

RECENT LITERATURE.

Barrows' Michigan Bird Life.¹— A comparison of Cook's 'Birds of Michigan' published by the Michigan Agricultural Experiment Station in 1893 and the present special bulletin of the state Agricultural College, furnishes a good illustration of the important position that the study and preservation of our native birds have attained during the past two decades. Where twenty years ago a pamphlet of 148 pages fulfilled the demand, the state today feels fully justified in the issue of this portly volume of 822 pages with 70 plates and 152 figures.

Prof. Barrows is to be congratulated upon the manner in which he has assembled his materials, and in his happy treatment of the subjects discussed in the introduction, especially 'migration' and 'how to study birds.' We heartily agree with him too when he says "The great importance of wild birds to the agriculturist may be readily conceded. Nevertheless it seems very desirable, at this time, that we should recognize the fact that all the wild things of our country, birds, mammals, insects, plants, have a right to protection, preservation, recognition, entirely apart from their *economic* status, using that word to indicate merely the amount of good or harm in dollars and cents which can be attributed to them. The fox, the Crow, the Kingfisher, the muskrat, may or may not, in the long run, be 'more beneficial than harmful,' yet each in its own way has a scientific, an æsthetic, a human value, which cannot be estimated in dollars and cents and which should forever protect him from extreme persecution, and above all from final extinction."

Our author's attitude toward collecting specimens moreover seems admirably expressed. While he believes in careful restriction in the granting of permits he says: "A moment's thought will convince anyone that the student who searches the woods carefully for a bird which he has never seen, who follows up each unknown call or song, watches with care each doubtful and illusive form which suggests the bird desired, and finally, perhaps after hundreds of disappointments, kills a specimen of the much coveted species and measures, preserves and labels it, has gained a knowledge of the appearance, habits, notes, size and structure of this species which could be obtained in no other possible way. Not only has he gained

¹ Michigan Bird Life | A List of all the Bird Species known to occur on the State together with | an outline of their Classification and an account of the | Life History of Each Species, with special reference to its | Relation to Agriculture. With Seventy Full-page Plates | and One Hundred and Fifty-two Text Figures | By | Walter Bradford Barrows, S. B., | Professor of Zoölogy and Physiology and | Curator of the General Museum | Special Bulletin | of the | Department of Zoölogy and Physiology | of the | Michigan Agricultural College | Published by the Michigan Agricultural College | 1912 — 8vo. pp. 822, 70 plates 152 text figures — Sold at the College. 45 cts. paper, 60 cts. cloth; transportation 35 cts. extra, must be prepaid.

all this knowledge with regard to this particular specimen, but in doing so he has exercised, consciously or unconsciously, his powers of observation, comparison and discrimination with regard to scores of other birds, so that his experience has been broadened and his power and judgment very materially strengthened."

The main text of Prof. Barrows work follows the nomenclature of the new A. O. U. Check-List. After the name comes a paragraph of popular synonyms and such technical synonyms as are used in the standard works; then follows a brief summary of the more striking characters by which the species may be recognized; an outline of its general distribution; a discussion of its occurrence in Michigan, its habits, nesting, etc., often at considerable length; and finally, a technical description. Much valuable economic and historic matter is incorporated in the articles the object being to select 'such information as would be useful and interesting.' Of Cook's 336 species 30 have been relegated to the hypothetical list while 20 others have been added making a total of 326 positively identified within the limits of the state.

Each family is preceded by a key for use with the specimen in hand, while six appendices treat respectively of, Additions and Corrections, Hypothetical List, Bibliography, Glossary, Outline of Classification of North American Birds (families and orders), and List of Contributors.

The value of the bibliography is materially lessened by the fact that the titles of each author are printed continuously, in one paragraph with title, reference date, etc., all in the same style of type which makes it exceedingly difficult to consult. The general typography and appearance of the work are excellent and the half tones and line cuts which are drawn from various sources, some of them original, are usually well printed.

Prof. Barrows has evidently had the cordial support of all Michigan ornithologists and bird lovers in his task and the result is one of which the state and the author may well be proud.— W. S.

Willett's Birds of the Pacific Slope of Southern California.¹—

In this recent publication of the Cooper Ornithological Club forming number 7 of the Pacific Coast Avifauna series, Mr. Willett presents a carefully prepared annotated list of the birds of 'the Pacific slope of southern California from, and including Santa Barbara County, to the Mexican line and from the summit of the mountains to the ocean, also including all the islands of the Santa Barbara group.' The work was originally intended as a revision of Grinnell's 'Birds of the Pacific Slope of Los Angeles County' published in 1898, but it was later thought better to extend its scope to the above limits.

The style and typography of the work are excellent and conform to other numbers of the same series. In nomenclature the author follows the

¹ Pacific Coast Avifauna, Number 7. Birds of the Pacific Slope of Southern California. By George Willett, Cooper Ornithological Club. Hollywood, California. Published by the Club. July 25, 1912 — 8vo., pp. 1-122.