In 1993, they completed a 53-page book documenting their collections, sorted by family, from Aceraceae to Zygophyllaceae–plants from every nook and cranny of the county. They admitted they hadn't yet found all of the plant taxa growing in Douglas County, but they certainly hadn't given up searching. In 1997, the group, still actively botanizing, found western wahoo (*Euonymus occidentalis*), a common shrub in California but not previously recorded in Douglas County.

Although the four modestly described themselves as the "Little Old Ladies in Hiking Boots," it would be a mistake to underestimate their audacity and tenacity. They didn't sit around waiting for others bring plants in for identification. As hands-on researchers who combed every corner of the county looking for plant specimens, they had more than a few stories to tell about their wild adventures.

Mildred said she once fell into a "real pothole" while walking in the woods in search of plants. The hole was the leavings of a marijuana grower who had been growing his illicit plants in a large bucket. "We figure the grower must have pulled up the bucket and left the hole," she said. Mary said once she was so busy looking at a plant she walked right off a cliff. Lois ventured out on some mossy ground, only to find herself up to her neck in a bog. "I can't tell you how many tires we've changed," Mildred said, and noted that her husband was not too happy about her ruining a dual muffler on her car during a single outing (punctured by two separate rocks in the road). A variety of challenges were overcome: what to do when a tree fell across the road, trapping them at the dead-end; how to break the car window after locking the keys inside; or getting lost (who moved that creek because it was not there on the map?). They also remembered driving through an open gate in a mountainous area and upon returning, found the gate closed and locked. On another adventure, they almost got stuck on a narrow logging road miles from civilization in a sudden snow storm.

All four admitted to botanizing whenever and wherever they traveled. "You just can't help yourself," Joan said. The four met every Tuesday to process and identify their plant specimens. In the winter, they mounted and labeled the pressed plants and wrote the history of the finds made during spring, summer, and fall field work. In 1995, they published a book, *Flora Distribution Survey for Douglas County*, based on their field work from 1978 to 1993. When their work was incorporated into the Oregon Atlas Project (Oregon Flora Project), it became apparent that their contributions put Douglas County far ahead of other counties in cataloging the native flora.

In the late 1990s, the four admitted that age was a problem. Because they knew that someone had to eventually take over their work, they openly sought new recruits interested in "making a lasting worthwhile contribution to the botanical study of Douglas County."

Lois Wesley Hopkins, who turned a coral root question into a lifetime of botanical adventures, died on December 6, 2005, at the age of 94. The Glide Wildflower Show and the Douglas County Museum were very important parts of her life. Mildred Thiele was 91 when she died September 10, 2006. She was "still going strong" at the age of 90 when she donated nearly 5,000 color slides to OSU for the Oregon Flora Project. She had carried two cameras on her field excursions since 1982 and presented programs of her wildflower adventures to many organizations. In addition, she was an outstanding artist and especially proficient in watercolors. Mary Carlson so loved identifying plants that she could still identify most of them by touch after she lost her vision. She died on March 3, 2007 at the age of 86. Joan Fosback, now approaching 80, was unable to attend the 2007 NPSO annual meeting in Mosier. Members of the Umpqua Chapter will present the award to her in her home in Roseburg.—Sam Friedman, Umpqua Chapter, adapted from the Oregon Flora Newsletter and a News Review article by Bill Duncan.

Book Reviews

Common Plants of the Upper Klamath Basin

Sarah Malaby, editor. 2007. 272 pages. 464 color photographs, map, indices to scientific and common names. No ISBN. Oregon Native Plant Society, Klamath Basin Chapter and Rabe Consulting, paper.

This excellent guide pictures and describes 464 of the plants found in the varied habitats of Klamath County and adjacent areas east of the Cascade Range in southern Oregon and northern California. The Upper Klamath Basin, defined as the area drained by the Klamath River upstream from Copco Lake, ranges from an elevation of 2,600 feet at Copco Lake to the 9,495 foot summit of Mt. McLoughlin and includes Crater Lake National Park (the remnant caldera of Mt. Mazama) and Lava Beds National Monument. Both testify to the volcanic origins of the basin. Soils and habitats range from expanses of droughty pumice deposited by volcanic eruptions to the rich alluvial soils around the extensive marshes and lakes, from alpine to agricultural, from dense conifer forests to scattered juniper scablands, and from rocky outcrops to alkaline flats.

Common Plants of the Upper Klamath Basin is a remarkably helpful guide to the vegetation of this large and varied region, designed for the general user, though the plants are listed alphabetically by family rather than by flower color as in some popular guides. Each plant is given a halfpage which includes family name, scientific name, common name, and a color photo. Text describes the plant's characteristics in layman's terms, (none requiring even a hand lens), and measurements are given in inches. A brief description of habitat is followed by a readable short paragraph called "Notes" which might include information



on how to tell the plant from look-alikes, or where exactly to look for it, or information about its rarity or its use and toxicity. The book includes a few tantalizing teaser examples of ferns, horsetails, grasses, lichens, mosses, and blue-green algae (including Mare's Eggs, a colonial blue-green alga that forms leathery baseball-looking clumps in a several cold, clear springs around the basin). These teasers are a fine way to lure us flower-besotted users into an awareness of other plant and life forms.

In addition to the plant descriptions, brief features include an overview of the basin and a description of its habitats, a description of each plant family, a history of plant exploration in the area, and information on glowing native plants.

The cover photo (by Ron Larson) features Applegate's paintbrush, found by Elmer Applegate on Mount Scott in Crater Lake National Park, one of a number of species in the area first reported by him.

The photographs, by Michael Calonje, Ron Larson, Sarah Malaby, and Terry Spivey, are the heart of the book and are excellent and remarkably informative. Indeed, this enticing book has been difficult to write about because the photographs and notes kept snagging me to read further, discovering old friends and learning new and intriguing bits of information about each. The writing, and indeed the entire book, is straightforward, accessible and useful, a fine model for other such books.

-Connie Battaile, Siskiyou Chapter

Rare Plants of Southwest Oregon

by Linda Mullens and Rachel Showalter. 2007. 298 pages, illustrations, color photographs, bibliographic references and index. Medford District BLM and Rogue River-Siskiyou National Forest, Grants Pass Interagency Office, paper. \$15.

The most useful guide to identify much of the flora of southwestern Oregon is The Jepson Manual Higher Plants of California. This is because many Californian species reach their northern distribution limits in the region which is the northern periphery of the so-called California Floristic Province. The Jepson Manual has had to serve Oregon botanists because the floras and field guides to plants of the Northwest neglected the southwestern portion of the state, except for Peck's classic Manual of the Higher Plants of Oregon, last printed in 1961, and now very much outof-date. However, in the last two years, botanists and amateurs in the area have been cheered by the publication of three plant guides including Kozloff's "Plants of Western Oregon, Washington & British Columbia," Turner and Gustafson's "Wildflowers of the Pacific Northwest" and Kemper's "Wildflowers of Southern Oregon." Though the former two books deal with the entire Northwest, they include many species from southwestern Oregon. Kemper's guide describes briefly nearly 700 species from the region. And now a fourth guide has appeared: "Rare Plants of Southwest Oregon," by Linda Mullens and Rachel Showalter. What information does it present and how should it be regarded?

The new guide is modeled closely on a previous field guide, "Selected Rare Plants of Northern California," written by federal and state botanists and edited by G. Nakamura and J.K. Nelson, published in 2001 by the University of California Press. The formats of the two guides are nearly identical: similar size, ring-bound, each species on a pair of facing pages, brief descriptions of morphology and how to distinguish the species from similar ones, full-color photos, line drawings and a map showing distributions. The Mullens-Showalter book describes 142 taxa that grow in Jackson, Josephine, the eastern 3/4s of Curry and the southern edge of Douglas counties. The Nakamura-Nelson book describes 149 taxa found in the northern ten counties of California. The plants described in the Mullens-Showalter book are listed on ORNHIC Lists 1 and 2 (and have more or less equivalent status on BLM and/or FS lists). Those described in Nakamura-Nelson are mostly on CNPS List 1B. Sixteen taxa are common to both.

Of the 142 plant taxa described in Mullens-Showalter, 112 also grow in California with many common and widespread there. Only 26, including two known only from single collections and now thought extinct, are endemic to southwestern Oregon. (Completing the list are four other taxa that also grow in Washington, Idaho and elsewhere.) According to the Foreward, written by the Medford District Botanist, the species in the guide were chosen by the sponsoring federal agencies because they are on or proposed for inclusion on their "Sensitive" or "Special Status" lists.

Many species described in the guide are odd choices since they are widespread in adjacent and/or more distant states yet are not likely to be encountered in southwestern Oregon; examples include the microscopic, floating duckweed *Wolffia columbiana* found widely in North America, four of the nine included *Carex* species, the sedge *Scirpus subterminalis*, the swordfern *Polystichum californicum*, the pillwort *Pitularia americana*, and the adder's tongue *Ophioglossum pusillum*. Also odd choices are four species thought extinct in Oregon. In contrast, a number of included species are not rare though their distributions in the region are restricted: examples include *Arctostaphylos hispidula*, *Bensoniella oregana*, *Clarkia heterandra*, *Limnanthes gracilis* var. *gracilis*, and many serpentine endemics in the Illinois Valley.

Overall, the new guide book was designed "to help botanists working for federal agencies and their partners" identify species placed on federal and state lists. Thus, inclusion of many of the species may reflect certain legal concerns that require these species to be monitored. But amateur botanists and plant lovers often have other interests. So should they buy the new guide book? The botanical information therein is useful and convenient, and the color photos and line drawings are generally excellent. The Mullens-Showalter guide, especially when considered together with the Nakamura-Nelson guide, offers a valuable introduction to the many rare and interesting plant species that grow in the northern portion of the California Floristic Province. Their similar and efficient organization, particularly the ease of comparing plant distributions both within and among species, will be helpful to plan hikes and to think about how and why plant taxa grow where they do. But, unfortunately, like most other field guides, neither has much to say about the biology of the species: how they adapt to local habitats, how they are pollinated, if they are rare because they originated recently or because their habitats were degraded by human action or other causes.

-Leslie Gottlieb, Siskiyou Chapter

Introduction to California soils and plants: serpentine, vernal pools, and other geobotanical wonders

by A. R. Kruckeberg. 2006. California natural history guides 86. University of California Press, Berkeley (CA). 280 p. \$45.00 hardcover \$18.95 paperback

Why would an Oregon botanist be interested in this book? Any botanist should be interested in Professor Kruckeberg's lucid, well-illustrated account of why plants grow and evolve where they do as influenced by topography, geology, hydrology, and soils and their mineral constituents. How geology shapes plant life in the landscape is the focus of this book, using California's diverse geology and landforms as the example. Mount Whitney, the highest point in the contiguous United States at 14, 505 ft. is only 80 miles from Death Valley the lowest point in North America at -282 ft. Then there are the 6,000 or so vascular plant taxa, the book's other focus, that occupy habitats from coldest cold in alpine areas to hottest hot in deserts from soggy coastal rainforests to dry high desert steppes.

There are chapters on landforms and plant life, plants and their soils, serpentine soils (a Kruckeberg favorite), other strange plant-soil relationships (limestone, salt flats, bogs and fens to guano habitats), plant distribution over space and time (endemics, indicator species of soil types), and human influences (mining and exotic species) to add just a few of the examples. Excellent color photographs of plants and landscapes illustrate each chapter. Brief, easy to read tables summarize details, maps show places of interest, and diagrams illustrate complex concepts.

After the epilog there is "Exploring California's Geology and Plant Life" with maps and a list of places to go to visit "exceptional sites" that show how geobotany influences the state's plant life. The map on page 236, Unique California Soil Types, shows Mount Eddy east of Interstate 5, not west, a minor "oops" in such a wonderful book.

So why should an Oregon botanist buy Kruckeberg's book? Many Oregon soils and landforms are the same or similar, often with the same or different species and just as perplexing. Kruckeberg's book will help answer many geobotanical questions posed by Oregon's diverse landscape and rich flora.

(Dr. Arthur Kruckeberg was Dr Frank Lang's Major Professor for his Master of Science Degree in Botany at the University of Washington. The inscription in Lang's copy of the book reviewed here reads, "To Frank Lang, fellow naturalist and old friend. Art Kruckeberg." Lang is indebted and grateful for Kruckeberg's mentorship, tutelage, and teaching him the meaning of ubiquitous.)

-Frank Lang, Siskiyou Chapter

Pitcher Plants of the Americas

by Stewart McPherson. 2006. vii + 320 pages, 227 color photographs, 12 maps and drawings, glossary, metric:imperial conversion table, bibliography, index. McDonald & Woodward Publishing Company. ISBN 0-939923-75-0, \$44.95, hardcover; 0-939923-74-2, \$34.95, softcover.

This is an absolutely beautiful book, crammed full of exquisite color images reproduced with excellent resolution. All you have to do is let it fall open in your hands and you'll say, "I want it!" The pitcher plants are the spectacular stars of carnivorous plants. This book focuses on that element of beauty so it stands out from other books about carnivorous plants. My greatest wonder came from the depiction of the diversity of the genus *Heliamphora* in South America. I had never imagined such variation of leaf form and color among species of this South American endemic genus. Also intriguing is the inclusion of three species in two other South American genera of the Bromeliaceae, *Brocchinia* (two species) and *Catopsis* (one species). These are "tank bromeliads" which trap insects in water at the base of a tubular whorl of leaves. I would not have thought, myself, to have included them in a book of pitcher plants but their presence in the same habitats as *Heliamphora* and their photogenic character make them seem not so out of place here. Otherwise, the three genera of the traditional pitcher plant family, Sarraceniaceae, are treated in detail.

The author is young, only twenty-three when the book was published. He claims that he resolved at the age of sixteen to write a book about pitcher plants before turning twenty two. Getting the book published within a year after that is remarkable. His travels to study and photograph these plants embody the great tradition of English explorerers. At the same time he obtained a BS in geography from the University of Durham. That this is a *jungendwerk* is probably the source of the few nits I have to pick.

Some peculiarities are the responsibility of the publishing company. They did not edit the book for American audiences, as evidenced by spellings such as "colour." It is the publisher's claim that the book is "technically written" that makes me critical. I find evidence of inadequate editorial oversight for this claim. McPherson frequently cites a combining reference as the "original description." For example, for *Sarracenia purpurea* ssp. *venosa* (Rafinesque) Wherry, he cites Wherry, 1933, as the original description. Wherry is responsible for treating this taxon as a subspecies but the original description was as a species by Rafinesque in 1840 (Cheek *et al.* 1997, Taxon 46:781-783). There are a few other discrepancies between technical terminology and usage by McPherson that indicate the author is a geographer first, a taxonomist second.

Further reservation regarding technical quality comes from the lack of attention to standard botanical literature. McPherson's interest in these plants as an amateur and horticulturalist is evident from the abundance of citations from the "Carnivorous Plant Newletter" and paucity of citations from professional journals. An example is the absence of mention of Sarracenia rosea, which was described as a distinct species eight years ago (Naczi et al. 1999, Sida 18:1183-1206). A web search quickly turns up this taxon, discussed in both the professional literature (Ellison et al. 2004, Am. J. Bot. 91:1930-1935) and on popular carnivorous plants web sites. Similarly, McPherson speculates on the evolutionary relationships among the genera of the Sarraceniaceae, supporting a model based on his personal views of what is morphologically advanced, without referring to contemporary studies using molecular techniques (Albert et al. 1992, Science 257:1491-1495). His views are interesting but not supported by these recent studies.

Closer to home, it is hard to ignore the strange distribution map for *Darlingtonia*, which shows a large spot in north central Oregon that would have to be somewhere between the Ochoco and Cascade Mountains. I wonder where that idea came from?

In conclusion, this is a beautiful book and it is a good book but it's not a great book. If what is desired is an overview of the colorful forms of these plants and the habitats in which they occur, this book will satisfy. If a technical understanding is desired, supplemental literature will be needed.

-David Wagner, Emerald Chapter