

BOREALIS

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by the



ALASKA NATIVE PLANT SOCIETY

P.O. BOX 141613, Anchorage, Alaska 99514

February 1992

ANPS STATE OFFICERS ARE:

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ANCHORAGE CHAPTER OFFICERS ARE:

President---Gary Davies, Vice-President---Charles (Chuck) Adsit, Secretary---Carol Hoblitzell, Treasurer---Ram Srinivasan, Rep. to State Board---Frank Bogardus

ANCHORAGE CHAPTER MEETING NEWS:

The January meeting of the Anchorage Chapter will be held on Monday, February 3rd, at 7:30PM in the meeting room of the Muldoon Library in the Carr's Shopping Mall on the corner of Muldoon Road and Northern Lights Blvd. The Library will be closed, so enter by the door at the rear of the building

BOARD OF DIRECTORS: The Board of Directors will meet at 6:45PM, just prior to the general membership meeting. Interested ANPS members are welcome at the Board Meeting. Board members are:

- President Gary Davies
- Past-President John Wenger
- Vice-President Charles (Chuck) Adsit
- Secretary Carol Hoblitzell
- Treasurer Ram Srinivasan
- Rep. to State Board .. Frank Bogardus
- General Programs Marilyn Barker
- Field Trips Marilyn Upton

Board members please take note and mark your calendars. Continued absence from Board meetings can be grounds for removal from the Board.

PROGRAM: Mr. David Swanson of the USDA Soil Conservation Service will present a program on "Management of Soviet Far East Reindeer Ranges". Domestic reindeer (*Rangifer tarandus*) have grazed the tundra and boreal forest ranges of northern Asia for many centuries. In the eastern portion of the Russian Republic (the Soviet Far East), reindeer support the local economy

and provide food and by-products for the native Chukchi's. The objectives of this talk are to summarize information pertaining to management of reindeer ranges of the Kanchalan State Farm near Anadyr. Information was collected during a technical exchange between USDA-SCS range and soil scientists and Magadan Agricultural Institute scientists in August 1991.

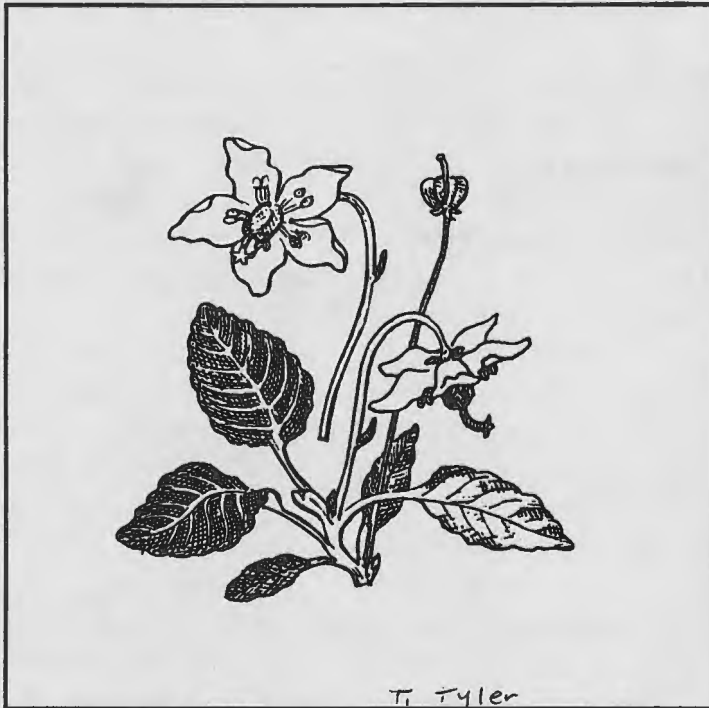
Much of Kanchalan's reindeer range consists of moist tundra dominated by cotton sedge (*Eriophorum vaginatum*), sedge (*Carex lugens*), and fruticose lichens (*Cladina* and *Cetraria* spp). In the mountains, dwarf shrubs (*Salix*, *Betula*, *Dryas*) and forbs (*Saxifraga*, *Pedicularis*, and many others) occur with lichens. Approximately 32,000 reindeer graze 2,000,000 ha. Brigades of 8-10 herders live in mobile camps and are responsible for 2,000 reindeer. For 100 female reindeer, 82 calves are born and survive until fall handling, when about one-third are slaughtered. About 11,500 of the 32,000 reindeer are slaughtered annually for meat. To obtain this high level of productivity, herders (1 in winter and 2 in summer) maintain a 24-hour surveillance over the herd of 2,000 reindeer. A management plan based on resource data is used by herders to select seasonal grazing areas. In the summer, reindeer consume mainly vascular plants. Slow-growing fruticose lichens (4.0-5.0 mm/yr) are key winter forages and require a 3-year rest rotation grazing system for sustained use. Most of the lichen range of the Kanchalan State Farm appears to be in excellent condition.

PLANT FAMILY: In February and March we will discuss the Primrose (*Primulaceae*) family. The February presentation will be on the cushion-type plants (*Douglasia*) and those with leafless flower stems (*Primula*,

Dodecatheon, and *Androsace*). This family has leaves that are mostly opposite or basal and simple. The regular flowers have 5 sepals, 5 joined petals, 5 stamens and 5 united carpels. There are 7 genera in Alaska.

MYSTERY PLANT:

This low evergreen woodland perennial is a particular favorite of children (perhaps because they can more easily get close to its waxy flowers with their enchanting fragrance). Naturally, they have come up with apt descriptive names; such as, Frog's Reading Lamp. What do you call this diminutive, but common, July bloomer:



Mystery Plant

SEED EXCHANGE:

Last call for seeds! Doug Tryck () has volunteered to package seeds, but needs them by the February meeting! If you are out of town, you can mail them to: Doug Tryck
Box 110104
Anchorage, AK 99511

DUES IS DUE: It's membership renewal time, again. Send dues to ANPS Post Office Box:

- Student-----\$5.00
- Individual-----\$10.00
- Family-----\$15.00
- Organization-----\$25.00

FIELD TRIPS:

Marilyn Upton () is our new Field Trip Coordinator. Please contact her early with ideas and dates.

EARLY NOTICE--Kantishna Hill Field Trip--- at the Kantishna Road House. This is a special --- this allows you to drive deep into Denali Park (otherwise not possible). Dates are Monday, June 8th and Tuesday, June 9th. Space is limited so call early to put your name on the (already growing) list. Your call is not a firm commitment at this time --- merely for head-count purposes. Payment will be required in advance; however, more on that later. A fee of \$125 per night per person (for ANPS members only)(So, \$250 for the two nights). Normally, they charge \$300 per night! This includes all meals, cabins and activities. Some of us may need to bring mats and sleeping bags if demand for space is high. ANPS Member Carolyn Parker (who deserves each members thanks for making these outstanding arrangements for us) is their Field Botanist. She will lead us around the area so that we can more fully enjoy the Park. We recommend allowing the full day of the 8th to drive in to Kantishna and the full day of the 10th to drive back out. More details later in future newsletters.

ANOTHER WORLD CLASS SPEAKER:

ANPS Member Sylvia ("Tass") Kelso will be speaking on growing American Primulas found in the Rockies to Alaska-----at "Primula Worldwide"--an international symposium sponsored by the American Primrose Society, the Royal Horticultural Society of England and the Berry Botanical Garden of Portland, Oregon. 10 international keynote speakers lead an audio-visual worldwide tour of the primula world and companion plants--from wet, flooded bogs through frozen Alpine regions to hot, arid lowlands. Plant sales, study clinics, tours, exhibits, book sales, and APS National Flower Show complete the program.

Show will be in Portland, Oregon on April 10th, 11th, and 12th. Contact:

Ann Lunn, Registrar
6620 N.W. 271st Ave.
Hillsboro, OR 97124

Botanizing Afognak-1991

by Carolyn Parker

Alaska's summers seem incomplete without an opportunity to visit a region of our huge state that is new to me. I was delighted, therefore, when Alaska Native Plant Society (ANPS) member Robby Sheidler suggested I come to Afognak Island in July to undertake a preliminary botanical inventory of Afognak Joint Venture's native land holdings there. Logging is the current source of income for shareholders. Robby felt that a description of Afognak's plant life should be precursory, in part, to making future land use decisions, and she used her influence, as controller for the Afognak Native Corporation, and as a serious amateur botanist, to secure my invitation.

Rolan's floatplane was loaded with plant presses, ANC employees, and a large picnic lunch when we flew north from Kodiak, across Marmot Bay, and on to Afognak. I peered anxiously down on a beautiful mosaic of Sitka spruce forests, dense alder thickets and tall grassy meadows covering steep slopes that inevitably terminated as rocky, coastal cliffs! Numerous lakes and meandering streams filled the few more level areas. I had assured Robby on the phone that I was an "experienced" field botanist, but this was not the alpine-arctic landscape I was accustomed to, and I privately wondered how in heck I was going to get around down there once left on the ground!

At the end of that first day of floatplane lake-hopping, I was quite excited about exploring Afognak's flora. Many familiar taxa, such as wild geraniums, chocolate lilies, fragrant gob orchids and nootka lupines added brilliant color and floristic richness to the open grass meadows, but I'd never seen them growing so tall! And the first Afognak record of mist maid (Romanzoffia sitchensis), which I first sat on during our Thorshiem Lake lunch, was a botanical "promise" of more discoveries to come!

I also realized now that hiking would be easiest if I used the intricate, and often confusing, network of game trails that beaches, ridges, lakes and meadows all across the island. I would be sharing these trails with elk (introduced in 1929), sitka black-tailed deer (supposedly swam over from Kodiak about 1950), and, of course, the trophy-sized brown bear (biologists debate how they arrived from the mainland, and on occasion, I wished they hadn't!). But of all the island's wildlife, I suspect it is the beaver that has most influenced Afognak's vegetation. After stumbling over many relict, overgrown dams

and lodges, now virtually hidden from view, I appreciated the role these effective engineers have probably had on creating the numerous lakes and broadening the valley bottoms which now offer such rich collecting and wildlife habitat.

The Ben Thomas logging camp on Danger (Kazakof) Bay was my home. Here I gained 4 pounds, was introduced to Ratnet, and learned radio talk like "Mile 6 & loaded", very critical information when driving on busy, one-way logging roads. Forester Dave Nesheim led, or pointed, me toward a variety of habitats each day and a steady blast of warm air from the camp generator effectively dried my wet presses every night. Hot showers, a real bed, this was indeed a luxurious field camp by any standards.

The highlight that first week was a long hike up to the alpine. Toward treeline, sitka spruce forms patches of impenetrable, krummholtz-like thickets, while the meadows become floristically enriched by alpine anemones, buttercups, kamchatka rhododendron, louseworts and violets. The dry, rocky ridgetop supported a herbaceous heath not unlike that found on mainland ridges, complete with a few scattered pixie-eye primroses, one ptarmigan family and a napping bear. Here I found the one-flowered cinquefoil (Potentilla uniflora), so common in our own interior alpine, but previously unknown from the Kodiak Archipelago.

Several large receding snowbanks allowed me to "time-travel" back to June and enjoy the earliest blooming alpiners. Each snowbank had its own unique melt-water garden; one dominated by mountain marsh marigold, another by yellow anemones and marsh violets (Anemone richardsonii and Viola epipsula, both first records for Afognak). One north-facing snowbank was melting back to expose a few hundred (honest!) Chukchi primrose rosettes still in bud (Primula eximia). This elegant and showy taxon was another first record for Afognak. Clearly, these alpine areas need more attention whenever the weather permits.

To escape her Kodiak office for a few days, Robby argued against my going alone to Paramanof Bay on Afognak's west coast; she had to go too! Rolan's floatplane, now loaded with food, more presses, a Zodiac raft, a small outboard and some select fluids (for both us and the outboard) drifted gently up to a small floating, tethered hunters cabin at the entrance to Long Lagoon, a narrow sea channel that extends inland over one mile to a large "tidal-marsh" lake. Here our daily life was governed entirely by the tides. With Robby at the bow watching for submerged rocks and bars, I would ease our

rubber craft inland on the morning flood tide. We had about 4 hours to explore the inland tidal lake and wetland before having to catch the ebb tide back to the cabin while there was enough water to navigate the channel. At peak low tide, with our cabin aground, I could hip-boot across the mud flats to nearby strand beaches, cliffs, and the adjacent forest. For the remainder of each day, however, leisure was forced upon us by the sea and we just sat on our floating porch, watched sea otters, seals, foxes and seabirds forage in our "front yard", marveled at the glorious weather, and pitied the rest of the world for not being there. Rolan returned on schedule to pick us up, but we were definitely reluctant to leave.

The side trip to Paramanof Bay reinforced my belief that in order to get a feel for the flora of any region, one must not only visit all its diverse habitats, but must also visit similar habitats at several localities within a region. A species dispersal to, and successful establishment in, any suitable habitat and its detection by a passing botanist must all be governed strongly by chance.

At Paramanof I added several new taxa to my growing list both from the new habitats I had access to and from habitats that seemed similar to those I'd visited at Danger Bay. After two weeks of intensive botanizing, I was still adding new taxa to my collection each day. Using Hulten's Flora of Alaska maps . . . and the University of Alaska Herbarium's collections as a base, my collection of 271 species included 46 taxa newly recorded for Afognak Island and 12 taxa new to the entire Kodiak Archipelago. (For anyone interested, Verna has a copy of my annotated species list.)

Although I was pleased with my efforts of those two weeks, I also realized how much more exploring could be done. I'll be returning next summer to spend more time in alpine areas and in the vicinity of Afognak Lake and the abandoned Afognak Village. Watch for a slide show next winter!

-----Carolyn-----

CLASSES:

Plants and their environment

An upper division or graduate course with or without a lab.

Biology 479 or 679 (3 h lecture + 3h lab)

Biology 493 or 693 (3 h lecture)

Addresses fundamental questions like:

How does the alpine environment differ from the arctic environment?

How do plants cope with an unpredictable water supply in the not desert? How can trees tolerate the intense winter cold in south central Alaska. How do plants defend themselves against snowshoe hares and moose? What makes trees grow slower in the mountains than in the valleys?

Considers practical problems like:

How would one go about selecting plants for revegetation projects?

What causes blow-downs and how might they be prevented? What limitations are there on forest productivity? How do human management practices affect succession and browse availability and wildfire susceptibility? How will global climate change affect present vegetation?

Lectures will be illustrated with slides from arctic to tropical environments. Students will study special topics in depth and report on them. Those taking the labs will learn to use state-of-the-art equipment.

The class meets two evenings a week for lectures and one evening a week for lab. Lectures: TR 5:30-6:45 PM, Lab: T or R 7-9:40 PM

First class meets January 28, 1992

MORE CLASSES:

There is still time to enroll in some exciting UAA spring courses:

BIOL 075: LOCAL FLORA

1 College credit

Study of wildflowers and plants in the surrounding locale with emphasis on use and identification.

Three sections all start in the month of May. Beginning date May 5 or 6 and end with an all-day field trip the weekend of May 30-31.

Fees: \$50 (included in consolidated fee if you are a full-time student)

| | | | |
|-------------|---------------|-----------|--------------------------|
| Section 001 | 9:30AM-1:00PM | Tuesday | taught by Verna Pratt |
| Section 002 | 6:00PM-9:30PM | Tuesday | taught by Verna Pratt |
| Section 003 | 6:00PM-9:30PM | Wednesday | taught by Marilyn Barker |

BIOL 479: PLANTS AND THEIR ENVIRONMENT

3 or 4 college credits

Morphological, anatomical and physiological adaptations of plants to environmental conditions characteristically encountered in the various biomes on earth. Lectures will be illustrated with slides from arctic to tropical environments. This course may be taken without the lab as a 3 credit course.

Fees: \$250 (4 credits--included in consolidated fee if you are a full-time student)

\$150 (3 credits--included in consolidated fee if you are a full-time student)

Section 051 Lecture meets Tuesday/Thursday evenings beginning January 28th, 5:30PM-6:45PM

Lab meets Tuesday or Thursday, 7:00-9:40PM

There will be some Saturday field trips

ALASKA

BIRDS IN LAB & FIELD

BIOLOGY 126

Are you interested in birds but have little background in biology?

Have you ever identified a bird and wondered if you were right?

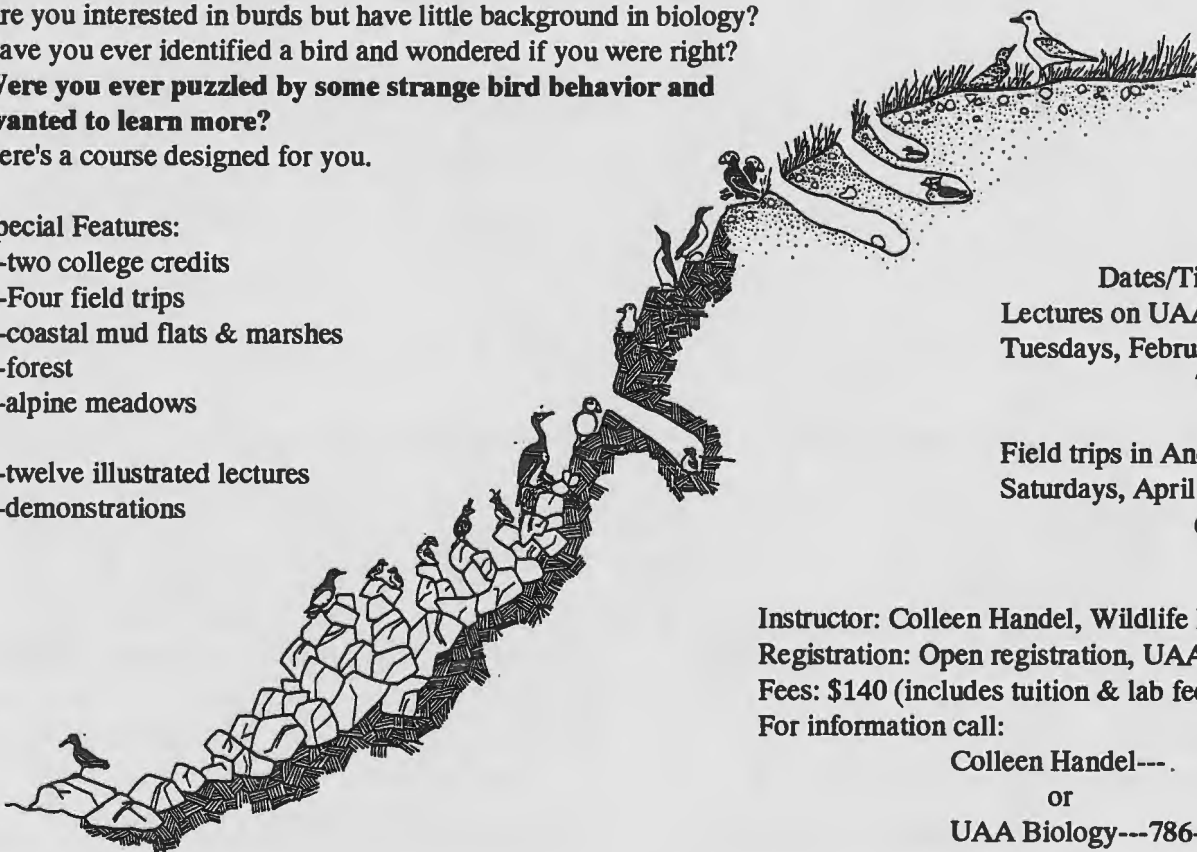
Were you ever puzzled by some strange bird behavior and wanted to learn more?

Here's a course designed for you.

Special Features:

- two college credits
- Four field trips
- coastal mud flats & marshes
- forest
- alpine meadows

- twelve illustrated lectures
- demonstrations



Dates/Times:

Lectures on UAA campus
Tuesdays, February 18-May 12
7:00-9:45PM

Field trips in Anchorage Area
Saturdays, April 25-May 16
6:00AM-2:00PM

Instructor: Colleen Handel, Wildlife Research Biologist

Registration: Open registration, UAA, Admin. Bldg.

Fees: \$140 (includes tuition & lab fee)

For information call:

Colleen Handel---

or

UAA Biology---786-4770

MYSTERY PLANT ANSWER:

Single Delight or One-flowered Pyrola are each literal translations of *Monesis uniflora*. The common name, Shy Maiden, is derived from the nodding flowers which are followed by a persistent upright seed pod on a 4" stem.

RIDE NEEDED:

Ride needed to Eagle River. Would love to attend ANPS meetings, but have no transportation. Only need ride one-way home after the meetings. Willing to share gas expenses. If interested, please contact me at: 786-1350 (office)
694-5565 (home)

Jim Mitchell
ANPS member



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