

Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

NOVEMBER 1997

JOIN US AT OUR NOV. MEETING

Monday, Nov. 3rd 7:30 p.m.
at the Campbell Creek Center

MAIN PROGRAM

Methane Transport Through Plants
(Especially *Carex lyngbyaei*)

Presenter: Katie Turner

A dominant sedge found in the coastal marshes of Cook Inlet is *Carex lyngbyaei*. It has been identified as one of many aquatic plants that are able to transport methane (a greenhouse gas) from the sediments to the atmosphere. This is the story of a graduate student's struggle to understand and measure this process using both field and laboratory techniques.

Katie Turner graduated from UAA in December, 1996, with a masters degree in biological sciences. She also holds a B.S. in Natural Sciences from UAA. A lifelong Alaskan, Katie grew up in Fairbanks before moving to Anchorage in 1979, where she now resides with her husband and two children.

Plant Family Study

Haloragaceae - Water Milfoil
Presenter: Susan Klein

(Bless you, Susan for so willingly coming to the rescue on such short notice!)

PLANT FAMILY STUDY

Haloragaceae - Water Milfoil

Members of this family are aquatic, herbaceous plants with leaves in whorls. Flowers are minute and consist of four greenish-white sepals. Petals are usually absent.

The *Myriophyllum* genus has pinnately divided leaves and 4 or 8 stamens. At the November meeting, Susan Klein will discuss the *Hippuris* genus which has simple leaves and only one stamen. There are only 3 species in Alaska. The common name for this plant is Mare's Tail and it could, at a glance, easily be mistaken for *Equisetum*/Horsetail. Unlike *Equisetum*, Mare's Tail is smooth and glabrous to allow it to shed water.

Hippuris vulgaris, the most common species, has 6 to 12 leaves in a whorl. The flowers are very small, mostly perfect and below the water line. It can easily be seen throughout Alaska in shallow slow-moving water. A large display of Mare's Tail looks like a tiny spruce forest.

Hippuris tetraphylla is a smaller plant and has 4-6 leaves in a whorl (usually 4) and may be found in shallow sluggish water in coastal areas.

Hippuris montana is quite rare and is a smaller species with 5-7 leaves in a whorl. It is found along creeks in the mountains of South Central Alaska, Southeast Alaska and the Aleutian Chain. Flowers can be perfect or unisexual.

(See line drawings of each of these species on page 3.)

Alaska Native Plant Society NEWS LINE

Birth Announcement

In Norway, October 7, 1997, to Julia and Trevor Ricketts:
A girl, Jennifer Phoebe, 6-3/4 lbs.

Alix Wennekens Dies

Alix Wennekens, a former member of ANPS died on September 13 in Sequim, Washington. She was 81. Our sympathies go out to her husband Pat and aunt Sylvia Alexander. Alix graduated from UAA in 1985 with a Master's Degree in Biology/Anthropology. Her research dealt with the ethnobotany of the Chugach natives of Prince William Sound. She taught ethnobotanical courses in several native communities in central and western Alaska.

Volunteer Opportunities - In other words: HELPII

1. **Seed Curator:** Someone to package seeds that are donated to ANPS for sale and swap. If you have seeds to donate, please don't forget us! Talk to Verna.
2. **Writers:** We need more articles for the newsletter. Tell us about your summer field trips or anything else that we should know. Don't worry about formatting it - it can even be handwritten. Just send anything to Ginny Moore (FAX: _____) by the 20th of the month before publication.

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

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:

MYSTERY PLANT

by Verna Pratt

This plant was really a mystery to us. Ginny Moore, our newsletter editor, called one day to say that there was a different plant in the woods near her home which is near the base of Flattop Mountain, off Upper DeArmoun Road in Anchorage. When she described the flower - 5 notched white petals with a swollen calyx, I figured right away that it was in the Caryophyllaceae (Pink) famil, and probably a *Silene* or *Melandrium*. Ginny wasn't convinced, as nothing in Hulten exactly matched it. I arranged a meeting time to go and check it out (late afternoon). The flowers were no longer open, so I did not get a photograph, but assumed it must have been introduced, and besides there used to be a homestead a short ways down the trail from there. Ginny said "No way. No one planted that in the recent past. We walk that route almost daily and never saw it before."

The plant was large - up to 18" high but sprawling on the ground. It had numerous light green, fairly large, opposite, sticky leaves on the lower half of the plant. Back at Ginny's home, we proceeded to dissect the closed-up flowers we'd retrieved. Above the swollen calyx sac there were 5 curved styles instead of the 3 found in *Silene* species. Also, there were no stamens (male reproductive parts) on the flowers we dissected.

We poured over all of the plant books in Ginny's collection and finally determined that our mystery plant was *Lychnis alba* called Evening Lychnis or white flowering campion. Don't bother looking in Hulten - it isn't there. Probably a seed was dropped by a bird. Sure enough, when Ginny and her husband checked out the plant that night, it was full of white blooms!

Apparently these species are often confused. *Melandrium noctiflorum* (also called *Silene noctiflorum*) also blooms at night and looks quite similar. The main characteristics that differentiate them are 1) 5 styles on *Lychnis alba*; 2) the flowers on each *Lychnis alba* plant are either all male or all female; and 3) *Lychnis alba* has a rosette of green leaves that last through the winter.

Ginny probably won't see her plant there again next year as it seems to be a biennial and unless there is another stray plant out there of the opposite sex, there won't be any new plants.

Drawings of each of these confusing plants are shown at the bottom of page 3.

Any time a native plant is saved from the bulldozers it is a worthy cause. Last year Ginny Moran started ANPS's Plant Rescue/Salvage and had great results. This year's plant rescues were quite successful also, and I hope we can be even more productive and involve more people next year.

The first rescue was at Anchorage Bog, (between Tudor and Dowling just east of the New Seward Highway) that was scheduled to become a ballfield. With only a couple of weeks notice, over a dozen people armed with shovels, pots, trays and boxes removed two truck loads of plants that are now being housed at the Botanical garden for future use. We really appreciated the youthful strength and energy of Mike Woods' forestry students from the King Career Center, a great bunch of high school juniors and seniors. Other plants rescued were taken home by the hard workers, for their own landscaping, and included spruce and birch trees, Labrador tea, roses, shrubby cinquefoil, low-bush cranberry, twinflower, crowberry, pyrola, dogwood, spiraea, etc. Watch out for the horsetail, folks, as it was there in abundance. Good luck with your new- found treasures.

Many thanks to all of you who helped with the McHugh Park Plant Rescue. There were choice plants available and most will be returned to McHugh after the construction is over. A few will be used at the Botanical

Gardens, probably on the wildflower walk. The special permit for this endeavor restricted use of the plants to such purposes. My truck made several trips to the Botanical Garden. Unfortunately many plants were left behind due to lack of participants and in many instances extremely deep roots in the dry, rocky soil. The last truckload went to Potter Trailhead for an Eagle Scout project that Adam Hill is working on. He is revegetating the north section of the slope above the parking lot to make it look more natural and, hopefully, eventually crowding out the clover the contractor seed in. With lots of help from his friends, family and church, they moved plants from the nearby woods and also planted the McHugh donations. Peggy Pletcher and I instructed the boys on proper digging, planting and care. The Park Service is hopeful that other scouts will adopt other sections and bring Potter trailhead back to nature again.

Expect some pleas for help next spring as we all know there are lots more plants to be saved. With a little more effort, and enough people involved, this could become a service project for Alaska Native Plant Society. Thanks again to all of you and to the Park Service for the permit.

By the way, someone called the police and said people were digging plants at McHugh. I had anticipated that, however, and had a large banner on my truck with the permit attached, so no problems arose from it!

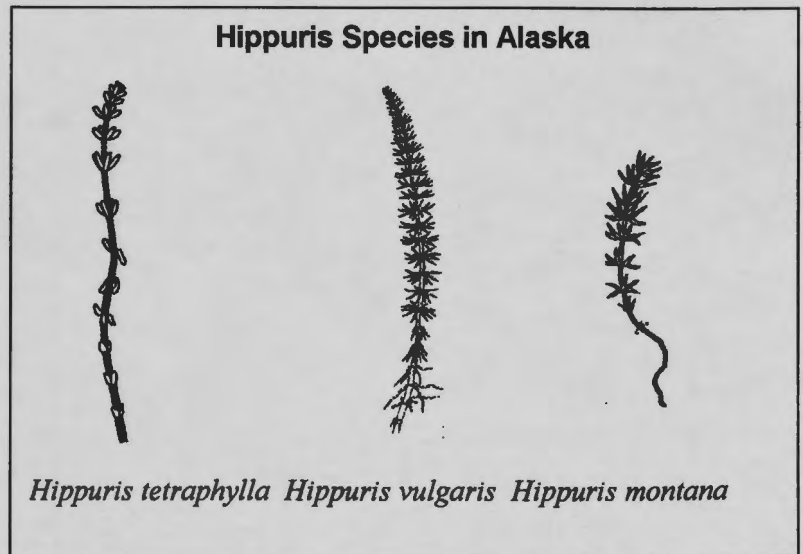


Mystery Plants



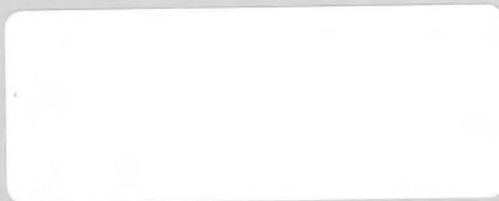
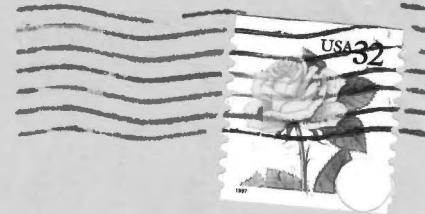
Melandrium noctiflora

Lychnis alba



Hippuris tetraphylla Hippuris vulgaris Hippuris montana

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



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
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 Membership is on a calendar year basis.

