

PUBLICATIONS REVIEWED

THE BIRDS OF OKLAHOMA. By Margaret Morse Nice and Leonard Blaine Nice. University of Oklahoma Bulletin, new series, No. 20, pp. 1-122. Norman, Oklahoma, May 15, 1924.

As is evidenced by the short bibliography in this report (it covers only nine printed pages) comparatively little has been published concerning the birds of Oklahoma, and most of it has been so scattered through various reports and periodicals as to be unavailable to the majority of the students of birds without a wearisome search. To assemble these scattered records and make them easily available would in itself have been a very valuable piece of work, but the authors of this report have had in addition unpublished notes from twenty-eight observers, amply supplemented by their own notes, with which to make this catalogue fairly reflective of present day knowledge of the avifauna of the state. Altogether they list 361 species and subspecies, of which "96 are residents, either non-migratory birds nesting in the state or migratory birds occurring in both summer and winter; 117 are summer breeding species; 49 are winter visitors; 83 are spring and fall transients and 16 are of casual occurrence." Since the Kansas list is only slightly larger (379 in 1913, *vide* Bunker) and the Iowa list is actually smaller (354 in 1907, *vide* Anderson), we may safely assume that this catalogue of Oklahoma birds is fairly complete. This is further evidenced by the brief hypothetical list (pp. 112-115), of only thirty-six forms.

The report proper is preceded by a geological map of the state and by pertinent remarks on the physical features and faunal areas, a historical sketch of early Oklahoma records and a discussion of the changes in Oklahoma bird life during the last seventy years. Practical remarks on the game laws of Oklahoma, the economic value of birds and suggestions on the attraction and protection of birds then follow. All of this preliminary matter is admirably condensed into less than nineteen printed pages, leaving some eighty pages for the annotated list. The nomenclature in this list is practically that of the A. O. U. Check List and its supplements, excepting in a half dozen cases where the subspecies concerned is one not as yet recognized by the A. O. U. Committee, but one that in the opinion of the authors and of the two competent ornithologists upon whom they have largely relied for the technical authority of the report (Messrs. Ridgway and Oberholser) is entitled to recognition, when they have used names of these authorities, appending a footnote explaining the nearest present equivalent in the A. O. U. Check List—a method of treatment amply justified, in the opinion of the reviewer.

The report is well indexed and is accompanied by two half-tone plates illustrating types of Oklahoma topography. The authors are to be complimented on having succeeded in preparing so acceptable and useful a state list in so few pages, and the appearance of this report should give a great impetus to the local study of the birds in Oklahoma.—M. H. S.

THE ORNITHOLOGY OF TODAY AND TOMORROW. By Witmer Stone. Reprinted from "The Fiftieth Anniversary of the Nuttall Ornithological Club". Pp. 7-25. October, 1924.

This address by Dr. Stone at the fiftieth anniversary of the Nuttall Club is a noteworthy survey of the trend in the ornithological world today. Our space will

not permit an adequate digest of this important paper by one of the foremost leaders in American ornithology.

In comparing the ornithology of today with that of fifty years ago Dr. Stone sees three general differences, viz., "(1) The increase in ornithologists, using the word in its broadest sense, and their differentiation along special lines. (2) The great decrease in collecting and collectors, and the increase and improvement in the study of the live bird. (3) The taking up by ornithologists of broader philosophic topics and their participation in discussions of general biological problems." The remainder of the paper is mainly an elaboration of these three themes, and much of the discussion is such as will greatly interest that class of bird students which largely comprises the W. O. C. membership.

In the matter of collecting specimens most of us are, doubtless, in substantial agreement with the views which we understand Dr. Stone to hold, viz., that the loss from scientific collecting is negligible in the cases of most species, and should not be curtailed when it serves any definite and legitimate end. On purely sentimental grounds there can be little more argument for protecting birds than for protecting butterflies or goldfishes. But there is less necessity for extensive collecting of birds today than fifty years ago. And were it not for the subspecies sandbur there would be less necessity than now exists—but this is the reviewer's point and not Dr. Stone's.

We wish to quote for the readers of the BULLETIN the following concise and well-put statement concerning the trend of present day ornithology as a science: "The advent of broad philosophical discussion of the various problems presented in a study of bird life is an interesting characteristic of present day ornithology. . . . In this way ornithology is taking its proper place in relation to other sciences, and not holding aloof as a purely systematic study as it has had the reputation of doing in the past."

Dr. Stone then pays a kindly and fitting tribute to the systematist, "for many years the ornithologist *par excellence*". We all recognize that ornithology would not and could not be what it is today except for the labors of the systematist. Perhaps, however, systematic zoology (or botany) may be somewhat like certain biological processes, such as immunity—it may proceed to over-production if not controlled by other organismal agencies.

Dr. Stone also stands squarely for trinomial nomenclature, and is, therefore, consistent. It may seem to verge on selfishness and lack of vision for the field ornithologist to offer any criticism of the methods employed in modern taxonomy. But the handicap which besets the field student in consequence is irksome; and when the end sought by the systematist is so vague and uncertain objection is bound to arise. Mere dimensions and shades of color seem too trivial in the quantities usually used in subspecific manipulation. The geneticist, with the chromosomal count, has a much surer and more satisfactory method of attack in the problem of relationships.

Withal, however, the field student and amateur must realize his debt to, and dependence upon, the technical ornithologist. Even though we may wish that in some respects the latter might be a little more conservative in his program, yet we recognize the wonderful achievement of American ornithology, and we stand, always, in due respect to those great men who have given us our heritage in bird lore.—T. C. S.

NOTES ON THE BIRDS OF CHARLEVOIX COUNTY AND VICINITY. By Josselyn Van Tyne. Papers Mich. Acad. Sci. Arts and Letters. Vol. IV. Pp. 611-627. 1924.

The list contains 118 species and subspecies which were observed in Charlevoix County, Michigan. The paper is based chiefly upon the author's studies during the summer of 1923, though acknowledgments are made to several other observers for notes made at other times. Such lists, though admittedly incomplete, are valuable contributions, especially when annotated with respect to abundance and habitat, as is the present one.—T. C. S.

REFLEX ASSOCIATION OF FEEDING AND DEFECATION IN YOUNG BIRDS (*Troglodytes aedon*). By C. I. and B. P. Reed. Proc. Soc. Exper. Biol. and Med. Vol. XXII. Pp. 295-296. 1925.

An orphan brood of nestling House Wrens were artificially fed. The usual reflexes concerned in feeding and defecation were observed. Each young bird, after being fed, elevated the anal orifice and defecated. The authors found that, "Defecation in this position *always* followed the taking of food." They also observed that the young bird then at once "became quiet and could not be induced to take food again for a period of from one and one-half to three minutes." The important conclusion in this very brief paper is that: "By noting the color of the food and that of the feces it was made certain that each bolus was digested and the waste ready for voiding before the bird could be stimulated to receive food again. The young bird, then, does not take food until the previous bolus has been digested."

This implies, we take it, that the reflexes of swallowing excite the reflexes of defecation of the excreta sac. There may be some relation between the two systems, but, that it is not an essential connection seems to be shown by the fact that defecation does not always immediately follow feeding in other species. To make the implication presumptive it should be shown, not merely that the old birds carry away the excreta sac "*every time* food was carried to the nest", but that the voidance of an excreta sac usually (if not invariably) follows the swallowing of food in a given bird. This the authors do not show.

Too much weight cannot be given to the fact that in this family of wrens the parents carried "away the excreta *every time* food was carried to the nest", because this does not hold true for all birds. It may be questioned whether the evidence presented is sufficient to prove that the digestion and passage of the bolus through the gut take place with the rapidity which the authors suggest. Some elaboration on the method used in reaching this conclusion would have been helpful to the reader in following the argument.

On the whole the paper is suggestive, and brings up some problems in physiology and behavior which will bear further investigation.—T. C. S.

THE FIJI-NEW ZEALAND EXPEDITION. By C. C. Nutting, R. B. Wylie, A. O. Thomas, and Dayton Stoner. University of Iowa Studies in Natural History. Vol. X, No. 5. Pp. 1-369. September 1, 1924.

This is the title of the narrative and preliminary report of a collecting expedition sent out by the University of Iowa in the summer of 1922 to the Fiji Islands and New Zealand. The report includes a chapter on the ornithological observations in Fiji, and a similar one dealing with the birds of New Zealand,

both by Dr. Stoner. Fiji does not seem to be a bird paradise, for the number of species encountered by Dr. Stoner seems small—scarcely two dozen; though the total list for the islands is given as about seventy-five. In New Zealand the abundance of birds is more marked, with respect to both species and numbers. The entire narrative is most interesting and would be especially instructive to anyone contemplating a trip to the south seas.—T. C. S.

SPREAD OF THE EUROPEAN STARLING IN NORTH AMERICA. By May Thacher Cooke. Department Circular 336, United States Department of Agriculture. Pp. 197. March, 1925.

This bulletin presents an up-to-date (1924) resume of the facts concerning the distribution and economic status of the Starling in America.—T. C. S.

A YEAR'S PROGRAM FOR BIRD STUDY. By George Miksch Sutton. Bulletin No. 7, Board of Game Commissioners of the Commonwealth of Pennsylvania. (1925). Pp. 1-47.

Mr. Sutton writes the present bulletin in the capacity of Chief of the Educational Service of the Pennsylvania Board of Game Commissioners. The pages are full of valuable material for teachers. An advance step is taken in advocating the protection of bird life on aesthetic grounds, chiefly. In the long run this will make the strongest appeal. A number of drawings by the author add greatly to the attractiveness of the pamphlet. Pennsylvania is to be congratulated upon undertaking this real educational service, and it is to be hoped that something of the kind may soon develop in other states.—T. C. S.

SOIL SURVEY OF IOWA. Published by Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts.

Thirty-four of these bulletins have so far been issued, each one dealing with a single Iowa county. They may be of interest to the bird student because of the elaborate topographic map of the county included in each report.—T. C. S.

THE TOLL OF THE AUTOMOBILE. By Dayton Stoner. *Science*, LXI, January 16, 1925, pp. 56-57.

This article gives a census of dead reptiles, birds, and mammals noted along 632 miles of Iowa highway. It is presumed that this death toll was caused by traveling automobiles. On this mileage the author noted that 225 individuals, including twenty-nine species of vertebrate animals, had met destruction presumably from this cause. This seems to be a new factor in the mortality of wild life, and further statistics should be gathered.—T. C. S.

REPORT OF THE CHIEF OF BUREAU OF BIOLOGICAL SURVEY UNITED STATES DEPARTMENT OF AGRICULTURE. By E. W. Nelson, Chief of Bureau. Pp. 1-39. September 18, 1924.

This report is a source of valuable information concerning the work of the Survey. It may be regretted that the report does not contain a statement of the personnel of the Bureau. A number of topics of interest to bird students are discussed briefly, viz., mortality among wild birds, economic status of Laughing Gulls, control of destructive birds, examination of bird stomachs, co-operative study of the quail, bird banding, bird refuges, etc. The report covers a wide range of activity beyond bird study and should be read by all who are interested in wild life.—T. C. S.