

Bulletin of the

Native Plant Society of Oregon

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

Volume 26 Number 5

May 1993

ISSN 0884-599

State News

June 4th-6th, Fri.-Sat. **The NPSO 1993 Annual Meeting** will be held in Corvallis on this weekend. More details inside!

Chapter News

Blue Mountain

May 8th, Sat.

Field Trip: A joint trip with the Idaho Native Plant Society. Meet 10am at the Cario School parking lot, a quarter mile west of the Highway 20 / 26 junction to Vale, Nyssa, and Ontario. This will mostly be an auto tour. 4-wheel drive vehicles will be needed for part of the tour, and we hope there will be enough of these to share rides. The South Alkali Sandhills contain two candidate species (*Astragalus mulfordiae* and *Hackelia cronquistii*). These hills can have some of the finest displays of wildflowers in the county. The Vale District BLM has begun discussions on development of a management plan for the area. It sees grazing, ORV use, heavy deer winter use, and active fire management. We welcome participation by all interested in public land management and in what we hope will be a fine wildflower display.

Corvallis

May 10th, Mon.

Meeting: 7:30 pm at the Unitarian fellowship, 2945 NW Circle Blvd., Corvallis. The Corvallis Chapter of the Sierra Club joins us as Phil Hayes presents "Wildflower Walks — A Guide to Trails Around Corvallis". For information contact Keli Kuykendall at 758-8409.

Emerald

Directions to meetings: From downtown Eugene, take Willamette St. south to Crest Dr., (right thru "Y" for Donald, between 32nd & 33rd Ave. E.). Turn right (W) on Crest and proceed about 4 blocks. Turn right into Morse Ranch Park parking lot. Walk east to the white farmhouse.

May 8th, Sat.

Field Trip: Meet 9 am at the South Eugene High School parking lot, across from the YMCA on 20th and Hilyard. Horse Rock Ridge RNA & summit wildflower hike. Cheshire Mayrsohn, our trip leader expects the high rocky bald to be at its early best with possibilities of seeing quillworts, *Githopsis*, *Orobanche*, *Blepharipappus*, and more! Bring poison oak and wet weather protection as well as lunch, water and a pack. The trail is rough enough to advise good footwear, and high enough to pack spare worm clothes; expect a fairly rigorous effort.

IMPORTANT NOTES FOR 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 or chapter representative about difficulty, mileage and terrain to be expected on field trips. Bring water and lunch. Participation is at your own risk. All NPSO field trips are open to the public at no charge (other than carpool mileage), 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 wilderness areas to 12. The reason for this is to limit human impacts on these often fragile areas. Each group using wilderness areas must be no larger than 12.

- May 15th, Sat. **Field Trip:** Buford Park / Mt. Pisgah plant inventory and spring wildflower party II. Buck Brush Creek drainage this time, featuring the amazing *Ceanothus cuneatus*. Meet at South Eugene High School parking lot, near southwest corner of 19th and Patterson St., 9:00 am., or 9:30 at Summit Trail gate, Mt. Pisgah. Contact trip coordinator, Tom Pringle at 484-0669 for details.
- May 16th, Sun. **Wildflower Show:** 10 am to 4 pm at the Mt. Pisgah Arboretum. A great family outing and opportunity for reviewing your local spring flora, buying autographed field guides, eating, purchasing native plants, or confirming that questionable plant or fungus identification, even keeping up with the new Jepson Manual! Anna Mockler really needs volunteers for specific collecting areas; before you head out, contact her at 485-0891 for guidelines.
- May 24th, Mon. **Meeting:** 7:00 pm. at Morse Ranch. Dr. Tom Pringle will give a lecture and slide show titled "Virtual Botany—Vegetation mapping and rare plant searches by computer". Tom's planning a high-tech visit to some favorite local botanical areas.

More information? Call Bruce Newhouse (president) 343-2364 or Ethen Perkins (programs) 345-3944.

High Desert

- May 26th, Wed. **Wildflower Workshop:** "Celebrating Common Wildflowers of Central Oregon" at 7 pm at the Central Oregon Environmental Center. This will be an excellent introduction to the wildflowers of our area.

Mid-Columbia

- May 5th, Wed. **Meeting:** 7:30 pm at the Mosier School. A panel discussion on noxious weeds. Do we pull, spray, or bug 'em? Come listen to experts charged with managing this "growing" problem.
- June 2nd, Wed. **Meeting:** 7:30 pm at the Mosier School. Caitlin Cray, who received her degree at Reed College under Bert Brahm, will give us a show on rare plants at Fort Lewis and at the Yakima Firing Range.

North Coast

- May 1st, Sat. **Field Trip:** Peninsula Park on the Trask River. Meet at 10 am at Tillamook PUD, 1115 Pacific, Tillamook. Easy hiking. Bring a lunch. Trip leader is Jim Winslow (842-4131).
- May 22nd, Sat. **Field Trip:** Hike at Cascade Head to see spring wildflowers. Meet at 9 am at Tillamook PUD, 1115 Pacific, Tillamook. Bring water and lunch. Trip leader is Al Krampert (842-2308).
- May 25th, Tue. **Meeting:** Meet at 7 pm in the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook. Amy Buchanan will share techniques for propagating native plants. For more information, call Jim Winslow at 842-4131.

Portland

- May 1st, Sat. **Field Trip:** East bank of the Deschutes River. This area east of The Dalles offers the chance to observe some desert plants as well as more familiar flowers. Beautiful views of the Columbia River may be enjoyed from a loop trail. Leave from Lewis & Clark State Park at 8 am. For more information call Sara Barnum at 639-3353.
- May 8th, Sun. **Field Trip:** West end of the Columbia Gorge. McCord Creek, an easy hike offers special plants, including two rare Erigerons, *Douglasia laevigata*, *Penstemon rupicola*. Meet at Lewis and Clark State Park at 8:30 am. Leader is Bob Wilson (292-6855).
- May 11th, Tue. **Meeting:** 7 pm at the First United Methodist Church, 1838 SW Jefferson St., Portland. Arlen Madsen, instructor for the Oregon Department of Fish & Wildlife Naturescaping program, will present "Naturescaping Your Yard — Using Plants and Other Enhancements to Encourage Wildlife in Your Backyard".
- May 15th, Sat. **Field Trip:** East side of Mount Hood to Warm Springs area of Central Oregon for dry land flowers. Mostly a driving trip. Meet at 8:30 am Ashley's Restaurant on Highway 26 at the Boring Highway 212 exit. Leader is Maxine Wilson (655-1523).

The following two excursions make up a single overnight trip.

- May 21st, Fri. **Field Trip:** Big Summit Prairie, Ochoco National Forest—a joint trip with the Willamette Valley Chapter. See *Wyethia*, paintbrush and many others. Leaders are Richard Helliwell, USFS, and Christy Steck. Meeting 10am at Prineville City Park and Courthouse. For information call Clint Urey at 503-393-0886 or Wilbur Bluhm at 503-393-2934.

May 22nd, Sat. **Field Trip:** Painted Hills Section of the John Day Fossil Beds. Features include *Pediocactus simpsonii* and bitterroot. Leaders are Clint Urey and Wilbur Bluhm. Accommodations: Prineville — Ochoco Inn (447-6231); City Center Motel (447-5522); Redmond—Best Western (548-8080); Redmond Inn (548-1091); Village Squire (548-2105).

June 6th, Sun. **Field Trip:** We will go to Opal Creek to experience the old growth forest. Meet at the Tualatin K-Mart lot off the Tualatin exit (#189) off I-5 at 8:30 am. Call Sara Barnum at 639-3353

Siskiyou

May 15th, Sat. **Field Trip:** Mule Mountain Trail in the Applegate. This will be moderately strenuous. Meet at the Medford K-Mart parking lot at 9 am. Leader is Barbara Mumblo, message 734-0424. Bring lunch and water.

May 29th, Sat. **Working Field Trip:** Inventory *Plagiobothry figuratus* spp. *corallocarpus* in the Lincoln area. Meet at the Medford K-Mart parking lot at 9 am. Leader is Juniper Brock, 482-4111.

May 20th, Thur. **Meeting:** 7:30 pm in Room 171, Science Building, Southern Oregon State College. Speakers will be Elmer Vandergelden, fanatic photographer from Hillsboro, Or., specializing in portraits of flowers. Elmer is a native Oregonian with 35 years photographing experience. The public is invited. For information, call Anita Seda at 471-8989.

South Coast

May 12th, Weds. **Organizational Meeting :** at 7 pm in North Bend High School. Joint NPSO / Cape Agago Audubon meeting. Bruce Rittenhouse, Botanist with the Coos Bay BLM, will present a slide show on "Wildflowers of New River ACEC". This will be an organizational meeting to start a new NPSO chapter on the south coast. All current NPSO members from the area are encouraged to attend and bring a friend. For more information call Bruce Rittenhouse at 756-0100 (work) or 888-9328(home).

Umpqua Valley

May 13th, Thur. **Meeting:** 7 pm in Room 311 of the Douglas County Courthouse. The cataloging of plants, and their blooming periods, for the Little River Roadside Field Guide will be discussed. Bring a native plant for identification or discussion if you wish. For information call Mildred Thiele at 673-5397.

May 15th, Sat. **Field Trip:** to walk the Wildlife Safari Nature Trail. Leave at 8 am at the BLM parking lot, 777 Garden Valley Blvd. For information call Russ Holmes at 672-4635.

Willamette Valley

May 1st, Sat. **Field Trip:** To the McCord Creek Trail in the Columbia Gorge; leader is Don Eastman. See *Dodecatheon dentatum*, *Erigeron howellii*, and *Castilleja rupicola*. Salem contact: Clint Urey (393-0886) or Wilbur Bluhm (393-2934).

May 15th, Sat. **Field Trip:** To Mount Hebo in the Coast Range to see *Erythronium elegans*. Leader is Julie Thiel of the BLM. Salem contact: Clint Urey (393-0886) or Wilbur Bluhm (393-2934).

May 17th, Mon. **Meeting / Field Trip:** We begin our outdoor summer meetings this month. We will tour Augusta Rockafellar's garden which contains an abundance of native wildflowers. Leave at 7 pm from the South Salem K-Mart shopping center parking lot (located at Mission and 25th Streets) to carpool to the garden, about 10 minutes away. For more information call Kathy at 327-1212 or Wilbur at 393-2934.

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May 29-31st, Sat.–Mon. **Field Trip:** See *Rhododendron occidentale* on a joint trip with the American Rhododendron Society. Leader is Wilbur Bluhm, 393-2934.

William Cusick

May 1st, Sat.

Workparty: The Oregon Trail commemorative flower bed at Birney will be planted. Birney Park is across the street from the Forest and Range Lab on Gekler Lane in LaGrande. We will start around 8:30. If we get done in time we will work on the Gangloff Park project too. Bring a shovel if you have one. Call Bob Ottersberg for more information, 963-9660.

May 8th, Sat.

Field Trip: Jean Findley will be collecting information for the development of a management plan for the South Alkali Sandhills. Meet at 10:30 am at the Cario School parking lot, which is a quarter mile west of the Highway 20 / 26 junction to Vale, Nyssa, and Ontario. Our chapter will be joining the Idaho Native Plant Society to help Jean develop this plan. The study area is considered to have the best wildflower display in Malheur County and due to abundant moisture should be the best in many years. The mulford milkvetch and Malheur forget-me-not which occur in the area are candidates for the rare and endangered list. Call Jean at the Vale District of the BLM 473-6233.

May 15th, Sat.

Field Trip: Marty Stein will lead a tour to Vance Knoll which is a proposed research natural area on the northern edge of the Zumwalt Prairie in Wallowa County. A good example of the mound topography found in the area, it is characterized by deep silty mounds surrounded by very shallow "scabby" soils. The theories of the development of this topography include giant Pleistocene gophers to periglacial frost action have kept experts and amateurs arguing for years. The debate still goes on. Come help Marty conduct an inventory and possibly hear a new theory discussed. Call Marty at 426-3443(H), 426-4978(W). Leave from Enterprise Safeway parking lot at 9 am..

May 15th & 16th,
Sat. & Sun.

Workparty: Berta Youtie is having a work party at the Clearlake Ridge preserve she manages for The Nature Conservancy in Wallowa County. You have the opportunity to pull weeds in some of the most beautiful scenery in northeast Oregon. This is an opportunity to hike in a relatively undisturbed riparian area. It is a birders paradise. Call Berta at 962-3903.

May 22nd, Sat.

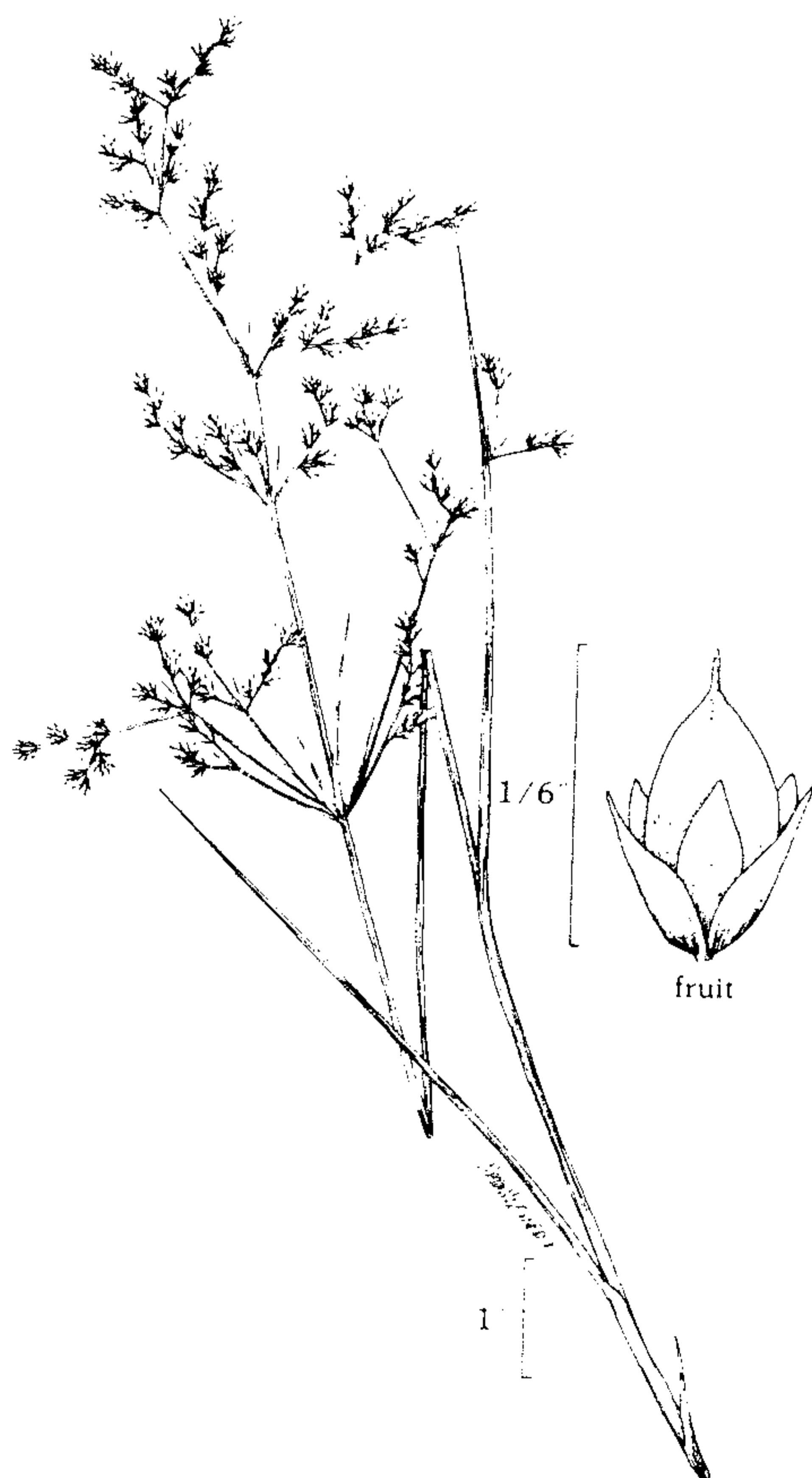
Field Trip: Paula Brooks will lead a wildflower hike along the Oregon Trail in Baker County. Leave 10 am from the Oregon Trail Visitor Center east of Baker City.

May 22nd, Sat.

Field Trip: Frank Lackaff will lead a trip along segments of the Oregon Trail through the Grande Ronde Valley in conjunction with the Union County Historical Society. Leave from Ladd Marsh Wildlife Refuge viewpoint on Foothill Road east of LaGrande. For more information call Frank Lackaff at 562-5313.

May 23rd, Sun.

Work party at Gangloff Park. Meet at the park at 9 am.



Jointed rush
Juncus articulatus
Drawn by Mark Mohlenbrock
From Western Wetland Flora

So, How Many Plants Are There in Oregon??

My first experience with computerized databases occurred in 1986. I had been doing sensitive plant surveys on a contract basis for the Umatilla National Forest during the summers and needed to computerize the generation of site species lists. Until then, I had handwritten and sorted 3 X 5 index cards and then painfully typed a list of all the plants I had encountered in each survey. The list-generating part of my work required approximately four days for each of the sites I surveyed.

Prior to 1986 I had come to the realization that Forest Service Publication PNW-46, Northwest Plant Names and Symbols for Ecosystem Inventory and Analysis (4th Edition), did not contain all of the alphanumeric codes for the plants I was finding in my surveys. I desperately needed an updated version of that publication which was not even under consideration by the Agency. With the purchase of my first PC in 1986, I was ready to make my job of generating site lists much easier. I was determined to revise PNW-46 by myself! It seemed so easy to add new names and their alpha codes to my database and such a contrast to the hand drudgery of the previous years. During my first year of "high tech checklisting" I was able to reduce the average time required to complete a site species-encounter list from four days to approximately 1 hour. It seemed really nice to come in from the field, "pull" a site checklist from the database, and then take a hot shower while the list was being printed!

My interests in a database of Pacific Northwest plants would not go away. I could envision all sorts of wonderful uses for it including the cataloging of the many photographs and slides I had accumulated while accompanied by the works of Hitchcock, Peck, and others during botanical forays through the Pacific Northwest.

In 1989, while on sabbatical leave from my teaching responsibilities at Blue Mountain Community College, I had a wonderful opportunity to have access to the botanical resources of Oregon State University. Dr. Kenton Chambers guided me to the appropriate literature and reference specimens. I nearly went blind typing a wealth of information into the database of my dreams. Under the poor lighting conditions of the OSU Herbari-

um, it was very difficult to use a laptop computer that did not have a cursor enhancer program installed, but somehow I survived it.

By the end of the academic year I had refined my original database and tripled its size. My next step was to combine efforts with Brad Smith, an ecologist on the Okanogan National Forest who had done a lot of botanizing and databasing while working in Southwestern Oregon. Our (Urban, Smith, and Chambers) database continues to grow but is still unfinished to date. However, I have used it for all sorts of interesting queries. "How many taxa of the Pacific Northwest were authored by David Douglas or carry his name in the binomial?" "What plants grow in Linn and Benton Counties?" "Which biotic province shows the greatest plant biodiversity?" And, finally, the question that prompted this article, "How many plant taxa are there in Oregon?"

The Douglas question was easy, the biodiversity question I could answer nicely for a presentation I gave at Whitman College last spring, and the question about state numbers wasn't too difficult either. But I could only give an approximate answer to Peter Zika's question about Linn and Benton Counties since I did not include county fields in the database (there's still time to add them). And so now Tom Kaye wants to know how many plant taxa are in Oregon. The answers are forthcoming but the reader must remember that the database is incomplete and has not been reviewed in its final form (since it's not in its final form yet).

In the Pacific Northwest there are approximately 6,750 plant taxa (excluding a partial listing of bryophytes).

In Oregon there are approximately 5,343 taxa, which includes 852 different genera, 3,430 species, and 1,892 varieties and subspecies. The State of Oregon has 2,536 taxa which are not found in adjacent Washington.

In Washington, there are approximately 4,302 taxa, which includes 748 genera, 3,446 species, and 868 varieties and subspecies. The State of Washington has 1,529 taxa that are not found in adjacent Oregon. The two states share 2,765 plant taxa.

Please remember that all figures are based on a database that is incomplete and may never be complete. Like all databases, it's a useful tool!

As for the other queries, David Douglas authored 90 species in the flora of Washington and Oregon. His name appears in a single genus (*Douglasia*) and in 24 specific epithets (namely *douglasii* and *douglasiana*).



Hulsea algida, alpine hulsea
Drawn by Karl Urban

For queries on floristic biodiversity, the province map is based upon Franklin and Dyrness (1973). The Klamath Mountain Province has 3,149 plant taxa; the Blue Mountain Province, 3,048; the Basin and Range Province, 2,983; the Owyhee Upland Province, 2,842; the Columbia Basin Province, 2,730; the Western Cascades, 2,687; the High Lava Plains Province, 2,596; the Okanogan Highlands Province, 2,565; the Northern Cascades Province, 2,525; the Southern Washington Cascades Province, 2,499; the Olympic Peninsula Province, 2,479; the Coast Range Province, 2,401; the Willamette Valley Province, 2,379; the Puget Trough Province, 2,252; and the High Cascades Province has 1,946 taxa.

Our database was not originally designed to “track” the plant species of counties or of National Forests. However, as more information is acquired on the distribution of species, appropriate fields can be added easily and provide “tracking” on such species. The day may come when our database can conveniently provide plant lists for each county or for each National Forest in our splendid Pacific Northwest.

—Karl Urban
Forest Botanist
Umatilla National Forest

The Names They Are A-Changin': Adventures With the New Jepson Manual

This is not a review of the new Jepson Manual. I look forward to seeing a detailed review of this extraordinary new Flora of California in these pages soon, perhaps written by a teacher of systematics or an agency botanist using the manual in the field. Rather, this note is intended to be a short “teaser” to alert readers to some of the interesting name changes I have discovered in the Jepson Manual during the first week the book has been in my hands.

Of course, botanists in the West have, for a number of years, been hearing rumors about the coming changes. My copy of the new Jepson arrived while I was away on spring break, so I had only a few days to study it closely before I stepped into the classroom to teach spring term systematics. I decided a good way to get a feel for the magnitude of its affect on the nomenclature of our Eugene area species was to use the Mount Pisgah Arboretum plant list to compare old names (based on Hitchcock and Cronquist) with the new ones proposed in Jepson. To begin with a few simple statistics, here is what I found.

The Arboretum flyer lists 297 species of native and introduced ferns, conifers and flowering plants, and, of those, a total of 44, or approximately 15%, have undergone name changes. Involved, in the various cases, are changes in family, genus and/or species. (Before citing examples, let me point out that 96% of the plants on the Arboretum list appeared in the Jepson Manual, which makes it clear to me, perhaps for the first time, that Hitchcock was correct in the Introduction to his Manual, when he stated that south of the 44th parallel, our flora must be characterized as Klamath rather than Northwestern.)

Here are some of the more interesting name changes I found in the Jepson Manual:

Family name changes. At the Arboretum, we have 5 new families to learn. Among the ferns, 3 new families have been created: *Dennstaedtiaceae*, *Dryopteridaceae*, and *Pteridaceae*. Among the Angiosperms, the family *Philadelphaceae* replaces *Hydrangeaceae*, and *Viscaceae* replaces *Loranthaceae*.

Genus name changes. Here are examples of the 13 changes in generic epithet we will be learning: The genus *Rhus* has returned to *Toxicodendron*; some of our well-known members of the genus *Brodiaea* have been placed in either *Triteleia* or *Dichelostemma*; our *Habenaria* orchid has become a *Piperia*; and at least one of our most common owl clovers has been moved from *Orthocarpus* to *Triphysaria*.

Introduced species: Here are a few other changes that may startle some readers, since the plants involved are European weeds whose designations have presumably been accepted at least since the 18th century: *Chrysanthemum leucanthemum* has become *Leucanthemum vulgare*; *Brassica campestris* is now *B. rapa*; *Matricaria matricarioides* has become *Chamomilla suaveolens*; teasel has changed from *Dipsacus sylvestris* to *D. fullonum*; *Centaureum umbellatum* is now *C. erythraea*; *Anthriscus scandicina* is now *A. caucalis*.

Name changes of some native species: The fern *Pityrogramma* is now *Pentagramma*; Blue elderberry has changed from *Sambucus cerulea* to *S. mexicana*; Red osier dogwood has changed from *Cornus stolonifera* to *C. sericea*; *Camassia leichtlinii* has been submerged with *C. quamash*; *Fritillaria lanceolata* has become *F. affinis*; and the Willamette Valley hawthorn, *Crataegus douglasii* var. *suksdorfii* has become simply *C. suksdorfii*.

I find dealing with these changes both exciting and challenging. Although some new names are based on discoveries of earlier valid publication, the majority reflect fresh research into plant affinities. Many of the 200 botanists who contributed monographs to the new Jepson Manual have used the tools of molecular biology, such as protein electrophoresis and DNA analysis, to discover hitherto unsuspected relationships within families and genera. To me, this represents an affirmation that the science of taxonomy is not static and dead, but rather alive and dynamic. It will be hard for me to "unlearn" old names, but I am working on it. For my students this spring, it will mean they can start

their botanical training learning names which will be accepted for some time to come, and that they will not be faced with great numbers of new names to learn in the near future.

For the many NPSO members who have asked how to obtain the Jepson Manual, the fastest way seems to be to call the toll-free number 1-800-822-6657 and order it using your credit card. Be prepared to be charged \$55.00 plus \$3.00 shipping. The price increases to \$65.00 at the end of June.

—Rhoda Love
Emerald Chapter

New NPSO Bulletin Editor Needed

After four years editing your monthly *Bulletin*, the present editor is ready to step down as editor and pass on the position to another volunteer. Increasing demands on my time, which have been steadily growing and which are about to take a quantum leap, require that I cut back on the demands on my attention.

The position brings the opportunity for valuable involvement in the affairs of the NPSO, free use of a computer, and requires about 20 hours a month. This is a good opportunity for someone wanting to benefit from experience at desktop publishing. Full instruction in use of the computer system is freely offered. Any willing computer novice could learn the process, though of course experience will shorten the learning curve. This involves a Macintosh and several pieces of software. The *Bulletin* editor is also an ex-officio (non-voting) member of the NPSO Board of Directors, and should give a report to the Board quarterly.

The printer, proofreader, mailing committee and bulk mail permit are all in the Portland area, so this position should most likely remain there, although theoretically if all four were found elsewhere it could move anywhere.

Interested parties should contact the present editor at the numbers below:

Bryan D. Boyce
13285 S. Clackamas River Drive
Oregon City OR 97045-9411
655-4457; 692-1448; 691-1394

The 1993 NPSO Annual Meeting Schedule

The 1993 NPSO Annual Meeting will be the 4th, 5th and 6th of June. Please fill and return the enclosed registration form by May 15th.

Schedule of Events:

Friday June 4th

Registration and check-in to OSU housing between 6 & 8 pm at Hawley Hall. The Friday night Social will take place from 6:30- to 9:30 pm at the OSU Center for the Humanities at 811 SW Jefferson. Come join us!

Saturday June 5th

All day fieldtrips will meet at 8:45 am at the parking lot across from the Monroe Beanery. Half day fieldtrips will meet at 1:00 pm at the same location. Please bring a lunch, water and proper attire. If you need a lunch there is a grocery store next to the Beanery Coffee Shop on Monroe Street.

Sunday June 6th

The State Board Breakfast Meeting will take place from 9 am to 12 noon at Sadies Bar & Grill at 777 NW 9th Street. Sadies features a brunch buffet as well as a breakfast menu and plenty of Allan Brothers coffee! For those not going to the Board Meeting, there will be a sign-up sheet at the Banquet for a morning local fieldtrip.

Saturday Fieldtrips for the 1993 NPSO Annual Meeting

All scheduled fieldtrips will take place on Saturday, June 5th. We will carpool. Bring a lunch if you are going on an all day fieldtrip. Come prepared for varying weather conditions, including warm clothes, raingear, good walking boots and a hat. Choose from the following list of fieldtrips; state first, second and third preference on your preregistration form. Remember, some of the fieldtrips will be limited in the number of participants. Sign up early for best selection!

Horse Rock Ridge Research Natural Area

In the Coburg Hills, Horse Rock Ridge overlooks the Willamette Valley. A one hour drive with moderate hiking. High diversity of wildflowers, in a mixture of meadow and forest. Fieldtrip leader will be Dan Luoma.

Delphinium Fieldtrip

A visit to the local rare *Delphinium pavonaceum* sites around the Corvallis area. Gaylee Goodrich will lead a small group to remnant sites. A half day fieldtrip with easy walking.

Findley Wildlife Refuge

A visit to a variety of remnant valley habitats at Findley Wildlife Refuge. Moderate walking to see the different habitats at the refuge. Fieldtrip leader is Ed Alvorson.

Low elevation Forest

Phil Hayes will lead us through a remnant low elevation old growth forest with easy walking on a one and a half mile loop. The area is a short distance from Corvallis. This is a half day fieldtrip.

Mount Hebo

This Coast Range site has subalpine grasslands with a rich diversity of flora and fauna including orchids, penstemons and lilies. Driving time 2 hours one way, with moderate walking. Leader is Paul Hammond.

Marys Peak

A June wildflower mecca in the Coast Range, with a moderate 2 mile hike through forest, meadow and rock garden. Driving time one hour each way. Leader is Bob Frenkel.

Purple Loosestrife Research Site

A visits to research sites investigation the use of insects to control the spread of purple loosestrife (*Lythrum salicaria*), an European perennial invading wetlands throughout North America. This is a half-day field trip with easy walking. Leader is Manuela Huso.

