

Bulletin of the

NATIVE PLANT SOCIETY OF OREGON

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

VOLUME 25 NUMBER 10

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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



For information call Jerry Baker (566-2244).

Corvallis

10 Oct., Sat.

WORKSHOP: Seed and cutting propagation of native plants 10 am to noon. If interested, call Loren Russell (752-7558).

12 Oct., Mon.

MEETING. NEW LOCATION: Unitarian Fellowship at 2945 NW Circle Blvd. Corvallis. At 7 pm there will be a conservation issues meeting. At 7:30 pm Manuela Huso will talk on purple loosestrife in Oregon and its biological control. Call Esther McEvoy for information (754-0893).

Emerald

12 Oct., Mon.

MEETING. Junior Robertson will give slide show & discussion on East Alton Baker Park charter amendment. 7 pm. at Morse Ranch Park. From downtown Eugene, take Willamette St. S. to Crest Dr. (Rt. thru. "Y" for Donald, between 32 & 33rd. Ave. E.). Turn right (W.) on Crest and proceed about 4 blocks. Turn right into Wayne Morse Ranch Park parking lot. Walk east to the white farmhouse.

24 Oct., Sat.

WORK PARTY. Amazon Park native prairie restoration. Bring shovels, gloves for digging tall fescue. Dress for work, rain or shine. Seeds & bulbs from eight local native populations will be provided. Meet on the Amazon bike path, northwest of the Amazon Community Center, 2700 Hilyard, Eugene, 10 am.

9 Nov., Mon.

MEETING. Tom Kaye on Monitoring Lane County's federally listed rarities: Bradshaw's lomatium and tall bugbane. Slide show & panel with Jennifer Dimling and Nancy Wogan, local USFS & BLM botanists. 7 pm at Morse Ranch Park. From downtown Eugene, take Willamette St. S. to Crest Dr. (Rt. thru. "Y" for Donald, between 32 & 33rd. Ave. E.). Turn right (W.) on Crest and proceed about 4 blocks. Turn right into Wayne Morse Ranch Park parking lot. Walk east to the white farmhouse.

More information? Call Bruce Newhouse (president 343-2364) or Ethen Perkins (programs 345-3944).

High Desert

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For information call Cindi O'Neil (389-3085).

Mid-Columbia

7 Oct., Wed.

MEETING: 7:30 pm at the Mosier School. Ed Guerrant, Conservation Director of the Berry Botanic Garden, will present the program "Reintroduction of Native Plant Species as a Conservation Tool". It will feature *Penstemon barrettiae* and *Stephanomeria malheurensis*.

North Coast

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FIELD TRIP: To be announced.

27 Oct., Tues.

MEETING: 7pm at the Carl Rawe Meeting Room in the Tillamook PUD, 1115 Pacific, Tillamook. Jerry Igo of the Mid-Columbia NPSO Chapter will give a presentation on showy wildflowers of Oregon.

Portland

13 Oct., Tues.

MEETING: 7 pm at the meeting room of the Washington Park Zoo, near upper end of parking lot at Gate G, Portland. [Note the change of place for this month only.] Joy Belsky will give a presentation, with slides of her climb up Tanzania's Mt. Kilimanjaro, starting with tropical rainforest and ending at the glaciers at the top. She will discuss the evolutionary pressures resulting in the unusual adaptations of plants to high altitudes at the equator. Joy recently moved to Portland after 12 years of research in Tanzania and Kenya for Syracuse and Cornell Universities.

Siskiyou

15 Oct., Thurs.

MEETING: 7:30 pm in Room 171, Science Building, Southern Oregon State College. Public invited. Program to be announced. For information call David Kennedy (535-6383).

South Coast

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

Umpqua Valley

8 Oct., Thurs.

MEETING: 7 pm in Room 311 of the Douglas County Courthouse.

17 Oct., Sat.

FIELD TRIP: To see mushrooms and other fungi and discuss the roles they play in the forest community. Leave at 7:45am from the BLM parking lot, 777 Garden Valley Rd. For information, call trip leader Jack Hausotter (874-2462).

Willamette Valley

19 Oct., Mon.

MEETING: 7 pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Frank Kolwicz, past Willamette Chapter President and a professional photographer, will present a program on "Plant Photography".

16 Nov., Mon.

MEETING: 7 pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Mike Fahey will present a program on "Flowers and Seeds of the Columbia Gorge".

16 Nov., Mon.

WORKSHOP: Bruce McCune, professor of botany at Oregon State University, will lead a Lichen Workshop at Silver Falls State Park. Meet at 9 am at the cabin behind the Main Lodge Building in the Park.

William Cusick

6 Oct., Tue.

MEETING: 7:00pm ESD Office, 2100 Main Street, Baker City, Oregon. Paula Brooks will present a slide show on trees and shrubs of northeast Oregon.

10 Oct., Sat.

FIELD TRIP: 10am Oregon Trail Interpretive Center, Virtue Flat, East of Baker City. Alan Bahn, a range scientist with the Soil Conservation Service in Baker City will lead a tour of the vegetation at the interpretive center.

17 Oct., Sat.

WORK PARTY: 9am Gangloff Park, west edge of LaGrande along the old highway. This will be a cleanup day, preparation of the site for planting natives and salvage of plants from a highway construction site. Contact Kent Coe (962-7049) or Lucinda Heber (963-9214).

24 Oct., Sat.

WORK PARTY: 9am Gangloff Park, LaGrande. Planting of new materials. Contact Bob Ottersberg 963-4907.

Welcoming Our New Members...

Here's our new members from May 31st thru August 1st:

Corvallis

Chris Gardner
Katherine Hunt
Aaron & Sara Liston
Carolyn Pearson

Emerald

Dawn Meckleson

High Desert

Leslie Gecy
Cynthia & John & Ayla Glenn
Mary Morton
Robert Nobile
Barbara E. Russell
Linda C. Weaver
Mary Alice Willson

North Coast

Jeri Hise
Byron D. Ruppel

Portland

Beverly Bach
Joy Belsky
Edwin Chinn
Julie Gates
Carolyn McAlear
Rick & Nora Miller
Magdalen Rebholz
Kitty Wheeler
Kathleen Wilson

Siskiyou

Dianne Louise Keller
Linda Knight

Umpqua Valley

Jody & Dan DeLand
Anna Slemmer

Willamette Valley

Susan R. Hall
Josh & Barbara Reese
Art & Sandi Reinke
Janvier Slick
Patricia A. Wheeler

William Cusick

Donna & Mike Higgins

RARE PLANT FIELD STUDY

LOMATIUM GREENMANII

Known only from alpine meadows and rocky outcrops on the top of Mt. Howard and Ruby Peak in Oregon's Willowa Mountains, *Lomatium greenmanii* (Greenman's desert parsley) was the subject of a June 1992 field study developed and directed by Tom Kaye of the Oregon Department of Agriculture (ODA) and co-sponsored by the US Forest Service. Thanks to a grant-in-aid by the Native Plant Society of Oregon, I was able to assist the ODA research team as a field botany intern, an exciting opportunity to contribute to rare and endangered plant research.

The study site on Mt. Howard is set in an incredibly beautiful location at 8,256 feet overlooking the Eagle Cap Wilderness, the near perfect glacier moraines of Willowa Lake, and Hells Canyon to the east. Our field team experienced probably the best and the worst of field conditions, including clear skies interspersed with freezing temperatures and snowstorms, as we established transects and measured plant size and density. A tramway takes thousands of visitors each year up a 4,000 foot ascent in small gondolas to this spectacular location. The unique habitat for *Lomatium greenmanii* occurs in profusion only on the Mt. Howard summit, and the impact of such frequent human visitors was the main interest of our field research.

Lomatium greenmanii is listed as threatened by the State of Oregon and is a candidate for federal listing under the Endangered Species Act. In 1988 Tom Kaye began monitoring *L. greenmanii* and studied plant characteristics along five transects located in areas of low, medium and high human disturbance levels. In a cooperative effort between ODA and the Willowa-Whitman National Forest, facilitated by botanist Marty Stein, the 1992 research included setting up an extensive and long-term monitoring system to be incorporated into ongoing federal work on the species. The results will provide accurate information to assist the Forest Service in routing trails and improving the visitor interpretation system so that *L. greenmanii* is protected from future disturbance.

Our work on Mt. Howard included reestablishing the previous five monitoring transects, surveying and mapping the *L. greenmanii* populations onto an aerial photo, and setting up seven new transects in representative areas. Tom also collected pollinators for comparison with the those collected in

the 1988 study. *Lomatium greenmanii* is a low-growing perennial generally less than 10 cm in height with moderately dissected leaves, a broad caudex, and umbels of tiny yellow flowers borne on scapes. As observed previously, we found *L. greenmanii* specimens in high impact areas to be generally more stunted, less reproductive, and more scattered than those from untrampled areas.

We set out to work June 26th with the Forest Service staff. Our attempt to drive to the top of Mt. Howard was unsuccessful due to impassably wet roads, so we commuted in the gondola to our work site. Using photos of the old transect locations, we scoured the ground trying to locate steel spikes left behind in 1988 to mark the sites. The problem caused by human trampling was immediately evident. We observed a network of planned and unplanned trails, bare of vegetation for up to 6 feet, and a tendency for visitors excited by the wondrous view and alpine flora to wander everywhere, unaware that a rare plant often lay at their feet.

The top of Mt. Howard consists of several hundred acres of gentle slopes with alpine meadows, tundra, and some rocky outcrops which fall off sharply to the valley below. We observed scattered whitebark pine, heather, lupine, grasses and many other species, as well as pesky chipmunks, rabbits, and deer all in close proximity. *Lomatium greenmanii* was observed in both meadow and rocky locations throughout a large portion of this area. One of our first challenges in data collection was isolating single plants, since individuals of the species often grow closely intermingled. Relatively large patches of *L. greenmanii* with numerous long scapes were observed in remote areas away from the tram buildings.

During the next few days our field team, including Matt Carlson, Lupin Loel, and Angie Ruzicka, collected data concerning plant size and density of *L. greenmanii* along 5 meter transects. We randomly selected individual plants in 100 cm x 25 cm plots along the transect, then measured the plant size, number of umbels, average scape length, and maximum phenology (many were fruiting). We also counted the number of plants and estimated percent cover for *L. greenmanii* in each plot. Since Tom had placed some original transects near very popular viewpoints, we received many questions from curious visitors as we

worked. After we explained our rare plant study, I was pleasantly surprised at the interest and enthusiasm the general public expressed about the plant and what we were doing. At least one person took a home video with closeups of *L. greenmanii*.

In the final days of our work we set up the new transects and collected plant data with assistance of Marty, Joanne and Jennifer from the Forest Service. Our scenic working conditions suddenly changed as the weather turned to occasional rain, hail, and even snow! Back at camp large puddles under several of our tents prompted a popular decision to move to a lodge for a couple of nights. The new transects, 15 meters long, were laid perpendicular across trails in representative locations within *L. greenmanii* populations we had mapped earlier. We measured and recorded plant location, size, number of umbels, and percent cover in 20 x 50 cm Daubenmire plots. Our final task was to photograph all transects and carefully record their location and orientation. The goal was to ensure that future teams could locate the exact locations in subsequent years and measure changes in population numbers and individual plant size, especially in relation to distance from trails.

Although results from this study will be compiled later, some trampling impacts on *L. greenmanii* were obvious. A 1988 photograph of one transect showed several *L. greenmanii* plants and scattered large rocks in one section which is now bare soil where a new "trail" had begun. Some visitor management steps have already been taken to protect *L. greenmanii* from excessive disturbance, such as the recent addition of a weekend Forest Service interpreter to guide tours and supervise visitors on the trails. Physical trail barriers like rocks, designated view locations, and better trail signs describing *L. greenmanii* and other fragile alpine taxa were discussed as means of possible future protection for the local ecosystem. I am happy to report that there is still a large population of *L. greenmanii* on top of Mt. Howard and the ODA/Forest Service project is helping to protect it.

I found this internship to be an extremely valuable experience as I continue my training as a biology student at Oregon State University. Special thanks go to the Native Plant Society of Oregon, Bob Meinke and Tom Kaye of the ODA Plant Conservation Biology Program, the U.S. Forest Service, and the excellent botany program at Lane Community College which helped prepare me for this assignment.

—Ed Hoover
Oregon State University

PRESIDENT'S CORNER

I am pleased and honored to be serving as the President of the Native Plant Society of Oregon. We are the constituency for all the native plants of Oregon be they rare or common. We serve a very important role in being the advocate for native plants and ecosystems in the state and we need to communicate our message to all levels of decision makers, from those at the national level in Washington D.C. to those at the local level in our state, county and neighborhood. This is a critical time for our voices to be heard. I feel we need to let others know the value of these plants and the importance of protecting their habitat and those processes that create and renew habitat. Written contact with the appropriate decision makers is especially important. Those of us that live near or spend time on public lands need to be involved in management decisions that affect those lands.

Native Plant Society members are ideal "key contacts" or "stakeholders" when input is necessary for decisions that have an effect on our native ecosystems. This is an exciting time when we consider the potential impact of a group as large as the Native Plant Society of Oregon. I look forward to meeting and working with you. Please feel free to share your ideas, comments and criticisms with me.

—Lisa Croft
NPSO President



Iris tenax
drawn by Julie Kierstead

HECTIC DAY FOR EMERALD R & E CHAIR

8:01am, Tuesday Sept 1. Phone jangling. Heavy equipment operator on line. Been ordered to bulldoze *Lomatium bradshawii* at Short Mt. Listed federally endangered. Two acres designated wetland diked and graded.

8:05am. Pull rap sheet—long as arm. Lane County owned and operated landfill. Sited on Bashaw clay wetland. No EA or EIS. FOIA from Corps: no permits issued. Floodwaters lap at base. Bad leachate breakout 1991. DEQ monitoring wells under water. Leachate ponds sited in Camas Swale creekbed. Raw leachate sprayed on lomatiums last year. City of Corvallis drinking water. Coffee getting cold.

8:09am. Outgoing enforcement calls. Laura Todd; USFWS rare plants. Jeff Kent; prosecutor, US Attorneys Office. Norm Delorme; natural resource / ecoterrorism special agent, FBI. Larry Keene, FWS Enforcement Agent, Seattle. Ken Bierly; Division of State Lands Wetlands Director. Brian Lightcap; US Army Corps of Engineers, Clean Water Act Enforcement Officer. Audrey Eldridge; DEQ Compliance Officer. Help on its way.

8:23am. Reheat coffee. Outgoing calls to resource specialists. Bob Meinke: ODA rare plant program. Jimmy Kagan; Oregon Natural Heritage Program. Bill Castillo; ODFW District biologist. Laura Bernstein; USFS Fisheries Biologist.

8:35am. Review resource data. Crucial southern anchor in new recovery plan for Bradshaw's lomatium. ONRC lawsuit filed August 10th. *Aster curtus*, *Erigeron decumbens* nearby.

Western pond turtle juveniles. Bald eagle nest downstream. Oregon chub in Camas Swale.

8:49am. Outgoing calls to interest groups. Bruce Newhouse; NPSO Chapter President. Peggy Robinson; Sierra Club Many Rivers Group. Dan Stotter; environmental attorney, Friends of the Coast Fork.

8:59am. Outgoing calls to media. Harry Esteve (Register-Guard). Kathleen Monje (The Oregonian). Pauline Austin (KVAL). Channel 13. OPB. KNPR.

9:21am. Make pancake batter. Turn on stove.

9:22am. Incoming call, line 1. Turn stove off.

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4:59pm. Last TV crew gone from house. Take last phone call. Prep last of 16 fax packets. Make fresh pancake batter. Turn stove on.

5:01pm. Equipment operator again. Harassed by supervisor. Advise to hire attorney, threaten County with whistleblower suit. Spouse already did.

—Tom Pringle
Emerald Chapter

POTENTIAL THREAT TO US PRICKLY PEARS

The following article is from *Park Science*, Summer 1992. If anyone finds this insect, send us a report.

Cactoblastis cactorum is a phycitine moth that has been used with remarkable success as a biological control agent against prickly pear cacti, *Opuntia* spp., in Australia, the Caribbean, Hawaii, India and South America. Solid stands of prickly pears have been reduced to a few stragglers in all these areas within a very short time. The moth whose larvae feed within the cladode (pad) often is cited as one of the best examples of effective biological control.

The moth was introduced to the Caribbean in 1957 to control the prickly pear on Nevis. Later it was taken to other islands but also dispersed naturally to areas such as Puerto Rico. Recently it was found in the Florida Keys and since has spread as far north as Key Biscayne.

There are many species of *Opuntia* in North America, where they form an important element of the flora of certain ecosystems, e.g., deserts. Some of these species now are quite rare. They already are attacked by native phytophagous insects. The introduction of *Cactoblastis*, however is a very serious threat to the genus. Pesticides are only effective during the period when the larvae are penetrating the pads. Thereafter they are generally protected by the thick outer cuticle of the pad. A number of natural enemies of *Cactoblastis* are known, but their efficacy and host specificity need evaluation. It is unlikely that such a study will occur unless considerable pressure is brought to bear on state and federal agencies.

More detailed information can be had from Drs. D.H. Habeck and F.D. Bennett, Dept. of Entomology and Nematology, IFAS, Univ. of Florida, Gainesville 32511. Ask for Entomology Circular 333 – *Cactoblastis cactorum* Berg (Lepidoptera: Pyralidae), a Phycitine New to Florida.

Clifford Smith and Donald Gardner
NPS / CPSU, University of Hawaii

