

Literature Cited

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- *Peter A. Bowler, Department of Ecology and Evolutionary Biology, University of California, Irvine, CA 92697-2525 and White Mountain Research Station, 3000 E. Line Street, Bishop, CA 93514*

Second Review

A Checklist of the Vascular Plants of Orange County, California, Second Edition by Fred M. Roberts, Jr. 1998. (see review above for additional information)

Fred Roberts' updated checklist for Orange County includes all species and subspecies known from Orange County, as well as those documented since the previous checklist, first published in 1989. The checklist incorporates much of the nomenclature used in *The Jepson Manual* (Hickman 1993), along with authority, synonyms, and a common name. An introduction and brief summary of the flora are followed by three appendices that include: "excluded taxa" (i.e., those reported, but not documented by herbarium specimens); species extirpated or long uncollected in the county; and a comprehensive cross-reference to nomenclature used in *The Jepson Manual*, and Munz's (1974) *A Flora of Southern California*. The book also features about a dozen full-page illustrations of meticulous quality that have been prepared by the author.

For students and professionals working from keys in larger floras, the checklist will help with plant identifications by quickly paring down the likely taxa. Field biologists who routinely identify plants for their work will find the Checklist immensely useful. Note, however, that someone using a checklist this way should confirm identifications by comparing the plants to written descriptions in larger floras, or to pressed reference specimens. New species are continually added to regional floras, and collectors should not overlook the possibility that they have discovered a noteworthy addition. The checklist will also be useful to amateur botanists and wildflower enthusiasts, who may normally work from an illustrated field guide rather than a flora. By necessity, illustrated guides do not include all taxa in any region, but generally provide illustrations of representative members of the more showy genera. Amateurs may wish to use an illustrated guide to identify a genus, then refer to Roberts's checklist to learn which species in the genus are known from the local area.

The new Checklist is a convenient quick reference for spelling, common names, and the other memory jogs constantly needed for species lists, herbarium labels, or botanical reports. Its binding seems sturdy enough to withstand the folding and bending that I am likely to give it. It is organized by the system that botanists in California are now well familiar with. It begins with ferns and allies, then gymnosperms, then dicotyledonous angiosperms, and finally, the monocotyledonous angiosperms. Within these large taxa, families are arranged alphabetically, genera are alphabetical within families, and species are alphabetical within genera. Ease of use would be improved if each page had the family in a header. In the few weeks that I have used it,

I have found no typographical or spelling errors, although I have made no special effort to search them out.

Roberts has generally followed the family taxonomy of the larger floras, but has not strictly adhered to either the Munz or The Jepson Manual conventions. For example, his treatment of the Liliaceae and allied families is more similar to Munz's than to The Jepson Manual's, but he places the onions in Alliaceae rather than Amaryllidaceae. Roberts has used his own judgement with lower level taxonomy rather than adhering rigidly to earlier works. For example, Roberts retains the genera *Microseris*, *Brassica*, and *Stipa* (cf. Munz 1974) rather than follow The Jepson Manual, which splits each into three genera. On the other hand, Roberts has not simply held to tradition for its own sake. He accepts the splitting of *Haplopappus* into its segregate genera, and the lumping of two shrubby *Mimulus* species into *M. aurantiacus*. Appendix 3 cross-references names, enabling the reader to quickly find a species, even where Roberts has used an unfamiliar name in the body of the checklist. I generally prefer Roberts' taxonomic judgements to those seen in the larger floras.

The current checklist includes 1193 species (increased by 36 from the 1989 edition). With few exceptions, it includes only species represented by a voucher specimen in a recognized herbarium, although it does not name these vouchers by collector and number. The lists of "excluded taxa" (Appendix 1) and extirpated or long-uncollected taxa (Appendix 2) total about 130 species. Some of these undoubtedly still occur in the county (e.g., *Rorippa curvisiliqua*, *Loeflingia squarrosa*, and *Opuntia basilaris*). These 130 taxa serve to remind us of the surprisingly poor state of floristic documentation, even in an area as heavily populated as Orange County.

I find the Checklist to be a useful desk reference for Orange County and adjacent cismontane southern California. Due to the absence of keys and descriptions, the Checklist will not be useful as a field reference, except to botanists already experienced and well-familiar with the plants. In the introduction, Roberts lets us know that a more complete flora is in the works, and I look forward to its publication.

— *Scott D. White, Scott White Biological Consulting, 99 East C St., No. 206 Upland, California 91786*

Conifers of California by Ronald M. Lanner. 1999. 274 pp. Softcover \$24.95 (ISBN 0-9628505-3-5); hardcover \$36.95 (ISBN 0-9628505-4-3). SCB members can receive a 10% discount by ordering (sorry, no credit cards) directly from the publisher; Cachuma Press, P.O. Box 560, Los Olivos, California 93341, telephone 805 688-0413 or email cachuma@silcom.com

Most of my friends know that I have always planned to write a book on the conifers of California. I have been known to travel to remote locations such as the Warner Mountains, the New York Mountains, or to Cone Peak in the Santa Lucia Mountains for the sole purpose of photographing and communing with a rare species of conifer. I even approached John Evarts of Cachuma Press with the idea of doing such a book. Wisely, John did not encourage me in this regard. Apparently, Ronald M. Lanner had beaten me to the punch, and he has done such a superior job that I am envious and humbled.

California is a focal point for the evolution of conifers. There are more taxa for this group in California than for any other region of similar size in the world. Simply stated, California would not be blessed with much of its spectacular scenery, were it not for its conifers. With this new volume on conifers by Ronald Lanner, Cachuma Press has produced a fine companion to its superb book on oaks (*Oaks of California* by Pavlik et al. 1991).

Accompanied by beautiful color photographs, many of which are the images of famous photographers, and the watercolor art of the late Otto Walter Murman, this book stands as one of the truly significant contributions to the literature about California plants. Of particular interest about the watercolors is that Murman died in 1962. The original renderings were archived in the



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