

BOREALIS

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APRIL 1989



ALASKA NATIVE PLANT SOCIETY

P.O. BOX 141613, Anchorage, Alaska 99514

Announcing

MEETING NEWS---The April meeting of the Anchorage Chapter will be held on Monday, April 3rd at **6PM** in the cafeteria meeting room of the National Bank of Alaska, corner of Northern Lights and C Street. The parking lot is behind the building with access from No. Lts. or C St. Enter the building through the back door off the parking lot, sign in, and take elevator to 2nd floor. Turn left to cafeteria. **This meeting will consist of a potluck supper, followed by a guest speaker. PLEASE NOTE THE EARLY HOUR.** Program will be at 7:30 P.M.

BOARD MEETING---cancelled for this month.

SPEAKER---We are once again honored to have as our speaker ANPS Member Dr. David F. Murray, Curator of the Herbarium, University Of Alaska, Fairbanks. His topic will be "Botany of Eastern Siberia and the Soviet Far East".

Dr. Murray has made several trips to the Soviet Union. In 1987, he spent 4 months as an exchange scientist under a program of the National Academy of Sciences. He was again in the Altai and Sayan Mts., but at different localities from those that he visited in 1983. Excellent plant collections were gathered with William A. Weber, Curator at the University of Colorado Museum, Boulder, and colleagues from the Central Siberian Botanical Garden, Novobirsk. Problems related to understanding the origin and evolution of the Alaskan flora were studied at herbaria in Novobirsk, Moscow, and Leningrad. Leningrad is where the first collections from Alaska are housed and it is interesting to note that the first treatment of our flora was by Ledebour in his *Flora Rossica* published 1842-1853.

This will be an interesting and informative program presented by an excellent speaker. We certainly appreciate Dave's, once again, making time in his busy schedule to bring us another in a series of annual programs.

PLANT FAMILY---The plant family to be discussed is the Caryophyllaceae or Pink Family, with 11 genera represented in Alaska.

The family contains some of the most beautiful and common flowers in Alaska. Such names as Chickweed, and Sandwort are cursed by those trying to obtain the perfect city lawn, and high in the mountains the tight cushion-like patches of Moss Campion add beauty to the starkness of the rocky environment.

The Pink family includes about 1400 species, mostly annual or perennial herbs widely distributed in northern temperate regions. The stems are often swollen at the nodes and the leaves are opposite. The flowers are regular and usually bisexual. A calyx and corolla, each composed of 4 or 5 separate parts, are usually present, and the stamens are 8 to 10 in number. The compound ovary is superior. A distinctive feature of the family is that the ovules are attached to a central column arising from the base of the ovary.

MYSTERY PLANT---Fascinating lobed leaves almost suggest those of Maidenhair Ferns. The five coral-red sepals enhance the bright yellow of the flared tips of the five petals. These petals extend to a straight, orange-red spur. Stems may be up to one meter high, bearing 3 to 6 of the nodding, extremely graceful flowers.

Widespread in the Anchorage area, especially in the wet seeps along the Seward Highway on the way south to Girdwood.



WILLOWS---Pussywillows are a pleasant reminder that spring is just around the corner. You may have noticed their furry little buds peeking out as early as last November. Just what is a pussywillow anyway? It's not really a single species of willow. All willows that are old enough to flower produce pussywillows of various shapes, shades of gray and degrees of furriness. If you want to identify willows to species -- good luck. Hulten lists some 56 species in Alaska; there are 809 species in North America and about 300 in the world. Telling willow species apart is difficult because willows often hybridize and characteristics on a single plant may vary greatly. Leaves on a sucker shoot may look entirely different from leaves up high. On some willows, you won't be able to look very high -- many are dwarf shrubs.

No matter how impossible it is to tell what species you have, knowing that you are looking at a willow is easy -- even this time of year. The furry pussies are a dead giveaway, but willows can always be identified by their single bud scale, clasped like a hand against the stem. Both the "fur" and the scale serve to keep the tender bud from dehydrating. Pussywillows are actually catkins, clusters of tiny petaless flowers.

Because they are not showy, many people think willows do not attract pollinators and that the wind gets the job done. This is not true -- just visit a willow thicket when the catkins are in full bloom -- you'll be buzzed by bumblebees, solitary bees, honeybees and syrphid flies. Willows are dioecious (separate male and female plants). How then do the insects pollinate them? They visit the male flowers to collect the brightly colored pollen, of course, but I wondered what attracts them to the female willows. Is it nectar, abundant and very sweet smelling and produced on both sexes? For bumblebee queens emerging in the spring, willows are her most important food source, providing energy for her to build her nest and raise her first brood.

Other wildlife relies on the willow, too. Snowshoe hares nip off willow twigs for winter lunches, Yellow Warblers line their nest with willow down from ripe catkins, and what do you suppose Willow Ptarmigan eat? Everybody knows willow is favored moose browse, but did you know that if you chew on a twig you might relieve a headache? Willow (genus *Salix*) bark contains salicylic acid, the chemical from which aspirin was derived. Willows are flexible and are useful for making baskets. This spring I made a pussywillow wreath.

While you're out gathering pussywillows this spring, watch for insect homes in the willows. Two different species of gnats (tiny flies) create

interesting galls on willows. The beaked willow gall looks like a smooth cocoon on the tips of branches. A far showier home is produced by the Willow Rose gnat. These galls look like beautiful wooden roses or pine cones on the willow. Both gnats have similar life histories. Females lay their eggs on growing branch tips in spring. When the larvae hatches they burrow into the willow and their presence causes a gall (like a plant tumor) to grow. The larvae overwinters in its cozy home, pupates in spring and emerges to start the cycle over again. Collect a few willow roses to add to your pussywillows. You can open a gall to see if the larva or pupa is there, or simply enjoy the willow rose's beauty and maybe get to watch the gnat hatch! (Editor's note: The willow roses are found only on *Salix Barclayi*, the Barclay Willow.)

If you visit the willow patch on a warm sunny day this April, you might notice one of the loveliest denizens of willow thickets -- the Mourning Cloak butterfly. This chocolate brown butterfly with yellow edges bordered inwardly by vibrant violet spots overwintered as an adult under leaves or under shaggy bark. Now the females can be seen laying eggs on willows. When the larvae hatch, they feed together, side by side on the willow leaves. Later this spring, look for black bristly caterpillars with orange-red spots down their backs. Take one home to raise, if you have an abundant supply of willow nearby. When your caterpillar is big enough, it will form a chrysalis and in late summer you can witness the birth of a Mourning Cloak butterfly -- another beautiful fruit of the willow.

---Submitted by Lynn Catlin, Anchorage Chapter Pres.

FIELD TRIPS---THERE'S STILL TIME TO ARRANGE A FIELD TRIP!

ANPS Field trips are fun informal events. Field trip leaders are responsible only for arranging the trip spot and date, knowing how to get to the spot and showing up at the assigned time and place. You don't have to know every flower. One of the best trips last summer was lead by a new member to a spot filled with rare Ladyslippers, that everyone thought would be Calypso orchids, which are far more common. If you feel uncomfortable about your knowledge of wildflowers,

(cont'd next page)

arrange for another member who is more knowledgeable to accompany you. If you are interested, call Field Trip Chairperson, Kathy Wright at 694-9450. Weekdays & evenings are good times for nearby trips. The following weekends are also available:

May 6-7, 13-14, 20-21, 27-28
 Jun 17-18, 24-25
 Jul 15-16, 22-23
 Aug 5-6, 19-20, 26-27
 Sep 2-3, 9-10

PLANNED TRIPS---the following is a tentative Field Trip list. It is still in the planning stages. More easy trips are needed. More input from members is needed.

Monday, May 29---Nancy Lake

Saturday, Jun 10---Arctic Valley

Sat-Tues, Jul 1-4---McCarthy, Kennicott

Sat-Sat, Jul 1-8---Gem & Mineral Society Trip, Anchorage to Central, via Eagle Summit

Fri-Sun, Jul 28-30---Backpacking into North Fork, Campbell Creek Valley, Chugach Mts.

Thur, Aug 10---Evening trip along new interpretive trail off Campbell Airfield Road.

Sat, Aug 12---The Ramp, Chugach Mts.

ALASKA NATIVE PLANT SOCIETY Treasurers Report

Year-To-Date
 December 31, 1988

Year-To-Date
 February 28, 1989

Opening Balance, 1/1/88 \$1,340.19

Opening Balance, 1/1/89 \$2,199.13

Receipts

Receipts

Membership Dues	\$ 1,250.00
Sale of Original Art	-0-
Sale of First Annual 1985 Prints	287.25
Sale of Second Annual 1986 Prints	280.00
Sale of Third Annual 1987 Prints	122.50
Sale of Fourth Annual 1988 Prints	241.50
Sale of Decal Stickers	3.75
Sale of Sew-On Patches	12.00
Sale of Seeds	113.50
Contributions to Scholarship Fund	-0-
Contributions to Eklutna Lake Project	105.50
Unrestricted Contributions	65.00
Advertising	31.00
Prepaid Postage; Sales Items	2.40
Rebates from Sanctuary Travel Agency	376.83

Membership Dues	\$ 315.00
Sale of First Annual 1985 Prints	-0-
Sale of Second Annual 1986 Prints	-0-
Sale of Third Annual 1987 Prints	-0-
Sale of Fourth Annual 1988 Prints	-0-
Sale of Decal Stickers	3.75
Sale of Sew-On Patches	-0-
Sale of Seeds	-0-
Contributions, Scholarship Fund	-0-
Contributions, Unrestricted	-0-
Advertising	-0-
Prepaid Postage; Sales Items	-0-
Rebates from Sanctuary Travel Agency	-0-

2,891.23

318.75

Disbursements

Disbursements

Newsletter Postage/Printing	379.00
Business License	25.00
Fourth Annual 1988 Prints (750)	1,434.50
Post Office Box Rent	29.00
Seed Sale Envelopes	12.55
Administrative Supplies/Postage	152.24
One half of Revenue from Sale of Original Art	-0-
Postage; prepaid on sales items	-0-

(2,032.29)

Newsletter Postage/Printing	-0-
Business License	50.00
Post Office Box Rent	39.00
Seed Sale Envelopes	-0-
Administrative Supplies/Postage	-0-
Postage; prepaid on sales items	-0-
Monthly Meeting; Refreshments	7.43
Refund; Overpayment of Membership Dues	10.00

(106.43)

Closing Balance, 12/31/88

\$2,199.13*

Closing Balance, 2/28/89

\$2,411.45*

* Includes \$75.00 (current as well as prior years) cumulative contributions to scholarship fund which are restricted funds

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There are 152 paid members at 2/28/89

There are 145 paid members at 12/31/88

Respectfully Submitted, *LH*
 Larry Haller, Treasurer



CENTER FOR PLANT CONSERVATION

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The Center for Plant Conservation is pleased to announce a 96-page publication containing the first comprehensive list of over 500 professionals and offices involved in conserving U.S. native plants, and a summary of state plant conservation laws. The 1988 Plant Conservation Resource Book contains the following information:

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- o Botanists and other contacts in national private organizations working on plant conservation programs.
- o Information on rare plant laws and rare and endangered plants by state.

For each copy, enclose a check or money order for \$9.00 (\$8.00 plus \$1.00 for postage) made out to the Center for Plant Conservation, and send it with the coupon below to:

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Jamaica Plain, MA 02130

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Enclosed is a contribution of \$ _____ in support of the Center's efforts to conserve U.S. rare and endangered plants.

Please send information about the Center for Plant Conservation.

9-20-88

Native to Alaska

1. Anemone multifida-----cut leaf Anemone
2. Antennaria dioica-----Pink Pussytoes
3. Acer glabrum Douglassii-----Douglas Maple
4. Aquilega brevistyla-----Blue Columbine
5. Armeria maritima-----Thrift
6. Arnica frigida-----Frigid Arnica
7. Artemisia frigida-----Prarie Sagewort
8. Aster subspicatus-----
9. Betula hybrida-----Hybred Birch
10. Dodecatheon frigidum-----Frigid Shooting Star
11. Dodecatheon Pulchellum-----Shooting Star (tall)
12. Dodecatheon sp.-----probably the above
13. Elaeagnus commutata-----Silver Berry
14. Epilobium latifolium-----Dwarf Fireweed
15. Dryas Drummondii-----Yellow Dryas
16. Fritillaria camschatcensis-----Chocolate Lily
17. Gentiana propinqua-----Four-parted Gentian
18. Geranium erianthum, alba-----Wild Geranium, white
19. Hedysarum Mackensii-----Wild Sweet Pea
20. Iris setosa-----Wild Iris
21. Iris setosa, interior-----Wild Iris, interior
22. Ledum decumbens-----Lab. Tea, Narrow
23. Oxytropis Sp.-----Yellow Oxytrope
24. Papaver alboroseum-----Pale Pink Poppy
25. Polemonium acutifolium-----Tall Jacobs Ladder
26. Polemonium pulcherrimum-----Low Jacobs Ladder
27. Picea Hybred-----Sitka cross
28. Picea Hybred-----White/Fir Hyb. ?
29. Solidago decumbens-----Interior Goldenrod
30. Sysyrinchium litorale-----Blue-eyed Grass
31. Thalictrum sparsiflorum-----Meadow-rue

Non-Native but Hardy

40. Aster tongolensis-----
41. Aquilega Sp.-----Small yellow flowers
42. Betula fontinalis-----
43. Clematis columbianum-----Small blue flowers
44. Clematis tangutica-----Small Yellow Flowers
45. Hieracium umbellata-----
46. Iris Sp.-----Japanese Iris
47. Primula auricula-----Yellow Primrose
48. Pulsatilla Sulfureae-----Yellow Pasque Flower
49. Pulsatilla Vulgaris, Rosea-----Rose Pasque Flower
50. Rhododendron Brachycarpum-----

1988 SEEDS 20¢ Pkg.

These are left overs from last year that have been tested and will germinate. They may have been overlooked because people were not familiar with the species.

60. Arnica frigida---Good garden specimen, lg. yellow daisy-type flowers, 8 to 10 inches.
61. Campanula rotundifolia---grows easy from seed --up to 12 inches
62. Draba kamchatica--small rock garden plant, about 5" early, covered with sm. white flowers.
63. Erigeron humilis--very small whitish daisy type flowers
64. Mimulus guttatus--Monkey Flower--up to 12 " makes a carpet of leaves and flowers, blooms most of the summer, will grow anywhere except overly dry areas.
65. Potentilla sp.---A nice rock garden plant, yellow,
66. Prunella vulgaris--8", purplish to magenta spikes, groundcover, preferrably dry.
67. Saussurea alpina--Not Native to Alaska. lavender thistle-type flowers
68. Tripleurospermum phaecephalum---Wild Arctic Camomile grows in coastal western Ak. This is a nice pure white native daisy with finely cut foliage, very tough, will grow as a specimen (up to 12"), or between stepping stones, low as a ground cover.

Botanical names:

Due to positive feedback on my brief commentary on botanical names, here are some more. This group of names relate to directions--north, south, east, west.

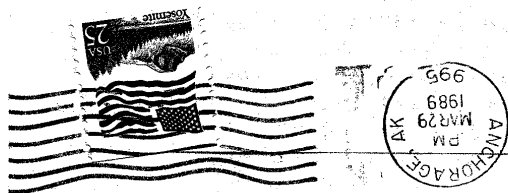
North/Northern: aquilonius, borealis, septentrionalis

South/Southern: australis, austrinus, meridionalis
("australis" in addition to meaning southern, also indicates the species is from the southern hemisphere)

East/Eastern: orientalis

West/Western: occidentalis

Keep in mind the botanical name is made of two parts a generic name (genus) which is a substantive (or adjective used as such) and a specific epithet which is an adjective. Names of genera are always capitalized; specific epithets are written in lower case. Together the genus and specific epithet are a species name.



Alaska Native Plant Society
Post Office Box 141613
Anchorage, Alaska 99514