

Birds of Paradise and Bower Birds, by E. Thomas Gilliard. Weldenfeld and Nicolson, 126s.

This is a superb work on a fascinating family, written with great clarity and zest by a fine naturalist, the late Curator of Birds at the American Museum of Natural History, who made five expeditions after 1949 to remote parts of New Guinea to study birds of paradise.

The first part deals with the biogeography of New Guinea, the origins of its animals, man's associations with birds of paradise and their exploitation for plumes, and finally, and most importantly, the author's views on the evolution which has led to their exotic plumage and display and the phenomenon of bower-building. Part Two is systematic, an admirable feature being the synopses of the characters and also the displays and nesting systems of the twenty genera of birds of paradise and eight of bower birds. The section on species follows a normal format with sub-headings under each for description, range, food etc., but extra sub-headings are introduced as appropriate—"Remarks", "Evolution", "Bower Painting" and so on—which allow the full range of present knowledge of each bird to be covered.

The book is illustrated by four pages of colour and twenty-four of black-and-white photographs, with distribution maps and small black-and-white reproductions of the plates from Sharpe's and Elliot's monographs of the Paradisideae in the text. The reader will naturally regret that there are not more coloured plates or more detailed maps but at the relatively modest price of 6 guineas he has more than his money's-worth. This volume is a worthy memorial to a dedicated zoologist and a charming person.

B. P. HALL

Handbook of the Birds of India and Pakistan, vols 1 and 2, by Salim Ali and Dillon Ripley. OUP, 95s and 88s respectively.

The Birds of Kerala, by Salim Ali. OUP, 80s.

The first two of the ten projected volumes of the long awaited handbook of the birds of the Indian subcontinent (like Shiva you will need ten hands!) fully come up to expectations. Thank heaven, too, no political nonsense is allowed to interfere with geographical logic: the whole subcontinent is included together with Bhutan, Ceylon, Nepal and Sikkim. The authors are two of the world's most distinguished ornithologists, one the doyen of Indian bird men and the other head of the Smithsonian Institution in Washington. The first two volumes cover respectively divers to birds of prey, and megapodes (did you know there was one in India? It inhabits the Nicobar Islands) to crab plover, thus including all the waders. Field characters come first in the treatment of individual species, followed by data on distribution, habitat, behaviour, food, voice and breeding biology. Where a detailed description of plumage exists elsewhere, as in the *Handbook of British Birds*, there is very sensibly a reference to it rather than a repetition. Another device which must have saved the publishers much expense is the use of colour plates from other works such as Smythies's *Birds of Burma* and Salim Ali's own *Birds of Travancore and Cochin* and *Birds of Sikkim*, while many of the line-drawings come from the bird volume of the *Fauna of British India*. Their task is so titanic that such aids to authors and publishers must be thankfully accepted, even if they result in oddities like the dual numbering of certain plates. However, there are also to be 49 new plates, by such able hands as David Reid-Henry and Donald Watson. The standard of accuracy is as high as one expects

from the authors, and this comprehensive work will immediately establish itself as the standard in a field where all too many previous books have only sampled the commoner birds of this vast area's rich avifauna. It will even be of substantial value to purely European ornithologists, for a surprising number of western Palaearctic birds extend or migrate southwards into India.

It is also good to have a revised second edition of Salim Ali's 16-year-old *Birds of Travancore and Cochin*. This has been enlarged and renamed *Birds of Kerala*, to match the political change that recreated the pre-British state of Kerala, by adding Malabar to, and subtracting Nagercoil from the area covered by the first edition. Much the same range of information is covered as in the larger book, but usually in different words.

RICHARD FITTER

Antarctic Bird Studies, edited by **Oliver L. Austin, Jr.** American Geophysical Union, 1968. \$16.50.

Symposium on Antarctic Oceanography. Scott Polar Research Institute, 45s.

With the opening up of Antarctica and the establishment of permanent research stations, biological studies have proliferated and the pioneer work of the heroic age has been followed by intensive professional research carried out by university-based scientists. Antarctic Bird Studies is a report on this modern phase of Antarctic research, and forms volume 12 of the American Geophysical Union's "Antarctic Research Series". Of its eight papers, five deal in detail with various aspects of the biology of the Adelie penguin. Of the remaining three, one (by W.L.N. Tickell) discusses the biology of the great albatrosses *Diomedea exulans* and *D. epomophora*, another (by M.E. Pryor) gives a full account of the avifauna of Haswell Island, and the third (by W.J.L. Sladen, R.C. Wood and E.P. Monaghan) describes the progress and results of the USARP Bird Banding Programme, with a general review of other bird-ringing projects in the Antarctic. This is a book for specialists, and a valuable one.

The same applies to the Symposium on Antarctic Oceanography, but more emphatically. This 268-page paper-covered volume contains in some cases full versions, in other cases abstracts (and a few listed by title only) of 59 papers presented at a symposium held at Santiago, Chile, in 1966. The aim of the symposium was "to identify the extent of present progress in oceanographical research in the Antarctic, and to endeavour to draw attention to those fields in which future work might most profitably be encouraged". Thus most of the papers presuppose a good deal of background knowledge, although the 'main review papers' provide some of this. Very much a publication for the specialist.

D.W. SNOW

Peregrine Falcon Populations—their Biology and Decline, edited by **Joseph J. Hickey.** University of Wisconsin Press, 95s.

The widespread decline of the peregrine in many countries of western Europe and its complete extinction in the eastern United States has caused some puzzlement as well as widespread concern. British scientists, led by D. A. Ratcliffe, argued that there was strong circumstantial evidence to implicate the persistent organochlorine pesticides; the manufacturers, and some biologists, were not convinced. So, in 1965, the University of Wisconsin organised a conference of international experts to review the