

## Book reviews

Edited by B. GILLIES

**Proceedings of the Fifth Pan African Ornithological Congress** (Lilongwe, Malawi, 1980).

Edited by John Ledger, 1984. Johannesburg: Southern African Ornithological Society. Pp. 885, many tables, graphs, maps and line drawings. 22 b. & w. photos. 165 × 235. Price R45.00.

These *Proceedings* emerged in December 1984, a little over four years after the Fifth Pan-African Congress had been held in Malawi. The fifty-seven papers in seven sections have uneven coverage: Systematics (four papers), Population Studies (six papers), Ecology (eighteen papers), Miscellaneous (seven papers), Conservation (eight papers), Behaviour (four papers) and Breeding Biology (ten papers). The section called 'Miscellaneous' in fact contains four papers on breeding biology, one on ecology and two on systematics. The large number of contributions makes it impossible to do more than select the more significant for review purposes.

Of the papers on systematics, C.H. Fry & R. de Naufois deal with the taxonomic status of the Gulf of Guinea *Corythornis* kingfishers in admirable detail. The study by A. Prigogine on secondary contacts in central Africa shows how the validity of certain doubtful species can be resolved by a careful study of their distributions in zones of parapatry or sympatry; he proposes the useful term 'paraspecies' to describe parapatric species of common origin. This paper demonstrates also the usefulness of long term distributional studies, even though one may not necessarily agree with the author's conclusions.

Turning now to Population Studies, one is yet again impressed by the indefatigable ringing efforts and meticulous measurements by Mrs D.B. Hanmer of Malawi in her studies of the Brown-throated Golden Weaver and of life expectancies and population dynamics of African bulbuls. Another usefully quantified long term study is that by C.J. Vernon on breeding in birds of *Brachystegia* woodland in Zimbabwe, which it presents a wealth of information on breeding seasons, brood and clutch sizes, nesting success and fecundity of twenty-two passerine species.

The long section on Ecology contains much of value. J. Cooper's paper on changes in resource division of seabirds in the Benguela system has profound economic and ecological significance for southern Africa. Also important for southern Africa is the treatment by Dowsett-Lemaire & Dowsett, of the effects of forest size on montane bird populations.

In terms of competition theory, D.N. Johnson's study of two sympatric muscicapid flycatchers in Nigeria poses some interesting questions, and shows that competition may not exist at all when population densities of both species are well below the maximum for a given habitat. Another conservation issue is raised by Macdonald & Gargett in their study of the unusually dense and diverse population of raptors in the Matopos of Zimbabwe — apparently a uniquely rich raptor community in a national park.

Vultures have been well studied in southern Africa, mainly by members of the Vulture Study Group, so the well researched paper by P.R.K. Richardson on the scavenging behaviour of

vultures in the Transvaal and Zimbabwe provides a welcome addition to the corpus of our knowledge of these potentially vulnerable birds. Competition between five vulture species is dealt with, as well as the relationships between them and other scavengers, notably the Black-backed Jackal and the Pied Crow.

In this volume of Pan-African ornithology, I could find the names of only three African authors: Muringo, Gichuki and Sumba of Kenya and Uganda. Gichuki's paper on the pest status of some grainivorous birds demonstrates the increasing dependence of certain birds on cereal crops and provides both a baseline and a warning for future economic studies of this kind. This study ties in with that of Pomeroy & Muringo on the effects of bush clearance in Kenya, where this has led to an increase in the numbers of potential bird pests.

An example of meaningful research conducted by a dedicated amateur is that on the Thickbilled Weaver by H.T. Laycock; this has useful information on feeding and movements. For students of burrow-nesting birds, the techniques described by Fry, Dyer & Crick for weighing bee-eaters will be most valuable. This ingenious use of a continuous-reading balance permits 400 weights to be taken daily.

In the Miscellaneous section one of the most important papers is an analysis of Barn Owl prey by Macdonald & Dean. The study incorporates all available data from the Cape Province north of the Orange River and compares prey spectra in seven different habitats. This detailed analysis sets a high standard for future feeding investigations.

Conservation of African wildlife is of major concern, so I looked with special interest at the eight contributions to this section. Four of them deal with conservation in farming areas or other regions outside of national parks, where the obviously greatest problems are to be found. Boshoff & Vernon make the most important and relevant assertion that 'increased conservation education' is one long term solution (I would say the long term solution) to conservation problems in settled areas. Some of the regions dealt with are the Cape Province (Boshoff & Vernon), the Orange Free State (Geldenhuys), the Transvaal (Tarboton) and southern Mocambique (Milstein). R.K. Brooke presents an assessment of rare, vulnerable and endangered South African breeding birds: this is a preliminary statement to his recently published *South African Red Data Book — Birds* (1984, South African National Scientific Programmes Report No. 97, Pretoria: CSIR). From this it emerges, for example, that the Jackass Penguin has lost 90% of its breeding population since 1900.

The function of national parks as avifaunal conservation areas is well shown by R. Liversidge for the Kalahari Gemsbok National Park and by I.A.W. Macdonald for the Hluhluwe-Umfolozi Complex in Zululand. The waterfowl survey in southern Mocambique by Milstein highlights the importance of the wetlands there, which are used as alternative habitats by waterfowl that migrate to South Africa. The need to conserve these wetlands is only slightly less urgent than the need to conserve the last remaining forests of East Africa where Britton, Stuart & Turner show that most of the threat to birds in this

region lies, largely as a result of wood-cutting for domestic fuel.

The presence of only four papers on bird behaviour points up the rarity of such studies in African ornithology. The species concerned here are the Black Eagle (V. Gargett), the African Black Oystercatcher (P.A.R. Hockey), *Trachyphonus* barbets (L.L. Short & J.F.M. Horne) and the Cape Turtle Dove (W.R. Siegfried).

The ten papers on Breeding Biology contain some good field studies on single species, notably those by Colebrook-Robjent (Didric Cuckoo), N.E. Collias (Grey-capped Social Weaver), Crowe & Crowe (White-fronted Plover), Mendelsohn (Black-shouldered Kite), Vernon (Thick-billed Cuckoo), Williams & Cooper (Jackass Penguin) and Wilson & Wilson (Hamerkop). Each of these papers contains much new material.

The study of sibling aggression in the African Fish Eagle by Sumba & Pomeroy presents an interesting picture in an eagle that may lay up to three eggs per clutch, and in which Cainism is not the rule.

The editing is generally poor. Many inconsistencies of spelling, of English and scientific bird names, of the use or misuse of hyphens, of the use of the decimal point or comma, and so on, detract from the overall quality. There are many typographical and spelling errors, and often poor reproduction of Figures. However, this is a significant publication, to be purchased by every zoological library and by anyone interested in African (and other) ornithology.

G.L. Maclean

**Eighth Volume of Chinese Fauna Sinica (Aves)**, Edited by Zheng Bao-lai, Yang Lan, Yang De-hua, and Kuang Bang-yu *et al.* Beijing, China: Science Press, Pp. 333, col. pll 8, distrb. maps 81, 196 × 273 mm. Hardcover, 10.40 yuan (RMB), Paperback 5.90 yuan (RMB).

This 418,000 word volume is written in Chinese with the title of book and contributors in English. The scientific names and distribution maps make this volume useful to English readers. It is a comprehensive study up to 1981 of 81 species and more subspecies from 27 genera of the following passerine families: Eurylaimidae, Pittidae, Alaudidae, Hirundinidae, Motacillidae, Campephagidae, Pycnonotidae and Irenidae. The editors of this volume are the scientists from Kunming Institute of Zoology, Academia Sinica, i.e. Zheng Bao-lai, Yang Lan, Yang Dehua, and Kuang Bang-yu. More than eight contributors, some of whom are well known for research on their respective subjects in China, have provided articles either on the families or general accounts within the passerines, including extensive coverage of the History of Research, Characteristic of Morphology and Anatomy, Biological Characteristic, Taxonomic system, Geographical Distribution, Economic Significance and Resources Protection. The authors are Cheng Tso-hsin, Institute of Zoology, Academia Sinica; Fu Tong-sheng, the late professor in North-east Normal University; Zheng Guang-mei, Beijing Normal University; Li Gui-yuan, Sichuan Agricultural University; Zheng Bao-lai, Kunming Institute of Zoology, Academia Sinica; and others.

The first characteristic of this volume in the series of the Fauna Sinica, Aves, is stress on the endemic species in China and also the first-hand information they deal with in their special interest

family of their study. For example, all families of birds mainly distributed in subtropical and tropical region near or within the Kunming Institute, that is Eurylaimidae, Pittidae, Campephagidae, Pycnonotidae and Irenidae, were compiled by all ornithologists in the Kunming Institute, while the Alaudidae authors, Wang Zuxiang and Li De-hao, come from the Qinghai Institute of Biology, Qinghai plateau.

Another characteristic of this book is that the authors, after studying a series of bird skins from all over China, have had new views regarding the subspecies status and classification. For example, it has been previously accepted from the Cheng's *Distributional List of Chinese Birds* (1976) that *Hysipetes madagascariensis* (Muller) has nine subspecies; in this treatment *H. m. ambiens* is proposed as the inbreeding form of *leucothorax* and *concolor*; while *stresemanni* is regarded as another hybridising form.

This volume does not include the status of each species; whether endangered, vulnerable, common or rare; unlike the current practice in ornithological texts. Both quality and quantity are very important in any avifauna book. The colour plates are a bit fuzzy. I would prefer to see better quality colour plates in the *Fauna Sinica* from Science Press in the near future.

In short, I highly recommend this fourteen volume series of *Fauna Sinica, Aves*, as a general ornithological reference, to anyone interested in Chinese birds. This impressive volume should be included in any ornithological library of any size, especially for the libraries of museums, colleges, and universities both in China and Abroad.

Weishu Hsu (Xu Wei-shu)

Head, Department of Zoology, Beijing Natural History Museum,  
Deputy Secretary-General, Chinese Ornithological Society.

**Reader's Digest Complete Book of New Zealand Birds**, Consultant Editor C.J.R. Robertson, 1985. Sydney: Reader's Digest Services Pty. Ltd. Pp. 320, col. pll 343, 230 × 330 mm. \$A45.

The *Reader's Digest Complete Book of Australian Birds* (published in 1976 and reviewed by S.C. Bennett in *Emu* 77, p.237) succeeded in satisfying two separate and demanding audiences. The general public welcomed it as a spectacular picture book to help with bird identification; and the ornithological world found it to be generally accurate and reliable. The *Complete Book of New Zealand Birds* is, in style and format, similar, although not identical, to its predecessor.

A panel of distinguished contributors, both amateur and professional, is headed by C.J.R. Robertson as consultant editor. An introductory section gives a general outline of bird behaviour and lifestyle, describes the major habitats of New Zealand and explains something of the origin and evolution of New Zealand birds. The book includes with brief descriptions of some extinct species, and accounts of those orders and families of birds that are represented in New Zealand.

By far the greater part of the book, however, consists of detailed treatment of over 300 species of birds, illustrated with photographs of the same high standard as those in the Australian book. Many of them, indeed, are the same photographs, but frequently reversed, and enlarged or reduced e.g. pp. 77 (N.Z.) and 48 (Aust.), 109 (N.Z.) and 62 (Aust.), 130 (N.Z.) and 80 (Aust.).

There is a substantial account of each species, sometimes extending over more than one page. As well there is, in stylised form, an extensive description of the bird, including juvenile and nestling plumages, details of moult and voice where known, an outline of the distribution of the bird in New Zealand and elsewhere, and a brief summary intended to aid in recognition.

Common and scientific names are given, with alternative (including Maori) names. Unexpected is the general use of trinomials. This is, of course, necessary in the accounts of endemic species with geographically separated and recognisably different subspecies such as the Robin *Petroica australis*, with North Island, South Island and Stewart Island forms, respectively *longipes*, *australis* and *rakiura*. However, it is to be doubted whether any useful purpose is served, in this context, by describing the House Sparrow as *Passer domesticus domesticus* or the Goldfinch as *Carduelis carduelis britannica*. One may ask, indeed, whether those names are necessarily accurate, in 1986, to describe the New Zealand populations of the two species in question.

Given the relatively small number of New Zealand breeding species, it is understandable that birds found in that country only as occasional vagrants are treated at the same length as many residents. The descriptions and illustrations of those vagrants expand the book and add to its interest for the reader, although both text and photographs must inevitably be derived from sources remote from New Zealand. Many species, from Emperor Penguin *Aptenodytes forsteri* to White-winged Triller *Lalage sueurii*, are given full page treatment on the strength of one New Zealand record only.

One major criticism must be made. As a source of information on distribution the *Complete Book of New Zealand Birds* is sadly incomplete: although in a manner that can readily be corrected in a later edition. Distribution is described in words alone, rather than by colour or shading on maps. But the only map of New Zealand that is included is intended to show the distribution of habitats throughout the country, and contains relatively few place names. For the reader with little knowledge of New Zealand geography this book must be supplemented by an atlas. A publication of this quality can expect to find a market outside New Zealand but anyone unfamiliar with that country will find many of the accounts of distribution all but meaningless. To give two examples only, out of many: the Takahe *Notornis mantelli* is said to be found in 'Murchison and Stuart Mountains, Fiordland National Park'; the Black Stilt *Himantopus novaezealandiae* in 'Wetlands of inland South Canterbury and North Otago'. None of those names appears on the map. It is to be hoped that the publishers will be able to include, in the second edition that will no doubt be called for, a map showing all place names referred to in the text.

Rosemary Balmford

**Threatened Birds of Africa and Related Islands, The ICBP/IUCN Red Data Book, Part 1** (Third Ed), by N.J. Collar & S.N. Stuart, 1985. Cambridge: ICBP & IUCN. Pp XXXIV + 761, col. pll 12 160 × 238 mm. A\$75.

**South African Red Data Book — Birds**, South African National Scientific Programmes Report No. 97, by R.K. Brooke, 1984. Pretoria: Foundation for Research Development, Council for Scientific and Industrial Research (P.O. Box 395 Pretoria 0001). Pp Vii + 212, many maps. 209 × 295 mm. NPG.

The third edition of the **ICBP/IUCN Red Data Book** is a detailed geographical appraisal of threatened species. Part 1. **Threatened Birds of Africa and Related Islands**, is an extremely detailed and thorough work. It is to be hoped that this high standard will be maintained throughout the third edition.

Africa has the highest human population growth rate of any continent. Reading this book, it soon becomes clear that forest destruction is the main threat to the birds of Africa, especially tropical Africa where a complex pattern of specification has led to an often fragmented distribution of species, even when habitats were in a pristine condition. Pressures on such ecological and zoogeographical 'islands' threaten restricted species very severely, though no bird species has yet become extinct in continental Africa. Twelve full colour portraits of some of Africa's most threatened birds, four species illustrated in colour for the first time, are a pleasing bonus in this otherwise extremely academic (but readable) work. All were commissioned from Norman Arlott for this edition.

Brooke's South African book is equally impressive. South Africa, with its larger contingent of resident enthusiasts, might be expected to be better documented than the remainder of the continent. Perhaps so, but both books have comprehensive and exhaustive bibliographies, invaluable for future workers, whether they are studying threatened animal species, threatened environments, or Africa's birds as a whole.

Collar & Stuart detail the status of 177 species, while Brooke's regional work deals with only 108. It is noteworthy that the ratio of non-passerines to passerines in the South African work is eight to three, whereas it is seven to seventeen in Africa as a whole. This is an example of larger species tending to disappear when a region becomes more developed. Certainly, conservation problems and future threats are very different in most of tropical Africa than they are in South Africa. Given the political situation in South Africa in recent times though, many widespread bird species must be regarded as potentially threatened. Brooke includes only thirteen species of forest birds for South Africa, where forest destruction has 'markedly abated', but forest clearance could begin again or accelerate at any time.

It is inevitable, perhaps, that problems arise when cosmopolitan species are viewed from a regional perspective. Brooke ranks species in priority order in his introductory section 'Species for conservation action'. It is regrettable that priority is quantified in such a way that the Roseate Tern, wide-ranging in northern and western Australia, and in other parts of the world, is equal third in this list, whereas the first of the six species endemic to South Africa is ranked twenty-two.

There are extremely few typographical or factual errors in these excellent books. Collar & Stuart is a worthwhile addition to the library of any individual or organisation with a special interest in conservation issues, especially with reference to the tropics. Brooke's regional work, with detailed distribution maps (pre-1969 and post-1969) for each species, will be especially interesting and useful for visitors to South Africa, past or future.

The attention to detail, thoroughness and clarity portrayed by both books are a credit to the authors and to Africa. These features are of a standard that many in other parts of the world might well emulate or envy.

Peter Britton