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The California Deserts: An Ecologic Rediscovery
by Bruce M. Pavlik

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Bruce Pavlik has recently produced one of the most impressive volumes available on California’s deserts. His book is a synthesis that expands on Edmund Jaeger’s classic The California Deserts (1933). Using 75 years of recent ecological research, Pavlik chronicles California’s deserts in an interesting and engaging way. The book has many color photos; in fact, nearly every page has a photo, diagram, graph, map, or chart to complement the written text. Scattered throughout are also text boxes that explore specific ecological principles or nuances. The book is divided into 7 logical parts—a brief introduction followed by 6 major topics called “Rediscovery,” “A Conspiracy of Extremes,” “Operations and Origins,” “Remarkable Biota,” “Greater Than the Sum of the Parts,” and “The Future of this Arid Bioregion.”

The research and first-hand knowledge that went into this hefty book are remarkable. Pavlik links biotic with the abiotic components to demonstrate that deserts are breathing, living beings. These details show that although California’s deserts are robust and durable, they are, at the same time, very delicate ecosystems that evolved over thousands of years. When viewed against this unforgiving nature of desert ecosystems, the principles of natural selection become very clear, and Pavlik deftly captures these struggles on nearly every page.

California is unique in that within its borders are 3 different desert ecosystems: the Mojave, the Sonoran, and the Great Basin. Each desert is discussed, and the flora and fauna occurring in these ecosystems are compared and contrasted. Pavlik points out these deserts’ unique differences, creatively incorporating climate, elevation, soil types, and latitude into his discussions. Some of the most interesting reading is about how life subsists in these 3 desert extremes. The variety of mechanisms that allows these biotic forms to survive is wonderfully explained. In addition to covering these “historic” deserts, Pavlik also writes about “prehistoric” California deserts: he explains why the deserts look the way they do, how lakes once expanded across many of the valleys, and which species once roamed over the landscapes.

The impacts of desert ecosystems on humans are not ignored in Pavlik’s book either. He starts by discussing the effects deserts had on early Native Americans, including the effects on their very survival. With the arrival of Europeans in the 1770s and the eventual mass settling of California in the 1850s, Pavlik does not hesitate to also explain human influence on the desert landscapes, for better or worse. His most emotional chapter is indeed the one entitled “The Future of this Arid Bioregion.” This chapter should be read—if nothing else. It chronicles the intense suffering the California deserts have endured: we have abused it, overgrazed it, overdrafted its water tables, driven its native human populations to near extinction, and pushed its flora and fauna to ecological catastrophe. It is now up to us to restore the deserts; it is our responsibility and part of our stewardship as residents of this planet. Pavlik explains our environmental impacts on the desert ecosystems but is also optimistic that our restoration and conservation efforts for endangered plants and animals are paying off.

Pavlik’s book would make a wonderful text for a desert ecology course. It should be read by anyone interested in exploring all 3 of California’s deserts in a single volume. By writing this book, Pavlik does the desert a great justice, and I hope that it will become an influential cornerstone in desert ecology and conservation. The California deserts are too precious and beautiful not to rediscover.
LITERATURE CITED


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