

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.

with Dr. Pirnie in this predator discussion is his opinion that it is "rather unnecessary and unwise to completely outlaw the use of pole traps"—simply because they are more efficient in catching Horned Owls than any other trap.

He wisely says that "Pheasant farms, deer refuges, fish ponds, and duck sanctuaries are not ultimate goals; they are only steps in the program to obtain additional recreation, sport and healthful activity and possibly create new vocations for a greater number of people. Social and economic aspects should not be lost sight of in the maze of such details as the best dates for shooting seasons or how to grow more pheasants per acre." In this same line of thought we should add the oft repeated fact that wild life belongs to all and if a thousand individuals get a great delight in the sight of a living Goshawk or Horned Owl why should these splendid birds be killed to meet the demands of the ten who desire to kill for sport the Ducks or other game which the birds have always relied upon for food? If we could have State Conservation Committees instead of Game Commissions we should cover the whole problem more satisfactorily and be able to serve the many instead of the few, and there would still be plenty of hunting for those who desire it.

Dr. Pirnie has written a splendid book which should be in the hands of as many men as possible. It is well printed and illustrated with many half-tones of birds, landscapes, food plants, etc., etc., and a good state map.

The Michigan Department of Conservation and the W. K. Kellogg Bird Sanctuary of which the author is in charge, deserve to share the credit for this excellent publication.—W. S.

Every Garden a Bird Sanctuary.—This is a British book¹ of a kind of which we have had a number in America but any helpful word on the subject is welcome and we can gain important new ideas from the perusal of Mr. Turner's little volume. He begins with an appropriate and unfortunately too true quotation of Lord William Percy that: "There is a sad irony in the fact that this period of awakening interest in these subjects has synchronized with a phase of human civilization which has involved such wholesale and world-wide decrease in wild life that it has become clear to all that the preservation, even of that remnant which survives, will tax the ingenuity and coöperation, not merely of groups of individuals but of groups of nations." Following are instructions for providing natural shelter, berry bushes, nesting boxes, feeding shelves etc. Also discussion of woodland and marsh sanctuaries. The information is well presented and the little book should do a world of good.

Most interesting to Americans, just at the moment, is the account of the Desborough and Gurney estates where game has been successfully reared and shot for years and where no Hawk or Owl is ever killed! Why do our so-called sportsmen allow themselves to be misled by the plea of the manufacturers of guns and ammunition for the extermination of predators?—W. S.

Sutton on Juvenal Plumages.—With the coöperation of the Cranbrook Institute of Science Dr. George M. Sutton has published an interesting paper² on the juvenal plumage and post-juvenal molt of several North American Sparrows with beautiful colored plates of eight of them in this early plumage, reproduced from his original paintings. These represent the Cardinal, Indigo Bunting, Towhee,

¹ Every Garden a Bird Sanctuary. By E. L. Turner, F.L.S. With Plates and Drawings, London. H. F. and G. Witherby, Ltd., 326 High Holborn, 1935. Pp. 1-190. Price 5 shillings net.

² The Juvenal Plumage and Postjuvenal Molt in Several Species of Michigan Sparrows. By George Miksch Sutton, Cornell University. Bull. No. 3, Cranbrook Institute of Science, Bloomfield Hills, Michigan. September, 1935. Pp. 1-36.