

Bulletin of the Native Plant Society of Oregon

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

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It's Renewal Time

The NPSO membership year is January to December. Now is the time to renew. First check your address label on the *Bulletin*. You might already be paid up for 1994. If there is a 93 on the top line, you need to renew now.

A remittance envelope is in this issue. Or use the membership form on the inside back page.

NPSO brings you field trips, programs, classes, the monthly *Bulletin* and the annual *Kalmiopsis*.

This is also a good time to consider a tax-deductible contribution to our special funds. The Leighton Ho Memorial Fund is used for summer research projects in western Oregon, and is a matching grant in cooperation with The Nature Conservancy. The Rare and Endangered Plant Fund supports work with our most threatened plants. The Jean Davis Fund awards scholarships to botany students in Oregon. Contributions can also be made to the NPSO General Fund.

Your membership and donations make it possible to carry out more of the many projects that are needed to pursue the goals of NPSO.

State News

Sat., Jan. 15

State Board Meeting: 10 A.M. Salem. Call Lisa Croft (447-5270) for information.

Sat., March 12

State Board Meeting: 10 A.M. Mosier. Call Lisa Croft for information.

Annual Meeting: Ashland. Details to be announced.

Chapter News

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. 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.

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. Each group using wilderness areas should be no larger than 12.

Blue Mountain

For information, call Chapter President Jerry Baker (566-3381).

Corvallis

Dec.14, Tues. **Meeting:** Dessert and slide potluck. Bring 12 favorite slides and/or dessert to share to 4550 Sw Nash, Corvallis. Call Keli Kuykendall, 758-8409, for information.

New Officers: Keli Kuykendall, president; Richard Brainerd, vice president; Loren Russell, secretary; Dan Luoma, treasurer.

Emerald

Dec.13, Mon. **Meeting:** 7 P.M. Annual slide show/potluck. Bring favorite slides of the year and potluck dish to Anna Mokler's, 32037/32043 Fox Hollow Rd. From intersection of Fox Hollow and W. Amazon Pkwy. 2.9 mi. south on Fox Hollow to blue mailbox. Parking for 5 or 6 cars. Call Anna, 485-0891, for more information.

High Desert

Jan. 25, Tues. **Meeting:** 7:30 P.M. Central Oregon Environmental Center, 16 NW Kansas. Speaker is Ranotta McNair, Forest Service Nursery Manager, who will speak on "Species Diversity at the Bend Pine Nursery." Call Cindi O'Neil, 389-3085, for more information. (There is no December meeting.)

Mid-Columbia

Dec. 1, Wed. **Meeting:** 7:30 P.M., Mosier School. Joy Belsky will give a program on grazing impacts in Oregon and Africa, where she has done extensive research.

North Coast

Dec. 4, Sat. **Field Trip:** Winter botany field trip. Location contingent on weather. Meet 10 A.M., PUD parking lot, 1115 Pacific, Tillamook. Call Jim Winslow, 842-4131.

Dec. 11, Sat. **Meeting:** Potluck/meeting (replaces regular meeting of Tues. 12/28). Noon at Evelyn Brown's, 17005 Trask River Rd. Bring dish to share. For directions or car pooling, call Evelyn (842-2746) or Jim Winslow (842-4131).

Portland

Dec.14, Tues. **Meeting:** 7 P.M. Members show and tell night. Bring up to 12 slides of your finest or most unusual plants and tell about your adventures. Carousel, projector and screen supplied. Come early for snacks and visiting. If showing slides, please call ahead. (246-6572). First United Methodist Church, 1838 Jefferson St., Portland...

Siskiyou

Dec. 16, Thurs. **Meeting:** 7:30 P.M. Barbara Mumblo will give slide show: "Wildflowers and Views of Israel." Meet in Room 171, Science Building, SOSOC, Ashland.

South Coast

For information on formation of South Coast Chapter, call Bruce Rittenhouse (888-9328).

Umpqua Valley

Dec.9,Thurs. **Meeting and Christmas Party:** 6:30 P.M. at Richard Sommer's (Hillcrest Vineyard) 240 Vineyard Ln. Please bring your place setting and finger foods. Bring 10 slides for viewing if you wish..Call Ted Schattenkerk (679-6953) for information...

Willamette Valley

Meeting: None in December.

Wm. Cusick

Dec.15,Wed. **Meeting:** 7 P.M. Baker ESD Office, 2100 Main St., Baker City, OR. Charley Johnson will present a program on the "Monkey puzzle tree forest of the southern Andes in Chile."

Welcome to New Members Who Joined Between September 5th and November 1st

Blue Mountain

Gritski, Ben
Kronner, Karen
Mitchell, Jean Ann

Corvallis

Ingersoll, Cheryl
Miller, Don
Trask, Melinda
Wehmeyer, Sandra

Emerald

Cantrell, Isabella
Manning, Judith
Millstein, Henry
Newman, Paul
Oldham, Keith

High Desert

Rule, Gary
Wayne, Rod and Barbara

Mid-Columbia

Buckhout, Stephen
Yang, Stella

Portland

Beyman, Phil
Brooks, Dan
Fong, April Ann
Hyslop, Bob
Lothrop, Claudia
Meserve, Leslie M.
Meyers, Leslie

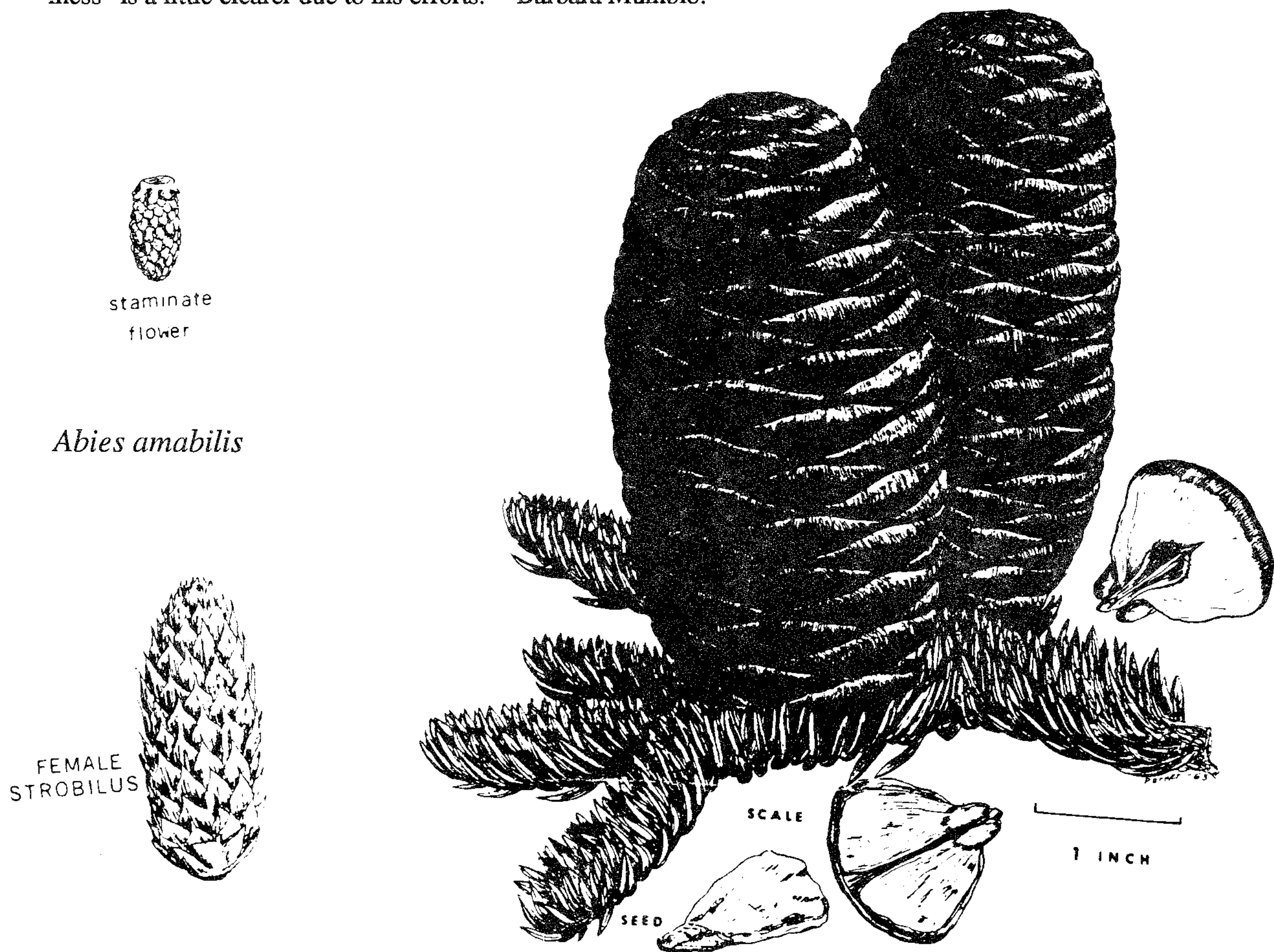
Umpqua Valley

Puffer, Robert
Wilson, John D.
Wolf, Lisa

REMEMBERING GENE PARKER

Southwest Oregon lost an enthusiastic conifer specialist in October when Gene Parker died of a heart attack. Gene had led a field trip for the Siskiyou Chapter to his beloved Pacific Silver Fir site near Cook and Green Pass just the week before he died. Gene discovered this disjunct population in the 1960's and greatly enjoyed showing people this site high in the mountains.

Gene truly loved the conifers and wrote several articles about his field studies. One of the more recent articles, "Those Amazing Siskiyou Firs and a New Discovery" in *The Four seasons*, 1/25/88, was about his discovery of *Abies amabilis* in the Siskiyou Mountains. The "botanical tramp," Oliver Matthews, had encouraged Gene to look in this area for the (Sub)alpine fir which was rumored to be above the Blue Ledge Mine. Just before his death, Gene had completed another article which he was ready to send for publication. Gene had so much enthusiasm for the conifers, it's wonderful he was able to go to one of his favorite spots and share some of his knowledge before leaving us. The Siskiyou firs "mixed-up mess" is a little clearer due to his efforts. -- Barbara Mumblo.



Drawing by Gene Parker, reprinted, by permission, from *The Four Seasons; journal of the Regional Park Botanic Garden*, Berkeley, California. The next issue of that publication will be in memory of Gene Parker.

President's Column

In September, I had the opportunity to be the program speaker at the Portland Chapter meeting. My theme was "Issues, concerns and activities at the State Board level." My part of the presentation was brief as I outlined current issues and discussed my ideas for the future direction of NPSO. My primary intent for that evening was to hear from chapter members on what their concerns were, on where they felt we should be going, and on what issues they felt we should become involved in. It was a chance for me to hear from the membership in person. It provided a bridge of communication from the Board to the chapter level, with an untraditional method. I greatly appreciated the opportunity the Portland Chapter provided and I hope other chapters welcome either myself or another Board member to their evening meetings soon.

We are still looking for an EFO coordinator. This is an important source of income for NPSO and we may lose it if we don't fill this position soon. Please call me if you are interested.

Several ideas have been presented for the next policy statement. These include: mining, ancient forests and the use of native species for restoration and rehabilitation. Please share your ideas with any Board member.

You are welcome at Board meetings. The next meeting will be in Salem in January. I am a strong believer in "people support that which they help to create." Therefore I look forward to a wide range of discussion and participation in developing the next policy statement.

As the solstice approaches, it is always a reminder to me of the return of another growing season, and of our Society's mission to the conservation and enjoyment of our native flora. Wishing you a joyous and peaceful solstice and holiday season.

Lisa Croft
NPSO President

NPSO Items For Sale

Oregon's Rare Wildflowers Poster depicts Punchbowl Falls and three of the Columbia River Gorge's endemic wildflowers. Text on the back describes the natural history of the Gorge and the mission of NPSO. Available from Stu Garrett, 21663 Paloma Dr., Bend, OR 97701 (503-389-6981). Individuals may order posters at \$12 each plus \$3 per order for shipping. Posters are mailed in tubes. Chapter treasurers may contact Stu for wholesale prices to Chapters.

NPSO Window Stickers are decals with NPSO's trillium logo in green over an opaque white background, for use inside car windows. Available from Stu Garrett (see above). \$1 each; minimum order is 5.

NPSO Notecards feature seven rare plants drawn by Julie Kierstead and one drawn by Valerie Sloane. They are printed on pastel parchment-style paper with matching envelopes. Notecards are sold through NPSO Chapters. For more information contact Lisa Croft, 699 W. 2nd, Prineville, OR 97704 (503-447-5270).

NPSO T-Shirts are available in various colors and designs. They are sold through NPSO Chapters.

NPSO's Original Wildflower Poster depicts 13 Oregon wildflowers in a striking artist's rendition. Soon to be a collector's item! Available from Stephanie Schulz, 652 W. 10th St., #1, Eugene, OR 97402 (503-485-1868). \$5 each.

NPSO Membership Directory lists names, addresses and phone numbers of NPSO members (April, 1993). Available from Jan Dobak, 2584 NW Savier St., Portland, OR 97210-2412. \$2 each.

HISTORY OF THE JEAN DAVIS AWARD

The Jean Davis Memorial Scholarship fund was established in August 1979 in memory of Jean Davis, who passed away while on a field trip in the Cascades with several other members of the Willamette Valley Chapter of NPSO.

Jean was a charter member of the Willamette Valley Chapter, and her husband felt this was the way he wanted to honor her. A request for donations to the fund in lieu of flowers was made and several sizeable donations were received. Mr. Davis then increased the fund to \$10,000 and a committee was formed to set up guidelines for the recipients of the scholarships.

After deliberations it was decided that the recipient must be one that will be attending an Oregon college, and plans to study plant systematics or plant ecology. The recipient is to have completed at least two years of satisfactory college work by July 1 of the year of application and be a full time student. The award is in the amount of \$1000 and will be paid directly to the school of choice, to be used toward tuition within the following academic year.

Applications are available from Mary Falconer, Chairman, Scholarship Committee, 1920 Engel Ave. NW, Salem, OR 97304. They must be completed and sent to this address no later than April 1 of the year of application. The award will be made by May 1 and is usually announced at the NPSO Annual Meeting.

Since the establishment of the Fund there have been donations in memory of other NPSO members. Any donations will be gladly accepted and should the Fund grow to the necessary size additional scholarships could be awarded.

From these funds NPSO will award a scholarship to a worthy student in an Oregon college, with his or her major study in plant systematics or plant ecology. The scholarship is in the amount of \$1000, to be used toward the student's tuition within the following academic year. Deadline of applications is April 1. The award will be made by May 1.

Donations to the scholarship fund are tax deductible and are welcome at any time. All interest earned from the donations is apportioned to as many scholarships as possible in the spring of

each year, at \$1000 each. All communications regarding this fund should be addressed to: Mary Falconer (address above).

RULES FOR SCHOLARSHIP AWARDS

- 1) Scholarships are available to students in Oregon colleges, planning their major study in plant systematics or ecology.
- 2) Scholarships are awarded in the amount of \$1000 to worthy students who will complete at least two years of satisfactory college work by July 1 of the year of receipt of application and are full time students. Graduate students may be eligible if they meet all qualifications except that of full time student.
- 3) Awards are made in the following manner:
 - a) A certificate is presented to the recipient.
 - b) A check in the amount of the award is submitted to the school of choice, as set forth in rule 1, to be used toward tuition within the following academic year.
- 4) If an award recipient fails to enroll, changes his or her major, or leaves the school before completing the period for which the award was granted, the full amount or unused part of the money shall be returned to the Jean Davis Memorial Scholarship Fund.
- 5) Applicants are required to submit:
 - a) In their own handwriting, a statement of academic and career intent.
 - b) Two letters of reference from persons able to judge the student's ability to successfully complete study in the area of plant systematics or plant ecology.
- 6) All applications together with items listed in rule 5 must be received by the Scholarship Committee Chair no later than April 1. The award will be made by May 1.
7. Scholarships cannot be granted to Scholarship Committee members or their relatives.

Mary Falconer

(Reprinted from NPSO Bulletin for Dec. 1990)

Haplopappus radiatus and *Cimicifuga elata*

During this past summer, NPSO helped sponsor four internships in conservation biology (over 40 individuals applied or expressed interest this year!). The interns assisted the Oregon Department of Agriculture in summer research on rare and endangered species. Two internships were summer-long in duration, and were filled by Steve Gisler (Sublimity) and Melissa Peterson (Eugene). The other two lasted two weeks each, and were completed by Mary Garrard (Portland; sponsored specifically by the Portland Chapter of the NPSO) and by Jill Van Winkle (Portland). As their final assignment, interns are required to write a narrative illustrating their work experience. The following article by Mary Garrard is the second in this series.

During the spring and summer of 1993 I had the opportunity to study several of Oregon's rare plant species as a Native Plant Society intern volunteering with the Oregon Department of Agriculture's Plant Conservation Biology Program (ODA). Although the two week internship seemed far too short, I learned a lot about field botany and the frustrations and rewards that come with it.

The first week of my internship took place in eastern Oregon in early May studying *Haplopappus radiatus* (Nutt.). Cronquist, the Snake River gold-weed, a member of the family Compositae. This plant is a narrow endemic whose global distribution is confined to a small area on either side of the Snake River near Huntington, Oregon, about halfway between Baker City and Ontario. It is listed as endangered by the ODA, and is scheduled for listing by the U.S. Fish and Wildlife Service by 1996. Most known populations of *H. radiatus* are located on land under the jurisdiction of the Bureau of Land Management (BLM), which has placed it on the agency's Special Status Species list. Consequently the BLM has contracted with the ODA to study this rare native to obtain information needed for its conservation.

H. radiatus is an herbaceous perennial which occurs on dry rolling hills in a community of *Artemisia tridentata*/*Agropyron spicatum*-*Poa sandbergii*. It blooms in June and July. Research on the species to date indicates that its population is in decline, and suggests that if observed trends continue it may be extinct within ten years. It is therefore imperative that the reasons for the low population viability of *H. radiatus* be determined

and steps taken to prevent its extinction. Several factors may be implicated in its poor reproductive performance, including direct and indirect effects of livestock grazing and poor seed dispersal. Accordingly, in 1991 ODA set up a project with the objectives of observing population trends, determining population dynamics and comparing population dynamics between grazed and ungrazed populations. Five monitoring sites were established, each site having two plots, one open to grazing and one fenced. Each plot is ten meters square and contains 50 one-meter-square subplots. Data is collected twice a year, in spring and in summer.

The task of the field team I joined in the spring was to locate *H. radiatus* seedlings. After a wet, gray April in the westside, it was wonderful to be in sunny eastern Oregon in early May. We camped at Farewell Bend State Park, which left much to be desired as a wilderness experience but did have showers and lots of birds including two great horned owl nestlings. Our work days were spent on the dry, rolling south to west-facing hillsides, the favored habitat of *H. radiatus*. Supplied with a meter-square PVC frame to help us locate subplots, we crouched on the ground to look for seedlings. These were mapped on copies of last year's data sheets. The seedling sample was a simple procedure involving learning to distinguish the seedlings of *H. radiatus*. One plot had been invaded by *Cardaria draba*, which we had to weed out before we could collect our data. With few exceptions, seedlings in the subplots we sampled seemed disappointingly sparse. This may represent a lingering effect of the recent drought.

On the last day of our trip we met Vale District botanist Jean Findley in Unity, Oregon. Our purpose was to visit several of the known locations of another rare, highly localized endemic, *Lupinus cusickii*. This species favors the kind of substrate that also attracts off-road vehicle users; loose, rocky slopes. Unrestrained ORV use clearly threatens *L. cusickii*. The ODA is helping BLM botanists set up study plots to determine the effect of ORV use and of livestock grazing. We visited three potential research sites which were assessed for possible locations for fenced and open study plots.

The second week of my internship came in late July and involved studying a member of the fami-

ly Ranunculaceae, *Cimicifuga elata* Nutt., commonly called tall bugbane. This species of Douglas fir forests is a large 1-2 meter tall herbaceous perennial with compound leaves and a raceme of white apetalous flowers.

In contrast to *H. radiatus* and *L. cusickii*, which have very restricted ranges, *C. elata* has a very broad range, historically known in the forests of the western Cascades from British Columbia south to Douglas County in Oregon; at present, the northernmost population is located on the northern Olympic Peninsula. Nevertheless, it is of concern to botanists because its populations are usually very small, from fewer than 25 up to 100 plants per patch. This suggests that each population might be vulnerable. Human activities are, not to anyone's surprise, implicated in the loss of *C. elata*'s habitat, principally from logging but also from pressures of development and roads. Consequently, the species has been declared a candidate for listing as threatened or endangered with the state of Oregon, and is included on Forest Service and BLM sensitive plant lists.

In 1992 the ODA established a joint project with the federal agencies to monitor the population status of this species and determine the effect of logging and timber management practices on its populations. The 1993 field studies included continued monitoring of established sites and surveying for new populations to add to the inventory of *C. elata*.

During the week of my internship, the field crew and agency personnel visited widely scattered study sites on BLM land in the northern Willamette Valley. We drove to Salem each morning to meet BLM staff who were to accompany us, and then divided into teams for the day's work.

Our monitoring assignments consisted of revisiting and collecting data from plots established last year. At each site, we located individual plants which had been marked with metal tags, mapped untagged plants not on last year's data sheets, and recorded demographic data including plant height, number and size of leaves, number of reproductive stems, and the percent of herbivory. This involved learning to distinguish *C. elata* from *Actea rubra*, another herbaceous perennial with similarly divided leaves. The major challenge *C. elata* presented was its preference for slopes, steep, slippery, wet, densely vegetated slopes, which made the concept of angle of repose very clear!

Our other task was to survey for new populations

of *C. elata* using habitat indicators derived from previous research. Field work from 1992 shows that although *C. elata* is found in a variety of habitats, it generally prefers north-facing slopes in a mature mixed forest of conifer (*Pseudotsuga menziesii*) and deciduous (*Acer macrophyllum*) trees. We started with maps on which areas had been marked by agency botanists where *A. macrophyllum* was present in the overstory. We then located those areas on topographic maps to find north-facing slopes. This cross-referencing process yielded quite a number of new sites to survey. While doing so, we crisscrossed much of the northern Willamette Valley. Sometimes finding the sites proved quite challenging: gates were locked, roads didn't exist or were blocked by berms, a river would be between us and the site, or the site would be surrounded by private land. Although it was fun to explore new territory, none of the sites we did manage to find during my week turned up new populations, which was discouraging.

I am indebted to the Native Plant Society and the Oregon Department of Agriculture Plant Conservation Biology Program for their support of the internship. Special thanks go to Tom Kaye and the other members of the 1993 field crew, Melissa Kirkland, Nick Testa, Angie Ruzicka, Melissa Peterson, Matt Carlson and Steve Gisler for their enthusiasm and willingness to share their knowledge of botany. I am truly grateful for the opportunity to contribute to the preservation of Oregon's rich natural heritage.

-- Mary Garrard



H. radiatus (Nutt.) Cronq.
Hitchcock, Charles Leo, "
Flora of the Pacific Northwest

Searching for Sedges

Was Friday or Saturday the more exciting day for the *Carex* Working Group's July trip? Thanks to a research grant from the NPSO, Keli Kuykendall, Jim Oliphant, Barbara Wilson, Georgine Yorgey and Peter Zika were searching the vast "sedge desert" of north-central Oregon for *Carex*.

No *Carex* had ever been reported for Gilliam County. By late Friday that situation had not changed and the group was approaching the county line. Then Keli found *Carex lanuginosa* along a creek near Lone Rock, and soon the bemused rancher was watching botanists wax enthusiastic over *C. pachystachya* and *C. microptera*. The discovery of *C. nebrascensis* zoomed the county total to four species.

Saturday the group visited the more varied habitats of the Umatilla National Forest in Morrow County, from which only one *Carex* species had been reported. As new county record followed new county record, the group's favorite was *C. praticola* which even sedge expert Peter had never seen before.

By six in the evening, the total was 11 new county records. Could it reach an even dozen by dark? An open meadow by a stream provided the 12th species and then more. As Peter washed the root wad of *C. luzulina* Barbara had dug, he found a bonus sedge, the delicate and edible *C. aurea*.

By the end of May, Morrow County had 15 new *Carex* records: *C. athrostacha*, *aurea*, *concinoides*, *deweyana* var. *lepropoda*, *geyeri*, *hoodii*, *ionessii*, *lanuginosa*, *lenticularis* var. *lipocarpa*, *luzulina* var. *luzulina*, *microptera*, *pachystachya*, *praricola*, *rossii* and *vesicaria*.

Sunday the group entered Wheeler County, where Peter predicted *C. nudata* would grow on the John Day River. A mile out of Spray, he disappeared down a near-vertical 15 foot slope to extract a confirming sample from the riverine rocks. Late in the day, Jim found *C. amplifolia*, the trip's last new county record. Though the area was dry, this sedge has wet feet, and by the time he had collected his fine specimen, Jim's feet matched the plant's.

The *Carex* Working Group is studying the distribution of Oregon's sedges. The group has pro-

duced a preliminary atlas of *Carex* distribution and is now collecting specimens and observations that will permit publication of a more detailed and accurate atlas. Collecting this data is too complex a task for the small working group to accomplish. The group would like to receive specimens of *Carex* from botanists and sedge enthusiasts throughout the state. People interested in contributing specimens or receiving maps should contact the *Carex* Working Group, Department of Botany and Plant Pathology, Oregon State University, Corvallis, Oregon 97331.

Barbara Wilson
Corvallis Chapter

DRUG SEARCH

The New York Botanical Garden and Pfizer, Inc., the pharmaceutical concern, are collaborating in a \$2 million, three-year nationwide search for plants that might be the bases of new medicines, it was reported recently in *The New York Times* (9/21/93, B7).

Emphasis has been put on the tropics, in such searches (Merck & Company and Costa Rica, for example), "but botanists believe the native plants of the United States also provide a potentially valuable source of drugs."

About one fourth of all prescription drugs used in this country are plant-based, it is estimated, but only about one half of one percent of the world's higher plants have been thoroughly screened, for this purpose.
