

Bulletin of the  
**NATIVE PLANT SOCIETY of OREGON**

To increase the knowledge of members and public in identification  
and conservation of the native plants of the Pacific Northwest

Volume 18 No. 8

August 1985

## CHAPTER NEWS

### Blue Mountain

--- For information about August activities, call Chapter President, Bruce Barnes, 276-5547.

### Corvallis

To register for field trips, please call Esther McEvoy (754-0893) or Dan Luoma (758-8063).

31 Aug.-2 Sept. Field trip over Labor Day weekend to STEENS MOUNTAIN with Northern Nevada Native Plant Society members; meet at Fish Lake Campground, 10 a.m. Saturday morning. Leader: Carolyn Wright, 467-2218.

### Emerald

12 Aug., Mon. Workshop, 7:15 p.m., Rm. 121, Science II, UO Campus. GRASS IDENTIFICATION, with Warren Pavlat. Bring hand lens, Hitchcock, and a dissecting kit. Microscopes will be provided.

### High Desert

--- August field trip to BROKEN TOP and TODD LAKE. Call Stu Garrett for time and details, 389-6981.

### Mid Columbia

7 Aug., Wed. POTLUCK at Susan Kofahl's home, beginning at 5 p.m.. Call 478-3576 if you need directions.

### North Coast

--- For information about August activities, call Richard Smith, 842-4324.

### Portland

We would like to thank Sam Johnson of NW Field Office of The Nature Conservancy, who on very short notice filled in for the scheduled speaker for the July 9 program. Sam presented 'Garden of Eden' a film about the need for preservation of natural diversity.

Please call the trip leader or Lois Kemp (760-4998), if there are any questions about a field trip. Bring lunch, liquids, and all-weather clothing for the trips.

3 Aug., Sat. Field trip, MT. ADAMS, UPPER HELLROARING CREEK. Meet at north end of Hood R. Bridge or at Hood River Inn at 8:30 a.m.. Leader: Keith Chamberlain, 478-3314.

10 Aug., Sat. Field trip, MULTORPOR BOG, MT. HOOD. Meet 8 a.m. at Dept. of Motor Vehicles (DMV), NE 60th and Glisan; or 9 a.m. at Zigzag Ranger Station. Lois Kemp, 760-4998.

17 Aug., Sat. Field trip, NETARTS SPIT, trip to Indian Village site. Up to eight miles roundtrip, bring water. To share rides meet at OMSI parking lot at 8 a.m.; or to meet leaders at Cape Lookout parking area at 9:30 a.m. Leaders: Jean Siddall, 636-4633, and Mary Lou Thomas.

20-22 Aug. Field trip, MT. RAINIER. For more information and to make arrangements, contact trip leader as soon as possible. Leader: Joyce Beeman, 639-3343.  
Tue.-Thurs.

## Siskiyou

- 10 Aug., Sat. Field trip, RABBIT EARS & HERSHBERGER LOOKOUT. This trip will botanize its way to Rabbit Ears, which is an old volcanic plug, looking for Collomia mazama. Then we will go on to Hershberger Lookout to see the rare Cascade erigeron, Erigeron cascadensis. Enjoy your lunch overlooking the Rogue Valley. Meet at 8 a.m. at Ashland Bi-Mart, 8:30 at Medford K-Mart, & 9:50 at Beckie's Cafe at Union Creek on Hwy. 62. Led by Cindy Cripps, 560-3770.

## Willamette Valley

- 2-4 Aug.,  
Sat. & Sun. Field trip, CRATER LAKE. Meet at Park Headquarters at 9 a.m. both days. For information contact Clint Urey, 743-2802.
- 10 Aug., Sat. Field trip, CANYON CREEK with the Audubon Society. Six miles roundtrip, moderate hike. Carpool at S. Salem K-Mart, Mission St., 7:30 a.m.. Leader: Jerry Smith, 393-3863.
- 17 Aug., Sat. Field trip, MT. HOOD AREA. Carpool at S. Salem K-Mart at 7:00 a.m. Leader: Bill Egan, 393-2131.
- 24 Aug., Sat. Field trip. CASCADE FLOWERS. Carpool at So. Salem K-Mart at 7:30 a.m. Leaders: Wally and Heike Eubanks, 390-2257.

## Wm. Cusick

--- For information about August activities, call Andrew Kratz at 963-9358.

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### JEAN DAVIS AWARD GIVEN

The Jean Davis Memorial Scholarship has been awarded to Diana Louise Petersen of Oregon City and Karen Slonika of Salem. Diana will be attending Linfield College in McMinnville and Karen will attend Oregon State University in the coming school year. Congratulations to both Karen and Diana!

### BLM-LAKEVIEW DISTRICT ENDANGERED PLANT TOUR

August 17-18, 1985

A tour of several endangered plant sites on the Lakeview BLM district will include visits to populations of Pleuropogon oregonus and a very unusual Ivesia in the rhypara-paniculata complex. In addition, a slide show on the endangered plant species of south-central Oregon will be offered Saturday evening by Steve Shelly, District Botanist. There will be a chance to offer input into the Bureau of Land Management's endangered plant species program.

Participants should meet at 8:00 a.m., August 17 at the Lakeview District office. Transportation will be provided for those desiring it. Cooking and sleeping facilities will be provided Saturday night in the BLM trailers located at Poor Jug, Oregon (off U.S. 395 about twelve miles southwest of Alkali Lake).

Persons interested in attending should contact Steve Shelly, Walt Devaurs, or Ralph Culbertson at the Lakeview District Office, 947-2177.

### SIDDALL RECEIVES POSTER FROM NPSO

On June 16, Jean Siddall, NPSO's Rare and Endangered Plant Committee State Chairman received a Distinguished Service Award at the commencement ceremony at the University of Oregon. At a gathering at the home of Stan and Joan Cook following the University ceremony, Jean received another award for her work on behalf of Oregon flora.

Alan Curtis, Emerald Chapter member and Chairman of the NPSO Poster Committee, presented Jean with a matted and framed copy of our brand new "Wildflowers of Oregon" poster. The poster features full-color paintings of 13 Oregon wildflowers by Jay Wesley Miner.

### JAPANESE AWARD GIVEN TO PORTLAND MEMBER

Each April 29, on the emperor's birthday, the Japanese government recognizes distinguished persons at its annual Spring Investiture. Among the names this year was NPSO Portland Chapter member William "Robbie" Robinson, who received the Order of the Sacred Treasure, Sixth Class. The former senior garden foreman for the city of Portland is an honorary director of the Japanese Garden Society and is a part-time gatekeeper at the gardens now.

# FLOWERS FOREVER

by Rhoda Love

Dear Fellow NPSOers:

THIS WRITER HEADED "DOWN UNDER"

I'll be off to botanize in the Southern Hemisphere later this month! Glen and I will be flying via Qantas from San Francisco to Australia in mid-August. Once there, our month-long itinerary includes Cairnes and Townsville (the Great Barrier Reef); Brisbane, Armidale and Sydney in the east; Perth in the far west; Alice Springs in the middle of the great "Outback"; then Melbourne on the south coast and finally home via Canberra and Sydney once again.

It will be early spring "down under", and I have been assured that wildflowers will be in bloom in a number of locations (depending, of course, on abundance of local rainfall). I am especially looking forward to visiting the area north of Perth where a rich native flora should be at its blooming peak.

Australia became separated from the Asiatic landmass well after the Angiosperms (flowering plants) had undergone major diversification, and the continent has few endemic families. However, some unique genera have evolved and some have diversified tremendously in isolation and in response to Australia's primarily harsh environments. The xerophytic family Proteaceae has some very large genera (*Dryandra*, *Banksia*, *Hakea*) which are endemic to Australia. The family has 500 species in southwestern Australia alone!

The orchids are likewise tremendously diverse in Australia. The small-flowered terrestrial orchids belong to a number of genera not known in North America: *Dipodius*, *Baleola* (which are climbers), *Corybus*, *Acianthus* and others.

In the Pea Family (Leguminosae or Fabaceae), the Acacias have undergone an explosion of diversity in Australia with over 700 species of *Acacia* trees and shrubs native to the continent.

And the Myrtaceae is a huge Australian family with a great many species in the genera *Callistemon*, *Leptospermum*, *Calytrix* and, of course, *Eucalyptus* with 450 Australian species!

The Australian Government was kind enough to present me with 3 excellent books on their country's wildflowers. These I have been studying and from them I extracted most of the above information. I will be traveling with camera, handlens, notebook and hiking boots and hope to visit as many National Parks, Wildflower Reserves and Botanical Gardens as our itinerary will allow. Although this will be my last regular "Flowers Forever" column for at least a year, *Bulletin* readers should watch for some sort of report about my trip late this fall. Meanwhile...

CHAPTERS AND INDIVIDUALS: PLEASE COMMENT ON THE BLM WILDERNESS ENVIRONMENTAL IMPACT STATEMENT.

We have until August 31 to comment on the Oregon BLM Wilderness EIS. I believe each NPSO chapter should send written comments from the President or the Conservation Chair. Individuals should write as well. Letter writers be sure to mention your favorite field trip destinations in BLM wilderness areas and the names of some of your favorite plant species found there. Letters need not be long.

Remember, the BLM is responsible for 16 million acres of your land and mine and the EIS recommends retaining only 950,000 acres of this in wilderness. Study the EIS. Many important botanical areas have been left out. Do you want to visit one of these unique spots one day soon and find that it has been sprayed with herbicide and planted with non native grass for cattle fodder? Write today and please send copies of your letter to Senators Hatfield and Packwood so that they will realize that wilderness, natural habitats and native plants are important to Oregonians. Your letters to the BLM should be sent to:

Wilderness Studies 935  
Bureau of Land Management  
P. O. Box 2965  
Portland, OR 97208

Thanks and I'll be thinking of you all during my travels. R. L.

*A NOTE OF THANKS TO RHODA from all NPSO members. Because of her diligence, NPSO has become a more visible and effective presence in the political arena, to the benefit of Oregon's native plants.*

*Rhoda's replacement as Conservation Chair will be Julie Kierstead, who will no longer edit the Bulletin. Angie Evenden will continue as Bulletin Editor for a few months, until a replacement can be found.*

# THE POLLINATION PROCESS IN TWO TWAYBLADES

## Part 1: Listera caurina

TEXT AND ILLUSTRATIONS BY CELESTE HOLLOWAY

Charles Darwin was much impressed by a book about pollination written in 1793 by the German botanist, Christian K. Sprengel, and believed that it contained "an immense body of truth." However, Darwin stated (p.2) in The Various Contrivances by which Orchids are Fertilised by Insects (1877. Reprint by U. of Chicago, 1984) that Sprengel "in the case of Listera entirely misunderstood the remarkable phenomena characteristic of that genus." Darwin added (p.115) that Sprengel "misunderstood both the structure and the action of the rostellum" in Listera.

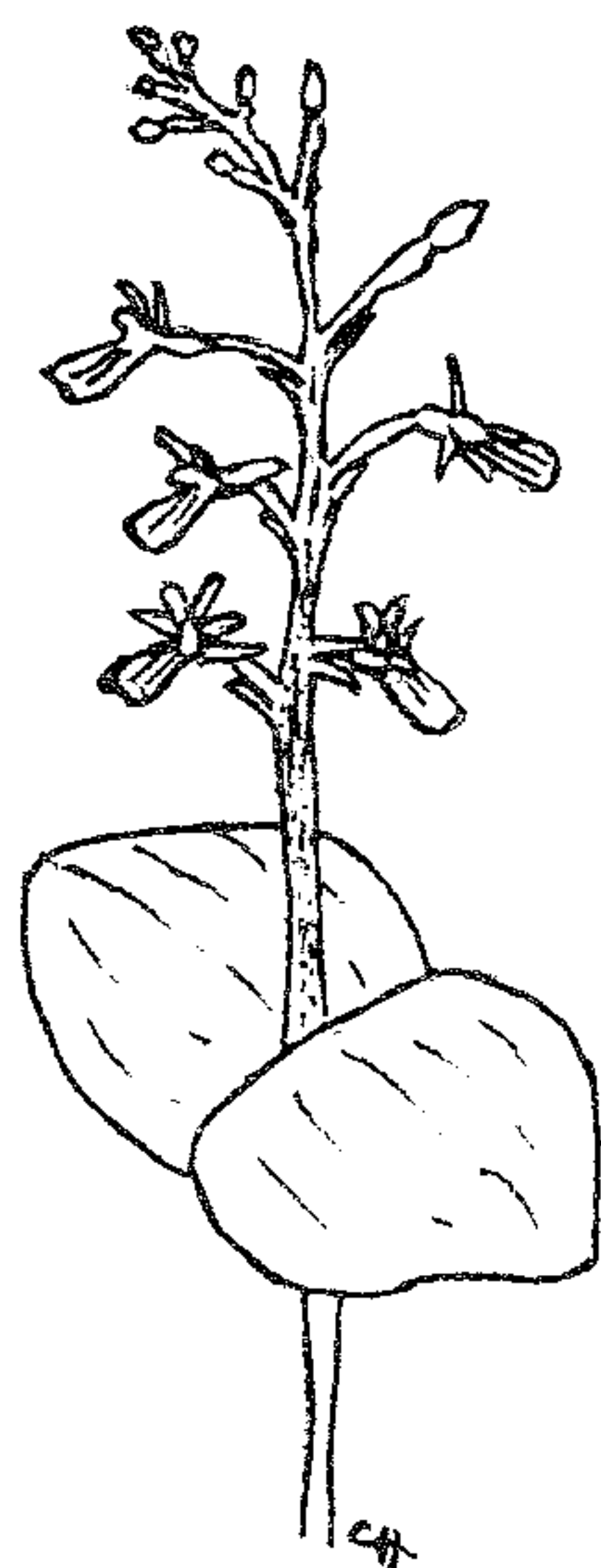
Found in most Oregon orchids except Cypripedium (Lady's-slippers) and Cephalanthera (Phantom Orchid), the rostellum is a flap of tissue located on the column between the terminal anther and the stigma. In this position a sizeable rostellum can be a barrier protecting the stigma from the orchid-flower's own pollen. Its main function is to produce a sticky secretion to secure the pollen-masses to the pollinating insect so that they can be carried to another flower (on a separate plant for cross-pollination). Darwin discovered in Listera ovata (Common Twayblade) that the crest of the rostellum was so sensitive that even when lightly touched it explosively discharged a viscid drop which could almost instantly cement the pollinia to the insect's head (frightening the insect away), and that at the moment of the removal of the pollinia the rostellum swiftly moved down to partially cover and protect the stigma; further, that during some hours later the rostellum slowly moved upward, leaving the stigma accessible.

The widespread European L. ovata grew near Darwin's home in Kent and was the one species of Listera which he studied intensively. The downward and then upward movement of the rostellum is less extensive in L. ovata than in L. caurina (Northwest Twayblade) and especially in L. cordata (Heart-leaved Twayblade). These two Oregon species have interesting points of difference in their pollination-processes. In L. cordata these include an additional function for the rostellum. L. cordata in No. America evidently also differs from the European L. cordata.

L. caurina and L. cordata, small inconspicuous plants, are found mostly in moist cool places in our forests. Each has a single stem which bears a pair of opposite leaves below a raceme of small flowers with large lips. The columns under study are 2-2.5 mm high in L. caurina, and in L. cordata ca. 1.0 mm, which includes an extension of the column and the rounded base of the anther which is hinged to it.

LISTERA CAURINA (5-25 cm tall) has the smallest range of Oregon's Listera - from the panhandle of S.E. Alaska, British Columbia and W. Alberta, to the N.W. corner of the U.S. Its green flower has a lip (4.5-7.5 mm long) with a rounded apex and two longitudinal green grooves (Fig.1, Stage I). The sides of the lip next to the grooves are at times turned up like fences, as if to confine the insect to the path. These trails lead the insect upward toward the base of the lip where two dark green glossy mounds shine out like beacons. These mounds, shining brightly as if with nectar, could be false nectaries. The much smaller true nectary located where the paths converge between the mounds does not show nectar until the lip is pumped up and down (as would occur when an insect landed). This could save expensive nectar. Behind, but to the outer side of each mound, stands a slender erect tooth. These teeth may help as lateral guides to keep an insect within bounds. A ridge joining the bases of the teeth is behind the nectary and prevents any of its overflow from going in the wrong direction.

The anther is narrowly hinged to the top of the ventral side of the column. The anther-cases on the underside of the anther split open in the bud, and by the time the flower is open the two paired pollen-masses have fallen out of their cases down upon the concave top of the broad rostellum directly below. The pollinia are positioned there with their tips extending over the rostellum's outer mid-edge (called the "crest"). The side-edges of the rostellum curve up a little to keep the pollen-masses in place (Fig. 2. Stage I.). The crest and the tips of the pollen-masses stand a little forward from the anther and anther-cases to



*Listera caurina*

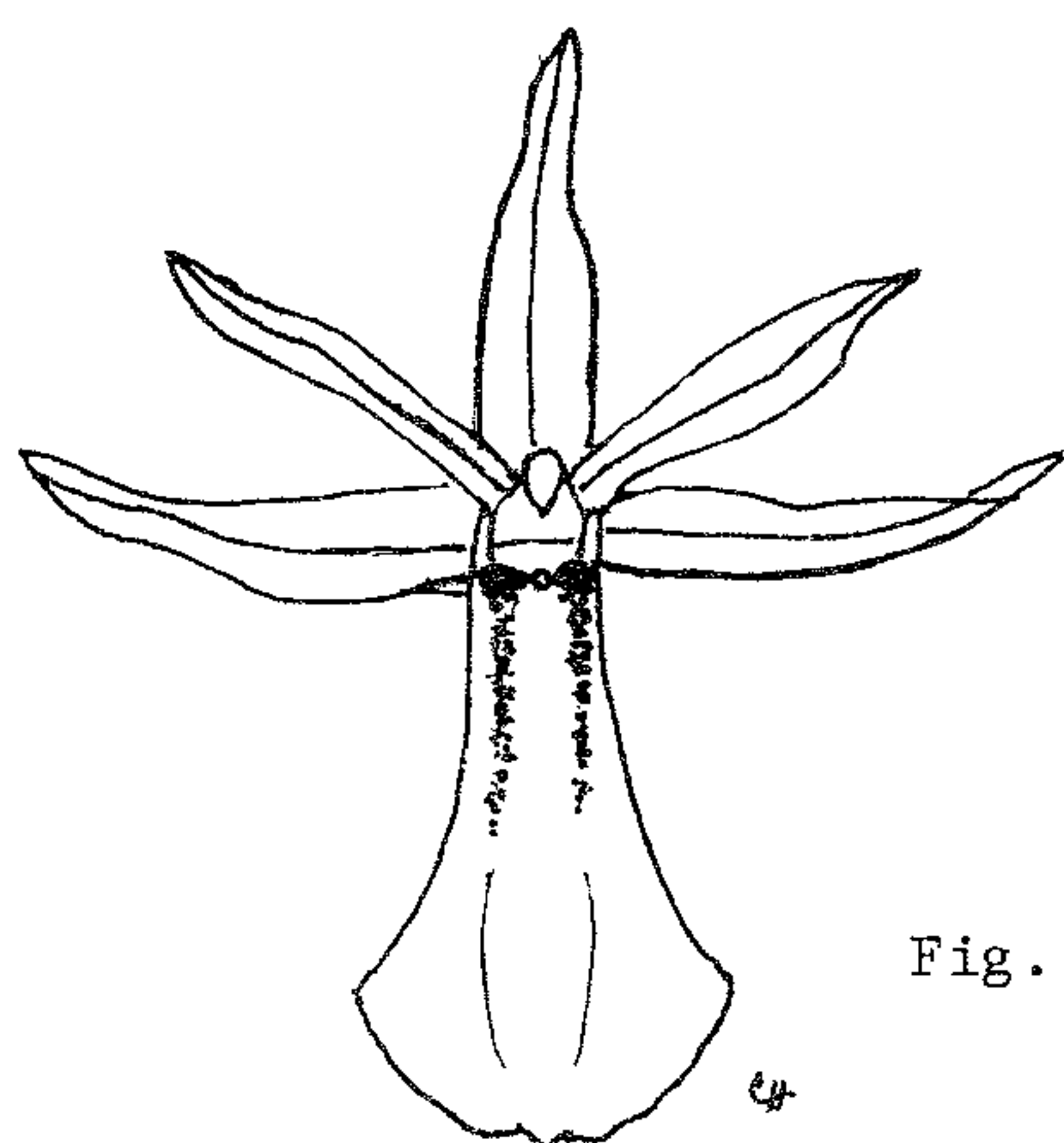


Fig. 1. Stage I - Flower

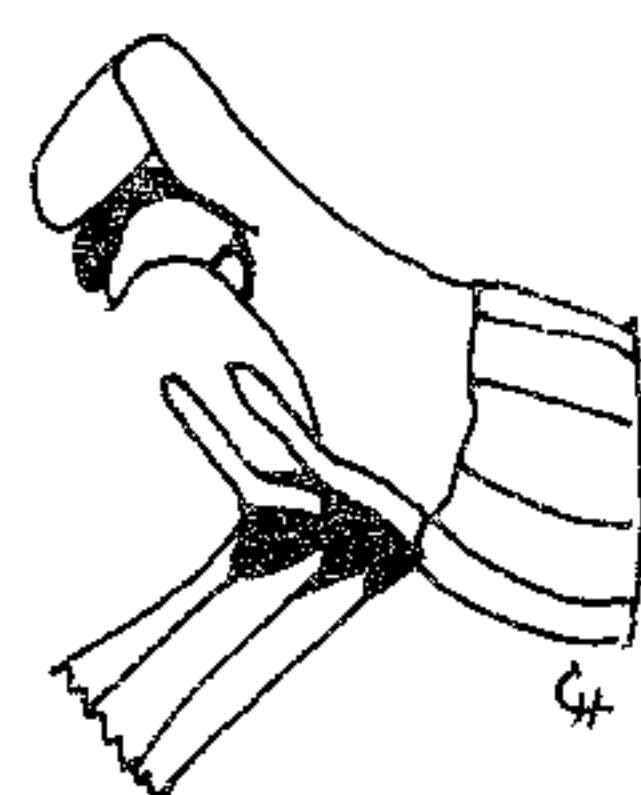


Fig. 2. Stage I  
Column & lower lip

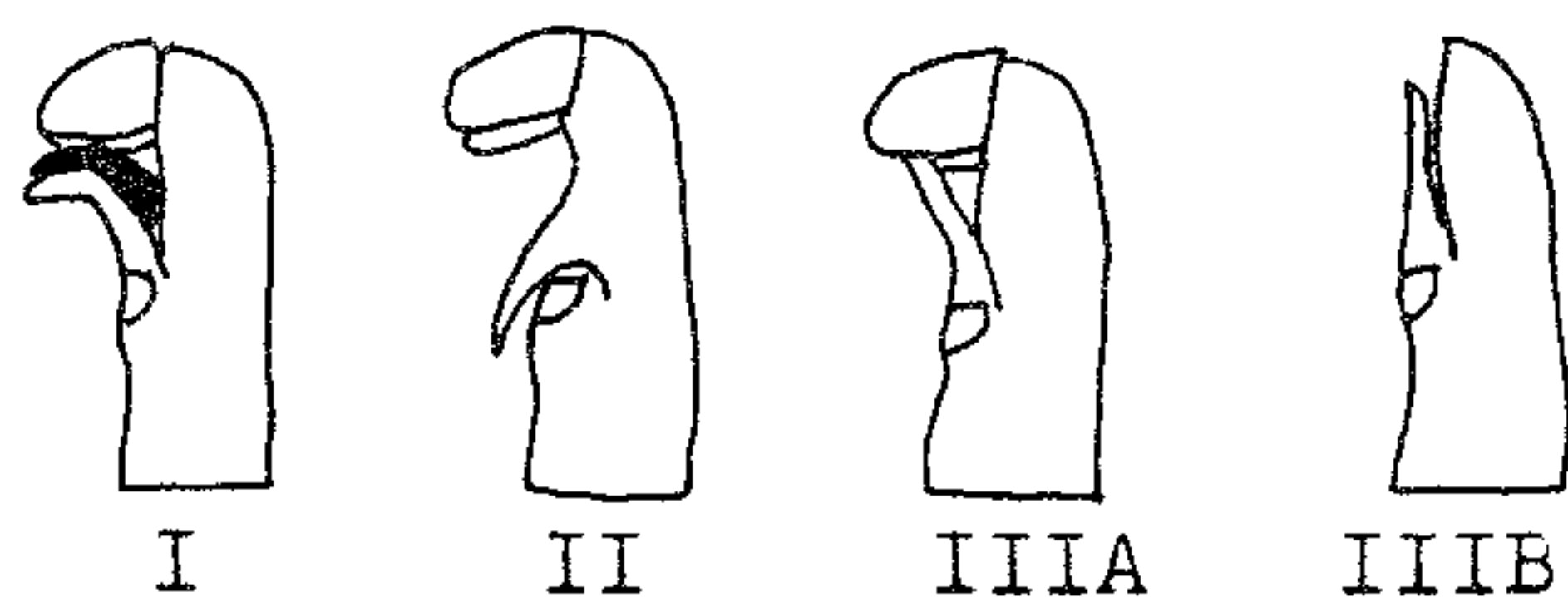


Fig. 3. Stages of column

help prevent them being stuck together with the expulsion of the glue. In this position, the crest is over the nectary-pit on the lip, providing an opportunity for the crest to be hit when the insect flies upward after feeding on the nectar. When the crest is hit, the rostellum expels a drop of glue which cements the pollen-masses to the insect's head, evidently frightening the insect away. The sticky drop has to harden quickly to remain on a startled insect. Darwin found that it took only two seconds in *L. ovata*, the fastest in any orchid he tested. Cross-pollination is favored by the insect's flight. By the time it wants more nectar it is very likely to visit another plant.

When relieved of the pollinia the rostellum instantly bends down to cover the broad stigma just below (Fig. 3, Stage II). One can bring this about by touching the crest with a needle and withdrawing the two tear-shaped pollinia. In *Listera* the few elastic threads that tie the pollen-masses together are weak. The location of the rostellum in front of the stigma aids in preventing stray pollen clumps, released in the explosion, from hitting the stigma.

Soon the empty rostellum slowly moves upward (taking  $1\frac{1}{2}$  to 6 hrs. in those I timed) until it is against the anther, which it may push up a bit (Fig. 3, Stage IIIA). If the narrowly hinged anther has fallen off, the rostellum will move farther up against the column, where it stands upright above the stigma (Fig. 3, Stage IIIB). The ovate stigma is now clear for receiving pollen-masses carried by another insect. The weak cohesion of the pollinia leads to clumps, rather than the whole mass, being pulled away from the pollinating insect by the adhesive stigma.

The pollination-process in *L. caurina* is basically very similar to that in *L. ovata*. In the former the rostellum, after the removal of the pollen-masses, bends down and covers the stigma completely. In *L. ovata* the stigma is only partially covered by the rostellum.

Next month--Part 2: The Remarkable *Listera cordata*.  
Celeste Holloway is a member of the Portland Chapter.

PUBLIC COMMENT NEEDED FOR

BLM WILDERNESS STUDY AREAS

August 31 is the last date for public comment on the Draft Environmental Impact Statement on Oregon's BLM High Desert Wilderness proposal. When the comment period closes, BLM will study all written and oral comments, review recommendations, and submit the Draft EIS to BLM and Department of Interior staff to prepare the final EIS (the final is expected to be completed in 3 to 5 years). Congress has the authority to designate wilderness, and may act on the BLM wilderness lands issue at any time (this too, is expected in 3 to 5 years).

It is vitally important that concerned people make their views known at this stage of the EIS. We may not get a better chance to have our wilderness and natural area protection views studied in the context of a formal review. The comments made now become part of a permanent record that will be reviewed by the press, lobbyists, Congressmen, congressional workers, local and national governmental workers, local politicians, and associated conservation groups.

The hearings part of the public comment process have already been held. Time remains (until August 31) for written comment. To help you with your written comments, refer to these documents and people resources:

1) The Draft Environmental Impact Statement, available from BLM offices, is the document to study, area by area, alternative by alternative, from introduction to summary. The alternatives range from All Wilderness, to No Wilderness, with intermediate alternatives giving emphasis to conflict resolution, to commodity development, and to ecosystem diversity.

2) The enclosed brochure prepared by the Wilderness Society is an excellent aid that gives an overview of the issue and summarizes conservationists points of concern in detail. It explains the Sage Proposal, and gives help with what to tell BLM in your comments.

3) Wild Oregon, Summer 1985 issue, published by Oregon Natural Resources Council (ONRC). The entire issue has articles about High Desert issues, and gives more detail on the Sage Proposal, area by area. It describes many suitable areas for wilderness that were left out of the current BLM reviews.

4) The Sierra Club Summer edition State Newsletter will have articles on Desert Wilderness issues.

5) ONRC staff in Eugene (344-0675), Portland (244-0201), and Don Tryon in John Day (575-2671) are excellent resources.

6) Portland Audubon Society (Linda Craig 244-6240 H, 222-2606 W) and many other Audubon Chapters have skilled and knowledgeable people who can and will help with this issue.

7) Barbara Fox (659-2445) will make available other documents, can refer specific questions or concerns to other resource people, and will be assisting with the NPSO written comment.

When you write your comments, consider the following:

1) Write about your personal experiences. Comment about your visits to the Oregon High Desert country, and say what you feel is important about the protection of this land, and wildlife and botanical resources.

2) Write a bit about yourself. Tell about your job, your hobbies, your interest in wilderness, and native plants.

3) Remember that the NPSO purpose is "To increase the knowledge of members and public in identification and conservation of the native plants of the Pacific Northwest."

4) Consider that many people feel that BLM has not provided sufficient botanical surveys of many of the recommended WSAs or other wild lands previously considered during the inventory process. This lack of adequate vegetation information is a serious deficiency of this statement. BLM should allocate money and people to provide detailed plant inventories and analysis for management of unique or rare species and communities when they occur.

5) Consider that proposed WSA boundaries are often roads, private land borders, mineral inholdings, or utility rights-of-way. Boundaries of ecosystems often do not coincide with roads and man-made boundaries. Wilderness designation will best protect ecosystem diversity if boundaries include entire systems to their natural boundaries (eg. watersheds, elevational or vegetation zone edges).

6) Send your written comment to:

Wilderness Studies  
Bureau of Land Management  
P.O. Box 2965  
Portland, OR 97208

7) Send copies to your Senators and Representatives at:

Senator Mark Hatfield  
Senator Bob Packwood  
United States Senate  
Washington D.C. 20510

Honorable Les AuCoin, Bob Smith,  
Ron Wyden, Jim Weaver, or Denny Smith  
U.S. House of Representatives  
Washington D.C. 20515

*submitted by Barbara Fox*

# Legislative Notes

Notes of the NPSO Legislative Committee Meeting, April 13, 1985, Herbarium Library, O.S.U., 11a.m.-2:30 p.m.

Attendance: Dan Luoma, Jim Fairchild, Jean Massie, Jack Lattin, Mary Walter, Paul Hammond, Jimmy Kagan, Rick Brown, Warren Pavlat, Carolyn Wright, Wendell Wood, Andy Kerr, Rhoda Love, Esther Gruber McEvoy, Elaine Joyal

We first agreed that there was ample justification for the need of an Oregon Endangered Species bill. We need to identify and prioritize the threats to our endangered species on private, state, and federal lands. The current Wildflower Act of 1963 is inadequate, being just a roadside protection law. As we began to discuss the content of the bill, Andy Kerr suggested that we use the Endangered Species Act (E.S.A.) as a model bill. The meeting then followed the sections found in the E.S.A. Amendments of 1982.

1. Major Problems -What kind of threats and by whom?
  - a. Habitat loss
  - b. Taking

2. Taking
  - a. Bill will include both animals and plants (fungi, lichens ?)
  - b. Prohibit unauthorized taking
  - c. Permit scientific collection
  - d. Penalty for taking
  - e. Apply to all state agencies
  - f. Commercially exploited and species of special concern. We need to be clear about definition when say "Endangered in Oregon". Purpose is to conserve the state's natural diversity.
  - g. Use definitions for endangered and threatened from section 3 in ESA
  - h. Permitting system for taking of listed species -would give some idea of amount that is being collected. Then one would be able to gather total data for year's taking, could follow the commercial level.

3. LISTING
  - a. Endangered category
  - b. Threatened category
  - c. "Candidates" category
  - d. Process of listing, should include a list of species being considered that we need more information on. In the bill have reference to existing lists with provisions in the rulemaking to add and delete to keep up to date, also allow for citizen petitions.

4. Critical Habitat
  - a. Try to keep a pure scientific/biological process
  - b. Board of reviewers or "committee" should be the State Land Board not the state department heads. We feel if a conflict comes up we want it guided to publicly elected officials.
  - c. Acquisition of private lands - as in section 5 of ESA, including "otherwise".
5. Co-operation with other Agencies
  - a. Need to permit the counties to be more, but not less restrictive than the state. Make sure they can have cooperation with the federals.
6. Inter-agency Cooperation
  - a. Presently the E.S.A. has no teeth in that the agency has to follow the "recommendations" .....we need enforcement by citizens and a consulting requirement.
7. Endangered Species Committee
  - a. State Land Board
8. Interstate Cooperation
  - a. This would be consistent with the federal act and so there would be cooperation between states. We would not allow species listed elsewhere to be sold or brought into Oregon.
9. Prohibited Acts
  - a. Importation prohibited without a permit of listed species, to include intrastate, interstate, and international species.
  - b. Grandfather clause - if already have a listed species in garden or herbarium, then should be allowed to retain.
10. Exceptions
  - a. Scientific and research purposes with a permit.
  - b. Permits - already have a permitting process for fish, small mammals by ODFW
11. Penalties
  - a. Civil - we discussed briefly but did not decide
  - b. Criminal - cite specific provisions
  - c. Rewards for .... leading to convictions
  - d. Seizure of supplies
  - e. Civil suits- against anyone or agency alleged to be in violation of the act
12. Funding
  - a. Need of a sustaining fund. Thoughts voiced were a license for collecting species, a state stamp, money from general fund, a specific tax...i.e. like on bird seed. Approximately \$100,000 a year needed to begin a program.

*Please turn to page 90*

13. State Agencies who could be responsible for An Endangered Species Program

- a. ODFW
- b. Parks and Recreation
- c. ONHAC
- d. Forestry
- e. Agriculture
- f. Creating a new agency

The ONHAC is advisory to the State Land Board but has no authority. We need to address the weaknesses of the council and the heritage plan which addresses habitat. The question raised : Is there a possibility of moving the ONHAC to ODFW, remove the authority concerning endangered

species and give it is the ODFW? We agreed unanimously that the best agency in the state to oversee a program is the ODFW . We felt that there was the possibility of working out a program to leave the Heritage plan intact with some transferred aspects, amending the heritage council by giving the authority of endangered species to ODFW. The information on private lands can only be included on state lists if one has the permission of the land owner.

If you have any comments, drop me a note.

Esther Gruber McEvoy  
Corvallis Chapter

## HELP SAVE EIGHT DOLLAR MOUNTAIN

Eight Dollar Mountain, composed of ultramafic parent material and laterite soils, is a significant natural landmark in the Illinois River Valley of SW Oregon. The mountain has become a source of conflict among land use planners because the soils support populations of rare plants and contain nickel and other heavy metals. Botanists want to protect the plants, miners want to surface mine, the timber industry wants to log, and ranchers want to graze cattle. The major property owners, the U.S. Forest Service, the BLM, the State of Oregon, and Josephine County, are presently attempting to develop a management plan for the area that will satisfy these diverse interests.

The mountain is the type locality for two taxa, *Hastingsia bracteosa* Wats. and *Aster paludicola* Piper, and possibly a third, *Senecio hesperius* Greene. In addition, many Illinois Valley and SW Oregon endemics (*Calochortus howellii* Wats., *Lewisia oppositifolia* (Wats.) Robins., and *Gentiana bisetata* Howell, among others) grow on the drier slopes of the mountain or in the many fine interior-valley *Darlingtonia* bogs around its base. Eight Dollar is a botanical treasure.

To ensure that Eight Dollar Mountain remains a botanical rather than a mineral treasure, a strong case must be made for its botanical importance to the scientific community. To accomplish this I need some information. If you knew of Eight Dollar Mountain before reading this note: 1) How did you learn about the mountain? 2) Have you ever visited the mountain? If so, what was the purpose and number of your visits? This information will be summarized and passed on to the government agencies.

At least 51 taxa of plants have been described from the relatively small Illinois Valley area. Most of the species were collected by Thomas Howell between 1884 and 1887. Are there other places with that concentration of type localities, or is the Illinois Valley unique?

Please send your responses to FRANK A. LANG,  
Dept. of Biology, Southern Oregon State College,  
Ashland, OR 97520.

## WALK, RUN, OR PADDLE TO PROTECT OREGON'S WILDERNESS

The Oregon Natural Resources Council is sponsoring its Third Annual Walk Around Waldo over Labor Day weekend, August 31-September 2, 1985. Weekend activities will begin Saturday with a variety of guided day hikes in the Waldo Country, including several led by NPSO members:

- 1) Dave Wagner & Chester Wilson will lead a "Willamette Pass Ski Area Expansion Reconnaissance", which will start at the Pacific Crest Trail and botanize areas to be affected by North Slope Expansion Alternative #4; in particular the wet meadows at the headwaters of Skyline Creek. This will be a 10-12 mile rigorous round trip. Meet at the parking lot of Willamette Pass Ski Area at 10 a.m., Sat. Aug. 31.
- 2) Herm Fitz will lead a short hike to Fuji Mtn., 1½ miles, offering a panoramic view of the High Cascades. Meet at 10 a.m. at Shadow Bay Campground on Waldo Lake, Sat. Aug. 31.
- 3) Leighton Ho will lead a 4-mile cross-country hike to Mt. David Douglas. Meet at 10 a.m. at Shadow Bay Campground for carpool. Hikers should wear comfortable shoes, bring lunch and water.

A hearty early evening banquet and campfire festivities will follow. Camping reservations can be made for Saturday and/or Sunday nights. The benefit Walk-Run-Paddle Around Waldo will start off early Sunday morning.

The heart of the weekend is the Benefit Walk. Because of growing participation, we are expanding it to include those who would like to run or canoe around the Lake. Participants collect pledges on a per-mile-travelled basis. The Walk is routed around the scenic Waldo Lake loop trail. Watermelon and ice cold drinks will greet participants at the pick-up point 15 miles from the trailhead. Those opting to complete the entire 21.5 mile loop may do so.

Families are encouraged to come. A Tike Hike for children, led by NPSO member Linda Johnson, will occur on Sunday with afternoon activities following. Parents may join their children or meet them after walking around Waldo.

Register now at ONRC's Main Office, 1161 Lincoln St., Eugene, 97401. Please phone 344-0675 for more information. Co-sponsored by 95 KZAM!



STATE OFFICERS

President . . . . . Frank Lang  
 535 Taylor St., Ashland, OR, 97520; 482-5235  
 Vice President . . . . . Susan Kofahl  
 P.O. Box 151, Mosier, OR, 97040; 478-3576  
 Secretary . . . . . Florence Ebeling  
 7725 SW 82nd Ave., Portland, OR, 97223; 244-4122  
 Treasurer . . . . . Marjorie Ettinger  
 63820 Quail Haven, Bend, OR, 97701; 382-2255  
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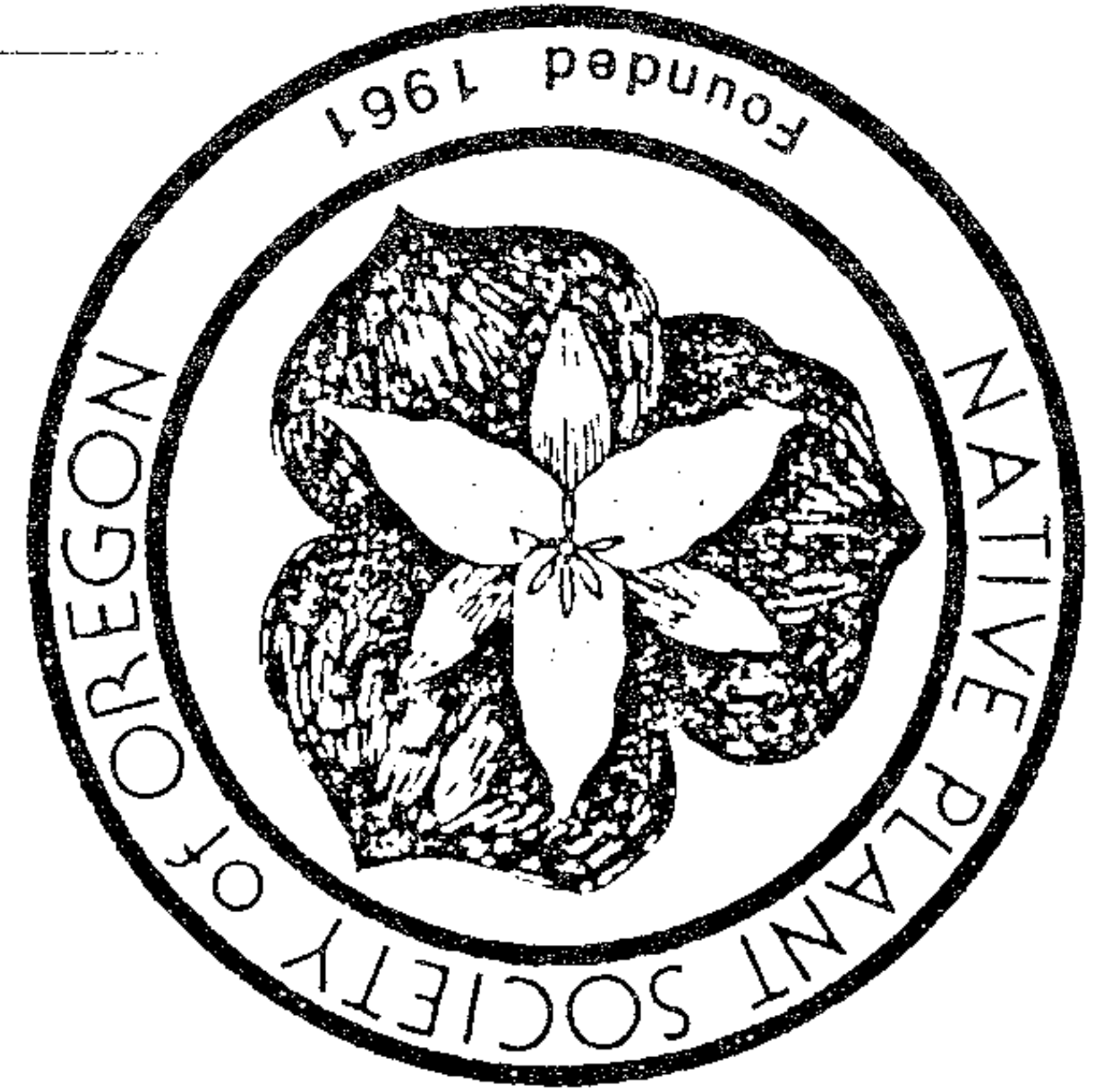
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