

Borealis

the newsletter of the



PO Box 141613 Anchorage, Alaska

FEBRUARY 1999

JOIN US AT OUR FEB MEETING

**Monday, February 1, 7:30 pm
at the Campbell Creek Center
off 68th and Lake Otis**

**Topic: Chester Creek Wetlands
Presenter: Anjanette Steer**

Anjanette Steer will discuss wetland community types in the Chester Creek watershed. She studied the mix of Class A, B and C wetlands in the watershed and also looked at wetland loss since the 1950's. Anjanette also mapped the community types and wetland loss on a Geographic Information System. Anjanette is a graduate student in Environmental Science at APU and works at HDR.

Mini Botany Presentation



**Presenter:
Connie Kison
Pedicularis Genus of
the Scrophulariaceae
Figwort or
Snapdragon Family**

A CRISIS IN OUR OWN BACKYARDS

Scientists believe that the current global rate of plant extinction is unprecedented. But these native plants are not just disappearing from the tropical rain forests. They are also disappearing from our own backyards. Since the 1800s, the United States has lost close to 200 plant species. Today, 5,000 plant species are considered vulnerable to extinction, and more than 600 are on the federal threatened and endangered species list. These plants are disappearing because we are destroying their habitats. To protect plants, we must protect their habitats. Concern over the plight of native plants has brought together a variety of people and groups dedicated to preserving native North American plants and their habitats.

Even Alaska has native plants that are on the Engangered Species List. While they are not literally in your own backyard, they are in your field of focus. In a future newsletter we'll try to focus on them and why they are endangered and what can be done about it. These plants are:

Erysimum capitatum var. *angustatum* sanddune wallflower

Polystichum aleuticum. Aleutian holly fern

The Native Plant Conservation Initiative is a collaboration between Bureau of Land Management, Department of Defense, U.S. Geological Survey (Biological Resources Division), Federal Highway Administration, National Park Service, Natural Resources Conservation Service, Office of Surface Mining Reclamation and Enforcement, U.S. Fish and Wildlife Service, USDA Agriculture Research Service, USDA Forest Service, and more than 115 non-federal cooperators.

For more information on native plants and the Initiative write to: Native Plant Conservation Initiative, Bureau of Land Management, Fish, Wildlife & Forests Group WO 230, 1849 C Street NW, LSB-204, Washington, DC 20240.

**Pedicularis Genus of the Scrophulariaceae
Figwort or Snapdragon Family**

This genus of plants has acquired an unusual and amusing common name "Lousewort". It probably came from the appearance of the species *P. Kanei/lanata*, the Woolly lousewort, although other species are also somewhat woolly. The flower spike of this plant is covered with a mass of tangled hairs as it emerges from the ground. It was once believed that these woolly hairs harbor lice that could be transferred to sheep.

There are several notable species in Alaska, but we will concentrate on those found in Southcentral and Interior areas. Many louseworts are easily noticed in early spring as their leaves are dark and reddish. All of the louseworts have pinnately divided leaves (like Jacobs Ladder, which is not a lousewort) - often referred to as *fern-like*. Their flowers have a hood, called the galea, and a 3-lobed lower lip.

We will start with three of the yellow species, as they are distinctly different from one another. The remaining plants have pink to purple flowers.

P. labradorica is a common plant of bogs, woods and alpine tundra throughout most of Alaska. Unlike most *Pedicularis* species, it is greatly branched. If this species is perennial it is short-lived. The small yellow flowers are scattered on the stems. This plant is probably noticed as much in seed as it is in flower.



In contrast, *P. capitata*, capitate lousewort, which is also widespread, has just a few, larger light yellow flowers on top of a short stem. This plant grows on alpine slopes and ridges, apparently from rhizomes, as the basal leaves never seem to arise from the same place that the flowering stem does.

The remaining yellow species is *P. Oederi*, Oeder's lousewort, with a basal rosette of leaves and a dense cluster of brownish-capped bright yellow flowers. It is found in damp alpine meadows and tundra throughout most of Alaska except Southcentral. It is common in Denali National Park.



I suspect that the first species that comes to mind when louseworts are mentioned is the Woolly Lousewort, *P. Kanei*. This was formerly called *P. lanata* and I understand that again is the accepted name. It can be found on dry stony tundra and alpine slopes throughout most of Alaska. I was appalled that

Hultén¹ doesn't list it in the Chugach Mountains, except near Valdez. We "Anchorage-ites" know it is one of the earliest bloomers at Glen Alps, below Flattop Mountain. This plant has many basal leaves and scattered leaves up the plant stalk. The dense, fat flower spikes make it one of the showiest of its genus.

Probably the next showiest and common species is *P. verticillata*, the whorled lousewort. It too is found all over the state. Its easily recognized features are the whorls of leaves just below each whorl of flowers. It also has a group of basal leaves. Most specimens in Southcentral Alaska usually have violet/rose colored flowers, are 6-8 inches tall, and do not have many flower spikes. They can however be very floristic - bright pink, with as many as 15 flower stalks and up to 20 inches tall. The Pribiloffs come to mind.



P. Langsdorffii, arctic lousewort, is quite distinctive, with no basal leaves and fewer hairs on the flower stalk than the woolly lousewort. Stem leaves protrude way beyond the purplish-pink flowers. It is found throughout Alaska in rocky alpine and tundra areas.

P. sudetica, the fern-leaf lousewort, is 8-15 inches tall, has a short dense spike of flowers at the top of its stem which has scattered leaves. Basal leaves are not clustered, but growing in small groups along the branched root system. Flower color is variable from pink to purple (occasionally white) and often 2-toned. There are four subspecies in Alaska and they can be found growing in wet and rocky tundra or near rivers.

The final specie to be mentioned is *P. parviflora*, few-flowered lousewort. Two subspecies occur in the state. Subspecie *parviflora* is not common, but is found in bogs in coastal Southcentral Alaska. This weakly branched plant has small stem leaves and small rose-purple flowers scattered on the stems. It could



easily be missed as its growing area frequently requires the observer to don rubber shoes.

Many louseworts are attractive plants and have always appealed to horticulturists as possible garden-worthy specimens. So far, however, no one has been successful cultivating them. They apparently rely upon an unknown substance for growth. Janice Schofield² claims that "the reason transplanting lousewort to rock gardens is difficult is because most *Pedicularis* species are at least partially parasitic on roots of other plants; under cultivation, they may not find the proper hosts."

1. Hultén, Eric, *Flora of Alaska and Neighboring Territories*; Stanford University Press, 1968.
2. Schofield, Janice *Discovering Wild Plants: Alaska, Western Canada, The Northwest*, Alaska Northwest Books, 1989.

Mystery Plant

by Verna Pratt

This beautiful low, shiny evergreen shrub is common in bogs and wet meadows in SE Alaska, Yukon Territory, British Columbia, Central and Eastern Canada and south into the northeastern portion of the Lower 48. The 3/4 inch, saucer-shaped, 5k-petaled flowers are magenta and grow in a cluster atop six to twelve inch stems.



HELP NEEDED - Treasurer: ANPS State Board
Yaso Thiru needs to be excused from her position as treasurer of the ANPS State Board, a position which she has held for many years. She is willing to train the new person. The treasurer's position is important but not difficult or time-consuming. It involves recording and depositing moneys received by the state organization - seeds, prints, etc. Membership is recorded separately by Verna Pratt, Membership Chairman. Deposit slips are then sent to the treasurer for recording purposes. The State Treasurer is also responsible for paying state-applicable expenses - newsletter, PO Box rent, Business License, etc. Thanks to Yaso, the record books are well-kept and up-to-date. Please call Verna Pratt, if you would be interested in filling this position.

Celebrating Wildflowers Coloring Book

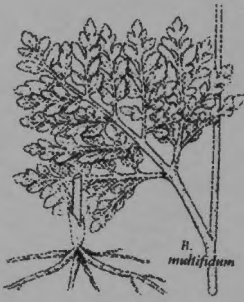
The Native Plant Conservation Initiative's website at www.nps.gov/plants/ has a great resource for people who could use large beautiful drawings of specific wildflowers. The Celebrating Wildflowers Coloring Book contains a great number of full page drawings as well as accompanying color guides. On page 7 of this newsletter is a full-page drawing of *Pedicularis groenlandica*, whose common name is Elephant's Head. This species hasn't been found in Alaska but is found in the neighboring Yukon Territories in Canada and is described in Hulten's Flora. Below you'll find a color guide for this plant.



1 = Deep Pink; 2 = Dark Green; 3 = Light Brown

NEW SPECIES OF *BOTRYCHIUM* FERN IN ALASKA!

By Jason R. Grant



Recent plant collections of mine from the interior of Alaska have been identified as an undescribed species of the fern genus *Botrychium* by Dr. Warren Herb Wager at the University of Michigan - Ann Arbor, world renowned pteridologist, and author of the treatment of *Botrychium* in Flora North America. Additionally, new species of have also been found in the Yakutat area by Mary Stansvold. Alaska is coming along well to being a major center of diversity of the genus!

In mid-June 1999, Dr. Wagner and his wife, Florence, will come to Alaska where I will lead him to the interior locality to collect further specimens.

Dr. Wagner will also present a workshop on *Botrychium* taxonomy in Fairbanks at the University of Alaska Museum. This free workshop will be open to all who are interested in Alaskan plants.

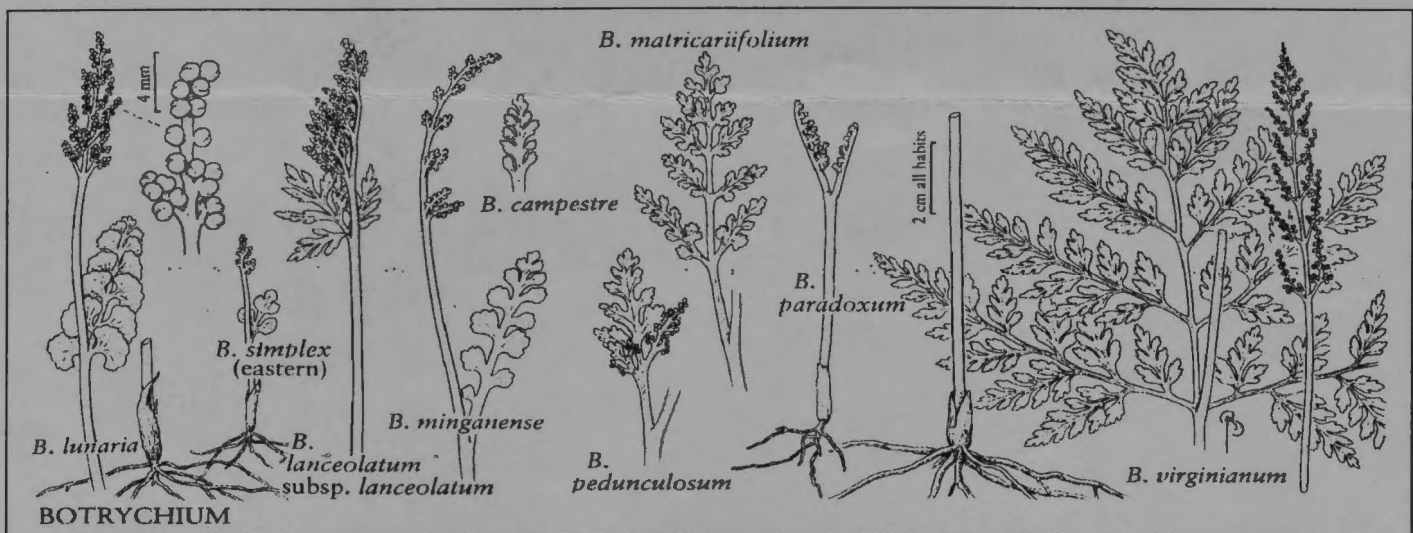
I would like to inform as many Alaskan botanists as possible about Dr. Wagner's visit, so all can keep an eye out for these little ferns in the 1999 field season. For the workshop, you could prepare dried herbarium specimens, or bring fresh material. If you are unable to attend, you could mail specimens to us at UAF Museum, 907 Yukon Dr., Fairbanks, AK 99709.

In addition, if any good localities are easily-accessible, we may be interested in visiting them as time permits. I would be very interested in hearing from as many people as possible who may be interested in attending the workshop, who have collected *Botrychium* in Alaska or Yukon, or who could collect

specimens for us. Until June, I can be reached at:

JASON R. GRANT, Laboratoire de phanérogamie, Institut de botanique, Université de Neuchâtel, ch. de Chantemerle 18, 2007 Neuchâtel, Switzerland, (041) 032 718 2344 - tel; (041) 032 718 3001 - fax; jason.grant@bota.unine.ch - email; or permanently at 604 Cambridge Dr., Fairbanks, Alaska 99709, - tel. (June 1999).

Here are some illustrations of *Botrychium* as published in Flora North America. Species currently known from Alaska include: *B. ascendens* W.H. Wagner, *B. lanceolatum* (S.G. Gmelin) Angström subsp. *lanceolatum*, *B. lunaria* (Linnaeus) Swartz, *B. minganense* Victorin, *B. multifidum* (S.G. Gmelin) Ruprecht, *B. pinnatum* H. St. John, *B. spathulatum* W.H. Wagner, and *B. virginianum* (Linnaeus) Swartz.



WWW. Surfing Through A World of Plants on The Worldwide Web

By Ginny Moore

Everybody's connecting to the Internet these days and it seems like almost everybody has a web page! Winter in Alaska is a good time to spend a little time surfing the net and finding out about the incredible amount of information that is available. Let's see what's out there.

Native Plant Societies

An increasing number of Native Plant Societies are going on-line. For starters, try the Washington State Native Plant Society: www.wnps.org. They cover a lot of information on native plants of the Pacific Northwest; from their site you can link to other groups' sites.

Botanical, Gardening and Horticultural Periodicals.

Another popular website concept gives traditional hardcopy magazines a chance to show themselves off by going online. They don't usually include the full text of their hardcopy counterparts, but many of the featured articles and some other columns and offerings. One of my favorites, even though I subscribe to the magazine is Horticulture Online at www.hortmag.com. Not only is that website always interesting and up-to-date, but it has a wealth of other links that could keep you surfing until the crowberries start to flower. An especially nice feature is their review of other websites of horticultural interest. The next two entries are excerpted from their reviews.

PLANTS National Database

<http://plants.usda.gov:80/plants/>

Who says our tax dollars don't go toward anything useful? This site is certainly one reason to get your 1040 in on time, and contains a wealth of information. Its goal is to "provide a single source of standardized information about plants. PLANTS provides standardized plant names, symbols and other plant attribute information." It certainly does all that and more, and is much more interesting than its mission statement makes it out to be. There's a lot going on in the site (including links to other Department of Agriculture projects, many of which also seem fascinating), but the two main sections are the Photo Gallery and the Database itself. The Photo Gallery contains thousands upon thousands of photographs, and each comes with cultural information and links to the database. The database is searchable by common name, botanical name, genus, or family, and can even be narrowed down by desired states. Once you've found a

plant, you can view its geographical distribution, synonyms, wetland information (if applicable), and references for the plant. This site focuses heavily on the conservation of plants, and preserving them in their natural areas.

(This site review from Horticulture Online; May 1997)

The Ladybird Johnson Wildflower Center

<http://www.wildflower.org/>

As gardeners (and, to a lesser extent, the population at large) become more aware of the decline in native plant species due to overdevelopment, hybridizing, and aggressive imported species, they are increasingly fighting back, striving to preserve the diversity and regionality of the landscape through the use and protection of native plants. The Ladybird Johnson Wildflower Center (formerly known as the National Wildflower Research Center) is at the forefront of this, and if you can't make it down to Austin, Texas, where the center is located, then their web site is the next best thing. The site states that, "The purpose of the Ladybird Johnson Wildflower Center is to educate people about the environmental necessity, economic value, and natural beauty of native plants," and web site attempts to do that by providing extensive regional resources. There is a calendar of upcoming events, organized by regions of the country; an in-depth list of native plant organizations (linked where appropriate) and, most valuable to those with only a beginning knowledge or interest in native plants, a countrywide list of public gardens with displays of regionally native plants. If you have any interest in wildflowers or native plants and can get to Austin, I would definitely stop by the center; they maintain one of the largest collections anywhere of information about native North American plants. And, if you aren't in the area, then this web site will tell you where you can go, which alone makes it an invaluable Internet destination.

(This site review from Horticulture Online; May 1997)

Surfing the Worldwide web will never take the place of exploring and enjoying real world habitats, but it certainly could lead you to interesting spots and it could be a place to come back to when you want to learn more about and share information on those interesting spots. Do you have a favorite website that would interest fellow native plant enthusiasts? Drop an e-mail to Ginny Moore at mooretg@alaska.net or call me at 345-1355.



BOOK REVIEWS

Talkeetna Twines

By Suzanne Bassette

Publication Consultants, Anchorage, AK 99522

ISBN 1-888125-27-6

I first became aware of this book last fall when Evan Swenson, producer of "Alaska Outdoors" magazine and host of a radio program asked me if I would read it. He was wondering if a person, in the circumstances described could survive as was told in the story. His motive, of course, was to have me on his talk show in the near future.

To set things straight from the beginning, I rarely read fiction. I just don't have the time. The bulk of my library consists of reference books. But I agreed, so I had to do it.

At first I balked, but then one sleepless night I decided to start. My intention, at that time was to skim through it quickly, but it soon became an obsession to read it carefully and make notes.

This woman was a good writer and she kept my interest. The basic story was real good. The setting for this story was the Talkeetna Mountains, a place dear to my heart. It was soon obvious that the writer (from Colorado) had not thoroughly researched what grew there and had not asked the proper persons for advice. I understand she took a year off from her nursing career to write the story. I guess she thought if she contacted a person who operated in the area they would "know it all" as the book jacket suggested. Heaven knows I've spread my share of false information over the years, but to expect one person (a river boat operator) to know all aspects of the Talkeetna Mountains is ludicrous. I of course zeroed right in on incorrect plant information. Another person noticed incorrect subsistence practices and logic.

Apparently everything Ms. Bassette ever read about that was edible and grew in Alaska was found in her little setting in the western Talkeetnas. Common names were obviously those from other areas. Very few people in

Alaska know pond lilies as "spadder dock". I have yet to figure out which primrose root she was talking about eating. The only species in the Talkeetnas is "pixie eyes" - now wouldn't that be nourishing. She found lowland to alpine species, interior to coastal species. I guess the final touch was when she found raspberries, blackberries and crowberries in one spot, and even found clover (an introduced species) up in the wilds of a nearly inaccessible mountain area. Too bad she had not researched the information better.

I still say "Read this book." It has a good, interest-catching story. Just don't do it for the reason I did and you will thoroughly enjoy it. Meanwhile, I'll return to my reference books. Have you seen the new *Stokes Bird Gardening Book*, which tells how to use native plants to create a bird sanctuary in your own back yard.?

ALASKA NATIVE PLANT SOCIETY

State Officers

President	Marilyn Barker
Vice President	Open
Secretary	Jean Poor
Treasurer	Yaso Thiru

Anchorage Chapter Board Members

President	Marlena Mooring
Vice President	Nancy Krieger
Secretary	Marilyn Upton
Treasurer	Jean Poor

Anchorage Chapter Program Coordinators

Main Program	Susan Klein
Plant Family	Verna Pratt
Mini-Botany	Verna Pratt
Field Trips	Diane Toebe

Newsletter ("*Borealis*")

Editor	Ginny Moore
Circulation	Martha Hatch

Borealis is published monthly October through May. Articles may be sent to Ginny Moore, Anchorage, AK 99516. Phone or FAX: or E-mail: mooretg@alaska.net

ANSWER TO MYSTERY PLANT:

Kalmia Polifolia subspecies *polifolia*
Bog Laurel

Ericaceae/Heath family

CELEBRATING WILDFLOWERS

Pedicularis groenlandica
Pink Elephants or Elephant
Heads



THE NATIVE PLANT CONSERVATION INITIATIVE

Native plant conservation requires cooperation among government agencies, private groups, and the public. The Native Plant Conservation Initiative brings together public and private organizations dedicated to preserving native plants in this country. Federal agencies and private cooperators work together to develop solutions to our plant extinction crisis. The initiative concentrates its efforts in four major areas:

1. Promoting plant conservation projects.
2. Conducting research that provides information vital to plant conservation actions.
3. Sharing information needed to conserve native plants throughout the country.
4. Helping people understand how important plants are to their daily lives and how they can help conserve native plants.

WHAT CAN YOU DO TO HELP?

- Learn more about native plants, get involved, and spread the word!
- Encourage conservation of native plant habitats in your local community.
- Volunteer in parks, national forests, and other public lands to help protect native plants and their habitats.
- Get involved with a native plant group, botanical garden, or garden club.
- Never collect native plants from the wild—they might be rare or endangered species! Order from reputable nurseries that propagate from nursery-grown material.
- Talk to your local garden stores and ask them to stock native trees, shrubs, annuals, and perennials.
- Get involved with a local school and share your knowledge and appreciation with tomorrow's leaders.
- Encourage schools to include plant conservation in their curricula.

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

- | | | |
|--------------------------|-------------------|------|
| <input type="checkbox"/> | Full-time Student | \$ 5 |
| <input type="checkbox"/> | Senior Citizen | \$10 |
| <input type="checkbox"/> | Individual | \$12 |
| <input type="checkbox"/> | Family | \$18 |
| <input type="checkbox"/> | Organization | \$30 |

Name _____

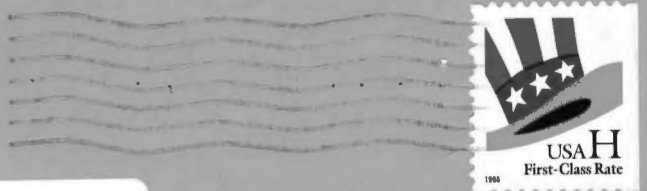
Address _____

City: _____ State _____ Zip _____

Telephone: (Home) _____ (Work) _____

Membership is on a calendar year basis.

**Alaska Native Plant Society
PO Box 141613
Anchorage, AK 99514**



REMINDER: IT IS RENEWAL TIME!!!

Use the form above and send in your renewal today!