commercial nature, under the administrative control of a Commission supported in part by a special "vacationist's" license. This whole question, of wild life administration in the interests of the average citizen, instead of in those of any one class, is one badly needing solution. Mr. Tyler has done a real service in launching a discussion of it within Cooper Club circles. A good start there may result in its transfer into wider groups, just as was the case with the State Bird Idea.

Taverner's "Birds of Western Canada" proved so extensively popular that the original edition, issued by the Canadian Government in October, 1926, was very soon exhausted. Not only because of the excellence of the work, but also because of the exceedingly low price charged for the book, orders, unfillable, piled up to an extent that convinced the authorities that a new edition should be gotten out. Now we have it, a second and slightly revised edition, issued in practically identical form with the first one, at a price of \$2.00, bound-the best "buy" we know of in bird books for the non-professional student to-day. Our scrutiny of the new volume shows no differences in illustrational content, and only very slight changes here and there in the text. By reason of the quality of paper, the bulk of the new book is 25 percent less than that of the old one, although the weight remains practically identical, 3¼ pounds. The lesser bulk is an advantage when it comes to taking a working manual in one's baggage when he goes afield.

Speaking of bird conservation again, and referring to the current system of setting apart so-called "game refuges" here and there throughout the state, why not, as a vastly more practical system, establish complete protection for all classes of birds throughout the state in its entirety, and then designate appropriate minor tracts, under proper regulations, as "shooting grounds"? There would then be far less wastage in administrative expense and, in the concentrated areas, better adjustment of annual kill to the varying annual rates of reproduction on the part of the game species. With concentration of human population in California, with the change from pioneer to highly civilized conditions, the sportsman and his interests are bound to become of less and less moment in the common welfare. The sooner sportsmen yield to this trend, the better it will be for their own interests; for the longer will there be any hunting at all, for anyone, anywhere.—J.G.

PUBLICATIONS REVIEWED

CHAPMAN ON HABITS OF OROPENDOLA.* — The present reviewer never saw an oropendola and never hopes to see one alive, in the wild; but he has seen pictures of their remarkable, pendant nests and has examined the strikingly colored study-skins of the bird. Now, Dr. Chapman provides a wonderfully appealing, intimate field study of the species, so that we have the bird as it is in life sharply visualized, permanently so, even though second-hand.

Dr. Chapman's field study of Zarhunchus wagleri impresses us as an ideal example of what rigidly conducted scientific observations should constitute and lead to. We gather that his observations of the bird at Barro Colorado Island, Canal Zone, was carried on in a patient, hence somewhat leisurely, fashion-the same features of behavior, on the part of the birds, scrutinized over and over again by means of high-power glasses (needed in this particular case because the nests were at considerable distance, and far aloft, from the nearest observation post); the observer seated, comfortably, drawing and writing board before him, undistracted. He was able to see and to verify what the birds were doing, and then was able to draw, gradually, one insight leading to another, his final inferences as to why the things were done.

The story of oropendola that resulted reminds us in many respects strongly of the account of Red-winged Blackbirds, as Dr. Arthur A. Allen has recorded his study of them. Both these birds are icterids; doubtless they do exhibit fundamental similarities in behavior that signify not too remote community of origin. Also, from what we have learned of its habits through casual observation, our Arizona Hooded Oriole shows traits remindful of oropendola.

^{*}The Nesting Habits of Wagler's Oropendola (Zarhynchus wagleri) on Barro Colorado Island, by Frank M. Chapman. Bull. Amer. Mus. Nat. Hist., LVIII, December 31, 1928, pp. 123-166, pls. 1-8.

Incidentally, we must point out certain blemishes in this paper. Citations will indicate their nature. It is said of the bird Legatus, which appropriates for its own use nests of oropendola: "its motives are unworthy". Again: "The poor oropendola sits humbly . . . waiting for a chance to enter her own home", etc. In an ostensibly scientific paper this sort of thing, it seems to me, is wholly indefensible. Sentiment, anthropomorphism, have no place at all in *real* ornithology. They tend to obscure rather than to clarify interpretations of animal behavior. It was Dr. J. A. Allen, forty-five years ago, who said of some author: "[He] fails to distinguish clearly between the science of ornithology and the sentiment of ornithology-both legitimate in their way, and not necessarily antagonistic, though not always compatible" (Auk, I, 1884, p. 302).

But, forgetting this very common type of "blemish", we wish again to express the warmest approval of this latest paper of Chapman's; and we wish every prospective writer on bird behavior would read it and *study* it, and then pattern his own methods and resulting exposition after it. Furthermore, no one need go to Central America to find many a subject of quite as interesting character as oropendola; no one organism is, from the truly scientific viewpoint, more "interesting" than another!

There is an astonishing lack of thoroughgoing natural history available concerning even our commonest North American birds. For example, we recently tried to find out something about Song Sparrows, any western subspecies; we failed completely, save for the usual uncritical, impressionistic, vague type of account such as appears over and over again, with suggestive similarity, in the usual run of bird books. And from Audubon down, bird books. with only a few refreshing exceptions, this sort of ornithological literature seems to be getting worse! When a distinguished ornithologist like Chapman reaches a point where he deems it worth while to devote months of his time to studying the habits of one kind of bird, then there can be no question as to the worthiness of this pursuit on the most scientific of grounds.—J. GRINNELL, February 20. 1929.

A RATIONAL PLAN FOR BIRD PROTEC-TION*.—Now that civilized people everywhere are experiencing a Renaissance in their interest in animal life and especially in bird life it is only natural that they should show concern over agencies that threaten the continued existence of those animals. There has been, especially of late years, much discussion of the subject of bird protection in America. Much of this discussion has applied to special, small phases of the general problem or to conditions as they existed in some one locality, often unique when compared with a larger area. At other times the ideas have been supported by tradition or sentiment, and, too often, they have been projected with the object of compromise with some powerful commercial interest.

These varied and conflicting viewpoints and interests tend to confuse rather than to clarify the situation for the person who is unable to study all the original facts. The greatest need, then, has been, and is, for some non-partisan and capable worker to study thoroughly and to present clearly the position of our bird life as it affects and is affected by man. Contrary to the seemingly prevalent notion, there is abundant factual basis for the support of foundation principles upon which to build definite programs for the administration of wild animal life. Progress in this direction, it seems to the reviewer, will depend upon, first, the acceptance of these principles and, second, the much simpler task of gathering the facts needed for the local application of this knowledge.

Mr. Nicholson's book deals so well with birds from this point of view that no person in any way interested in bird protection can afford not to read it. The fact that the author uses for his illustrative material the birds of England need not detract from its value to Americans. In fact, this may be considered an advantage; for an opportunity is left for the reader to focus attention on the discussion of the principles as they are developed. Another feature that should be pointed out is that serious disturbance of the bird life by man has gone on for a longer time in England than in America. In one sense, then, this work might be considered as prophetic of some conditions that may be expected in America at some future time.

Mention of a few of the points stressed in the book will serve to indicate how

^{*}Birds in England | An Account of the State of | Our Bird-life | and | a Criticism of Bird Protection | By E. M. Nicholson | With eight Woodengravings | by | E. Fitch Daglish || London | Chapman and Hall, Ltd. ; 1926.