

BOREALIS

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by the



ALASKA NATIVE PLANT SOCIETY

P.O. BOX 141613, Anchorage, Alaska 99514

October 1989

MEETING NEWS—The October meeting of the Anchorage Chapter will be held on Monday, October 2nd, at 6:30 PM, at the Muldoon Library, on the west end of the Carr's Shopping Mall, corner of E. Northern Lts. and Muldoon. Since the library will be closed, enter by the door at the rear of the building.

Please note the early hour, as this is our Annual Potluck. Bring a dish to serve 3 to 4 times the number of people in your party. We will provide the drinks. Paper plates, cups and plastic utensils will be provided, but you may bring your own dishes and utensils if you desire more durable items.

The Potluck will be followed by a slide show. Everyone is encouraged to bring 10 slides of interesting plants, or summer activities. You may bring more than 10 slides, and we will show them if time allows.

SEEDS---Please bring the seeds that you have gathered to the October or November meeting. Let's get the seed sale organized early this year. Would anyone care to volunteer to organize this project?

BOARD OF DIRECTORS---There will be no Board of Directors meeting due to the early meeting time. However, see comments

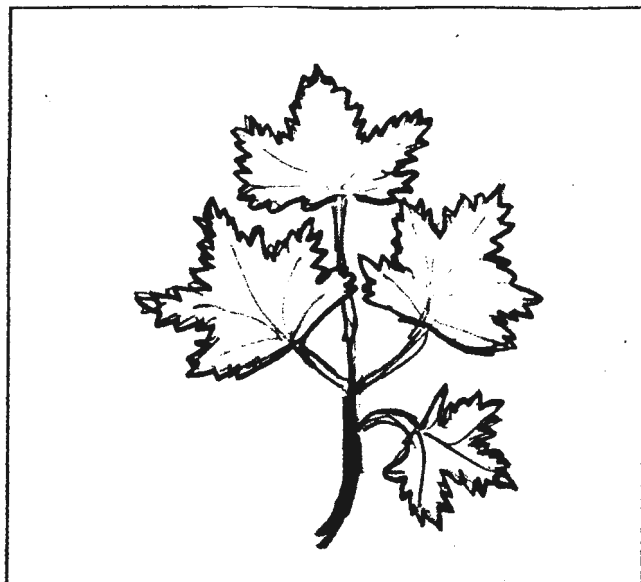
regarding board elsewhere in this newsletter.

NEWS FROM UAF ---by Pat Holloway
Seed germination update. Very frequently, Wild Iris (*Iris setosa*) pods full of seeds remain upright above the snow throughout winter. Seeds are fully exposed to the cold dry air. I wondered if there was any advantage to collecting seeds from these upright pods in Spring as opposed to the late Summer or Fall collections that I usually make. In May 1988, I collected seeds from these pods and sowed them in Petri dishes on filter paper. The dishes were placed in the dark for 7 days at 70 degrees F. (21 degrees C.). None germ-inated. I then stratified the remaining seed in moist soil for 156 days at 40 degrees F. (4 degrees C.). I repeated the germination test and this time, 19% had germinated. This percentage is at least half of the poorest germination percentages I got from fresh seeds, which usually have above 70% germination after 7 days (range is 38-98%). Although some seeds will germinate from these Spring-collected pods, it is still best to harvest in the Fall.

ANPS STATE OFFICERS ARE:

President-----Forrest Baldwin
Vice-President-----Jean Poore
Secretary-----Jean Tam
Treasurer-----Larry Haller

MYSTERY PLANT Look for this shrubby tree while visiting Southeastern Alaska and at lower elevations along the Haines Highway. It has distinctive reddish stems, sharply toothed, 3-5 lobed leaves, that are dark green above, and lighter below. They turn red in the Fall.



HELLO FROM THE PRESIDENT'S DESK Happy Fall! Another Summer is history. I hope many of you came away with some nice memories and a few new flower friends from attending ANPS field trips this summer! Why not share them by giving a program, or a mini-botany talk! If you are a little nervous about giving one, here are some tips and guidelines that may set your mind at ease. Remember, ANPS is a friendly group and we'd love to hear your perspective on plants and field trip experiences.

MAIN PROGRAM: Should be a program on some facet of plants native to Alaska; it is best to have slides, or props (posters, specimens, etc.); program does not have to be technical, **IN FACT IT IS BEST IF IT IS NOT TECHNICAL**; program should be between 30 & 45 minutes, and no longer than 45 minutes. Some ideas and suggestions: If

you are uncomfortable standing in front of a crowd, you can talk from the back of the group at the slide projector. If you feel you are not "expert" enough to give a program, here are some ideas: talk with another ANPS member who is a little more knowledgeable about plants than you are. If you have some nice slides from a field trip, but you don't know all the plants in the pictures, why not give a program on the trip itself and have the audience identify the flowers?

MINI-BOTANY: This is a tiny SHORT tidbit of information and should last ONLY 5 minutes. Anyone should be able to do one of these on any native plant topic of their choice. If you need ideas, talk to ANPS Board Members.

PLANT FAMILY: This is a SHORT informative bit on a plant family that has not yet been covered. Emphasis should be on some interesting facet of the family, **NOT ON TECHNICAL DISTINCTIONS FOR THAT FAMILY!** Ideas for different twists on families: key characteristics common to all members, how to recognize them in the field; are they poisonous, edible, aquatic, medicinal, have economic uses; do they have unusual features or adaptations?----carnivorous, evergreen, parasites? If you are interested in giving a main program, contact the Program Chairperson. See you at the next meeting! . . . maybe as a presenter?

Lynn Catlin
Pres., Anchorage Chap.

ANCHORAGE CHAPTER OFFICERS

President-----Lynn Catlin
Vice-President-----Marilyn Barker
Secretary-----Peggy Pletcher
Treasurer-----Larry Haller
Representative to State Board-----Frank Bogardus
Newsletter Editor-----Frank Pratt

ANCHORAGE CHAPTER SEEKS BOARD MEMBERS

In May, I appointed the nominating committee to seek out members to run for election for ANPS 1990 officers. If you are interested in running for office, or have suggestions for nomination, please contact Dorothy Emmons at _____, Verna Pratt at _____, or John Wenger at _____. Listed below are the duties of each office. Officers are expected to perform these duties AND REGULARLY ATTEND BOARD MEETINGS. In 1989, we successfully held only 1 board meeting due to unexcused absences and latecomers. If you run for office, please do so with the intention of attending board meetings. The business of ANPS cannot be conducted without board meetings. Board meetings are held 45 minutes prior to each general meeting, for the sake of convenience.

President's Duties: Preside at general membership and board meetings; appoint chairpersons of committees and other appointments as necessary; appoint nominating committee in May; write thank-you cards to program presenters; serve as the public contact for ANPS Anchorage Chapter.

Vice-President's Duties: In the absence of the president, to conduct the duties of the president; head an important committee; arrange for meeting place for monthly membership meetings.

Secretary's Duties: Record the minutes of each board meeting and submit them in writing to the newsletter editor before the 15th of each month for incorporation into the newsletter; take care of chapter correspondence; submit news releases to the media for program advertisement.

Treasurer's Duties: Collect all monies and

dues; pay bills and keep a ledger showing receipts and expenditures; present a copy of these to the board; read reports at meetings when necessary.

Representative to the State Board Duties: Attend State Board meetings and report to Chapter Board; provide a liaison between Anchorage Chapter and State organization; take charge of Sanctuary Travel business for Chapter and State; including attending necessary meetings.

Program Chairperson Duties: Select and obtain speakers for monthly chapter meetings; present chapter president and newsletter editor with list of program schedule for the year on January 1, including speaker's name, phone number, and topic title and contents.

Lynn

SOVIETS VISIT ALASKA

Most ANPS members are aware of the fact that fellow ANPS member Dr. David F. Murray, curator of the Museum at University of Alaska, Fairbanks, has made several trips to the Soviet Union in recent years to study with their experts. This Summer it was Dave's pleasure to be able to reciprocate. Four top Soviet botanists visited Alaska for a full month in a joint program sponsored by U.S. government agencies, National Geographic, and UAF. They are: Dr. Igor Yu. Koropachinsky, Director, Central Siberian Botanical Garden (CSBG) at Novosibirsk; Dr. Ivan M. Krasnoborov, Vice-Director, CSBG; Dr. Alexie C. Skvortsov, Main Botanical Garden, Moscow; and Dr. Alexander (Sasha) V. Galanin, Institute for Biological Problems, North, Magadan. Accompanying them on their tour were: Dr. Murray, Carolyn Parker of Fairbanks, and Dr. George Argus and his wife Mary of the Univ. of Ottawa. Dr. Argus is a world-renowned Willow expert. During

their one-month stay, they visited areas from the North Slope to Seward. On the evening of August 9th, a reception was held for them at the home of Nancy Moore of Wasilla. ANPS members attending were: Dr. Murray, Rob Lipkin, Carolyn Parker, Verna & Frank Pratt, and Kathy Wright. On the following day; Verna, Frank, and Cindy Williams, a Summer employee of Alaska State Parks, joined the group for a very pleasant field trip in the Hatcher Pass area. The Soviets are highly interested in the relationship of our flora to the flora of the Siberian area; they are avid collectors, and enjoyed their visit immensely.

FLOWER FOUND IN MEXICAN JUNGLE HAS REPRODUCTIVE PARTS REVERSED

Botanists thought they had plant sex figured out.

After all, all 248,000 known flowering plants has the pistil - the female parts - in the center, and the stamen - the male parts - outside.

But biologist Esteban Martinez, tromping through three feet of decaying tropical muck in a chigger-ridden jungle, has proved once again that little can be taken for granted in science.

Lacandonia schismatica, a flower the size of a sesame seed, has the stamen in the center, surrounded by about 50 pistils.

"It defies all logic," said Warren Stevens, head of research at the Missouri Botanical Garden in St. Louis. He said a paper on the discovery will appear in an upcoming issue of *Annals of the Missouri Botanical Garden* in St. Louis. Martinez, who works at the National University of Mexico, found the star-shaped flower on a fallen tree trunk in the Lacandon jungle. At first he thought he'd picked up a type of mushroom, and it took a

year to discover and prove it was an exception to the sexual rule.

"It seems to be some sort of massive mutation.

One of the sacred things has been that the female parts are inside the male," Stevens said.

More study is needed to see what advantage a reverse arrangement could have. The plant appears to reproduce as other flowering plants do: pollen from the stamen fertilized the ovaries, which are part of the pistils. The ovaries turn into fruit, which produce seeds.

Martinez and Clara Hilda Ramos agreed to discuss the discovery before publication because they believe the plant's habitat is threatened by logging.

Cutting was banned last year in the 20-acre site where the plant has been found, but Martinez said he'd heard that members of the Chol Indian tribe are seeking permission to cut chicle trees, valued because their wood resists rot.

The reserve is in Chiapas state near the Guatemalan border.

"We've advised all the authorities in Chiapas and the federal Ecology Department, and we hope they take the proper measures," Martinez said.

Each plant has four to seven flowers 2 millimeters in diameter, growing along threadlike stems up to 3-1/2 inches long. The flowers have six tepals - a kind of petal - ending in turned-up points. They are thickish, something like the fleshy leaves of a jade plant. In the center is a mound of ovaries encircling an average of three stamen.

The plant is a brilliant, almost translucent white, "like crystal," Ramos said. As the ovaries mature, the center turns yellow, then to the reddish-brown color of its fruit, so tiny they're like a fine dust.

Lacking chlorophyll, the plant get its energy from decomposing material in the

dark, humid jungle with the help of a fungus that lives at its roots.

Martinez and Ramos believe the plant doesn't belong to any existing family and propose that it be categorized as family Lacandoniaceae, genus Lacandonia and species schismatica, for the jungle and the fact that it broke with traditional botanical faith.

Stevens said the plant is clearly a new genus and species, but he expects it to fall into the existing family of Triuridaceae - which includes varieties of flowering plants with normally arranged sexual parts.

When he spotted the plant in September 1985, Martinez was collecting for Flora Mesoamericana, a survey run by the National University, the Missouri Botanical Garden and the Natural History Museum in London.

He has been unable to find the plant in other parts of the jungle, but Stevens thinks it will appear. "My experience is that plants don't have ranges that restricted," he said.

The plant has survived for as long as six weeks in the laboratory, but it then dies, perhaps because it doesn't fertilize itself and may need insects to carry its pollen to another plant's pistils.-----Mesa,Az.Tribune--14April1989

QUIZ ANSWER

Acer glabrum Douglasii

LOTIONS, NOTIONS, AND POTIONS ---by Old Doc

Doc would like to divert off the normal track of medico-botanical comments this month and jump on the ecology scene for just one short column. The following was taken from George Lepp's column "Tech Tips" in the September 1989 issue of *Outdoor Photographer* magazine. I personally feel that most photographic magazines are not worth the time taken to read them. However, if you are interested in outdoor and wildlife photography, you owe it to yourself to at least take a

look at this one. Anyway, on to the extract "Shutterbug, Not Litterbug"

We've all noticed litter along the trail, and most of us pick up other people's castaways, packing them out to preserve the beauty of an area. I recently came upon a U.S. Forest Service sign that put litter into a whole new time frame. The stuff people casually discard doesn't go away for a long, long time. Here's the information on how long some litter lasts in the environment:

- * A plastic film container (Kodak or Fuji); 20-30 years.
- * Aluminum cans and tabs; 80-100 years.
- * Glass bottles; 1,000,000 years.
- * Plastic bags; 10-20 years.
- * Plastic coated paper; 5 years.
- * Nylon fabric; 30-40 years.
- * Rubber boot sole; 50-80 years.
- * Leather; up to 50 years.
- * Wool socks; 1-5 years.
- * Cigarette butts; 1-5 years.
- * Orange and banana peels; 2-5 weeks.

You can see how it can pile up if we don't do our part and someone else's as well."

(Editor's Note: I agree with all of this except the orange and banana peels. I think that they last a whole lot longer than that. Any comments from reader?)

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EDITOR'S CORNER:

Well, here it is Fall again, and time to toss out the annual plea for articles for the newsletter. Last year, we really had to plead, and came very close to publishing the newsletter on a postcard once or twice. It really could happen this year. How 'bout some articles, Dear Readers. Hope you enjoy the new crisper format. Comments are solicited.---Ed.

ALASKA NATIVE PLANT SOCIETY
Treasurers Report
Year-To-Date
June 30, 1989

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

Receipts

Membership Dues	\$ 1,165.00
Sale of First Annual 1985 Prints	15.00
Sale of Second Annual 1986 Prints	15.00
Sale of Third Annual 1987 Prints	25.00
Sale of Fourth Annual 1988 Prints	20.00
Sale of Decal Stickers	4.50
Sale of Sew-On Patches	3.00
Sale of Seeds	97.65
Contributions, Scholarship Fund	-0-
Contributions, Unrestricted	15.00
Advertising	-0-
Prepaid Postage; Sales Items	-0-
Rebates from Sanctuary Travel Agency	-0-

1,360.15

Disbursements

Newsletter Postage/Printing	-0-
Business License	50.00
Post Office Box Rent	39.00
Seed Sale Envelopes	-0-
Administrative Supplies/Postage	26.39
Postage; prepaid on sales items	-0-
Monthly Meeting; Refreshments	7.43
Refund; Overpayment of Membership Dues	10.00

(132.82)

Closing Balance, 6/30/89 \$3,426.46*

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

There are 145 paid members at 6/30/89

Respectfully Submitted,
Larry Haller, Treasurer

