

Borealis

the newsletter of the



PO Box 141613 Anchorage, Alaska

APRIL 2000

Join us at our April meeting!

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

**Topic: George W. Steller's
Plant Collecting in Alaska, 1741**

Speaker: Jack Frost

Jack Frost, former professor at AMU (now APU), historian and Steller specialist, will present a program on Steller's plant collecting in Alaska. The program will include what plants he collected, where they were collected and under what types of circumstances. In addition, Mr. Frost will include biographical and historical background of Steller's work in Alaska.

Plant Family Study:

Smelowskia and Thlaspi

BRASSICACEAE/Mustard Family

Speaker: Frank Pratt

Willow Soup

Spring Tonic For your Garden

The painkilling properties of willows have been utilized by humans for centuries wherever the genus *Salix* occurs. North American Indians and pioneers, for example chewed on willow bark to relieve pain. But did you know that willow's properties are beneficial to other plants as well as to people? The topic came up at a hosta society meeting and several members shared their gardening experiences.

Clair Peolowski of East Nassau, NY reported that her mother and German-born grandfather were enthusiastic and thrifty gardeners who used cuttings for an ordinary weeping willow to make what they called willow soup. They used only the new growth, chopping and mashing it up, filling a pail with the willow bits, and adding water to cover. After a few days, they used the resulting "soup" as a propagation aid. Cuttings of roses, shrubs, and fruit trees struck more quickly if watered in with this willow soup. So did the geranium cuttings they rooted for their window boxes. If a particular plant was doing poorly and seemed weak, a willow cutting was temporarily placed next to it in the soil and it would often revive.

Claire's grandfather had learned much of what he knew about gardening before he left Germany, and these tricks with willow were commonly practiced in that country.

Hank and Jane Unger-Millhorn from Ohio regularly make batches of willow soup, which they call willow tea. Hank has an endless supply of what the locals call "that durned ole branche willer" and he tosses cuttings into buckets, adds water and brews in the same manners as "sun tea". For his purposes he does not insist on new growth, but uses any willow branch less than 1/4" in

(continued on page 3)

Smelowskia and *Thlaspi*

BRASSICACEAE/Mustard Family

At the April meeting Frank Pratt will lead the plant study of *Smelowskia* and *Thlaspi* genera.



Thlaspi has only one native species in Alaska and is very rare. *Thlaspi arcticum* is a small plant found near the Arctic Ocean. The small, smooth, entire, spatulate and silvery leaves are in a tight cluster. The flower stalk is short with white (allysium-like) flowers. The club-shaped silicles are on long pedicels.

Thlaspi arvense is an introduced weed, commonly called Pennycress. It is located more in southcentral and southeastern Alaska. Stem leaves are sagittate, petals are white, and silicles are oblong.



Thlaspi arvens



Smelowskias on the other hand have silicles on long pedicels. They also have lobed hairy leaves. The young plants look much like a hairy sempervivum ("Hens and chickens").



These attractive young plants make remarkable changes as they bloom and mature. As the flowering stem elongates, so do the leaves, giving

Smelowskia borealis

it a floppy unkempt look. There are three species in Alaska.

The most common is *S. borealis* which has four varieties. *S. borealis* can be seen on scree slopes in the Alaska and Brooks ranges.

Differences between the species are most evident in the shape of the silicles. *S. borealis* has long, tapered papery silicles that are often arched or twisted. Flowers are small and usually lavender.

S. Calycina has a branched caudex, cream colored flowers and oblong silicles. There are three varieties. They are found on gravelly hillsides, mostly in coastal areas near the Arctic Ocean.



Smelowskia calycina integrifolia



S. Pyriformis is very rare and differs in having pear-shaped silicles and pinnately divided basal leaves. Flowers are usually white or cream. This plant is only found in the Alaska Range on gravelly scree slopes.

Smelowskia pyriformis

All drawings are from *Flora of Alaska and Neighboring Territories*, by Eric Hulten; 1968

Willow Soup (Continued from page 1)

Diameter. The water takes on an amber color over time as the shoots soak and begin to root. Hank keeps three to five buckets of this tea going all season and uses it as a foliar spray on azaleas and rhododendrons to improve the color and sunfastness of the blooms ("better than Miracid").

He also spritzes hosta and daylily seedlings with it every two weeks. He uses it as a soak for new bareroot plants, especially if they look a little tired after their trip in that big brown truck ("even known to revive plants from Michigan Bulb Co.!") And he too notes that cuttings watered with this tea root faster. It seems to be fairly common knowledge that an aspirin (acetylsalicylic acid, the artificial equivalent of willow) dissolved in a vase with cut flowers prolongs their life in the house. Adding a little "willow soup" or a couple of willow twigs to the water in the vase would do the same thing – in fact, Hank thinks the willow works a bit better. Hosta blooms can

be spectacular in arrangements, but they do not last particularly well when cut. I intend to try some willow twigs or soup with an assortment of cut flowers this year.

Experts seem to differ on how many species of willow there are – somewhere between 80 and 150, perhaps. Cuttings from any available willow can be used as a plant tonic, including pussy willow (*Salix discolor*), shining willow (*S. lucida*) – both American natives – or any of the European or Asian willows. There is a striking and decorative form of the common weeping willow (*S. babylonica*) aptly called the Ram's Horn Willow, which needs regular pruning to keep it small and shapely. I can't think of a better use for the prunings than to make willow soup!

Reprinted from the *Indiana Native Plant and Wildflower Society News*, Autumn 1998

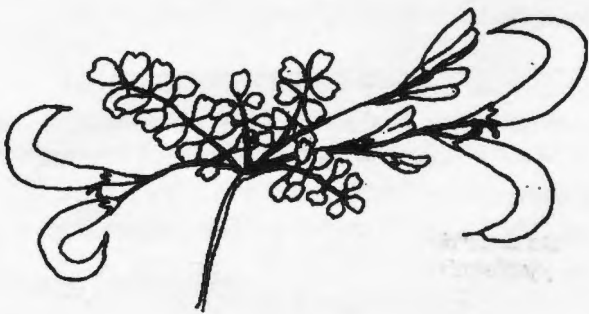
Bobby Diehl is a member of both INPAWS and the Southern Indiana Daffodil, Hosta, Daylily and Iris Society.

MYSTERY PLANT

This weak-stemmed plant is usually found on gravelly or sandy streams and river bars from about 1000-3000 feet elevation.

Flowers are small, pale pink to white, and grouped in twos or threes at the end of a weak stem (about 2"). Leaflets are small and rounded, but indented at the tip and slightly bluish-green.

This plant is unmistakable in seed. Note the curved red pod. Answer is on Page 7.



SPRING BOTANICAL CLASSES AT UAA

Are you still trying to figure out "What plant is that?" It is not too late to register for two botany classes offered by UAA's Biology Department this spring. Both courses are 1 credit and cost \$77.

"Local Flora" - Biology 075 is taught by Verna Pratt May 9-June 3. It has 2 sections on Tuesdays: 9:30-1:00 AM OR 6:00-9:30 PM in SCI 248. Registration for this course is for SPRING semester. The course has a mix of indoor laboratory sections, slide shows and field trips. Emphasis is on identification and use of the native flora.

"Recreational Botany" –although the catalog lists it quite boringly as "Biota of Alaska: Selected Topics. It meets Tuesday and Thursday evenings May 23-June 13 and all day Saturday June 10. All classes are in the field. Emphasis is on identification and use of the native flora. Registration for this course is for SUMMER semester.

For more information, contact the UAA Registration Office: 786-1480.

Where Have All The Flowers Gone

By F.M. Oxley, Senior Botanist, Lady Bird Johnson Wildlife Center

Reprinted from *Native Plants*, Quarterly Publication of the Lady Bird Johnson Wildlife Center, Winter 2000

Do you remember the song "Where Have All the Flowers Gone?" It was a kind of anthem for young people many years ago. One of the verses asked the question, "Where have all the flowers gone? Long time passing." At the time the question referred to futility of war and the loss of lives associated with it. Today, that same question might be asked in reference to our vanishing native flora.

The Big Picture

We share the earth with at least 5 million, some estimates say as many as 30 million, different species. Imagine that. Humans are just one of 30 million species. Biologists estimate that more than 500,000 of these species are plants.

Plants form the very foundation of all life on earth. Think about that for a minute. All organisms, from bacteria and fungi to reptiles and mammals, including humans, rely on plants for their survival. It stands to reason then that maintaining plant diversity and ecosystem health is incredibly important, and the vitality of the natural world around us is intricately connected to our health.

What's at stake?

In a previous issue of *Native Plants*, Robert Breunig wrote that recent assessments of the status of native plants in North America and elsewhere in the world emphasize the need for heightened awareness and action. In April 1998, a report issued by the International Union for the Conservation of Nature (IUCN) revealed that 12.5 percent of the world's plant species are at risk of extinction. In hard numbers, this means that more than 62,000 species of the world's plants could disappear from the face of the earth in our lifetime. Closer to home, conservative estimates of the 18,000 plant species native to the United States indicate that more than 4,669 (29 percent) species are threatened with extinction. As many as 700 of these species may disappear within the next ten years. Ninety percent of these "at risk" species are endemic to, or grow only, in the United States, representing the potential loss of a significant portion of America's and the world's natural heritage.

What's causing these losses?

Populations of many (if not all) native plants are being lost at an increasingly alarming rate. The primary cause

is an ever expanding human population and the resulting impact this has on our natural resources. Increased development, agriculture, ranching, and road construction all contribute to the loss of habitat normally occupied by native plant species.

Why should we care?

As a friend of mine once said when I quoted these numbers to her, "Do the math, Flo! Even if we do lose 5,000 species, we'll still have 13,000 left!" Well, that's the math all right! However, consider this: Once a species becomes extinct, it is lost forever. We would literally have to go back to the very beginning of time to have any chance of getting that species back. Not much chance of that happening. And, what a poorer world it would be without those 5,000 species.

What can we do about it?

In the coming year, the Lady Bird Johnston Wildflower Center (in Texas) will begin building a plant conservation program to address the issues facing threatened and endangered species of Texas and the Southwest. One of the first steps toward achieving this goal will be to create a seed banking program for the long-term storage of genetically represented samples of at-risk species. The stored seeds represent a "security blanket" should a species or population become so reduced or, in a worse case scenario, extinct. Should that happen, the seeds could potentially be germinated and used to reintroduce individuals into a devastated population or reestablish an otherwise extinct species. Stored seed can also be used for germination and propagation studies, as well as to increase the size of surviving populations. Therefore, it is vital that appropriate collections of stored seed be maintained.

Seed banking is just one step toward maintaining plant diversity and ecosystem health. As the Wildflower Center's plant conservation program grows and matures, other techniques and tools will be used to work toward these goals. Together with the Center's landscape restoration program, we will build an integrated approach that uses seed banking, tissue culture, habitat restoration, and species re-introduction to reduce the loss of our threatened and endangered native flora.

And, maybe future generations won't have to ask "Where have all the flowers gone?"



ALASKA NATIVE PLANT SOCIETY

SPRING & SUMMER 2000: 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: _____

Special instructions/Items to Bring: _____

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.

Celebrating Wildflowers

This popular annual event begins with an opening talk by Verna Pratt on Thursday, June 8, followed by numerous neighborhood walks on Friday evening, and then at least one walk per evening from Saturday, June 10 – Saturday June 17. So we're going to need a lot of volunteers to help out. Sign up below. The schedule will be published in the newspaper so we need you to be as specific as possible in describing the meeting locations and times. **Your name and telephone number will not be published in the newspaper.**

Friday, June 9 (Numerous Neighborhood Walks)

Name: _____ Telephone # _____

Where: _____ Time: _____

Meeting Place (Be specific): _____

Comments: (easy, difficult, wet, special dress or shoes, etc.)

Other Walks: Saturday, June 10 – Saturday June 17

Date: _____ Time: _____

Name: _____ Telephone # _____

Where: _____

Meeting Place (Be specific): _____

Comments: (easy, difficult, wet, special dress or shoes, etc.)

Date: _____ Time: _____

Name: _____ Telephone # _____

Where: _____

Meeting Place (Be specific): _____

Comments: (easy, difficult, wet, special dress or shoes, etc.)

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.

ANPS NEEDS YOU!



FIELD TRIPS

It is field trip planning time again. Fill out the worksheet in this month's newsletter and send it in or bring it to the next meeting. Diane Toebe is our chairman again this year, so give her a call _____ if you have questions. Let's make this another great field trip year.

GARDEN WEEK – April 15: Sears Mall

10 AM-7PM We have two people for each time slot but would like backups.

Call Verna:

NATIVE PLANT APPRECIATION DAY

Sunday April 30, Campbell Creek Science Center 12 Noon- 4 PM

We need help to man our table:

Times: 12:30-2:30 or 2:30-4:00

Call Verna:

ALASKA NATIVE PLANT SOCIETY State and Anchorage Chapter Officers

President Marilyn Barker
 Vice President Frank Pratt
 Secretary Beth Koltun
 Treasurer Sue Jensen

Anchorage Chapter Program Coordinators

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

Newsletter ("Borealis")

Editor Ginny Moore
 Circulation Martha Hatch

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

ANNOUNCEMENTS

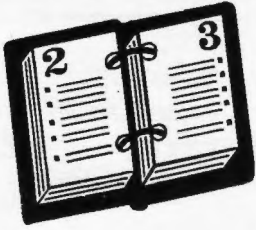
The Alaska Rare Plant Forum will be held in Fairbanks April 6 and 7 this spring, in the main conference room at the Bureau of Land Management building near the corner of University Avenue and Airport Road. Featured speakers will be Amy Denten, the newly hired Herbarium Curator, and 'Jack' Frost, retired historian from UAA. Amy will talk about her work in Tibet, and Jack will talk about George Stellar's trip with Vitus Bering.

Contacts: Carolyn Parker University of Alaska Museum Herbarium 907 Yukon Drive Fairbanks, AK 99775-6960 ; e-mail: fnclp1@uaf.edu) and Janet Jorgenson, USFSW, 101 12th Avenue, Rm. 236, Fairbanks, AK 99709; _____ ; e-mail: janet_jorgenson@mail.fws.gov mailing list.

MYSTERY PLANT ANSWER

Pea/Fabaceae Family

Astragalus Nuttoidensis



UPCOMING PLANTS & NATURE EVENTS

- April 3, 7:30 PM – **ANPS April monthly meeting** Campbell Creek Science Center
- April 6-7 – **Alaska Rare Plant Forum**, Fairbanks (see page for more details)
- April 11, 10:00 AM – **Wildflower Garden Club** monthly meeting (call for more info)
- April 15, 10 AM – 7 PM – **Garden Week**, Sears Mall (Call Verna to Volunteer)
- April 30, 12 Noon to 4 PM – **Native Plant Appreciation Day**, Campbell Creek Science Center
- April 27, 7:30 PM – **Alaska Herb Study Group**, Carleton Trust Bldg, 2221 E. Northern Lights
- May 3, 7:30 PM – **ANPS May monthly meeting**, Campbell Creek Science Center
- May 4-6 **Alaska Master Gardener Conference**, Juneau. Contact:
- May 17-19 - **5th Biennial Urban Forestry Conference for the Pacific Northwest**, Anchorage, Holiday Inn. Contact Alaska Urban & Community Forestry office: or e-mail: info@pnwisa.org
- June 8-17 – **Celebrating Wildflowers** – Thursday evening: Opening Talk, Verna Pratt; Neighborhood walks Friday June 9, and Saturday June 10 through Saturday June 17 (Please sign up on the enclosed worksheet to lead a walk during this week!)

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



AUTO**3-DIGIT 995