## **BOOK REVIEW**

Before the Wilderness. Environmental Management by Native Californians.

Thomas C. Blackburn and Kat Anderson (editors). Menlo Park, California: Ballena Press, 1993. \$31.50 (hardcover); \$ 23.50 (softcover). Pp. 476. ISBN 0-87919-127-9 (hardcover), 0-87919-126-0 (softcover).

This book will be welcomed by ecologists, historians, archaeologists and ethnologists, environmentalists, and Aboriginal peoples interested in traditional ecological knowledge and the complex interactions between people and their environment. It provides an ethnobiological perspective to traditional land and resource management systems and strategies among California Aboriginal groups.

Before the Wilderness is comprised of a series of 13 papers by different authors addressing a spectrum of specific "case studies" within this general topic. These are prefaced by an introductory chapter by the editors, setting the stage and discussing the papers in context. They are concluded with a retrospective essay by Henry T. Lewis, one of the leading researchers in traditional land management systems of Indigenous peoples, notably the use of habitat burning. Several of the papers have been previously published in various journals. The initial paper, by Bean and Lawton on proto-agriculture and agriculture, and the following one, by Henry Lewis on patterns of Indian burning in California, were originally published in 1973, and are regarded by the editors as the inspiration for or the precursor to almost all subsequent research on the topic. Nearly half of the essays were first presented at the Seventh Annual California Indian Conference in October, 1991, in a symposium on past and present resource management practices by Native Californians.

A popular perception of the North American landscape at the time of the arrival of Europeans has been as a "wilderness,"—in the words of Longfellow, a "forest primeval"—with vast areas unaltered by humans. To be sure, it was recognized that Aboriginal peoples carried on their lives and activities on the land, as hunter-gatherer-fishers and small scale agriculturalists. However, these activities were seen to be limited in time and scale, and for the most part, the land and its ecosystems were considered largely as "natural." This view is refuted by researchers such as Ford, in presenting prehistoric plant production in North America as a continuum, where activities of tending, tilling, sowing and transplanting are classified as "incipient agriculture" with their own impacts on the plants and their habitats (Ford, 1985:2). This book supports, and in some senses elaborates on, Ford's model, presenting a wide array of evidence to indicate a spectrum of human-caused modifications to the environment, with specific reference to Native California societies. Aboriginal Peoples not only lived on and used the land and its resources, they influenced and changed their environment in major ways. In fact, the editors of this book contend, large areas of the environment were carefully managed and "domesticated" by First Nations peoples.

Most of the papers in Before the Wilderness focus on the technologies developed to manage and maintain important plant resources used for food, medicines and construction materials. These include essays on: vegetation burning by the Chumash (Timbrook, Johnson and Earle); Native Californians as cultivators (Anderson); cultivation and harvesting of roots by Pomo basket makers (Peri and Patterson); contemporary basket weavers and the environment; managing oaks for acorns (McCarthy); use of pine nuts (Farris); and use of juniper for bow staves in west central Nevada (Wilke). Other chapters address topics that have received even less attention previously. For example, King analyzes fuel use, with careful consideration of the quantities and qualities of wood needed for cooking and heating. Swezey and Heizer discuss management of the salmonid fisheries, emphasizing the role of ritual systems in maintaining this important resource. Shipek describes the complex social, political and ceremonial aspects of influencing and controlling populations of various mammals among the Kumeyaay. Strategies for water management and flood and erosion control in dryland agriculture are examined by Lawton et al. and Shipek. The

papers are well written, and most are supplemented with excellent photographs, diagrams, tables and maps.

This book represents a "first" in literature pertaining to traditional land management systems. The editors note that it represents only a beginning, but it does provide a nucleus for subsequent work. "Like other scholarly compendia of its kind, Before the Wilderness should be viewed less as an integrated overview of a mature field of investigation than as a prolegomenon to future research, and one moreover that raises as many questions as it answers . . ." (p. 21). The editors express the hope that this book with help to foster further interdisciplinary research aimed at increasing our understanding of traditional environmental management strategies. If only there were collections of this calibre documenting traditional land and resource management practices for other regions of North America!

## LITERATURE CITED

FORD, RICHARD I. (editor). 1985. Prehistoric Food Production in North America. Museum of Anthropology, University of Michigan Anthropological Paper No. 75, Ann Arbor.

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