

# Books

## GEOLOGY

Field Guide to Southern California

by Robert P. Sharp

William C. Brown Company

Publishers . . . . . \$2.95

Reviewed by Enid H. Bell

Editorial Assistant

Division of Geological and Planetary Sciences

This is a book for everyone who has an inherent interest in natural history and who enjoys travel. It is an authoritatively written layman's guide to geologic features in southern California. Robert P. Sharp, professor of geology at Caltech, has devoted most of his life to studying the processes that shape the earth's surface. He is especially interested in glaciers and in desert landscapes. "Among scientists," he says, "geologists are reputed to have as much fun as anybody because of their understanding and appreciation of the natural environment." His objective is to share that fun with others.

Southern California runs the gamut of scenic and geologic possibilities, and many of us, untrained in geology, drive high-speed highways unaware of the area's interesting features. Sharp's book stimulates the interest of the non-geologist, and is a helpful guide for those already acquainted with the field.

The book is divided into three parts, the first actually being a "mini" course in basic geology. The second section furnishes descriptions of geological features in the nine natural provinces of southern California. The third part, constituting more than half the book, is a series of self-guiding field trips which assist users to recognize geological features that can be seen while traveling by automobile.

The book is filled with interesting historical highlights and little-known facts. Are you aware that the basement relief of the Los Angeles Basin is 37,000 feet—exceeding by 7,000 feet that of Mt. Everest? And that over 20 million years ago the Los Angeles Basin was dotted with volcanoes spewing out smoke, fumes, and ash—Tertiary *smog*, I presume.

Southern California is laced with earthquake faults; many of our prominent landmarks are close to the San Andreas or one of its "friendly neighborhood branches." For example, the Huntington Hotel and the Huntington Library are on the scarp of the Raymond fault, as is the hillside stretch of the turf course at the Santa Anita racetrack. The San

Jacinto fault passes directly under the principal buildings of the San Bernardino Valley College. We also learn that San Francisco (most of which lies east of the San Andreas fault) and Los Angeles (which lies west of it) are steadily drawing closer to one another by several inches per year.

Reading about geology is fine, but actually seeing some is much more satisfying. The trip guides and annotated sketch maps allow the users to make their own firsthand observations. The focus is upon two routes richly endowed with striking geological features. One trip is from the Los Angeles Basin to Death Valley and the other is from the Los Angeles Basin to Mammoth. The trips are divided into segments and the segments can be arranged in various combinations.

This book was written for out-of-doors people. As "aborigines" (according to Sharp, this includes anyone who has lived in the area for more than 10 years), my husband and I had travelled about southern California for longer than we care to admit. We had reached the point where we felt we had seen just about every place dozens of times and, frankly, our trips had become something less than exciting.

When we were privileged to review an early draft of Professor Sharp's book, we decided to try one segment of the field trip guide just to see if we could find the features he wanted his geologically untrained readers to see. Armed with nothing more than curiosity and the trip guide, we were delighted to find how easy he had made it for us. Marginal symbols and occasional mileage references in the guide, and correlated notations on the sketch maps, made the special geological attractions—even the subtle ones—easy to locate and identify.

We were more than a little excited when we found the roadcut just past Monte Cristo ranger station along the Angeles Crest Highway which exposes a huge mass of *anorthosite*, a type of rock which may be a major constituent of the lunar highlands. Professor Sharp tells us "anorthosite masses are rare, and we are fortunate to have one in our own backyard." Picking up samples of the same kind of rocks the astronauts went to the moon to find made our trip a memorable adventure.

Rock Creek and McGee Creek in the southern Sierras have often been sites for our family camping trips. We hadn't realized that the meadows where we pitched our tent were results of 10,000-

year-old glacial deposits, and that the waterfalls and cascades we enjoyed were streams descending from *hanging* valleys carved by glaciers. We recognized other geological features as moraines and alluvial fans in this area.

Surely this book belongs in the map compartment of every automobile in the southern California area.

## OSCAR MANDEL'S COLLECTED PLAYS

Volume Two

Unicorn Press . . . . . Clothbound \$7.50  
Paperbound 2.95

Volume Two of Oscar Mandel's plays is, like Volume One, a collection of six dramatic works—and of similar wit and wisdom. (Volume One was reviewed by J. Kent Clark, *E&S*, November 1971.) This volume includes "The Monk Who Wouldn't," "The Fatal French Dentist," "Professor Snaffle's Polypon," "The Sensible Man of Jerusalem," "Adam Adamson," and "Of Angels and Eskimos." Most of these plays have already been performed for live or television audiences. Mandel, a member of the Institute faculty in English since 1962, is the author of a number of other books, including works about drama, a collection of short fables, and two volumes of translations of French comedies.

# Letter

Pasadena

## EDITOR:

Your mention (*E&S*, February, page 21) of the "anatomical agonies from the slatted wood seats" of Culbertson evoked resonances in my caudal vertebrae, not to mention my gluteus maximus. But I am bemused by the second sentence of the article: "The demolition was not solely for the sake of progress but also to make room for a new laboratory of geophysics and planetary science." Are we to infer that the construction of such a laboratory is not considered to be progress?

CHARLES B. JORDAN, '36

*The author of the Culbertson article assumed that use of the word "solely" could lead only to the inference that factors in addition to progress were part of the decision to raze Culbertson. Obviously, one writer's assumption is not necessarily every reader's inference.*

Geology Field Trips & Guidebooks. Field trip overview: San Juan Bautista is one of the oldest towns on the Central Coast of California. At the entrance to the town is a sign that calls itself "the City of History" for good reason. This fieldtrip report is a guide to the town's natural and cultural history (two topics that cannot be justifiably separated!). This volume includes five geologic field-trip guides in the Los Angeles region associated with the 2020 GSA Cordilleran Section Meeting that was scheduled for M. From the Islands to the Mountains: A 2020 View of Geologic Excursions in Southern California | GeoScienceWorld Books | GeoScienceWorld. This volume includes five geologic field-trip guides in the Los Angeles region associated with the 2020 GSA Cordilleran Section Meeting that was scheduled for M. See more at PUBLISHERS.GEOSCIENCEWORLD.ORG. English (UK). Extended van trip included 29 EAS undergraduate majors, 2 geology graduate students and 2 geology professors. A tradition of GeoSociety is the annual winter field trip. This year, it took place January 2-8, 2020, and visited geologic sites in southern New Mexico. Photo of the field trip group with the mountains of southern New Mexico in the distance. The 2020 trip was led by EAS geology professors Peter Copeland and Mike Murphy and included 29 EAS geology and geophysics majors that ranged from sophomores to seniors. EAS geology graduate student Shelby Johnston and former EAS undergraduate student and Geosociety president David Lankford-Bravo helped organize and co-lead the field trip. Lankford-Bravo i Learn about the Geology of Southern California with maps, photos and expert descriptions! This 6"x9" paperback has 389 pages that are packed with detailed information about Southern California Geology. See table of contents below. Roadside Geology of Southern California Table of Contents. PREFACE. VIII. Visitors Also Bought California DeLorme Atlas. The California DeLorme atlas gives you a complete set of California topographic maps in a single convenient book. More information. Only \$24.99. Advertising. Roadside Geology for Other States. This section provides sample student reports on a four-day field trip in southern Nevada and southern California. Home » Courses » Earth, Atmospheric, and Planetary Sciences » Sedimentary Geology » Field Trip. Field Trip. Course Home. Syllabus. Lecture Notes. Field Trip. Download Course Materials.