

chusetts Fish and Game Association and should be read by all who aspire to active participation in this field or who would know the problems that confront conservationists.—W. S.

Caum's 'Exotic Birds of Hawaii.'—Mr. Edward L. Caum, a former member of the Delaware Valley Ornithological Club, but a resident of Hawaii, has prepared an interesting list¹ of exotic birds which have at one time or another been introduced into the Hawaiian Islands. As is generally known the native birds have been driven back into the mountains by the cultivation of the lowlands and a number nearly or quite exterminated. While it is natural that the introduction of exotic species should aggravate this condition it is not generally known how many foreign species have actually been introduced. Fortunately most of these have so far failed to gain a permanent foothold but of those introduced in the last few years it is as yet impossible to say what their status may be.

According to Mr. Caum's list ninety-six species have been liberated in the islands of which twenty-eight were Passerine birds, twenty-seven upland game birds and eighteen Doves. Some sixteen or eighteen have become established more or less abundantly. They have come from all parts of the world and curiously enough some of them have been brought from countries where they had been previously introduced from elsewhere, as for instance the European Skylark which was imported from New Zealand!

Mr. Caum has done an excellent piece of work in recording these introductions before it was too late to get their history and even as it is he encountered no little trouble in running down the origin of some of the species.—W. S.

Mrs. Bailey on Birds of the Mammoth Cave Region.²—The September, 1933, issue of 'The American Midland Naturalist' is devoted entirely to Vernon Bailey's report on cave life in Kentucky, an interesting review of the forms of life to be found in and about the caves especially the famous Mammoth Cave. There is a brief account of the caves and a list of the forest trees of their vicinity, following which are full accounts of the vertebrates of the region—the mammals, reptiles and amphibians by Mr. Bailey and the birds by Mrs. Bailey, and finally an account of some of the invertebrates by Leonard Giovannoli.

Mrs. Bailey considers about ninety-five of the birds most likely to be found by tourists in the vicinity of Mammoth Cave and which were actually seen there during the season of 1929. While no formal descriptions of the species are given there are statements of the character and time of their

¹ The *Exotic Birds of Hawaii*. By Edward L. Caum. Bernice P. Bishop Museum, Occasional Papers, Vol. X, No. 9. 1933. Pp. 1-55.

² *Cave Life of Kentucky Mainly in the Mammoth Cave Region*. By Vernon Bailey with Chapters on the Birds by Florence Merriam Bailey and on the Invertebrates by Leonard Giovannoli. September 1933. The Amer. Midland Nat., Vol. XIV., No. 5, September, 1933. Pp. 395-635, text figs. 1-90. Price \$1.25. Apply Editor Amer. Midland Nat., Univ. of Notre Dame, Notre Dame, Indiana.