

## Book reviews

Edited by B. GILLIES

**Acoustic Communication in Birds**, Edited by Donald E. Kroodsma and Edward H. Miller, 1982. New York: Academic Press. Vol. 1, pp 360, Vol. 2, pp 377, many text figures, sonagrams and diagrams. 160 × 240 mm. Approx. \$110 per volume.

This excellent book, of two volumes, must be essential reading for all interested in the scientific study of bird song. It is dedicated to Peter Marler the first graduate of William Thorpe's pioneering research laboratory in Cambridge University England. Marler, who early in his career migrated to Berkeley in the United States, is rightly regarded as having inspired the study of bird behaviour and song in the Universities of the U.S.A. and Canada. The nine chapters in each volume are written by leading workers while the validity of the whole work is endorsed by the status of the two editors Donald E. Kroodsma of the University of Massachusetts and Edward H. Miller of the British Columbia Provincial Museum. The two volumes provide a critical review of the researches published in the leading scientific journals of the world, except the U.S.S.R. They are written at an advanced level, not intended for amateurs, although many non-scientists will find much of interest in some chapters.

Volume I explains the broadcasting of sounds by the bird, the problems of transmission of these signals through the air and their reception by other birds. There is a plainly worded account of the structure and action of the sound producing system including the syrinx but the non-physiologist will find it more difficult to follow the action of the brain that controls this action. Much is now known about the ability of birds to hear, perceive and interpret the significance of songs of other birds in spite of their degradation and distortion in transmission. The sound recording equipment in general used up to 1982 is excellently described but necessarily there is no reference to the many advances in technology that have since greatly improved field recording. The invention of the sonagraph in the 1950's enabled bird song to be, for the first time, rapidly analysed in terms of frequency and time. It is a major disappointment that there is no account of this instrument and its adjustments which critically control the precise form of the sonagrams.

Volume II describes the behaviour of birds, song learning of passerines, vocal mimicry, duetting and the repertoire of songs of many different species. The variation over short and long geographic distances of the species-specific territorial song and vocal dialects have interesting analogies to human speech variation. The experimental evidence of the role of song for individual recognition, in parent-young relationships, and in the recognition of mates and neighbours is discussed. These are all of genetic origin and are of functional behavioural importance. The bibliographic references with each chapter, the appendix on a world survey of vocal learning plus a full taxonomic and a subject index make these volumes a valuable reference source.

Marler and his colleagues have worked principally with bird species of North America and Europe. Australian work, such as that of Watson on the whipbird and Robinson on the lyrebird, is mentioned but indeed very little work relevant to the subject of acoustic communication has so far been done here. But Australian and New Zealand species differ from those of the northern hemisphere and thus offer a rich field for local research. These

volumes are printed and presented at the usual high standard of Academic Press and, although costly, should be on the shelves of all biological libraries.

F.W.G. White

**In Quest of Bower Birds** by Norman Chaffer, 1984. Adelaide: Rigby. Hard cover pp 108, col. photos 92, B&W photos 15, distribution maps 9, diagrammatic sketches 3. 223 × 286 mm. \$29.95.

*In Quest of Bower Birds* is an anecdotal account of one man's interest in, travels in search of, and experiences with Australian bowerbirds. Chaffer has made considerable contributions in advancing knowledge of basic bowerbird biology, notably with Chisholm, on the Golden Bowerbird *Prionodura newtoniana*. Moreover, Chaffer is rightly acknowledged as a pioneer and great exponent of bird photography. His enthusiasm, stamina and skill in pursuing these birds are apparent in the book.

Subject matter presentation is poor and, whilst factual errors are few, inconsistencies are numerous. Species accounts follow no suggested order and, inexplicably, the natural group of avenue bower building species is divided by the maypole building Golden Bowerbird. Pictures of the Stagemaker *Scenopoeetes dentirostris* precede catbirds, contrary to species account order!

A five page introduction provides a basic but incomplete and confused account of bowerbirds. On p. 2 it is stated that eight bowerbirds occur in Australia, but the book deals with nine. A paragraph on p. 2 dealing with origins of bower building is unhelpful as Chaffer confuses arena (lekking) birds with bowerbirds and lyrebirds, which are not arena birds. He erroneously uses 'arena' for bowerbird courts or bowers when an arena is, in fact, used by males of communally displaying polygamous species.

Passing reference is made to E.T. Gilliard's important 'transferal effect' (loss of male display plumage with correlated complexity in bower structure and decoration) without explanation or discussion of it. The fundamentally significant facts that males of court or bower attending species are non-territorial and promiscuous and their females are uniparental, whilst catbirds (*Ailuroedus*) are monogamous and defend general purpose territories, should have appeared in the introduction.

It is stated on p. 9 that no satisfactory explanation for north-south orientation of Satin Bowerbirds bowers exist, yet Marshall (1954) and Gilliard's (1969) monographs repeatedly discuss the widely accepted view that this enhances male display due to light direction. A detailed description of a Satin Bowerbird's bower is out of place in the Golden Bowerbird account (p. 31). The known range of the Regent Bowerbird (p. 45) extends north to Eungella, not merely to Rockhampton as stated. The two distinct Spotted Bowerbird subspecies are described and their distributions discussed and illustrated but photo captions do not indicate which form is shown (all are of eastern population). Chaffer suggests male Stagemakers do not mimic other birds, but they do so commonly. Inexplicably he states male Stagemakers perform nesting duties, for which no evidence exists.

Photographs make this book attractive, and many are fine and historically significant, but printing is adequate only. Inclusion of out of focus photographs may be justified on historical grounds, or for their behavioural content. Photographs vary, however, from technically excellent to very poor. Some 37 photographs are of no direct relevance to bowerbirds, mostly of other Australian birds. A picture of Fawn-breasted Bowerbird *Chlamydera cerviniventris* on p. 83 is important as it shows a male of this crestless species in nape presentation display, but caption and text fail to note this.

Distribution maps are inconsistently placed within species accounts, making location difficult. Of three bower sketches the first lacks a scale, and all are referred to in text by figure numbers not appearing on figures. Figure captions are inadequate.

Serious bird watchers and ornithologists may buy this book for Chaffer's photographs. Text is interesting to those keen on the bush in general or bowerbirds in particular, but adds nothing new of significance to our knowledge whilst omitting a great deal that is known. A grossly inadequate bibliography indicates a superficial treatment. Had the publisher been prepared to seek pictures additional to Chaffer's admirable but dated work, this book could have provided a valuable record of behaviour and nesting biology. The publisher fails to provide a cohesive text lacking inconsistencies. It is admirable and pleasing that Chaffer has provided this summary of some of his bowerbird work, but the publisher has failed him miserably. The book is overpriced, and for its quality and pagination would be reasonable at \$15 to \$20.

Clifford B. Frith

**Birds of the Cayman Islands** by Patricia Bradley with photographs by Yves-Jacques Rey-Millet, 1985. Cayman Islands: P.E. Bradley. Pp 245, col. p11 62, 7 b. & w. maps. 195 × 125 mm. \$48.00. There is a foreword by H.R.H. the Duke of Edinburgh; the World Wildlife Fund benefits from the sale of this book.

The essential point about this book is that it is a regional guide, presenting in some detail the results of four years of observations. It is further supported by a historical list of birds reliably recorded on the three islands that make up the Caymans. While the bulk of the book is devoted to the forty-five species that breed on the islands, the text provides information about 149 species that use the Cayman Islands. An appendix covers 29 species that are rare transients, casual, accidental or introduced.

There are 62 colour photographs of the breeding species. They are of a high standard and include the immature forms of those species that might prove confusing. Especially useful are the insets produced in plates where a single photograph does not reveal all distinguishing features. Four excellent plates depict the main habitat zones of the islands while a birdseye view of the colourful coast of Little Cayman should be more tempting to scuba divers than to birdwatchers.

The main body of the text is concise and clearly laid out with a brief description of the family and a reference to their number and status on the Caymans. This is followed by the common and scientific name, field characters, range, Cayman habitat, habits and status. Identifying features are in italics, as is the call when described. The sequence of names used follows the *American Ornithologists Union Check List* — what a sensible practice. Equally sensible is the author's decision to quantify the status of birds covered in the text. It is too often left to the reader to interpret 'common' or 'very common' in a bird list with little or no help from

the compiler. Features that further add to the value of this book are the sections on endemic subspecies, the detailed information on equipment and technique provided by the photographer, and the list of species breeding on each island.

Seven maps at the end of the book are well drawn and uncluttered, with clearly marked habitat zones, titled features and a scale. Grand Cayman, Little Cayman and Cayman Brac are each depicted and a further three maps identify prime birdwatching areas on Grand Cayman. These maps, and the list of specific localities at which each species occurs, should delight short-term visitors intent on some quick birdwatching.

I found only two typographical errors, and the spelling of one place name on a map differs from that in the text. I would also dispute the worldwide range given for *Gallinula chloropus*, *Nycticorax nycticorax* and *Falco columbarius*, and the winter range of *Numenius phaeopus* is greater than that indicated in the book.

This is not just another field guide. It is a well researched account of the current status of the avifauna in an isolated environment against which future research can be compared.

Perry de Rebeira

**Birds of Eucalypt Forests and Woodlands: Ecology, Conservation, Management**, Edited by A. Keast, H.F. Recher, H. Ford and D. Saunders, 1985. Chipping Norton, N.S.W.: Surrey Beatty in association with The Royal Australasian Ornithologists' Union. Pp. 384, col p11 12. b. & w. ills 25. b. & w. figs many. 216 × 305 mm. \$54 incl postage.

This book is the published proceedings of the annual Congress of the Royal Australasian Ornithologists' Union, held at Armidale, New South Wales in November 1982. As such it has already received acclaim, gaining the 1986 Gilbert Whitley Award for the best symposium volume as judged by the Royal Zoological Society of New South Wales. In recording the proceedings of that congress, this book represents the results of a decade of research on the ecology of birds of eucalypt forests and woodlands. It highlights both the current status of our knowledge and the vast gaps that must be filled before more responsible land management can occur.

The book begins colourfully, with full page illustrations by J. Trapp and D. Milledge decorating what is normally a very dry business-like beginning to any reference book. The first two chapters, by H. Recher and A. Keast respectively, are intended to help place all that follows on the birds of eucalypt forests and woodlands in ecological and evolutionary perspective. The remaining twenty-nine chapters are divided into three major sections. These sections are: 'Bird Communities in Forests and Woodlands' edited by H. Recher; 'Ecology and Adaptations of Forest and Woodland Birds' edited by H. Ford, and 'Human Impact: The Response of Forest and Woodland Bird Communities' edited by D. Saunders. The papers in each section are introduced by the editor of the section who also concludes with what are, on the whole, enlightening and valuable syntheses of the topics covered and the current state of knowledge. These syntheses also fulfil an important role in suggesting the direction of future research and are one of the highlights of the book. Line drawings by D. McFarland are interspersed between the papers. The papers are followed by an appendix listing the common and scientific names of the 245 species and subspecies mentioned in the text. This is followed by twelve plates of colour photographs illustrating

a range of woodland and forest habitats and some of the birds found in them. The book concludes with a comprehensive index that greatly enhances the value of the book as a reference for future research.

The first major section of the book begins with two papers describing forest and woodland bird communities in Victoria and the reasons for the type of communities observed. The following two papers carry on the community description work in forests along the coast of N.S.W., attempting to relate avian species diversity to the floristic and structural diversity of the forests in question. A change of emphasis then takes place in the following two papers, which concentrate on the critical resources for particular avian groups. This is achieved by studying their foraging ecology and the associated seasonal variation in avian community structure. The last paper in this section on springtime song, periodicity and sequencing, seems an odd inclusion in an otherwise cohesive group of papers. The closing synthesis is by far the most informative chapter of the first section. It is a valuable critical review of a field in ornithology in which it is a relatively easy to collect data of a kind, but far more difficult to collect data that will actually answer the questions that arise about land management practices.

The aim of the second section of the book is to give detailed descriptions of the niches of some of the most important groups of forest birds. The first five papers use a comparative approach in an attempt to identify niche characteristics and differences for closely related species. This begins with an excellent comparison of the habitat requirements of the genera *Playcercus* and *Trichoglossus* and continues in later papers on members of the genera *Acanthiza*, *Pardalopus*, *Rhipidura* and a guild of three bark-foraging species. The next four papers, in turn, present the results of detailed studies on some specific niche requirements of the Helmeted Honeyeater *Meliphaga* (= *Lichenostomus*) *melanops cassidix*, New Holland Honeyeater *Phylidonyris novaehollandiae*, Eastern Yellow Robin *Eopsaltria australis* and the Rufous Scrub-bird *Archornis rufescens*. Again an excellent synthesis concludes this section. It ably conveys the necessity of comprehensive studies of particular species or groups in order to gain some understanding of how bird populations are controlled. It also points out the need to test the applicability of ideas about avian ecology, which have been developed in the Northern Hemisphere, in the Australian environment.

The aim of the final section of the text is to 'examine the effects on our avifauna of some changes brought about by European settlement and to discuss methods for ameliorating these effects.' It begins with two studies on the effects of current forestry practices in forests harvested for woodchips and sawlogs in the Eden district of N.S.W. Both studies stress the need for the preservation of mature-age trees, which provide essential foraging substrates and nesting sites for some species. The number and distribution of such trees needed to maintain viable populations of the dependent avian species is raised as a problem that still needs further research.

The following two papers concentrate on the effect of fire on bird communities. The first studies the effect of wildfire in intensively logged forests, while the second includes some findings on the effect of prescribed burning in Jarrah *Eucalyptus marginata* forest in W.A. Both stress the lack of precise information on the long-term effects of fire on birds and the need for long term studies. The second study however appears to go beyond the available data in drawing premature conclusions on the long term effect of prescribed burning on the breeding success of birds, and ultimately, population stability. Such speculation is dangerous,

when it can and has been used by forest managers to justify potentially harmful practices.

The next four papers highlight the extremely serious effects of past and current agricultural practices on the habitat of certain species and groups. The synthesis concluding this section stresses the shortage of such research, especially considering agricultural practices are probably more threatening to our avifauna than current forest practices.

The overall quality of the text in this book is variable in standard, as one might expect with such a variety of contributors. Although some deviation from the standard scientific format for each paper is understandable, it is a pity that a summary was not made a minimum requirement for all chapters. There are some unfortunate grammatical errors that result in awkward passages for the reader (e.g. first para. of Ch. 17) and some inaccuracies in spelling of some scientific (e.g. *Strepera versicolor arguta*) and common names (e.g. Bell Miner is two words, not one!), which will offend the purists. Anyone who expected uniformity of nomenclature throughout the publication will be disappointed with the mixture from the 1969 CSIRO Checklist, Condon (1975), Schodde (1975) and Schodde *et al.* (1978).

The figures accompanying the text are generally of good quality. By contrast, this book contains an over-abundance of complex and enormous tables (e.g. pp. 38, 39), some running to more than two full pages. These cumbersome attempts to convey information I feel are doomed to be ignored by the average reader and should have been avoided.

The colour photographs are the weakest component of the book and add only to its aesthetic appeal rather than the scientific information conveyed. The choice of birds included bears little relation to the habitat photographs on the pages facing them. Some birds shown in the photographs (e.g. White-rumped Miner *Manorina flavigula*), are not mentioned in the text. The same applies to some of the paintings at the beginning of the book (e.g. Yellow Wattlebird *Anthochaera paradoxa*). It seems odd to not have been able to find suitable illustrations from among the more than two hundred species mentioned in the text. The photographs are of reasonable quality but some were not enhanced by their strange orientation (e.g. Mistletoebird *Dicaeum hirundinaceum*, and Striated Thornbill *Acanthiza lineata*). The habitat photographs are generally of good quality although the choice of habitats included is also somewhat puzzling. Considering the diversity of Australian eucalypt forest and woodland habitats it is hard to understand the necessity for three photographs of 'Open-forest on sandstone escarpment' (especially when two of these appear to be of the same site from different angles). The addition of the photographs to this book has the appearance of a costly last-minute afterthought, which falls short of its potential and could have been omitted without detracting greatly from the value of the book.

With these comments on format aside, this book is an important documentation of the state of knowledge and understanding in this field at the time of the 1982 R.A.O.U. Congress. It is a benchmark from which all future research in these areas should progress: direction is given of questions to be answered, methods which can be used and the urgency of the task.

## References

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Michael F. Clarke

**Ecology of the Wet-dry Tropics** edited by M.G. Ridpath and L.K. Corbett, 1985. Proceedings of the Ecological Society of Australia Vol. 13. Melbourne: Blackwell Scientific Distributors Pty. Ltd. pp vii + 333, many B&W photos, diagrams, maps. 185 × 240 mm. \$20.00.

This soft-covered volume results from a joint meeting of the Ecological Society of Australia and the Australian Mammal Society held in Darwin in May 1983, and it includes 26 papers presented to the main symposium on the wet-dry tropics. The papers are grouped into seven sections — tropical environments, organism's responses to the tropical environment, structure and dynamics of communities, fire, mangroves, comparisons between Australia and other continents, and management. Although only two papers specifically focus on birds, any ornithologist with an interest in northern Australia will find much of interest, particularly because ecological understanding of the wet-dry tropics is so limited.

The first of the two ornithological papers, by R.J.S. Beeton, is entitled 'The Little Corella: a seasonally adapted species'. Beeton presents a most welcome summary of his research conducted in the east Kimberley district of Western Australia, including studies of seasonal patterns of movement, food, reproduction and population structure. He interprets the results in terms of adaptation to an environment characterised by extreme but predictable seasonality. This work is of considerable value because the Little Corella has been poorly known ecologically, despite its broad distribution. The second paper, by J.G. Blackman and D.K. Locke, is 'Quantitative analysis of seasonal wetlands in the Burdekin — Townsville region with special reference to waterbird habitat'. Blackman and Locke examine a problem that is virtually universal in studies of Australian waterbirds, and that is how one goes about quantifying the preferred habitat of the birds as the wetland changes rapidly in spatial distribution through time. They approach the problem by using aerial photography to map the vegetational components of a wetland, and then by developing a 'persistence index' to quantify the presence of the components through time. The persistence index allows them to identify the process of temporal and spatial change and to evaluate the extent of those components that determine the carrying capacity for waterbirds of a particular wetland. Blackman and Locke illustrate their valuable method with data on the Brolga.

Many other contributions are of considerable interest to ornithologists. M.G. Ridpath's introductory paper, 'Ecology in the wet-dry tropics: how different?' is essential reading for any biologist searching for understanding about northern Australia. Many of the botanical papers are of great value to animal ecologists in emphasising the over-riding influence on northern ecosystems of permanently high temperatures, the switching from intense rainfall to an extended dry season, leached and infertile soils, and widespread burning. The six papers dealing with fire are especially significant. Finally, the papers on management, particularly R.W. Braithwaite's 'Biological research for national park management',

highlight some of the problems facing the Top End of the Northern Territory, a region of extraordinarily high nature conservation value.

I am not a totally unbiased reviewer, as I was a member of the organising committee for the meetings which led to these proceedings. Nevertheless, I commend Drs Ridpath and Corbett for their efforts in taking a big step along the road to better ecological understanding of a region that, until recently, has experienced little ecological research. Anybody with an interest in the northern third of Australia should take the time to inspect this landmark volume.

S.R. Morton

**Gulls and Plovers: The Ecology and Behaviour of Mixed-Species Feeding Groups** by C.J. Barnard and D.B.A. Thompson, 1985. London/Sydney: Croom Helm Ltd. pp. 302, B&W p117, B&W drawings 12, maps 1. 160 × 240 mm. \$62.50.

This is the first in a series entitled Studies in Behavioural Adaptation, edited by John Lazarus of the University of Newcastle-upon-Tyne. To paraphrase its editor, the purpose of this series is to take stock of behavioural ecology and sociobiology, now that the heady days of their birth are over. Gulls and Plovers performs admirably in its role as the vanguard of this ideal.

The first chapter of Gulls and Plovers introduces theories designed to answer the question of why some animals forage in flocks. It is essentially a review of current knowledge and ideas, and is illustrated with examples taken mainly from avian studies, but relevant observations made on other vertebrate groups are included. The advantages and disadvantages of foraging in flocks are considered, and the interaction of optimal foraging and social environment is introduced as an important factor in understanding flocking and foraging behaviour.

Following the necessarily long introductory chapter, the authors introduce their case study: Black-headed Gulls *Larus ridibundus*, Golden Plovers *Charadrius apricarius* and Lapwings *Vanellus vanellus* foraging on earthworms on pasture near Nottingham, England. Successive chapters examine the foraging behaviour of the plover and Lapwing in terms of where they feed, what they eat and how they organise their foraging. In particular, interactions between the two species are considered. Throughout this, the authors never lose sight of the theories they are examining. Trials designed to test specific ideas are clearly thought out and discussed, and the reader is led to feel some of the excitement clearly felt by the authors for their subject.

The foraging of the Black-headed Gull by stealing food from the plover and Lapwing (kleptoparasitism) is considered in later chapters. Like that of the plover and Lapwing, the foraging behaviour of the gull follows a relatively simple optimal-diet model. Although the kleptoparasitism is costly to the plover and Lapwing, it has disadvantages as well as advantages for the gull. The foraging of each species is influenced by each of the other species.

Gulls and Plovers is very well laid out, with chapters in a logical sequence and the chapters themselves are well structured. They include a one or two page resume and a half-page, point-by-point summary, which are invaluable for getting the authors' message across. The book achieves its purpose as a scientific reference and is also very readable. However, it does have two shortcomings. The first of these is a point of style.

Australian Ornithologists are accustomed to standardised common names for birds, with capital letters used for species' names. The authors use only lower case letters for species' names, and while in itself not a problem, some confusion was encountered because they also used plover to refer collectively to Golden Plovers and Lapwings, as well as to, on some occasions, just Golden Plovers. It was clearly essential to have a collective term for the two waders (shorebirds?), but it was necessary to re-read some paragraphs to decide which species were referred to. The use of capitals in the common names of birds can avoid such confusion and make life easier for people with a lot of material to read and not much time to read it in.

The second shortcoming is of a less subjective nature and applies to the standard of the proof-reading. For a book of this price (and the price does seem a little excessive), being able to find a typographical error on the inside of the dust-jacket and several others scattered through the text, was very disappointing. It was a pity that the quality of the proof-reading didn't equal the quality of the science. Despite these small points of criticism, Gulls and Plovers achieves what it sets out to do very well, and one hopes that the later books in the series will be of equal standard.

Mike Bamford

**The Birds of Wallacea** by the late C.M.N. White and Murray D. Bruce, 1986. B.O.U. Check-list No. 7. London: British Ornithologists' Union. pp 524, 5 maps, 157 × 247 mm, £35. (U.K.) posted to Australia.

Wallacea lies at Australia's 'back door' yet most Australian ornithologists are not aware of its avian richness. Living at Australia's back door has enabled me to visit it from time to time. Currently from Darwin, a return airfare to Kupang ranges from \$150 to \$190 and internal airfares within Wallacea are inexpensive by Australian standards. The lack of field guides together with the problem of Bahasa Indonesian as the main language doubtlessly has inhibited Australian bird orientated visitors. Its ornithological literature is scattered throughout the world's publications and in many languages so it is extremely difficult to compile accurate lists for its incredible number of islands. Wallacean bird specimens are likewise scattered throughout the Museums of the world.

Murray Bruce and the late C.M.N. White have taken on the task of assessing the region's avifauna from these far flung sources and this comprehensive volume is the result of their labours. The region is appropriately named after the pioneer evolutionist and zoogeographer Alfred Russel Wallace and lies between Wallace's and Weber's Lines. It thus lies between Lombok and the Moluccas and includes Sulawesi and the Kai Islands.

The work itself commences with an introduction with sections on coverage, sequence and nomenclature, bibliography and references, taxonomy and descriptions. Five maps and a glossary of Indonesian geographical terms follow with brief overviews of Wallacean climate, vegetation, habitats, National Parks and conservation plus longer sections on zoogeography, migration, breeding and a historical synopsis of ornithological exploration.

The systematic list forms the bulk of the book, covering 676 species plus others of likely or doubtful occurrence. The species accounts describe distribution, habitat preferences, altitudinal range, breeding dates, taxonomy and in the case of Wallacean endemics, useful descriptions. A few typographical errors were noted but I will concentrate on some of the distributional and

taxonomic information and include some of my unpublished data where pertinent.

The following are comments on some of the specimens and records. The occurrence on Timor of the Asian Darter *Anhinga melanogaster* is queried but as none of the 30 plus birds reported had white underparts *A. novaehollandiae* seems unlikely. A specimen from Sumbawa, and sightings from Sumba, indicate the Grey Heron *Ardea cinerea* to be a likely stray to Australia hence some of the sight records claimed in the dim past may not be erroneous. The Australian breeding race of the Intermediate Egret *Egretta intermedia plumifera* is not upheld, however the soft part colours of Asian populations still require investigation. The occurrence of the Javan Pond-Heron *Ardeola speciosa* and Purple Heron *Ardea purpurea* in Sumba etc. indicates further likely vagrants to Australia. The status of Black Kite *Milvus migrans* in the Lesser Sundas is considered unclear, however it occurs throughout the year in Timor so presumably breeds there. The Spotted Harrier *Circus assimilis* is thought to be a visitor to Sumba and Timor from Australia but my data from Timor indicates it to be a resident. Butastur Buzzards seen on Timor lacked the rufous upperwing and tail of *Butastur liventer*, which is well known to me from Sulawesi. The species seems to occur year round so either overwintering or breeding is possible. An undescribed Timor endemic is not beyond the realms of possibility given that large hawks are difficult to collect. Recent trends in splitting the Scrubfowl complex are discussed and supported. Red-capped Plover *Charadrius ruficapillus* on Timor is considered a vagrant however my records show it to be a resident. The sole Dunlin *Calidris alpina* record from Timor is rightly queried. The bird seen was the, then undescribed, Cox's Sandpiper *C. paramelanotus*. Under Pomarine Skua *Stercorarius pomarinus* Thompson is stated to have recorded this species in Northern Australia but the reference given concerns Arctic Skua *S. parasiticus*. Pomarine Jaegers do however occur off the coast of Northern Australia. The Cuckoo-Doves *Macropygia phasianella* and *M. emiliana* are treated as separate species, which solves an anomalous distribution problem. The Fruit-Doves *Ptilonopus cinctus* and *P. alligator* are regarded as separate species, a move that is supported by their different life-styles and habitat requirements. Contra Johnstone, whom they quote, the Baucau (Timor) specimen of the Fruit-Dove complex *P. regina* does not match *P. r. roseipileum* and *P. r. flavicollis* like birds certainly occur in East Timor. The Fruit-Doves *P. iozonus* and *P. nanus* are considered to be in the same superspecies but their broad sympatry excludes that. Although more work is required in zones of sympatry, the treatment of the Imperial Pigeons *Ducula bicolor* and *D. luctosa* as allospecies is more satisfactory than the recent lumping attempt of Johnstone. The Brush Cuckoo is split into two species *Cacomantis sepulchralis* and *C. variolosus* and a new subspecies *C. v. whitei* described from Timor by Murray Bruce. The Koel complex is briefly overhauled and three species are recognised, viz. *Eudynamis melanorhyncha*, *E. scolopacea* and *E. cyanocephala*. My own independent studies support this but more than one species may occur in Northern Australia. Taxonomic problems in the Swiftlets are discussed and partial solutions indicated. Condon may well be correct in upgrading *Collocalia terraereginae* to a full species. In Timor the Singing Bushlark *Mirafra javanica* is noted as only occurring near Dili but it is found throughout the island. The widespread lumping of many Cuckoo-shrike taxa under *Coracina novaehollandiae* is not supported and their arrangement of allospecies seems sound on current knowledge. The Cicadabird complex has also suffered from overlumping and the treatment given is reasonable. The Cuckoo-shrike *C. morio* is split into a number of different species with New Guinea populations becoming *C. incerta*. In the Trillers, another character that supports the specific separation of *Lalage tricolor* and *L. sueurii* is the eclipse plumage of adult male *L. tricolor*. The treatment of Drongos is interesting:

*Dicrurus bracteatus* is no longer regarded as being conspecific with *D. hottentottus* while *D. densus* of Southern Wallacea is also regarded as a full species. My field experience particularly of vocalisations supports this and even further subdivision may be warranted.

Following the species accounts is a massive bibliography and four appendices plus indexes of English and scientific bird names.

The work can be summed up as a superlative effort. No Asian or Australasian worker interested in the fields of systematics and zoogeography should be without a copy and it will be of tremendous use to any birder wishing to visit Wallacea, particularly as descriptions of many of the species are not readily available elsewhere.

John L. McKean

## Sound review

**A Field Guide to Australian Bird Song** by Buckingham, R. and Jackson, L. (Eds), Melbourne. Bird Observers Club, Box 185, P.O. Nunawading, Victoria 3131. \$9.00 plus \$2.00 postage.

The third cassette in this series covers, with only five omissions, the waders in Australia and is an essential companion to the recently published *Shorebirds of Australia* (Lane B.A. 1987). Visual identification of this group is very difficult but their rather simple calls can be readily recognised with the aid of this cassette.

In view of the difficulties in recording the calls of seabirds and waders due to noises of surf and wind the quality of these recordings is outstanding. The range from Red-necked Crake to Black-naped Tern (68 species) is well covered but the omission of both the Common Tern and the Roseate Tern is surprising.

In a previous review I drew attention to the value of the written descriptions of the calls compiled from the Field Guides, which are included in the booklet that accompanies the cassette. In this instance it illustrates faults in these texts which describe the calls of the Pied and Sooty Oyster-catchers as being similar whereas they are in fact readily distinguishable, as are also those of the Brolga and Sarus Crane.

Ornithologists have been slow in recognising the importance of bird calls as an aid to the identification of species. In Australia, the Bird Observers Club has been a leader in this field.

F. Norman Robinson.

## Corrigendum

Vol. 87 Pt 3, Contents: for Schultz read Schulz.