OREGON FLORA NEWSLETTER

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Dr. Linda K. Hardison, chairperson of the Friends of the Oregon Flora Project

by Rhoda Love

"Seeing firsthand the commitment and effort Scott Sundberg puts into the Oregon Flora Project gives me absolutely no doubts about the value and importance of a new flora for Oregon. My job is to communicate that passion to others, whose participation and donations will help to speed the work on this major contribution to botany in the Pacific Northwest," declared Linda Hardison in a recent interview for this biographical sketch.

Linda was born and raised in El Paso, Texas, where she was always interested in plants, whether in her mother's garden, the desert hills around her home, or the New Mexico pine forests where she camped. Linda entered the University of Texas at Austin in 1979 as a biology major. There, after a summer of research at the University's marine station, she declared a major in marine biology and botany.

Linda met her future husband, Scott Sundberg at that time. Scott was doing graduate work at Texas and they encountered each other when she was studying plant specimens posted in the hall outside his door. In 1984, Linda graduated and came to the Northwest on a three-month internship with the Salem District BLM. She then returned to Austin and worked as a plant physiology technician until

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Photo: Rhoda Love

Linda Hardison and the Friends of the Oregon Flora Project display, Mt. Pisgah Arboretum, May 2000.

A tale of two blocks

by Scott Sundberg

During an interview a few weeks ago, I was asked which block I had adopted for the Oregon Plant Atlas Project. The Atlas project has divided Oregon into 176 "blocks" to aid in our efforts to map the distributions of vascular plants growing outside of cultivation in the state. On average, Atlas blocks are approximately 576 square miles in size [see OFN 2(2)]. Volunteers are encouraged to "adopt" a block and gather locality information for as many plant species, subspecies and varieties (taxa) as possible. At the time, I hemmed and hawed and finally admitted that I had not adopted a block. Later that day my wife pointed out that I was missing one of the really fun parts of the Flora project and convinced me to adopt one. I plan to look for new plant sightings while hiking, picnicking and exploring the area with my family. I'm looking forward to the experience—not only will I spend more time outdoors with my family, but I will probably also see species in the field that I have only previously seen as dried herbarium specimens and, who knows, perhaps I will come across a new state record or two.

This article is the first of a series in which I'll describe my experiences, not with just one, but with two blocks. I have decided to adopt Block 53 now and, although I will not adopt it at this time, I will also gather existing plant records for Block 78. The two blocks are quite different in a number of ways. They're practically at opposite ends of the state and have very different vegetation, topography, land ownership, and plant species composition.

Block 53 is located near the center of the Willamette Valley of western Oregon (see map, back page). The block includes parts of Benton, Linn, Marion and Polk counties and the towns of Albany and Lebanon. The topography is relatively flat and is almost entirely privately owned agricultural or urban land. The Atlas project currently has records of 374 species, subspecies and varieties for Block 53.

Block 78 is located on the southeastern edge of the Blue Mountains in eastern Oregon. It includes parts of Baker, Grant, and Malheur counties and encompasses no major towns. The Federal government owns most of the block, with portions administered by the U.S. Forest Service and others by the Bureau of Land Management. The block is topographically variable, with a number of ridges, hills, and broad valleys. We currently have only one plant record from Block 78! This is a

See Two blocks, page 21.

Friends news: Jackson Foundation grant received.

by Linda Hardison

We would like to extend a hearty thank you to Oregon's Jackson Foundation which awarded the Friends a $2000 grant to help fund the completion of a Checklist of Oregon Monocots other than the grasses. This is a significant portion of the estimated $5,000 necessary to complete this part of the *Oregon Vascular Plant Checklist*.

We are asking members of the Friends as well as other *Oregon Flora Newsletter* readers for a special contribution to raise the $3,000 balance needed to accomplish this work. Contributions made before December 31 may be eligible for matching funds from the Oregon Flora Project Challenge (see page 17). If you donate at this time you may double your gift, while joining with the Jackson Foundation to ensure that the Monocot Checklist appears in a timely fashion.

Illustrations of *Erythronium oregonum* on the front and back covers by Linda Ann Vorobik.

The Oregon Flora Newsletter is published three times a year by the Oregon Flora Project and the Oregon State University Herbarium. The Editor is Rhoda Love and the Production Assistant is Miko Nadel.

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Hardison, continued from front page

Scott finished his Ph.D. They were married in Indonesia in 1986.

After a year at Ohio State University, the couple moved to Seattle in 1987 where she enrolled as a graduate student in the Botany Department at the University of Washington. There Linda's research was in yeast molecular genetics. She received her Ph.D. in 1995 and followed Scott to Corvallis where she began a post-doctoral fellowship in the OSU Botany and Plant Pathology Department studying the molecular interactions between wheat and its fungal pathogen, tanspot.

Linda describes the next phase in their lives, "April, 1999 brought big and wonderful changes with the birth of our son Matthew. I took leave from a life in the laboratory to be home with him. Knowing how much the Oregon Flora Project needed someone to raise funds and help coordinate the growing interest of volunteers, and wanting to maintain a flexible schedule as a mom, I approached Scott about working on these aspects of the project."

Linda joined the Friends of the Oregon Flora Project, a committee of the Native Plant Society of Oregon charged with raising funds for the new Flora of Oregon, soon becoming Chairperson of the committee. She notes that her present activities — writing grants to foundations, communicating to generate interest in the project, and asking individuals and organizations for funding — are all very different from the lab work she did in the past. "However," she says, "it is a refreshing change and a big challenge about which I still have much to learn."

She goes on, "The Friends committee has been working to raise awareness of the Oregon Flora Project through press releases and displays at botanically oriented events. Our major goal for the upcoming year is to build up membership in the Friends and to increase contributions. I am very grateful to the individuals and organizations that have contributed and continue to contribute to the Flora project. The support of the Native Plant Society of Oregon has been especially outstanding. I hope that everyone who donates to the Oregon Flora Project realizes the importance of their gift, and takes delight in the knowledge that their contribution will help make a positive impact to benefit plant enthusiasts for decades to come."

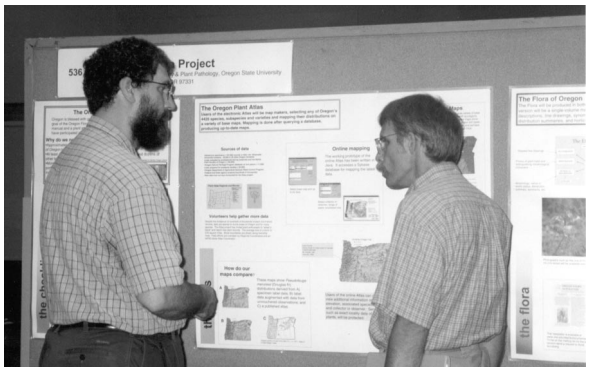

Photo: Rhoda Love

Scott Sundberg of the Oregon Flora Project and Steve Brunsfeld of the University of Idaho discuss the Flora project poster. Botanical Society of America meetings, Portland, August, 2000.

Kudzu in Oregon!

by Scott Sundberg

Kudzu (*Pueraria montana* var. *lobata*) is an aggressive vine native to China and Japan. It is a terrible weed in the southeastern US, where it infests hundreds of thousands of acres of forested land and can kill trees and pull down power lines. A quarter-acre patch of kudzu has recently been found by Oregon Department of Agriculture employees southeast of Portland in Clackamas County, and they have since learned of a second patch in southwestern Portland, in Multnomah County. These are the only known infestations in the western United States. The ODA has begun control efforts and plans eventually to eradicate the two populations.

Kudzu, a member of the legume family, has tough stems, purple, sweet-smelling flowers, and large, hairy, trifoliate leaves. If you see it in the wild anywhere in Oregon please contact the Oregon Noxious Weed Control Program at 1-503-986-4621 or call the invader hotline number 1-866-INVADER to report the site. Please also let us know so we can include the report in the Oregon Plant Atlas. You could help prevent an environmental disaster!

Photo: Scott Sundberg

Photo: Oregon Dept. of Agriculture

Top: Kudzu on the march in Clackamas County, before control efforts had begun. Bottom: Kudzu leaves are often ten inches wide.

The $10,000 Oregon Flora Project Challenge!

A friend of the Oregon Flora Project has established a $10,000 Challenge to match new and increased gifts in support of one of Oregon's most important botanical projects. By making a new or increased gift to the Oregon Flora Project, you will double your benefit to Oregon's only effort to produce a comprehensive set of botanical references for the entire state. The new *Flora of Oregon* and its accompanying plant Atlas will become the invaluable resource of plant information for amateurs and professionals alike. The Oregon Flora Project needs your support now!

The Oregon Flora challenge offers matching dollars to double the value of •contributions from new donors and •contributions increased over 1999's total gifts.

If you have already donated this year, we ask that you consider adding to your gift now. The challenge will double your contribution if it brings your year's total gifts to an amount greater than 1999's. Gifts are tax-deductible and must be postmarked before December 31 to be considered for this challenge.

For further information contact Maya Abels, Director of Development, OSU Foundation, at 541-737-8773 or Maya.Abels@orst.edu.

Dr. Chambers honored

The latest issue of *Madroño* [46(4), 1999] is dedicated to Professor Emeritus Kenton L. Chambers of the OSU Herbarium. The dedication reviews Dr. Chambers' distinguished career and is illustrated with two photos of Ken, one taken in Baja California in 1955.

In addition to this honor, two Oregon plants collected by Dr. Chambers have been determined to be new species and have been named for Ken. *Castilleja chambersii* M. Egger & Meinke, sp. nov. was described in *Brittonia* [51(4), 1999] with an illustration by Linda Vorobik. The Chambers collections were from Onion Peak and Sugarloaf Mountain, Clatsop County.

Poa chambersii Soreng, sp. nov. was described in *Novon* [8(2), 1998]. Ken collected the interesting dioecious bluegrass on Fairview Mountain, Lane County in July 1993. It was described by Robert Soreng of the Smithsonian Institution, a former student of Ken's.

Oregon delphiniums – Part II

by Kenton L. Chambers

In Part I of this article [OFN 6(2)] I pointed out two contrasting modes of variation in the genus *Delphinium*, as represented by the 15 species found in Oregon. One is the frequent blending of the characteristics of different species, through natural hybridization, and the other is the splitting out of distinctive localized species through mutation and genetic stabilization of novel floral color patterns. The Willamette Valley holds good examples of these evolutionary processes, perhaps as a result of catastrophic habitat disturbance 13,000 to 15,000 years ago due to Ice Age floods from the Columbia River.

Since writing that article, I have been assisted by Russ Jolley and Keith Karoly in examining a recently described larkspur of the Columbia Gorge, *Delphinium basalticum*, as possibly another localized evolutionary development in the genus. Collections and observations we made at the type locality (Oneonta Gorge) and other nearby sites have clarified the relationship of these plants, based on peculiarities of their root development. Although similar in floral morphology to the common species *D. menziesii*, the plants growing on talus and vertical basalt cliffs of the Columbia Gorge have elongated, rope-like roots rather than the short, fleshy tuberous roots of the latter species. Their primary root becomes divided lengthwise into anastomosing cords, through the development of internal corky layers of periderm.

Exactly this type of root development is characteristic of the species *D. glareosum*, known from the Olympic Mountains and high Cascades of Washington and often found in talus-slide habitats. We hypothesize that "*D. basalticum*" is a low elevation race of *D. glareosum*, and furthermore, that this species extends south in the high Cascades of Oregon to at least the McKenzie Pass region. However, throughout its occurrence in Oregon, it meets and hybridizes with a subalpine race of the tuberous-rooted species *D. menziesii*, so that no sharp distinction is possible between these two entities. Root form ranges from elongated to short and tuber-like, even within the same population, and there are practically no other differences that would be useful to separate the two species in that part of the Oregon Cascades.

Delphinium menziesii is also found in the Coast Range and the Willamette Valley, where it meets and possibly hybridizes with *D. nuttallii*, *D. pavonaceum*, and *D. oreganum.* Such hybrids are localized and do not blur the distinctions among these taxa (as happens with *D. glareosum* in the high Cascades). Following the range of *D. menziesii* south into Douglas County, however, leads one into another extensive area of intergradation, this time with *D. nuttallianum*! I have not previously mentioned this latter species, but it is the widespread morphological equivalent of *D. menziesii* found in the southern Cascades, Siskiyou Mountains, and throughout central and eastern Oregon. Except in Douglas County, these two closely related species are geographically separate (allopatric). The single consistent difference I find between them is the depth of the "notch" or cleft in the lower petals— the petal pair whose small, hairy blades hang from the center of the flower to form the characteristic larkspur "bee." In *D. nuttallianum*, this notch is conspicuous and divides the petal into two well-separated lobes; in *D. menziesii*, it is shallow or absent, and the petals are not obviously lobed. All intermediate degrees of petal notching occur, particularly in the zone of intergradation mentioned above, as well as where *D. menziesii* intergrades with *D. glareosum* (another deeply notched-petal species).

Still another area of interspecific variation for *Delphinium menziesii* is the south-coastal region of Oregon, especially where the species contacts *D. decorum*, a Californian entity that barely enters Oregon in coastal Curry County. There are herbarium collections that appear to be intergrades of these two taxa in the vicinity of Port Orford, for example.

Delphinium nuttallianum is the widespread and common low-growing, open-racemed, tuberous-rooted larkspur of mesophytic habitats in central and eastern Oregon, extending west through the south Cascades and Siskiyou Mountains to Curry County. Other names previously applied to this species (e.g. in Peck's *Manual of the Higher Plants of Oregon*) include *D. sonnei*, *D. decorum* spp. *tracyi*, *D. bicolor*, and *D. lineapetalum*. There is a distinctive regional variant of *D. nuttallianum*, common in a north-south zone on the eastern flank of the Cascade Range, whose lower petal-pair is white (or pale blue) with purple pencilling on the veins. This trait seems to represent ancestral gene flow from a distinctive species of central Washington named *D. lineapetalum*, not now present in Oregon. Where *D. nuttallianum* ranges into drier habitats, e.g. in the sagebrush zone, it may intergrade with *D. andersonii* and acquire the elongated, well-branched roots of the latter species.

Another pair of larkspur taxa that frequently intergrade in eastern Oregon are *D. depauperatum* and *D. distichum* (=*D. burkei*). Both taxa are found in meadows and open forest habitats that are moist early in the season but dry later; they differ markedly in leaf and pubescence traits, but plants of intermediate morphology frequently occur where the parent species are sympatric (grow in the same or adjacent habitats).

In a key to the Oregon species of *Delphinium* (facing page), I have selected those traits that seem to separate the taxa most clearly, but one must allow for environmentally induced variation as well as frequent intergradation between sympatric species. Subtle distinctions, for example in root development and in the notching and pubescence of the lower petals, are often critical to a choice between closely related taxa. If you enjoy challenges in plant identification, you will enjoy *Delphinium*.

Delphinium trollifolium *is a species of moist shady woods and stream banks.*

Key to *Delphinium* species in Oregon *by Kenton L. Chambers*

1. Sepals red. Species of southwestern Oregon.....*D. nudicaule*
1. Sepals blue to purple or white.
  2. Sepals white or very pale blue, sometimes greenish at tip; petals blue.
    3. Sepals cupped forward or spread laterally; inflorescence raceme narrow throughout; lower petals hairy all over the surface. Species of Portland vicinity.....*D. leucophaeum*
    3. Sepals +/- reflexed to spreading; inflorescence raceme wider below, narrowed above ("pyramidal"); lower petals with hairy tuft at base of blade. Species mainly of Benton and Polk Cos.....*D. pavonaceum*
  2. Sepals dark blue or purple, rarely pale blue; upper petals often white.
    4. Plants 1 m or more tall and flowers relatively small, the sepals 15 mm or less long; flowers numerous in narrow racemes; stems with wide, hollow pith cavity ("fistulose"); roots elongated, tough and fibrous.
      5. Stem leaves with 5-7 broad lobes, toothed but not much dissected. Species of montane meadows and stream banks, Cascade, Siskiyou, Blue, and Wallowa Mtns.
      .....*D. glaucum* (including *D. occidentale* of *Flora of the Pacific Northwest*)
      5. Stem leaves palmately dissected, the segments relatively narrow. Species of sagebrush desert and conifer forests, central and southeastern Oregon.....*D. stachydeum*
    4. Plants mostly <1 m tall, if taller then flowers larger with sepals up to 25 mm long; racemes various, often wide and open; stems fistulose or not; roots various, elongated to short and fleshy.
      6. Racemes narrow throughout, the pedicels mostly no longer than floral spurs (or the lowest flowers held near the stem on upright pedicels); plants (exc. *D. andersonii*) with rather short, fleshy roots, growing in sites that are wet early in the season.
        7. Roots elongated, branching, woody; stems glabrous below inflorescence; plants of sagebrush desert and dry, open forests. Species of central and southeastern Oregon.....*D. andersonii*
        7. Roots clustered, short and fleshy, not much branched; stems sometimes puberulent throughout; plants of meadows and other sites wet early in the season.
          8. Stem leaves numerous, crowded, dimorphic (the lowest ones with much wider lobes than middle and upper ones); stems puberulent throughout. Species of central and eastern Oregon..
          .....*D. distichum* (*D. burkei* of *Flora of the Pacific Northwest*)
          8. Stem leaves well separated, gradually reduced in size from the base upward (or nearly all basal); stems glabrous in lower part or puberulent throughout.
            9. Inflorescence axis usually glandular-puberulent; leaves mostly near base of stem, the lowest green at flowering time; lower petals with hairs in a central tuft. Species of central and eastern Oregon.....*D. depauperatum*
            9. Inflorescence axis not glandular; leaves well distributed on stem, the lowest usually brown and withered at flowering time; lower petals long-hairy on blade surface and margin. Species of the Columbia River Gorge area, Wasco Co. to Puget Trough of southwestern Washington.....*D. nuttallii*
      6. Racemes more open, some of the pedicels spreading and longer than floral spurs; roots elongated and woody to short and fleshy; habitats various.
        10. Roots elongated, branching, sometimes woody or ropy (divided lengthwise into anastomosing cords).
          11. Plants up to 7 dm tall and with stems sometimes fistulose; fruiting pedicels strictly erect. Species of dry sites in sagebrush desert, woodlands and forests east of Cascade Range; intergradent with *D. nuttallianum*.
          .....*D. andersonii*
          11. Plants often >7 dm (in 1 species); fruiting pedicels spreading to ascending. Species of moist sites in meadows and forests in the Cascade Range and westward.
            12. Plants 5-20 dm tall; stems stout and fistulose; sepals 15-25 mm long. Species of moist shady woods and stream banks, mostly below 2000 feet elevation.....*D. trolliifolium*
            12. Plants <5 dm tall; stems slender, not fistulose; sepals <18 mm long. Species of cliffs, talus, moist meadows, mostly above 3000 feet elevation in the Cascade Range (lower in Columbia River Gorge); extensively intergradent with *D. menziesii*.....*D. glareosum*
        10. Roots short and fleshy, not much branched, often swollen and tuber-like, not ropy.
          13. Largest leaves with 3 oblanceolate lobes (lower 2 lobes often again split 2/3 of way to the petiole), the lobes usually with 3 triangular teeth at the tip. Species of coastal Curry Co., south to California; intergradent with *D. menziesii* and *D.nuttallianum*.....*D. decorum*
          13. Largest leaves more complexly lobed with more numerous or deeper divisions, some of the lobes and teeth often linear; plants not restricted to coastal Curry Co.
            14. Lower petals evenly short-hairy over most of the blade; upper petals white with bluish tip; plants up to 8 dm tall. Species of roadsides and fencerows in central Willamette Valley, mainly east of the Willamette River, from Clackamas to Linn Co.; also Saddle Mtn., Clatsop Co.; intermediate between *D. menziesii* and *D. nuttallii*.....*D. oreganum*
            14. Lower petals with hairs mainly concentrated in a tuft at center and base of blade; upper petals usually white (sometimes bluish at tip); plants <7 dm tall.
              15. Lower petals blue to purple, entire-margined to shallowly notched (notch up to ¼ the length of the blade, more deeply notched in plants of high Cascades, where species is intergradent with *D. glareosum*, and in Douglas Co. where intergradent with *D. nuttallianum*). Species of low to high elevations from Cascade Range crest westward and from Douglas Co. northward (rarely disjunct in Siskiyou Mtns.)
              .....*D. menziesii*
              15. Lower petals blue to purple or (in north-central Oregon) white with purple veins, deeply notched (notch ½ or more the length of the blade). Species of medium to high elevations, widespread east of the Cascades and in the Siskiyou Mtns., north to Douglas Co., where intergradent with *D. menziesii*.
              .....*D. nuttallianum*

A new regional flora

by Aaron Liston

Flora of Steens Mountain by Donald H. Mansfield. 2000. OSU Press. ISBN 0-87071-471-6.

Steens Mountain is well known to Oregon botanists, but apparently under-appreciated outside of the region. This is evidenced by the fact that Steens Mountain field trips offered for participants at the 1999 International Botanical Congress in St. Louis, and the 2000 Botanical Society of America meeting in Portland were cancelled due to lack of interest! This new flora should go a long way towards increasing the awareness and appreciation of this Oregon treasure.

Don Mansfield is a professor of biology at Albertson College of Idaho, and his *Flora of Steens Mountain* developed from the checklist and keys that he wrote for his Field Botany classes. The book describes 1,150 taxa (species plus subspecies / varieties) covering all plants known to grow on Steens Mountain and the surrounding basins (Alvord, Catlow and Harney). The flora also includes species "suspected" but not observed from this area and many plants known from adjacent areas. This expanded coverage, and the fact that Steens Mountain and the surrounding basins encompass much of the habitat diversity of southeastern Oregon and southwestern Idaho, makes the book useful across a much broader area than implied in the title. I have used it to identify plants from 50-80 miles away in northwestern Harney and eastern Crook County, and found that all of the encountered species were covered.

The flora begins with a comprehensive 27 page introduction that is well worth reading. In addition to material typically included (geography, geology, biogeography, vegetation), the introduction also covers "what makes a plant rare," the history of botanical exploration on Steens Mountain, and basic taxonomic information (how to use keys, make a plant collection, and botanical names). I was particularly impressed by the concise summary of three patterns of variation found in widespread Western genera occurring on Steens Mountain: 1) endemic taxa; 2) cases where interspecific differences (typically between a Sierra Nevadan and Rocky Mountain species) "break down" on Steens, and 3) plants that clearly belong to one species, but due to presumed introgression exhibit characteristics typical of a second species not present on Steens. This is a wonderful example of the synthesis that can result from a thoughtful floristic study, and it provides testable hypotheses for future systematic investigations.

Phoenicaulis cheiranthoides, *daggerpod, is a monotypic species found east of the Cascades in much of the west. On Steens Mountain it is found in rock outcrops at all elevations. Drawings on this page and page 18 by Jeanne R. Janish from Hitchcock et al. 1969,* Vascular Plants of the Pacific Northwest, *courtesy of University of Washington Press.*

Like *The Jepson Manual*, the *Flora of Steens Mountain* arranges the families in alphabetical order within ferns and fern allies, gymnosperms and angiosperms. However, it takes this trend one step further by not separating the monocots and dicots. The species nomenclature is also very up-to-date, incorporating names used in *The Jepson Manual* (e.g. *Cusickiella douglasii*, syn. *Draba douglasii*) and the most recent volume of the *Intermountain Flora* (e.g. *Pentaphylloides fruticosa*, syn. *Potentilla fruticosa*). In such cases, the more familiar synonym is given in the text. Unfortunately, the index is to genera only, and thus species cannot be looked up based on an older name. For example, if one does not realize that *Draba douglasii* is now placed in *Cusickiella*, one will search in vain for the species in the *Draba* account.

Approximately 25% of the species are illustrated by line drawings. Especially helpful are the details of diagnostic features of selected genera, e.g. *Cryptantha* nutlets and *Carex* perigynia. The species line drawings are from *Vascular Plants of the Pacific Northwest*, and thus intermountain plants are poorly represented. A total of 62 species are illustrated with color plates. Although the plates are attractive, they are neither numbered nor arranged taxonomically, and thus one must browse among 8 pages of photos to find a particular species.

The keys and descriptions are very "user friendly." The descriptions are brief, focusing on the diagnostic features of a taxon. In most cases, these provide enough information for confident identification. However, if you are using the flora outside of its circumscribed range, the limited descriptions may not be sufficient, and I would recommend consulting a second flora before attaching a name to a plant. Species that are only known from adjacent areas are clearly noted, providing targets for botanists eager to add new records to the flora.

This is the first complete regional flora for Oregon since Georgia Mason's 1975 *Guide to the Plants of the Wallowa Mountains of Northeastern Oregon*. Don Mansfield has done an excellent job of synthesizing his extensive field experience with the latest taxonomic findings, and presenting this information in a scientifically accurate and generally accessible format. *Flora of Steens Mountain* is an important contribution to Oregon botany.

This is one of two regional floras (*Flora of Mount Rainier National Park* will be reviewed in a later issue) published this year by the Oregon State University Press. The OSU Press is to be congratulated for publishing these two fine works, and is encouraged to continue to include floras in its offerings.

Two blocks continued from front page

common species of groundsel (*Senecio*) that was collected in the area and the data entered into the OSU Herbarium database.

I will be using very different methods for gathering plant records for each of these two blocks. I will be doing a fair amount of field work in Block 53 and will be sampling in all of its major habitats. We currently have 34 species lists for the block in the Atlas project files. All but three of these were made on very small parcels of land, most of which were remnant Willamette Valley prairie sites. There are no species lists for urban areas, roadsides in agricultural areas, or for a number of other habitats that occur in the block.

My approach for Block 78 will initially not be field oriented, but will rely on data gathered by the Forest Service and the BLM on their lands. Early in the process I will consult with Paula Brooks, who is the Oregon Plant Atlas Project Regional Coordinator for the area, and ask about sources of data. I will then be requesting species lists from vegetation plot surveys and other studies conducted by the agencies.

If I had to, I would guess that there are over 800 plant taxa in Block 53, only 374 of which have so far been recorded. Block 78 probably has many more, and I'll guess 1,000 taxa. I expect that a number of weedy species occur in both blocks, but many others will be found in only one or the other of them. I wouldn't be surprised if I found new records for the state. It will be interesting to see how work on the two blocks progresses over the next few years.

Online Oregon Flora Newsletter

This is the first issue of the *Oregon Flora Newsletter* to be posted on the OSU Herbarium website before paper copies have been mailed. Miko Nadel, who is also the Production Assistant for the newsletter, has recently made a number of improvements to the website. The online OFN can be viewed at **http://www.orst.edu/dept/botany/herbarium**. The site has additional information about the Oregon Flora Project and other activities of the OSU Herbarium and its staff.

Thanks

In Memoriam: Robert Ornduff (1932 - 2000)

The botanical world lost a dedicated friend when Bob Ornduff died September 22 in Berkeley. Bob was a native Oregonian who became an expert on the California flora. He was a former director of the University of California Botanical Garden in Berkeley. Bob was well-known in Oregon for his botanizing trips, his attendance at meetings and his visits to the OSU Herbarium. He wrote the Oregon Checklist treatment of the touch-me-not family (Balsaminaceae). He will be very much missed.

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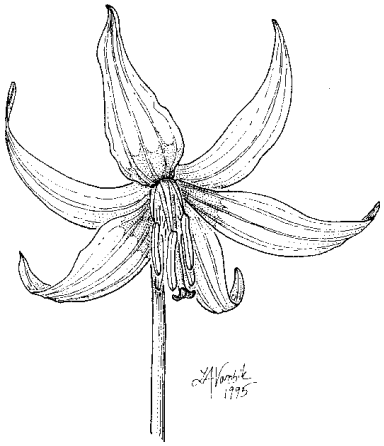


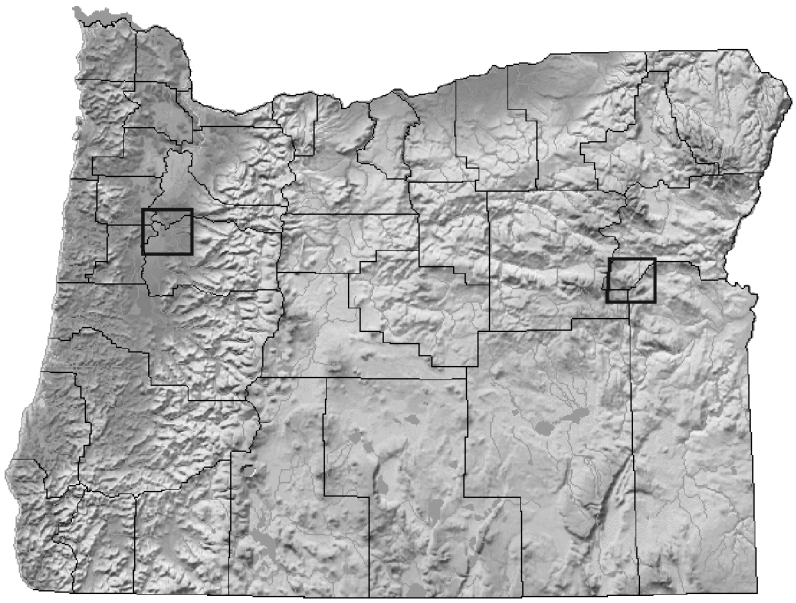
Challenge Grant See p. 17!

Did you know?

• The names *Delphinium nuttallii* and *D. nuttallianum* both honor the explorer and author Thomas Nuttall (1786-1859). The spelling "nuttallii" is the Latin genitive (possessive) case, hence *Delphinium nuttallii* is translated as "Nuttall's larkspur." "Nuttallianum" has the form of a Latin adjective (similar to words like Darwinian, Jeffersonian, Oregonian). Literally, *Delphinium nuttallianum* means "the Nuttallian larkspur." Nuttall collected the type specimens of both species while exploring the Oregon Territory in 1834-35.

• The name for daggerleaved rush, which has broad, flattened stems and leaves, has bounced between *Juncus ensifolius* and *J. xiphioides*. "Ensifolius" is derived from Latin words for sword and leaf and "xiphioides" is derived from Greek words for sword-like.

• The genus name *Olsynium*, proposed by Constantine Rafinesque in 1836, has recently been adopted for *Sisyrinchium douglasii* (purple-eyed grass) and related taxa. The word *Olsynium*, according to Rafinesque, means "hardly united" — alluding, perhaps, to the stamen filaments being fused only near the base, rather than fully united as in *Sisyrinchium*.



Atlas Blocks 53 and 78

Over the next few years we will follow progress on listing plant species in these two areas of Oregon.