

LITERATURE

Edited by A. R. McEVEY

BOOKS

A Field Guide to Australian Birds, Non-Passerines by Peter Slater, 1970. Adelaide: Rigby Ltd. Pp xxxii + 428, numerous col. and b. & w. pll and distribution maps. 190 × 130 mm. SA\$5.50.

Except for Cayley's *What Bird is That?* there has been no readily available publication in which all Australian species are illustrated. Mr P. Slater is now filling a great need. The first part of his work is available and the second will, it is understood, soon be completed. *A Field Guide to Australian Birds* has a much wider scope than Cayley's book. Apart from the continent and Tasmania it covers the political dependencies Norfolk, Lord Howe, Macquarie, Heard, Christmas and Cocos-Keeling Islands. This is commendable; for, often these outposts of the Commonwealth have been sadly neglected ornithologically and for the first time a fully illustrated guide is available, reasonably priced, covering the whole area, except the New Guinea region. It is therefore interesting to see included in an Australian book such species as the Ruddy Crake (Christmas Island), Woodhen (Lord Howe), Weka (Macquarie) and even a new family (Sheathbills), which occurs on Heard Island.

The names of various ornithologists, most connected with the Division of Wildlife Research, CSIRO, who have contributed parts of the text are given, and a list of others, chiefly those who helped Mr E. Lindgren at the time of the book's origin, appears in the Acknowledgements. The decision to follow the scientific arrangement and specific nomenclature of the recent CSIRO publication, *Index of Australian Bird Names*, has merit. The official RAOU Checklist has become out of date, and is now not even followed by the official journal of the RAOU. Nevertheless, a few apparent errors can persist in changing from a checklist solely specific (as that of 1926) to one basically interested in vernaculars, and when modernizing scientific names, such as the generic name for the Australian Bustard (the type of *Eupodotis* is *E. senegalensis*, a bird quite different from the group to which our Bustard belongs) and the continued use of *rufa* as the specific name for the Darter. If the Australian bird is to be merged specifically with the African *rufa*, then surely the Indian Darter also should be merged and *melanogaster* of Pennant is much the oldest name. If, as is more feasible, all darters be considered conspecific then *anhinga* must be used. I would personally much prefer to see retention of the present name, *novaeollandiae*, with mention of the fact that it belongs to the superspecies *Anhinga anhinga*, as Mayr and Short have done in *Species Taxa of North American Birds* (1970).

Another weakness, I think, is that some birds have been awarded trinomials when it has been considered that they are too different to be merged with another species, but a criterion cannot be found for justifying such procedure. Furthermore, it is unnecessary in a book expressly stated to be a field guide. It is apparently the author's wish to unite the Spur-winged and Masked Plovers, in which he is justified in following his opinion. The entry under one heading, with comments in the text, is therefore perfectly correct. Consequently the use

of *Chrysococcyx lucidus lucidus* and *C. lucidus plagosus*, *Chrysococcyx minutillus minutillus* and *C. minutillus russatus*, *Calyptrorhynchus funereus funereus* and *C. funereus baudini*, etc. should have been avoided and the pattern adopted for the Plovers ought to have prevailed. Under *Trichoglossus haematodus* apart from description there is no mention in the text of the very different Red-collared Lorikeet (some still believe that the two are partly sympatric), and for the sake of uniformity this should also follow the arrangement adopted for *Vanellus*. In a book primarily concerned with field ornithology there is the problem of expressing distinctness where a bird is different enough in the field for such discussion. I consider that the best way is to use a binomial and to draw attention to the fact that 'this and . . .' are regarded as conspecific by some authorities.

The inclusion of maps for the Australian range of all species follows modern custom, and provides a quick visual guide. Many, however, appear to be incorrect and more careful checking might have prevented this. New South Wales, except for two small areas, is omitted from the range of the Red-kneed Dotterel, but the species is spread widely in the State. Presumably its status was insufficiently known when data on distribution were compiled and later completion was planned. The maps for the two bronze cuckoos of northern Australia differ a good deal from the findings in the latest review of *Chrysococcyx* (Friedmann 1968), where *russatus* is confined to Cape York and *minutillus* given the rest of the range in Queensland. The former indeed is shown by Slater to reach the north-eastern corner of New South Wales, but I know of no definite record of it there. New South Wales is shaded for the Avocet, but it is seldom seen except in the south-west and records do not warrant such a general distribution. Records of the Oriental Dotterel in New South Wales are very few, yet the whole State has been included in its range. The range of the Grey-tailed Tattler is shown as only the north-eastern corner of the State; yet the species is common on most tidal estuaries and coastal reefs. It is stated (p. xiv-xv) that 'the maps show the normal range . . . in solid black and the nomadic or migratory parts . . . in stippling'. I have been unable to follow this; many species that breed widely are mapped only by stippling (e.g. Varied Lorikeet, Koel, Black-shouldered Kite.) If it was intended that species with nomadic or migratory tendencies be shaded light and sedentary birds black, then surely the Grey and Black Falcons do not, as is implied, wander more than do the Peregrine and Little Falcons. I would rather interpret the normal range to be the breeding distribution, but stippling and solid black in the maps do not always agree with that assumption.

The illustrations throughout are ample and appear well executed. Of special significance are the outlines of bills of the Procellariiformes, drawn to actual size, thus providing for a direct check with any specimen examined in the hand or found as a beach derelict. Patterns of flight, especially of seabirds, hawks, terns and waders, are also depicted carefully. Allowing for difficulties in reproducing exact colour, the appearance and shades of

species are most pleasing. The size of bill of the Red-necked Stint (p. 279) is far too long, but care in such matters is widely apparent. Because there might be some confusion in identifying swallows and swifts, the former family has been added after the Coraciidae.

The second part of this publication will be as eagerly awaited as was the first. The whole will be a notable contribution to the ornithology of Australia and a very helpful guide to every field-worker. A. R. McG.

The Behaviour of Animals by Jiro Kikkawa and Malcolm J. Thorne, 1971. Milton, Qld: Jacaranda Press. Pp 223, b. & w. pll 2, col. 2, numerous text figs and diagrams. 150 × 225 mm paperback, \$3.95.

Both behaviour and animals are words that cover many things, and this book deals with a great range of topics, many of which are excellently up to date and interesting. Some, such as lists of hormones and the branchial arch nerves of fish, and a diagram of the vertebrate sympathetic nervous system, are less so, but it could be argued that an understanding of the machinery underlying behaviour is essential to a proper comprehension of behaviour. I think that is the authors' aim, and they succeed well. Although a number of examples, some Australian, refer to bird behaviour, it is not by any means a bird-watcher's book, but serves well as a general introduction to what behaviour studies are

all about. In fact, it is a good reminder to ornithologists that patterns of behaviour, which have received so much attention when performed by birds, particularly during courtship, are found throughout the animal kingdom and serve a bewildering variety of functions.

An introductory chapter deals with the history and methods of behavioural science; then there are three chapters (about one third of the book) on systems of control in different animal groups: nervous systems, hormonal systems, receptors and effectors and their neurophysiology, and the evolution of these in the main invertebrate phyla and in vertebrates. A chapter on stereotyped behaviour (reflexes, taxes, kineses, rhythms, and innate behaviour) is followed by one on the six types of learning, and the final one is on social organization.

An unusual feature is a list of 150 'selected readings' (books) on various aspects of behaviour, usefully categorized as introductory, interesting, simple experimental, advanced text, general behaviour, animal groups, physiological, and psychological, plus a list of the scientific journals publishing behavioural articles. Following this there are another nine pages of references appropriate to the text, listed by chapter, and a comprehensive index. For the more than merely interested student of animal behaviour this is a reasonably priced and comprehensive starting point.

D.F.D.

SHORTER NOTICES

Note. As most readers know, noticing current ornithological papers presents problems of policy and coverage. At present selection is arbitrary and coverage partial, and we have never been able to compete with what is provided by overseas journals. Instead of short comments on a limited selection of papers, starting with Part 3, Volume 72, as an experiment we intend to list

regularly, by titles and authors only, the contents of current Australasian ornithological journals and Australasian ornithological titles from other journals that do not deal with birds exclusively. We hope to make this service as complete as possible and provide a central source of information not available elsewhere.

Review Ed.