## BOOK NOTICES AND REVIEWS

THE GAME BIRDS OF CALIFORNIA. Contributions from the University of California, Museum of Vertebrate Zoology. By Jos. Grinnell, Harold Child Bryant and Tracy Irwin Storer. Univ. of Cal. Press, Berkeley, 1918, large 8 vo. pp. i-x plus 1-642, 16 colored plates and 94 text figures. Price, cloth, \$6.00 net.

This is one of the most notable bird books and one of the handsomest examples of popular bookmaking that has been published under the auspices of a public institution in some time. It is a credit to the University and Museum in whose name it appears, as well as to the printer who executed it and the artists and authors who illustrated and wrote it. It contains a greater mass of game bird life histories both original and compiled probably than any other work generally accessible. The colored illustrations consist of some of the best work from the brushes of Louis Agassiz Fuertes and our talented countryman, Major Allan Brooks. The many line drawings scattered throughout the text to illustrate critical points are exceptionally accurate, clean and clear. The introduction states that the work was undertaken to meet the varied requirements of the sportsman, the legislator and the naturalist and was made possible through the financial munificence of a patron who refuses to make his (or her) name known. California is to be congratulated on having such public-spirited citizens.

In an opening chapter dealing with the Decrease of Game and Its Causes it is definitely proved that game has decreased and an analysis is made of the contributing factors. Tables of game that have passed through the hands of dealers hav, been obtained directly from their own books and are presented in evidence. These numbers are ample evidence of the drain on wild life that market hunting entails. Other agencies of decrease are logically and calmly discussed giving due weight to their effects pro and con with convincing restraint.

The next chapter, on the Natural Enemies of Game Birds, discusses the effects of vermin and other enemies and incidentally corrects a number of common preconceptions of their relative values.

The Gun Club of California is a chapter all conservationists should read. Arguments are given on both sides to show that the subject is not a simple one to be answered offhand. Parallel columns giving detrimental and favorable effects are contrasted and the result summed up in the final paragraph, saying:

"It would appear that the institution of well re-

gulated gun clubs, occurring as it has, at a critical stage in the adjustment of natural to artificial conditions, is to be looked upon as a propitious rather than an adverse factor in the conservation of our duck supply. Whether or not, as further changes result from the increased human population, this valuation of the preserve will persist, remains to be seen"

The History of the Attempts to Introduce Nonnative Game Birds in California, is an illuminating chapter, and deserves study by all who contemplate such introductions elsewhere.

The Propagation of Game Birds is an equally important chapter and includes a valuable bibliography on the subject.

The last chapter of the introductory part gives the history and present status of legislation relating to game birds in California.

The Key to the Game Birds of California seems an admirable instrument. It is clear and concise and notable for the absence of obscure or technical terms and is such that any one of ordinary intelligence should be able to get results with it.

The main part of the book is, of course, occupied with the detailed treatment of the various species in their systematic order. The descriptions of plumages are unusually complete and clear, paragraphs on Marks for Field Identification, Voice, Nest, Eggs, General Distribution and Distribution in California of each one are given, and all are admirably arranged, paragraphed and picked out by distinctive type for ready reference.

The discussions of the species include much original material, but also the most complete series of excerpts from other authors dealing with the life histories and other pertinent matter of the various species that can anywhere be found under one cover.

The method of such a tripartite authorship wherein each does that for which he is specially fitted is the ideal one in dealing with a broad subject wherein no one man can be an equal authority in all directions and the course is here amply justified by the results

This book should appeal especially to bird students, sportsmen and conservationists of western Canada as whilst it deals most particularly with California, the bulk of it is equally applicable to British Columbia and it forms the work that most nearly fulfills far western needs that has so far been published.

P. A. TAVERNER.

## ERRATA

Page 51, Vol. XXXIII, Sept., 1919, delete word "late" in bottom line of right column. Page 57, Vol. XXXIII, Sept., 1919, 11th line, left column, for "crescentic spot of purple," read "crescentic spot on purple."

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