

Now Dr. Lowe,¹ with fresh material, brought from Cameroon on Mr. Bates' latest visit to England, confirms his suspicions and shows conclusively that *Smithornis* is a Broadbill. He also suggests that Rothschild's unique *Pseudocalyptomena graueri* from the bamboo forests north of Lake Tanganyika may also "actually be a Broadbill instead of merely reminiscent of one." Incidentally Dr. Lowe calls attention to the long white-based feathers which overlie the *pteryla spinalis* in *Smithornis* and which are exactly like those found in Oriental *Eurylaemidae* and says "it seems evident that colour pattern in this, as in so many other examples which could be quoted, has a deep seated origin, pointing to similar chromosomal factors and phylogenetic affinities." This is a point which the reviewer has long claimed.—W. S.

Mitchell on the Birds of Saskatchewan.—The Saskatchewan Department of Agriculture has reprinted the account of the birds² of the province by H. Hedley Mitchell which appeared as a special number of the 'Canadian Field Naturalist.' It consists of a brief historical and topographical introduction and an annotated list. Six half-tones and a colored faunal map illustrate this excellent publication which will serve to spread interest in the ornithology of the province. The author has added in manuscript three species reported since the publication of the list: Knot, Hudsonian Curlew and Crested Flycatcher.—W. S.

Hatt on Land Vertebrate Communities of Western Leelanau County, Mich.—This paper³ consists of lists of species of vertebrates characteristic of twenty-five different habitats. The value of such minute ecological classification is open to question as it is difficult to correlate the habitats with those of another region, even close by, and many of the associations are self evident. However Mr. Hatt's work is well and carefully done and the criticism is directed to this type of investigation, not to his application of it. An annotated list of the mammals follows which will be of distinct value in working out the more general distribution of the species.—W. S.

Collinge on the Food and Feeding Habits of the Blackbird.⁴—Dr. W. E. Collinge in another of his useful papers on the economics of British birds treats the Blackbird, that homologue of our Robin, and it proves

¹ On the Presence of Broadbills (*Eurylaemidae*) in Africa. By Percy R. Lowe. Proc. Zool. Soc. London, 1924, pp. 279-291. March 31, 1924.

² Catalogue of the Birds of Saskatchewan. By H. Hedley Mitchell. Govt. of the Prov. of Saskatchewan, Dept. of Agriculture. Regina, May, 1924. Reprinted from the 'Canadian Field Naturalist,' Vol. XXXVIII, No. 6. Special number, May, 1924, pp. 101-118.

³ The Land Vertebrate Communities of Western Leelanau County, Michigan, with an annotated list of the Mammals of the County. By Robert Torrens Hatt. Reprinted from the 'Papers of the Michigan Academy of Sciences, Arts and Letters,' Vol. III, 1923, pp. 369-402, pls. XXIV-XXVI.

⁴ Journ. Ministry Agr., 31, No. 2, May, 1924, reprint 5 pp.

that the relationship of the species involves food habits as well as structure. A fourth of the food of resident Blackbirds consists of cultivated fruits (strawberries, raspberries, gooseberries, currants, plums, and even apples and pears), and 61 per cent in all of the diet is vegetable. The 39 per cent of animal food is subdivided as follows by Dr. Collinge: injurious insects, 22 per cent; beneficial insects, 3.5 per cent; neutral insects, 5.5 per cent; slugs and snails, 2.5 per cent; and miscellaneous, 1.5 per cent. Grouping the birds according to the place of collection, whether in fruit-growing or urban districts, shows that fruit is consumed much more heavily where easily available, the ratio being 28.5 per cent to 18.5 per cent for these districts in the order mentioned. The birds from fruit-growing localities consume only 32 per cent of animal food compared to 45.5 per cent for those from urban areas. Dr. Collinge concludes as follows:

"Investigations conducted in this and other countries on different species of wild birds suggest that this is precisely what we should expect. Over and over again it has been pointed out that a bird feeds upon the food that is the most easily obtained, and that the reason why a species becomes injurious is that we have too many of that species feeding upon the same kind of food.

"It does not seem necessary to enter into any further analysis of the figures obtained, for it is doubtless patent to every unprejudiced mind that at the present time we have too large a resident population of Blackbirds—which is from time to time augmented by immigrants. The struggle for existence must be very keen, and so long as these conditions obtain in fruit-growing districts, the Blackbird will continue to be one of the most destructive birds with which the fruit-grower has to contend. Before it can be regarded as a neutral or a beneficial factor its numbers will have to undergo considerable diminution."—W. L. M.

Birds in Insect Control.—It is gratifying to find a work on Economic Entomology in which a chapter is devoted to birds. The reviewer does not recall a previous instance but we now have one in a book entitled 'The Principles of Insect Control,' by Robert A. Wardle of the University of Manchester, and Philip Buckle of the University of Durham (Manchester Univ. Press, 1923, 295 pp.) in which Chap. V, pp. 57-70 and pp. 259-260 of the bibliography relate to Bird Encouragement. These sections being strictly compiled are rather uneven in treatment of various phases of the subject, and of work on economic ornithology in different countries. However, a stand is made for abundance of material, well distributed seasonally, and geographically as an essential to the proper economic study of a bird. In summing up the practical relations of British birds the statement is made that "the cuckoos, swifts, lapwings, woodpeckers, and the majority of Passerine birds, particularly Paridae (tits), Turdidae (thrushes), Muscicapidae (flycatchers), and Hirundinidae (swallows), are of the utmost value." (p. 61). The reviewer would seriously object to only one sentence in the entire chapter, and that is one which ranks