many plants it may tell enough about very few. Nevertheless, the references appended to each chapter and the short general bibliography should assist those who may require access to more detailed information. Thus, within the limits set by the author, the book fulfills its objectives in a manner that many general readers and students should find useful.

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## **Inquiring Naturalist**

South of Yosemite. Selected Writings by JOHN MUIR. Frederick R. Gunsky, Ed. Photographs by Philip Hyde. Sketches by John Muir. Published for the American Museum of Natural History by the Natural History Press, Garden City, N.Y., 1968. xviii + 269 pp. \$7.50.

During the last three decades of the 19th century, a time when the country was firmly committed to rapid industrial development and full utilization of the "unlimited" natural resources of the west, John Muir sought out the secrets and solitude of California's Sierra Nevada. He found what he hoped for and contributed materially to our knowledge of the geomorphic evolution of glaciated mountain areas. However, he also learned of the shortsighted land ethic which has characterized the philosophy of many westerners since the gold rush. He saw the effects of logging practices, still prevalent today, of timber companies which were beginning to feel public pressure for preservation and thus rapidly and indiscriminately cleared forests of thousands of years of growth before the ponderous legislative machinery could move to protect them. He recognized and alerted the public to the problems of long-continued overgrazing by the animals he first went into the Sierra to herd but later called "hoofed locusts."

Unlike many of the vacationers, weekend outdoorsmen, sightseers, and mountaineers who visit the Sierra today, Muir went into the mountains because of a positive desire to explore, observe, and contemplate the natural environment. He did not want to "get away from it all" but rather, although bothered by the lack of sensitivity to nature exhibited by some of the few tourists, hunters, guides, and sheepherders he met, advocated bringing more people to the mountains. In the

social and political climate of the times public interest was necessary if parts of the Sierra were to be preserved for future generations.

Sympathetic friends encouraged Muir to bring the wonders of the Sierra to the attention of the nation through his eloquent writing. Beginning in the 1870's, Muir published articles in such national monthlies as Harper's, Scribner's, the Atlantic, and the Overland. These articles, and the manuscript correspondence associated with them, serve as the foundation for the text of this new book. The writings have been sympathetically edited by a former editor of the Sierra Club Bulletin. In later years, Muir himself edited many of his articles to produce a series of popular books, but, by drawing on the original sources and contemporary newspaper and manuscript articles, the editor conveys much more of the flavor, charm, and immediacy of Muir's first writings.

Books about Muir and ones that use his writings to accompany photographic presentations are numerous, and many are excellent. This book differs from others in that its main purpose is to present John Muir himself, through his writings, as an inquiring scientific naturalist, a gifted if rather romantic writer, and a conservationist. The book is highly successful. The plates, by an able and renowned photographer, have been carefully selected to complement the text rather than the reverse. Unfortunately, the quality of the reproduction of the black-and-white plates is not equal to the standards of readers accustomed to Sierra Club or most other volumes of that format. Editorial annotations include background information on the original sources and historical context of the selected passages and footnotes updating taxonomic nomenclature and place names.

Unlike previous volumes on Muir, this book focuses on writings of 1872 to 1912 dealing with the part of the mountain range south of Yosemite National Park. His descriptions of his ascents of Mount Whitney and Mount Ritter and his exploration of the southern "yosemite" of Tehipite Valley offer some of the best examples of his gently persuasive reasoning, in particular his arguments that ice was the chief agent of erosional modification of the landscape. The giant sequoias of the southern Sierra, whose ecology Muir studied, prompted writings on their esthetic nature and great age and the need for conservation. Out of this writing grew efforts that resulted in the

preservation of many remaining isolated stands in Sequoia and Kings Canyon national parks. It was during Muir's travels south of his Yosemite home that he wrote some of his most charming and able descriptive vignettes —for example, of the water ouzel, the Sierra bighorn, and the theft of his teapot lid by a wood rat.

For the general reader, Muir's perception of ongoing geomorphic processes, his descriptive prose, and his insight into conservation problems make this book enjoyable and timely. For those who are interested specifically in the Sierra Nevada, his early impressions serve as a base line on which to measure the changes that have come about between his time and today. when one may see fishermen standing elbow to elbow at a High Sierra lake on the Fourth of July or be awakened on a frosty morning 40 miles from the nearest road by a low-flying helicopter dangling a freshly painted National Park Service outhouse to serve the throngs of city-bred visitors.

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## Metabolism

Protein Nutrition and Free Amino Acid Patterns. Twentieth annual conference of the Rutgers University Bureau of Biological Research. James H. Leathem, Ed. Rutgers University Press, New Brunswick, N.J., 1968. 227 pp., illus. \$10.

Publication of a collection of papers in book form four years after the conference at which they were presented is, in this case, worthwhile, although the delay is regrettable. The 13 contributions provide a good starting point for knowledge of the subject, but their authors and other investigators have made important additions to it since the time of the conference.

J. M. McLaughlan, Selma E. Snyderman, L. E. Holt, and their respective co-workers assemble convincing evidence that plasma amino acid distribution in experimental animals and man is altered by the quantity and quality of dietary protein. This is made more significant by Q. R. Rogers and A. E. Harper's demonstration that plasma amino acid concentrations do reflect what is happening in liver and muscle.

H. N. Christensen summarizes his experimental evidence for three distinct