# **Borealis**

the newsletter of the

Alaska Native Plant Society

PO Box 141613, Anchorage, Alaska

January-February 2005

# Join us at our NEXT meetings!

Campbell Creek Science Center Monday, January 3, 7:30 p.m.

# **Topic**

"Glaciers Retreat, Plants Advance"

Find out more about the secrets that have been uncovered as the Bering Glacier retreats.

# **Speakers**

Anne Pasch and Marilyn Barker, UAA

Mini-botany Speaker: Alan Batten, UAF Herbarium

January Plant Family Study

Aspidaceae Shield Fern Family

Presenter: Andy Anderson

February Meeting
Monday, February 7, 7:30PM

Topic:

"Plants and the Animals That Eat Them"

Speaker: Don Spangler, UAA

... op....g.o., o. . .

February Plant Family Study

Polypodiaceae/Licorice Fern Blechnaceae/Deerfern

Presenter: Connie Kison

# Foiling Non-Native Plant "Escapes"

Trees and shrubs native to other parts of the world have long spruced up U.S. gardens and landscapes. But problems arise when some of these plants escape cultivation to become weeds or invade natural plant communities.

That's why Agricultural Research Service horticulturalist Mark Widrlechner and colleagues are retooling a strategy for assessing the risk of such escapes across North America into something more suited for a specific region.

This work at the ARS North Central Plant Introduction Station in Ames, Iowa, has produced new models geared toward improving plant-escape predictions. The models integrate life-history traits of woody plants found in the north-central United States with climatic and geographic risk analysis.

Widrlechner's team collected data on 100 non-native landscape trees and shrubs grown in Iowa, tested approaches for predicting their escape abilities, and then compared the predictions with escape histories.

The scientists modified an existing decision tree for assessing the risk of non-native woody plants escaping anywhere in North America by including regionally important traits. They then designed a new decision tree featuring a geographic-risk factor based on the plants' native distributions and selected biological traits.

Few intentionally introduced species escape cultivation, and even fewer become pests. But effective predictive models can reduce time and costs associated with quarantine programs designed to spot problem plants. Widrlechner stressed that all related models and strategies should be augmented with long-term monitoring of sites that could be a foothold for newly naturalizing woody plants. Details of the study and the new models were published recently in the Journal of Environmental Horticulture.

From: ARS News Service Agricultural Research Service, USDA Luis Pons, (301) 504-1628, lpons@ars.usda.gov November 29, 2004

# FROM WHAT WE GATHER

# **Greenhouse & Nursery Conference**

The Alaska Greenhouse & Nursery Conference would like to invite your garden club/group to provide information to those attending the next conference scheduled for January 26 & 27, 2005 in Wasilla at the Best Western Lake Lucille Inn. Free space will be available for garden club flyers and brochures. This will be the first time the conference includes a garden club table.

This event targets horticulture businesses and individuals involved in professional horticulture. It usually draws people from 20 different communities in Alaska. Home gardeners are also welcome to attend.

This year there will be two speakers from outside Alaska, Tom Plocher speaking on growing grapes in cold climates and Chuck Lewis, formerly of P & M Garden Services, now with McHutchinson in Washington. Other topics include Verna Pratt on wildflowers for commercial production, Sally Koppenberg on native plants in the landscape, Debbie Hinchey on maintainable landscapes, Jeff Williams on water features, insect pests of landscape trees, topsoil, plant patents and a tour of the Recluse Garden Center.

A registration brochure will be available early January.

If you would like to participate or have questions, please contact Julie Riley, afjar@uaa.alaska.edu or at

### **Idaho Rare Plant Conference**

The 21<sup>st</sup> Annual Idaho Rare Plant Conference will be held in Boise, Idaho on February 15-16, 2005. The conference format requires that only species about which information was submitted to the rare plant organizing committee prior to the conference will be reviewed and discussed.

This year's special topic will be sagebrush communities and their function, and there will be a session on identifying sagebrush using fluorescence.

Check for information at <a href="www.idahonativeplants.org">www.idahonativeplants.org</a>. A \$35 registration fee is due by January 31, 2005 (\$45 after that) to cover the cost of conference materials.

# **Keep Up With Invasives**

Want to know more about invasive plant problems in Alaska and what is being done about them? Check out this website: <a href="http://www.cnipm.org/">http://www.cnipm.org/</a>

This site was developed by the Committee for Noxious and Invasive Plants Management in Alaska (CNIPM). Its' goal is to heighten the awareness of the problems associated with non-native invasive plants and to bring about greater statewide coordination, cooperation and action to halt the introduction and spread of undesirable plants.

### Native Gardening & Invasive Plants Guide Website

The National Wildlife Federation has developed a useful and interactive website:

http://www.enature.com/native invasive/natives.asp

#### Here you can:

Use the Native Plant Finder to get a list of recommended native gardening plants for your state. The lists contain only plants that are native to the state and that are (or have been) available in the nursery trade.

Check out the **Invasives**. For each state they have compiled a list of some of the plants that are best avoided in the garden because they can be weedy or invasive. The lists present a selection of plants for each state, rather than a comprehensive list of all the plants that might be undesirable in the state.

# In 2005 Alaska Weed Awareness Week will be July 10-17, 2005

# Alaska's Tallest Trees (as of 2003)

- Black Spruce 71 ft (Tanana River)
- Western Paper Birch 67 ft (Haines)
- Balsam Poplar- 60 ft (Kuskokwim River)
- White Spruce 112 ft (Tok River)
- Quaking Aspen 126 ft (Near Fairbanks)
- Cottonwood 132 ft (Haines)
- Western Hemlock- 150 ft (Admiralty Island)
- Stika Spruce 185 ft (Prince of Wales Is.)

# The Aspidaceae/Shield Fern Family

Presenter: Andy Anderson

There are nine members of the Aspidaceae/Shield Fern family in Alaska. Leaves are pinnately divided, sori are along the veins on the underside, and the indusium spreads from above or from one side.

Five of these ferns are in the *Polystichum* genus. Three have broad, pinnately divided fronds, are large plants, and grow in moist woodlands of Southeast Alaska. The remaining two have narrow, pinnate, sword-like fronds that arise from a stout base.

Polystichum lonchitis, the holly fern, is 8 to 10 inches tall, and has dark green, evergreen fronds. Individual pinnae are sharply pointed and finely serrated. This very attractive fern grows on rocky slopes from S.E. Alaska up into southern Southcentral Alaska.

Polystichum lonchitis

Its smaller relative, Polystichum aleuticum, is only 5 or 6 inches tall, rare and endangered, and only grows on Atka Island. This deciduous fern is



Polystichum aleuticum

closely related to an Asian species.

Dropteris dilatata, the spinulous wood fern, is found in moist woodlands and meadows from sea level up to about 2500 feet and exists all over Alaska except north of the Brooks Range. It is also widespread throughout the northern hemisphere. This clump-forming fern can be up to thirty inches tall. The triangular leaf blade is on a brown scaly stipe.



Dropteris dilatata



Dryopteris fragans, the fragrant shield fern is about ten inches high, has stiff, scaly stipes and many old, dried, curled up fronds still present. It is common throughout the northern hemisphere and is found on sunny, dry rocky slopes throughout much of Alaska except coastal areas and Southeast.

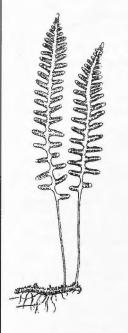
Gymnocarpium dryopteris, the oak fern, grows on creeping rhizomes and carpets woods throughout the state south of the Brooks Range. It also extends up into low alpine meadows and is found throught much of the northern hemisphere. The stipe is glabrous and about as long as the leaf blade which is made up of 3 sections (the lateral ones being almost as large as the terminal blade.

Gymnocarpium dryopteris
January-February 2005

# The Polypodiaceae/Licorice Fern Family Blechnaceae/Deerfern Family Presenter: Connie Kison

Both the Polypodiaceae/Licorice Fern and Blechnaceae/Deerfern families have sword-like fronds arising from a creeping rhizome.

Polypodiaceae/Licorice fern is a deciduous plant of shallow soil, creeping across rocks and up tree trunks. It has a brown scaly rhizome.



Polypodium vulgare ssp columbiana is a plant of interior Alaska. Fronds are about 8 inches tall, yellowish green and pinnae are obtuse (rounded on the end). Ssp. Occidentale can be found in coastal areas from SE Alaska up to and including the Aleutian chain. It is a bit taller, grayish-green and the leaf segments are more acute.

A thousand times sweeter than sugar, the licoriceflavored rhizome, or underground stem, of

polypody has been prized since ancient times, not so much for

Polypodium vulgare ssp occidentale

its sweetness as for its medicinal powers. From Greco-Roman antiquity physicians prescribed preparations derived from this lovely evergreen fern as a mild laxative, purgative, and remedy for coughs and chest complaints. Herbalists also recommended preparations of the dried and powdered rhizome for internal use to expel tapeworms and for external use as a liniment.

Because polypody is often found clinging to oak trees, herbalists believed it absorbed the vigor of that mighty tree, and as late as the 18th century, they would use only "polypody of the oak." Even the fern spores were thought to have supernatural powers: anyone who carried them, people said, became invisible. The name polypody comes from a Greek word meaning "many-footed," and alludes to

the appearance of the plant's branching rhizomes, which may be fancied to look like many feet.

The Blechnaceae/Deerfern family has only one specie in Alaska; Blechnum spicant. This very attractive evergreen fern is generally found in very moist coastal woodlands and meadows from SE Alaska to Kodiak. Deer Fern's fronds are dimorphic - having two distinct forms. The primary frond is sterile and arises from the rhizome in a circular pattern. The fertile frond arises from the middle of the circle and can be 12 to 24 inches tall. Individual segments are rounded. The fertile frond dries up by the



Blechnum spicant

end of summer, but the sterile fronds are evergreen.

Deer ferns are popular garden plants because they are very durable and low maintenance plants which can be used in deep shade. They are drought tolerate but do best if kept damp. They should be planted in a rich humus acid (pH 5.0-6.5) soil. They prefer full shade but will grow in most light conditions except full sun. Deer ferns are hardy to -20F.

Deer ferns may also be grown as house plants in a *cool* environment. They must be kept constantly and evenly moist.

Native Americans had great respect for the deer fern. It was used for emergency food. The children were told to look for it if they were lost, and eat the roots. The leaves can be eaten to prevent thirst or suppress hunger. The leaves can be boiled and the tea consumed as a general health aid and help with a variety of ailments.

### ALASKA NATIVE PLANT SOCIETY 2005 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: The plea for seeds for the exchange did not get into the last newsletter, but if you have gathered seeds that you'd like to donate, <u>please do</u>. 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.

#### Pre-germination Code

St - Stratify 6 weeks or more (see below)

S- Soak seeds fro 4-12 hrs

#### Germinaton Code

W - most seeds germinate best at 70°F (try a laundry room)

D - Dry

# ANPS SEED EXCHANGE ORDER FORM

Orders will be filled in the order that they are received

Cruei by plant in	umber appearing befo			
The price is \$0.50	per packet. For mail ord	ers, add \$0.50	0 for 1 -5 packets, or \$1.00 for 6 or m	ore.
Address				
City	State	Zip	Total enclosed	

5

No	Name	Common Name	Size	Flowers	owers Comments		Germinating Conditions	
1	Aconitum delphinifolium ssp. delphinifolium	Monkshood	3-4 ft	Dark blue	May take 2 years to germinate S of		W-M-L	
2	Aconitum maximum	Aleutian Monkshood	6 ft	Light blue, 2 in.		S or St	W-M-L	
3	Carex Gmelini		15-20			S or St	W-M	
4	Coptis aspleniifolia	Fernleaf Goldthread	6"	Tiny frilly	shade, moist areas		W-M	
5	Dodecatheon Jeffryyi	Jeffrey's Shooting Star	8"	Maroon, yellow, magenta/lavender	Wetland plant; may take 2 S or St years to germinate		M-W	
6	Epilobium luteum	Yellow Willow Herb	8"	Yellow	Likes wet areas		W-M-L	
7	Erigeron peregrinus	Coastal Fleabane	10-14"	Large light pink daisies	Meadow plant	St	W, then L-M	
8	Fritillaria camschatcensis	Chocolate Lily (yellow)	14-20"	Yellowish	May take 2 years to germinate S or St		W-M-L	
9	Geum calthifolium	Caltha Leaf Avens	8-10"	Large round leaves	Wetland plant	St and S	L-M	
10	Mimulus guttatus	Monkey Flower	12-14"	Yellow	Easy to grow; likes water will grow in drier conditions			
11	Minuartia arctica	Arctic Sandwort	3-4"	White	Very easy		W-L	
12	Polemonium acutiflorum	Tall Jacob's Ladder	24-30"	Blue	Easy, reseeds		W, then L-M	
13	Potentilla uniflora	One-flowered Cinquefoil	3-4"	Yellow	Rock garden or border		W, then L-M Easy	
14	Primula incana		4-5"	Small, lavender	Wetland plant		W-L-M	
15	Rhododendron Iapponicum	Lapland Rosebay	6-16"	Magenta, aromatic	Grows very slowly, acidic soil		W, then L-M Don't let mix dry	
16	Rumex transitorius	Dock			Very tall, bulky plant, best used to revegetate a wet area		No known recommendations	
17	Saxifraga bronchialis	Yellow-spotted Saxifrage	3-5"	Yellow, small	Easy, but slow		W, then L-M	
18	Saxifraga tricuspidata	Prickly Saxifrage	3-5"	Cream colored			W, then L-M Easy	
19	Silene acaulis	Moss Campion	1-2"	Pink, aromatic	Easy		W, then L-M	
20	Tiarella trifoliata	Lace Flower	10-12"	Tiny, white	Moist woodlands, acidic soil		W, then L-M	
21	Tofieldia glutinosa	Sticky Asphodel	8"	Cream-colored	Red seed heads	St or S	W-L-M	
22	Viola Langsdorffii	Alaskan violet	6-7"	Purple				

# **ALASKA NATIVE PLANT SOCIETY**

# **2003 FIELD TRIP PLANNING WORKSHEET**

Chairman: Verna Pratt E-m	an. <u>veinajwataskakraits.</u>	com, 1cl:	, FAX:
eader:			
Leader:			
Telephone:	FAX:	E-Mail:	
Field Trip to:			
Date:	Day of Week:	14 Marie 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Time Allotted:
Meeting Time:	Med	eting Place:	
			A CONTRACTOR OF THE CONTRACTOR
Reservations by (date):	100 mg	crist/i	
Level of Difficulty			Minimum Age:
			IO_MON_
		-	HASIS SAFE BEEN IN
24		24	
Special Instructions:			
	agid the	-10	
Windowski and			
		W.C.	

# Identifying Invasive Knotweeds

Tom Heutte, of the US Forest Service in Juneau, shared this information from a talk given by Peter Zika, U of W Herbarium at the Invasive Knotweed Symposium November 10, 2004 held at Snohomish PUD, Everett WA, where there were over 200 in attendance.

Many botanists separate the spp. P. cuspidatum, P. sachalinense, and P. bohemica into a separate genus Fallopia. Zika does not see the need for this.

Asian competition: Knotweeds are native to Hokkaido, Kuriles, Sakhalin, Kamchatka. Geographically the mirror image of southeast Alaska, the land of the aggressive canopy gap fillers includes Sasa bamboos and Petasites, giant coltsfoot, a ground herb that looks like garlic mustard, but with 1.5 m diameter leaves. Polygonums compete successfully with these genera.

History: P. cuspidatum arrived in England in 1825 and received a gold medal in 1847 from Society of Agriculture and Horticulture of Utrecht, Netherlands. By 1898 English horticultural literature called it "weedy" and advised to "plant with caution"

P. sachalinense discovered 1853 on Sakhalin Island in the Russian Far East, showed up in St. Petersburg gardens by 1864 and in English gardens by 1869. Used as cattle forage in 1893 and to stabilize riverbanks in Bengal in 1890s.

P. bohemica, a cross between P. cuspidatum and P. sachalinense was probably around England for the past 150 years but not recognized as a species, until it was described by Czech taxonomists in 1983. It is the Most common escapee in Washington state. The genus has not been very well understood by the botanical community. The news of this new species all around us for 150 years is new to a lot of people.

Germans recently extracted a fungicidal compound from P. bohemica

**Dispersal**: Generally by fragmenting stems and rhizomes, different spp. fragment with differing success and respond differently to control methods. Seeds when produced are 90% viable in simple wet filter paper germination tests.

How to differentiate the species:

Leaves: Look at leaves from the middle of the branch. Leaves at tip are highly variable and not diagnostic. *P. cuspidatum* leaves are as long as wide, with a flat base and abruptly tipped (cuspidate) Schalinense is blunt tipped. *P. bohemica* has elongated tip with gradual taper. *P. sachalinense* has deeply cordate leaf base, *P. cuspidatum* has a flat, cuneate, maybe a little bit of a wedge shape but never deeply notched. *P. bohemica* is variable.

#### Other species:

P. balschaniana, Chinese fleece vine is a woody vine with heart shaped leaves. P. convolulus is a vine showing up around Seattle. (Hulten describes it in Alaska) P. ploystachium has long Salix-like leaves, occurs in large colonies, similar habit to P. cuspidatum, sachalinense and bohemica.

Pubescence is the most diagnostic character. To view, bend leaf over finger and observe underside of leaf, particularly the midrib. Pubescence also present on branch veins and leaf surface. Hold leaf up to a backlight, such as the sky, with a 10x hand lens. Hairs are knocked off by abrasion especially after petal fall. P. sachalinense: hairs multicellular, kinky, long. P. cuspidatum: bumpy (scabrous) not really hairs but just bumps. P. bohemica: intermediate between P. cuspidatum and P. sachalinense, hairs stout-based, short, stiff. Use pubescence as the deciding factor if not in agreement with leaf characters.

Flowers: Plants are clones of one sex or another. P. bohemica in Washington almost uniformly male. P. cuspidatum virtually all female. Insects pollinate between clones. Flowers are imperfect, clones unisexual. P. baldschanianum and P. polystachium have perfect flowers and pollinate within clones.

Fruits: P. cuspidatum: common, P. bohemica: rare P. sachalinense: rare P. baldschanianum: always, P. polystachum: always

Inflorescence length (compared to leaf length) P. cuspidatum: as long as the leaf, P. sachalinense: shorter than leaf P. bohemica: intermediate (is this a surprise by now?)

Send specimens, well labelled, mounted, clean. to Peter Zika c/o WSU herbarium email zikap@aol.com

# ANPS MEMBER NEWS

#### **Election Results**

Elections were held in December and the recommendations of the nominating committee were unanimously accepted. The following members were elected to the Alaska Native Plant Society Board for 2005-2006:

President: Andy Anderson Vice-President: Ken Johnson Secretary: Cara Wardlaw-Bailey

Treasurer: Sue Jensen

### **Field Trips**

It is time to start planning for the summer field trip season. People need time to plan for their summer (especially lengthy, expensive, or holiday time trips). Let's plan a great summer. Verna will coordinate field trips this summer while Anjanette spends more time with her growing family.

Contact: Verna Pratt 7446 E. 20<sup>th</sup>, Anchorage, AK 99504 Tel: , Fax: E-mail:

verna@alaskakrafts.com

# **HELP WANTED - Monthly Meetings**

We are still looking for two **volunteers** for Plant Family presentations on March 7 and April 4. The families are Athyriaceae/Lady Fern (9 species) and the Southeast Alaska straglers – bracken, filmy fern and spleenwort. Although there are 3 families involved there are only 4 species total. Call Verna:

Marilyn is still looking for a mini-botany presenter for the March 7 meeting – topic of your choice (5-10 minutes).

Newsletter articles are always needed! Tell us what you're doing, what is interesting to you and what you'd like to see happening.

Contact Ginny Moore - E-mail: tgmoore@gci.net

### More On The Summer of '04

In the last newsletter we marveled at the wondrous summer Alaska experienced – at least for people – and shared some anecdotal observations about how our native plants handled it. We asked for more reader response. Keep them coming!

Anjanette Steer's comments are based on her observations in the Sheep Mountain area, Mile 113 Glenn Highway. "As most people noted everything was blooming a few weeks ahead. On the ANPS hike I led to Syncline Mountain (second weekend in July) we missed

the arnicas and the shooting stars by at least a week, and the slope was north facing. By the end of July, I was picking ripe blue berries. It was not a good blueberry crop and most of my berry picking efforts went to finding lowbush cranberries. The lowbush cranberry crop was average, many of the places that typically had high yield were sparse. Most likely because these areas were in full sun (usually a favorable situation for lowbush cranberries) on what was a Long Dry Summer. Of course the cranberries I found growing beneath alders, spruce and willows, were great, nice and plump; being shaded was a favorable growing condition this summer. The usual radiant fall colors around here were non-existent. Many of the trees and shrubs lost their leaves or they dried up and were brown."

# **Exciting Summer Field Trip!! Sand Point Alaska** - July 7-112005

Trip leaders: Jeanette Kent & Marilyn Barker

ANPS will sponsor a field trip this summer to to this remote Alaska fishing village on the Alaska Peninsula. We will spend 4 days at guests of the Kent's. Plan on hiking every day with the possibility of a boat trip to Unga Village.

This will be a great chance to explore the Aleutian tundra vegetation which should be in full bloom at that time. Dactylorhiza (Rose purple orchid) and Rhododendron will be a couple of the botanical highlights, as well as fields of Chocolate lilies and wild geranium.

One day will be devoted to a beach walk to survey coastal vegetation. In addition we will hike to fossil localities for wood and shells.

You will need to provide your own transportation to Sandpoint. The timing of the field trip coordinates with the Alaska ferry's (\$213 one way) arrival at Sand Point. The ferry departs Homer July 5 at 10:30 PM and arrives Sand Point July 7 at 10:15 PM. Timing does not permit a round trip on the ferry. Airfare to Sand Point from Anchorage is around \$800 round trip. Space is limited to 8 participants.

Contact Marilyn Barker for more information: afmhb@uaa.alaska.edu or

# Seed Starting

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.

Here are few helpful links to get you started:

- Starting Perennial Seeds by Canadian author Douglas Green. Great information, with easy-to-understand but thorough details. It is available on the web at: http://www.simplegiftsfarm.com/Articles/Artseed.html
- For the Advanced seed starter, Tom Clothier's terrific **Perennial Seed Germination Database** (http:tomclothier.hort.net) has an extensive listing of perennials along with the specific germination requirements to get your seeds off to a good start. It even includes many of the trickier native woodland plants that need stratification and other seed treatments. If you've ever sowed perennial seeds and nothing happened, here is the place to find your answers.

### 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, pleas indicate the category of membership you desire, fill in the form below and mail it with the appropriate remittance to:

		P.O. Box 14161 Anchorage, AK 9	13,			
STATUS  New  CATEGORY  Senior Citizen  Individual  Family  Organization	\$ 5 \$10 \$12 \$18 \$30					
Name				e <sub>E0</sub>		
Address					_	
City:			State	Zip	_	
Telephone: (Home)	(Work)	E-Mail:				
	Memb	ership is on a calend	ar year basis	WALE T		



### **MYSTERY PLANT**



This month's mystery plant grows amongst rocks in woodlands and on slopes. It can be seen in eastern Central Alaska and the Yukon Territory. The leaves are alternate on the 8-10 inch flowering stem. They are narrowly oblanceolate and have slightly serrated edges. The five blue petals are connected at the base, flare out and terminate in a sharp point. There are five epipetalous (on top of the petal) stamens. The five connected sepals are very narrow and shorter than the petals.

(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
Plant Family
Mini-Botany
Field Trips
Luise Woelflein
Verna Pratt
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



To Matt Carlson and Nic Church for presentations at the November and December meetings.

YOU MAKE IT HAPPEN!

Mystery Plant Answer Campanula aurita Yukon Bellflower

Campanulaceae Campanula Family

# UPCOMING PLANT EVENTS

(AND Check Out Our Field Trip Schedule Inside!)



January 3, Monday

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

January 10, Thursday (2nd Thursday)

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

January 10, Thursday (2nd Thursday)

Wildflower Garden Club, 10:00 a.m. Janet Brower:

Voice Mail:

January 17, Monday

Anchorage Master Gardener Association, "Growing your Own Tomatoes, with Mary Shier", plus Annual Elections; 7:00 pm, Cooperative Extension Service, 2221 E. Northern Lights,

January 25, 2005, Tuesday (4<sup>th</sup> Tuesday)

Alaska Orchid Society; Sally Karabelnikoff:

February 7, Monday (1st Monday)

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

Alaska Rock Garden Society meets 2<sup>nd</sup> or 3<sup>rd</sup> Saturdays, contact: Florene Carney: Nevaldine:

or Annie

Nevaldine:



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

DID YOU RENEW??