

Bulletin of the

# NATIVE PLANT SOCIETY OF OREGON

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

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## OUR 30TH ANNIVERSARY YEAR

### 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. As we are often in the position of asking them to follow their rules and regulations for conservation of our natural resources, it's time for us to do the same. Each group using wilderness must be no larger than 12.

### Blue Mountain

1 Apr., Mon.

**MEETING.** 7:30pm in Room 113, Morrow Hall, BMCC. Berta Youtie will give a presentation concerning The Nature Conservancy.

6 Apr., Sat.

**FIELD TRIP** to Twin Sisters in Washington to observe early spring wildflowers. Leave from the BMCC greenhouse at 8am.

### Corvallis

13 Apr., Sat.

**FIELD TRIP** to Mary's Peak in search of early season bloomers around the receding snow near the peak. Bring warm clothes, rain gear, and a sack lunch. Leave from the parking lot across from the Monroe Beanery at 9am. For more information call Esther McEvoy (754-0893).

8 Apr., Mon.

**MEETING.** (Note change of place this time only): 7:30pm in the Large Conference Room, Forest Sciences Lab, 3200 Jefferson Way. Joint meeting with the North American Truffling Society to view videos on frostbite and hypothermia by Dr. Frank Heyl of Portland; discussion following.

13 May, Mon.

**MEETING.** 7:30 at the Herbarium Library (Room 4083 Cordley Hall, OSU). Our guest Speaker will be Dr. Aaron Liston, Director of the Herbarium. His topic is "Botanical Travels in Northwest China".

## Emerald

13 Apr., Sat.

**FIELD TRIP.** Buford Park Botanizing. Ever wonder whats over the hill from the Arboretum? Join Tom Pringle for a visit to the Buford Park botanical Area to view and document early spring wildflowers. Observe first hand why cattle and wetlands don't mix. Depart from South Eugene High School parking lot (NE corner) at 10am. Bring handlens, rain clothes, lunch, drink. For further information call Tom Pringle (484-0669).

8 Apr., Mon.

**MEETING.** 7pm at the Kennedy Middle School, Bailey Hill Rd. and West 18th. Wendell Wood of the Oregon natural Resources Council, and Tom Ribe, editor of *Inner Voice*, a publication of the Association of Forest Service Employees for Environmental Ethics, will discuss "Protecting Ancient Redwood Forests in the Siskiyou".

27 Apr., Sat.

**FIELD TRIP:** Curry County Redwoods. Joint trip with Siskiyou Chapter. All NPSO members welcome. Representatives of Siskiyou National Forest will take us to Wheeler Creek Redwood RNA, to the Redwood Nature Trail, to the northernmost redwoods on Snaketooth Ridge and to see some fine remaining old growth redwoods on Peavine Ridge. Overnight camping available at Loeb Park and at the Redwood and Winchuck Campgrounds on the National Forest. Meet at Chetco Ranger Station, 555 5th St., Brookings, at 10am. Wear hiking gear and bring lunch and drink. For more information call Rhoda Love, 345-6241.

13 May., Mon.

**MEETING.** 7pm at the Kennedy Middle School, Bailey Hill Rd. and West 18th. John Christie of the Oregon Natural Heritage Program will speak on "Mosses, Lichens, and Liverworts...Ranking for Protection".

## High Desert

6 Apr., Sat.

**Glide Wildflower Show.** This long-running annual show highlights freshly collected plants from all over Oregon. Its a great chance to learn about our native flora firsthand. Several High Desert members are planning to attend. Call Betty Bahn (389-4192 for details and carpooling.

11 May, Sat.

**FIELD TRIP** to the Fort Rock District in Deschutes National Forest. Both natural and prescribed burns will be visited. A dramatic change in the non-forested steppe areas bordering the east side of the National Forest will be seen. A beautiful meadow-steppe area has been created from a heavy cover of sage and bitterbrush. The 1988 North Paulina fire will be visited. Easy Hiking. Call trip leader Stu Garrett for more information 389-6981 evenings.

## Mid-Columbia

3 Apr., Wed.

**MEETING.** 7:30pm at the Mosier School. Bill Weiler, Wildlife Biologist for the Washington State Dept. of Wildlife in Yakima, will present the program "Oregon White Oak: Its Biology, Uses, and Conservation Strategies".

## North Coast

11 Apr., Thurs.

**MEETING.** 7pm at the State Office Building, 3600 Third St., Tillamook. Ed Stiernberg will give a slide presentation on plant nomenclature.

**FIELD TRIP** --to be announced. For more information call Ron Exeter (842-4171).

## Portland

9 Apr., Tue.

**MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Don Barr will be showing slides from the Siskiyou Mountains.

6 Apr., Sat.

**FIELD TRIP.** Nancy Russel will coordinate a field trip NE of Lyle with the Friends of the Gorge. Leave at 9am from the DOT lot 60th & Glisan. 2nd pickup at south end of Hood River Bridge, 10:15am. Beware of ticks & poison oak. 1000 ft elevation gain over 4 miles.

6 Apr., Sat.

**FIELD TRIP.** Burdoin Mountain. Leader will be Christa Thie. Leave at 9:15am from the Bingen Winery on SR14.

27 Apr., Sat.

**FIELD TRIP.** Visit three local areas--each in the urban area. Limited driving, only a little walking. We will visit Berry Botanic Garden with its diverse plantings in the morning, spectacular Camassia Natural Area in the afternoon, with lunch on the banks of the Clackamas River overlooking a mass of the only sagebrush species native to the Willamette Valley. Leave from 82nd & Milwaukee Express way K-Mart lot at 9am. Call leader Bryan Boyce (655-4457) for more information.

## Siskiyou

11 Apr., Thurs.

**MEETING.** 7:30pm in Room 171 of the Science Building at Southern Oregon State College. Rick Prusz, natural resource specialist for BLM, and Dr. Frank Lang, chairman of the SOSOC Biology Department and editor of the upcoming NPSO journal *Kalmiopsis*, will present a slide show of the Chapter's field trip to Mount Eddy in the summer of 1990.

27 Apr., Sat.

**FIELD TRIP:** Agate Desert Preserve. *Lomatium cookii* monitoring on the preserve. Meet at 9am, corner of Table Rock Road and Antelope Road. Darren Borgias, Southern Oregon Preserve Manager for The Nature Conservancy and Siskiyou chapter NPSO President, will provide material for sampling and instruction. This is an opportunity to contribute to the Conservancy's work in Southern Oregon and learn something about monitoring rare plants. Information 482-8196.

27 Apr., Sat.

**FIELD TRIP:** Curry County Redwoods. Joint trip to the Chetco Ranger District with Emerald Chapter. All NPSO members welcome. See the writeup under Emerald Chapter above.

## Umpqua Valley

11 Apr., Thurs.

**MEETING.** 7pm in Room 216, Douglas County Courthouse Auditorium, Roseburg. Dr. David Wagner of the University of Oregon will have a program on ferns. For more information call Mary Carlson (672-3479).

**FIELD TRIPS** to be announced. For information call Barbara Rupers (364-0774 Salem).

27-28 Apr., Sat.-Sun.

**FIELD TRIP.** Glide Wildflower Show. Meet at the BLM parking lot, 777 Garden Valley Rd., Roseburg at 7:45am for carpooling, leave at 8am. Spend the morning examining exhibits, spend the afternoon in the field one had and the forest the other day.

### VOLUNTEERS NEEDED

**For the Glide Wildflower Show!** We have scheduled two field trips in conjunction with the Glide Wildflower Show and need volunteers to meet participants at the BLM carpooling point. We also need people to help with the preparation of plant materials, be it collecting, keying, cataloging, or cleanup. Call Jean Cross (496-3236) or Mary Carlson (672-3479) to volunteer and to share our diverse plant resources.

9 May., Thurs.

**MEETING.** Frank Callahan will present a *Calochortus* species update. 7pm in Room 216, Douglas County Courthouse Auditorium, Roseburg. Frank will lead a field trip on to see *Calochortus* the following Saturday. For more information call Mary Carlson (672-3479).

## Willamette Valley

15 Apr., Mon.

**MEETING.** 7pm at First United Methodist Church, Room 225, 600 State St., Salem. Peter Zika will give a slide show and talk on The Mountain Flora of the Adirondacks.

18 May, Sat.

**FIELD TRIP.** Elaine Joyner will give a guided tour of the Willamette University Botanical Garden. Meet at 10am in front of Sparks Center on the Willamette University Campus.

## William Cusick

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For information, contact Paula Brooks (523-7564).

## WAGNER'S 1-IN-20 RULE OF THUMB FOR PLANT COLLECTORS

The arrival of spring makes many botanists think about the arrival of "the field season". This is when we get out to search for plants in flower, make new discoveries, and, back in the good old days, make lots of nice collections.

These are not the good old days, however. The field season still means its time to look for plants but it doesn't necessarily mean making lots of collections. We recognize that past attitudes towards collecting often resulted in damage to plant populations that would be considered unconscionable today. Two examples of this come to mind immediately, both involving *Botrychium pumicola*, the rare pumice grapefern I have been studying for 12 years.

The pumice grape fern is known from very few sites. It was discovered on the rim of Crater Lake in 1897 and was known only from there until 1928, when a population was found by LeRoy Detling on the rim of Newberry Caldera. In 1941 W. B. Cooke found it on Mt. Shasta. His collection is in the herbarium at UC Berkeley. When I borrowed the specimen to verify its identity, I found it is, indeed, *B. pumicola*. On the label Cooke reported, "only two seen". The single specimen on the sheet represents 50% of the population! It has not been found on Mt. Shasta since, despite considerable searching, and is presumed extirpated in California.

In the early 1950s a student intern at Crater Lake National Park, Roy L. Rogers, undertook a search for additional sites for *B. pumicola*. He went to Newberry Caldera and found a new, healthy population on The Dome. It was a different site than Detling's, one recently rediscovered by Dr. Stuart Garrett of Bend. The Dome continues to be the most accessible site for seeing this fern and botanists looking for new sites regularly visit it to see the fern and develop the 'eye' needed to find this inconspicuous plant. However, when Rogers went to Tumalo Mountain, he found, and collected (dug up), two plants. He found only one plant on the east side of Broken Top, which he collected. It has not been found again at either of these sites.

These examples demonstrate very clearly how well-meaning botanists, in the pursuit of increasing knowledge about plants, have destroyed the existence of a species at certain sites by documenting their discoveries with collections. We hope that this wouldn't happen today, that botanists finding only one or two plants would document their discovery with photographs and notes. Good photographs and careful field notes are increasingly acceptable for recording plant discoveries. Nevertheless, from time to time, a field worker is likely to encounter a small population of an unknown plant and feel it is necessary to collect a small amount for positive identification and documentation. The Native Plant Society of Oregon Guidelines and Ethical Code recognizes this situation and advises that collecting be done as inconspicuously as possible so that casual observers will not be encouraged to follow suit.

The guidelines for field work go on to state, "Collecting must never endanger a plant population....avoid excessive collecting: this calls for exercise of good judgment by the collector. Consider the use of rules of thumb for judging whether to pick or not to pick". Sage advice, but what is a good rule of thumb? I remember this question being asked over a dozen years ago at one of the rare plant conferences organized by Jean Siddall in Portland. None of us, professional or amateur, had a good answer at that time.

During the past half-dozen years I began using a rule of thumb which I now call the '1-in-20 Rule'. I cannot recall from where the idea came, if it was in some piece of literature, picked up in conversation, or an original insight. The notion grew gradually in my mind, becoming clearly articulated only as it was put into strict practice, by myself, over the last few years. This practice has satisfied me of the general utility of this rule of thumb and I am now prepared to advocate its widespread use. I will take credit for the idea until somebody shows me an earlier source (not unlikely, since I have a vague sense that I heard it somewhere).

Simply put, the '1-in-20 Rule' dictates that one never collects more than one out of twenty plants. It means *not* collecting one plant until you have found at least twenty. This runs counter to the traditional collector's mentality. As a teenage fern collector the sight of a rare fern sent my hand out to pluck it from the rocks as a prize. Having the plant safely in my vasculum, I started looking around for more. Now, if I run across an unusual plant I suppress my traditional impulse and think, "Can I find twenty?" Only if twenty are found will I consider collecting one plant. And forty should be present before two are taken, and so on. Leave at least nineteen for every one taken. This applies to parts of plants, also: remove no more than five percent (one-twentieth) of a shrub, one frond from a clump of twenty, 5% of a patch of moss. I use the 1-in-20 Rule whether I am doing rare plant work or gathering common species for classroom use.

There is at least a modicum of scientific logic behind this rule. When we do statistical analyses of populations, we generally consider the difference between two populations to be not statistically significant if results of what we are counting or measuring are within 95% of each other. A population sample of 19 is not significantly different from a sample of 20. Note that I recognize that one plant out of a *total* of 20 is significant and statistics has nothing to do with it. Nevertheless, although the statistical argument for justifying the 1-in-20 Rule is weak when dealing with small populations, it is the most reasonable one I can devise. A population geneticist has advised me that statistical arguments will not speak against the 1-in-20 Rule. Between this advice and having proved to my own satisfaction the utility of the 1-in-20 Rule, I advocate its use by all field botanists.

The 1-in-20 Rule does not obviate the need for good judgment. Any collecting should be both necessary and permitted. Any pertinent factor relating to the survival of a population needs to be superimposed on the 1-in-20 Rule. The main value of a rule of thumb is to provide a clear point of reference from which to begin assessing a situation. I suggest this one as a minimal criterion to be met before any taking of a plant be considered.

---David H. Wagner  
Emerald Chapter  
Curator, U of O Herbarium

## FENCING PARTY AT CATHERINE CREEK

Catherine Creek is a special place in the Columbia River Gorge, well known to many NPSO members. At least nine different rare plant species are found there, plus a host of other native trees, shrubs, grasses, and wildflowers. In 1988, over 2000 acres around Catherine Creek were acquired by the Forest Service, so that the area is now national forest land.

Unfortunately, during the past year ORVs, mostly four-wheel-drive vehicles, have invaded these beautiful grasslands, crushing plants and bulbs, making deep ruts in the thin fragile soils. Some of the ruts will scar the land for years to come.

The main reason for this desecration is the absence of a decent fence along the Old Highway. The existing fence is old and decrepit, almost non-existent in places, elsewhere so weak that one can push the fenceposts over or press the wires to the ground. What is needed is a strong new fence.

The Forest Service has agreed to supply the necessary materials and a Forest Service coordinator if the NPSO can supply volunteers to build the new fence. From our experience in building .3 mile of fence at the Dalles Mountain Road in 1989, we know we can build a fence to protect Catherine Creek. In fact, this one would be easier, since the fence is along the road, so that no time or effort need be expended carrying materials to the site.

In all, about a mile of new fence is needed, but the Forest Service recommends it be built in short installments. The proposal for 1991 is to build the section from the Catherine Creek gate west to the cliff edge--a little less than a quarter mile. We should be able to complete it in four sessions. The first session will be on a weekday soon after April 14th. Members who are interested in helping on one or more of the fence-building sessions should please contact Russ Jolley (286-2350) or Portland Chapter President Mike Fahey (206-694-2902).

--Russ Jolley  
Portland Chapter

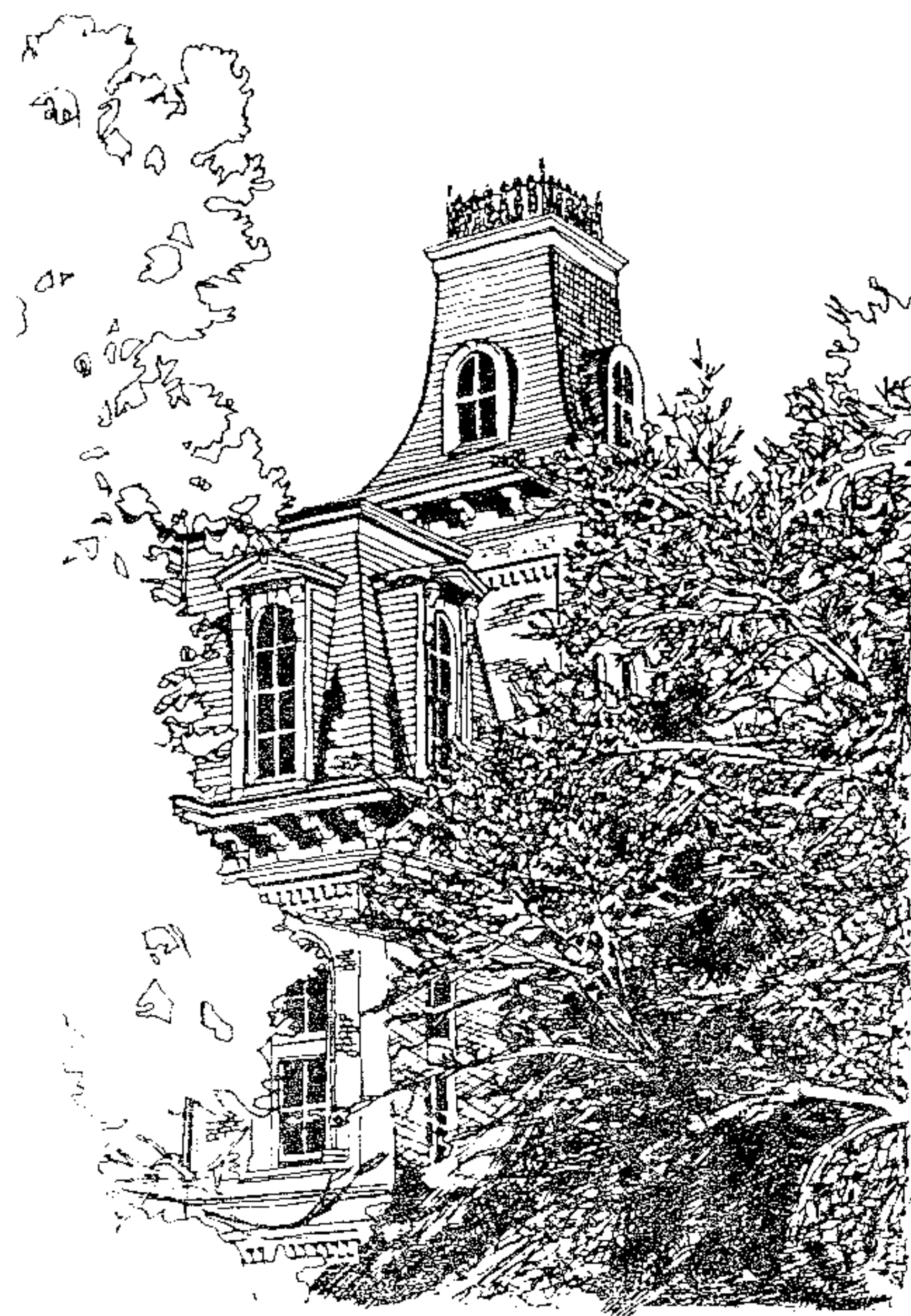
## NPSO ANNUAL MEETING, JUNE 14-16: MONTHLY UPDATE MEETING SCHEDULE & REGISTRATION MATERIALS ENCLOSED

**ANNUAL MEETING PLANS: WITH ONLY TWO MONTHS TO GO,** Emerald Chapter, under the direction of Charlene Simpson, continues to plan for NPSO's big 30th Birthday Annual Meeting in Eugene. Dates are **Friday, thru Sunday, June 14, 15 and 16.** The Saturday night banquet, which will be served in elegant Gerlinger Hall, will include wine and a gorgeous NPSO 30th Birthday cake! Banquet speaker will be **Dr. Linda R. McMahan** of Berry Botanic Garden.

**REGISTRATION MATERIALS:** This is the second and last time registration forms will appear in the Bulletin. If you forgot to fill yours out and send your check last month, please do it now! **Deadline for registration is May 1.** If you have registration questions, please call Evelyn Everett at 345-1746. If you have questions about the field trips, please call John Koenig at 935-7677.

**ANNUAL MEETING SCHEDULE:** A schedule of annual meeting events with times and places is in this *Bulletin*. This is the only time this schedule will appear, but all annual meeting participants will receive an updated schedule when they register. If you have questions about the schedule, please call Charlene Simpson at 465-1059.

**POSTER SESSION:** At most scientific conferences, poster sessions are held for participants who wish to give attendees an idea of research in progress, but who are not presenting formal papers. Rhoda Love has adopted this idea for our Annual Meeting. When Rhoda was NPSO president, she realized how important Chapter Reports are. Each chapter gains from hearing the important things other chapters are doing, yet there is often little time at meetings for these very important idea exchanges. Thus, the poster session was born! **Each chapter is asked to bring a poster illustrating one or more of your activities.** Easels will be provided. Emerald Chapter's poster will illustrate how Federally-listed *Lomatium bradshawii* at Buford Park was fenced to exclude cattle. Stu Garrett reports that High Desert Chapter is at work on their poster. Jerry Igo, of Mid-Columbia, will present a video of chapter activities. Posters will be displayed on Saturday night, June 15, before the banquet. Questions? Call Rhoda Love at 345-6241.



### NEW NPSO NOTECARDS TO SUPPORT SOCIETY

The new NPSO Notecards are now available from your local chapter. They feature seven rare plants illustrated by Julie Kierstead plus one by Eugene artist Valerie Sloane. Included in this collection are Gentner's fritillary (*Fritillaria gentneri*), Kamchatka lily (*F. camchatcensis*), red clintonia (*Clintonia andrewsiana*), Myrtle Creek mariposa (*Calochortus coxii*), Barrett's penstemon (*Penstemon barrettiae*), rough popcorn flower (*Plagiobothrys hirtus*), triplet lily (*Triteleia laxa*), and Gorge daisy (*Erigeron oreganus*). Printed on pastel parchment-style paper in beige, grey blue and green with matching envelopes, these notecards make lovely gifts. Proceeds go to the NPSO's Rare and Endangered Plant Fund. For further information, contact Nancy Fredricks at (509) 427-8778, Box 127, North Bonneville, WA 98639.



## CONSERVATION BIOLOGY PROGRAM FIELD PLANS

Its spring and the field season is again upon us! In 1991, we are looking forward to a rewarding season of cooperative projects with the Bureau of Land Management and the US Forest Service studying rare plants throughout Oregon. Here is a brief description of our plans.

Our work with BLM should cover at least five species. Already this year we have conducted inventory, monitoring, and disturbance ecology on *Montia howellii*, a tiny plant with a historic range from California to British Columbia, but which is now restricted to only a few known sites. Soon we will initiate long-term population studies of *Astragalus tyghensis*, a Wasco County endemic, and *Haplopappus radiatus*, a rangeland species from the Snake River Area. In Eastern Oregon near Harper, we hope to study the pollination and breeding system of *Amsinckia carinata*, an annual plant in the borage family, and examine substrate requirements of the species. Last, we will work with the BLM to establish a monitoring program for *Cordylanthus maritimus* at Coos Bay.

A trip to Hell's Canyon in the Wallowa-Whitman NF will kick off our field work with the USFS. There we will establish additional monitoring plots for *Mirabilis macfarlanei*, one of only three Oregon Plant species listed by the US Fish and Wildlife Service as endangered. On the Fremont NF near Lakeview, Dr. Aaron Liston from Oregon State University and his graduate student, Jeff Green, will work with us to examine possible hybridization of *Castilleja chlorotica* with other *Castilleja* species. In a third project, probably underway as you read this, we will work with the Berry Botanic Garden in their cooperative effort with the BLM and the Siuslaw NF to monitor population trends of *Erythronium elegans* (elegant fawn-lily) in the Coast Range.

With these projects keeping us busy, we are hoping an interested person will come forward to help out with field work for one to two weeks. Funding may be possible through an NPSO Research Grant matched by ODA. Write or call Stephanie Schultz or Dan Luoma soon if you are interested.

--Tom Kaye and Bob Meinke

## LETS GO SEE OUR OREGON REDWOODS!

Please join us in Brookings on Sat. April 27 for a guided tour of our beautiful Oregon redwoods. District Ranger Michael Frazier and other representatives of the Chetco District of the Siskiyou National Forest will be our guides for a day on the Chetco and Winchuck Rivers to see what's left of Oregon's old growth redwood forest and to hear how the redwoods will be managed by the Forest Service in the future.

The trip is sponsored by the Emerald and Siskiyou Chapters and all NPSO members and other interested guests are welcome. Meet at the Chetco Ranger Station, 555 Fifth Street, Brookings at 10 am Saturday, April 27. Wear hiking clothes and boots and bring lunch and drink. For more information, call Rhoda Love (345-6241).

FACING PAGE, BOTTOM:

*Sequoia sempervirens*

Coast redwood

From Manual of trees of North America

By C.S. Sargent

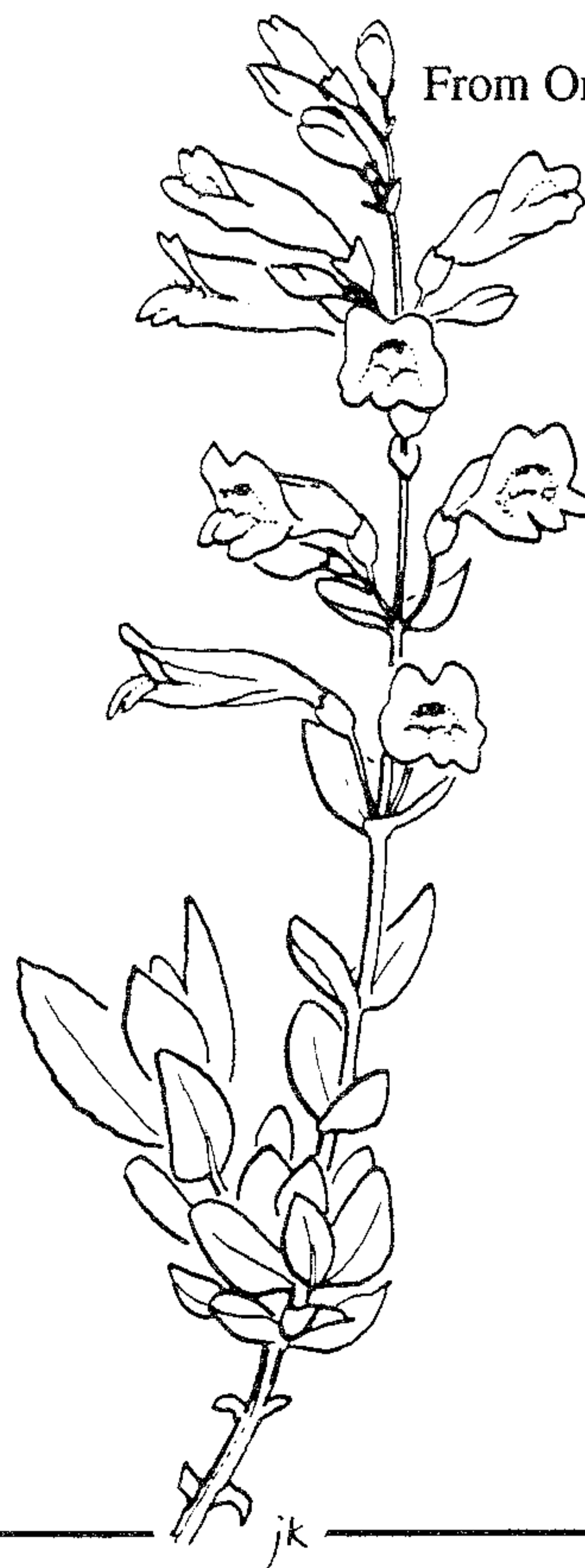
BELOW:

*Penstemon barrettiae*

Drawn by Julie Kierstead

From Oregon Rare and Endangered Plants

NPSO Notecards



## WILDFIRE IN CENTRAL OREGON: LIVING WITH THE INEVITABLE

The fire season of 1990 is one that vividly remains in the minds and lives of Central Oregonians. The loss of 22 homes in the Awbrey Hall fire is a graphic example of the potential for holocaust.

Why do we have the current situation? What can be done about it? Can we prevent a similar dilemma in the future? In recognition of NPSO's 30th year, the High Desert Chapter will sponsor a series of fieldtrips to examine, in a non-judgemental way, the causes and effects of fire. We will travel to forested and non-forested areas and examine the urban and rural aspects of the problem.

Trips depart from the Juniper Park parking lot (7th and NE Greenwood in Bend at 8:30am unless otherwise noted. Arrive a few minutes early to carpool. We normally return to Bend by 5pm. Fill your gas tank. Bring water, lunch, boots, day-pack, and consider layered clothing, sunscreen, hand lens, camera, binoculars, etc. Riders are encouraged to reimburse the drivers; 22 cents per mile total is a suggestion. Weather may be severe and trails and roads can be rough. No smoking due to fire danger. No picking or collecting of plants allowed. Please leave pets at home. Please privately inform your triplader of important medical conditions. You participate at your own risk. Call trip leaders for more information about specific outings, or Field Trip Chair Stu Garrett (389-6981 eves) for general information.

### FORT ROCK DISTRICT, DESCHUTES NATIONAL FOREST Saturday, May 11th.

Both natural and prescribed burns will be visited. A dramatic change in the non-forested steppe areas bordering the east side of the National Forest will be seen. A beautiful meadow-steppe area has been created from a heavy cover of sage and bitterbrush. The 1988 North Paulina fire will be visited. Easy Hiking. Call trip leader Stu Garrett for more information (389-6981 evenings).

### HATFIELD'S HIGH DESERT RANCH Saturday, June 8th.

Doc and Connie Hatfield have invited us to their ranch 15 miles from Brothers. They practice innovative ways of ranching which are kinder and

gentler on the land. Prescribed fire, juniper control, and riparian protection are some of them. Easy hiking. Trip leader is Stu Garrett 389-6981.

### METOLIUS RESEARCH NATURAL AREA Saturday, June 29th.

In 1989 the USFS used prescribed fire in this ancient forest. We will visit the area to see the results and understand the benefits. We may also visit sites for Peck's penstemon, a rare plant. Easy hiking. Call trip leader Stu Garrett 389-6981

### PRINGLE FALLS EXPERIMENTAL FOREST/RNA Saturday, July 20.

Both natural and planned fires will be seen. We will also visit the planned "Turn of the Century Forest" and understand the role fire will play in its development. Easy hiking. Call trip leader Bill Hopkins for details at 389-3330.

### CRATER LAKE NATIONAL PARK Saturday-Sunday, July 27th-28th.

We will visit Oregon's only National Park on this overnight campout. Our tour will include an examination of fire management in the ancient forests of the Park and a visit to some rare plant locations. Moderate hiking. Please **preregister** with trip leader Stu Garrett at 389-6981 evenings.

### BROKEN TOP VOLCANO Saturday August 17th.

Our annual hike to view the spectacular display of alpine wildflowers and glacial geology on Broken Top. A five mile RT moderate to strenuous hike with a 1500 ft. elevation gain, mostly off-trail in the Three Sisters Wilderness. Number of hikers limited due to USFS restrictions, call trip leader Stu Garrett to **preregister** at 389-6981 evenings.

### AWBREY HALL FIRE Saturday, September 14th.

Those interested in the urban-forest interface will find this trip interesting. We will examine the area burned and talk about prevention. Recovery of the 1979 bridge Creek Burn may also be observed. Easy hiking. Trip leader is Stu Garrett, call 389-6981 evenings for more information.



