

'Table of Species and Subspecies,' which shows by means of symbols their distribution in the islands, and whether the record is based on specimens in the Field Museum, on previously published records, or specimens observed in life but not taken. The combined list numbers 161 species and subspecies, nearly all of which are represented by specimens in the Field Museum, collected in the spring of 1908 by Mr. John F. Ferry and Dr. Ned Dearborn, and in the early part of the year 1909 by Mr. Ferry. One species and three subspecies are described as new; the collectors' field notes are given, and in many cases extended technical annotations. The paper is thus a valuable summary of present knowledge of the ornithology of the Leeward Islands.— J. A. A.

Fisher on the Economic Value of Predaceous Birds and Mammals.—

An eight-page paper¹ by Dr. A. K. Fisher states briefly the economic relations of the principal predaceous mammals and birds of North America to agriculture. The house cat is arraigned as the "sleek highwayman" that "destroys in the aggregate more wild birds and young poultry than all the native natural enemies combined," adding that a well-known naturalist estimates "that in the New England States alone 1,500,000 birds are destroyed annually by cats."

A good word is said in behalf of the much maligned hawks and owls, with the exception of two of the former and one of the latter, whose portraits in color, by Fuertes, are pilloried in the three plates that illustrate the paper, in order that they may be the better recognized and distinguished from the beneficial species that for the most part compose these two groups of useful birds. These species are the Sharp-shinned Hawk, the Cooper's Hawk, and the Great Horned Owl. Other birds of usually unsuspected beneficial traits are the Great Blue Heron and the Bittern, which prey upon injurious rodents; certain gulls and terns also gorge themselves on grasshoppers and crickets, while some of them feed extensively on field mice and other small rodents. Crows and Jays, while effective destroyers of pests, are seriously destructive of the eggs and nestlings of useful wild birds.

The educational information here presented will be widely distributed among agriculturists, and should be effective in placing the matter in a proper light before those most interested in the suppression of farm pests.— J. A. A.

Beebe on the Breeding of Canada Geese in Captivity.— Apropos of industries connected with semi-wild birds, Mr. Beebe, in a recent number of the 'Zoölogical Society Bulletin,' published by the New York Zoölogical Society, gives an account of the rearing of Canada Wild Geese on Chinc-

¹ The Economic Value of Predaceous Birds and Mammals. By Dr. A. K. Fisher, in Charge of Economic Investigations, Biological Survey. Yearbook of Department of Agriculture for 1908 (1909), pp. 187-194, pll. i-iii (colored). Also separate.

teague Island, Virginia, for their commercial products.¹ More than fifty years ago, he states, Mr. J. W. Whealton secured a pair of wing-tipped Wild Geese, which "were the nucleus of his present flock of 450 birds." New blood has been added at frequent intervals, thus avoiding in-breeding. Mr. Beebe's report of this experiment is detailed and full of interest, particularly his account of the habits of the species in confinement and the manner in which the birds are cared for and controlled. The geese are plucked several times a year for their feathers, and thus yield a small revenue. Other species of geese, and several species of swans, are likewise reared on this island by Mr. Whealton, and various crosses have been made between different species of geese, the hybrids being in some cases fertile, in others not so.— J. A. A.

Shufeldt on the Osteology of *Arachnothera magna*.²— Dr. Shufeldt here describes in detail the osteology of one of the larger species of the family Nectariniidæ, in comparison with that of the Cerebidæ, Meliphagidæ, Certhiidæ, and Trochilidæ. He finds that osteologically the species is distinctly passerine, with faint resemblances in some features to the Trochili, but these "have no bearing whatever upon affinity." The plate is a lateral view of the skeleton, from a photograph by the author.— J. A. A.

Macpherson's 'The Home-Life of a Golden Eagle.'³— This is a most interesting narration of Mr. Macpherson's success in watching and photographing a pair of Golden Eagles and their young in the Grampian Hills of Scotland during the breeding season of 1909. The eyrie was discovered on the 23d of April, when it contained two eggs. It was first visited by the author and the eggs photographed, of course with the eyrie and its surroundings, on May 3, when a shelter of stones was constructed for the concealment of the camera. On the 19th of May there were two eaglets in the nest, apparently about six days old; they were photographed, and arrangements were completed for photographing later the old birds at the nest. How successfully this was carried out is recorded in the thirty-two plates illustrating the present brochure, where not only the young birds are shown at various stages of growth and in many attitudes, but the old birds as well on their visits to feed and care for the young. Only one of the young birds reached maturity, leaving the eyrie about the end of July when about eleven weeks old. The narrative is a record of patience and

¹ Breeding Canada Wild Geese on Chincoteague Island, Va. By C. William Beebe. Zoöl. Soc. Bull., No. 36, October, 1909, pp. 576-579, with half-tone illustrations.

² On the Comparative Osteology of the Passerine Bird *Arachnothera magna*. By R. W. Shufeldt, M. D., C. M. Z. S. Proc. Zoöl. Soc. London, 1909, pp. 527-544, pl. lxviii.

³ The Home-Life of a Golden Eagle Photographed and described by H. B. Macpherson With thirty-two mounted Plates London Witherby & Co., 326 High Holborn W. C. MCMIX. Large 8vo, pp. 1-45, pl. 1-32 (mounted photographs).