

Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

March/April 2010

Join us at our Next Meetings!

Monday, March 1, 7:30 p.m.

(Campbell Creek Science Center)

Speaker: Mary Stensvold

Topic: "Millions of Moonworts"

Plant Family: Pinaceae Abies - Glenn Brown

Monday, April 5, 7:30 p.m.

(Campbell Creek Science Center)

Speaker: Beth Baker

Topic: "Ordering the Chaos: A Historic Perspective on the Life and Legacy of Carl Linnaeus"

Plant Family: Taxaceae—Taxus
Diane Toebe

Would you prefer to receive this
newsletter electronically, by e-mail?

Contact Ginny Moore:
tgmoore@gci.net



For latest information on ANPS
events, check our website at:

[http:// AkNPS.org](http://AkNPS.org)

CALLING FOR FIELD TRIPS

It's that time of year again - time to "Think Summer" - as in "Field Trips"!

It is time to start planning this summer's field trips so that all members can arrange their own summer plans accordingly, especially if trips require extra time or money, or a limit on how many can attend. Our outings are ALWAYS fun, no matter what size the group, or whatever the weather. There have been many memorable trips. Let's make this a memorable year.

On Page 6 you'll find the standard Field Trip Planning Worksheet and once again we're asking you to get all excited about taking a group of plant lovers to one of your favorite places to enjoy the summer bounty.

All members are encouraged to submit field trip proposals. Preliminary proposals for field trips should include the following:

- 1) Your name and email address,
- 2) Title of the field trip,
- 3) Name(s) and contact information for all organizers,
- 4) A brief description of the field trip,
- 5) Preferred day(s) of the field trip,
- 6) Special needs,
- 7) Enrollment limit and
- 8) Tentative budget (e.g., travel and food items; estimated cost per participant).

It would be great if we could have the whole slate of summer activities lined up by the end of April!

Pinaceae Family - Abies

The Pinacea/Pine Family is well represented in Alaska by 5 genera and 9 species of trees. The Genus *Abies*, or “true firs” is represented by 2 species in Alaska: *Abies lasiocarpa* (Pacific Silver Fir) and *Abies amabilis* (Subalpine Fir). Both are present in southeastern Alaska and are not commonly seen. The true firs are monoecious (both sexes found in the same individual) tree. The trees are commonly tall, thin and conical, although the top may become flattened with age.

“Fir trees are characterized by narrow pointed crowns with mostly horizontal branches. The leaves are flat needles without leafstalks, those on lower branches often spreading in 2 rows along the twig, others mostly curving upward. Older twigs are smooth with round leaf-scars. Cones are upright and stalkless in the highest branches. At maturity the cone-scales and seeds are shed but the narrow upright axis persists on the twig. No old cones remain on the trees or on the ground.” Alaska Trees and Shrubs” by Leslie A. Viereck, and Elbert Little

Abies lasiocarpa “The Silver Fir in youth sometimes looks much like the Alpine Fir, with its exclamation-point outline. But it is distinguished, once you have a fruiting branch in hand, by the way its needles grow in irregular ranks, the lower pair appearing brushed upward from below, the upper pair brushed forward along the twig, giving the whole upper surface of the spray of foliage a ruffled appearance; the lower surface of a spray feels flat and smooth in the palm. The shining silvery undersides of the needles give this tree its name. As for the cones, they are ponderous and big, and almost as handsome as flowers when mature, with their purplish scales. Every two or three years there are large seed crops, but the viability of the seeds is brief, the failure of the seedlings common. Because of its beauty, Silver Fir has often been cultivated, especially in Europe, but after exhibiting the pretty charms of tis youth, it is apt to pine away or, at least, fail to develop into the grandeur of its sisters [in the wild].” A Natural History of Western Trees by Donald Culross Peattie, 1950.



Abies amabilis (the species name “*amabilis*” means lovely) is a slow growing tree, 50-80 ft (15-25 m) high, straight trunk, bark is light gray, mostly smooth, but furrowed at the base. There are two to three taxa of Subalpine Fir, treated very differently by different authors. The Coast Range Subalpine Fir, *Abies lasiocarpa* in the narrow sense, is the typical form of the species, occurring in the Pacific Coast Ranges, the Olympic Mountains and the Cascade Range from southeast Alaska (Panhandle mountains) south to California.



- Leaves densely arranged, brushed forward on the top of the twig (viewed from the side, these needles are reminiscent of a ski jumper in mid-flight), side rows erect, 20-30 mm long, 2 mm wide, apex blunt or slightly 2-pointed, deep shiny green and furrowed above, 2 white stomatal bands below, each with 5-6 lines (this gives the underside of the needles a silvery appearance), when needles are crushed an orange fragrance is detected. Needles on cone bearing branches are different, they are stout, curved, and very sharp.
- Cones stiffly erect, barrel-shaped, 10-14 cm long, at first green, then deep purple when ripe.
- The wood is soft and not very strong; it is used for paper making, packing crates and other cheap construction work. The foliage has an attractive orangey scent, and is sometimes used for Christmas decoration, including Christmas trees.

Taxaceae - Taxus

Taxus brevifolia, commonly known as Pacific yew, is a member of the Taxaceae family. It is a subcanopy tree or shrub native to the western coast of North America, ranging from Alaska to California, but it is rare in Southeast Alaska and found only in the most southern part of the panhandle. The average height of *Taxus brevifolia* ranges between 5 and 15 meters. *Taxus brevifolia* plants have flat, evergreen needles and seeds surrounded by a red fleshy aril.



Identifying Characters: The red, fleshy cups enclosing the seeds and the distribution of the species will identify this species.

Similar Species: This is the only *Taxus* species within its range.

Measurements: Trunk angulate and commonly twisted or irregular, with a wide crown; height 50 feet and diameter 2 feet at breast height.

Seed Cones: Seeds about 0.25 inches long, elliptical, blunt-pointed, brown, and angulate; seed nearly completely enclosed by a red, cup-shaped receptacle about 0.4 inches in diameter; seed cones scattered and single on leafy twigs.

Needles: Needles in two rows, between 0.5 and 0.75 inches in length; flattened, pointed at the tip, and with a thin base, soft and pliable; color yellow-green above, green below with two white bands.

Bark: Bark purple-brown, thin, and smooth with red-brown papery scales.

Habitat: Pacific Yew is most commonly found in moist soils along streams and in the bottom of canyons, sometimes as a understory tree in coniferous woods.

Note: The foliage and seeds of Pacific Yew are poisonous. The wood is tough and flexible.

Traditional uses of yew plant included making weapons, harpoons, canoe paddles, drum frames, etc. due to its strength and toughness. Yew was also used for medicinal purposes. Native Americans used yew plant to impart strength, induce perspiration, and treat internal injuries and lung diseases. The Japanese used the yew plant parts to induce abortion and treat diabetes. Conversely, toxicity of the extracts derived from the members of yew family has been described in ancient Greek literature. Today, Pacific yew is primarily used as an ornamental tree, and commercial extracts such as paclitaxel derived from its bark are used to treat various cancers.

Sitka Rose Origins (Continued from page 4)

In 1898 Congress appropriated funds for the establishment of an experimental station in Sitka, but it was not until 1902 that actual work was begun. [Charles] Georgeson was named Superintendent, and from his reports the following information may be obtained...

Georgeson saw *Rugosa* roses growing in abundance on the west coast of Japan. There, the rose had economic value for a delicate yellow dye extracted from the roots and used to dye silks. The *Rugosa* rose was first brought to Sitka from Nelson, Manitoba. Plants were propagated from seed, root cuttings and layering from 1903 through at least 1921. Selections of *Rugosa*s were sent by Georgeson to experiment stations in Kenai, Fort Yukon, Rampart, Kodiak, Copper Center and later to Matanuska and Fairbanks.

I believe that this clears up the mystery of the Sitka rose. Dr. Charles Georgeson introduced the plant into Alaska in 1902 and helped spread it far and wide. Gardeners throughout the state received the plants from Sitka, thus the name, Sitka rose. This plant does, however, have far more distant roots.

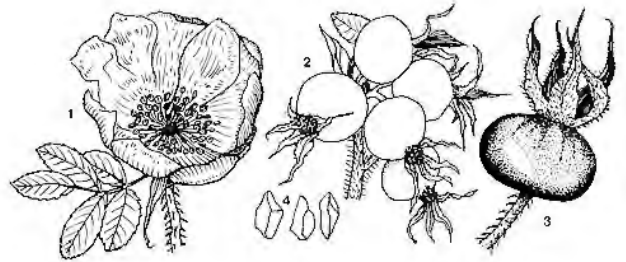
Mystery Plant

Rhododendron lapponicum
Lapland or Mountain Rhododendron
Heath/Ericaceae Family

Sitka Rose: Clearing up its Mysterious Origin

by Dr. Patricia Holloway

Invariably, every spring, I answer a lot of questions about our "native" Sitka rose. "Where can I find it in the wild?" "Does it grow all over the state?" "Does it come in any other colors than pink?" Local vendors such as Fred Meyer routinely sell Sitka roses to Fairbanks gardeners. I have always puzzled over why these flowers were called Sitka roses since they are native to China, Japan and Korea, not Alaska. Sitka roses are Rugosa or Turkestan roses, *Rosa rugosa*, and have no connection to Alaska except for fact that they thrive throughout the coastal and interior regions and are one of the best-loved perennials in Alaska's gardens.



As I began my search of references to Sitka roses, I found that my curiosity was not new, and the legendary Sitka rose has been around for a long time. I located a transcript of a speech given by Phillip M. Gardner at the American Rose Society Pacific Northwest District Convention in Chehalis, WA on June 29, 1968. As a member of the Alaska Rose Society, he too, wondered what the Sitka rose was, and he compiled an interesting record to show no such native rose exists. Below is an excerpt from his presentation.

"Alaska, which is comparatively young in statehood and, as with all states, likes to identify itself with a romantic past. With us, it is the gold rush, Robert Service, Jack London, the Russian occupation, Lord Baranoff, and the Russian missionaries. ... I personally enjoy stories of the past, especially those concerning the legend of the rose, but it would be well to stop and choose now before fact has fallen before fancy. [The book], *Modern Roses VI*, defines the Sitka rose as follows: "Sitka (origin unknown) said to have been raised from a rose brought from Russia and grafted to a local wild rose. Single or double, fragrant, pink, deep pink, purple-red, or white. Foliage wrinkled, gray-green. Very thorny. Fruit large, round, red. Ht. 6-8 feet. Resistant to cold, heat, dryness, poor soil and widely grown in Alaska".

Now I ask you, is this description a little familiar? Could you recognize a Sitka rose? ... Shortly after I arrived in Alaska, I saw... Rugosa roses blooming in Palmer, Anchorage, Kenai and even up in Fairbanks. But whenever I mentioned to home owners that they were Rugosas, I'd receive a shake of the head and, "No, these are Sitkas".... Was this a spontaneous sporting of the old Rugosa miraculously developed in Sitka perhaps due to a happy combination of cold, dampness and subarctic northern lights?

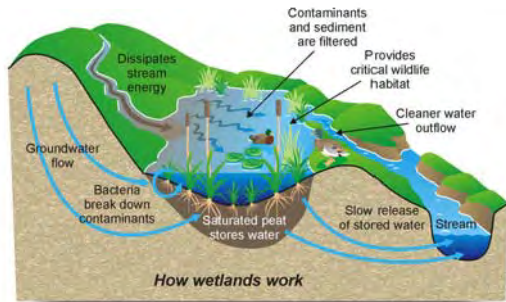
Let me digress awhile. The Rugosa species is a rather recent arrival to the New World. It is a member of the group Cinnamomeae and is native to North Eastern Asia, the Northern China, Korea and Japan. It was first recorded by Carl Thunberg, a naturalist and classifier, in 1784 in the gardens of Kyoto, Japan. From there it was called the Romanas or Hedgehog rose. E.A. Bunyard in his book *Old Garden Roses*, relates how the Chinese portrayed this rose as far back as 1000 AD. It was introduced from Japan into Great Britain in 1796 by Lee and Kennedy of Hammersmith but was not very well received at that time. Then later on the Rugosa was again introduced by Siebold in 1845. This time it became accepted. In the United States, Thomas Hogg introduced the single form in 1872; and in 1892, Professor J.L. Budd of Iowa State College, worked with the large single crimson form and also with a double plena form that he brought back from St. Petersburg. The magenta colored double rose from Russia was later distributed as 'Empress of the North' and is thought to be a sport of the single rose. Almost immediately, hybridizers commenced to work; but of the many hybrids that resulted, only a relatively few survive today.

Last winter when I was in Sitka, I called upon everyone that might have a chance bit of information concerning the "rose". Joe Ashy, the custodian of the Sitka National Cemetery, drove me out to the old experiment station, now occupied by the US. Coast and Geodetic Survey Seismic Group. In front of the house and to the right of the access road lie orderly rows of ancient apple trees. This road ends at a garage, back of which lies a path that traverses the trial fields now overgrown. To the west of the path was an area thickly massed with rose bushes and upon examination I found thickets of *Rosa nutkana* and Rugosas.

I visited the old Russian cemetery in which the Orthodox are still interred, expecting to find the legendary rose bush but there were none to be seen in the entire area nor was there one on the hill where the Russian Princess and other royalty were buried. It would seem that if the Sitka rose was brought here by the Russians that this would be a place of collection. The double Rugosas that I saw in the city were in recent yards and gardens. Then where, we may ask ourselves, can we find the answer?

John Green Brady, arrived in Sitka on March 13, 1878, as a minister. He was later appointed Governor of Alaska from 1897 to 1906. Governor Brady was known as the Rose Governor as he greatly loved the rose and cultivated several varieties about his home in Sitka.

Identifying Wetlands



At our February meeting, Ann Claerbout gave us a look at what goes on in the process of identifying an area as a wetland. She works for an environmental engineering company, HDR. The Clean Water Act of 1977 requires permits for any plans to deposit fill in a wetland for such things as making a foundation to build a road, housing or other development. It is important therefore to determine what land should be classified as a wetland. The Wetland Delineation Manual was published in 1987, providing guidelines for the identification process. A wetland is more than just a place where your boots get wet. Because the Alaska Native Plant Society is interested in plants, Anne gave us an entertaining account of how she picked up a winter twig from a snow covered field to try to determine what

species it is. Vegetation is not the only indication, however. Soil types give clues, and understanding hydrology is important as well. When examining the dominant species of an area suspected of being wetland, one may ask if it is a plant that requires a water saturated environment, and if so that species is classified as an obligate indicator. Other species may live in or out of the water. Those would be facultative wetland indicators. Upland species that cannot tolerate saturated soils would indicate the area is not a wetland. The next question to ask would be how much of this particular species is growing in the area suspected of being a wetland. Ann says with practice you get better at estimating this. A bog will generate a particular kind of soil. One indication is the thick organic mat that accumulates, because vegetation does not decay as readily in a bog. This should be at least a foot deep, but it can collect over many centuries. Digging a pit will reveal distinct soil horizons from which to conclude how much water is present or has been present in other seasons. You know you have hit a bog when you dig in and the smell of hydrogen sulfide assaults your nose. It stinks like rotten eggs.

The Munsell color chart provides a scientifically accurate system to determine what color the soil is. You hold the chart next to the soil sample and decide what is the best color match. The chart is divided into five principle hues: red, yellow, green, blue and purple, with intermediate gradations. It also indicates how dark or light each color sample is, on a scale of zero for black to ten for white. Chroma indicates how saturated a color is. For example, red is more saturated than pink, but has the same hue. Gley soils develop as a result of microorganisms operating in anaerobic conditions, with poor drainage, producing a blue grey color typical in bogs. On exposure to air this can oxidize to mottled rust hues from iron. The color chart will help determine how closely the soil sample indicates these conditions. In a wetland, the surface water level may fluctuate. Spring runoff, for example, can cause a higher water level that results in a vernal pond that subsides later in the season. Earlier flooding can leave water marks on trees or stain leaves. Marl is organic matter that can float on the water like an oil sheen. Iron in the form of red dust may get left behind on vegetation and soil. Cracks in dried mud also reveal a previous high water level. Sometimes it is not practical to go out in the field to investigate if an area contains wetlands. One can still determine what the situation is likely to be by examining aerial photography. Ann showed us an example of the wetland between a hill and the Arts Building on the UAA campus. Superimposed on a contour map such a photo shows where higher elevation supports upland vegetation. Enclosed lower areas may lack drainage, so colors and textures in the photos can give further clues as to what sort of vegetation grows in those hollows. It is important to take map scale into account. Fall photography is more revealing because of the autumn leaf colors that help identify what the vegetation consists of. A lichen understory appears whitish and low bushes may show up brown, while many tree leaves turn gold in September. An aerial photograph won't show much about what kind of soil underlies the vegetation, but for some locations soil maps are available from the Natural Resources Conservation Service. This is another tool to help identify wetlands from your desk instead of on location.

In earlier decades the function of wetlands was poorly understood so heedless development had no restrictions in place. Wetlands operate like sponges that regulate water flow, providing a more even water supply to local rivers. Wetlands filter pollutants and fertilizer runoff. They provide habitat for important species, nesting and spawning grounds for both local and migratory animals.

Anne concluded her lecture showing how to identify some of the species that indicate an area is a wetland. Cottongrass, horsetails, Labrador tea, water lilies and various berries for example. Winter identification provides special challenges. You look at a winter twig and all you see are tightly closed buds or shriveled leaves from last summer. How do you determine what species it is? A verbal overview like this can't convey the effect of all the beautiful photographs and the well thought out organization in Anne's PowerPoint presentation, not to mention the enthusiasm she conveys. So, what is your favorite bog berry? Hers is the cloudberry.

(Thank you to Beryl Wardlaw for providing this recap of Anne's presentation.)

ALASKA NATIVE PLANT SOCIETY

2010 FIELD TRIP PLANNING WORKSHEET

Return this form to: Anjanette Steer by April 15.

E-mail: _____

, Tel: _____

Mail: _____

Leader: _____

Telephone: _____ FAX: _____ E-Mail: _____

Field Trip to: _____

Date: _____ Day of Week: _____ Time Allotted: _____

Meeting Time: _____ Meeting Place: _____

Driving Distance/Car Pooling, etc. _____

Reservations by (date): _____

Level of Difficulty _____ Minimum Age: _____

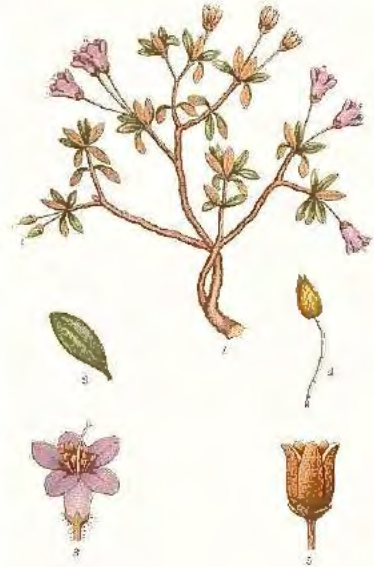
Description of Trip: _____

Special Instructions: _____

MYSTERY PLANT

This dwarf evergreen shrub can be found throughout interior Northern Canada, across interior and arctic Alaska into northern mountainous areas of Asia and parts of Europe. It is absent from most coastal areas. The small ovate leaves are dark green, slightly curved under and covered with resin dots on both surfaces. The $\frac{3}{4}$ inch rosy-purple flowers have 5 triangular sepals with ciliate hairs and 5 petals connected at the base. They are quite showy with 7-10 stamens, an exerted stigma and wonderful fragrance. In windswept areas this congested shrub is often only a few inches tall, but can grow up to 24 inches with protection. Habitat is quite varied, being found in both dry and wet stony tundra and occasionally wooded areas as well. This is a delight to see in late May and early June.

Answer on Page 3.



Borealis

the newsletter of the



ALASKA NATIVE PLANT SOCIETY State and Anchorage Chapter Officers

President	Mel Langdon
Vice President	Ken Johnson
Secretary	Beryl Wardlaw
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Membership	Verna Pratt
Plant Family	Marilyn Barker
Mini-Botany	Ken Johnson
Field Trips	Anjanette Steer

Newsletter ("Borealis")

Editor Ginny Moore

FAX:

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

Newsletter Correction

Thank you to an observant reader of the December issue of *Borealis* newsletter who caught an error in the article about *Pinus contorta*. The offending sentence should have read: "Botanists have separated the lodgepole pine into two subspecies, *Pinus contorta contorta*, or shore pine and *Pinus contorta latifolia* or lodgepole pine." The article had the two common names reversed.

Thank You - and Keep Reading!

Thank You!

To

Matt Carlson and Anne Claerbout,
Speakers at the January and February meetings
And to the Mini-Botanists, and Plant Family hosts:
Anjanette Steer and Ken Johnson

You make it happen!

**Alaska Native Plant Society
2010 Seed List**

	<i>Scientific Name</i>	Common Name	Height	Flower Color	Comments
1.	<i>Aconitum delphinifolium</i>	Monkshood	2-4 ft.	Dark blue	Damp; stratify 2-4 months; may take 2 years to germinate
2.	<i>Antennaria dioica</i>	Pink Pussytoes	5-6 in.	Pink	Stratify
3.	<i>Aquilega brevistyla</i>	Small Blue Columbine	12-14 in.	Lavender and white	Easy
4.	<i>Aquilega formosa</i>	Western Columbine	Up to 3 ft.	Red sepals Yellow laminae	Easy
*5.	<i>Armeria maritime</i>	Sea Thrift	3-5 in.	Pale pink	Easy
6.	<i>Arnica latifolia</i>	Meadow Arnica	9-12 in.	Yellow	Easy
7.	<i>Campanula lasiocarpa</i>	Mountain Harebell	2-4 in.	Blue	Easy
8.	<i>Campanula rotundifolia</i>	Bluebells of Scotland	4-6 in.	Blue	Easy
9.	<i>Corydalis pauciflora</i>	Pale Corydalis	24-30 in.	Pink and yellow	Biennial; blooms 2 nd year; easy
10.	<i>Dodecatheon pulchellum</i>	Shooting Star	10-14 in.	Pink	Stratify; recommend direct sowing – may take two years
11.	<i>Draba incerta</i>	Whitlow Grass			
*12.	<i>Erigeron glabellus ssp. pubescens</i>	Fringed Fleabane	9-14 in.	Pale pink	Dryland species, easy
13.	<i>Gentiana platypetala</i>	Broad-petalled Gentian	6-10 in.	Large, sky blue tubular flowers	Stratify 4 weeks: may take 2 years
*14.	<i>Geranium erianthemum</i>	Wild Geranium-White	2 ft.	White	Easy
*15.	<i>Lagotis glauca</i>	Weasel Snout	5-8 in.	Blue	Stratify
*16.	<i>Ligusticum mutellinoides</i>	Alpine Lovage	2-4 in.	Brown	Easy
*17.	<i>Oxytropis nigrescens</i>	Purple or Blackish Oxytrope	1-2 in.	Purple	Easy, needs very good drainage
*18.	<i>Papaver alaskanum</i>	Alaska poppy	6-8 in.	Yellow	Easy; short-lived perennial; reseeds
19.	<i>Papaver alboroseum</i>	White poppy	2-3 in.	White	Easy; no stratification; may flower the first year; reseeds. Gravelly soil.
20.	<i>Papaver alboroseum</i>	Pale-pink poppy	2-3 in.	Pink	Easy; no stratification; may flower the first year; reseeds. Gravelly soil.
21.	<i>Papaver lapponicum</i>	Arctic Poppy	5-7 in.	Yellow	Easy; reseeds
*22.	<i>Polemonium pulcherrimum</i>	Low or Beautiful Jacob's Ladder	8-10 in.	Lavender	Easy
*23.	<i>Potentilla uniflora</i>	One-flowered cinquefoil	3-5 in.	Yellow	Easy
24.	<i>Rhododendron camtschaticum</i>	Kamchatka Rhododendron	Subshrub	2-3" large magenta	Easy but very slow growing; do not allow to dry out
25.	<i>Saxifraga tricuspidata</i>	Prickly Saxifrage	3-4 in.	Cream	Easy
26.	<i>Swertia perennis</i>	Star gentian	8-12 in.	Purple/blue	Stratification recommended
27.	<i>Papaver sp. (Unnamed at this time)</i>	Unnamed	2-4 in.	Bright orange with yellow centers	From Mt. Peulik on the Alaska Peninsula, south of Becharof Lake.

ALASKA NATIVE PLANT SOCIETY 2009 Seed Exchange

The Alaska Native Plant Society sells seed of plants native to Alaska, which have been collected by members during the year. Seeds can be purchased at the regular monthly meetings or by mail order.

NOTE to Donors: If you have gathered seeds that you'd like to donate, please do. We will offer them at meetings and upcoming mall shows.

The price is \$0.50 per package. Package sizes vary considerably due to the number or amount of seeds collected. Some rare or difficult to collect species may contain few seeds, while some easy to collect species may contain a large number of seeds. For mail orders, include an additional \$0.50 for 1 -5 packages, or \$1.00 for 6 or more. Make checks payable to: Alaska Native Plant Society. Send order to: Alaska Native Plant Society, PO Box 141613, Anchorage, AK. 99514

Seed Germination Information

Use a sterile mix for best results. Fine seed should be sprinkled on the surface. Cover large seeds with soil. Keep mixture moist by covering with plastic. For best results water from the bottom of a tray or spray with a fine mister.

If your only seed starting experience has been with easily germinated vegetables or annual flowers, more patience is going to be required when it comes to growing perennials from seed successfully. Some types germinate within days, others take several weeks, and a large number of perennials require what is called **stratification** -- basically, simulating the conditions that exist outside over the winter. These types of seed are sometimes described as "cold germinators". The usual trick is to place the seed with some moist, sterilized commercial seeding mix inside a plastic bag, then storing it in a refrigerator for a period of time to break down the natural chemical germination inhibitors within the seed. A typical period of time is about three to four months. Then the seed is sowed as usual and started indoors under lights. Another approach is to sow the seed in late fall in pots, then leave it outside in a protected (but unheated) coldframe for the winter.

ANPS SEED EXCHANGE ORDER FORM

Orders will be filled in the order that they are received

Order by plant number appearing before the name

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The price is \$0.50 per

packet. For mail orders, add \$0.50 for 1 -5 packets, or \$1.00 for 6 or more.

PLEASE NOTE: Seeds marked with a * are in limited supply, so if you are ordering them, list an alternative in case they are no longer available.

Name _____ Number of packets ____ @\$0.50 = \$ ____

Address _____ Mailing cost (\$.50 for 1-5 or \$1.00 for 6 or more) = \$ ____

City _____ State _____ Zip _____ Total enclosed \$ ____

Make checks payable to: Alaska Native Plant Society

Send order to: Alaska Native Plant Society, PO Box 141613, Anchorage, AK. 99514

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

Have you renewed your membership? Remember all memberships extend through the calendar year.

Name This Plant - Clues on Page 9



- 2010 SEED EXCHANGE LIST
- 2010 FIELD TRIP PLANNING FORM

Don't Miss:

What's Inside?