Book reviews

Edited by P. DANN

Birds of New Guinea, by Bruce M. Beehler, Thane K. Pratt, and Dale A. Zimmerman, with text contributions from Harry L. Bell, Brian W. Finch and Jared M. Diamond, illustrated by Dale A. Zimmerman and James Coe, 1986. Princeton: Princeton University Press. Pp. ix + 293, col. pll. 47, b & w pll. 8, b & w drawings 17, maps 4, 155 x 230 mm. \$65.00 (paper).

Over 700 species of birds have been recorded from the Papuan Region, which comprises the main island of New Guinea and the islands on the continental shelf, with the exception of Torres Strait. This book, Handbook No. 9 of the Wau Ecology Institute, Papua New Guinea, covers them all.

An introduction explains the systematic and taxonomic treatment followed and lists sources for the species' accounts. A section on Papuan Natural History covers ornithological exploration, features of the environment, ornithologicaphy, rain forest ecology, and conservation. It is followed by valuable advice for visitors, in which are two sections that everyone contemplating a visit should read. These are etiquette for visitors and hazards to avoid. At the end of the book there is a gazetteer of place names, a substantial bibliography and an index.

Each species account lists English and Latin names, followed by alternative English names where they exist, and the status of the species if it is not given species rank elsewhere. The text is divided into five sections for description, similar species, habits, voice and range. Notes on voice are naturally lacking for those few species that are exceptionally rare, or have not been seen since they were collected. Each family account has an introduction, with initials indicating text authorship, giving a summary of the number of species in the region and an outline of habits and ecology.

The family groupings follow recent systems of classification. This makes little change at the generic level. It mostly affects those species previously lumped together as Old World Insect Eaters in a huge family Muscicapidae. As an ordinary person coming to Australasian birds from Europe, Asia or Africa there is difficulty in placing new passerines to a genus or subfamily. I can remember noting that a new bird reminded me of a *Phylloscopus*. It turned out to be the Leaf Warbler. The new family groupings make sense of subjective impressions that groups like scrub-wrens, thornbills and gerygones are natural entities not closely related to the sylviids with which they were once grouped. Fantails and whistlers are two fairly distinct groupings which seem to merit their family status. There are still problem species, such as the two Peltops, which were formerly lumped in an enlarged Muscicapidae, and are here placed in the Cracticidae, but noted to be of uncertain affinity. Perhaps this uncertainty will encourage people to pay more attention to them; they are fairly common, and are easy to watch.

I have read perhaps three quarters of the species' accounts: those that I have seen; those that I missed and wanted to see, and those that are little known and rare. Combined with the family account, the species' accounts encapsulate a wealth of information that will make the job of indentification much easier and more certain. Birding is hard in New Guinea because most of the species are forest birds, and many are extremely shy and wary. Some groups are exceptionally difficult to identify. The genus Accipiter and the Mimic Meliphaga group are each given an additional note

detailing particular difficulties with these birds. Identification of most free-flying individuals of the Mimic *Meliphaga* group will not be possible for the majority of visitors, as the group is exceptionally difficult. Diamond (1972, pp. 361-374) goes into detail on this group but said that his first impression was that these forms were a hoax.

The plates are good, although rather too crowded. The colours on plates 38 and 48 seem to me to be a little too faded. It is a pity that some of the plates are black and white, especially when they illustrate species not found elsewhere. Plate 27 (nightjars) would have been better in colour, instead of plate 13 (stints).

Changes have been made to many English names; the grounds for doing this are stated in the Introduction. When I lived in Papua New Guinea, most of us referred in discussion to birds by their Latin names, to ensure that we knew what we were talking about. I used to make up abbreviated English names for use in my field notebooks, or ask Win Filewood for his names whenever I met him. This used to make difficulties with some visitors from Australia who would be astounded when you could not remember the official English name. In my view, most of the changes are a decided improvement.

New Guinea has been one of the major regions of the world without a field guide, so this book has been eagerly awaited. There is not now likely to be another, because of the expense and the small size of the market. It is a pity that the Bismarck Archipelago and the Admiralty Islands have not been included. This area is also excluded from Mayr's *Birds of the South-west Pacific* and is unlikely to get a field guide of its own.

This book is essential for anyone with an interest in New Guinea birds, or who intends visiting the country. Other field guides were in the pipeline but have not seen the light of day. This one is the survivor and having heard a good deal about the contents of the others, I had great expectations. The text more than satisfies these. The plates are good but not quite excellent. The line drawings are very good. It is a pity that there are no maps of species' distributions. Peckover and Filewood (1976) and Coates (1985) produced maps for all the species they treated. It takes a lot of work and time to establish a mental picture of a species' range when you have to consult a gazetteer and up to three maps. The price for the paperback edition is very high, but then the book has been carefully produced. So far I have found no typographical errors; top marks here.

References

Coates, B.J. (1985). The birds of Papua New Guinea: including the Bismarck Archipelago and Bougainville Vol. 1. Non-passerines. Dove Publications, Queensland.

Diamond, J. M. (1972). Avifauna of the eastern highlands of New Guinea. Publications of the Nuttall Ornithological Club, No. 12 Cambridge, Massachusetts.

Peckover, W.S. & Filewood, L.W.C. (1976). Birds of New Guinea and tropical Australia. A.H. & A.W. Reed Pty Ltd, Sydney.

Geoff Swainson

The Pheasant: Ecology, Management and Conservation, by David Hill and Peter Robertson, 1988. Oxford: BSP Professional Books. Pp. 281, col. pll. 9, several line drawings, graphs, tables and b & w photos. 160 x 240 mm. \$61.00

Readers aquainted with the wonderful world of pheasants may well ask 'Why another book on the pheasant?' The introduction of the so-called 'true pheasants' to most of Europe and North America has led to claims that it is not a 'real' bird at all. Ornithologists will, I believe, be intrigued with the statement in the Foreword: 'Furthermore, its importance as a gamebird and the fact that many sportsmen augment their populations with hand-reared birds leads many people to view the pheasant as an entirely artificial member of our avifauna.'

Despite the introduction of the pheasant to the English countryside as an exotic species, despite its place in British recreational culture as a gamebird and despite the species being voted the most hated bird in Britain (at a birdwatchers' conference!), the authors are convinced that, for such a common bird, it is poorly understood.

How then, did Hill and Robertson tackle the task of writing this well-illustrated, well-produced book? Firstly, they proceed in a logical manner as evidenced by the sequence of chapters — Introduction; Study Areas and Techniques; During the Winter; Finding Mates; Clutches; Broods; Reared Pheasants in the Wild; Shooting and its Effects on Populations; Management; Past, Present and Future; and Bridging the Gap.

The authors' research experiences in Britain, together with the collection and interpretation of information gathered over many years, is a special feature — and strength — of the book. It is sad to note that the 'true pheasants' have been studied least in their native lands — the irony due, apparently, to 'the lack of interest in it as a sporting bird in these areas.' (The gun is mightier than the pen.)

The statistical information within the text is based on field data collected by radiotelemetry which were then fed into a computer using map co-ordinates. The statistical data are a feature of the book. The use of graphs and tables complements the balanced, easy-to-read text thereby making it particularly interesting for those who have a passion for pheasants.

Shooting gamebirds ia an emotive subject. Yet, during the reign of Henry VIII, the taking of pheasant eggs (in England) was punishable by a year's imprisonment. Those who find duck shooting in Australia an activity of questionable ethics will, I think, be intrigued to learn the pheasant in Britain has a parallel. The authors' state '... that pheasants are only a small part of the rural environment but whilst conservation organisations push for land purchases and site designation as a means of protecting the last remaining land of special conservation value, interest in pheasants as a game species is becoming much wider and their potential for influencing land-use in the countryside as a whole should not be undervalued.

In 1981, game shooting is England was worth nearly £400 million per year. As this was largely comprised of pheasant shooting management (of pheasants as gamebirds), as discussed in the book, then it becomes a conservation issue of enormous dimensions.

David Hill, who has a doctorate on the population ecology of wildfowl, and Peter Robertson, who received his doctorate on the comparative ecology of wild and hand-reared pheasants, have contributed an important work to pheasant culture. This importance should not be underestimated as the natural range of the 'true pheasants' spreads through many countries. There are two species — the Common Pheasant *Phasianus colchicus* and the Japanese Green Pheasant *P. versocolor* which comprise 30 subspecies and two subspecies respectively.

Although entirely different to material normally reviewed and a subject of little interest to many ornithologists, it is, nevertheless, an important ornithological contribution.

Graeme Hyde

Birds Asleep, by Alexander F. Skutch, 1989. Austin: University of Texas Press. Pp. 219, b & w pll. 29. 225 x 150 mm. \$US24.95.

Years ago I read somewhere that you'll never know a bird until you know how it roosts. With this in mind, I spent many freezing hours on Victoria's high plains in pursuit of Flame Robins going to roost. I had little success so that I marvel at the wealth of knowledge amassed by Alexander Skutch in his search for the manner in which birds sleep.

The book is littered with fascinating stories. Skutch tells of Willow Ptarmigans that dive in flight 'into softly drifted snow, leaving never a footprint . . . In the morning . . . they burst flying from their cold chambers, again making no trail'; of adults and helpers leading young fledglings to return to the nest at night, showing by example how to enter those nests with awkward entrances; of parrots of the genus Loriculus that sleep in tight clusters head downward; of fledgling White-breasted Nuthatches that cling upside down to the trunk of a tree beneath a sheltering branch; and he proposes the idea that birds carry their houses with them — their feathers.

One of the many pieces of information that surprised me was that so many of Skutch's birds sleep in their breeding nests. I may be mistaken but I always understood that most Australian passerines deserted their nests once breeding was over.

Added to this wealth of information, the book is beautifully illustrated with black and white drawings by N. John Schmitt. The casual reader flipping over pages must be tempted to buy the book for this reason alone.

With that said, I am critical of the book, loath as I am to confess it, as I read recently that Skutch in his eighty-sixth year is trying to bring some of his old manuscripts up-to-date for publication. This is an enormous task considering that he has spent almost all his adult life studying nesting and feeding of birds in Costa Rica where he has lived for 50 years. He has tried to cover too vast a canvas, battling to keep up with the many name changes of countries and birds and his literature search is out of date, as is evident from most of the references cited.

It is not clear whether he has covered all the members of certain families or whether he has simply dipped here and there. For instance, he discusses the sleeping habits of more than half the penguins and yet omits the genus *Eudyptula*, the only penguin nocturnal on land, about which there is ample published information.

Too much extraneous information abounds. The book is about birds sleeping or resting. It is legitimate to regard incubation and brooding as part of the process but it is not legitimate to discuss

the plumage of a bird, building of the nest, its contents even the colour of the eggs, the intervals of laying and a host of other facts; interesting but irrelevant. How relevant to the birds asleep is the fact that a bird carries nest lining amid its rump feathers or that nestling estrildids are remarkable for the elaborate patterns on their mouths and tongues?

At every measurement, and there were many, I found myself mentally blotting out the habitual translation from imperial to metric. I also found irritating the use of a capital 'S' for sun and the personal pronoun 'who' rather than 'that' in such sentences as 'birds who leave their nests...' I have no quarrel with references at the end of chapters but sometimes author's names were used in the text and at other times not, so that it was not clear whether observations were personal or secondhand.

Had he given the book another title and confined it to his own observations and to that portion of the world he knows best, it might have been better. Rigorous editing might have overcome many of the problems and I do not think the author has been well-served in this regard.

This is a book for the person who wants a pleasant read about birds. For those who seek specific information about sleeping and roosting habits, there is a great deal to be excavated with patience. There is no denying that Skutch has contributed much to our knowledge with this book but it is to be hoped that he will have a more capable editor for his further worthy contributions to ornithological knowledge.

Pauline Reilly

Flight Strategies of Migrating Hawks, by Paul Kerlinger, 1989. University of Chicago Press, Chicago and London. Pp. xv + 375, b & w pll. 21, b & w figs 63, b & w maps 9, tables 52. 227 x 152 mm. \$US68.95 (cloth), \$US22.95 (paper).

During the past 30 years, numerous authors have addressed aspects of the seasonal movements of raptor species. Most have reported the movements of one or a few species, often at one or a few sites of concentration, or on a single feature of migration or the results of a particular methodological approach. As a consequence, the literature contains much detailed, but fragmentary information, in a field entirely dependent on the integration of diverse data. With exceptions provided by D.S. Heintzlman in his works on raptor migration in North America, this volume represents the first attempt to draw together what is known about the broad parameters of the migrations of the Falconiformes.

Despite an apparent preference for Dingle's (1980) infinitely encompassing and therefore impractical definition of migration as 'a specialized behaviour, especially evolved for the displacement of an individual in space', and an occasional and unsatisfactory flirtation with the inclusion of data for post-natal dispersal, local

ranging, irruption and nomadism, the author has largely restricted himself to a consideration of the movements more traditionally regarded as exemplifying migration: the seasonal return movements of whole or part populations between breeding and non-breeding ground. This he has done with a certain amount of style and with an eye for the 'big picture'.

The body of this book consists of eight chapters on the mechanics of migratory flight, the altitude, direction, distance and speed of migration, water-crossing behaviour and flocking. These contain a wealth of sourced information in the form of figures, maps, tables and text, and each concludes with a short summary of the key findings, trends and hypotheses. Four preliminary chapters deal with the evolution of migratory behaviour in raptors, ecogeographic considerations, methodological approaches and atmospheric structure (in terms of the portion used by migratory raptors and with particular reference to the causes and ramifications of horizontal winds and thermals).

Two appendices are included. The first is a categorisation of the migration tendencies of 133 or the c. 280 Falconiforme species. While it contains useful 'broadbrush' information on migration distance, water-crossing, flocking and insect-following for species suggested to be complete or partial migrants and for others said to make 'local' or irruptive movements' it takes no account of population differences, and it includes speculative and sometimes erroneous catergorisations for many little-known forms. Australasian readers will find some of the entries amusing. The second appendix is more useful, in that it includes accurate information about seasonal, sexual and age differences in the timing and distribution of better known species.

Throughout, the author blends his factual information with musings on the matter at hand. He continually reflects on the evolutionary origins of the adopted strategies, the selection pressures at work, and on the interface between the animal, its atmospheric context and the resultant energetic imperatives. Of more direct importance to the Australian reader is the emphasis given to research methods and to practical suggestions for future study. Little attention has been paid to avian migration in this region and it stands as one of the critical broad shortcomings in our knowledge.

Despite its minor shortcomings, this work is of immense value to students of raptors and to those concerned with the migrations of other flying animals. It will be read with ease and interest by scientist and general enthusiast alike.

References

Dingle, H. (1980). Ecology and evolution of migration. In: Animal Migration, Orientation and Navigation. (ed. S.A Guthreaux, Jnr.) pp. 2-101. Academic Press, New York.

T. Aumann