

interior provinces, gives an added value to the publication. The present part is quite up to its predecessors in thoroughness and appearance.—W. S.

Gorbunow's 'Birds of Franz-Joseph Land.'—This work¹ is a detailed account of the bird life of Franz Joesph Land based on trips made by the author in 1927 and 1930 on Russian "ice-breaker" boats, and on collections made by previous Russian voyagers, as well as on the literature which he has studied exhaustively. Twenty-six species are found on the island of which all are water birds except the Lapland Longspur, Snow Bunting, Horned Lark, Swallow, Snowy Owl, Gyrfalcon and Ptarmigan. We note that the Eider Duck is the northern race *S. m. borealis*. Some of the species like Bonaparte's Sandpiper have occurred only once or twice and only the true arctic birds breed there. This important work is printed in Russian but there is a much condensed German translation appended.—W. S.

Pearson and Brooks on Crows and Jays.—Continuing its excellent accounts of the birds of North America the 'National Geographic Magazine,' in its January issue, presents an account² of the crows, jays and their allies, by Dr. T. Gilbert Pearson, with attractive illustrations in color from paintings by the well known bird artist, Major Allan Brooks. There are sixteen of these representing the raven, crow, the two magpies, eleven species of jays and the nutcracker. The various subspecies into which these birds have been divided are mentioned by name with an outline of their distribution.

There are good accounts of the habits, history, and food of the birds and a popular introductory sketch of the group with anecdotes and many halftone illustrations. Students of our birds should secure the magazines containing these valuable papers which will eventually form a well illustrated and reliable history of the birds of North America.—W. S.

Palmgren's Recent Publications on Animal Ecology.—Mr. Pontus Palmgren has recently published a number of important contributions to animal ecology and related subjects which we, unfortunately, have not space to adequately review but we recommend them to the attention of all interested in this line of investigation. All are written in German.

One³ deals with the principles of plant and animal ecological investigation while in another⁴ he describes at length a quantitative investigation of the bird life of the woodland of southern Finland which is approached from

¹ The Birds of Franz-Joseph Land. By G. Gorbunow, Transactions of the Arctic Institute, USSR. Vol. IV. Leningrad, 1932. Pp. 1-244.

² Crows, Magpies and Jays. By T. Gilbert Pearson. Nat. Geographic Mag., January 1933. Pp. 50-79.

³ Zur Synthese Pflanzen- und Tierökologischer Untersuchungen. von Pontus Palmgren, Acta Zool. Fennica 6 Helsingforsiae 1928. Pp. 1-51.

⁴ Quantitative Untersuchungen über Die Vogelfauna in den Wäldern Südfinnlands. von Pontus Palmgren. Acta Zool. Fennica 7 Helsingforsiae 1930. Pp. 1-218.