

Sidalcea Summer: Botanists, Boots, and Boats

by Rhoda M. Love, Emerald Chapter

VOLUME 36, No. 5

Thope 2003 will be the summer when NPSO volunteers scour Oregon's Pacific coast estuaries for one of our rarest and most beautiful wildflowers, *Sidalcea hendersonii*, Henderson's checkermallow.

A member of the Hollyhock Family (Malvaceae), Henderson's checkermallow is a gorgeous plant, which is, or was, one of the treasures of our coast. (See recent photo which was not taken in Oregon.) Sadly, evidence suggests that the species has virtually disappeared from our state, although it was originally known from at least ten scattered locations from the mouth of the Umpqua River in Douglas County to the Columbia River estuary. While it can still be found in places along the Washington and southern British Columbia coasts, this is its worldwide distribution! Where it still exists, the plant is found in a unique habitat: areas where fresh water from lakes or streams approaches the Pacific Ocean. Its typical locations are tidal river estuaries, estuarine islands, outlets of sand dune lakes, or where fresh water marshes drain to the sea.

Where did this unusual and spectacular species evolve, how did it spread to these isolated locations, and why has it virtually disappeared from Oregon? These questions have not yet been answered; however, it seems likely that the species moved primarily from south to north. At least this is my hypothesis based on the fact that the genus *Sidalcea* is more diverse in California than to the north. *The Jepson*

Manual lists 18 Sidalcea species for California; floras of Oregon generally recognize 13 species; Hitchcock identified three species in Washington; and British Columbia has two.

In a 1957 monograph, Hitchcock concluded that the closest living relative of S. hendersonii was Sidalcea nelsoniana, another rare Oregon species. Thus it seems possible that Henderson's sidalcea evolved in Oregon. How it subsequently spread along the coast is not known. As for its rarity, the species is vulnerable due to various factors. First are the vicissitudes of the estuarine habitat where vegetation may fall prey to flooding, siltation, storm surges, battering by driftwood and long-term changes in sea level. Other dangers are anthropogenic, arising due to forestry, urban or resort development, road, bridge and airport construction, grazing, and the introduction of weedy competitors. Research in BC suggests that the plant's gynodioecious reproductive mechanism makes it vulnerable when population size becomes low. Weevils are known to feed on the seeds.

Sidalcea hendersonii was first made known to science by plant explorers in Oregon. Pioneer botanist Louis F. Henderson receives credit for sending the type specimen to the Gray Herbarium where it was named by Sereno Watson in 1887. Henderson made the collection, probably near present day Fort Stevens State Park on the Columbia River estuary in Clatsop County. Simultaneously, it was found

by another Oregon pioneer, Thomas Jefferson Howell, near the mouth of the Umpqua River in Douglas County. It has not been seen in either location for many years.

If Oregon is indeed the species' site of origin, as well as its site of first discovery, it is sad to contemplate what has apparently happened to it here. Historically there were at least ten sites in our state. With your help, I hope surveys will take place at most of these sites in 2003; however, based on current knowledge plus evidence from searches in the 1970s, Henderson's checkermallow has been found at only 3 places in Oregon in the last 40 years. (At one of these, only a single stem was noted.)

continued on page 57

MAY 2003

In This Issue

April State Board Meeting4	48
Chapter Calendar	49
Other Events	54
Camas: Essential Item for Northwest First Peoples!	56
All Plant Geneticists Agree	58
NPSO Contacts	59
NPSO Items for Sale	50



Native Plant Society of Oregon

World Wide Web

http://www.NPSOregon.org

E-mail Discussion List

To join send a message to majordomo@tardigrade.net, with the following in the body of the message: subscribe npso

General Business Address

P.O. Box 902
Eugene, OR 97440
or correspond directly with Officers
and Committee Chairs listed on the
inside of the back page.

Membership Inquiries Only

Jan Dobak 2921 NE 25th Avenue Portland, OR 97212-3460

Bulletin of the Native Plant Society of Oregon

Editor: Tanya Harvey

ISSN 0884-599. Published 11 times per year. Subscription price \$18/year. Date and issue number on page 1.

The submission date is the 10th of each month for the following month's issue. Send submissions by e-mail to bulletin@NPSOregon.org.

Opinions expressed in this publication are those of the authors of the articles. They do not represent the opinions of the Native Plant Society of Oregon, unless so stated.

Highlights of the April State Board Meeting

by Kelli Van Norman, Secretary

That a surprise it was at the April 5th NPSO State Board of Directors meeting, when Bob Ottersberg from the William Cusick Chapter in LaGrande walked in! I think the best part about the Board meetings is the chance to hear what is happening at the Chapters. Chapter presidents attend the Board meetings to represent their members, share reports on Chapter happenings, and hear about successes and difficulties at other Chapters.

And even more exciting is the news that Bob Ottersberg has offered to serve as the NPSO Eastside Conservation Coordinator. As conservation is the main mission of NPSO, it is critical to have this position filled. The job entails working with Chapters to identify and participate in conservation-related issues. Jerry Igo from the Mid-Columbia Chapter will also be working with Bob.

We reaffirmed that conservation is a core mission of NPSO at a preliminary strategic planning session prior to the regular meeting. We have a good start on identifying goals and tasks for NPSO to accomplish. The hope is that by going through this exercise to create more structure to the organization, we might increase the vitality and membership of local Chapters and the cachet of the NPSO organization to influence conservation issues throughout Oregon. Everyone is welcome to provide input, and you will hear more about this in the coming year.

The study of native plants is one of NPSO's goals. Every year the Board and local Chapters award student grants. Dan Luoma, chairperson of the Field Research Grants Committee, recommended four proposals.

- Conservation Biology of *Oenothera* wolfii (Onagraceae) ~ Rebecca Currin
- Distribution of *Abronia umbellata* ssp. *breviflora* on the Oregon coast ~ Nathan Wintle
- Myrmecochory and predation of Trillium ovatum seeds across a range of forest age classes - Jennnifer Millard
- Effects of Livestock Grazing on Calochortus greenei and Astragalus

californicus in the Cascade-Siskiyou National Monument - Evan Frost.

The NPSO Membership Directories will be out by the end of April. Thanks to Jan and Dave Dobak for their Membership Committee work. If you know someone whose membership has expired, encourage them to rejoin!

Chapter	Current 2003/Expired 2002
Blue Mountai	in17/4
Cheahmill	43/13
Corvallis	94/30
Emerald	122/29
High Desert.	48/25
	18/2
Mid-Columb	ia32/8
North Coast.	14/5
Portland	201/61
Siskiyou	89/27
	ey24/7
	ck12/4
Willamette Va	alley43/13
At Large	24/4
	781/232

Wildflower Show season is upon us. At the Mid-Columbia Chapter, Jerry Igo reports that they taught a successful how-to-give-a-wildflower-show workshop. Bob Ottersberg reported that the William Cusick Chapter is "alive and struggling" as their members are far-flung, and they have difficulty finding officers. On a positive note, the Chapter remains active by maintaining a 2-acre City park and working with an AmeriCorp volunteer to have local kids help pull weeds. Jack Hausotter reported that Umpqua Valley Chapter has a great new meeting location. Their main difficulty is finding speakers for meetings and getting new, young members. The Corvallis Chapter has held a series of successful plant identification workshops this spring organized by an energetic new member. As always the Siskiyou and Emerald Chapters have been very busy with numerous activities.

Thanks to Dan Luoma and Esther McEvoy from the Corvallis Chapter for hosting the State Board at the new College of Forestry Building, Richardson Hall, at Oregon State University. The next Board meeting will follow the Annual Meeting in John Day, June 22.

NPSO CALENDAR

State

June 20-22, 2003

Annual Meeting: The Portland Chapter will host this year's meeting in John Day. Registration and field trip and lodging information were included as an insert in the March issue of the *Bulletin*. For more information go to http://ghs.gresham.k12.or.us/science/ps/nature/bloomtime/centralo/trips/jday/johnday.htm.

Blue Mountain

May 4, Sunday, 8:00 am
Field Trip: Wildhorse – Pine Creek
Roads. Jerry Baker will lead this trip
into the Blue Mountain foothills, with
several stops and no hiking. Meet at
the NE corner of Pendleton's Safeway
parking lot. Call Jerry, 541-566-2244,
to let him know you are going.

Cheahmill

May 3, Saturday, 8:30 am AM Workshop & PM Field Trips: Backyard Wildlife Habitat Work**shop.** Yamhill SWCD and the Cheahmill Chapter are co-sponsoring this annual educational event. Morning topics include: Butterfly Gardening with Native Plants; Mushroom Basics; Bees and Other Pollinators; and Raptors. The afternoon field trip options include guided visits to: Airport Park in McMinnville—an easy walk led by Marilynn Karbonski—and tours of the wet prairie at Deer Creek County Park in Sheridan led by Dave Hanson. Workshop lectures start at 9:30 am at Public Works Auditorium, adjacent to the OSU Extension Office at 2050 Lafayette Ave, McMinnville. To register or for more info call Tim Stieber at Yamhill SWCD 503-472-6403.

May 17, Saturday, 11:00 - 4:00 pm Event: Spring Wildflower Show and Native Plant Sale. Cheahmill Chapter will host its 4th Annual Wildflower Show and Native Plant Sale at the McMinnville Public Library located at 225 N. Adams Street. Tours of the Native Plant Garden at the library will be available. For more info contact Marilynn Karbonski at 503-852-7230 or Sepha Nisbet at 503-434-5675.

May 24, Saturday, 9:00 am
Field Trip: Trask Mountain. Dan
Upton, a retired Willamette Industries
forester, will lead this moderate hike.
Trask Mountain is a 3450' peak located

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. Participation is at your own risk. Be prepared to sign a release form indicating this. For a sample copy check out the NPSO website. Please contact the trip leader or chapter representative about difficulty, distance, and terrain to be expected on field trips. Bring water and lunch. All NPSO field trips are open to the public at no charge (other than contribution to carpool driver) and newcomers and visitors are always welcome. National Forests require a Northwest Forest Pass for many field trip locations. Permits can be acquired at forest headquarters and ranger districts.

NOTICE TO FIELD TRIP CHAIRS AND LEADERS

The Forest Service and other agencies have set policies limiting group size in many wilderness areas to 12. The reason is to limit human impacts on these fragile areas. Groups using wilderness areas should be no larger than 12.

in the northwest corner of Yamhill County in Oregon's Coast Range. Field trip participants will pass through grassy meadows, oak groves and ancient conifers. **Registration required**. Meet at the Linfield Ave. entrance to Murdock Hall on the Linfield College campus in McMinnville. For more information or to register, call Kareen Sturgeon at 503-472-0866.

May 31, Saturday, 9:00 am

Field Trip: The Butte. Cheahmill past-president, Dave Hanson, will lead this moderate hike. Participants will explore The Butte, which has an elevation of 1407' and is situated approximately 8-1/2 miles due west of the city of McMinnville, between the waters of Muddy Creek and Deer Creek. Hikers will pass through a stand of 200- to 400-year-old Douglas Firs. Meet at 9:00 am at the Yamhill SWCD parking lot located at 2200 SW 2nd Street in McMinnville. For more info contact Dave Hanson at 503-843-4338.

June 7, Saturday, 10:00 am
Field Trip & Picnic: Deer Creek
County Park. This annual event is
scheduled in conjunction with the
Yamhill County Park District. Come
take a tour of the park's wet prairie—
one of the few such ecosystems remaining in the Willamette Valley. Bring a
picnic lunch and join in discussions
planning for the continuing restoration
and improvement of Deer Creek
County Park. For more information
call Dave Hanson at 503-843-4338.

June 14, Saturday, 8:30 am

Field Trip: Marys Peak. Joint Outing with the Corvallis Chapter. Meet at the McMinnville Bi-Mart parking lot at 8:30 am. We shall have two options for the participants. There will be a loop hike from the campground to the summit and back down through the woods. There is a less strenous hike from the upper parking lot to the rock garden and back if there is an interest. Please wear hiking boots, be prepared

for any weather and bring a lunch. For questions and to register for the field trip please call or e-mail Erin Rainey cell phone: 503-435-8589 e-mail: erin.rainey@baileynursery.com.

June 28, Saturday, 8:30 am Field Trip: Mt. Hebo. Carol Bickford, a retired BLM wildlife biologist, will lead this moderate hike. Expect to see grassy meadows, rocky outcrops, a sphagnum bog, and spruce-fir forests. On sunny days this hike offers panoramic views of the Pacific Ocean, Coast Range and high peaks of the Cascades. Participants will pass through meadows that are home to the largest known population of Oregon's endangered Silverspot butterflies. Meet at the Linfield Ave. entrance to Murdock Hall on the Linfield College campus in McMinnville. For more info or to pre-register call Kareen Sturgeon at 503-472-0866.

Corvallis

May 12, Monday, 7:30 pm Meeting: Impacts of the invasive European grass *Brachypodium sylvaticum* at McDonald-Dunn Forest, a slide show and talk by Susan Morre. Meet at the Avery House in Avery Park For more information please contact Esther McEvoy at 541-754-0893.

May 18, Sunday, 1:00 pm Field Trip: Owens Farm. Meet at the parking lot across from the Monroe Beanery, Corvallis at 1:00 pm. We will carpool to the Owens Farm where we will work on a species list for the area. For more information please call Esther at 541-754-0893.

June 1, Sunday, 1:00 pm Field Trip: Butterfly Meadows to look at the invasion of false-brome (Brachypodium sylvaticum). Meet at the Oak Creek entrance to McDonald's Forest at 1:00 pm for hike to the site. For information and to register please contact Esther McEvoy at 541-754-0893.

June 9, Monday 7:00 pm

Work Party: Yard cleanup and dinner potluck. Bring gloves, a trowel and a bucket. We will weed the native plant garden and then take a break for a potluck dinner on the deck of the Nature Center, Avery House, Avery Park. Everyone welcome! For more info call Esther McEvoy at 541-754-0893.

June 14, Saturday, 9:30 am
Field Trip: Marys Peak. Joint outing of Corvallis and Cheahmill Chapters.
Meet at the parking lot across from the Monroe Beanery at 9:30 am to carpool to Marys Peak. See Cheahmill listings for full description or contact Esther McEvoy for more information and to register 541-754-0893.

Emerald

May 4, Sunday, 9:00 am
Field Trip: Spencers Butte. A local landowner will host a visit to his property on the southeast side of Spencers Butte. The land consists of more than 100 acres of grass prairie and oak-pine savannah. Meet 9:00 am at South Eugene High School and return before 3:00 pm. Bring lunch. For more info call Dave Predeek at 541-345-5531.

May 10, Saturday, 10:00 am Local Garden Tour: Yard of Native Landscaper, Denis Biesecker. Denis' yard is a charming example of a blend of Willamette Valley and northwest natives mixed with exotic ornamentals. Meet at South Eugene High School at 10:00 am. The tour will last until noon. For more information call Denis at 541-344-9032.

May 12, Monday, 7:30 pm
Meeting: Kalapuya and Respect for
the Earth. Esther Stutzman works with
various arts-in-education councils
throughout Oregon and is currently
developing a culturally-correct curriculum. She'll talk to us about the
Kalapuya view of the Earth and the
resources, say something about the
practice of burning in the valley, and
give some plant uses. Esther, who's

been telling stories of her people for over 40 years, will also tell us some stories. Room 115, Science, Lane Community College, 4000 E. 30th. Ave. Note: May's meeting will be on the 2nd Monday (not the 4th as is usual).

May 31, Saturday, 8:00 am Field Trip: Conifer Identification Walk. Rob Weiss will lead a trip to Smith Ridge near the McKenzie River headwaters. Smith Ridge may have more conifer species in one small area than anywhere else in Oregon—rivaling the Klamath Mountains of California. Among 16 to 18 species are Alaska yellow cedar, silver fir, dwarf juniper and Engelman spruce. We will walk 2 to 3 miles. Bring hand lens and lunch. Wear boots. Meet 8:00 am at South Eugene High School or 9:15 am at Harbick's Store 7 miles east of Blue River on Highway 126. For more information call Rob at 541-563-3947 or

June 29, Sunday, 9:00 am
Field Trip: Elk Meadows. Nate France will take us to see Mimulus cardinalis, knobcone pine and other special plants of the Kalapuya Divide. Frasera umpquaensis should be in bloom at Elk Meadows. Then there will be a short off-trail hike with little elevation gain. Be prepared for walking through brush. Meet 9:00 am at South Eugene High School or 9:45 am at Lakeside Park on Cottage Grove Reservoir. We will return to Eugene by 6:00 pm. For more information call Nate at 541-942-0483.

High Desert

Dave at 541-345-5531.

May 13, Tuesday, 6:00 pm
May 21, Wednesday, 6:00 pm
May 29, Thursday, 6:00 pm
Work Party: Pilot Butte State Park—
Stop the Alien Invaders! The Butte is a special natural feature in the urban sea of Bend. This half million-year-old volcano has intact native bunchgrass communities over much of its flanks and springtime wildflowers abound.
Unfortunately, in the last 10 years spot-

ted knapweed, toadflax, cheatgrass, sweetclover, and mullein have begun to replace native plants. In cooperation with the State Parks Division and Pilot Butte Partners, we are pulling weeds to stop this invasion in its early stages. Bring gloves, wear sturdy footwear, and meet at the eastside parking lot at the base of the Butte at 6:00 pm for an hour of weed pulling! For more info call Stu Garrett, 541-389-6981 eves.

June 7, Saturday, 8:30 am Field Trip: The Island Research Nat**ural Area** is a remnant example of our native grasslands. Much of the local high desert probably looked like this before grazing, farming, and urbanization took over. Unfortunately, even in this barely-grazed area, exotic weeds are a problem. NPSO will assist the BLM in removing medusahead from several small infested areas. This is a unique opportunity to visit the area since the Island Research Natural Area is closed to casual hiking. The trail up is steep and requires handholds to climb. Best for experienced hikers. We may see rattlesnakes so long pants and boots are encouraged. Meet at north end of the main parking lot on the east side of Pilot Butte State Park off of Hwy 20 (Greenwood St.) in Bend at 8:30 am sharp. Call trip leader Stu Garrett for details: 541-389-6981 eves.

Klamath Basin

For information on the Klamath Basin Chapter, contact Sarah Malaby, 541-884-5703, smalaby@cs.com; or Mike Cutler, 541-850-9012, cutler@cvc.net.

Mid-Columbia

May 7, Wednesday, 7:30 pm Meeting: SECRETS program. Ever wonder what makes the shrub-steppe ecosystem unique? Bring the whole family and join the Northwest Service Academy's Mosier Field Team for a fun and informative evening demonstrating parts of the science curriculum taught by the SECRETS program. SECRETS is a non-profit, Columbia Gorge based

organization dedicated to teaching children about their surrounding environment. Columbia Gorge Discovery Center Exit 82 off I-84 in the Dalles and follow the signs.

North Coast

For information on the North Coast Chapter, contact Janet Stahl at 503-842-8708 or jjs@oregoncoast.com or John Gerke at 503-842-5366 or johnroyal@juno.com.

Portland

May 3, Saturday, 8:30 am
Field Trip: Hood River Mountain
and Mosier Creek. Both easy hikes as
we drive up to the ridge to start a trail
with spectacular views of the Hood
River Valley with Mount Hood presiding and color abound, then Russ will
lead us to Mosier Creek to hunt for the
rare Linanthus bakeri, along with L.
bicolor and Trifolium eriocephalum.
Leave 8:30 am, Gateway/NE 99th Ave.
Park and Ride, southeast corner of
parking lot. For more information call
Greg Stone at 503-233-4761 or Russ
Jolley at 503-286-2350.

May 4, Sunday, 4:00 am Photography Trip: Memaloose Hills. Meet at 4:00 am in Mosier across from

Meet at 4:00 am in Mosier across from the Mosier Market. Drive to the Memaloose area and climb a balsamroot, lupine, and Indian paintbrush covered hill in the predawn light to catch the first light on Mt. Hood, Mt. Adams, and the Columbia River from the hilltop. Then enjoy wildflower photography in the early morning light. Those who wish may camp with the leader at his property on Dry Creek near Mosier. Contact Mike Mckeag, 503-430-2693 or mckeag@attbi.com.

May 10, Saturday, 8:30 am

Field Trip: Warren Creek. Collinsia grandiflora, Dodecatheon poeticum, and Mimulus guttatus will supply fields of color. You will surely want to sing! Easy hike but there is a steep downgrade at the end of the loop and Russ recommends a walking stick if you have one.

There will be other stops depending on what the group wants to do. Leave 8:30 am, Gateway/NE 99th Ave. Park and Ride, southeast corner of lot. For more info call Russ Jolley 503-286-2350 or Greg at 503-233-4761.

May 13, Tuesday, 7:00 pm

Meeting: Rare Non-vascular Plants in NW Oregon. David Lebo, an ecologist with the Forest Service in the Mt. Hood National Forest, will present a program on the biology, ecology, and distribution of Survey and Manage lichens, bryophytes, and fungi in NW Oregon. David was also the President of the Klamath Chapter of NPSO for two years. Come and learn more about non-vascular plants in NW Oregon! Fireside Room (#355) of the First United Methodist Church located at 1838 SW Jefferson St. in Portland. For more information contact Dee White, 503-775-2909.

May 17, Saturday, 8:30 am

Field Trip: Dog Mountain. The classic strenuous wildflower hike of the Columbia Gorge. 2800 ft. gain, but well worth it. Forest and meadows on the way up with lots of variety, and a giant meadow on top with a dense stand of balsamroot, Indian paint brush, lupine, and a huge profusion of other flowers. Leave 8:30 am, Gateway/NE 99th Ave. Park and Ride, southeast corner of lot. Second meeting place, 9:30 am at Dog Mountain trailhead. For more information call Paul Slichter at 503-661-3292.

June 1, Sunday, 8:30 am

Field Trip: Augspurger Mountain. Russ Jolley will lead a trip to see Hydrophyllum fendleri, Thlaspi fendleri, Viola adunca, Mitella trifida, Erythronium grandiflorum, and many more. Four miles round trip, 1200 ft. elevation gain. Leave 8:30 am Gateway/NE 99th Ave. Park and Ride parking lot southeast corner. Second meeting place is Milepost 56.3 right after Dog Creek Falls on SR 14 at 10:00 am. For more info call Russ at 503-286-2350.

June 7, Saturday, 8:30 am Field Trip: Grassy Knoll. Located about ten miles north of Wyeth and Wind Mt. in the Columbia Gorge, this premier botanical natural area is at the convergence of three bioregions and has a stunning diversity of plants. The terrain ranges from hemlock forest to grassy meadows and rocky outcrops. The hike is about 4.5 miles and climbs about 1000'. Leave Gateway/NE 99th Ave. Park and Ride, southeast corner of parking lot, at 8:30 am. Second meeting place: Cascade Locks Charburger parking lot at 9:10 am. Call Paul Slichter, 503-661-3292, for details.

Siskiyou

May 3, Saturday, 9:00 am Field Trip: Illinois River Canyon

Meet on right (south) side of Selma Market parking lot in Selma, 20 miles south of Grants Pass on Hwy 199. Leader: Don Heinze 541-955-7247, birdhaus@cdsnet.net. Along with other flowers, we will see the most accessible stand of Kalmiopsis (namesake of Kalmiopsis Wilderness Area) and Western Sophora, rare plants discovered by and named for one of Oregon's best known pioneer botanists, Lilla Leach. Easy 4-mile hike on good trail, but slope from trail to Illinois River is high and precipitous. Recommended reading: Don Begnoche, Siskiyou Sundays pp. 91-100; Kirkpatrick, Holzwarth, and Mullins, The Botanist and Her Muleskinner pp. 63-103.

May 4, Sunday, 9:00 am

Workshop: Wildland Grasses. Meet at the left (east) side of Fred Meyer parking lot on the Parkway in Grants Pass at 9:00 am or at north side parking lot of Fish Hatchery Park at 9:45 am. Leader: Don Heinze; reservations required—call Don at 541-955-7247. Learn to key and identify common grasses of southwest Oregon; find out natural history and historical facts about grasses. Bring pencil, paper, clipboard, hand lens, and digging tool. Easy 1-mile hike.

May 15, Thursday, 7:30 pm
Meeting: Propagation and Use of Native Plants at North Mountain Park.
Linda Chesney, Stewardship Coordinator for North Mountain Park in Ashland, will present a slide show that provides an overiew of the history and goals of the restoration planting at the park. She will describe some methods and species being used in implementation and some successes and challenges shared by park's staff and volunteers.
Room 171 of the SOU Science Building, Ashland. For more information call Shannon Clery at 541-201-0909.

May 10, Saturday, 9:00 am
Field Trip: Rough & Ready Creek
Trail to Mud Springs. Meet at Illinois
Valley Visitor Center, Cave Junction,
half a block from Hwy 199 on Hwy 46
on the way to Oregon Caves National
Monument. Leader: Karen McCullough 541-592-4032 or 541-592-4205.
Rough and Ready has a large variety of
serpentine plants, some endemic to the
area. The trail goes through Jeffrey
pine woodland, rock outcrops, a
Darlingtonia fen, and the Rough and
Ready Creek floodplain. A portion of

the area was burned by the Biscuit Fire last summer. It will be interesting to discover how this fire-adapted ecosystem is recovering. The hike is an easy 2-3 miles but does have several narrow spots with a steep incline down to Rough & Ready Creek.

May 17, Saturday, 10:00 am
Field Trip: Stout Grove, Jedediah
Redwoods State Park. Meet at the
Redwoods National Park Information
site, Hiouchi, California on Hwy 199,
about 8 miles southwest of Gasquet.
Big trees, lovely water, butterworts,
ferns, Clintonia andrewsiana. Leader:
Jennifer Hutchinson 541- 482-1964,
247-3654, jlhutchinson@fs.fed.us. In
the afternoon we will visit other nearby
redwoods areas. Bring lunch, water and
rain gear. Stout Grove is an easy 1-mile
round-trip walk; afternoon hikes will
be easy to moderate.

May 24, Saturday, 9:00 am Field Trip: Grizzly Peak. Meet in Ashland BiMart parking lot next to fence along Tolman Creek Rd. (Highway 66 (Ashland St.) and Tolman Creek Road, (Ashland, near I-5 exit 14). Leader: Jim Duncan 541-482-7629. Early spring



Sheets of Spring gold (Crocidium multicaule) and other wildflowers bloom in April at Upper Table Rock near Medford. Slight depressions form vernal pools on the otherwise strikingly flat top. Snow-capped Mt. McLoughlin is in the distance.

52 NPSO Bulletin

TANYA HARVEY

flowers—Klamath Fawn Lily, Yellow Bells, small Lewisias, Lomatiums. Easy-to-moderate 5-mile round-trip hike, 600-ft elevation gain (5300–5900 ft).

May 24-26, Saturday to Monday Field Trip: Thompson Reservoir (east side of the Cascade Mountains) Meet Saturday at 4:00 pm in the office parking lot of the Silver Lake Ranger District of the Fremont National Forest in the (more or less) town of Silver Lake, 76 airline miles south southeast of Bend and 73 airline miles northeast of Klamath Falls. Alternate meeting place and time: 5:00 pm, Forest Service Campground on the west side of Silver Lake. This will be a plant listing trip for the Oregon Plant Atlas Project that is working on a new computerized technical manual of Oregon plants. Data collected on this trip will feed directly into the OPAP database. Thompson Reservoir is located in an area where no data have been collected for the project, so we will be on the "cutting edge". See last Bulletin for more details. Call or e-mail Don at 541-955-7247 or birdhaus@internetcds.com to let him know that you're thinking of coming and to obtain more information.

May 31, Saturday, 9:00 am Field Trip: Boccard Point/Soda Mountain Area, Cascades-Siskiyou National Monument. Meet east side of Ashland BiMart parking lot, next to Tolman Creek Road (intersection of Ashland St and Tolman Creek Rd west of I-5 exit 14). Leader: Tyler Duvall tyler_duvall@or.blm.gov or 541-512-1522. Car pool on good gravel roads (last mile is a little rough) to Boccard Point; return to Ashland by 5:00 pm. A moderate hike in the high country of the Cascade-Siskiyou National Monument's Soda Mountain area; distance is 3-4 mi. Highlights include spectacular views at Boccard Point, big subalpine meadows, and a wide array of botanical treats. Bring lunch, water, camera and hand lens; this hike will not be overly strenuous, but be prepared for some off-trail sections and possibility of rain or a late-season cold snap.

June 7, Saturday, 9:00 am Field Trip: Oregon Gulch Research Natural Ârea, Cascades-Siskiyou National Monument. Meet at east side of Ashland BiMart parking lot next to Tolman Creek Road (intersection of Ashland St and Tolman Creek Rd west of I-5 exit 14). Leader: Frank Lang 541-482-5235, frlang@charter.net. Reservations required; call or e-mail Frank by June 1. Car pool over logging roads to the RNA; return by 5:00 pm. A moderate-to-difficult 3-5 mile hike through Cascade-Siskiyou National Monument's Oregon Gulch Research Natural Area on a search for Limnanthes bellingeriana and other botanical wonders. Bring lunch, water, and perseverance; be in good shape for crosscountry hiking.

Umpqua Valley

May 8, Thursday, 7:00 pm Meeting: Backyard Browsing Botany. Special guest. If not, bring specimens. 7:00 pm at the Mercy Medical Center Community Education Building 2459 Stewart Parkway (bright blue sign between Stewart Park Pharmacy and Office Max). For more information call Richard Sommer at 541-673-3709.

May 31, Saturday, 8:00 am
Field Trip: King Mountain, a serpentine ridge. We will be going to see two rare lilies, the Siskiyou Fritillary, Fritillaria glauca and the Scarlet Fritillary, Fritillaria recurva. Assemble for caravan or carpool at BLM parking lot 777 Garden Valley Blvd, Roseburg prior to 8:00 am departure. For more information please call 541-673-3709.

Willamette Valley

May 3, Saturday, 7:30 am
Field Trip: Hood River Mountain
Meadows. Spend the day in a flowerladen meadow overlooking Hood
River. Dress for wind and rain, and
bring a lunch. About a 500 foot elevation gain in the first mile. For more information or to register, call John Savage at 503-399-8615.

May 24-26, Saturday-Monday Field Trip: Cave Junction Area. This year the Willamette Valley Chapter's annual Memorial weekend trek is in the Cave Junction, Oregon area in the Illinois River Valley. Each day's field trip is independent of those of the other days, enabling a person to participate in field trips for any day or all three days. Headquarters is the Junction Inn in Cave Junction, Oregon, at junction of Redwood Highway 99 and Oregon Caves Highway 46. For reservations, call 541-592-3106. Other motels are also in Cave Junction-Kerby vicinity. For those wishing to camp, a fine campground is at Lake Selmac, about 10 miles from Cave Junction, east of the community of Selma. Daily field trips begin at 8:00 am at the Junction Inn. Advance field trip reservations are unnecessary. For each day's field trip, pack your own lunch and carry sufficient water for the day. Leader: Wilbur Bluhm; contact him at 503-393-2934 for more information.

June 14, Saturday, 9:00 am Field Trip: Finley Wildlife Refuge.

We will view the native plants in the untouched Research Natural Area of Finley Wildlife Refuge near Corvallis. Uneven walking. Dress for the weather, and bring your lunch. Meet at 9:00 am at the Holman State Park parking lot on Doaks Ferry Road just off of Highway 22. The parking lot is across the highway from the Eola Inn Restaurant, two to three miles from Salem's Marion Street Bridge. For more information or to register, call Jennifer Goodridge at 503-371-1078.

June 21, Saturday, 8:00 am Field Trip: Jefferson Park. Dana Field will leak a hike to view the wildflowers in the Jefferson Wilderness. For more information or to register, call Dana Field at 503-581-6073.

William Cusick

For information on the William Cusick Chapter call Frazier Nichol at 541-963-7870.

OTHER EVENTS

Berry Botanic Garden Events

Portland's Berry Botanic Garden has a number of native plant oriented events. To register or to get more information on these and other events at the garden call Kris at 503-636-4112x22 or visit their website at http://www.berrybot.org.

Geology and Botany of Camassia May 1, Thursday, 1:30 pm - 4:30 pm

The Camassia Natural Area, only 26 acres, supports an extraordinary diversity of habitats: oak-madrone woodlands, ponds, and stunning wet-meadows. On this hike, with geologist Dick Thoms, learn where the dark gray basalt bedrock came from and how it became exposed. We'll also look at the unique flora of this site, including the stunning camas, which should be blooming. Be prepared for muddy trails on this easy hike. \$10.

Nature Journaling with Pen and Watercolor May 7, 14, 28, June 4, Wednesdays, 10 am - 1 pm

Record impressions, experiences and musings of nature, while traveling or in the garden. Naturalist and watercolorist Jude Siegel will share simple techniques in her relaxed way, encouraging you to explore drawing and watercolor skills and increase awareness of nature. No art experience is necessary. Prepare to be outside as well as inside. \$45.

SOLV Cleanup at BBG! May 17, Saturday, 9 am-1 pm

Every year, SOLV organizes volunteers around the state to do habitat restoration, weed removal and more for their "Down By the Riverside" work day. This will be BBG's second year as a SOLV site! We welcome SOLV volunteers who will help us pull ivy and other weeds.

Celebrate Eugene's Unique Wetlands!

est Eugene Wetland Partners and WREN have joined with Americans everywhere to raise pubic awareness about the uniqueness, beauty, and importance of the nation's wetlands during May, American Wetlands Month.

Wetlands nurture millions of plants and animals, replenish and cleanse the Earth's water supply, and provide sanctuary for people. Despite these benefits, more than 50 percent of the wetlands in the continental United States have been destroyed. The wetlands of West Eugene are unique in

Shady Cove Wildflower Show

May 3-4, Saturday-Sunday, 10-4 pm

The Shady Cove/Trail Wildflower Association will again sponsor the 22nd Annual Wildflower Show. Over 200 live wildflower specimens found growing in the local area are identified by botanical and common names and will be on display in the Shady Cove School Multipurpose Building. The show will include educational exhibits and a botanist will be on site to help identify and answer wildflower inquires. Shady Cove is a rural community in the Upper Rogue Valley along the Rogue River. Take Hwy 62 north from Medford and follow the signs through town to Cleveland Street and turn left. For added pleasure there is a boutique and garden plant sale, a Quilt Show by the Material Girls, and an Art Fair by the Upper Rogue Artists. A Jackson County Master Gardener will be available to answer any gardening questions. Enjoy a spring day in the Upper Rogue Valley.

Admission is by donation and proceeds go to benefit the Jackson Country Fire District 4 to purchase Emergency Medical and Rescue Equipment. For more information call 541-826-6649.

that they are "isolated." While not isolated from people or wildlife, isolated wetlands are wet areas that are not connected to a river, lake, ocean, or other body of water through surface water. Less than 1% of the Willamette Wet Prairie wetland remains. The wet prairies and vernal pools provide shelter, food, and nesting sites for birds, fish, mammals, reptiles, and invertebrates, and are home to many rare and threatened plant species.

For more information on how to participate in Wetland Celebration Events, contact: Holly McRae, 541-683-6494

WEDNESDAY NIGHT SPEAKERS

All events meet at BLM Wetlands Office (11th & Danebo) unless otherwise noted.

May 7, 7:00 pm West Nile Virus

May 14, 7:00 pm TBA

May 21, 7:00 pm Readings from the Wetlands

May 28, 7:00 pm Amphibians and Reptiles of the Wetlands

SPECIAL EVENTS

May 2, Friday, 5:00 pm Wetland Photography Exhibit

May 3, Saturday, 10 am - noon Wildflower Walk

May 10, Saturday, 9:30 am - noon Willow Creek Natural Area Work Party

May 16, Friday, 7:00 pm Owl Walk

May 17, Saturday, 7:00 am Birding Trip at Stewart Pond

May 17, Saturday, 1:00 pm Discovering Dragonflies Walk

May 31, Saturday, 1-4pm Spring Butterfly Walk

Mount Pisgah Arboretum Events

Seavey Loop Rd., Eugene, call 541-747-1504 for information or to register.

Spring Field Botany Workshop May 2-4, Friday-Sunday, 9 am-3 pm

Learn to use Gilkey & Dennis' Handbook of Northwestern Plants to key out common wildflowers and other plants of the Willamette Valley in this intensive 3-day botany class. Use the handbook in the field and the classroom, and apply your botanizing skills in three major plant communities—the Willamette Valley floor in the Arboretum, the unique mountain floras of Spencer Butte, and the West Eugene wetlands. Led by Dr. Rhoda Love and Judith Manning. This is a great way to learn our native plants or to brush up on keying and identification skills! Cosponsored by the Native Plant Society of Oregon. Fee: \$100 (\$90 for MPA & NPSO members). Fee includes handouts. Pre-registration required.

Changing Landscapes at the Arboretum: a walk May 3, Saturday, 10am-Noon

Gain a whole new perspective on the Arboretum's trees and habitats with naturalist and urban forester Whitey Lueck. Learn how the varied landscapes within the Arboretum came to be, and what they might look like in a hundred years due to human management, succession, shifting water, and climate change. Meet at the Visitor Center. Suggested donation \$3.

Flower Pressing Workshop May 3, Saturday, 2-4:30pm

Want to make spring wildflowers last forever? Need to preserve greenery for a project or craft? Join botanist Jean Jancaitis and woodworker Jonathan Plummer at this hands-on workshop where you'll build your very own professional quality press. You'll also gain new knowledge about collecting samples and making beautifully preserved flowers and plants. All materials provided. Fee: \$25. Pre-registration required.

Spring Wildflower Walk May 10, Saturday, 10am-Noon

Immerse yourself in the splendor of the Arboretum's native spring wildflowers. Learn about the ecology and how to identify the flowers in bloom on this walk led by local botanist Judith Manning. Meet at the Visitor Center. Suggested donation \$3.

Wildflower Festival & Plant Sale May 18, Sunday, 10am-4pm

Don't miss this annual celebration of Oregon's wildflowers! This year we will explore the uses of plants by native people in the Willamette Valley. Enjoy a display of hundreds of wildflowers and educational exhibits prepared by festival co-presenters, The Native Plant Society of Oregon. Other activities include a huge plant sale, children's activities, music, guided walks, and food and craft vendors. Suggested donation: \$3 per person or \$6 per family. Members free!

The Private Life of an Oak Tree May 24, Saturday, 10am-Noon

Join nature guide Harold Schyberg for an exploration of the community that lives within and around an oak tree. Roots, trunks, branches, and leaves are home to many species of plants, lichens, fungi, insects, and animals. Learn how these organisms live together, in harmony or opposition, and complete the mini-ecosystem of a single tree. Meet at the Visitor Center. Fee: \$3 per person, \$6 per family.

Wildflower Field Sketching May 24, Saturday, 1-4pm

Oregon wildflowers are simply spectacular wherever you go this time of year. Kris Kirkeby teaches this class using basic watercolor paints and techniques. You'll learn to sketch these spring jewels in the field and along the trails. Some materials provided, list at registration. Fee: \$20. Pre-registration required.

Audubon Society of Portland's 7th Annual Native Plant Sale

May 17-18, Saturday-Sunday, 10am-4pm

5151 NW Cornell Road, Portland. Lots of native plants for sale and volunteer experts to answer questions. For more information or directions call 503-292-6855 x 106.

Yoncalla Workshops

Plant Identification and Nature Journaling May 3, Saturday

Wendell Wood and Susan Applegate team to offer a Plant Identification and Nature Journaling workshop. Wendell Wood, ONRC's Klamath Basin Field Representative, will introduce a plant list and identify plants common in the Yoncalla area. Susan Applegate, artist and educator, will demonstrate techniques for nature journaling through art. For information about the day's schedule, registration, optional Sunday session, and directions to the Old Charles Applegate Home in Yoncalla, call 541-849-3500. Workshop sponsor is Applegate House Heritage Arts and Education.

Festival of Herb Workshop May 31, Saturday

Esther Stutzman, Yoncalla Kommema of the Kalapuya people, introduces native uses of indigenous plants. Shannon Applegate discusses pioneer uses of herbs. Instructors also include five herbalists who feature herbal aromatherapy, herbal tincture making, traveling medicine show and herb gardening. For registration information, schedule and directions to the Old Charles Applegate Home in Yoncalla, call 541-849-3500. Workshop sponsor is Applegate House Heritage Arts and Education.

Camas: Essential Food and Trade Item for Northwest First Peoples

By Katherine Neall, Botany student & Gail Baker, Instructor, Science Division, Lane Community College, Eugene, OR

amas has one of the best-known ethnobotanical histories in the flora of the Pacific Northwest. And as ethnobotanist Erna Gunther notes, "except for choice varieties of dried salmon there was no article of food that was more widely traded than camas" (1). Its importance to the Kalapuya people, who live in the Willamette Valley, is indicated by the variety of words used to refer to camas. According to Esther Stutzman, a Kalapuva and Member of the Confederated Tribes of Siletz, the general word for camas is "Luk-wa" but "Gandip" refers to raw camas, "Lut" is the word for the little purple camas flowers and "Di'ip" means blue camas flowers. Camassia is the botanical name and up to 2 species are recognized in our area Camassia quamash and C. leichtlinii. Both Camassia and quamash are known to be words with origins in the native languages of northwest indigenous peoples.

Camas is also beautiful. There was a time when in certain areas the camas fields extended for miles. On June 12, 1806, Meriwether Lewis recorded in his journal that the camas growth was so thick and abundant that it "resembles a lake of fine clear water, so complete in this deception that on first sight I could have sworn it was water" (2). Lewis collected a specimen of camas at the Weippe Prairie, Idaho in spring 1806. This is the type specimen that introduced it to western botanists. It still exists today in good condition with the other Lewis and Clark plants

ILLUSTRATION BY TANYA HARVEY

at the Philadelphia Academy of Natural Sciences.

Plant enthusiasts and botanists have recognized camas as a member of the lily family but recent research has shown that it is more closely related to Agave and Yucca and now placed in the plant family Agavaceae (3). The flowers grow clustered together on a tall stalk and each one has six pale-blue to deeppurple tepals, six typically yellow stamens and a 3-branched style. At the base of the stalk is a rosette of long narrow leaves that grow each year from and underground bulb. The thick bulb is generally 1-2" inches long and was the source of the important staple food of the Native Americans in this area for as long as eight thousand years (4).

Camas was used by many different tribes in the northwest including the Coast Salish of Vancouver Island, the Squamish, the Sechelt, the Comox, the Kwak-waka'wakw of the British Columbia Coast, the Grand Ronde, the Nez Perce and the Kalapuya (5). Because of its importance the camas fields were allocated to certain clans who protected them and passed them down in families from generation to generation. Young women watched the fields to assess the camas abundance, make sure supply fit with demand and to discourage attempts by one clans to dig in another clans field. The men had burned the camas fields the previous year to encourage growth of the bulbs. Camas prefers to grow in moist meadows and prairie habitats that are also ideal areas for European settlers to use for crops and pasturage. Two wars between Native Americans and white settlers were fought over the rich camas beds in Idaho: The Nez Perce and the Bannock Wars.

Camas bulbs were harvested in late spring or early summer, and the act of harvesting was considered sacred in many tribes. In the Kalapuya tribe, gathering the starchy camas bulbs was the job of the women (4). As shared by Esther Stutzman, "women elders of the Kalapuya prayed and held ceremony for five days before a harvest; the first camas feast of the season was a 'festival' in itself." Bulbs were harvested using wooden digging sticks with fire-hardened points. Once harvested, they were carried back to temporary camas processing camps where they were washed and then baked in earth ovens for at least twenty-four hours. Cooking converted the complex sugar inulin, contained in the bulbs, into the more easily digestible form of fructose. Remains of camas ovens have been found in several different places in Oregon. At Mill Creek near Salem camas ovens date back almost six thousand years. They serve as reminders of the vital role camas played in the sustenance and livelihood of the indigenous cultures of our region.

References

Personal communication with several people provided information for this article. Esther Stutzman provided the Yoncalla Kalapuya words for camas and information about Kalapuya cultural practices and Rhoda Love guided us to resources about Meriwether Lewis's collection of camas and the conflicts for the land and suggested the title.

- (1) Gunther, Erna, Ethnobotany of Western Washington: The Knowledge and Use of Indigenous Plants by Native Americans, 1973.
- (2) Pojar and Mackinnon, *Plants of the Pacific Northwest Coast*, Lone Pine Publishing, 1994.
- (3) Kelch, D. 2003. Consider the lilies. *Fremontia* 30(2):23-29.
- (4) History & Prehistory Oregon/ Washington BLM Archaeology, History, & Paleontology, Camas Oven Sites, http://www.or.blm.gov/salem/html/archaeology/archeology-sites/camasoven.htm, (3-01-03).
- (5) US Dept. of Agriculture Natural Resources Conservation Service Plant Guide for Common Camas: Ethnobotany, Culture, Management, and Use.

Sidalcea Summer

continued form page 47

Shockingly, for a species this rare and vulnerable, Sidalcea hendersonii receives no active protection or regular surveys in Oregon at the present time. The Nature Conservancy describes Sidalcea hendersonii as "Critically imperiled in Oregon," however the species lacks state listing. I plan to petition the Oregon Department of Agriculture to add the species to the Candidate List. The Oregon Natural Heritage Program places the species on List 2 = "Threatened or Endangered in Oregon, more common elsewhere." Technically this is true, but globally the plant is extremely uncommon, with a range of a few scattered populations (perhaps as few as 50-60) in estuaries from Reedsport (if it still exists there) to north of Campbell River, BC. The species currently has no Federal status but should be designated a Species of Concern. I will petition the U.S. Fish and Wildlife Service for such a rating.

I hope that all NPSO members and other concerned plant lovers and conservationists will join me in these efforts. I also hope that you will organize and take part in field efforts during the summer of 2003 to survey the historic sites in Oregon, as well as other likely but as yet unexplored sites in estuaries and similar habitats. Blooming time is June and July. Contact me at <rglove@oregon.uoregon.edu> for more information. Henderson's checkermallow is a stunningly beautiful plant, a part of our natural heritage that is apparently slipping into extinction in our state—it deserves our attention and our efforts! Be sure to bring your boots—and in some cases, a boat!!

Here is a review of major historic *Sidalcea hendersonii* sites in Oregon which should be surveyed in 2003.

Clatsop County:

- (1) Type-site. "Near Clatsop Bay, Oregon" L. F. Henderson (#1413) 7/3/1887. Exact site unknown; may be in or near present-day Fort Stevens State Park; the species at one time appeared on a plant list for the park. Has not been seen recently.
- (2) Historic site: "Seaside." LeRoy Abrams (#8917) 7/11/1922. Exact site not known. Has not been seen for years.

- (3) Historic site: Cannon Beach.
 "Moist hollows in sun, Ecola Creek."
 L. F. Henderson (#11360) 8/1/1929.
 Has not been seen for years.
 (4) Historic site: Cannon Beach. Mor-
- (4) Historic site: Cannon Beach. Morton Peck (#13274) 7/1/1924. "Small swamp island just above bridge." Has not been seen for years.

Tillamook County:

- (5) Sand Lake: Historic site: "Swamp, south side of Sand Lake." Morton Peck (#13420) 7/12/24. (Near Whalen Island County Park?) Threat: prospective golf course; dike and road have altered hydrology since 1924.
- (6) Sand Lake: North side of lake, just east of Sand Lake Campground. S. and M. Gisler found one plant here in 2000.
- (7) Nestucca Spit. Morton Peck (#6857) August 1909. "Nestucca Bay." Bob Straub State Park. Is the state managing for this species? Wendell Wood sighting and photos 7/12/87. Estimated 45 stems at that time. East side of Nestucca Spit, open sun, wet meadow just west of tide flat. No recent report.

Lane County:

(8) Cox Island in the Siuslaw River estuary near Cushman. This may be the only viable site in Oregon. Nature Conservancy property; TNC botanists monitor the population annually. Trip planned in 2003 to check nearby island. Boat required to visit this site.

Douglas County:

(9) Historic site – this collection is a mere 52 years old! Reedsport, Smith River. C. L. Hitchcock (# 19528) 7/1/51. "Sandy meadowland 1 mile north of Reedsport, Smith River." Perhaps this population may be extant? Possible threats: siltation, grazing, urban sprawl, highway construction, draining of wetlands, spread of purple loosestrife. Urgent: Check in 2003.

NOTE: At the April 11th triennial meeting to discuss the status of rare plants in Oregon, Henderson's checkermallow (Sidalcea hendersonii) received more protection. It was upgraded from List 2 to List 1. Well done Rhoda!



Sidalcea hendersonii at an undisclosed location in Washington State.

May 2003

All Plant Geneticists Agree...

by Joe Arnett, Washington Native Plant Society

Thad the good fortune of attending a L recent conference in Corvallis, Oregon titled "Native Plant Restoration and Management on Public Lands in the Pacific Northwest: Rare Plants, Invasive Species, and Ecosystem Management." It was hosted by the Bureau of Land Management, the Institute for Applied Ecology, the U.S. Forest Service, and the Native Plant Society of Oregon; most of the presenters were from the sponsoring organizations, Universities in Oregon, and not-forprofit conservation organizations like the Nature Conservancy and Berry Botanic Garden.

As I expected, a great deal of botanical information, on many aspects of restoration with native plants, was shared. It is interesting how memory selects certain bits of information to retain. For example, I know now to keep a sharp eye out for false brome, Brachypodium sylvaticum, a serious and widespread weed in western Oregon that is almost certain to show up in Washington. I learned that half the BLM botanists in the U.S. are in Oregon, and that Penstemon palmeri, native in the intermountain West but not in Washington, has been extensively planted here in restoration projects. I learned a lot more about Sudden Oak Death (which is neither sudden, limited to oaks, nor fatal in all infections), a disease caused by *Phytophthora ramorum*.

I was also given several new glimpses into the genetic variation that occurs within native plant species, and gleaned a particularly useful metaphor from Aaron Liston of OSU: species are like clouds, genetic assemblages that separate and regroup over time. Sometimes the boundaries are distinct, and sometimes they are not. I also got a clearer view, unfortunately a grim one, from Emily Roberson of the California Native Plant Society, of the array of environmental laws—the Clean Water Act, the Endangered Species Act, the Clean Air Act, the National Environmental Policy Act, the National Forest Management Act, to name a few-which are at risk in the current political climate.

The session that I thought was most interesting involved a panel of eight plant geneticists and botanists considering the question of what material is appropriate for restoration projects. This is a practical and immediate question for anyone planning revegetation. Projects will not be effective if the plants don't survive and grow, and the seed or other plant material will not be available if growers don't have it for sale. To support these needs the Native Seed Network is trying to develop guidelines for seed collection zones, to provide guidance both to restorationists and to commercial seed growers.

But there are genetic aspects of revegetation that include a risk to the plant communities being restored. The discussion in the panel was pulled between two opposing dangers: the risk of swamping, or contamination, of a native genome by hybridization with close relatives, on one hand, and the objective of restoring a natural process of gene flow on the other. Bitty Roy, a geneticist from OSU, told a compelling story that demonstrated the danger of genetic contamination. A restoration project in the vicinity of a rare variety of giant fawn-lily, Erythronium oregonum, included planting the more widespread variety of this species. Over time hybridization has been observed between the varieties, and the likely result will be the loss of the unique genetic configuration that had been known from that site.

The opposite danger, presented by Mitch Cruzan, a geneticist from Portland State University, is inbreeding depression, where a small isolated population may gradually lose vigor because of shrinking genetic diversity and a consequently reduced ability to respond to environmental change. This isolation and loss of diversity is exacerbated by climatic changes, the fragmentation of habitat due to human development, and the introduction of exotic species.

In many situations there is the immediate need for plant material to use in projects, and the choice is often between species that are native (though genetically different from the local plants) and species that are not native. The latter poses the risk, which we all know well, of aggressive non-native species displacing native communities. The former poses a more subtle risk of displacing the unique genetic configuration present in the local area. A third choice that is sometimes available is to use sterile annuals that will provide vegetation cover and erosion control until species already present in the vicinity can become established, or until appropriate material can be obtained for replanting. There are risks here too, of contaminated seed, and of plants that are expected to die out after a season or two but that persist.

As is usually the case with complex questions, there isn't a simple answer, and wise decisions require assessing a whole string of more specific questions: Are sensitive species present? What is the size of the resident population compared to the material that may be introduced? What is the mating system of the species being considered? Linnea Hanson, the botanist from the Plumas National Forest in California, offered a good summary that encompasses the variety of concerns and the information that must be included: "Use common sense; use ecological principles."

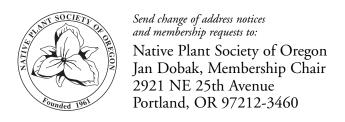


Lithophragma parviflorum on U. Table Rock.

TANYA HAI

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name		DUES include monthly Bulletin and yearly Kalmiopsis.		
Address		Membership is for the calendar year. New memberships September 1 include the following year.	enrolled after	
City	_ State Zip+4	New Renewal		
Dhone E	-Mail	Student – \$12 Regular – \$18 Family – \$	\$24	
		Sustaining \$50 Patron \$100 I life Mem	hership = \$500	
Chapter (if known)		Subscription Only (Bulletin and Kalmiopsis) – \$18 O	•	
Is this a change of address? If so, p	lease write your old address here:	wish to subscribe, but do not want to have full membership		
Address		— CONTRIBUTIONS to NPSO are tax deductible.		
		The state of the s	\$	
City	_ State Zip+4		\$ \$	
Please make checks for dues and co	entributions payable to:	Leighton Ho Memorial Field Botany Award Fund		
NATIVE PLANT SOCIETY OF OREGON		Rare and Endangered Plant Fund	\$	
Send completed form and full remi	ittança tal	Friends of the Oregon Flora Project	\$	
Jan Dobak, NPSO Membership C		Membership in the Native Plant Society of Oregon is ope	n to all.	
2921 NE 25th Avenue		Membership applications, renewals and change of addre		
Portland, OR 97212-3460		address) should be sent to the Membership Chair.		
	0	C		
	OFFICERS &	COMMITTEE CHAIRS		
STATE OFFICERS				
	Jim Duncan, Rhoda Love, Ka	reen Sturgeon (to 6/2004) Clayton Gautier, Elaine Plaisar	nce, Veva Stansell	
		2525 Potter, Eugene, OR 9740		
Immediate Past President	Michael Igo	P.O. Box 603 M	losier, OR 97040	
		7461 SW 184th Pl., Aloha, OR 97007-574		
		secretary@NPSOregon.or		
Treasurer	Candice Guth		3; 503-235-0617	
CHAPTER PRESIDENTS				
		58840 Bar M Lane, Adams, OR 97810-300.		
		contact John Koeni		
		smalaby@cs.com; 541-884-5703/cutler@cvc.ne		
		9780 Whiskey Creek Rd., Tillamook, OR 9714		
		429 Morton Street, Ashland, Oregon 97520-304		
		contact Karl Anderson		
WM CUSICK (La Grande)	Frazier Nichol	c/o Dick Kenton, 1805 U Ave., La Grande, OR 9785	0; 541-963-7870	
STATE COMMITTEE CHAIRS				
		P.O. Box 885, La Grande OR 9785		
			0; 541-552-6804	
Legislative				
		2921 NE 25th Avenue, Portland, OR 97212-346		
Budgets and Grants	Dan Luoma	3740 NW Harrison, Corvallis, OR 9733	0; 541-752-8860	
PUBLICATIONS				
	Tanya Harvey	bulletin@NPSOregon.or	g; 541-937-1401	
Kalmiopsis Editor	Cindy Roché		ueen@charter.net	
		webmaster@		
			0 0	



NONPROFIT ORG
US POSTAGE
PAID
EUGENE OR
PERMIT NO. 204



TIME DATED MAIL

NPSO Items for Sale

Vascular Plants of Lane County, Oregon: An Annotated Checklist by C. Simpson, J. Koenig, J. Lippert, R. Love, B. Newhouse, N. Otting, S. Sundberg, D. Wagner, and P. Warner. Emerald Chapter, NPSO. This new county checklist includes more than 1,740 species and varieties representing 39 percent of the 4,460 plants currently recognized by the Oregon Flora Project at Oregon State University. It also includes a color map of Lane County's five major ecoregions; and information about rare and endangered species, noxious weeds, and escaped cultivated plants. Information is included for every species on habitat, ecoregion, occurrence frequency, and native or non-native origin. To order, send \$15 payable to Emerald Chapter, NPSO to Lane County Checklist, Emerald Chapter, NPSO, PO Box 902, Eugene, OR 97440-0902.

Camas Tee Shirt from Cheahmill Chapter. Beautiful moss green or tan tee shirts with color botanical drawing of *Camassia quamash* by Carlton, OR artist and Cheahmill chapter member Marilynn Karbonski. Short sleeve, high quality, **\$15** plus shipping. For ordering information call 503-852-7230, or send order to PO Box 291, Carlton, OR 97111.

The "Atlas of Oregon Carex" was NPSO's first Occasional Paper. The Atlas has 128 location maps, one for each Carex taxon in the state of Oregon. Also included are a synonymy, fun facts about sedges, a history of the project, and Oregon geography maps. **Price: \$5.**

"Louis F. Henderson (1853-1942): The Grand Old Man of Northwest Botany" by Rhoda M. Love. NPSO's second Occasional Paper is the only existing publication with detailed coverage of the long and fascinating life of this John Muirlike western character. Included: 56 pictures, 133 notes, chronology, list of plants named for Henderson. Third printing nearly sold out. Order your copy today! Price: \$10.

To order either or both Occasional Papers, send check for the appropriate amount (made payable to NPSO) to: Occasional Papers, Native Plant Society of Oregon, PO Box 902, Eugene, OR 97440-0902.

NPSO Membership Directory lists names, addresses, phone numbers, and e-mail address of NPSO members (April 2003). Available from Jan Dobak, 2921 NE 25th Avenue, Portland, OR 97212-3460. **\$3 postpaid.**