

## GUIDE TO SEQUOIA AND GENERAL GRANT NATIONAL PARKS.

Full information regarding the Sequoia and General Grant National Parks, which contain the oldest and largest trees in the world, is contained in a circular just issued by the Department of the Interior. Within these parks are thirteen groves of sequoia trees, there being over 12,000 trees exceeding ten feet in diameter.

In the Giant Forest in the Sequoia National Park the principal trees are the General Sherman, 286 feet high and 36 feet in diameter; the Abraham Lincoln, 270 feet high and 31 feet in diameter; and the William McKinley, 291 feet high and 28 feet in diameter. In the General Grant Park the principal trees are the General Grant, 264 feet high and 35 feet in diameter, and the George Washington, 255 feet high and 29 feet in diameter.

These big trees are the oldest living things in the world, 4,000 annual wood rings having been counted on one of the fallen giants in the Sequoia Park. The great pines of the Pacific Coast are old in their fourth or fifth century, when the big trees growing beside them are still in the bloom of youth, as they do not attain prize size and beauty before their fifteen hundredth year or become old in less than 3,000 years.

This circular, which may be obtained free from the Department of the Interior, contains information regarding the means of seeing the park, tables showing distances to the principal points, a tourist map, a list of birds, and the regulations that have been adopted for the protection of the forest.

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## BOOK REVIEWS.

*Animal Communities in Temperate America as illustrated in the Chicago Region, a study in Animal Ecology*, by Victor E. Shelford, Ph. D., of the Department of Zoölogy, the University of Chicago. Pages xiii+362. 16x25x2.5 cm. With 2 maps and 306 text figures. 1913. Published for the Geographic Society of Chicago as Bulletin No. 5, by the University of Chicago Press, Chicago, Ill., Price, \$3.00 net.

This is a pioneer work on animal ecology. Plant ecology is now well organized, thanks to Professor Cowles and his co-workers, but for some reason, perhaps because of the comparative ease and interest of morphological studies and a corresponding lack of interest in and appreciation of ecological studies of animals, animal ecology has found no champion till now. The new field always entails greater labor for the investigator and this one is no exception to this rule. The amount of labor expended by Mr. Shelford in the preparation of the studies upon which this work is based must have been very great. The scope of the work can be appreciated best by a resumé of the chapter topics. Chapter I treats in a general way of "Man and Animals"; Chapter II, "The Animal Organism and Its Environmental Relations," followed by a study in Chapter III of "The Animal Environment." In Chapter IV "The Conditions of Existence of Aquatic Animals" are discussed, followed by chapters successively on "Animal Communities of Large Lakes," "of Streams," "of Small Lakes," and "of Ponds." Then the "Conditions of Existence of Land Animals" are discussed in Chapter IX, followed by chapters on "Animal Communities of the Tension Line between Land and Water," of "Swamp and Flood Plain Forests," of "Dry and Mesophytic Forests," of "Thickets and Forest Margins," and of the "Prairie." In a final chapter there is a discussion of the general laws which may be discovered in the study of animal communities. There is a bibliography of authors and works which will be very valuable to the student.