

Reviews

Japanese Birds.—R.A.O.U. member, Keisuke Kobayashi, has published privately (Kobe, 1959) a paper: 'Notes on Osaka Bay Waders', which is of interest and importance to Australian wader enthusiasts. The text is in Japanese (111 pp.) with a 4 pp. English summary. Observations, supported by specimens, over a seven-year period at Nanko mudflats, Osaka Bay, yielded data on 39 species. It is noteworthy that more than one-fourth (about 60 species) of the world's waders have been recorded from the Japanese archipelago. The author groups the Nanko waders under three headings: (a) Numerous regular visitors and common residents (6); (b) less common regular visitors and residents (23); and (c) irregular visitors and stragglers (10). From November to March over 75 per cent of all waders are the resident Kentish Plover (*Charadrius alexandrinus japonensis*) and wintering populations of the Eastern Dunlin (*C. alpina sakhalina*). From May to September more than 50 per cent of all waders are passage migrants. During the spring migration the most numerous species is the Eastern Whimbrel (*Numenius phaeopus variegatus*), and in autumn the Red-necked Stint (*C. ruficollis*). For each species data are given on migration dates, numbers (with graphs and histograms), field marks and habits.

Opportunity is here taken to notice four other publications by Kobayashi, of which the first is a meritorious and significant addition to the growing list of field-guides in the 'Peterson' style, and is already in its third edition. 1956—*Birds of Japan in Natural Colours* (Kobe, Hoikusha, 204 pp., 64 col. pl. and line drawings by Takashi Miyamoto; price 1200 yen). 1957—*Photographs of Japanese Birds* (one of a series of school nature publications, 7 col. and 197 black-and-white photos.; price 200 yen). 1958—*Nature Photographs of Bird Life in Japan* (a more lavish edition of the preceding on art paper with more detailed notes on species and index of scientific names, 128 pp. and six outstanding colour photos.; price 500 yen). 1958—*Some Birds of Eastern Asia and the Western Pacific* (a picture book of 80 col. pl., 658 birds, in crisp, stylized form, plus photographs of nests and eggs and 15 magnificent coloured plates of eggs of Japanese birds, price 380 yen).—W.B.H.

Ecology of Wild Ducks.—Investigations on the bionomics of native ducks in a region of flood-plains of rivers in south-western New South Wales have been carried out over a period of years by the Wildlife Survey Section, C.S.I.R.O. A series of seven papers by H. J. Frith gives the main results of that research. The most recent contributions by Frith include four complementary papers dealing with 'The Ecology of Wild Ducks in Inland New South Wales', *C.S.I.R.O. Wildlife Research*, 4 (2), 1959. Part I (pp. 97-107) deals with duck habitats; part II is concerned with the movements of the birds; part III deals with food habits; and part IV (pp. 156-181) provides information on the breeding of the species.

A contribution on 'Ecology of Wild Ducks in Inland Australia' by the same author appears in *Biogeography And Ecology in Australia* (Series *Monographiae Biologicae*, vol. VIII), pp. 383-395, Sep. 1959, and summarizes the knowledge of the ecology of the species concerned in inland New South Wales. General conclusions are that waterfowl habitats fluctuate greatly in extent from year to year, and the movement patterns of the various species of wild ducks vary according to the habitat required and available. Species having regular movements have regular food cycles. Some nomadic species have very adaptable food habits, but one nomadic species, the Pink-eared Duck (*Malacorhynchus membranaceus*) is a food specialist and has developed an extreme type of nomadic wandering. Whilst the species of ducks characteristic of permanent swamps have very regular breeding seasons, the nomadic ones are able to breed at any time of the year whenever suitable conditions occur.—E.F.B.