

Bulletin of the

NATIVE PLANT SOCIETY OF OREGON

Dedicated to the enjoyment, conservation, and study of Oregon's native vegetation

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Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412 For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain

11 July, Sat.

FIELD TRIP to Indian Rock above Olive Lake in Grant County, elevation 8000 ft. The leader of this trip will be Harry Vincett. Note!: This trip leaves BMCC greenhouse at <u>7am</u>.

Corvallis

Contact Duncan Thomas (752-6529) for more information.

Emerald

18 July, Sat.

FIELD TRIP: Evelyn Everett will lead a trip to view high elevation wildflowers at Bristow Prairie and Bradley Lake, along the Calapooya Divide, in the Rigdon Ranger District of the Willamette National Forest. These are both Forest Service Special Interest Areas. Bring lunch, drink and hiking shoes. For more information call Evelyn (345-1746).

High Desert

11 July, Sat.

FIELD TRIP: Rare plants on the Big Summit District. The rare Peck's mariposa lily and other plants of interest will be featured on this trip to the Big Summit area. Forest Service Botanist Richard Helli well (447-9645 days) will lead us. This trip will not leave from Bend. Meet at 9:30am at the Ochoco Ranger Station, 25 miles east of Prineville.

18 July, Sat.

FIELD TRIP: Forest Health and Sustainable Forest Management. Areas of the conifer forests of central and eastern Oregon have been called "ecosystems in collapse". We will see conditions that have led to this problem and understand the natural forces at work. Entomologist Andy Eglitis and Plant pathologist Helen Maffei from the Deschutes National Forest will accompany us. Depart from Juniper Park parking lot near the tennis courts at 7th and NE Franklin Ave. in Bend at 8:30am sharp. Trip leader: Stu Garrett (389-6981 eves).

25 July, Sat.

FIELD TRIP: This trip to Echo Basin / Cone Mountain will feature the 7-ft. diameter Alaska cedars of Echo Basin. The area is near Tombstone Prairie, just west of Santiam Pass. Easy to moderate hiking. Leader is Mary Vogel (385-8633).

15 Aug., Sat.

FIELD TRIP: Broken Top Volcano in the Three Sisters Wilderness. Our annual hike to view the spectacular display of alpine wildflowers and glacial geology of Broken Top is an NPSO favorite. This is a five-mile roundtrip, moderate to strenuous hike with a 1,500 ft. elevation gain. We'll do mostly off-trail hiking. The number of hikers per group is restricted by USFS wilderness area regulations. Preregistration is required! Leader is Stu Garrett (389-6981, eves.)

Mid-Columbia

1 July, Wed.

MEETING. 7:30pm at the Mosier School. Lisa Lantz from the OSU Botany Department, will report on her research grant partially funded by the Mid-Columbia Chapter. The focus species is *Amsinckia carinata*, the Malheur Valley fiddleneck, which is endemic to the distinctive talus outcrops around Harper. It is listed as a threatened species by Oregon and is a candidate for federal listing as well.

5 Aug., Wed.

MEETING. 7:30pm at the Mosier School. Debbie Champigny, Interpretive Specialist with the Zigzag Ranger District of Mt. Hood National Forest, will present the newly created slide program, "Celebrating Wildflowers", which has been showing at Timberline Lodge.

North Coast

11 July, Sat.

FIELD TRIP: Hike on Mt. Hebo. Meet at 9am, PUD parking lot, 1115 Pacific, or 9:45am at Hebo Ranger Station. Bring lunch. Call Jim Winslow (842-2246) for details.

28 July, Tues.

MEETING. 7pm at the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook. Program to be announced.

Portland

14 July, Tues.

MEETING. 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. George Lewis will present a slide program on the "Wonders and Beauties of Oregon Wildflowers"—an overview of Oregon's beautiful plants, including one seldom seen.

For information on Portland Chapter field trips, contact George Lewis (760-2316).

Siskiyou

18 July, Sat.

FIELD TRIP: Dutchman's peak. Richard Brock will lead a field trip exploring the diverse flowers of the Dutchman's Peak region in the Applegate. Easy hiking. Leave from Ashland BiMart at 8:30am, or Medford K-Mart at 9:00am, or Applegate Ranger Station at 9:15am. For information call Richard Brock 482-4111).

25 July, Sat.

FIELD TRIP: Eight Dollar Mountain and *Darlingtonia* bogs. Anita Seda, botanist for the Galice and Illinois Ranger Districts, USFS, will lead a tour of the proposed T.J. Howell Botanical Drive. We will have an opportunity to give suggestions on stops and interpretive areas on this proposed self-guided tour of wet and dry serpentine areas. Leave from Ashland BiMart at 8am, Medford Food-for-Less at 8:30am, or Selma Market at 9:30am. For information call Anita Seda (592-2166) or Ginny Post (779-4102).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

For information, call Ted Schattenkerk (679-6953).

Willamette Valley

1 July, Wed. FIELD TRIP: A midweek trip to see Mountain Laurel and other wildflowers at Crown Lake, near Fire

camp Lakes off the South Fork of the Breitenbush. Contact leaders George and Harriet Schoppert for

details. (859-2613).

12 July, Sun. FIELD TRIP: Larry Scofield (Salem District BLM Botanist) will lead us on a trip to Niagara Falls in

the Coast Range. This is about an hours drive over good gravel roads. Hike one mile to the falls with resting benches along the trail. Leave from Dallas Safeway parking lot at 9am. Call Larry Scofield

(Falls City, 787-3833) or Kathy P. Connelly (327-1212) for further details.

20 July, Mon. MEETING / FIELD TRIP: We will tour the Willamette University Botanical Garden looking for late

bloomers and plants in seed. This garden contains a variety of native plant habitats. Meet at 7pm in front of the Sparks Center on the Willamette University Campus. This is near the entrance to the university just off Mission Street (near 12th St.) Contact Kathy Connelly for more info (327-1212).

William Cusick

11 & 12 July, Sat. & Sun. CAMP OUT AND WORK PARTY. All are welcome to a work party and barbecue at The Nature

Conservancy's Middle Fork Preserve near John Day, Oregon. For information, call Berta Youtie

(962-3903).

12 July, Sun.

FIELD TRIP: Paula Brooks will lead a walk on Mount Howard to view alpine flowers. Meet at the

gondola near Wallowa Lake State Park at 10am. For more information call Paula (523-6391). There is

a \$10 fee for the gondola.

22 Aug., Sun.

FIELD Trip: Bob Ottersberg will lead a trip to see how plant communities are related to soil types of

the Wallowa Mountains. Leave from the Richland Post Office at 8am. Call Bob (742-6200) for more

information.

NATURAL SCIENCE ILLUSTRATION:PLANTS IN PEN & INK OR WATERCOLOR

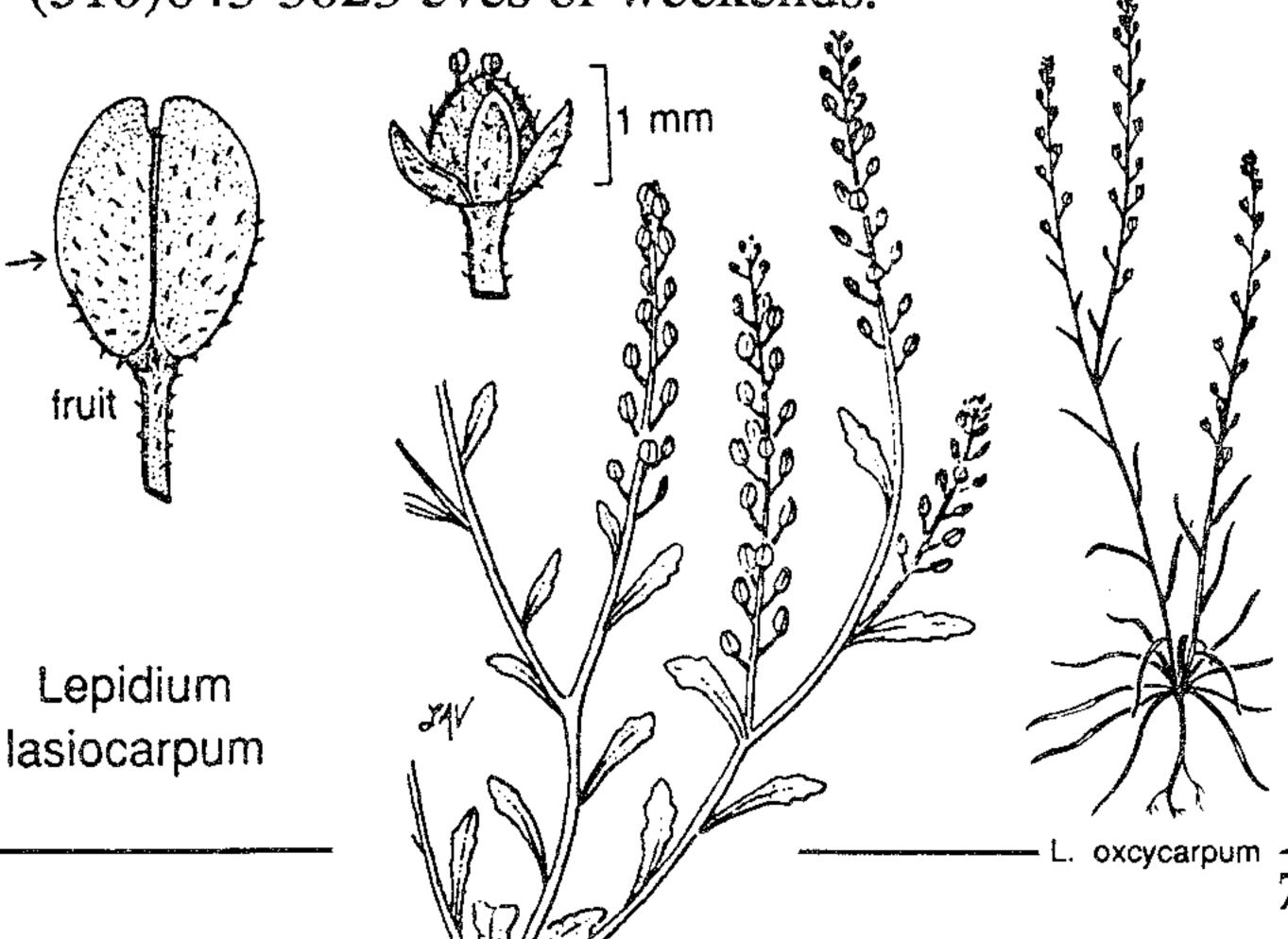
This year's Natural Science Illustration course at Malheur Field Station will focus on rendering plants in both ink and watercolor. The course will be a marathon of artwork in Oregon's High Desert, designed to accommodate the needs of both the beginning illustrator and the more seasoned artist. In the field we will work on basic drawing skills—how to render organisms with both aesthetics and accuracy. In the classroom, we will work with both living and preserved specimens, and will discover how to best interpret and portray different kinds of plants by becoming familiar with a variety of important botanical references. Illustration topics will include basic From The Jepson Manual: Higher Plants of California Reprinted with permission from the Jepson Manual Project, UC, Berkeley,

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drawing skills, use of media, publication opportunities, creating the illustration resume and portfolio, and making a business of botanical illustration.

The instructor is Linda Ann Vorobik, who holds a BA and a Ph.D in biology and has instructed numerous college level courses in biology. She has been illustrating for 15 years and has appeared in numerous scientific books and journals. She is Principal Illustrator for the Jepson and University Herbaria at UC, Berkeley, and is providing illustrations for The Jepson Manual: Higher Plants of California, and A Flora of Santa Cruz Island.

For more information, write Dr. Linda Ann Vorobik, Jepson Herbarium, UC, 6701 San Pablo Ave., Oakland CA 94608, or call (510)643-7008 days or (510)643-3023 eves or weekends.



July 1992

L. latipes var. latipes

Arthur Cruunist—1919-1912

A giant among western botanists has left us—in body, but not in spirit, for he leaves us a rich legacy of his many contributions to systematic botany. Indeed, a giant both in physical stature and in botanical achievements, Art Cronquist was a remarkable scientist. We in the west know him best for his prodigious output of major work on the Floras of the Pacific Northwest and of the Intermountain West. Though these were (and are) team efforts, the Cronquist 'signature' is clearly fixed in these regional floras. Just think of our own PNW flora in its original five volume version. Art was way ahead of his collaborators, C. Leo Hitchcock and Marion Ownbey, having finished the Sunflower Family well before the other authors had done their homework. So, Volume Five, Compositae, was the first to appear. And then the concepts for the assigning names to the plants, set out in that first volume, are vintage Cronquist. All serious plantwatchers should reread the introduction to volume 5. The ideas for what constitutes a species, a subspecies and variety were clearly set forth in that essay. Not all botanists would agree with these concepts, but that was often the case with Cronquistian utterances. He was an independent thinker, and usually right, to my mind.

The team effort with Hitchcock, Ownbey, and Thompson to produce the five volume Vascular Plants of the Pacific Northwest began in the 1950s, when Cronquist was still at Pullman. One has to say that Hitchcock was the key member of the team—the coordinator, arbiter, and compiler of the volumes, but Art was the innovator and prodigious producer of manuscript. I remember "Hitchy" being astounded at the speed with which Art turned out the treatment of Carex, the vast and difficult genus of sedges. And Art's superb handling of the more than 50 species of Penstemon was another major, rapidfire output.

I was on the phone with Art only days ago in early March. I had caught him in the midst of yet another major contribution, his part of the Intermountain Flora. Art said he was putting on the finishing touches on the...you guessed it...the *Compositae* for that vast floral region between the Rockies and the Sierra Nevada. He was overseeing the artist doing the illustrations of sunflowers of the sagebrush country.

Cronquist's mark in botany goes beyond regional floras. Always mining the rich veins of taxonomy and systematics, Art ranged into areas of evolution, phylogeny, concepts of what constitutes a species, and critical evaluation of the latest fads in science. Art was skeptical of the utility of the biological definition of the species. He knew that the reproductive test of a species-fertility within and sterility between species—was hard to apply in plants. So in 1978, he devised a definition that encompassed the real world of the practicing taxonomist. Here is the definition—elegantly simple and practical: "Species are the smallest groups that are consistently and persistently distinct and distinguishable by ordinary means" (Cronquist, A. 1979, "Once Again, What is a Species", in Biosystematics in Agriculture).

Beyond his continual involvement in regional floras, Art leaves us with many original papers in systematics and three major books: An Integrated System of Classification of Flowering Plants, Columbia University Press (meticulous descriptions of the world's flowering plant families); The Evolution and Classification of Flowering Plants, New York Botanical Garden; and, with H. Gleason, Natural Geography of Plants (a gem of a book on plant distribution and biogeography).

Some tidbits from the Cronquist curriculum vitae are in order. He was born in San Jose on Mar. 19, 1919. He earned his bachelor's and master's degrees at Utah State, where he surely came under the influence of Bassett Maguire. He took his doctorate at the University of Minnesota. From 1948 to 1951, Art was a colleague of Marion Ownbey at Pullman. He then moved on to the New York Botanical Garden, where he remained for the rest of his productive life. His last moments on Mar. 22, 1992 were spent doing what he did most expertly and serendipitously: gleaning botanical information from dried specimens at the herbarium of Brigham Young University at Provo.

So the next time you use the five volume work or the one volume Flora of the PNW, pay momentary respect to one of the men behind those outstanding products—Dr. Arthur Cronquist, an outstanding scientist.

--A. R. Kruckeberg, *Douglasia*, Vol. xvi, #2, Spring 1992

1992 CHALLENGE COST SHARE PROJECTS

This year the Eugene District Bureau of Land Management (BLM) will implement three Cost Share projects with the Oregon Department of Agriculture's (ODA) Conservation Biology Program. The species of interest are *Lomatium bradshawii* (Federal Endangered List), *Montia howellii* (Federal Candidate List) and *Cimicifuga elata* (BLM Sensitive List).

Lomatium bradshawii is a rare perennial plant species endemic to remnant Willamette Valley wet prairies.

The 1992 Cost Share program between BLM and ODA will consist of:

- 1) A throughout pollination and breeding system study covering what insects pollinate *Loma-tium*—is the species a generalist, or does it require specific insect visitors? Does it ever self-pollinate?
- 2) Because most if not all sites for this species occur next to private agricultural areas, evaluate the potential impacts of pesticide applications on pollinators.
- 3) Establish a monitoring plan that will provide information on population trends based on current transition matrix models.
- 4) Determine the frequency and effect of a pathogenic fungus that has been identified on this species.

Montia howellii is an annual herb species historically found from British Columbia to California. Its habitat is thought to be limited to seasonally wet lowland areas.

The 1992 program between BLM and ODA for *Montia howellii* includes resampling disturbance ecology plots which were established in 1991. Because it is hypothesized that this species may rely on periodic disturbance for seedling establishment, a study was initiated in 1991 to determine the effectiveness of varying degrees of soil disturbance in encouraging seedlings.

Cimicifuga elata is a perennial plant species found from British Columbia to Oregon.

Cimicifuga is a forest species and on the Eugene District has been found in several old growth stands.

The 1992 Cost Share program for Cimicifuga elata will be an interagency effort with other BLM Districts, several US Forest Service Districts as well as ODA. The objectives of this project are:

- 1) Determine the current condition of populations on federal land in Oregon.
- 2) Determine the plant association at known sites and analyze various other physical site attributes.
- 3) Establish a monitoring program at selected sites to determine the effects of various management activities on population and to determine long term changes in other sites not impacted by timber management activities.

—Nancy Wogan Eugene District BLM



THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaf is from a native woody species.

Send your guess on a postcard to:
Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

No one submitted a correct identification last month, so the same plant is featured here.

July 1992

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

ENDANGERED, THREATENED, AND SENSITIVE PLANTS OF NEVADA RECEIVES UPDATE

This updated 48-page booklet lists the most imperiled plants of the State of Nevada. It is the result of the cooperative efforts of the Northern Nevada Native Plant Society, Nevada Natural Heritage Program, Nevada State Museum, Bureau of Land Management, US Fish & Wildlife Service, US Forest Service, and The Nature Conservancy.

Included are common and scientific names, synonymy, NNNPS status and recommendations for future federal status, current federal and state status, the Heritage Program's rankings, and known county and state distribution. The booklet is intended not just to inform about rare plants but to encourage wiser land use decisions in respect to native plants. It should be useful in underbotanized Southeastern Oregon.

Free copies are available from the Nevada State Office of the BLM (850 Harvard Way, Reno NV 89502 {702}785-6386), the booklets publisher.

1992 PLANT CONSERVATION DIRECTORY

This is a comprehensive listing of more than 500 professionals and organizations involved with the conservation of American native plants, and also includes a summary of state conservation laws. It also has a listing by state of rare and endangered plants.

The listings include the Center for Plant Conservation contacts in each state; federal and state resource-level contacts; contacts in state Heritage Programs, Native Plant Societies, and other national private groups working on plant conservation.

The Resource Book can be ordered for \$15 by sending your name, organization's name, address and phone number to the Center for Plant Conservation, Missouri Botanical Garden, PO Box 299, St. Louis, Missouri 63166. Also indicate if you would like more information about the CPC.

1992 FIRE SEASON STARTS UP SIX WEEKS EARLY

I think everyone is aware of the extreme potential for wildfires in this year of continuing drought. The start of fire season was declared six years early, and fire crews started work by mid-May. The first residences were destroyed in June. Fire-fighters are all holding their breath.

East of the Cascades the drought has dragged on for six to nine years, depending on the location. Moisture conditions were already very low in many areas in May. Governmental agencies are striving to cooperate on fire fighting this year even more than usual. Expect extensive forest and rangeland closures throughout Oregon later this summer and perhaps into fall.

How dry is it? Here are the statistics on what the stream levels are as a percent of average:

Central and Southern Eastern Oregon: 6 to 59% Rogue / Umpqua Basins: 32 to 70% Wallowa Mountains: 63 to 72% Willamette Valley: 70 to 79%

Fire danger is only one of a number of problems presented by the dry conditions. The low streamflows levels are threatening our fish populations, some of which were already severely damaged by logging, grazing, past fires and road building. Forage plants are drying up early, and in the dryer parts of the state over half of both natural and man-made water sources are completely dried up, and those remaining contain less than one third of their normal capacity. This is a profound problem both for wildlife and the cattle industry. In the BLM's Lakeview District, for example, only 40 to 50% of the usual cattle turnout is likely to be allowed this year.

It has been discovered that not all fire is bad. In fact, part of the danger from fire this year is due to past fire suppression. Under natural conditions high levels of downed wood in the forest would have burned before reaching its current high level, and less brush and small trees would be present. Fewer firs would exist to have been damaged by insects. Current conditions may lead to larger and more intense burns than often occurred naturally.

STATE OFFICERS	DIRECTORS	ılz	699 W. 2n 652 W. 10th St 2912 NW Arthur Av 462 South E S	id, Prineville 9 t. #1, Eugene 9 ve., Corvallis 9 t., Coos Bay 9	97704; 447-527 97402; 485-186 97330; 758-806 97630; 947-447
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