persistent throughout November and December, but whether socially roosting birds were mated males or young of the previous season was unknown.

Authorities state that social roosting recommences late in June in southern England. Summer and early autumn roosts are also described by Marples (1934) starlings occupying reed beds or deciduous trees and deserting them before winter. He notes that non-breeding starlings occupy a roost throughout the year.

At Karori on December 6 birds remained at night about their late breeding area in the plantation or flew elsewhere. Two kilometres distant a summer roost existed in late November. Many juveniles were absent from the suburb but had probably retired to Makara where they were abundant on January 2, 1948.

Small groups of non-breeding birds, usually about five, had increased to fifty by November 23 and 30.

Observations on summer roosts are not precisely identical with English records but the writer believes this is caused by the absence of favourable vegetation in the area.

References.

Tucker, B. W. (et al) Handbook of British Birds.

Marples, B. J.—Journal of Animal Ecology, Nov., 1934. Winter Starling Roosts of Great Britain.

Stuart Smith .- How to Study Birds.

Secker, H. L.—N.Z. Bird Notes, Vol. II., Roosting Habits of Starlings.

REVIEWS.

New Zealand Bird Life, by E. G. Turbott; A. H. & A. W. Reed. (101 pages, including 49 illustrations). Price, 17/6.

Attractively printed on art paper, this volume contains authoritative information concerning a number of native birds, with more or less incidental reference to two or three introduced species. Written in popular style, it is intended to interest more particularly youthful readers, though its pages can well be perused and enjoyed by the more mature. Miss Nancy Wilson contributes a fitting-preface. A feature of the volume is its profusion of photographs, many of which are the work of Major G. A. Buddle. The photographs generally are of an excellent standard, but a few of stuffed specimens do not stand comparison with those of wild birds. Major Buddle's fine studies testify to his patience and painstaking work in photographing New Zealand's bird life. Perhaps some space could have been devoted to common, introduced birds met with in garden and countryside and captions provided for the photographs introducing the four sections of the book. The volume as a whole is a very fine production and should grace the shelves of all bird lovers.—R.H.D.S.

The Gannet on Cape Kidnappers, by K. A. Wodzicki and C. P. Mc-Meekan; Trans. Royal Soc. of N.Z., Vol. 76, pt. 3, p.p. 429-452, July, 1947.

In view of the gannet census being conducted by the Ornithological Society of New Zealand this paper is of particular interest. In an introductory section is included a table of the breeding colonies of the gannet in N.Z., in which, based on the observations of various authorities, the estimated total is given as 11,777 pairs, though this may not be very accurate as some of the estimates were made over 20 years ago. Dealing more particularly with the Cape Kidnappers colony, the authors give a brief historical survey, a general description of the gannetry, evidence of an extension of the breeding areas to three different colonies in comparatively recent years, a population census (in 1945, 5674 birds), observations on breeding habits and on experiments to study psychological reactions of breeding birds. The authors reached the conclusion that in the 1945-46 season "no more than 16 per cent. of their total numbers have been reared to the stage that the chicks are able to leave

the rock." Notes on the bird life of the area are included and an appendix gives a list of egg measurements. There are a number of illustrations.—(R.H.D.S.)

Notes on the Bird Life of the Porangahau District, N.Z., by John H. Cunningham and K. Wodzicki; Emu, Vol. 47, 177-128; Jan., 1948.

The Porangahau Estuary and its association with some of the field observations of the late Mr. H. Guthrie-Smith make this area of more than passing interest. Following on a general description of the area, the authors give a systematic list of the species recorded in the district. It is difficult to follow the reasoning of the authors in their remarks about the North Island and the South Island oystercatchers. After quoting such an eminent authority as Falla, who includes the east coast of the North Island as within the range of H. unicolor, they dismiss all black-plumaged birds as H. reischeki, passing over Falla's statement and the fact that it is considered impossible to distinguish in the field wholly black reischeki from unicolor. One of the most interesting records concerning the area is the breeding of the black-billed gull (in company with the red-billed gull) in a district not hitherto known as a breeding place for this species. Some of the conclusions arrived at differ from those of Fleming (published in the second annual report of the Ornithological Society) and it appears that some of Fleming's observations have been overlooked. These considerations apart, the paper gives much interesting information of the bird life of the district under review.—
(R.H.D.S.)

BIRD BIBLIOGRAPHY.

Pair Formation in Penguins, by L. E. Richdale; Emu, Vol. 46 (1946), 133-156 and 215-227.

A supplementary paper to one entitled "Courtship and Allied Behaviour in Penguins" (Emu, 1945, 305-323 and 37-54) relates to a study of a sedentary species, **Megadyptes**, in which the author's evidence and observations are based on ringed birds.

Notes on the Breeding Cycle of the Thrush and Blackbird in N.Z., by P. C. Bull; Emu, Vol 46 (1946) 198-208.

This study was made in a dairy farming area at Mangere, near Auckland, and discusses period of breeding, including winter laying of thrush, size of clutch, fertility of eggs, survival in the nest and population density, with a comparison between the two species.

Method of Silvereye Trapping in N.Z., by J. M. Cunningham. Emu, Vol. 46 (1946), 209-214.

Reprints of this paper have been distributed to members.

Sooty Shearwater in Tasmania, by M. S. R. Sharland. Emu, Vol. 46 (1946) 228-229.

Records Tasman Island (S.E. tip of Tasmania) as a breeding site of this species.

A Note on the Australian Tree Martin in N.Z., by W. J. Phillipps. Emu, Vol 47 (1947), 116.

Records the occurrence of Hylochelidon nigricans in Blenheim district on four occasions in last ten years, a bird being shot on 29/3/47.

Field Notes on Waders in South-West Pacific, with Special Reference to the Russell Islands, by P. C. Bull. Emu; Vol. 47 (1948), 165-176.

Gives observations made during a year's war service in this area. Numbers and species observed indicate, says the author, that Solomons are a short backwater from main stream of Northern Hemisphere migrants moving south to Australia. Migrants to and from New Zealand apparently travel further east.

Sooty Shearwater in Australia, by J. A. Kearst and A. R. McGill. Emu; Vol. 47 (1948), 199-202.

Following on M. S. R. Sharland's record of breeding of this bird on island off Tasmania, the authors give two additional islands off N.S.W. as breeding places of this bird.