

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

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Due to unexpected good fortune, the newsletter editor will have a new address, 13285 S. Clackamas River Drive, Oregon City, Or. 97045 (655-4457). Please send all submissions to the above numbers.

## CHAPTER NEWS

### IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS

Field trips will 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. Your participation is at your own risk. Bring water and lunch.

### Blue Mountain

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For information, contact Bruce Barnes (276-5547).

### Corvallis

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For information, contact Wes Messinger (754-5425).

### Emerald

9 Oct., Mon.

**Meeting.** 7 pm at the Westmoreland Community Center, 1545 W. 22nd. Robin and Ken Lodewick will speak on "What is a Penstemon?"

### High Desert

31 Oct., Tues.

**Meeting.** 7:30 pm at the Senior Citizens Center, 4th and Lafayette, Bend.

### Mid-Columbia

4 Oct., Wed.

**Meeting.** 7:30 pm at Pietro's Pizza, 3320 W. 6th St., The Dalles. Lynn Long, Wasco County Horticultural Extension Agent, will speak on "Native Plant Propagation".

For more information call Susan Gabay (478-3576).

### North Coast

5 Oct., Thurs.

**Meeting.** 7pm at the State Office Building, 3600 3rd St., Tillamook. Sallie Jacobsen will present a slide show on Alaska's wildflowers seen on her recent trip there.

15 Oct., Sun.

**Field trip** to Munson Falls. Leave at 1:30 pm from the Tillamook PUD or be at Munson Falls at 2 pm. Leader: Margaret Willets (842-7985).

## Portland

- 7 Oct., Sat. **Field trip** for fall color on Zig Zag Mtn. Leave at 8 am from Gateway Park and Ride lot. Identify flowers and shrubs by seed pods, fruits and late blossoms. Excellent fall color and closeup views of Mt. Hood for miles. Elevation gain about 1400 ft. and distance about 9 miles. Leader: Bryan Boyce (655-4457).
- 10 Oct., Tues. **Meeting.** 7 pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Margery Willis, Natural Resource Planner for Oregon State Parks, will give a program on the native plants of Succor Creek in N. Malheur county.
- 14 Oct., Sat. **Field trip** for a fall fantasy along the Washington Lava beds. Leave at 8 am from SW corner of K-Mart lot at 122nd & Sandy or 9 am at the N. end of the Bridge of the Gods. Spectacular fall color and lingering blooms along the Pacific Crest Trail. Leader: Florence Ebeling (244-4122).
- 21 Oct., Sat. **Field trip** to Nehalem Bay State Park. Leave at 8 am from SW corner of K-Mart lot at 122nd & Sandy. Visit an area identified by the Oregon Natural Heritage Data Base as a unique vegetation area. Leader: Mary Mason (227-4639) or Sallie Jacobsen of the North Coast chapter.
- 28 Oct., Sat. **Field trip** "of the year". A 1.5 mile walk around Lackamas Lake for plants on the basalt outcroppings, followed by a visit to the Collectors Nursery to see the alpine plants in the garden. Leave at 8:30 am from DOT lot at NE 60th and Burnside. Leader: Bill Janssen and Diana Reeck (1-206-257-8533) or call Elizabeth Handler (244-5320).

## Siskiyou

- 12 Oct., Thur. **Meeting.** Rm. 171, Science Bldg., Southern Oregon State College at 7:30. Gordon Larum of the Mt. Mazama Mushroom Association will give a slide presentation of common edible and poisonous fungi of Southern Oregon.
- 21 Oct., Sat. **Mushroom Field trip** to the Prospect vicinity. Gordon Larum will lead a joint field trip with the Mount Mazama Mushroom Association. Tentative, according to rainfall. Hike rated easy. Mushrooms will be identified by species and edibility. Leave from the Medford K-Mart lot at 8:30 am. Info: 772-1685.

All NPSO activities are free and open to the public and newcomers and visitors are always welcome.

## Umpqua Valley

**Organizational Meeting.** Help form the Umpqua Valley Chapter of the NPSO. Meet Oct. 12 at 7 pm at the BLM office, 777 NW Garden Valley Blvd., Roseburg. See article elsewhere in this newsletter for further details.

## Willamette Valley

*Please notify the trip leader if you plan to go on any Willamette Valley Chapter field trip.*

If you want to be notified about unscheduled mid-week trips, call Clint Urey (743-2802) or Glenn and Barbara Halliday (371-1025).

16 Oct., Mon.

**Meeting.** First United Methodist Church, upstairs, corner of SE Church and State Sts., Salem (use the Church St. entrance), 7 pm rather than 7:30 as before. Slide presentation on Opal Creek area east of Salem.

## Wm. Cusick

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For information, contact Karen Antell (963-0267).

### UMPQUA VALLEY CHAPTER ORGANIZATIONAL MEETING

An organizational meeting to form the Umpqua Valley Chapter of the NPSO will be held on October 12, 1989 at 7:00 PM at the BLM office, 777 NW Garden Valley Blvd., Roseburg. Dan Luoma will provide a slide presentation on Oregon's

native flora and will be available afterward along with Mary Falconer to assist in the organization of the chapter.

All those interested are encouraged to attend. You do not have to be a member of NPSO.

Contact Russ Holmes (672 4635) or Mary Pierce (672 5430) for more information.



## Bits and Pieces

--News and Information from all over

### BLM Designates Six Oregon "National Back Country Byways"

According to a July press release the BLM has initiated a program to increase public awareness and use of back-country roads, with the added value of enabling BLM "to communicate its multiple use message". They plan on installing signs and printing brochures and maps "as time and funding permit". Among the six routes so far identified are the Steens Mt. Loop road, the Christmas Valley Loop, the Leslie Gulch-Succor Creek road, 2 routes near Grants Pass, and the Lakeview to Steens Mt. route. These routes cross areas noted for wild-flowers, wildlife, and scenic diversity. Impact of this program likely will be limited, especially considering BLM's "when we get around to it" approach. Perhaps some more use of these areas will result. Currently maps and descriptions are available from the BLM (825 NE Multnomah St., Portland 97208).

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How often must efforts at preservation come too late? In the early 1930's, the Illinois legislature decided it was time to preserve some native tallgrass prairie, like that which greeted the earliest pioneers in endless vistas. Unfortunately no suitable remnants could be found in the entire state! Recently, however, the Nature Conservancy has entered into agreements to purchase 30,000 acres of tallgrass prairie in Oklahoma. Evidently this area is the last extensive tallgrass prairie in the entire nation---out of 140 million acres which once covered much of the nation's heartland. Herb Beattie, director of the Oklahoma chapter of the Conservancy states that this "area is our only chance to recreate a functioning tall-grass prairie ecosystem". Plans include reintroduction of buffalo and fire.

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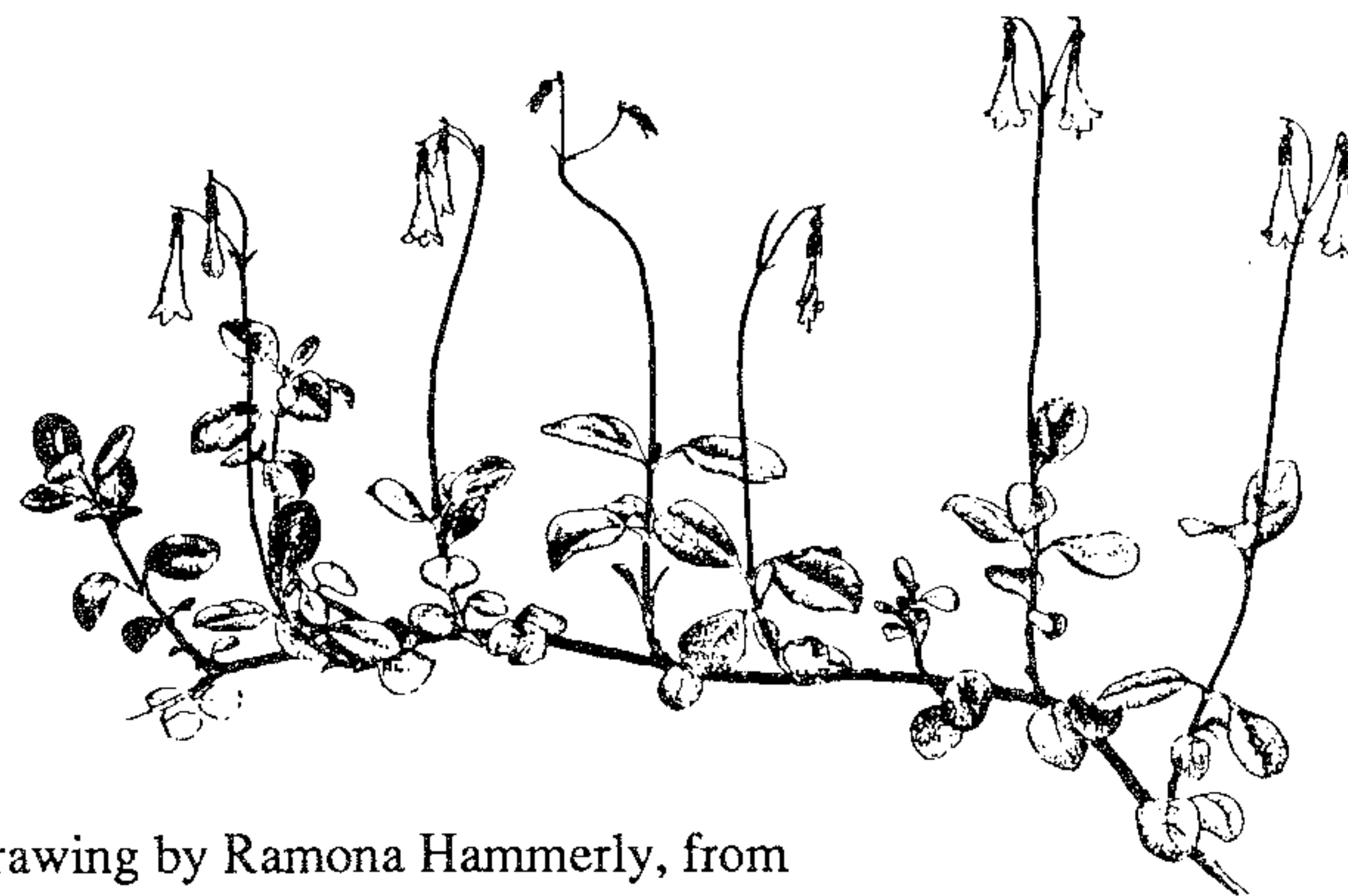
### "Wintering In" Festival

Oregon Historical Society's annual fall celebration will be held at the Bybee-Howell Territorial Park on Sauvie Island. This festival features a variety of displays, among them an array of native berries and fruits from the Portland chapter of the NPSO. Louise Godfrey is heading our efforts there.

Come anytime between noon and 4 pm Sat., Oct. 7. Picnic if you like. The Bybee-Howell house, furnished and maintained by the OHS, will be open. Other attractions include the agricultural museum, the orchard of old apple varieties, several craft and food booths, cider-pressing, and the people enjoying it all. If you don't have time for the regular field trip this Saturday, come to Sauvie Island.

The Mountaineers have added another hiking guidebook to their extensive collection, this one titled "50 hikes in Oregon's Coast Range & Siskiyou".

Authored by George and Rhonda Ostertag, this guide gives details on history, wildlife, wildflowers, and the effect of land use planning on the landscape. The book covers areas little visited by hikers, but which contain many interesting native plants, including some surprises.



Drawing by Ramona Hammerly, from Northwest Trees, by Stephen Arno & Ramona Hammerly, The Mountaineers Books, Seattle.

### NPSO Funds Research

Our Society's research grant program is helping to support two important botanical studies this summer. The Leighton Ho Memorial field Botany Award was presented to Robert Misley of Clackamas Community College. The award will help defray transportation costs associated with his study of *Delphinium leucophaeum* on Little Rock Islands, a preserve of The Nature Conservancy. Pale larkspur is a Federal candidate species that is restricted to a few cliffs along the Willamette River and Lake Oswego. The study is monitoring population size and identifying components of population fluctuation such as seed dormancy and seedling survival. The information gained will help The Nature Conservancy manage the preserve and will be incorporated into presentations to community groups.

Carolyn Wright and David Gross are continuing research that will lead to the production of guidebooks for three Research Natural Areas in Harney County: Mickey Basin, Long Draw, and Silver Creek. Species lists, habitat descriptions, and a file of photographs for each RNA will be made available to NPSO. This study requires some 1,800 miles of travel this summer and exemplifies one of the goals of our grant program--to encourage research in the more remote parts of the state.

---Dan Luoma



## 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 the 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 sizable donations were received. Mr. Davis then increased the fund to \$10,000 and a committee was formed to set up guidelines for the scholarships.

After deliberations it was decided that the recipient must plan to attend an Oregon college, to study plant systematics or plant ecology. The recipient is to have at least two years of satisfactory college work by July 1 of the year of application and be a full-time student. Graduate students may be eligible if they meet all qualifications except that of being a full time student. The award is in the amount of \$1,000, and will be paid directly to the school of choice, to be used toward tuition the following academic year.

Applications are available from Mary Falconer, Chair of the Scholarship Committee, 1920 Engel Ave. NW, Salem, Or. 97304. They must be completed and sent to the above 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 some donations in memory of other NPSO members. Any donations will be gladly accepted and should the fund grow to the necessary size there could be additional scholarships awarded.

---Mary Falconer  
Willamette Valley Chapter

## THE LEIGHTON HO FUND

Leighton Chee Won Ho came to Oregon from Hawaii for school. Attending in order University of Puget Sound, Oregon State, and University of Oregon, he fell in love with the mountains and wildlands of the Northwest. He joined preservation efforts here, working with the McKenzie Flyfishers, Oregon Natural Resource Council, and the NPSO, as Emerald chapter president from 1983 through 1985. He completed his studies at UO in 1985, but finding no teaching positions here, he returned to Hawaii and began teaching in 1986.

It was there, just before Christmas 1987, towards the end of a day of adventuring on the coast of Kauai, that Leighton drowned tragically in the Ha ena wet cave. The loss of Leighton Ho was deeply felt by those who knew him. Considering his involvement with the society, the NPSO board on Jan. 30, 1988 established a special fund in his memory. It is intended for use for Summer Research Grants. It is now called the Leighton Ho Memorial Award Fund. The initial recipient was Jennifer Dimmling of Eugene, who used the \$400 to study *Sidalcea cusickii* in the Coast Range. For the 1989 recipient see the article "NPSO Funds Research" on the previous page.

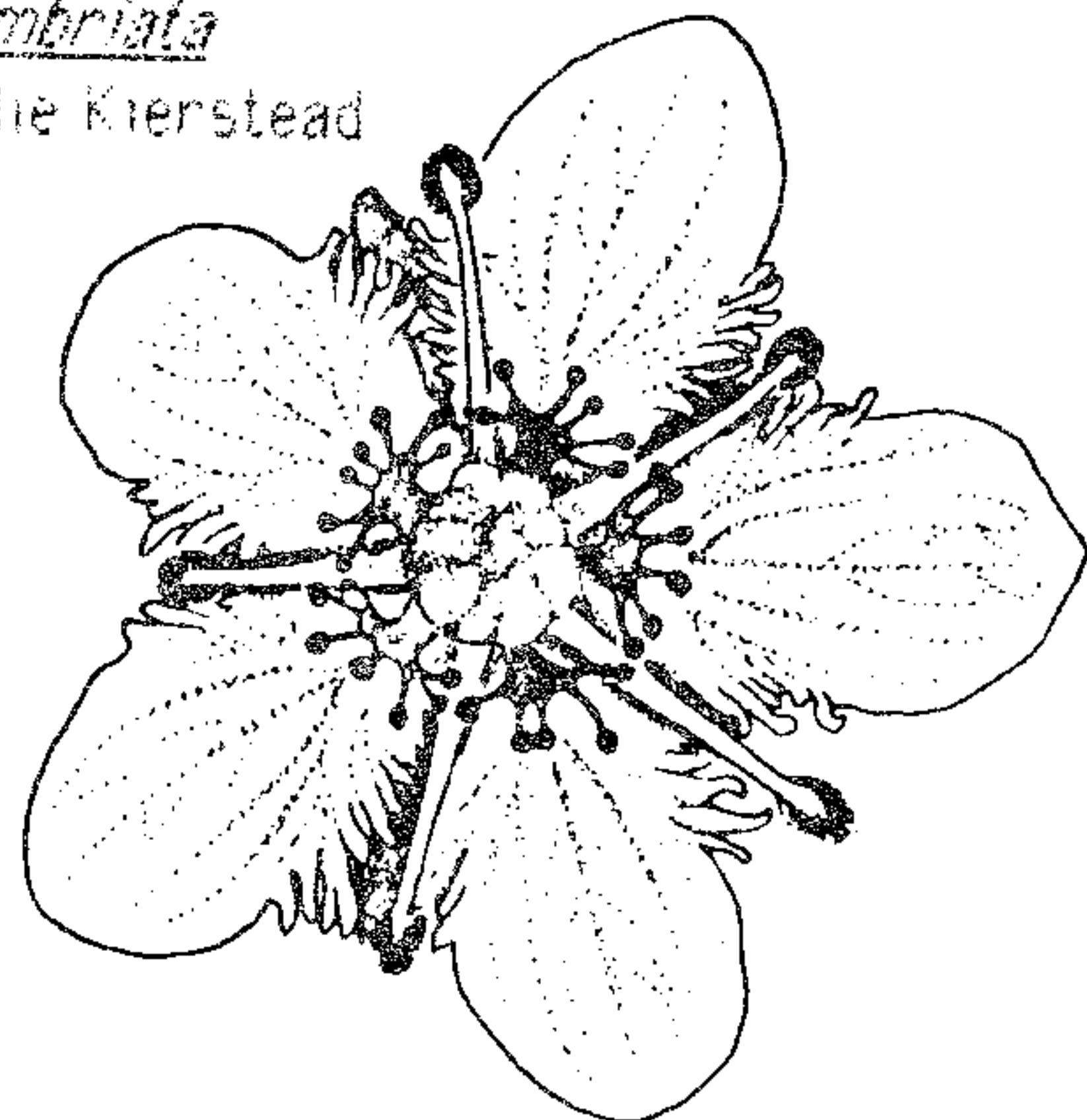
The fund quickly grew in size as scores of individuals and groups contributed. It is hoped that future donations, whether in his memory or to encourage study and protection of our native flora, will result in a continuing fund. It has been the feeling of the NPSO board that this fund should be used for projects west of the Cascades, in the areas he loved best. Those wishing to contribute can mail donations to either Daphne Stone, NPSO Treasurer, or Mary Falconer, Membership chair. Contributions can be sent in with memberships, as a markoff space is provided with the membership form in every copy of the Bulletin.

---Bryan Boyce  
Portland Chapter



*Fernassia fimbriata*

Drawn by Julie Kierstead



Wild Carrot or Queen Anne's Lace (*Daucus carota*). Note the dissected leaves, common in Umbelliferae. Involucral bracts beneath the compound umbel are pinnately divided.



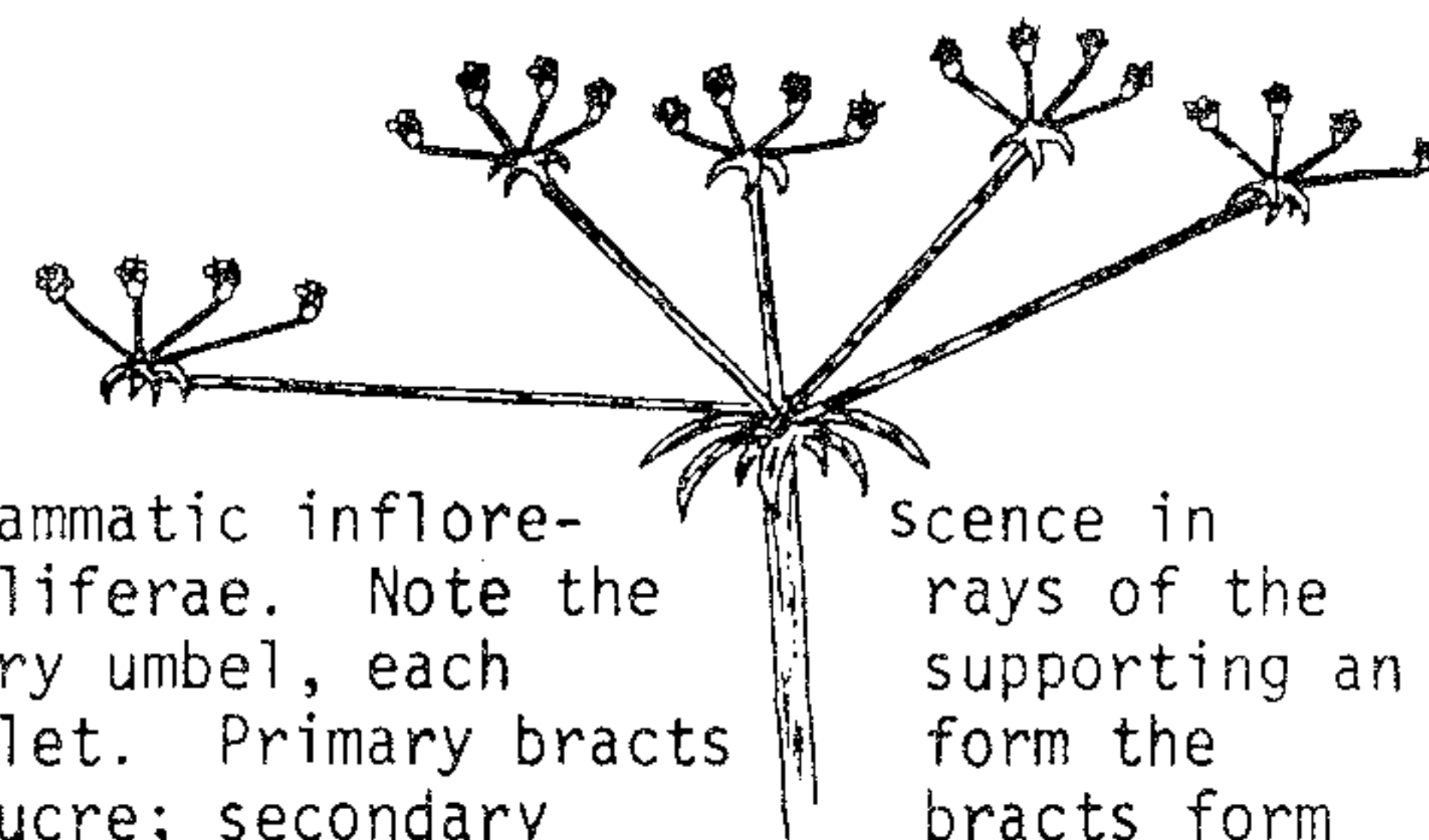
PLANT FAMILY PROFILES

By Herm Fitz

The Umbelliferae - CARROT FAMILY

The Carrot Family is one of the best known of all flowering plant families. Representatives occur in most parts of the world; however, species are most abundant in temperate uplands and noticeably rare at tropical latitudes. Some 2,500-3,000 species in 300 genera are found worldwide, and Oregon has 1 or more species in each of 32 of these genera. Some are aliens, having been introduced from Europe and Asia: The Knotted Hedge-Parsley (*Torilis nodosa*) of the Curry County coast; Wild Carrot or Queen Anne's Lace (*Daucus carota*), the ancestral carrot, Fennel (*Foeniculum vulgare*), and Parsnip (*Pastinaca sativa*) of roadsides, ditchbanks and waste places; the Poison Hemlock (*Conium maculatum* - of classical antiquity) along roadside ditches especially west of the Cascades; Venus' Comb (*Scandix pecten-veneris*) weedy in fields; and Bur Chervil (*Anthriscus scandicina*) along streambanks or moist open places.

The natives (26 genera) are quite varied in appearance and habitat: A species of Eryngo or Coyote Thistle (*Eryngium*) occurs on low ground in the valleys both east and west of the Cascades; Snakeroot (*Sanicula*) may be found from coastal bluffs to wooded slopes and mountain meadows; and Western Hedge Parsley (*Caucalis microcarpa*) grows along streams and on vernal moist slopes on both sides of the Cascades. Beach Silver Top (*Glehnia leiocarpa*) is strictly of the coastal dunes and sandy beaches, and Pacific Hemlock-Parsley (*Conioselenium pacificum*) may occur on bluffs or both rocky and sandy beaches along the seashore. Also along and near the coast, in salt marshes and flats and sandy or muddy beaches grows the Western Lilaeopsis (*Lilaeopsis occidentalis*). In the mountain springs and bogs from southern Jackson and Lake Counties and southward is found the Western Oxypolis (*Oxypolis occidentalis*), and in woods of southwestern Oregon are species of Tauschia (*Tauschia*). The large genus of Desert Parsley (*Lomatium*) boasts species in nearly every sort of habitat from moist ground, prairies or meadows to dry, rocky open areas and scablands of eastern parts of the state. Many umbellifers thrive in moist areas and in such habitats as wet meadows, marshes, streambanks, lakeshores, slow-moving streams, bottomlands, ponds, swamps, bogs and sloughs grow species of Angelica (*Angelica*), Water Pennywort (*Hydrocotyle*), Swamp Whiteheads (*Sphenosciadium capitellum*), Heart-Leaved Alexanders (*Zizia aptera*), Hemlock Water Parsnip (*Sium suave*), Water Hemlock (*Cicuta*), Water Parsley (*Oenanthe sarmentosa*), or Cut-Leaved Water Parsnip (*Berula erecta*).



Diagrammatic inflorescence in Umbelliferae. Note the rays of the primary umbel, each supporting an umbellet. Primary bracts form the involucre; secondary bracts form the involucrel.

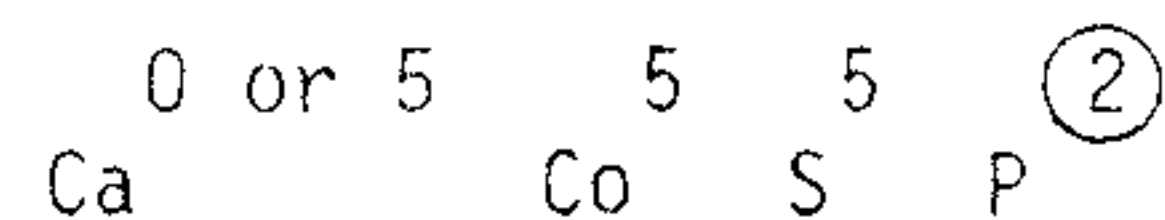


Petiole of leaf sheathing the stem, typical in the Umbelliferae (Blade of leaf not shown). Note also the furrows of the stem.

Sweet Cicily (*Osmorrhiza*) is often encountered in woodlands or meadows; Lovage (*Ligusticum*) may be found on slopes or mountain ridges or in meadows and marshes; and the robust Cow Parsley (*Heracleum lanatum*) occurs along streambanks and in low, moist ground. A species of Turkey Peas (*Orogenia*) occurs on each side of the Cascades on open slopes and ridges, and in the loose, dry ground of Malheur, Harney and Lake Counties occurs the Dwarf Cork Seed (*Rhysopterus pleurijugis*). Species of Pteryxia (*Pteryxia*) are found in the dry slopes and rocky cliff and canyon walls of the Steens Mountain and Alvord Desert; *Cymopterus* (*Cymopterus*) grows in dry flats and hillsides or rocky places; and False Caraway (*Perideridia*) occurs in varied habitats from dry open hillsides and ridges to wet meadows in the mountains. Last, a small native cousin of Wild Carrot (*Daucus pusillus*) is often found in dry open places around rocky outcrops.

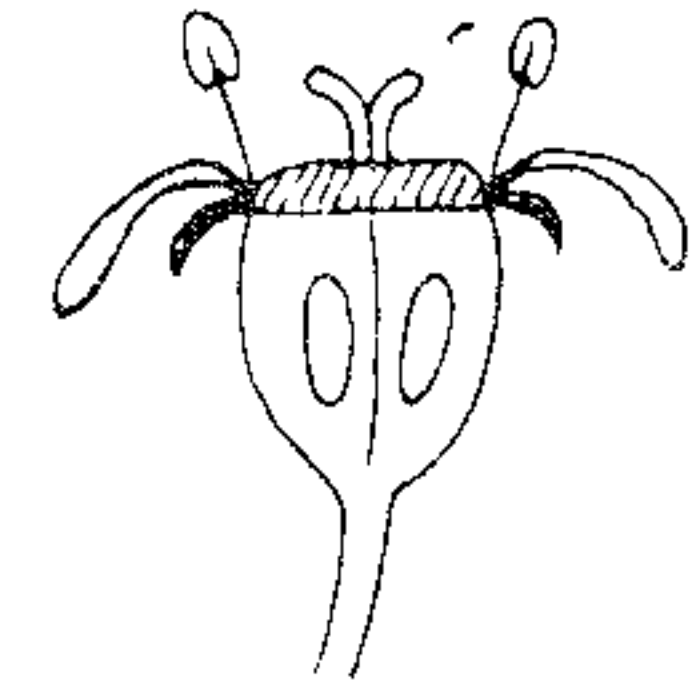
Perhaps the Carrot Family (also called Apiaceae) is best known for its aromatic odor, its flavor, and its toxicity. Many herbs and condiments, in addition to some root crops, are widely used: anise, cumin, coriander, dill, fennel, celery, parsley, parsnip, and carrot. Most are highly aromatic, and a few are poisonous (*Conium*, *Cicuta*). All are herbaceous, though they may be annual, biennial or perennial. Furrowed stems are hollow or soft-pithy between the nodes; leaves are often finely dissected, or at least compound (simple in *Hydrocotyle*), and are alternate, without stipules, and generally bear an expanded petiole sheathing the stem. The characteristic inflorescence is most often a compound umbel consisting of flowers in small umbellets which themselves are in a primary umbel. Umbellets may be reduced to capitate globular clusters (*Sphenosciadium*) or dense spiny-bracteate heads (*Eryngium*). Rarely are flowers solitary (*Hydrocotyle*). Bracts at the base of the primary umbel form an involucre; at the base of each umbellet, an involucler. These bracts vary in number and size from showy and colorful to inconspicuous or obsolete.

The pattern of flowering is sequentially from the outer whorls to the center, with stamens usually maturing first. A few genera (*Heracleum*, *Daucus*) bear irregular outer flowers with enlarged outer petals that seem to be analogous to the ray flowers of a composite in the attraction of a wide variety of insect pollinators: flies, mosquitoes, gnats, non-specific bees, butterflies and moths (the flowers are said to be "promiscuous."). Individual flowers may have five sepals or none, 5 petals, 5 stamens, and a bicarpellate inferior ovary. A fleshy disc-like "stylopodium" supports the two styles that lead to the single ovule in each locule below. This formula may be expressed:

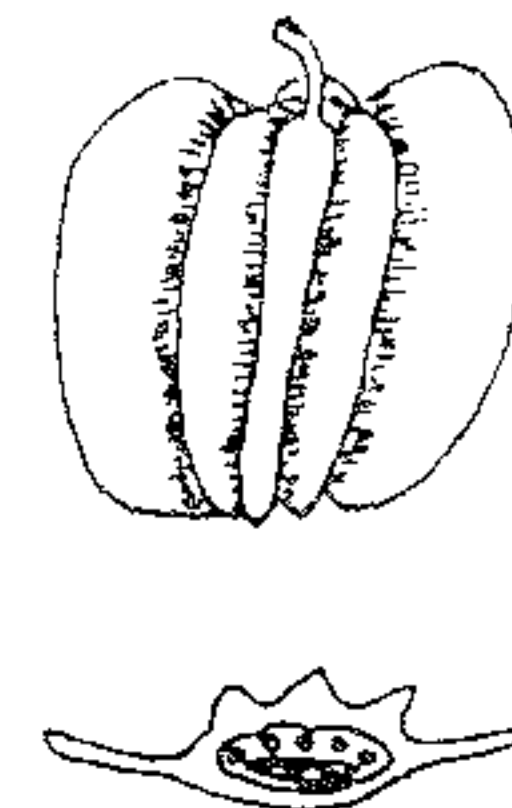
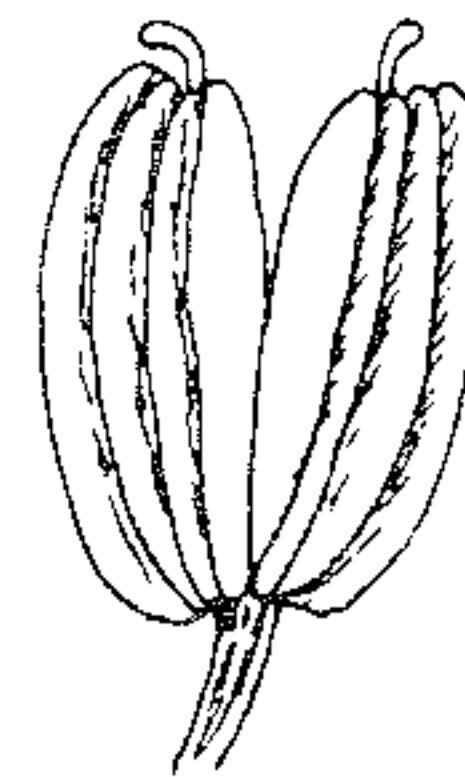


The fruit is a dry "schizocarp" splitting down the middle along a "commissure" into two "mericarps" with a common forked stalk, the "carpophore." Each mericarp contains a single seed, and normally has 5 primary ridges - a single dorsal, 2 commissural, and, in between, 2 lateral. Four secondary vallecular ridges lie alternate with the primary ridges; all run longitudinally down the fruit and may be expanded in various ways. Fruit surfaces may also bear spines, hooks, hairs or tubercles of many sorts related to seed dispersal. A cross-section of the mericarp often shows oil cavities and resin canals ("vittae"). These fruit characters become important in keying a given plant to genus and species since it is extremely difficult to base a key on floral and vegetative characters.

Diagrammatic longitudinal section of a typical flower in Umbelliferae. Note the stylopodium supporting 2 styles, and the inferior ovary with 2 ovules.

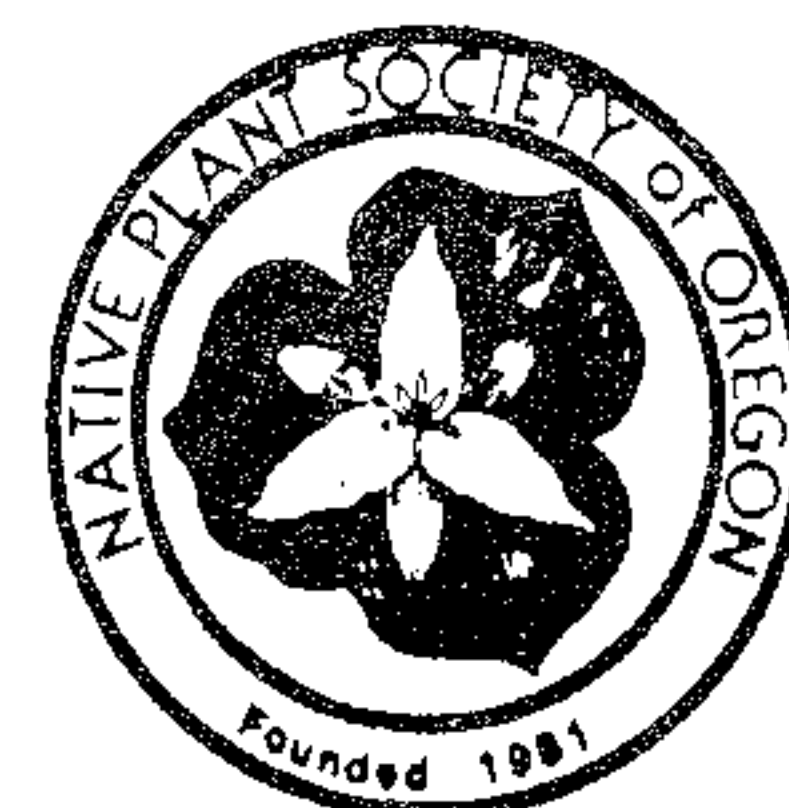


Diagrammatic fruit in Umbelliferae: a schizocarp. Note the carpophore supporting the two mericarps, in this case partly split along the commissure.



Sketch and cross-section of mericarp of *Angelica arguta*. Note the five primary ridges and resin ducts.

Should you then encounter an aromatic herbaceous plant with hollow internodes, divided leaves, sheathing petioles, small five-parted flowers in compound umbels, each with an inferior ovary that matures into a schizocarp of two ridged mericarps - no doubt at all you have found a member of the well-known Umbelliferae - the Carrot Family.







## In This Issue

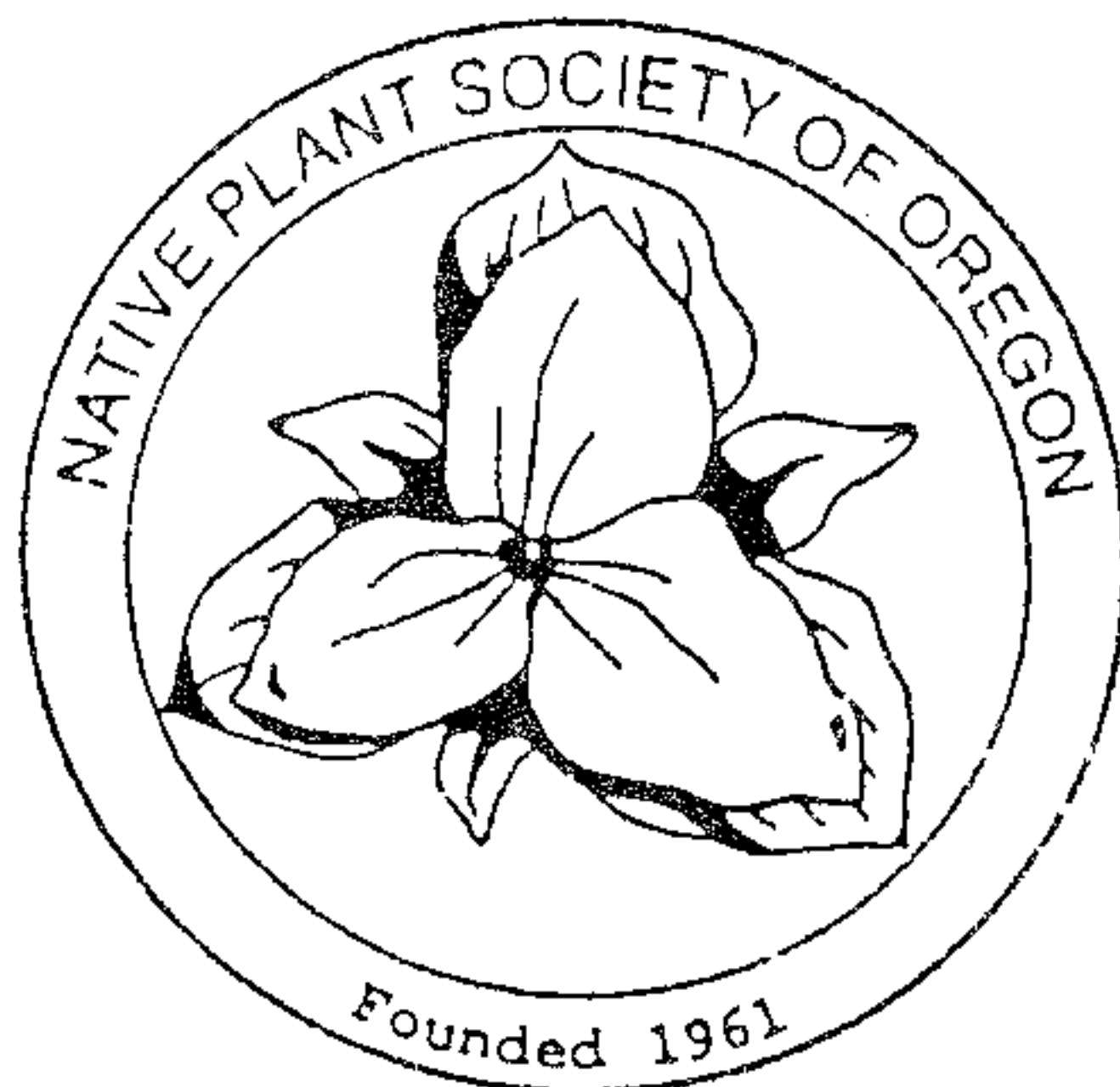
Umpqua Valley Chapter Begins. ....	96
Bits and Pieces. ....	97
NPSO Funds Research. ....	97
History of the Jean Davis Award. ....	98
The Leighton Ho Fund. ....	98
Plant Family Profiles---Herm Fitz. ....	99

*Please send change of address notices to:*

Mary Falconer, NPSO Membership Chair; 1920 Engel Avenue NW; Salem, Oregon 97304.

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