

## BOOK REVIEW

**Conservation and Management of Rare and Endangered Plants.** Edited by Thomas S. Elias. California Native Plant Society, 909 12th St., Suite 116, Sacramento, CA 95814. ISBN 0-943460-11-5 (cloth), 0-943460-12-3 (paper). 1987. 640 pp. \$45 (cloth), \$24.95 (paper).

Since its inception in 1965 the California Native Plant Society (CNPS) has been dedicated to the preservation of the California native flora. Beginning in 1968 CNPS started a card file containing data on all California plants with distributions limited to 100 miles. This modest data base has since grown immensely, has been computerized, and is the largest rare plant data base in the United States. Along the way there have been numerous field surveys, status reports, inventories, and several "rare plant" meetings that were used to pool information. This work has resulted in several editions of *Inventory of rare and endangered vascular plants of California*. To top even this impressive track record CNPS has published *Conservation and management of rare and endangered plants*. This is the published proceedings of a California conference held in early November, 1986. The conference was held to further facilitate data exchanges and conservation ideas and was attended by over 800 individuals.

The contributed papers in the proceedings are arranged into 14 sections. The first two sections are "Background" and "Legal Aspects of Endangered Plant Conservation." Within these two sections are explained the Federal Endangered Species Acts, the California state laws, and the nomenclature involved with each. Such bewildering and seemingly contradictory terms and ideas as "federally listed," "on a federal register," "proposed threatened or endangered," "candidate threatened or endangered," "state listed," and the legal aspects of these terms, are all spelled out and defined. Anyone involved in environmental impact statement work will applaud these thorough informative sections.

The rest of the proceedings contain a myriad of information in all aspects of rare and endangered plant work and research. Included are articles on impacts by exotic plants, feral pigs and cattle (I wish someone had done one on feral horses and burros as well), techniques in surveying, case histories of critical and endangered habitats, ecology, and population dynamics. There are also articles, among many others, about federal and state involvement (surprisingly the federal government owns over 40% of California), the Nature Conservancy's role, how botanic gardens can help, and of course, the role of CNPS. I was very impressed by the articles in the "Case Studies" and "Ecology and Population Dynamics" sections. These articles can be used as models for future surveys and investigations. I could ramble on advocating the usefulness of these proceedings but it should suffice to say that I consider these proceedings to be the standard reference for rare and endangered plant work, especially in North America. They should adorn the shelves of any serious botanist.

It was decided that these proceedings should see print as soon as possible so authors were asked to submit camera-ready copy. This resulted in inconsistencies as to style, literature citations, and type of print. I found these inconsistencies to be a minor distraction that was an unavoidable circumstance of rapid publication. My only real gripes are the lack of an identification of the species so beautifully pictured on the cover and the lack of a complete index. We can hope that an index is in the works and will soon become available.—ARNOLD TIEHM, New York Botanical Garden.