U-shaped or J-shaped, sometimes round or absent.

### Lady Ferns

*Athyrium filix-femina* ssp. *cyclosorum* is probably the most common species. It can be found in moist woodlands and alpine meadows throughout the southern half of Alaska, British Columbia and the Pacific Northwest. Similar subspecies can be found throughout the northern hemisphere.



*Cystopteris fragilis* Dickieana

There are two subspecies of *Cystopteris fragilis*, Fragile fern, in Alaska and they are common throughout the state, from sea level up to about 3500 feet. This fern is also found worldwide throughout the Northern Hemisphere. It spreads by rhizomes and is often found wearing through rocks – an attractive addition to the landscape. Its fronds are simple, whereas *Cystopteris montana* has alternately divided fronds and

might be mistaken for the oak fern, *Gymnocarpium dryopteris*. It is found in central and eastern Alaska.

The genus *Woodsia* includes 4 species in Alaska. They are all small ferns found in dry rocky areas. All woodsias have simple fronds with shallowly lobed pinnae.



*Woodsia ilvensis*

*Woodsia ilvensis*, Rusty Woodsia, is 4-7 inches tall and is probably the easiest to recognize. The fiddleheads are covered with silvery hairs that turn rusty as they mature.

*Woodsia scopulina* is a similar but taller species found on the Kenai Peninsula and northeast parts of Southeast Alaska.

*Woodsia alpina* is only 2-4 inches tall and is found in rocky alpine areas. It has a few hairs on the lower part of the stipe.

*Woodsia glabella* is similar but smaller and has no hairs on the stipe.

### References

<sup>1</sup>Integrated Taxonomic Information System  
<http://www.itis.usda.gov/>

<sup>2</sup>"Lady Fern", <http://members.eb.com>, (6/18/00)

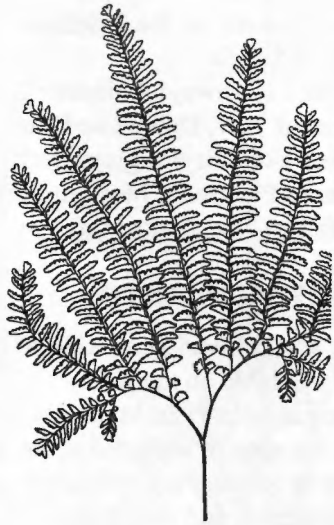
"Lady Fern",  
<http://www.rook.org/earl/bwca/nature/ferns/athyriumfil.html>

"Athyrium filix-femina",  
<http://www.fs.fed.us/database/feis/plants/fern/athfil/>

Athyrium filix-femina & Lady Fern",  
<http://www.borealforest.org/ferns/fern1.htm>

Adiantaceae/Maidenhair Family  
Cryptogrammaceae/Mountain Parsley Family

Presenter: Anjanette Steer



*Adiantum pedatum* is the only species of the **Maiden Hair Fern** family in Alaska. According to Hultén's "Flora of Alaska", it can be found along the west coast of the Lower 48, British Columbia, Southeast Alaska, Prince William Sound, Kodiak Island, the very end of the Aleutian chain, Asia and

Europe. Probably *Adiantum pedatum aleuticum* is more common in moist sub-alpine areas of coastal Alaska than previously known. It can be up to 20 inches high, but in Alaska's cold climate it is more commonly 6-8 inches. This is a dainty fern with a fan shaped frond that prefers moist habitats. On a Native Plant Society field trip several years ago, we discovered this plant on Red Mountain, near Seldovia. At the time we were unaware that it was a new sighting, and no collection was made.

The **Mountain Parsley** Family has two genera in Alaska. *Cryptogramma crispera* has two species, both restricted to southern coastal and southcentral Alaska. The crinkly congested leaves look very much like parsley. Spores are borne on a fertile frond. They have a thick, coarse rhizome and tend to grow in a bushy clump. This 5-8 inch fern prefers hot, sunny, rocky areas from sea level up into dry alpine zones.



*Cryptogramma stelleri* is a slightly smaller plant of interior and eastern Alaska that winds its way among the rocks on a creeping rhizome. Due to fewer congested pinnae, it looks much more slender than *C. crispata*.

### Maidenhair

by Edgar Fawcett (1847-1904)

When deep in some dim glade we pause,  
Perchance we mark how winds caress  
These lowly sprays of quivering gauze,  
Aerial in their slenderness.

The ruffled leaves of vapory green  
Fringe mimic branches, fine as thread,  
Above slim stems whose ebon sheen  
Is always mellowing into red.

Near trees or bushes hardier born,  
They group as fragile, where you pass,  
As though in shreds a mist of morn  
Yet lingered on the balmy grass.

Ah, shadowy ferns, in such frail ways  
Your lightsome, fiexuous throngs are wrought,  
I half am tempted, while I gaze,  
To question of my wondering thought

If silvery whispers of the breeze  
Have found, as through the woods they went,  
In your phantasmal delicacies  
Ethereal embodiment!

# ANPS MEMBER NEWS

## PLANNING FIELD TRIPS

Now is the time to set dates for field trips. Let's have a full schedule – short or long, they all are valuable and important for the group to be able to offer.

Trip Leaders: Be sure to give an accurate description of your trip so that people will know if they can do it with ease. A moderate trip, with an elevation gain can become more difficult if you walk too fast. Actually most people will enjoy it more if you take your time. Remember, the purpose of these trips is to see and enjoy the plants, not to get to a particular destination.

Also be sure you are very clear on the meeting place for carpooling. Carpooling has always been a big help, but often people don't know who else is going, so they appreciate this. Choosing a section of a mall parking lot that is easy to describe and is seldom used is a good choice. We will ask people to call on out of town trips and it is also wise to give a 10 minute grace period on out of town trips. While most trips are open to anyone, members and non-members alike, trips where space is limited will be reserved for members only, unless there is available space.

## SCHEDULED FIELD TRIPS

To help you in your planning, here are the 3 definite trips that have been scheduled so far:

June 12: Syncline Mt. (Glenn Highway) Anjanette Steer  
 June 22-25: Homer/Kachemak Bay; Daisy Lee Bitter; limited spaces ( ) or daisylee@xyz.net  
 July 7-11: Sand Point/Alaska Peninsula; Marilyn Barker; 8 people ( ), or afmhb@uaa.alaska.edu

## NEW FLYERS ON NATIVE PLANTS

A new set of flyers in use and cultivation of Alaska native plant seeds is now available on the web. Produced by the Northern Latitude Plant Materials Center (PMC) in Palmer, the species included so far are grasses, but look for more to come. PMC provides testing, production, development, and distribution of materials to resource industries to meet environmental requirements and includes development of a native seed industry. PMC provides cost effective practices, testing production, and distribution of disease-free potatoes and landscape plant materials to Alaska horticulture and produce industries.

[http://www.dnr.state.ak.us/ag/ag\\_PMCPlantFlyers.htm](http://www.dnr.state.ak.us/ag/ag_PMCPlantFlyers.htm)

## ANNUAL MEMBERSHIP APPLICATION/RENEWAL

The Alaska Native Plant Society was organized in 1982 by an enthusiastic group of amateur and professional botanists. It is a non-profit educational organization with the goal of uniting all persons interested in the flora of Alaska. Membership is open to any interested individual or organization. If you wish to join us, please indicate the category of membership you desire, fill in the form below and mail it with the appropriate remittance to:

Alaska Native Plant Society,  
 P.O. Box 141613,  
 Anchorage, AK 99514

STATUS  New  RENEWAL

### CATEGORY

- Full-time Student \$ 5
- Senior Citizen \$10
- Individual \$12
- Family \$18
- Organization \$30

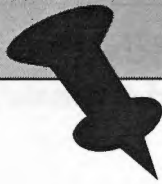
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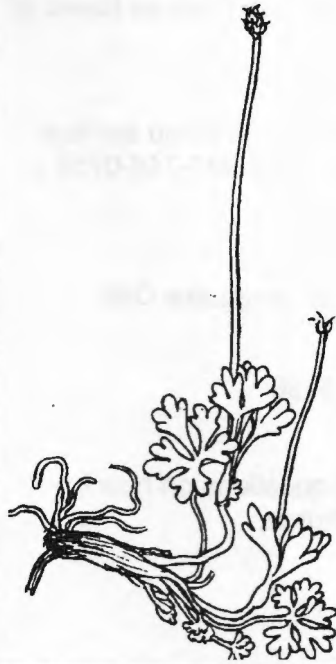
City: \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone: (Home) \_\_\_\_\_ (Work) \_\_\_\_\_ E-Mail: \_\_\_\_\_

Membership is on a calendar year basis.



## MYSTERY PLANT



This plant prefers to grow on wet scree slopes and is often half buried. Leaves are 3-parted, the basal segments divided again, Segments are blunt-lobed. Leaves are glabrous, dark green above and grayish beneath. He 5-petaled yellow flowers are about 5/8 inch and on a leafless stem. The sepals have gray hairs.

(ANSWER BELOW)

### ALASKA NATIVE PLANT SOCIETY State and Anchorage Chapter Officers

President      Andy Anderson  
Vice President      Ken Johnson  
Secretary      Cara Wardlaw-Bailey  
Treasurer      Sue Jensen

### Anchorage Chapter Program Coordinators

Main Program      Luise Woelflein  
Plant Family      Verna Pratt  
Mini-Botany      Marilyn Barker  
Field Trips      Verna Pratt

### Newsletter ("*Borealis*")

Editor      Ginny Moore

*Borealis* is published bi-monthly October through May.  
Articles may be sent to Ginny Moore,  
Anchorage, AK 99516. Phone or FAX:  
or E-mail: [tgmoore@gci.net](mailto:tgmoore@gci.net)



To Anne Pasch, Marilyn Barker and Don Spangler for preparing presentations at the January (even though it didn't happen!) and February meetings.

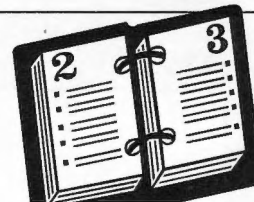
**YOU MAKE IT HAPPEN!**

**Mystery Plant  
Answer**

*Ranunculus gelidus*  
Ranunculus/  
Buttercup Family



**UPCOMING PLANT EVENTS**  
(AND Check Out Our Field Trip Schedule Inside!)



**March 3, Thursday**

Anchorage Garden Club Program - "Compost Peat" - presented by Pete Kineen of the Organic Recycling Center. 7:30 - 9 p.m., Pioneer Schoolhouse @ 3rd & Eagle St. - Information can be found @ , or <http://communitynews.adn.agclub>

**March 5, Saturday**

Gardening with Nature Class - A unique workshop for the gardener who seeks ways to blend spiritual connection with the Earth with conventional horticultural practices. 9am to 5pm. Call to register.

**March 7, Monday (1<sup>st</sup> Monday)**

**Alaska Native Plant Society:** 7:30 p.m., Campbell Creek Science Center off 68<sup>th</sup> and Lake Otis

**March 10, Thursday (2nd Thursday)**

Alaska Pioneer Fruit Growers, 7:00 - 9:00 p.m. Dan Elliot, President:

**March 10, Thursday (2nd Thursday)**

Wildflower Garden Club, 10:00 a.m. **Julie Riley: Culinary Herbs** - Bring your questions on how to grow, dry & use those great aromatic herbs. Seed share. Central Lutheran Church,

**March 22, 2005, Tuesday (4<sup>th</sup> Tuesday)**

Alaska Orchid Society; Sally Karabelnikoff:

**March 25, Monday**

Alaska Master Gardener Association meeting: "Landscaping for Small Spaces and Tract Homes", with Erika Keinlen. 7:00 pm, Carlton Trust Bldg., Conf. room 130, Cooperative Extension Service, 2221 E. Northern Lights,

**April 4, Monday (1<sup>st</sup> Monday)**

**Alaska Native Plant Society:** 7:30 p.m., Campbell Creek Science Center off 68<sup>th</sup> and Lake Otis

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**DID YOU RENEW??**