

Henshaw on American Game Birds.¹ — This paper follows exactly the plan of two earlier publications on 'Common Birds of Town and Country' which appeared previously in the 'National Geographic Magazine,' the one having been originally issued as a bulletin of the U. S. Department of Agriculture. There are 72 colored illustrations from original paintings by Louis Agassiz Fuertes. Of these 16 represent gallinaceous birds, 28 geese and ducks, 17 waders, 3 pigeons and doves and 8 cranes and rails, but as several species often appear together the total number treated is nearly 100. The text presents the range of each species and a brief account of its habits. Only those familiar with the cost of producing the high grade of colored illustrations here presented will appreciate the expense to which the 'National Geographic Magazine' has gone in producing this series of portraits of North American birds; while the educational value of the undertaking, in bringing this mass of ornithological information to thousands of homes that would not otherwise obtain it, is impossible to estimate.— W. S.

Taverner on The Double-crested Cormorant and Its Relation to the Salmon Industry.² — In this pamphlet Mr. Taverner presents the results of an investigation of the food of the Cormorants at Percé Village and Gaspe basin, Quebec, undertaken during the summer of 1914. Incidentally much interesting information on the nesting of the birds is presented, while the food habits are treated at considerable length. It was found that, during the period of observation at least, the Cormorants feed on other species of fish and do not molest the Salmon, while evidence collected inclined the writer to regard them as entirely blameless of this charge. They do however inconvenience the fisherman, when herring are scarce, by stealing the few which they catch for bait. The fishing clubs of the vicinity we learn offer bounties of 25 cents per head for Cormorants, Shelldrakes, Kingfishers and Divers and \$2. for a Kingfisher's nest with the female bird! Mr. Taverner's paper is an interesting and valuable contribution.— W. S.

Shufeldt on the Osteology of the Limpkin and Stone Plover.³ — In two detailed and fully illustrated papers Dr. Shufeldt describes the skeletons of these two birds and compares them with those of related groups. The Limpkin he regards as affiliated more closely with the Rails

¹ American Game Birds. By Henry W. Henshaw. National Geographic Magazine XXVIII, No. 2. August, 1915. pp. 105-158.

² The Double-crested Cormorant (*Phalacrocorax auritus*) and its Relation to the Salmon Industries on the Gulf of St. Lawrence. By P. A. Taverner. Canada. Dept. of Mines. Museum Bulletin, No. 13. April 30, 1915. pp. 1-24

³ On the Comparative Osteology of the Limpkin (*Aramus vociferus*) and its Place in the System. By R. W. Shufeldt. Anatomical Record, Vol. 9, No. 8. August, 1915. pp. 591-606.

On the Comparative Osteology of Orthorhamphus magnirostris (the Long-billed Stone Plover). By Dr. R. W. Shufeldt. Emu, XV, Part 1, July 1, 1915. pp. 1-25.

than with the Cranes, although it represents a family distinct from the Rallidæ. This conclusion illustrates how difficult it is to arrive at any generally acceptable classification of birds, so great do the opinions of individuals differ. Dr. P. Chalmers Mitchell in a recent investigation of this same problem on the basis of osteology comes to a diametrically opposite opinion! (Abst. Proc. Zool. Soc. London, May 25, 1915). The Stone Plover Dr. Shufeldt finds to be probably not closely allied to the Bustards as has sometimes been claimed. On the other hand it shows clearly the relationship between the *Limicola* and the *Longipennis*, and "so far as osteology goes, beautifully bridges across one of the gaps, for we find both pluvialine and larine characters intimately blended all through the skeleton." Dr. Mitchell's views upon this point would be interesting for comparison.—W. S.

Recent Publications of the Biological Survey.—Prof. Cooke¹ in a report on the shorebirds points out their value as game and the importance of preserving them from extinction. The Wilson's Snipe, Woodcock, Upland Plover and Eskimo Curlew are the species especially considered and their former abundance and rapid decrease in numbers are reviewed and the causes pointed out. As an illustration of the unchecked slaughter of these birds in the southern States the record of a gunner in Louisiana is cited, who in 20 years from 1867 to 1887 killed 69,087 Wilson's Snipe!

Mr. Alex. Wetmore² has been making a field study of the mortality of ducks, shorebirds, herons, etc., in the neighborhood of Great Salt Lake where large numbers of these birds have died under apparently similar conditions to those which attended like mortality at Tulare and Owens Lakes, California.

The cause of the trouble has not been positively determined but seems in all probability to be alkaline poisoning from the water. The increase in irrigation it is suggested has taken up vast quantities of alkali from the soil and in dry seasons the water naturally becomes heavily charged with it. Investigations by experts fail to show that bacteria, nematodes or poison from smelting works have had serious effect upon the birds.

Another valuable paper recently issued is a new edition of Mr. McAtee's 'Important Wild-Duck Foods,'³ which is in great demand among breeders of wild fowl.—W. S.

Da Costa on the Economic Value of the Birds of São Paulo, Brazil.⁴

¹ Our Shorebirds and their Future. By Wells W. Cooke. Yearbook U. S. Department of Agriculture for 1914, pp. 275-294.

² Mortality Among Waterfowl around Great Salt Lake, Utah. (Preliminary Report.) By Alex. Wetmore. Bull. 217 U. S. Department of Agriculture. May 26, 1915.

³ Eleven Important Wild-Duck Foods. By W. L. McAtee. Bull. 205 U. S. Department of Agriculture, May 20, 1915.

⁴ Os Pequenos Amigos da Agricultura. Por. J. Wilson Da Costa. Published with the aid of the Secretary of Agriculture of São Paulo, 1914, pp. 1-118, illustrated.