

REVIEWS

BULLER'S BIRDS OF NEW ZEALAND

A new edition of Sir Walter Buller's "A History of the Birds of New Zealand" — reproducing in six-colour offset the 48 stone-plate lithographs by J. G. Keulemans — from the Second Edition, 1888, now edited and brought up to date by E. G. Turbott. Published by Messrs. Whitcombe & Tombs Ltd.

The world today looks always for something new and is inclined to forget the value of things old. Ornithologists have as much need as any to guard against this failing, so all will feel grateful that in this instance we have a fine old work made new, by the able hand of Mr. E. G. Turbott. This affords us the opportunity of studying the ornithological situation at the time of Walter Lawry Buller and his artist J. G. Keulemans. The scarcity of the original books has been a difficulty for those seeking to refer to them and this is now obviated. It would be a grand thing if the writings of other workers of New Zealand's early days could be reproduced in similar style. Today we get into a car, a fast boat, or even an aeroplane and sally forth to study birds. What an advantage we have over the pioneer devotees who set off leading a pack-horse, or tramping and carrying a swag, or at best using a horse-drawn vehicle or the then limited railways. We have good reason to be amazed and to appreciate the work that these men, and some women, too, achieved in the field. Their standard of accuracy is something to cause unstinted admiration. Since their time, new facts about birds have been discovered and some of their findings corrected; but this will happen, too, to the work and findings of the present generation. In his Preface to the History of the Birds of New Zealand, 1873, Buller wrote ". . . and the result is now presented to the public in a form which will, I trust, be acceptable to both the scientific and the general reader." The wide acclaim of the reviewers and commentators of the time is sufficient evidence of his having achieved his aim, as is also the present-day regard for what he achieved.

It is good to see that Mr. Turbott has given a well balanced view of the fact that Buller, like others, collected birds by shooting. This was quite a different matter from killing out a rare species in order to put up the price of the skins. Birds were so numerous that few thought of their becoming scarce. In any case we would have been badly off for study material if they had not collected. We can still feel that this was an unfortunate way of making a living. Ideas have changed for the better; and some of our older citizens who once shot native birds for sport or for food, do not now like to think of those days. Many of them make amends for their short-sightedness by being enthusiastic protectionists. Buller, too, would no doubt have become a protectionist, as he was already concerned about the future of some species, even in the latter part of the nineteenth century.

The Editor's Introduction is an essay in itself and a pleasure to read. Perspective in the treatment of a reappraisal such as this is vital and has been admirably achieved. In making an editorial

introduction to each species and following it with the lightly edited text of Buller Mr. Turbott has welded the old with the new, preserving the justly famed style of the early author and aptly bringing up to date the present status of each bird. An example of this, selected at random, is the treatment of the Pied Stilt. Mr. Turbott compares the present distribution of the species with the past, showing its increase and spread and he confirms Buller's suspicions of an internal seasonal movement of population. And another, the White-fronted Tern, shows Buller's account to stand to this day, except for the partial migration to and from Australia, something of which the early author had no opportunity of knowing. These instances show the value of this edition. It has not been necessary to reproduce the textbook material since it is readily available in so much of the modern literature. The measurements and other descriptions of birds remain the same but the numbers, habits and habitat are matters which need this kind of revision. It is good, too, to perpetuate the great artistry of Keulemans.

It is often indicated by reviewers that they have a duty to find something to criticise. If this is correct the present reviewer has failed dismally, being unable to find any fault in this splendid re-presentation.

— H.R.McK.



Animal Navigation. By R. M. Lockley. Pan Books Ltd. (Pan Piper Series) 75c.

This paperback, by the well-known ornithologist who pioneered banding work on the Manx Shearwater at Skokholm almost 40 years ago, has much of interest to readers of *Notornis*. The title is a bit misleading, since in the process of working up to discussion of navigation and migration, eight chapters, nearly half the book, are devoted to reviewing our knowledge of the senses of animals.

Anecdotes drawn from the author's own experience and wide reading (back to Leonardo) are interspersed through the intriguing summaries of modern knowledge of animal psychology and behaviour. The reader who has not kept up with more specialised publications can thus get acquainted with such fascinating discoveries as echo-reception (sonar) in bats (Griffin) and dolphins, the sense of direction in starlings (Gustav Kramer), use of polarized light by bees (Von Frisch), and the internal chronometers of fiddler crabs. The experiments described show that almost all vertebrate and most invertebrate animals that migrate over long distances have an acute sense of direction or geographical position, as well as an internal biological clock, so that some can navigate by solar time by day and some by sidereal time at night. Lockley is now convinced that nocturnal sea-birds carry a sound-memory of the distinctive echo-pattern of the terrain near their burrows, and that the calling of incoming petrels is to obtain the familiar echo-pattern by which they can locate their burrows accurately (and avoid obstructions).