

Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

JANUARY 2000

**Start the millennium
off right - join us
at our January
meeting!**

**Monday, January 3rd, 7:30 p.m.
at the Campbell Creek Center
off 68th and Lake Otis**

**Speaker: Marilyn Barker
Topic: "Mystic Mosses"**

Come find out what distinguishes a moss from other plants. Marilyn Barker, adjunct professor at UAA, will describe and show slides of mosses and their characteristics.

**Plant Family Study:
BRASSICACEAE/Mustard**

Parrya, Braya, Erysimum

Presenter: Dorothy Emmons



Can you identify this plant? Read the clues for this month's Mystery Plant on page 3. The answer is on page 5.

Another Look At Alders

By Debra Teachout-Teashon
<http://www.rainyside.com>

A stand of lichen covered *Alnus rubra* - Red alder - is a sight to behold. Peering through a stand, you can almost see the creatures that artists hide in their paintings of white barked trees and snow. Because alders are such a common tree in the Pacific Northwest they are often thought of as weed trees. I have thought this too as I pull the numerous seedlings that volunteer in my ornamental gardens or too close to the fruit trees. However when I see a mature stand of alder those thoughts quickly disappear. They are important trees for many reasons.

Alders fix nitrogen into the soil - well not exactly. A bacterium called actinomycete invades the alder's roots where it draws nitrogen from the air and fixes it to the nodules that have formed. If you ever pull up an alder seedling you can see the orange-red colored nodules all over the roots. A stand of red alder can provide up to 705 pounds (320 kg) of nitrogen every year! This helps the tree to grow over places such as avalanche tracks, flood plains and other disturbed areas such as where logging has occurred. Alder helps provide the nitrogen for younger conifer seedlings growing up under the protection of their canopy. The alders start to decline after about 50 years, giving way to the next generation of forest trees.

Epiphytic lichen (lichen that grows on trees) cover most alder trees' bark, giving them an appearance similar to a birch tree. Covering the bark, the lichen make mosaic patterns of white and gray with tinges of light pink.

Where the air is free of pollutants the lichen freely cover the bark. One lichen that frequently grows on alder is called Pencil script (*Graphis scripta*), a very old species dating back to at least 25 million years ago. It is white, with black fruiting bodies that look like small hieroglyphs drawn in pencil on the lichen. Alder bark is one of its favorite hangout.

(continued on Page 3)

BRASSICACEAE/Mustard Family

At the January meeting, Dorothy Emmons will tell us more about the Brassicaceae/Mustard family. She will focus on three genera: *Parrya*, *Braya*, and *Erysimum*. These three genera all have siliques, long stout roots, and early blooming flowers.

Parrya grows in damp tundra and therefore, unlike the other two genera, is mostly glabrous. The long petiolate basal leaves are usually shallowly dentate. These tasty leaves are enjoyed by native cultures. The tight rosette of new spring leaves is often referred to as "little cabbage". The starchy root is also used for food. The flowering stems are scapose.

There is one species, *P. nudicaulis*, in Alaska, having three subspecies. Subspecies *nudicaulis* can be found mostly in coastal western Alaska. Variety *grandiflor*, with its larger flowers, can be found at Eagle Summit, northeast of Fairbanks, and in the Denali National Park area. Subspecies

interior can be found in the interior and eastern Southcentral Alaska and subspecies *septentrionalis* mostly in Arctic Alaska. All have white or pale pink to lavender aromatic flowers in a tight cluster atop a 5" to 8" stem. The siliques are long narrow upright and torulose.

There are five species of *Braya* in Alaska. They mostly grow on gravelly riverbanks or gravelly slopes. These very small plants have very small, hairy, narrow, mostly entire leaves in a tight cluster. Stem leaves are few or non-existent. Most species are in Arctic Alaska, a few are interior Alaska in Denali National Park area or Eagle Summit.

Braya humilis subs *Richardsonii* is the species most commonly seen and is in eastern Interior Alaska and the Brooks Range. Unlike most other species, it has a few small stem leaves. Its siliques are long and narrow and torulose. Flowers of all species are very tiny and white or pinkish. Most siliques are elliptic to oblong, and as in the case of most members of the Brassicaceae family, are evident when the plant is still in flower for ease in identification.

The third genus to be discussed is *Erysimum*. These plants prefer dry and gravelly areas, there are four native species in Alaska and one introduced which is an annual. One of the native species, *E. cheiranthoides* ssp. *altum*, is a tall and somewhat weedy biennial. Most species have very small yellow flowers, hairy, entire leaves, and long linear seed pods.

E. angustatum can be 6-8" and grows in Eastern Alaska and the Yukon Territory. *E. inconspicuum* can be found in eastern Central Alaska and Southcentral Alaska. This species could easily be missed, as although it could be 6-8" tall, it usually has only one slender flowering stalk arising from a cluster of tiny leaves, tiny stem leaves and a tight cluster of minute flowers.

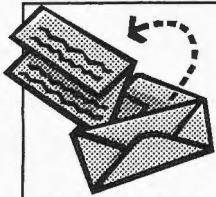
E. Pallasii is by far the most showy, though sometimes very small. The cluster of basal leaves are very hairy, long, petiolate and somewhat floppy. The tight mass of small pink flowers soon becomes somewhat overpowered by the very long siliques that curve up and around and over it. In the arctic it is common and can be up to 8" tall and very showy, but plants seen in the Denali National Park area seem to be less than 3" tall and have very small, dainty, light pink flowers.



Definitions

oblanceolate	considerably broader than long (inverse of lanceolate)
petiolate	referring to leaves having a stem
scapose	referring to the flowering stem having no leaves
silique	a narrow, many-seeded, divided capsule
torulose	seed pod constricted between seeds

If you didn't receive it as a Christmas gift, you might want to buy "Plant Identification and Terminology" by James and Melinda Harris, Spring Lake Publishing ISBN 0-9640221-5-X.



CORRESPONDENCE

Dear Ginny,

I have just consulted our new website and can't agree with your observation, though I applaud your diligence. The distribution map for that wallflower lists only California, as it should. Could you be using either our old website or a cached copy of it?

Why not start over with plants.usda.gov after cleaning out various caches, and see what you get?

Your earlier message was one of several that alerted me to a serious problem with the way we were interpreting our distributional data, and it was a big help. I believe we have fixed that problem, but I'm sure there are others. Any future comments of similar nature will be much appreciated.

Thanks for using PLANTS,

Mark Skinner

Editor's Note: Sure enough – I was using a cached copy of the web page as a bookmark. Do check out the website at www.plants.usda.gov.

Congratulations to the Ricketts!

E-mail from Julia and Trevor Ricketts in Norway:

" We are delighted to let you know of our newest family member. Megan Claire Ricketts arrived on November 14th at 2:40 AM (just a half an hour after mum (Julia) got to the hospital!). She weighed in at 3.76 kg (8 pounds 5 ounces) and was 51 cm long. Mum and Megan are both doing well..."



Mystery Plant

This small plant, an annual or biennial, is one of the earliest blooming plants (mid-May) but probably easily missed. It has a tight rosette of oblanceolate leaves that are toothed near the end. They are slightly hairy and often are reddish. Early specimens are under 3" elongating to 6" or more in seed. The tiny white aromatic 5-petaled flowers are in umbels. This plant can be found in dry rocky areas below 2000 feet elevation over much of Alaska, except coastal areas and the Yukon River drainages.

In flower



In Seed



Looking At Alders (continued from page 1)

Have you ever wondered why you saw barnacles growing on an alder tree? It's not really a barnacle, but a fruiting body of the lichen *Thelotrema lepadinum* or Bark barnacle. Without the lichen the bark would be brown in color. Where pollution is bad lichen will die off, making it a good indicator of air quality in an area.

Alder is an abundant hardwood and used for making fine furniture and cabinets around the world. Alder is still considered the best wood for smoking salmon. Coastal tribes once ate the inner bark of alder, scraping it off in spring and mixing it with an oil or drying it in cakes for winter use. Clothes, utensils, dyes and medicines also came from the alder.

The next time you look at an alder tree, don't think of it as a weed. Think of all the things it does and you might find it is quite fascinating.

Editor's Note: Although this article was written about red alders, *Alnus rubra*, which grow only in Southeastern Alaska, the description is indicative of our other alders too. Alaska has 4 kinds of alders, which grow here as shrubs or small trees. The most common alder in the rest of Alaska is *Alnus crispa*, green or mountain alder. Sitka alder (*Alnus sinuata*) may interbreed with it. Sitka spruce often become established at the same time as Sitka alder. Alder acts as a nurse tree, improving soil conditions and adding organic matter and nitrogen. It disappears when the spruce overtop it and shade it out.

Alaska Native Plant Society – Seed Exchange List –2000

The Alaska Native Plant Society sells native plant seeds which have been collected by members during the year. Seeds can be purchased at the regular monthly meetings or by mail order. The price is \$0.50/package. If seeds are to be mailed, include an additional \$0.50 for 1-5 packages or \$1.00 for 6 or more packages. Send your check and seed order to: Gary Rasmussen, , Anchorage, AK 99503-1917

1	Alpine Spiraea	<u>Luetkea pectinata</u>
2	Anemone, Cut-leaf, white (limited #)	<i>Anemone multifida</i>
3	Arnica, Lessings' (limited #)	<i>Arnica lessingii</i>
4	Arnica, Meadow	<i>Arnica chamissonis</i>
5	Aster, Coastal Fleabane	<i>Erigeron peregrinus</i>
6	Aster, Fringed Fleabane	<i>Erigeron glabellus ssp. pubescens</i>
7	Aster, Siberian	<i>Aster sibiricus</i>
8	Bear Flower	<i>Boykinia richardsonii</i>
9	Chocolate Lily	<i>Fritillaria camschatcensis</i>
10	Columbine, Western	<i>Aquilegia Formosa</i>
11	Corydalis, Pale	<i>Corydalis sempervirens</i>
12	Dryas, Eight-petaled/Mountain Avens	<i>Dryas octopetala</i>
13	Dryas, Yellow	<i>Dryas, drummondii</i>
14	Grass of Parnassus/Bog Star	<i>Parnassiapalustris</i>
15	Harebell	<i>Campamula rotundifolia</i>
16	Iris, wild	<i>Iris setosa</i>
17	Jacob's Ladder, Low or Beautiful	<i>Polemonium pulcherrimum</i>
18	Jacob's Ladder, Tall	<i>Polemonium acutiflorum</i>
19	Larkspur	<i>Delphinium glaucum</i>
20	Monkshood	<i>Aconitum delphinifolium</i>
21	Northern Wormwood	<u>Artemisia compeatris</u>
22	Poppy, Alaskan	<i>Papaver alaskanum</i>
23	Poppy, Arctic	<i>Papaver lapponicum</i>
24	Poppy, Iceland	<i>Papaver nudicaule</i>
25	Poppy, Portage	<i>Papaver, alboroseum</i>
26	Prickly Saxifrage (limited #)	<i>Saxifraga tricuspidata</i>
27	Shooting Star	<i>Dodecatheon pulchellum</i>
28	Shooting Star, Frigid (limited #)	<i>Dodecatheon frigidum</i>
29	Sitka Burnet (limited #)	<i>Sanguisorba stipulata</i>
30	Strawberry Spinach	<i>Chenopodium capitatum</i>
31	Whitlow Grass (limited #)	<i>Draba incerta</i>
32	Wild Sweet Pea	<i>Hedysarum mackenzii</i>

Greg Williams, an ANPS member from Wolcott, VT provided one packet for each of the following non-native seeds. They will be available on a first-come, first-served basis. If there are multiple requests for any of the packets at or before the January meeting, we will divide the packet. You will have to do your own research for additional information.

SEED EXCHANGE CONTINUED – NON-NATIVE SEEDS

Botanical Name	Variety	Notes
1. <i>Acantholinum hokewackeri</i>		
2. <i>Aconitum columbianum</i>		(Aconitum = Monkshood) poison
3. <i>Asclepia tuberosa</i>	Hello Yellow	Asclepia = Swamp Milkweed, 150 days to bloom!
4. <i>Asclepia tuberosa</i>	Yellow Parent	Asclepia = Swamp Milkweed, 150 days to bloom!
5. <i>Aster himalaticus</i>		
6. <i>Leiditzia Anandia</i>	Nana	
7. <i>Lilium formosianum</i>	Parryi	White, fragrant, 4-5 ft, trumpet-shaped flower, may need winter protection
8. <i>Saponaria ophnzlis</i>	Dazzler	
9. <i>Teucomn montanum</i>		

Send your check and seed order to: Gary Rasmussen

Anchorage, AK 99503-1917

**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

Name _____

Address _____

City: _____ State _____ Zip _____

Telephone: (Home) _____ (Work) _____

Membership is on a calendar year basis.

ALASKA NATIVE PLANT SOCIETY

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Secretary Beth Koltun
Treasurer Sue Jensen

Anchorage Chapter Program Coordinators

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

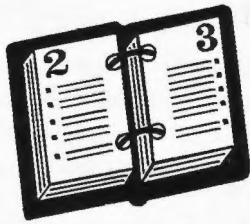
Newsletter ("Borealis")

Editor Ginny Moore
Circulation Martha Hatch

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MYSTERY PLANT ANSWER

Northern Jasmine *Androsace septentrionalis*
Primulaceae/Primrose



JANUARY GARDEN CALENDAR

- January 3, 7:30 PM – ANPS January monthly meeting Campbell Creek Science Center**
- January 4, 10:00 AM – Wildflower Garden Club monthly meeting (call _____ for more info)**
- January 8, 11:AM - Anchorage Weavers and Spinners Guild program on weaving with grass, presented by June Simeonoff Pardue, an Allutiq basket weaver. Anchorage Museum of History and Art.**
- January 11, 6:00 PM - ANPS Board Meeting 6 PM at Marilyn Barker's. Please call Marilyn (_____) if you plan to attend.**
- January 27, 7:30 PM – Alaska Herb Study Group, Carleton Trust Bldg, 2221 E. Northern Lights**
- January 29, 7:00 PM – Alaska Rock Garden Society Regular meeting. Baldassare Mineo will speak on plants suitable for rock gardens. Mr. Mineo is the owner of Siskiyou Rare Plant Nursery and author of the just-released Timber Press "bible" on alpines entitled "Rock Garden Plants" A Color Encyclopedia" Anchorage location TBA.**
- February 7, 7:30 PM – ANPS February monthly meeting. Campbell Creek Science Center..**

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Anchorage, AK 99514**

