

# Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

MARCH 1999

## JOIN US AT OUR FEB MEETING

**Monday, March 1, 7:30 pm  
at the Campbell Creek Center  
off 68<sup>th</sup> and Lake Otis**

**Topic: Katmai Bear Habitat  
Presenter: Tom Smith**

Tom Smith will introduce us to Katmai plant community classification and mapping for bear habitat analysis. Dr. Smith did research in Katmai for the National Park Service, and presently works for the Biological Research Division of USGS studying bears.

### PLANT STUDIES

**Presenter: Diane Toebe**  
*Rhianthus* Genus of the  
Scrophulariaceae  
Figwort or Family

**Mini-Botany:**  
"Understanding Monocots"  
Diane Toebe

### *What's in a name?* On Common Names for Plants

by Joe Arnett

A while back there were a couple of articles in *Douglasia* [see "Scotch Broom (and other common names)" Vol.20, No. 3] that suggested standardizing common names for plants. The idea caught my attention; I'm against it. My objection against this notion of one "correct" common name is based on two very good arguments: first, it isn't necessary, and second, it would contribute to the loss of a lot of useful, pleasing, amusing, and just plain interesting names. I am a proponent of taxonomic diversity and the preservation of rare plant names. I'll stick my neck out even further and advocate that people make up new names if they feel so inclined.

Scientific names serve very well as the common language of the scientific community and anyone else who wants to be explicit about the identity of a plant. Giving scientific names is directed and bound by the well-defined rules of the International Code of Botanical Nomenclature, which also specifies procedures for changing them. As anyone who works with plant taxonomy knows, this changing of names, particularly familiar and euphonic favorites, is painful. But even the changes are based on rules, and rooted in the concepts of priority and greater understanding of phylogenetic relationships. There is, ideally, already one proper scientific name for every recognized taxonomic entity. We rely on and need that consistency.

But use of common names is another matter, and offers richer rewards than mere common terminology or compliance with clear rules. Common names are the stuff of cultural diversity and freedom of expression. They carry with them the history of human relationships with plants, information about uses and life cycles, smells, and other physical characteristics. Since the beginning, we've used the plants around us in lots of ways, and names can pass on information about these uses. You may know *Arctostaphylos uva-ursi* as "kinnikinnik".

*Continued on Page 2*

The Chippewa mother of a friend of mine called willow (*Salix* species) "kinnikinnik", and I've also seen the name referring to pacific dogwood (*Cornus nuttallii*). I was confused until I realized that this was a name given to plants that were smoked, including all of these. So not all taxonomies are phylogenetic. *A. Uva-ursi* is also called "bearberry", and that name reminds me of bear scat along Lake Chelan, loaded with these berries. It brings to mind a special place and the food habits of bears.

"Ironwood" is a *common* common name that refers to lots of different species that have hard wood. I heard Lummi people refer to ironwood as the material of choice for roasting sticks for salmon, and wondered what plant they meant until I learned that this was a name for *Holodiscus discolor*. This species is also called "arrow-wood" (for another use), and "oceanspray", based not on where it grows, but what it looks like.

Another name derived from usage is *Shepherdia canadensis*, variously called "buffalo-berry" (I don't know why), "scopolallie" ("olallie" is Chinook jargon for "berry"), "soap berry", and "Indian ice cream" (indigenous people whipped the berries into a froth for a treat). Other examples include "Indian cucumber", which we usually call "western starflower" (*Trientalis latifolia*), and "rice-root" or "Indian rice" for "chocolate lily" (*Fritillaria lanceolata* and *F. camschatcensis*, respectively). All of these names are valuable, and I am unwilling to give up any of them.

I see no reason to be bound to common names I don't like. For example, I resent calling anything a "false" something, especially species I happen to like, such as *Agoseris glauca* ("false" dandelion), or *Maianthemum dilatatum* ("false lily-of-the-valley), *Maianthemum* (formerly *Smilacina*) *racemosum* ("false" Solomon's seal) or *Veratrum viride* ("false" hellebore). I have started replacing the word "false" with "wild" in some cases; perhaps "western" would be as good, or new names entirely. And what about all those other great alternative common names, like "dirty-socks plant" (*Polygonum bistortoides*), or "mouse-on-a-stick", "wind flower", "Pasque flower", and "tow-head" (*Anemone occidentalis*), or "swamp lantern" (*Lysichiton americanus*).

Some plant names are connected to long-standing traditions. Take *Amelanchier ainifolia*, probably most often called "serviceberry" or "sarviceberry". I have heard that this name came from its use for two kinds of

services. In some rural communities, people who died in the winter could not be buried because the ground was frozen. Funerals were delayed until the ground thawed, when *Amelanchier* was in flower. A happier version refers to wedding services, when the mud had dried up and itinerant preachers could reach remote places to perform marriages. *Amelanchier* has other names, too: "Juneberry", for its early fruit, "shad-bush" for the fact that it flowered when the shad were running in the streams. I am particularly fond of the name "saskatoon", just because of the way it sounds. Indigenous people relied on the species for food and recognized several distinct "types", giving them different names. Some botanists suggest that these names are indicators of genetic groups warranting recognition in our own taxonomy.

Since good presentations often have three parts, I'll add a third argument to my case against standardized common names: it won't work. People will never agree. It could get ugly. Without the over-riding need for a common language, what would hold people back from revolting? As soon as some "proper" name was established, I, for one, would start using others I like better. We need the consistency and universality of scientific names to successfully communicate the identity of plants. But we also need the richness and diversity of common names, and all the flavor and texture they convey. A rose by any name certainly is sweet to smell, and pleasing to look at. But multiplicity of names can inform us about the people who have preceded us in sniffing, and looking, and more.

*Joe Arnett is Chapter Botanist for Washington Native Plant Society-Central Puget Sound.*

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#### **Resources about Northwest native plants:**

**Hortus West: A Western North America Native Plant Directory & Journal**; P.O. Box 2870, Wilsonville, OR 97070-2870 Tel: (800) 704-7927

Published twice annually (\$12/year). Contains articles of interest to horticulturists and restoration scientists, and a comprehensive listing of nurseries that carry native plants. <http://www.teleport.com/~phabitat>

#### **Gardening with Native Plants of the Pacific Northwest: An Illustrated Guide**

by Arthur R. Kruckeberg, 2nd Enlarged Revised ed., University of Washington Press, 1996, 288p. ISBN/Price: 0-295-97476-1 Trade Paper \$35.00

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

At the March meeting, Diane Thoebe will discuss two genera of the figwort family that have opposite leaves and are annuals. We have very few native annuals in Alaska due to our short flowering season.



The *Rhinanthus* genus has one species; *Rhinanthus minor*, which is commonly known as "Rattlebox". The small yellow tubular flowers protrude from the inflated urn-shaped calyx. The seeds that are formed inside rattle when they are dry. It grows in meadows and moist fields and although it reaches 15-18 inches tall it often goes unnoticed until the seed pods form. The long leaves are opposite and notched. Flowers are formed in the axis of the leaves.

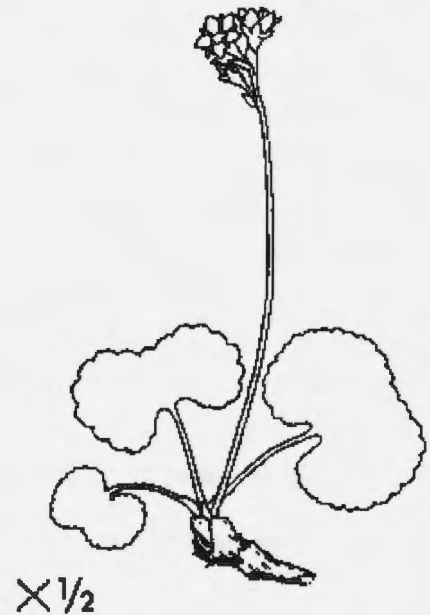
The second genus to be discussed is *Euphrasia*, commonly known as "eyebright". The common name is derived from its former use as an eyewash. There are two species in Alaska: *E. mollis*, and *E. disjunca*. *E. disjunca*, having glandular pubescence, is an unbranched plant with small rounded toothed leaves that grows 6-8 inches tall. *Euphrasia mollis* is a smaller plant with slightly larger leaves. Both plants grow in damp areas and sap nutrients from other plants. The very small irregular flowers are creamy white with violet stripes. These plants often are missed due to their size and late bloom.



**Mystery Plant**

By Verna Pratt

This plant grows in bogs and swamps in SE Alaska and Prince William Sound. Its large glabrous, petiolate, kidney shaped basal leaves have shallow wavy teeth along the margins. The white 5-petalled flowers are clustered at the ends of the 6-8 inch stems and have ruffled edges.



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**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

## The Chester Creek Watershed Research Project

At the February ANPS meeting, Anjanette Steer, from HDR Alaska, Inc., gave a presentation on the Chester Creek Watershed Research project. Anjanette has graciously provided a summary of the project for those of you who were unable to attend, or did attend and would like a printed summary of the project.

The Chester Creek watershed, located in Anchorage, Alaska, contains locally important wetlands. Beginning in the summer of 1997 and ending in September of 1998, research was conducted to determine the types of wetland plant communities present and their historic extent. Historic wetland Geographic Information Systems (GIS) coverages of the Chester Creek watershed for the years 1950, 1972, and 1982 were created. These wetland GIS coverages were compared to the wetland extent in 1997 to estimate wetland loss since 1950. Using the Alaska Vegetation Classification System (Vioreck et al., 1992) eighteen Level 3 community types were identified in the Chester Creek watershed.

Wetland loss in the Chester Creek Watershed has been substantial, with a net loss of 2,831 acres or 74% of the wetlands present in 1950. Two community types that suffered the greatest loss were the wet graminoid herbaceous and open low scrub community types. Wetland loss has affected the watershed's ability to provide basic habitat, hydrologic and flood water control functions.

Table 1. Level 3 and 4 Community Types (Vioreck et al, 1992) of the Chester Creek Watershed

Level 3: Community Type	Level 4: Scientific name of dominant species
closed needleleaf forest	black spruce ( <i>Picea mariana</i> )
open needleleaf forest	black spruce ( <i>P. Mariana</i> )
needleleaf woodland	black spruce ( <i>P. mariana</i> )
closed broadleaf forest	birch ( <i>Betula papyifera</i> )
closed broadleaf forest	balsam poplar ( <i>Populus balsamifera</i> )
open broadleaf forest	birch ( <i>Betula papyifera</i> )
open broadleaf forest	balsam poplar ( <i>Populus balsamifera</i> )
closed mixed forest	black spruce/paper birch
open mixed forest	spruce ( <i>P. glauca</i> or <i>P. mariana</i> )/paper birch
mixed woodland	spruce ( <i>P. glauca</i> or <i>P. mariana</i> )/paper birch
open dwarf tree scrub	black spruce ( <i>P. mariana</i> )
closed tall scrub	alder ( <i>Alnus tenuifolia</i> )/willow ( <i>Salix</i> spp.)
open tall scrub	alder ( <i>Alnus tenuifolia</i> )/willow ( <i>Salix</i> spp.)
open low scrub	shrub birch-ericaceous shrub bog ( <i>Betula</i> spp./ <i>Vaccinium</i> spp.)
open low scrub	ericaceous shrub bog ( <i>Vaccinium</i> spp./ <i>Ledum</i> spp.)
open low scrub	willow graminoid shrub bog ( <i>Salix</i> spp./ <i>Gramineae</i> spp.)
open low scrub	sweetgale graminoid bog ( <i>Myrica gale</i> / <i>Gramineae</i> spp.)
mesic graminoid herbaceous	bluejoint herb ( <i>Calamagrostis canadensis</i> )
wet graminoid herbaceous	subarctic lowland sedge meadow ( <i>Carex aquatilis</i> , <i>Carex</i> spp.)
wet graminoid herbaceous	fresh sedge marsh ( <i>Scirpus validus</i> )
wet graminoid herbaceous	halophytic herb wet meadow ( <i>Triglochin maritimum</i> , <i>Plantago maritima</i> )
fresh aquatic herbaceous	pond lily ( <i>Nuphar polysepalum</i> )
fresh aquatic herbaceous	burreed ( <i>Spaganium</i> spp.)
lacustrine- littoral and limnetic unconsolidated bottom*	n/a
palustrine unconsolidated bottom*	n/a
palustrine-aquatic bed*	n/a

\*Note: these community types are from Cowardin et al. (1979)

Table 2: Percent wetland area remaining for those community types that had an overall loss in acreage since 1950

Community type	1950 wetland area	1997 wetland area	Percent area remaining (1997)	Percent wetland area lost	Acres lost
Wet graminoid herbaceous	717 ac.	52 ac.	7%	93%	665 ac.
Open low scrub	2035 ac.	378 a.	19%	81%	1657 ac.
Open needleleaf forest	812 ac.	258 ac.	32%	68%	554 ac.
Closed mixed forest	202 ac.	75 ac.	37%	63%	127 ac.
<b>TOTAL ACRES LOST</b>					<b>3.003 ac.</b>

A complete copy of Anjanette Steer's thesis "Chester Creek Watershed Wetland Characterization and Wetland Loss" will be available for viewing on APU's homepage.

### ARGUMENTS FOR THE USE OF NATIVE PLANTS IN LANDSCAPE DESIGN

Some claims made for landscape performance of native plants are the following.

1) Energy efficiency: Because they are adapted to our soils, temperatures, and rainfall patterns they require less irrigation and fertilization.

This argument can be true if several factors hold, namely that the right native has been chosen for the site to be landscaped, and the original soil profile and hydrology at the site have not been altered. For example, a wetland species is not going to prosper if planted on dry, limestone fill. All too often, native topsoils have been removed and water flow patterns changed during development. If such is the case, an attempt to recreate the original composition of trees and shrubs may fail. Of course, any newly planted tree, whether native or exotic, will require regular irrigation until it becomes established.

2) Low maintenance: Native plants are resistant to pests and diseases in Alaska because they have evolved under constant exposure to these organisms.

Plants do not evolve in isolation. The resistance to pests and diseases can sometimes be as much a factor of interactions between the plants that make up a vegetational association as the individual genetic resources of any one particular species. Native plants may not demonstrate any "advantages" in this respect when planted in disturbed sites or mixed with species not usually associated with them. And certainly, as with any new planting, regular care during establishment is necessary.

3) Ecological educational factor: The use of native trees in landscapes preserves [endangered] natural resources of the state. This argument is perhaps the best one for wider use of native plants. Alaska's continued rise in population does place enormous pressures on our native vegetation. The educational benefits of native plant landscapes, particularly in teaching new residents about our state's natural bounty, have great value.

## FROM WHAT WE GATHER

### FIELD TRIPS

It is field trip planning time again. Diane Toebe is our chairman again this year, so give her a call or send in your form (next page) or bring it to the next meeting. Let's make this a great field trip year.

### THE ALASKA RARE PLANT FORUM

The Alaska Rare Plant Forum will hold its annual meeting on April 8-9 in Anchorage at the office of the Chugach National Forest in the Calais II Building at 3301 'C' Street, Suite 300. Anyone interested in rare plants of northern regions is invited to attend or to give a presentation.

If you would like to give a presentation, please send your name, a brief description of your presentation and the presentation's approximate length to one of the addresses below. We also would appreciate hearing about any topics that you would like to see added to the agenda. The agenda will be publicized in mid-March. Exciting botanical work is taking part in our part of the world, so we look forward to a particularly interesting meeting of the Alaska Rare Plant Forum.

Mary Stensvold	John DeLapp
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John's e-mail: <a href="mailto:jdelapp/r10_chugach@fs.fed.us">jdelapp/r10_chugach@fs.fed.us</a>	

### RESERVED FOR MEMBERS ONLY!

Subscribe to *Wild Garden* today, at a special members-only discount rate. *Wild Garden* is the first national gardening magazine to demystify the process of using native plants to create beautiful landscapes and provide bird and wildlife habitat and support the ecosystem. You can find current issues at Carr's, Borders, and other larger magazine stands. *Wild Garden* is published quarterly and the regular subscription rate is \$23.95 for 6 quarterly issues. Through the Alaska Native Plant Society you can order today for only \$12.50 for a 1-year (4 quarters) subscription. Call 1-877-NATIVE-2 and tell them you're a member of the Alaska Native Plant Society.

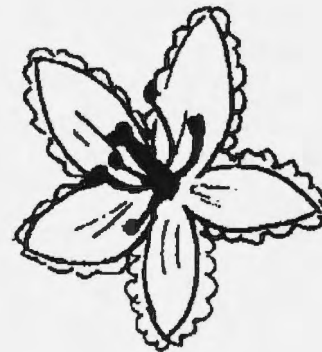
### CLINTON SIGNS INVASIVE SPECIES ORDER

One of the things President Clinton did while he was trying to ignore impeachment hearings in Congress was to sign an executive order coordinating a federal strategy to address the growing environmental and economic threat of invasive species, plants and animals that are not native to the United States.

The order, signed February 3<sup>rd</sup>, created an *Invasive Species Council* chaired by Secretaries Glickman (Agriculture), Babbitt (Interior), and Daley (Commerce) to work with states, tribes, scientists, universities, environmental groups, farm organizations, shipping interests and the business community. Clinton's budget for fiscal year 2000, released last month, proposes an increase of more than \$28.8 million in funding to combat invasive species as well as accelerating research on habitat restoration. The order directs federal agencies to use their authority to prevent the introduction of invasive species and to restore native species. It directs the new interagency Council to come up with a detailed invasive species management plan within 18 months.

### MYSTERY PLANT: ANSWER

*Fauria Crista-galli* (often called **Deer Cabbage** as the animals savor their succulent leaves)  
Gentianaceae/Gentian Family



**ALASKA NATIVE PLANT SOCIETY**

**SPRING & SUMMER 1999: FIELD TRIP PLANNING WORKSHEET**

**Field Trip to:** \_\_\_\_\_

**Leader(s):** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Day of Week:** \_\_\_\_\_ **Time Allotted:** \_\_\_\_\_

**Meeting Time:** \_\_\_\_\_ **Meeting Place:** \_\_\_\_\_

\_\_\_\_\_  
**Driving Distance/Car Pooling, etc.** \_\_\_\_\_

\_\_\_\_\_  
**Reservations by:** \_\_\_\_\_

**Level of Difficulty:** \_\_\_\_\_ **Minimum Age:** \_\_\_\_\_

**Description of trip:** \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

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**Special instructions/Items to Bring:** \_\_\_\_\_

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\_\_\_\_\_

**Please hand in completed forms to the Field Trip Chair at Anchorage Chapter meetings, or mail to the ANPS, P.O. Box P.O. Box 141613, Anchorage, AK 99514 Field trip schedules will be sent out to members in the first week of May.**

## 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  
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 Family \$18  
 Organization \$30

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Telephone: (Home) \_\_\_\_\_ (Work) \_\_\_\_\_

Membership is on a calendar year basis.

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IF the date on your mailing label is circled in RED, your dues have expired and this is your last newsletter.

Alaska Native Plant Society