

## REVIEWS

NEW ZEALAND BIRDS. By W. R. B. OLIVER. A. H. and A. W. Reed, Wellington, New Zealand. Second Edition, £6.

In 1930 Dr. W. R. B. Oliver, formerly Director of the Dominion Museum, published his standard work *New Zealand Birds*, now out of print. This work has been completely revised and enlarged and will be the authority on New Zealand ornithology for many years to come.

Dr. Oliver is an outstanding biologist and his ornithological pronouncements are based on many years of study of the anatomy of birds, especially the skull. Where he differs from the New Zealand Checklist and the findings of other ornithologists, he has given extremely sound reasons for doing so.

His remarks upon the genus *Gallirallus*—large rails with strong bills and feet and rudimentary wings—has helped to clear up the debatable point as to how many wekas or woodhens should be recognized. These birds, whose migratory movements tend to make them appear and disappear in districts rather like the Cheshire Cat in *Alice in Wonderland*, have been neatly tabulated into forms definable by colour and size.

Hitherto it has been usual to suggest that the black fantail of South Island was a mutant of the pied form, but Dr. Oliver in his recent work states that the black fantail is a very distinct entity with all the characteristics of a species, except that it is not yet sufficiently distinct physiologically from the pied fantail for there to be a barrier to cross fertilization. To those of us who have watched pied and black nestlings of two black parents, his findings come as a happy release from uncertainty.

Since the first publication of Dr. Oliver's work so much information has been obtained about certain seabirds that his present work contains a wealth of new information about them, but what comes as a surprise is the lengthy list of cage and domestic birds which have gone wild. Both turkeys and guinea fowls are amongst the escapes and most amusing is the history of the rosella parrakeet. Chapter one of its history was its escape from captivity in the Auckland district where it became naturalized. Chapter two occurred when a few crimson rosellas, denied entry into New Zealand by the Customs, mysteriously flew ashore off Otago Heads from the ship which had brought them from Sydney. Chapter three was enacted by the crossing of the two species and "now no pure birds of the crimson rosella remain in the Dunedin area".

A special section of the book is devoted to the description of

the extinct birds of New Zealand, such as the moa, upon which Dr. Oliver is an outstanding authority. There are many photographs and twelve coloured illustrations.

P. M.

**THE FLAMINGOS: THEIR LIFE HISTORY AND SURVIVAL.** By ROBERT PORTER ALLEN. Research Report No. 5, National Audubon Society. xv + 285 pp., 16 plates (4 coloured), 49 figs., 8 tables, 1956. \$3.95.

Robert Porter Allen is to be congratulated on his skilful presentation of the complex problem of the flamingos. His superb monograph is a most fascinating exposition of this extraordinary and lovely bird and not just a highly technical ornithological treatise. Every page is intriguingly informative, as well as of absorbing interest, and though to a certain extent inevitably repetitive, repetition serves to emphasize the disturbances and disasters to which the flamingos have been and are still subject. Happily, however, it is not all species of flamingos which are at present seriously threatened, though no corner of the earth now inhabited by these strange birds remains untouched by man—therein lies the danger. Probably no other bird has such a tragic record of prolonged and steady destruction. The flamingo whose status is causing grave concern is the greater flamingo, *Phoenicopterus ruber*, commonly known as the American or West Indian flamingo. To a lesser extent its near relative of Europe, Africa and Asia, *Phoenicopterus antiquorum*, and also *Phoenicoparrus jamesi* of the Andean highlands of South America are nearing the danger point. Fortunately, other flamingo species do not yet present serious population problems. But Allen's treatise deals generally and comprehensively with all species of flamingos wherever they occur.

His three years of intensive study in the field of the American flamingo provide the background of much that is recorded, though in a general way the report is also a revision of the basic literature of the flamingos, as well as an attempt to interpret the various aspects of their biological characteristics in relation to environment. Preceded by a 19-page "Introduction", including an entertaining dissertation on "Legend and Early History", it is admirably arranged in five parts: "Distribution and Migration," "Numbers," "Food Habits and Ecology," "The Breeding Cycle" and "Conservation".

In their behaviour and general habits all flamingos are much alike. They are to be found from sea level to an altitude of 15,000 feet; one species nests at 13,000 feet. Man is the