

to be little influenced by weather conditions. Many species arrive with great regularity, irrespective of bird waves. It is believed that through study of weather maps 'bird waves' can be predicted with some certainty.— J. A. A.

Montgomery's 'The Protection of Our Native Birds.'¹—This admirable essay considers, successively, (1) the reason for protection, (2) data on the destruction of birds, and (3) the means for their protection. Under these several divisions the author summarizes the leading features of the subject, especially the value of birds to agriculture. Among the means for the protection of birds, he urges emphatically "the spread of accurate knowledge concerning the practical value of the birds, and especially among farmers. . . . Common-sense talks before farmers' granges and before the meetings of ranchmen may prove more efficacious than printed matter," inasmuch as the bulletins prepared by experts seem rarely to reach the farmers, "being consigned to the waste paper baskets of congressmen." The wide distribution of this important presentation of the subject among the people of Texas should result in much good.— J. A. A.

Oberholser's 'The North American Eagles and their Economic Relations.'²—This is a summary of the distribution and life histories of the Bald Eagle (*Haliaeetus leucocephalus*) and the Golden Eagle (*Aquila chrysaetos*) with a brief allusion to the Gray Sea Eagle (*Haliaeetus albicilla*), which has in North America only a very limited range, being found, so far as known, only in Greenland, on the shores of Cumberland Sound, and on Unalaska Island. The food habits of both the Bald Eagle and the Golden Eagle are considered at length; the former being regarded as "rather more beneficial than otherwise," and the latter as "on the whole more harmful than beneficial." Each species is illustrated by a plate, and the breeding range of each is shown by means of two maps.— J. A. A.

Cooke's the Distribution and Migration of North American Ducks, Geese, and Swans.'³—Sixty-four species and subspecies of ducks, geese and swans are stated to occur in North America north of Mexico, of which 24 breed in the United States. Five of the latter are confined to the southern border of the United States and range thence southward, leaving 19 as regular and more or less common breeders over portions of the

¹ The Protection of Our Native Birds. By Thos. H. Montgomery, Jr., Professor of Zoölogy, University of Texas. Bull. University of Texas, No. 79; Scientific Series No. 6, 8vo, pp. 30.

² The North American Eagles and their Economic Relations. By Harry C. Oberholser, Assistant Ornithologist, Biological Survey. Biological Survey, Bull. No. 27—8vo, pp. 31, 2 pl. and 2 text figures, 1906.

³ Distribution and Migration of North American Ducks, Geese, and Swans. By Wells W. Cooke, Assistant, Biological Survey. Biological Survey, Bulletin No. 26, 8vo, pp. 90. 1906.

United States. These are the species that have shown the most marked decrease in recent years, and which, therefore, stand most in need of protection. This investigation was undertaken for the purpose of furnishing information as to present ranges, relative abundance, and migration, with reference to practical legislation. The first part of this valuable report is devoted to a consideration of the extent and causes of the recent decrease in numbers of these useful birds, and the suggestion of measures for their better protection. The absolute prohibition of spring shooting in every part of the country is strongly urged as necessary for the preservation of these species for the benefit of future generations. Then follows a list of species that winter principally in the United States, and a list of those that winter both in the United States and Canada. It is stated that 54 species regularly visit the United States during some portion of the year.

Following this preliminary matter, the species are taken up in systematic sequence, with reference to their breeding ranges, their winter ranges, their seasons and routes of migration. The basis for determining the ranges consists of published records, data derived from museum specimens, and the unpublished notes of the field agents of the Biological Survey. "The data on migration are derived almost entirely from the migration schedules contributed since 1884 to this Bureau by hundreds of observers distributed throughout the United States and Canada." It thus follows that a vast amount of hitherto unpublished information on the ranges and migrations of the Anatidæ is here for the first time available. The paper is thus, aside from its great economic importance, a valuable contribution to ornithology.—J. A. A.

Ward's 'Notes on the Herring Gull and the Caspian Tern.'¹—This is an account of two visits (in 1905 and 1906) to a large breeding colony of Herring Gulls and Caspian Terns at Gravel Island, at the northern end of Door County peninsula, Wisconsin, and contains many interesting observations on the manner of nesting and other matters connected with the home life of these species. The first season many young gulls were found dead on the beach, and the cause of their death was not easy to explain. On the second visit it was found that the old birds deliberately maltreated certain of the young birds, mortally wounding them. "The habit of killing the young," he says, "appears to be fairly common," but he is quite unable to account for such strange acts, which he repeatedly witnessed. "I was quite unable to see," he adds, "that the victims of these attacks were in any way abnormal, or that they had given any offense. . . . Rapid movement seemed always to excite the adults and a running young one was sure to be attacked by every adult near which it passed, but

¹ Notes on the Herring Gull and the Caspian Tern (*Larus argentatus* and *Sterna caspia*). By Henry L. Ward. Bull. Wisconsin Nat. Hist. Soc., Vol. IV, No. 4, October, 1906, pp. 113-134, with 2 plates.