

Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

MAY 1997

JOIN US AT OUR MAY MEETING

Monday, May 5th 7:30 p.m.
at the Campbell Creek Center
off 68th and Lake Otis
(See Map on Back)

MAIN PROGRAM

"The Role of Molecular Systematics For The Conservation of Rare Plants"

Do you even know what molecular systematics is? Here's your chance to learn about some of the latest scientific work going on at the herbarium in Fairbanks.

Dr. Conti will give us a look at recent advances in systematics, including the use of molecular data and cladistic analysis, and how these new methods are being used to study the genetic diversity and phylogenetic relationships of rare plants, including a few examples of Alaskan rare species that would be good candidates study.

**Presented by Dr. Elena Conti, Curator
UAF Herbarium, Fairbanks**

PLANT RESCUE

An ambitious effort is being mounted by members of the Alaska Native Plant Society to rescue native plants before planned construction work this year at McHugh Creek State Wayside on the Seward Highway. Actual construction work had been postponed until fall so the effort will not be as frantic as previously believed. Volunteers will dig plants and line them in flats to be stored at the Alaska Botanical Garden until permanent locations are made for them.

Thanks to all who volunteered and, of course, more are welcome, too. If you are not already on the list call Verna Pratt at _____ or just show up. If transportation or carpooling is desired call in advance.

Volunteers will meet at the lower parking lot next to the highway. Bring proper clothing, gloves, diggers, shovels, old plant trays, wooden boxes, excess plant pots, lunch or snacks, drinks, and any other helpful items (plastic, burlap, cord, etc.) If you have a truck or another vehicle that can help transport plants from McHugh to the Career Center or to the Botanical Garden, it would be greatly appreciated, also.

Following is a list of scheduled dates and times. Come whenever you can. Additional dates may be needed - if so they will be in July or August and we will call anyone who has expressed an interest in helping.

Date	Time
Thursday, May 1	10 am - 4 pm
Saturday, May 10	10 am - 4 pm
Thursday, May 15	5:30 pm - 9:30 pm
Sunday, May 18	1:00 pm - 5:00 pm
Saturday, May 24	10:00 am - 4:00 pm

MYSTERY PLANT

by Verna Pratt

The mystery plant for this month is a weed - a flower where it is not wanted. It has been introduced to Alaska. It is an annual and appears in wastelands, farmlands, and sometimes our own back yards. The height is very variable, depending on habitat enrichment. Stems are stiff, coarse and have stiff hairs. Leaves are opposite, ovate, and hairy. The flowers, though small, are exquisite. They can be pink, white or violet, and are clustered together in the axis of the leaves.



Alaska Native Plant Society State Officers

President	Marilyn Barker
Vice President	Ginny Moran
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Anchorage Chapter Program Coordinators

Main Program	Ginny Moran
Plant Family	Verna Pratt
Mini-Botany	Verna Pratt
Field Trips	Kathy Burke

Newsletter ("Borealis")

Editor	Ginny Moore
Circulation	Martha Hatch

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Anchorage, AK 99516. Phone or FAX:

Alaska Native Plant Society HAPPENINGS

FIRST SPRING FIELD TRIP!!

McHugh Creek Park: Sunday April 27

Meet at the northeast corner of the Sears Parking Lot on the corner of Northern Lights and Seward Highway at 1 PM. Regroup at McHugh Creek Park at about 1:20. If the gate is open drive up to the first parking lot on the hill. We will follow the Old Johnson Trail south and experience spring and look for the first flowers. The first part of the trail is easy, but places may be wet. Hardy souls may want to proceed up the steeper trail. Allow 2-3 hours.

FIELD TRIP SCHEDULE ANNOUNCED

Kathy Burke has put together an enticing list of field trips for the coming season. The list will be handed out at the May meeting and mailed to those who aren't there to pick it up. If you don't get your list call Cathy at . Thank you to the many people who volunteered to lead these trips. Everyone will enjoy them, and they will provide educational entertainment for our summer visitors.

THANK YOU.....

To **Susan Klein**, for putting in a pitch for ANPS at the conclusion of Garden Week, at the Cooperative Extension Service, on April 12th.

To all who volunteered to help at the Sear's Mall display on Saturday April 26. This display has proven to be of great interest to folks shopping in the mall each year, even though it is a busy day everywhere, and spring is in the air.

ANSWER TO MYSTERY PLANT:

Mint Family: Lamiales (formerly Labiales)
Galeopsis bifida
Hemp Nettle

ANSWER TO PUN FUN:

1. Shooting Star (Dodecatheon)
2. Siberian phlox (Phlox)

PLANT FAMILY STUDY

Potentilla vs. Geum

To close out our seasonal study of those often confusing five-petaled yellow flowers, at the May meeting Verna Pratt will compare *Potentilla* and *Geum*.

Both of these genera are in the Rose/Rosacea family, and are very closely related. Botanically speaking they are separated by a persistent style on the fruit of the *Geums* and a deciduous style on the fruit of the *Potentillas*.

Of course, it is in fruit, not flower, when this can be easily seen, so it is those five yellow petals that attract your attention. As was noted last month, most *Potentilla* petals are indented and they look soft and velvet-like. *Geum* flowers have neither characteristic. *Geum macrophyllum* might, however, be confused with some of the more weedy *Potentillas*. Its leaves are much larger and have long coarse hairs. You might even see it now in wooded areas, as its leaves are often persistent throughout the winter. Its seed head might also be mistaken for a weedy buttercup/*Ranunculus*, but the obvious stipule, very hairy leaves, habitat, and large lyrate leaves dispel that theory. Come to the meeting and view a few of these confusing species.

PLANT PUN FUN

Here is a wacky definition and you have to figure out what common name of an Alaskan plant it refers to. The answers will be found elsewhere in this issue. To begin with, the names come from available wildflower guides, but as an example, here is one from the tree guide:

Definition: Mt. Redoubt erupts.

Answer: Mountain Ash

Here are the first two definitions:

1. John Wayne flower
2. Russian sheep

MEMBER SPOTLIGHT

Dr. Eleni Conti, our guest speaker at the May meeting, is the new curator of the herbarium at the University of Alaska in Fairbanks. She is new to Alaska as well. But she is not new to the field of botany. And she has global experience.

She obtained her bachelor's degree at the University of Bologna in Italy, with a thesis on the "Characterization of proteins in *Cateanea sativa* and other Fagaceae". From there she moved on to Florence for training at the herbarium there. She began her Ph.D studies at the University of Wisconsin-Madison, where her thesis topic was "Phylogenetic relationships of Onagraceae and Myrtales: Evidence from rbcL sequence data". She continued her studies with a post-doc at Washington State University, working on the phylogeny and life-history evolution of saxifrages. Her second post-doc was at Harvard university, where she concluded a part of her previous work in Myrtales and started a new project on the evolution of floral morphology in a small crucifer.

Already at UAF she has started a new Plant Molecular Systematics lab, which is up and running this month. Her current interests include a study of the phylogeny and evolution of breeding systems in the genus *Primula* and a continuation of her studies on the South-African families of Myrtales.

She is also generating ideas for studies of genetic diversity and molecular systematics of Alaskan rare species. Candidates for such studies could include *Smelowskia* and *Oxytropis*, but she is soliciting suggestions from others who could provide their expertise and support in the field.

WELCOMING DINNER FOR DR CONTI

To welcome Dr. Elena Conti to the Alaska Native Plant Society, we will hold a "Cinco-deMayo (the Thai food version) Welcoming Dinner" at the home of Dr. Marilyn Barker on May 5th. Dinner will be begin at 5:30 before the May meeting. Various Thai dishes will be purchased for the feast. The cost will be \$10/person and it will be collected during the dinner. Space is limited to 15 AKNPS members. To sign up, please call Program Chair, Virginia Moran by May 3, so she can order enough food. Her number is 243-3698 or e-mail her at atvsm@uaa.alaska.edu. It is sure to be a lovely time! Buenos dias!!

Alaska Rare Plant Forum: The Report

Alan Batten and Carolyn Parker, botanists at the University of Alaska Herbarium in Fairbanks, brought the following report to their colleagues.

"The meeting of the Alaska Rare plant Forum in Anchorage on April 2-3 was an enjoyable opportunity to meet with other Alaskan and Yukon botanists and to catch up on what everyone is doing. Alan Batten presented results from the upland sites of last summer's fieldwork for BLM in the Yukon-Tanana Uplands. Carolyn Parker summarized the high points of the whole 3-year inventory of the Yukon-Tanana Uplands alpine floristic survey and also presented her work with Yukon-Charley National Park in the Ogilvie Mountains and along the Yukon River. These combined surveys have resulted in a new species for the state flora, *Draba ogilviensis*, and several new localities for species listed 'Species of Concern' by USFWS and/or being tracked by the Alaska Natural Heritage Program.

Mike Emers of the USFWS reported on the Porcupine River trip that he and David and Barbara Murray took last June, investigating the flora of the dry south-facing bluffs along the river. The flora of these bluffs has some striking differences from similar bluffs along the Yukon River. Two new species, a fleabane (*Erigeron*) and a hepatic (*Asterella*) will eventually be described from this area.

Bruce Bennett of the Canadian Wildlife Service talked about issues affecting rare plants in the Yukon, and talked about developing a list of rare plants for the Yukon. Donna DiFolco of NPS reported on populations of *Aster yukonensis* that have been located in the Brooks Range over the last couple of years.

Randy Meyers of BLM in Kotzebue summarized the status of *Oxytropis arctica* var. *barnebyana* and reported on her fieldwork along the Squirrel River in northwest Alaska.

Rob DeVelice and Bev Shulz of the US Forest Service talked about the ecosystem mapping project that the Forest Service is working on.

Connie Hubbard of the Forest Service talked about its inventory of *Arnica norbergii*, a taxonomic entity that may or may not be distinct from *A. lessingii*, that occurs along the right of way of the road being built from Portage to Whittier.

Steve Talbot, of USFWS, gave an account of the work he is doing with CAFF (Conservation of Arctic Flora and Fauna). CAFF is an international group trying to come up with a list of Arctic rare species. Much of their effort has to do with reconciling different taxonomies as well as balancing different ideas of "arctic" espoused by different nations. Dave Murray has also been involved in this work.

Rob gave us the latest list from the Alaska Natural Heritage Program of Alaskan species ranked S3 and rarer. He also reported on fieldwork with Dave Murray on the Seward Peninsula, and described several rare taxa known from that area, including a new species for Alaska, *Douglasia beringensis*.

OFF THE BOOK SHELF

Guide to Flowering Plant Families

by Wendy B. Zomlefer
1994 University of North Carolina Press
ISBN 0-8078-4470-5

Wendy Zomlefer is a taxonomist and a professional botanical illustrator, which is obvious from the 158 full-page plates of excellent botanical drawings. This 9"x12", one inch thick book has 430 pages of concise, well organized, detailed descriptions of 130 families (both temperate and tropical) common to the U.S. and Canada. This book would be a great taxonomy guide for serious individuals and taxonomy students. It is a superb publication and a great bargain at \$24.95 (soft cover) or \$49.95 (hard cover). For those of you how remember our April Fool's joke a few years ago: THIS IS NOT A JOKE. It really is that cheap. Borders showed an interest in carrying it, so ask them about it.

FROM WHAT WE GATHER

CELEBRATING HERBS: A Full-Day Workshop - August 16, 1997 - Meier Lake, Wasilla

The 4th Annual statewide conference will take an herbal "garden tour" focusing on healthful herbs, culinary herbs, aromatic herbs, companion herbs, and colorful herbs. The emphasis will be on "how to do it": identifying, cultivating, gathering, preparing, cooking, surviving. Your garden guides will include some of Alaska's most prominent herbalists, gardeners, and users. For a conference brochure or more information, contact Ginny Moore,

BOTANY CLASSES

- **University of Alaska Anchorage- Register at UAA**
 - * **Local Flora (Biol 075)- Verna Pratt; May 7-28 with field trips all day May 29 and June 7;**
Study of wildflowers and plants in the surrounding local with emphasis on use and identity.
Two sessions: Wed: 9:30 am - 1:00 pm or 6:00 pm - 9:30 pm. Field Trips all day May 29 and June 7
For more information contact Verna Pratt: _____ ; 1 credit
 - * **Biota of Alaska: Recreational Botany (INTI A304C) - Marilyn Barker: May 14-June 14 6-10pm;**
Identification of Native plants in the field using popular guides; derivation of plant names; food and medicinal uses of plants; includes two Saturday field trips: June 7 and June 14; 1-2 credits
 - * **Flora of Alaska and Yukon Territory (BIOLA124Q) - Marilyn Barker: July 12-20;**
Canada Field Study Tour focusing on Native plants in Alaska and Yukon Territory, emphasizing field identification and uses of the Native flora; 1 credit.

ALASKA NATURAL HISTORY EXPEDITIONS

Discover Alaska's amazing natural history through the 1997 wilderness expeditions led by naturalist/wildlife biologist, John Wenger, an instructor at the University of Alaska. Emphasis is on learning bird, mammal, and flowering plant species. Participants provide their own food and personal camping gear. For details contact leader John Wenger 3217 Doil Drive, Anchorage, AK 99507 or call (907)562-58387-9 am Tues. and 3-5 pm Fri.; or E-mail: gowild@alaska.net. Costs include all transportation in Alaska for the expedition. Credit, if desired, is provided for some expeditions, by the University of Alaska. See John's website: www.alaska.net/~gowild for more information.

Wrangell-St Elias National Park: June 5-15 \$685

Arctic National Wildlife Refuge: June 19-July 2 \$985

Denali Parks of Alaska (Biology 124) July 8-19 \$1185

Denali and Wrangell-St-Elias National Parks (Biology 124) July 25-August 5 \$1185

Yukon-Charley Rivers National Preserve: August 10-24 \$1085

ANCHORAGE MUSHROOM CLUB HAS A NAME: GAMA

The local mushroom club that was formed this spring has named itself *Greater Anchorage Mycological Association* more conveniently shortened to GAMA. Annual membership dues are \$15/individual, \$25/family, and \$10/student. In May the group hopes to hunt morels. For more information contact Phyllis Kempton () or Blanche Tinius ().

ANCHORAGE HERB STUDY GROUP

Meetings are on the 4th Thursday each month. A new herb is studied each month. Meetings are held in the conference room at the Alaska Cooperative Extension Service, 2221 E. Northern Lights. Call Julie Riley at _____ for more information.

ALASKA BOTANICAL GARDEN

The Botanical Garden in Anchorage has many activities planned for the upcoming season. The next programs include: May 21: "Primula and Company in Alaska" Jim Fox, extraordinary Alaska gardener presents a slide show and lecture on the needs, adaptability and best associates of Primula. A plant sale is tentatively planned following the lecture. The meeting will be held in the auditorium of the Anchorage Museum of History and Art at 7 p.m. On June 18: "1997 Flower Photography" by Annie Nevaldine. This program will be held in the Garden and Annie will demonstrate and speak about flower photography using the blooming plants and natural lighting of the garden. Both programs are free to the public.

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



Don't Miss Out - It's Time To Renew!

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.

Map To The New Meeting Place Campbell Creek Science Center

