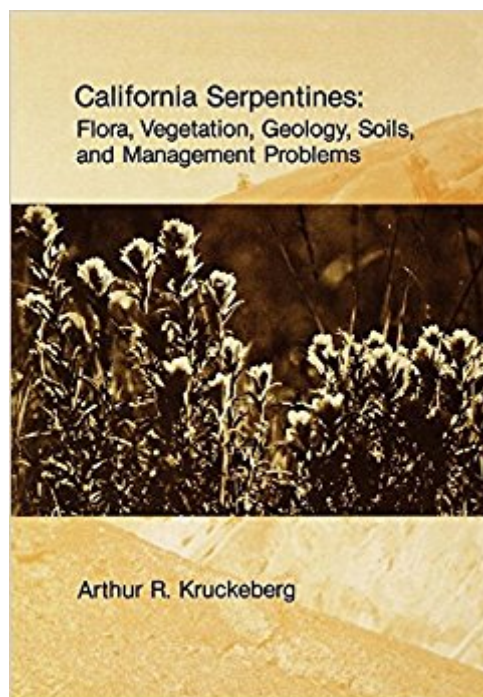




Ebook Directory
the best source of ebook

The book was found

California Serpentes: Flora, Vegetation, Geology, Soils, And Management Problems (UC Publications In Botany)



Synopsis

This is the first comprehensive treatment of an important segment of the flora of California: native plants that have varying degrees of fidelity to serpentine rock and soil that make up over 1100 square miles in the Coast Ranges and the Sierra Nevada. Many of California's unique endemic plants are found nowhere else but on serpentine; over 200 species, subspecies, and varieties of native plants are restricted to some degree to serpentine. The author describes the geology, soils, and mineral nutrition of serpentines (low in normal essential nutrients, high in magnesium, iron, and toxic heavy metals, nickel, and chromium), the vegetation and flora that tolerate this inhospitable habitat, the fauna on serpentines, and management/conservation problems associated with serpentines. This is an essential guide to an important aspect of the flora of California.

Book Information

Series: UC Publications in Botany (Book 78)

Paperback: 196 pages

Publisher: University of California Press (April 12, 1985)

Language: English

ISBN-10: 0520097017

ISBN-13: 978-0520097018

Product Dimensions: 7 x 0.5 x 10 inches

Shipping Weight: 10.4 ounces (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 1 customer review

Best Sellers Rank: #290,294 in Books (See Top 100 in Books) #16 in Books > Science & Math > Earth Sciences > Geology > Specific Locations #141 in Books > Science & Math > Biological Sciences > Plants > Flowers #145 in Books > Textbooks > Science & Mathematics > Biology & Life Sciences > Botany

Customer Reviews

Arthur R. Krukeberg is Professor of Botany at the University of Washington.

To the eyes of someone from southern Australia, serpentine lands constitute a strange anomaly because they are the only soils in the Enriched World that are of anything approaching the typical fertility (more correctly, of course, the typical infertility) of soils today in Australia and Southern Africa, and indeed of all soils in most geological eras. Their lack of the normal climatic zonality of Enriched World soils creates a number of unique species and communities, which constitute some

of the most poleward "biodiversity hotspots" in the world. Outside of the tropics, California contains the largest concentration of serpentines in the world, and like New Caledonia, its environment to some extent is shaped by the character of these toxic soils, which contain unusual concentrations of siderophile metals nickel, chromium and cobalt. Serpentine soils, like those of Australia and Southern Africa, are very deficient in phosphorus, nitrogen and sulfur, though there are important differences in that they lack the severe deficiency in chalcophile elements found in almost all Australian and Southern African soils. Serpentine soils, as author Artur Kruckeberg shows, also often have some unique physical problems because of their shallowness and very high erosion risk, a trait also found on soils derived from other ultramafics. Despite this, as I have recently read, the poisonous and infertile character of serpentine soils allows the northern California coast, where they are most dense, to in some respects appear a region of much lower latitude than it is. Examples can be seen in the duetting towhees, which are almost the most northerly birds with this trait. In "California Serpentine: Flora, Vegetation, Geology, Soils, and Management Problems", Arthur Kruckeberg does a very good job of outlining the occurrence of serpentines in California and the vegetation found on them. He looks at how various well-known taxa from the state differ in their tolerance to serpentine - from complete avoiders like Sequoia to a variety of endemic taxa in both familiar and unfamiliar genera. In some drier parts of California, serpentine areas are almost barren (hence the term "barren") and in others they are well vegetated, though the book could do a somewhat better job than it does of explaining the cause of these differences. There are detailed summaries of statistical details regarding taxa on serpentine, and in the genus *Strepera* there is an outline of how endemism to serpentine soils has evolved, along with a simple classification of plant species occurring on serpentine according to whether they are woody or herbaceous and whether they can tolerate other substrates. There could perhaps for the beginner be more details of taxa which are useful to indicate serpentine - these "indicator" taxa are merely mentioned. Extensive tables cover about half of "California Serpentine: Flora, Vegetation, Geology, Soils, and Management Problems" and they are valuable even if they could have been arranged for easier reading to supplement a fairly simple text. All in all, this is an interesting book about a quite specialised yet - for someone of my background - fascinating topic. There are a few flaws, but not enough to avoid a recommendation.

[Download to continue reading...](#)

California Serpentine: Flora, Vegetation, Geology, Soils, and Management Problems (UC Publications in Botany) Soils, Vegetation, Ecosystems (Conceptual Frameworks in Geography) Alpine Tasmania: An illustrated guide to the flora and vegetation Gardening Success with Difficult

Soils: Limestone, Alkaline Clay, and Caliche Soils California: California Travel Guide: 101 Coolest Things to Do in California (Los Angeles Travel Guide, San Francisco Travel Guide, Yosemite National Park, Budget Travel California) What Can THE MANCHURIAN FLORA as Well as the Flora of Neighbouring Countries Give to Gardens of Manchuria Itself and Other Countries with Cold Climates Flora of the Northeast: A Manual of the Vascular Flora of New England and Adjacent New York Illustrated Flora of Keoladeo National Park, Bharatpur, Rajasthan: A general guide to the wetland flora of the Gangetic plains Prostate Problems Home Remedies, How To Fight Prostate Problems At Home, Get Rid Of Prostate Problems Fast!: Back On Track - Fighting Prostate Problems At Home Geology for beginners: Easy course for understanding geology (Geology explained) Geology From Experience: Hands-On Labs and Problems in Physical Geology Nature Illuminated: Flora and Fauna from the Court of Emperor Rudolf II (Getty Trust Publications: J. Paul Getty Museum) Tropical Plants of Costa Rica: A Guide to Native and Exotic Flora (Zona Tropical Publications) Geology of California/Book and Geologic Map of California Use of Vegetation in Civil Engineering Atlas of the Vegetation of Madagascar The vegetation of the Hempstead Plains How trace element selenium affects men's health: Discover how selenium can affect: prostate problems, eczema problems, asthma breathing, and 9 other health problems Best Management Practices for Saline and Sodic Turfgrass Soils: Assessment and Reclamation Tropical Soils: Properties and Management for Sustainable Agriculture (Topics in Sustainable Agronomy)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)