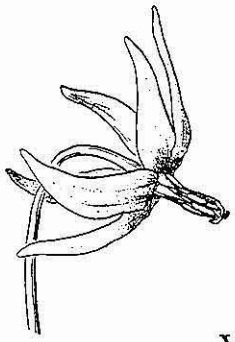

OREGON FLORA NEWSLETTER

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Requiem for a Laptop: Seeds of the Oregon Checklist Project

Karl Urban

I probably will never discard my old worn-out Zenith 286 Supersport laptop computer because it elicits so many fond memories of a wonderfully challenging year at Oregon State University: long days spent in the OSU Herbarium, long nights in the Kerr Library, the sprint to finish my project, and the exciting day I submitted my gargantuan, 18-pound, computerized "Preliminary Database for a Flora of Oregon" to Dr. Kenton Chambers. The date was June 9, 1989.

My involvement with the Oregon Checklist database project began in 1982, during my first summer as a botanical contractor for the Umatilla National Forest. That year, I decided to use the Forest Service's Alphanumeric Code Book and Checklist for the Flora of Region 6 (Pacific Northwest), to compile species lists for the areas I was surveying. However, I quickly discovered that the alpha code book (book of abbreviations of Latin names of plants) was very weak on species in the southern half of Oregon. Also, for

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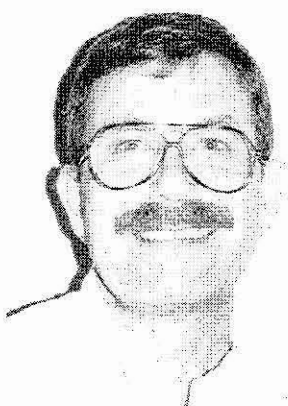

Karl Urban

Checklists of Oregon Plants

Scott Sundberg

Two articles concerning checklist projects are featured in this issue of the Oregon Flora Newsletter. The first, by Karl Urban, describes his motivation for compiling an Oregon checklist and the process he used for this huge task. Karl's Oregon checklist forms the nucleus for the checklist being developed by the Oregon Flora Project. It is being extensively modified, but much of the basic structure and content remain intact. The second article, by Mary Carlson, Lois Hopkins, and Mildred Thiele, provides the background of the *Douglas County Flora* project. A book, which lists the plants of the county, is a product of this ongoing project by four avid lay botanists (Mary Carlson, Joan Fosback, Lois Hopkins, and Mildred Thiele) from Roseburg. Mary reports that for many years they have been going out to the field nearly every Tuesday during the field season to make species lists for different areas in the county. Their latest publication is a list of 1418 species and their known distributions in 64 areas delineated in Douglas County.

There are numerous other checklists of Oregon plants. One, compiled by George Lewis from floras, covers the entire state and is similar to the one developed by Karl Urban, although it lacks synonyms and is not in a database. Charlene Simpson and the Lane County Checklist Group are actively working on a list for that county. We have received checklists for the Warm Springs Indian Reservation, the Umatilla, Wallowa-Whitman and Winema National Forests, the Vale District of the Bureau of Land Management, Steens Mountain, and Crater Lake National Park. Checkists of smaller areas, such as Fairview Peak, Iron Mountain, and the Oregon Dunes National Recreation Area also exist. All of these lists are currently being checked for new Oregon records. We will be searching for other checklists for various parts of the state over the next few months, so please let us know if you are aware of lists that we may not already have.

Douglas County Flora

Mary Carlson, Lois Hopkins and Mildred Thiele

It all started in the early sixties over an orchid. Lois Wesley Hopkins learned that Mildred Thiele thought a coral root was a member of the heath family. She called Mildred to correct the error and they discovered a mutual interest in their new-found love of wildflower identification. In 1967 they met Joan Fosback at the Glide Wildflower Show and then they were a team of three.

Their summer outings took them exploring the network of forest roads in Douglas County. Sometimes problems occurred—like what to do when they found a tree had fallen while they were up a dead-end road, or do you break the car window when you have locked the keys inside, or who moved that creek because it was not there on the map.

They met weekly to process and identify their specimens. With Peck as their only reference (no illustrations), they would attack the key, and hammer out each lead until they were all satisfied with the identification. The appearance of the first illustrated references were like manna from heaven!

The plant lists of special areas accumulated rapidly and their cataloguing became cumbersome. A workable system was needed. Roughly following watersheds, they divided the county into sixteen areas and each of those into four sub-areas. Incorporating this with their flora sightings they made a survey booklet for each area. Now by using initials for specific locations they could record their sightings for a trail, a camp, or a specific roadside area.

Left to right: *Mildred Thiele, Joan Fosback, Mary Carlson, Lois Hopkins.*
Photo: *Douglas County Museum Photograph*

In 1977 they were delighted with a new challenge. The Bureau of Land Management contracted with them to compile a *Para-Botanist Training Package*. It was also used for their first District Botanical Report. The county checklist was printed in full with the Threatened and Endangered plants indicated. The group continued to help with the T and E project.

The Douglas County Museum of History and Natural History has an excellent natural history department. In 1980 the group was invited to house their collection of botanical material at the museum and to establish a scientific herbarium. The Friends of the Museum were generous with cabinets, dissecting scope, scientific books and various supplies. Dr. Wagner and Dr. Chambers gave valuable suggestions. Now collecting and mounting started in earnest.

Then came the computer age! Mary Carlson had joined the group in 1982. The summer of 1987 Lois Hopkins asked Mary to baby-sit her computer and by summer's end they had a database. Later a second database was created. It contains the distribution of Douglas County flora, incorporating sightings in the sixteen areas and the four subareas.

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The Oregon Flora Newsletter is published quarterly by the Oregon State University Herbarium and the Oregon Flora Project. The Editor is Rhoda Love.

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Requiem, continued from front page

several years, I had been using hand-written index cards and a typewriter to compile my lists, and this required spending a tremendous amount of time.

As the 1986 season approached, I somewhat nervously decided that perhaps it was time to switch to a computer data base. So I traveled to Portland and bought my first computer, an IBM-compatible, and taught myself to use it. That field season I found to my delight that I could return from the field after completing a survey, type in the alpha codes of the species I had encountered, and let the computer print the final species list. It was a pleasant race to see whether the computer would finish printing the list before or after I had finished showering!

Once I had sampled the power of computer technology, I began to be haunted by the desire to update the entire alpha code and checklist so it would be comprehensive for all of Forest Service Region 6 as well as being taxonomically current and academically accurate. At the time, I felt willing to take on this project, even if ultimately I might be the sole user.

In 1988, I applied for a long-overdue sabbatical leave. I had spent twenty years as an instructor at Blue Mountain Community College and recognized the need for a year of refresher studies at Oregon State University, where my wife would also be completing her bachelor's degree. So, I proposed to Dr. Kenton Chambers that while taking course work, I might also compile the checklist database. He agreed to "coach" me through this project if I obtained the sabbatical leave and was accepted as a graduate student at the University in the fall. It all came to pass.

Little did I know just how time-consuming the project would be, nor had I any idea that I would have to purchase my own Zenith portable computer to make it happen. I had academic commitments at OSU which were dictated by the conditions of the sabbatical leave, and fall quarter I found little time to work on the database. Winter quarter, however, more of my credits were dedicated to my project and it began to flourish. On a daily basis I cross-checked synonyms and regional and national codes, attempting to reconcile all valid species names in the published Floras for Oregon and Washington. I reviewed herbarium specimens and literature, attempting to estimate geographic distributions, recording it all in the memory of my little Zenith.

But as spring approached, I realized that I had to shift to an even higher level of diligence if I was going to finish. So, my final quarter I enrolled for an early morning section of immunology and then retreated to the herbarium for the rest of the day. Thus I went from antibodies to *Zauschneria* in one term! On June 9, 1989, I beamingly presented Dr. Chambers with my cumulative efforts, thinking to myself as I did, that it might serve as a catalyst for working on a Flora during his retirement years. Five days later I was back home in eastern Oregon.

Later that summer I met Brad Smith, a Forest Service ecologist, who had dealt in southwestern Oregon, with the problem of inadequate alpha codes and incomplete floristics. He suggested that we work together to enlarge the database so it would update archaic species names to currently valid names and codes. So I began to work nights and weekends to replace invalid names which I had earlier eliminated at OSU.

I changed jobs in 1991, leaving Blue Mountain Community College to become the Umatilla National Forest's first Forest Botanist. The new job left me with virtually no time to spend revising the database. So, although I desperately wanted to incorporate the changes proposed in the Jepson Manual, I reluctantly put my project to bed, realizing that the opportunities that had existed in 1988-89 at OSU (herbarium, library facilities, and professional direction) were never to be mine again. However, the hope that Dr. Chambers would, indeed, use my work in his retirement lingered. Somehow, I just couldn't picture him as a passive retiree.

In February of 1994, shortly after the University of Oregon Herbarium had been moved to OSU, I received a call from Dr. Chambers: "We would like to use your database..." In a state of shock I mumbled something about, "I'll be in Corvallis in March. Could I come a day early and meet with your group to make arrangements?"

I couldn't conceal my glee. My efforts, imperfect as they may have been, were to serve as one of several catalysts that would help the Oregon Checklist and Flora projects get under way. My work is in good hands now, as Oregon's professional botanical community revises and builds upon a foundation I helped initiate. I am ecstatic that my work was not in vain!

So I probably won't part with the old Zenith laptop that served me so well during that wonderful year at Oregon State. It collects dust in my attic, but I am certain that at the very edge of its overstuffed hard disk are the last words that ever flowed through its silicon veins: "A Preliminary Database for a Flora of Oregon, Presented to Dr. Kenton Chambers in Partial Fulfillment of the Requirements for Botany 505, Oregon State University, June 1989."

Douglas County Flora, continued from page 6

The group is presently computerizing existing field checklists for specific sighting locations in each of the 64 subareas. Their third publication *Flora Distribution Survey* was another computer challenge.

To date, this group has published three flora distribution surveys and they have 2450 specimens housed in their collection. They may be Little Old Ladies In Hiking Boots but they also have their sights on the future and are having a good time getting there!

Did you know?

• *Filipendula occidentalis* (Queen-of-the-forest, family Rosaceae), a species endemic to coastal northwestern Oregon, has no close relatives in North America. It is morphologically very similar to *Filipendula camtschatica*, found in northern Japan, the Kurile Islands, and Kamchatka, Russia.

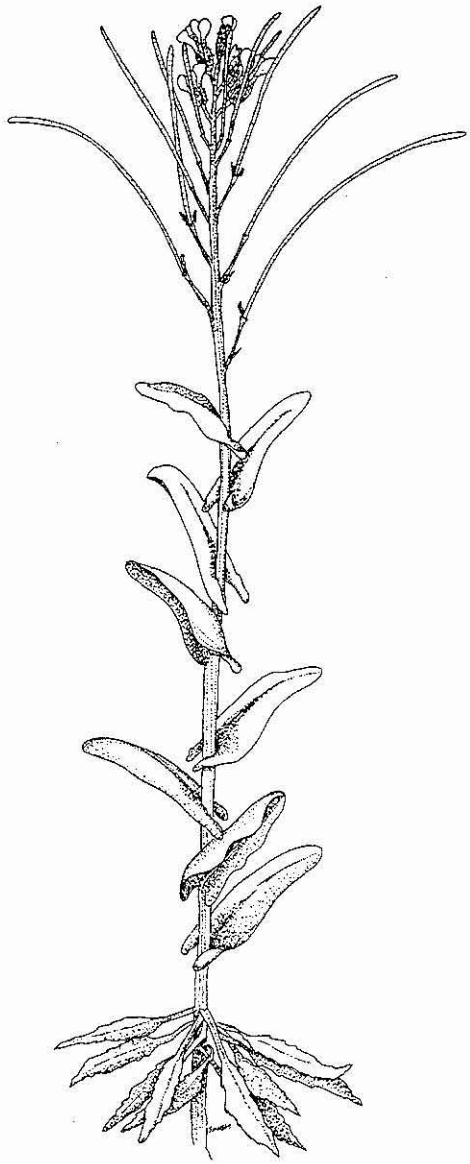
• Several subtropical plant species were collected in old ship ballast (soil and gravel used to weigh down ships) dumping grounds around Portland in the early 1900s. These may have lasted only one growing season, perishing in cold winter weather.

• *Claytonia* (*Montia*) *sibirica* (candy-flower) does not occur in Siberia, despite its species name. The closest it comes to the Asian mainland is on the Commander Islands, a westward extension of the Aleutian Island chain.

• *Cirsium arvense* (Canada thistle) may have been first introduced into Marion County, Oregon around 1872 "when a man bought a new separator [farm machine] from the East. The spot on which the machine was set up and first run was found to have a number of fine Canada thistle plants the next year" (Craig 1892, Oregon Agricultural Experiment Station Bulletin # 10)

• There are no published illustrations for many Oregon plants, for example *Arabis sparsiflora* var. *atrorubens* (sicklepod rockcress, illustration at right), drawn by Susan Massey for an in-house field guide of rare plants of the BLM Prineville District.

Cover illustrations of *Erythronium oreganum* by Jeanne Janish, taken from Hitchcock et al. 1969, *Vascular Plants of the Pacific Northwest*, courtesy of the University of Washington Press.



Arabis sparsiflora var. *atrorubens*
sicklepod rockcress

Duckweeds Wanted!

While looking through specimens of Oregon Lemnaceae in the herbarium, I discovered that we had fewer than 5 specimens for 10 of the approximately 13 species of duckweeds (*Lemna, Spirodela, Wolffia*) that have been found in the state. These are among the smallest flowering plants in the world and are poorly collected. If you see any species of the duckweed family (except water lentil, *Lemna minor*), please send material to me in a moist paper towel inside a sealed plastic bag. I will provide an identification, and you'll be helping the Oregon Flora Project! - Scott Sundberg

Your Donations Help!

Private donations to the Project so far have ranged from $10 to $350. A $10 donation defrays the cost of the newsletter for three people for one year. This issue of the *Oregon Flora Newsletter* has been produced using Aldus Pagemaker, which was purchased with one contribution of $100 that was matched by an employer. It took much less time to put together than the first issue, which was cut and pasted, and this gave us a lot more time for working on the Project. Thanks! Your continued contributions, from $10 up, help keep the Oregon Flora Project running. Matching donations, which are available from many Oregon employers, typically double the amount. The following have made donations to the Oregon Flora Project:

Have you seen these plants?

As we work on the Checklist, we turn up herbarium specimens of plant taxa that are known from only a single locality in Oregon. As an occasional feature of the Oregon Flora Newsletter, we will be listing these plants and mapping their approximate localities on the back page. If you are aware of populations of any of these, or would like to check to see if the plants still exist in their recorded locations, please contact us. We can provide full label data from the specimens in the Herbarium.

Oregon Flora Project News

Scott Sundberg

The past three months have been an active period for the Oregon Flora Project. In January we received a generous grant of $2000 from the Native Plant Society of Oregon. Other notable activities included formation of the Checklist Advisory Board, planning for an Oregon vascular plant atlas, invitations to outside contributors to the Checklist, and work on the Checklist draft. Several botanists from outside the Checklist group are preparing treatments of families, and most families have been assigned.

The Checklist database now has 4349 accepted taxon names (species, subspecies, and varieties) and 868 synonyms, and continues to change nearly daily. The number of accepted taxon names has decreased over the past few months, partly due to the removal of redundant entries and general cleaning up of the list, but the number of synonyms has increased with the submittal of treatments of several small families and 51 genera of Asteraceae.

The Checklist Advisory Board has been recently formed. People on the Board will help primarily by reviewing draft treatments in the Checklist, or will be involved in the project in other ways.

Meetings have been held to explore possibilities of producing an atlas of Oregon vascular plants using a database of locality information. We have approached the Douglas County flora group and the Lane County checklist group and several individuals to see if there is interest in such a project. Although details of the project have not been worked out, the response has been generally positive. A tentative database structure has been developed, and methods for gathering data are being explored.

To be added to our mailing list (if not already on it):

Name _____

Address _____

_____

_____

Phone _____

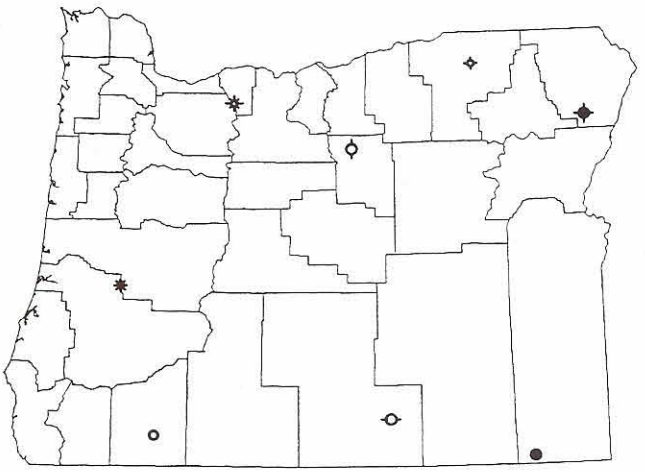
E-Mail _____

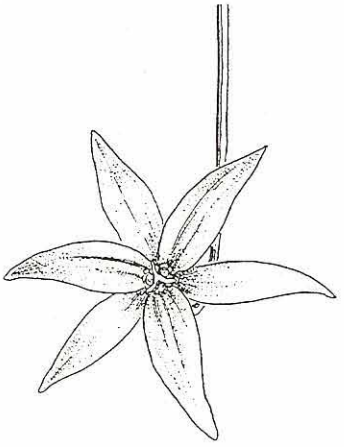
Would you like to make a donation?

Tax-deductable donations can be made to the Oregon Flora Project by sending a check made out to the Oregon State University Foundation to Scott Sundberg at the address on page 6. Please note on the check that it is for the Oregon Flora Project. Your donations pay for newsletter supplies, software, and student wages. They go a long way.

Have you seen these plants?

- *Petasites frigidus* (L.) Fr. var. *nivalis* (Greene) Cronq. (alpine coltsfoot)
- *Helianthella californica* A. Gray var. *nevadensis* (Greene) Jeps. (California false sunflower)
- *Helianthella quinquenervis* (Hook.) A. Gray (nodding helianthella)
- *Lygodesmia juncea* (Pursh) D. Don ex Hook. (rush skeletonplant)
- *Malacothrix stebbinsii* W.S. Davis & P.H. Raven (Stebbins' malacothrix)
- *Microseris douglasii* (DC.) Sch. Bip. ssp. *douglasii* (Douglas' microseris)
- *Rafinesquia californica* Nutt. (California chicory)
- *Taraxacum ceratophorum* (Ledeb.) DC. (horned dandelion)





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