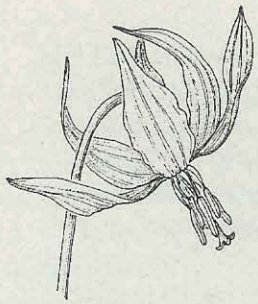

OREGON FLORA NEWSLETTER

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Wilbur Bluhm
horticulturist, photographer, conservationist

by Camille V. Tipton

Wilbur Bluhm is at home in the Oregon wilderness. The now retired professor of horticulture has traveled to all corners our state to photograph more than 1,500 plant species native to Oregon and has given many programs on native plants to audiences throughout the Pacific Northwest.

He is also an active volunteer with the Oregon Plant Atlas Project, having contributed more than 65 plant checklists and suggested several new taxa to the Oregon Vascular Plant Checklist.

"The historical landscape and flora of the Willamette Valley has also been a special interest of mine," he said, adding that nursery production and landscape use of Northwest native plants is a favorite topic.

Wilbur formerly worked as an Extension Agent for the University of Nebraska and for Oregon State University. He completed his Bachelor of Science degree

See Wilbur, page 8

Wilbur and Mary Bluhm

Project news:
Asteraceae checklist to be released this fall

by Scott Sundberg

Checklist project: We have been working on the Checklist Project since 1994. As OFN readers know, the Checklist is a list of all native and naturalized vascular plants in Oregon. We are now planning to release the Checklist in stages, starting with the Asteraceae. Keep an eye on our web site this fall for an announcement (see address bottom of page eight).

Other aspects of the Checklist continue to progress with many draft treatments of genera submitted over the past few months. We now have advanced drafts for about 30% of Oregon plant taxa. Treatments have so far been submitted for portions of 45 families, including all of the Cyperaceae, Polemoniaceae, Lamiaceae, Crassulaceae, Campanulaceae and Rhamnaceae and most of the Asteraceae, Fabaceae, and Hydrophyllaceae.

Countless additional improvements have been made to the rest of the list. Rhoda Love has nearly completed a thorough review of common names. We continue to add taxa, especially range extensions from neighboring states and cultivated plants that have become naturalized. The Checklist now has 4428 accepted names and 2048 synonyms.

Flora project: Our long-range goal is to write an illustrated Flora of Oregon and to make it available in both printed and digital forms. The electronic Flora will be fully integrated, linking the checklist, keys and descriptions, illustrations, and the electronic Atlas. Although we are focussing our efforts on the Checklist and Atlas at this time, we are also building the infrastructure for the Flora itself. Rhoda Love, Gil Voss and others have been systematically searching scientific journals for articles pertaining to Oregon plants; the OSU herbarium is actively being curated to make work on the Flora more efficient; and the herbarium has enhanced its computer facilities. In the fall we will begin writing the Contributors' Guide for the Flora.

Atlas project: Spring is the time for being out of doors, and the weather in Oregon has been wonderful

See Project news, page 8

Wilbur, from front page

at the University of Nebraska and his Master of Science at Purdue University. He also attended the University of Illinois and Oregon State University for post-graduate studies.

Wilbur says that although he has never been in the nursery business, he has enjoyed working with plant growers and contributing to the field.

"As a professional horticulturist, I have had the opportunity to work with this industry in Oregon since it was small and have seen it become one of Oregon's largest agricultural enterprises," he said. Most recently, he has acted as a consultant to growers and to the Association of Nurserymen's Oregon Garden Project.

Currently, Wilbur works as the secretary-treasurer of the International Plant Propagator's Society (Western Region), and teaches horticulture part-time at Chemeketa Community College in Salem. He is beginning his fourth term on the Berry Botanic Garden board in Portland and is a member of the advisory panel to the Cecil and Molly Smith Garden in St. Paul, Oregon.

Furthermore, Wilbur helped establish the Willamette Valley Chapter of the Native Plant Society of Oregon which was one of the first chapters to form outside of Portland in 1977. He later became Chapter President, then state Vice President. He has led many field trips and worked on a variety of NPSO projects. Wilbur's conservation activities include organizing the Salem Beautification Committee, supporting the Nature Conservancy and the Delbert Hunter Arboretum and Botanical Garden, a native plant garden in Dallas, Oregon. His involvement with land use activities led to his receiving the US Department of Agriculture Superior Service Award in 1974.

A number of people inspired Wilbur throughout his life including former professors Dr. Carl Rosenquist, botany professor at the University of Nebraska and Dr. Don Paarlberg, at Purdue University.

"It may seem like a cliché, but my parents certainly had a profound effect upon my life," he said. "And my wife, Mary, has encouraged and supported me through thick and thin and in so doing has been most influential in my life."

Wilbur met Mary Brunzell at the University of Nebraska and they married in 1953. They have three children and six grandchildren, all of whom live in Oregon.

The Oregon Flora Newsletter is published three times a year by the Oregon State University Herbarium and the Oregon Flora Project. The Editor is Rhoda Love and the Production Assistants are Camille V. Tipton and Alisa Anderson.

Address correspondence to:
Scott Sundberg, Coordinator, Oregon Flora Project
Department of Botany & Plant Pathology
Oregon State University • Cordley Hall 2082
Corvallis, OR 97331-2902
E-mail: sundbers@bcc.orst.edu
(541) 737-4338; FAX (541) 737-3573
http://www.orst.edu/dept/botany/herbarium

Project news, continued from front page

most days this season. Lists are being compiled for the Atlas project by a number of individuals who have adopted blocks. The Native Plant Society of Oregon High Desert and Emerald chapters have scheduled field trips this summer for making Atlas lists. Meanwhile, back at OSU, Kelly Huynh and Alisa Anderson have been processing and entering data. So far 41,000 records have been entered from 314 species lists. We have recently received hundreds of lists from Jackson and Josephine counties that were gathered from BLM files and photocopied by Dick Straw.

Symposium volume published

Conservation and Management of Native Plants and Fungi—Proceedings of an Oregon Conference on the Conservation and Management of Native Vascular Plants, Bryophytes, and Fungi is now available from the Native Plant Society of Oregon.

This volume was edited by Thomas N. Kaye, Aaron Liston, Rhoda M. Love, Daniel L. Luoma, Robert J. Meinke, and Mark V. Wilson and contains a foreword by Reed F. Noss. The book contains 40 papers by symposium contributors.

To order, send a $25 check or money order to NPSO, 804 Jefferson Avenue, La Grande, Oregon, 97850.

As different as apples and pears

by Rhoda Love

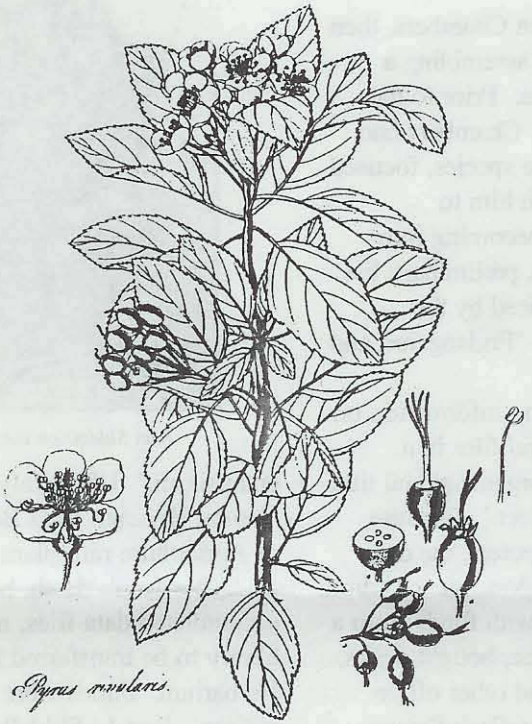
Working on the pome-fruited members of the Rose Family for the Oregon Vascular Plant Checklist, I ran into a controversy which has apparently been brewing (like apple cider?) since pre-Linnaean times: namely, should apples and pears both be placed in the pear genus, *Pyrus*? My immediate task in this case, was to provide a name for the wild crabapple of the Pacific Coast. This is our pretty little dark-fruited tree which Peck (*A Manual of the Higher Plants of Oregon*) called *Pyrus diversifolia* Bong., and Hitchcock (*Vascular Plants of the Pacific Northwest*) called *Pyrus fusca* Raf.

Abrams (*Illustrated Flora of the Pacific States*) and Thomas J. Rosatti (in Hickman, *The Jepson Manual: Higher Plants of California*) both placed the crabapple in *Malus*, the apple genus, calling the species *Malus fusca*. (Raf.) C. Schneider.

Pyrus L. was the genus name given to both apples and pears by Linnaeus in *Genera Plantarum*, 1754; while *Malus* [Tourn.] Mill. was the pre-Linnaean name used for the apple genus by Tournefort and later adopted by Miller in the 8th edition of his immensely influential *Gardener's Dictionary* in 1768.

Presumably Peck and Hitchcock, like Linnaeus, the great classifier, felt that the similarities between apples and pears were more important than the differences. There is no doubt that the two groups are rather alike with their fleshy pomes and similar spring blossoms.

On the other hand, I found that the great American botanist and horticulturist, Liberty Hyde Bailey, although originally in the single-genus camp (*Manual of Cultivated Plants*, 1924), broke away and put apples in *Malus* and pears in *Pyrus* in the 1949 edition of this work.



An 1833 drawing of Malus fusca *(then called* Pyrus rivularis*) from* Flora Borealis-Americana or The Botany of the Northern Parts of British America, *by William Jackson Hooker, LL.D, F.R.A., and L.S. This drawing was done from a collection by David Douglas who saw it " ... on the banks of streams near the ocean, from the mouth of the Columbia northwards." Hooker notes that the Chinook Indians called the edible fruits Pow-itch.*

In a charming article in *Gentes Herbarum* (1949 8:40) available in the OSU library, Bailey lists six morphological features which he feels can be used to distinguish apples from pears. Several of these are: apple blossoms are mostly borne in umbels and pears in racemes; apple fruits lack stone cells while pear fruits have them; apple buds and young growth are tomentose while pear growth is mostly glabrous. Another distinction noted in Bailey's Manual and also in *Flora Europaea* (1968) is that *Malus* styles are usually connate 1/3 to 2/3 their length while *Pyrus* styles are mostly free.

M. N. Westwood, Professor Emeritus of Horticulture at Oregon State University recently told me that, under normal circumstances, grafts and hybridizations between apples and pears fail (although they have been accomplished using certain strains of the fruit and specific techniques). The general incompatibility of the groups seems to add credence to the agument that they differ genetically.

The modern tendency to separate apples and pears continues to the present where recent papers by experts on the pome-fruited rose family members (for example, Phipps, 1990, *Canadian Journal of Botany*, 68:2209; and Dickson, 1991, *Systematic Botany*, 16:363) split the two groups into *Malus* and *Pyrus*. I have by no means had the opportunity to study the world's many species of apples and pears, and must rely on experts who have noted differences that separate the two genera.

This has all been rather a long way to go about stating for OFN readers that, for the Oregon Flora Checklist, I have been convinced by Bailey, the editors of *Flora Europaea*, Phipps, Dickson, and Rosatti in the *Jepson Manual*, and have decided to call our native Oregon crabapple *Malus fusca*.

Jean Siddall

(1930-1997)

It is with great sadness that we report the death of Jean L. Siddall, who died on May 3, 1997 of complications from a brain tumor.

Jean will be remembered for a great many important activities, but perhaps the most significant is her contribution to our present knowledge of Oregon's rare and endangered plants.

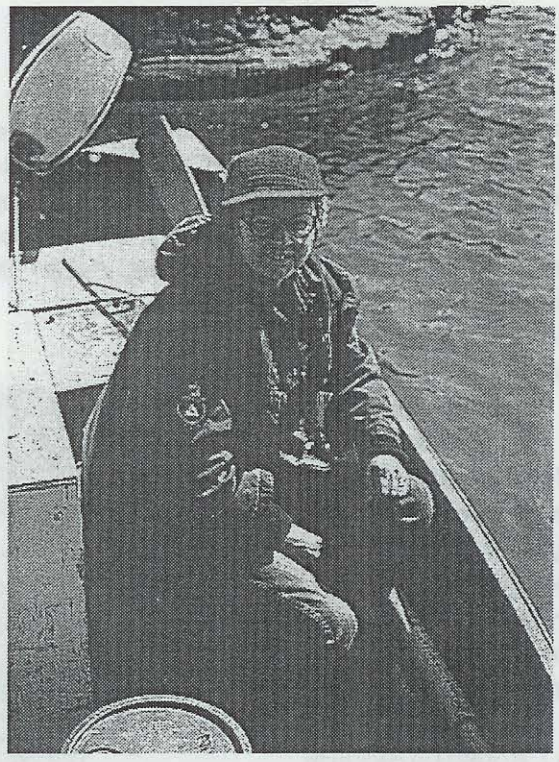
In the early 1970s Jean contacted Ken Chambers, then Curator of the Herbarium at OSU, about assembling a comprehensive list of Oregon's rare plants. Prior to the US Endangered Species Act of 1973, Dr. Chambers had prepared a preliminary list of Oregon rare species, focused on endemics. Jean subsequently met with him to incorporate species which she felt were becoming rare through threats from human activities. A preliminary list which the two put together in 1973 was used by the Smithsonian Institution in its 1978 book, "Endangered and Threatened Plants of the United States."

Jean then took on the task of gathering information on Oregon's rare plants. She set up her central files in a basement office in her home, under the organizational title "Oregon Rare and Endangered Plant Project." Because these were the days before personal computers, the data files were typed by her and her major helpers, one of whom was Sue Vrilakas. Sue recalls that Jean, with funds from a contract with the Fish and Wildlife Service, bought desks, file cabinets, typewriters, punch cards, and other office materials and hired Sue, Bonnie Brunkow, Rick Brown, Carolyn Wright, and Lois Kemp as assistants.

Ken writes: "Jean was a superb organizer and was the perfect person to lead the cooperative effort that was required in preparing an endangered species list. The people involved with her in the early stages consisted of only a few professional botanists plus a corps of eager self-trained amateur naturalists, principally members of the Native Plant Society of Oregon, The Mazamas, The Rock Garden Society, and The Nature Conservancy."

Beginning in 1976, Jean organized the first of four rare plant conferences, at which participants responded to a proposed list of Oregon endangered taxa by writing observations about rarity and threats on worksheets. Data from these, plus detailed sighting reports, were transferred by Jean's group to punch-cards coded by taxon and geographic region. Nowadays such information is kept in computerized databases like that at The Natural Heritage Program, but Jean Siddall and her small corps of workers did it all by hand in the 70s and 80s.

Recently, remembering those days, Sue Vrilakas wrote: "Jean had a combination of intelligence, curiosity and focus, topped off with incredible amounts of energy and enthusiasm." Ultimately Jean's work led directly to the Natural Heritage Data Base and the Oregon Department of Agriculture rare plant program.



Jean Siddall on the Stikine River, southeast Alaska.

After Jean's death, her family arranged for her accumulated data files, maps, punch cards, and reference library to be transferred to the Oregon State University Herbarium. Funds were also donated by the family to initiate a Jean L. Siddall Memorial Botany Scholarship in the OSU Department of Botany and Plant Pathology, to support research projects using the files.

At a memorial service for Jean, Ken Chambers emphasized how important it is that we remember Jean's pioneering work in the protection of Oregon's rare plants. He reminds us that many of today's students are too young to be aware of her reputation as a leading Oregon plant conservationist. However, Jean will be remembered far into the future because her research materials are available to the Oregon Flora and Atlas projects at OSU and a fund has been set up to help integrate her data with present research.

In closing Ken writes: "As I told those who attended her memorial service, when it comes to protecting and conserving Oregon's endangered flora, the plain facts of the matter are: Jean was the pioneer; she initiated the work, and she made it all happen."

Donations to the Jean L. Siddall Memorial Botany Scholarship can be made to the Oregon State University Foundation, 517 Snell Hall, Corvallis, Oregon 97331.

What have we learned?

Over the past year we have learned a great deal about Oregon plants from newsletter readers and others. Some information has even come via the Internet, including discussions in the Oregon and Washington Native Plant Society lists.

Several people have reported new plant records or range extensions for Oregon. Frank Callahan II sent us information on 26 taxa. Wilbur Bluhm reported several escaped cultivated plants, many of which had not been included in the Checklist. Examples are *Caltha palustris* (yellow marsh marigold), *Prunus avium* (sweet cherry), *Corylis avellana* (filbert or hazelnut), and *Prunus laurocerasus* (cherry laurel). *Sedum album* (white stonecrop) was found outside of cultivation by Bill Winner. Many other new records have been discovered in the herbarium at OSU.

We have learned that certain words, specifically "squaw" and "scotch," are offensive to some people and have consequently removed them from the Checklist.

We have discovered that we have very few records of plants from Columbia County, in northeastern Oregon. We haven't received any species lists from that county and no sedge (*Carex*) specimens from there have been found in the OSU herbarium. Other genera have not been checked, but this suggests that Columbia County has been floristically overlooked.

Thanks!

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

Botany and Birds, Too?

Oregon botanists, coordinated through the Native Plant Society, are visiting all corners of the state as part of the Oregon Plant Atlas Project (see OFN April 1996, February 1997, and this issue). Oregon birders and ornithologists also have organized a statewide atlas project. We are developing lists of birds seen in each of 430 geographic units.

If you are traveling this summer to rural areas as part of the Oregon Plant Atlas Project, and can recognize even a few species of birds, the Oregon Breeding Bird Atlas Project would like to know which bird species you encounter. If you notice a nest, that is useful information to note as well. Please send your lists by September 1 if possible. Include general location, for example distance from nearest town, or township-range-section. Send information to: Oregon Breeding Bird Atlas Project, POB 2189, Corvallis, OR 97339. Thank you for your bird sightings. -- *Paul Adamus*

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

Name _____

Address _____

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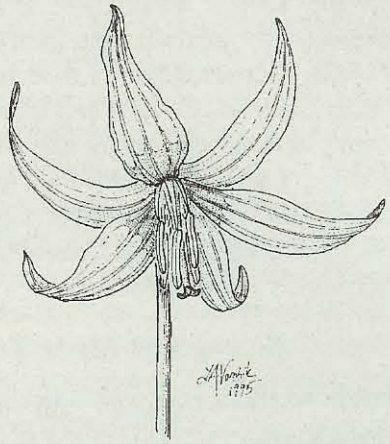
Phone and/or e-mail _____

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 8. Please note on the check that it is for the Oregon Flora Project. Your donations go primarily toward newsletter expenses and student wages.

Oregon Flora Project
Dept. of Botany & Plant Pathology
Oregon State University
2082 Cordley Hall
Corvallis, OR 97331-2902



Did you know?

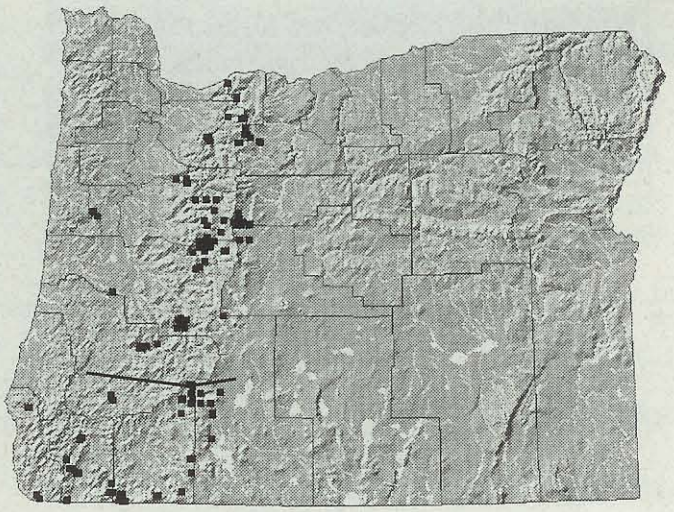
• A number of differences between apples (*Malus*) and pears *(Pyrus*) are reviewed on page nine of this issue. Several of these and others were kindly provided by Kim Hummer of the National Germplasm Repository, Corvallis, including the fact that apples float and pears sink!

• After many years in the field, some botanists may take a humorous approach to intermediate plant forms. One such was apparently Elmer Ivan Applegate (1867-1949) known for his *Flora of Crater Lake* and his monograph of the genus *Erythronium*. In his later years, Applegate was a Ranger-Naturalist at Crater Lake National Park and once reputedly remarked that when the seasonal employees finished their regular chores, they should be put to work "rooting out the intermediates that adversely affect our keys."

• According to the draft Oregon Checklist, Asteraceae is the largest family in Oregon and *Carex* the largest genus.

Sightings of hairstreak butterfly (*Habrodais grunus*) in Oregon

(line indicates the division between northern and southern types)



H. grunus is currently believed to consist of two subspecies. The northern type feeds on chinquapin (*Chrysolepis chrysophylla*), and the southern on canyon live oak (*Quercus chrysolepis*). We hope to overlap butterfly distributions such as this with Atlas project maps for the host plants.

Data from the Leptronics butterfly database by Jeffrey Miller (OSU); base map by A. Jon Kimerling (Atlas project).