

of present day ornithologists and bird lovers, all fortified by their own wide experiences. There are no descriptions nor technical discussions as the work is purely distributional and historical, the current English and Latin names only, being given in the heading of each species.

There are sixteen full page half-tone plates from photographs of birds or habitats, a colored map of the Forth drainage and attractive vignettes at the close of many of the chapters.

The information on character of occurrence, abundance, migration, etc., is well put together and forms not only interesting reading but an example of English composition of the highest order.

While the birds naturally comprise the major part of the text, annotated lists of the twenty-one mammals, which now or formerly occurred in Forth, and of the eleven reptiles and batrachians and one hundred and forty-two fishes will interest students of the cold blooded vertebrates. The admirable reviews of faunal relationship, migration, etc., are of general appeal.

The book is handsomely printed on the best of paper and both authors and publishers deserve great credit for the production of a most important contribution to ornithological literature.—W. S.

Hachisuka's 'The Birds of the Philippine Islands.'—The fourth part of this handsome work,¹ completing volume II, has appeared completing the Pittidae and covering the Swallows, Flycatchers, Cuckoo-Shrikes, Bulbuls and Babblers, leaving the remaining families of the Passeres to be dealt with in volume III. The printers have maintained the high standard set in the previous parts of the work and the colored plates by Grönvold, Keulemans, Frowkawk, Horsfall, Smit and Koyabashi, reproduced in several ways present a fine appearance. Acknowledgements are made in the preface for the use of certain plates from old works, but we find no explanation for the verbatim descriptions taken from original authorities or from McGregor's 'Manual of Philippine Birds' without quotation marks, an oversight that might well have been corrected.

We note as new the genus *Borisia* (p. 416) type *Zosterornis dennistouni* O-Grant; *Pitta erythrogastra yairocho* (p. 259), Sibutu Island; and *Muscicapula hyperythra mindorensis* (p. 299) Mindoro; while among the plates is one by Horsfall depicting two of Dr. E. A. Mearns's discoveries—*Pseudotharrhaleus caudatus malindangensis* and the unique *Leonardina woodi* neither of which we think has been previously figured.

We trust that the concluding volume of this important work may be completed at an early date so that the entire Philippine avifauna may be placed before us in convenient and attractive form.—W. S.

Pinto's 'Birds of Bahia.'—This excellent publication² is based upon the results of a collecting expedition undertaken November, 1932–April, 1933, in the interests of the Museu Paulista and the Museum of Comparative Zoölogy and covering several localities in the state of Bahia; along the rivers to the west of the city of that name; and at points south to the Rio Jucuruca. Under each species the author presents the synonymy so far as it relates to Bahia, a list of the specimens obtained on this and previous expeditions, and a discussion of relationship, distribution and habits.

¹ The Birds of the Philippine Islands. By The Marquess Hachisuka. Part IV, pp. 257–469, pl. 42–62. H. F. and G. Witherby, 326 High Holborn, London, W. C. 1. July 31, 1935.

² Oliverio M. de O. Pinto. Aves da Bahia Notas críticas e Observações sobre uma colleção Feita no Reconcavo e na Parte Meridional do Estado. Separata da Rivista do Museu Paulista da Universidade de S. Paulo Tomo XIX, pp. 1–326, 1935. [In Portugese with a brief abstract in English.]

There is, as an introduction, an account of the itinerary of the expedition with numerous photographs of the country through which it passed and methods of transportation.

Six species are recorded for the first time from Bahia and six others are described as probably new to science; two of the latter have already been published by the author and the others appear in the present report: *Myiornis auricularis berlepschi* (p. 207) Cajazeiras; *Myiozetetes similis pallidiventris* (p. 212); *Attila rufus hellmayri* (p. 231) Cajazeiras; *Tachyphonus rufus subulirostris* (p. 268) Bomfim. In an English abstract at the end of the work there is listed "*T. r. rubrirostris*" as a new form described and while it apparently refers to the last mentioned race there is no page cited so that it will remain a nomen nudum while the name "*subulirostris*," also published in the index, will prevail even though it is to all appearances a misprint for the other!

An outline map of Bahia is a valuable aid to localities.—W. S.

Pirnie's 'Michigan Waterfowl Management.'—Discussions and controversies on wild-fowl management have flourished ever since the serious decrease in the number of game birds became apparent. Whether any general agreement on the matter will be attained before the birds are exterminated remains to be seen. Our main hope would seem to be through education and while that is a very slow process any publication that tends to spread reliable information without stirring up antagonism is to be welcomed, and Dr. Pirnie's book¹ is of that sort.

In a word of praise for Phillips and Lincoln's 'American Waterfowl' he truly says that it "takes up the discussion at a point a little too far along" for the everyday man and this book is designed to fill the gap. This it seems admirably fitted to do and to present to the Duck-gunner, the Duck-club manager, the conservation officer and the legislator the facts that they should know and without their coöperation wild-fowl conservation would seem to be doomed.

Dr. Pirnie begins with brief accounts of the best known water-fowl of Michigan and something on their dispersal and migrations. Then follows a statement of their present status and the effect of droughts and food shortage. Then comes a chapter on enemies—predators, disease and parasites, and another on hunting, in which the part man has played in Duck destruction is fairly and forcibly presented. Part two of the work discusses the more complex problem of wild life management and the waterfowl program with a detailed account of food plants, artificial propagation of Ducks and restoration.

We are only able, in our limited space, to mention some of Dr. Pirnie's remarks which strike us as particularly apropos. In the matter of predator control he emphasizes the inaccuracy of judging a supposed predator upon circumstantial evidence. Many a bird of prey has been killed because it was caught eating a dead Duck which had died of lead poisoning or disease, and he quotes a comment of a shrewd observer who asked "if you found a rat feeding on a dead horse would you think he killed it?" "The chief function of useful predator control is to discover when and where any wild animals are doing sufficient damage to wildlife to justify remedial measures. Control work should employ only those practices which of themselves are decidedly less destructive to wildlife than the predators which are condemned." If our sportsmen would only listen to advice of this sort instead of the arguments of the ammunition makers our Hawks and Owls would be saved from the extermination which now threatens them. The only point upon which we differ

¹ Michigan Waterfowl Management. By Miles David Pirnie, Ph.D., Dept. of Conservation, Game Division. Lansing, Michigan, 1935. Pp. i-xxi + 1-328. Price \$1.50 post paid.