

Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

March 2001

Join us at our March meeting!

**Monday, March 5, 7:30 p.m.
at the Campbell Creek Center
off 68th and Lake Otis**

**Topic: "Hitting The Road"
Summer 2001**

Speaker: Verna Pratt

As you head out to explore Alaska's native wonders this summer, think about joining the ANPS's field trip to the North Slope in June. There are a wide variety of plants – from woodland to alpine – right along the road, and you'll want to take at least one side trip. Let Verna show you "how it's gonna be" and recommend some must see spots – Mt. Healy, Bison Gulch, Murphy Dome, Eagle Summit. Even if the field trip can't be part of your summer agenda, you can travel with us to the top of the state while staying right here in Anchorage.

Plant Family Study

**Aquatic Plants, Continued
Bur Reed/Sparganiaceae Family**

Presenter: Verna Pratt

Do You Know Your Native Trees?

Pinaceae of South Central Alaska

--by Boyd Shaffer

In the pine family, we have three indigenous species of spruce and two hemlocks in this area. They are not hard to identify as long as one realizes that there are always variations within any plant species. What we should not do is declare a subspecies or a hybrid as soon as some variations are found.

The first and foremost misuse of the word "hybrid" was used by seed companies when they were buying spruce cones collected from squirrel middens on the Kenai Peninsula. Many people, both old and young, made good money collecting and bagging cones. That was in the nineteen sixties. Cones collected in areas dominated by a single species of spruce were labeled, "White", "Sitka", or "Black". However, where there was a complete mixture of species they incorrectly labeled them hybrid cones. Not because they were genetically different, but because that was the name they decided upon for mixed species in a single bag. Not long after that, foresters were planting, in Alaska and elsewhere, seeds labeled Hybrid, Black, White or Sitka. No wonder there is so much confusion.

The White Spruce is the primary Piceaceae of the northern forests of North America. It varies in shape, bark color and cone scale from area to area and they integrate in all areas where the differences occur. The seeds grow and are fertile. That means they are the same species. Any botanist who claims this isn't so will someday attempt to reclassify the Human race into many different species. One outstanding area where White Spruce have taken on an interesting appearance is along the Glenn Highway between Sheep Mt. Lodge and Eureka. Their grotesque shapes rival any Black Spruce growing in a bog. These trees grow that way because of the poor soil, elevation and cold winds.

Two spruce species are unique in one way, the Black and Sitka are the only ones that can reproduce by layering. That is the ability of lower limbs, when touching moss or damp soil, to take root and produce new trees. This is very common when the trees are in a fairly open place where the new shoots can get enough sunlight. White Spruce is not known to do this.

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Water Plants

Bur Reed/Sparganiaceae Family

Presenter Verna Pratt

The Sparganiaceae Family contains aquatic plants that are found mostly in northern temperate zones. It is well-represented in Alaska with four species in the Sparganium (There are only 20 species worldwide.) It is closely related to the Tyhaceae or Cattail family.

This species is commonly called "bur-reed" from the bur-like fruits and the narrow reed-like leaves. These long, parallel veined grass or sedge-like leaves look like a ribbon; in fact, the Latin name comes from the Greek word for "swaddling band". Leaves are alternate, sheathing at the base, and may be erect or lying flat on the surface of the water.



Sparganium angustifolium

The round flower heads somewhat resemble a sedge, with tiny greenish numerous flowers. Sexes are separate on the same plant: the upper heads being staminate (male) and the lower pistillate (female).

Fruits are hardened, nutlet-like achenes, spindle-shaped, abruptly narrowed to 2 mm long beak; 1-2 seeds.

Most species are found in ponds and sluggish streams in much of Alaska south of the Brooks Range, usually submerged or floating in shallow to fairly deep water, but sometimes partly emergent; low to middle elevations, extending sometimes to alpine ponds..

MYSTERY PLANT

The mystery plant this month is a circumpolar plant of the northern hemisphere with the largest concentration in Alaska being in northern coastal areas. The leaves are linear-lanceolate, hairy and mostly basal with one to three reduced pairs on the sticky, hairy flowering stem. Usually the flowering stem is less than six inches and has one flower. The inflated nodding calyx is whitish and streaked with lilac, and the 5 tiny lilac petals barely protrude from the calyx. At maturity the seed capsule is erect.



Answer is on Page 5.

Plant Explorers to the Rescue



Some of you may have attended the "Standing Room Only" presentation on Friday, January 26th, at the Anchorage Museum. Jaime Rodriguez, one of the nine participants of the Alaska Rock Garden Society's seed collecting trip to China in 2000, gave a slide presentation showing where they traveled and what they saw.

Inspiration for planning this trip came from a presentation 2 years ago by Dan Hinkley of Heronswood Nursery in Seattle, Washington. Dan is an avid plant explorer --- always looking for new garden worthy plant species. He does, however, concentrate on plants to serve Zones 5 to 9. It became evident that, if we colder climate gardeners wanted new species suitable to Alaska, we would have to plan our own trip and explore higher elevations. With age and asthma against me, I decided not to accompany them but, instead, to support them with a seed share purchase. With many such purchases and a grant from the North American Rock Garden Society, the trip became a reality.

I am looking forward to the results of growing some of the wonderful seeds that they acquired. With over 900 different collections there are bound to be some good ones, but we also need to be aware of troublesome or invasive species. I plan to start a special China garden on any property where these plants can easily be grown under supervision. Often times it takes several years to determine the value or worth of some species.

In the past, many garden worthy plants have come from China, and have become well known and cherished by gardeners. On the other hand, some very desirable plants

were once considered impossible to grow. Sometimes, merely because they were attempted in the wrong climate. A perfect example of this is *Meconopsis*, the Himalayan Blue Poppy. It absolutely loathes hot or dry climates. Then a brave soul tried it in Alaska. Now it is considered a most desirable plant. The following comment was made (with a big grin) by Panayoti Kelaidis, now Director of the Denver Botanic Garden, while visiting Alaska, "You can grow *Meconopsis*? Stop your whining about your terrible climate!" There could be more such species out there. Many Primroses, *Ligularias*, *Cimicifugas*, etc. from this area have already proved to be nice showy garden plants. I wonder what wonderful new gems this group of people have brought back to us. All gardeners realize that, because of our climate, the number of species that we can grow is very limited and more experimentation needs to be done. With these seeds available, we can explore these possibilities without a large expense.

If any of you have been fortunate enough to receive any of the seeds from this expedition, please sow and grow them with care. Keep records and report your findings. Who knows, as industry expands in China, and devastation of forests and wild species progresses, we may, also, be saving some plants from extinction.

Without a doubt, we all will have learned a lot and, hopefully, provided Alaska's horticulture world with some new desirable species. The right plant in the right place can make a world of difference.

Boyd and Susan Shaffer are leading another Safari!

Dates: January 25, 2002 to February 14, 2002



In Swahili, the tongue of East Africa, "safari" means a journey. This then is an invitation to come along on a journey with naturalist and wildlife expert Boyd Shaffer and his wife Susan. It is an African adventure, a 3 week trip to all of the Shaffers' favorite spots in Kenya East Africa. This is probably the last group Safari that the Shaffers will put together, so it is your last chance to travel with them. You will discover first hand the fantastic plant and animal life, as well as the people, the rich culture, the history and the geography of this most fascinating country.

They have finalized the program, have a good itinerary and also have obtained group air travel, and are now registering guests. There is plenty of room, so do think about joining them, but don't wait too long because they expect to fill up quickly! You can learn more about the details of the safari on the website <http://www.wildlifeartprints.com/safari.htm> or by contacting Susan at P.O. Box 2445 - Kenai, Alaska 99611; phone: (907) 283-3753; fax: (907) 283-8761; or e-mail susan@wildlifeartprints.com.

Pinaceae Family In Alaska, (Continued from Page 1)

Black Spruce is one of our most beautiful species when it is not living in a bog (the only species tough enough) and has good soil and sunlight. It is so delicate and finely shaped. No wonder Rhode Island chose it as their state tree. If you want a good-looking ornamental spruce, try one. Give it good deep and wide compost, fertilizer and plenty of open space.

Genus: *Picea*:

***Picea glauca* (White Spruce)**

Description: Tree about sixty feet tall, with variable shape, no two seem to be alike in that respect. There are a number of growing forms making them appear as hybrids. The best way to identify them is by twig and needle shape. The needle is square in cross section. The twig from the preceding year is covered with light colored glabrous (smooth) scales.

Habitat/s: Prefers well drained soil, rarely occurs in bogs, and is found quite high in the mountains.

Range: All of S. Central AK. Rare along most coastal areas and absent on Kodiak Island.

***Picea sitchensis* (Sitka Spruce)**

Description: The largest spruce in the area and can grow to a height of one hundred and fifty feet or more. The needle is flattened in cross section. The twig from the preceding year is covered with light colored glabrous scales. Needles from lower twigs often growing upward, and with two bands of light colored stomata (glandular dots) on upper surface. Caution: some of the White Spruce complex is this way, the needle and twig scale are the best indicators.

Habitat/s: Found primarily along the coastal belt.

Range: All of coastal S. Central Ak. The only native spruce on Kodiak Island.

***Picea Mariana* (Black Spruce)**

Description: Easily recognized growing stunted in bogs, but given a proper place to grow it is delicately beautiful with drooping spreading limbs covered with short needles. Best identified by twig and needle shape; The needle is square in cross section. The twig from the preceding year exhibits some rust colored pubescence (fuzz).

Habitat/s: The habitat varies from bogs and edges of clearings, to hillsides.

Range: Most of coastal S. Central AK. and all of the Kenai Peninsula. Absent from Kodiak and Afognak Islands.

Note: A hybrid between Black and White Spruce occurs in parts of Canada. It was originally named as a distinct species by Elbert Little who named it *Picea Lutzii*. The name is now superfluous and should not be used for any hybrid. Hybrids cannot have their own name. The names of both parents must be listed with " X" between them.

Genus: *Tsuga*:

***Tsuga heterophylla* (Western Hemlock)**

Description: Tree often growing over one hundred feet tall with drooping branches and deeply grooved bark. Needles flat with rounded tips and two whitish rows of stomata on the undersides. The needles are rounded at their tips.

Habitat/s: Coastal and adjacent wet forests.

Range: Southern S. Central Ak. except Kodiak and Afognak Islands. Prefers regions near coasts.

***Tsuga Mertensiana* (Mountain Hemlock)**

Description: Tree usually shorter than Western Hemlock, with needles rounded on the underside and flat on the upper side. Needles have small stomata distributed over both upper and lower surfaces. Cones small and purplish becoming brownish when ripe.

Habitat/s: Same as Western Hemlock. More abundant than Western Hemlock on the Kenai Peninsula.

Range: Same as Western Hemlock.

Note: Hemlocks can be found at high elevations where they acquire a stunted shape, often quite bushy and short.

This article was printed, with permission from **Botany News**, the newsletter of the Kenai Peninsula Botanical Society, an educational organization that is sponsored by the Biology Dept. University of Alaska Anchorage, Kenai Peninsula College.. Snail mail to: Boyd Shaffer, Editor, Botany News, Box 2445 Kenai, AK 99611 Phone: (907) 283-3753 - Fax: (907) 283-8761 or visit their website at: <http://www.wildlifeartprints.com/kpbs.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

Name _____

Address _____

City: _____ State _____ Zip _____

Telephone: (Home) _____ (Work) _____

Membership is on a calendar year basis.



Summer 2001 Field Trips

Marsh marigolds in March? Well, not quite! But it won't be long before we'll all be wanting to be out finding them and the elusive plants, too. Take us to your favorite plant spot. There is still time to organize a summer field trip. You can use the Field Trip Worksheets that were included in last month's newsletter and fax them to me at or email me at popcorn@ak.net. Thanks.

Susan Klein, Field Trip Coordinator



MYSTERY PLANT ANSWER

Melandrium Apetalum
 Pink or Caryophyllacea Family

Volunteers Needed

Garden Week Display at the Sears Mall
Saturday, April 14

Call Verna _____ if you can help man the booth
on Saturday, April 14. Set-up starts at 8:30 AM

ALASKA NATIVE PLANT SOCIETY State and Anchorage Chapter Officers

President	Frank Pratt
Vice President	Leonard Grau
Secretary	Beth Koltun
Treasurer	Sue Jensen

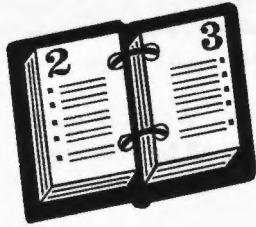
Anchorage Chapter Program Coordinators

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

Newsletter ("*Borealis*")

Editor	Ginny Moore
Circulation	Martha Hatch

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UPCOMING PLANTS & NATURE EVENTS

- March 5, 7:30 PM *Alaska Native Plant Society Monthly Meeting Campbell Creek Science Center*
March 3, 6:00 PM *Kenai Peninsula Botanical Society Monthly Meeting Room 137 -Kenai Peninsula College*
Marcy 17, 2:00 PM *Alaska Rock Garden Society Monthly Meeting Cooperative Extension Service, "Rock Garden Construction" followed by a meeting of the 2002 Committee*
- April 2, 7:30 PM *Alaska Native Plant Society Monthly Meeting Campbell Creek Science Center*
April 14, 10AM-7 PM *Garden Week Display at Sears Mall*
April 21, 2 PM *Alaska Rock Garden Society Monthly Meeting Mat Su College, Fred & Sarah Machetanz Bldg. Rm 103: "Garden Photography" and "Hosting a NARGS Annual Meeting"*

Kenai Peninsula College is offering a special course in Greenhouse Gardening. The class runs from 7 to 9:45pm, March 28-April 25. For the newest and best information on this subject Enroll Now. Remember! Senior citizens don't pay tuition! For additional information contact student services at 262-0330.

**Alaska Native Plant Society
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Anchorage, AK 99514**

