Book reviews

Edited by D. Jones

BIRDS TO WATCH 2: THE WORLD LIST OF THREATENED BIRDS

by N.J. Collar, M.J. Crosby & A.J. Stattersfield.

1994. BirdLife Conservation Series No. 4, BirdLife International, Cambridge. Pp. 407. 17 mm x 24.5 mm \$54.95

BirdLife International (formerly the International Council for Bird Preservation, ICBP) has sponsored the prevention of global extinction of avifauna through the identification and documentation of threatened species. Thirty years ago, the Red Data Books (RDBs) were instituted. However, during the compilation of information on international birds, serious gaps in the knowledge of threatened species became evident. To fill these gaps, BirdLife published the volume Birds to Watch (Collar & Andrew 1988). Six years later, they produced the present volume as a replacement. Although it has a similar title, treats the subject in a similar manner, and appears to resemble a second edition, the authors correctly claim that it 'represents an entirely new evaluation of the world's threatened bird species, using new criteria...' Because BirdLife's Red Data Book program is the source of birds treated on the 'IUCN Red Lists' series, this volume is the official source for birds for the current revision of the IUCN Red List.

The introductory pages open with acknowledgements of His Royal Highness Prince Bernhard of the Netherlands, the Rare Bird Club, the many contributors of unpublished material and those whose recent publications (e.g. *Threatened Birds of Africa and related Islands* 1985; *Threatened Birds of the Americas* 1992; *Birds in Europe: their conservation status* 1994 and *Threatened and Extinct Birds of Australia* 1993) have provided candidates for inclusion in this volume. The next three chapters describe the design of the volume, the new IUCN criteria and an analysis of the trends and factors associated with the global endangerment of birds.

The volume is mainly organized around species accounts of approximately 1104 globally threatened species (115 families and subfamilies), 16 extinct species, 11 conservation dependent species and 66 data deficient species. The threatened species are listed by family according to Sibley and Monroe (1990, 1993) with an additional 32 species included from Morony et al. (1975). A brief description of each species' geographical distribution, habitat, threats and population status (if known) is followed by its threatened status in bold capitals and IUCN threat codes with the decisive code for its listing in a bold typeface. Similar accounts are given for the other categories with the omission of the threatened status. The final chapter lists 884 nearthreatened species by family with information on their country of occurrence.

The major chapters are followed by three extremely valuable appendices which are quick references to the status of species by countries, the countries with the most threatened species and a list of all extinct, critical and endangered species. The volume closes by listing more than 1000 references (most are recent with some in press) and an index of species by common and scientific names.

The value of this volume to ornithologists, conservationists, wildlife managers and authorities in Australia and elsewhere is the less ambiguous application of the new IUCN criteria. The original criteria of Mace and Lande (1991), as followed by Garnett (1993) for example, has since undergone three revisions involving Mace and the IUCN General Assembly. This volume adopted the proposed IUCN categories (Mace & Stuart 1994) of Extinct, Extinct in the Wild, Critically Endangered, Endangered, Vulnerable, Conservation Dependent, Low Risk, Data Deficient and Not Evaluated. The threatened status of species (e.g. critical, endangered and vulnerable) are decided by different thresholds involving whether the species have experienced one or a combination of a rapid decline in numbers over 10-20 years; have a small geographical distribution that is fragmented, declining or fluctuating; have a small or very small population of less than 250 and 50 mature individuals respectively; have a very small geographical distribution of less than 100 km² or less than five locations (vulnerable status only) and/or has an unfavourable population viability analysis. A problem, when assessing a species categorisation is the reliance on the knowledge of the number of mature individuals. Another difficulty is the identification of subpopulations in nature. Given these difficulties which are clearly acknowledged by the authors, they have adopted the 'precautionary principle' as the arbiter in borderline cases, especially between the threatened and nonthreatened status. They disallow 'worst-case scenarios' but adopt caution in accordance with the evidence.

Conservation dependent status 'exists for species that would very rapidly qualify as threatened if they were not under management.' Eleven species are listed worldwide. Australia has six listed (e.g. Mallee Emuwren, Atherton Scrubwren, Mountain Thornbill, Redlored Whistler, Eungella Honeyeater and Golden Bowerbird). The data deficient category included those species for which information was comparatively sparse and intractable compared to other species globally. Because of Garnett's (1993) publication and others on the status of Australian birds, no species was listed as data deficient.

Because of the revisions in the threat criteria, the status of some threatened Australian species have been justifiably upgraded in this volume. For example, Black-breasted Button-quail has been elevated from vulnerable to endangered, a change supported by my own studies. Other changes such as upgrading Australasian Bittern from vulnerable to endangered appear questionable. Nevertheless, 84 species are listed as threatened or near-threatened: two critical, 10 endangered, 32 vulnerable, one extinct, six conservation dependent and 33 near-threatened.

Any person with interests in the conservation of birds worldwide or any specific country should acquire this volume. It is the official source for birds on the IUCN Red List and is a must on the shelves for wildlife managers, ecological consultants, ornithologists and birders alike.

References

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BIRD CONSERVATION: THE SCIENCE AND THE ACTION Edited by John Coulson and Nicola J. Crockford

1995. Supplement 1 to Ibis Volume 137. Proceedings of the British Ornithologists' Union Annual Conference, 6–10 April 1994, Shuttleworth College, Bedfordshire, UK. Pp 250, 270 x 210 mm. £20 (from BTO, including p&p).

In a situation where some 100 bird species have become extinct worldwide within the last three or four centuries, and a quarter of all birds have geographical ranges of less than 50 000 square kilometres, with about 10% of all bird species on the continents of Africa, Australia, New Zealand and Europe classified as 'threatened' by the International Union for Conservation of Nature, this publication must help to meet the need for better understanding of the problems currently facing both birds and other organisms. However, the sweeping title of this volume belies its somewhat parochial content. The latter is not surprising as these are the proceedings of the 1994 conference of the British Ornithologists Union. The laudable objective of the conference was to develop links between sound science and practical conservation.

There are 35 contributed papers from different authors, which are mostly loosely grouped together as follows. (1) About 60 pages (seven papers) cover detailed studies of particular British bird species (including Grey Partridge, Oystercatchers, and Red Grouse) or models of population dynamics designed with British birds in mind. While of a high scientific standard and containing various interesting information, these papers do not offer much of particular practical relevance to worldwide avian conservation issues, except perhaps the lesson that, while it is desirable to understand population processes, many significant questions remain unanswered even after decades of intensive study. (2) About 30 pages (four papers, three by North American authors) deal with the topic of habitat fragmentation and its consequences. These include a review by John Wiens of fragmentation concepts, which urges a shift from the 'reserve mentality' towards a focus on the whole landscape, and a new addition to Daniel Simberloff's continuing series of papers that debunk fashionable paradigms (this time the target is the metapopulation concept). This section, as a whole, provides a useful overview of ideas relating to habitat fragmentation. (3) About 40 pages (six papers) outline various case studies of threatened species and regional avifaunas, including M. Clout and J. Craig on New Zealand's flightless birds. (4) About 30 pages (seven papers) describe examples of national action plans and agreements relevant to bird conservation, including Bruce Male on species recovery plans within Australia. (5) About 20 pages (four papers) give broad overviews relating to global bird conservation issues and risk assessment. Within this section, Georgina Mace and N. Collar describe and discuss the recently revised IUCN criteria for identifying threatened species and Colin Bibby provides a short but lucid perspective on global priorities. (6) There are six papers that escape such classification, including a comparison of bird and insect conservation issues in Britain (J. Thomas), comments on plant species change and its implications for bird species in northern Europe (Brian Huntley), and an outline of approaches to bird count schemes used for monitoring British species (Jeremy Greenwood and others). There is also a review of British ornithology and conservation (E. Nicholson and H. Crick) and a five page 'conclusions and recommendations' section with background statements and 16 summary recommendations.

Overall, I was struck by the diversity, and sometimes the disparity, of approaches. Many of the 'overview' papers call for a focus on the identification of important habitat areas and habitat mosaics based on unreserved land, and the development of: a scientific approach to understanding 'whole landscape' processes, scientifically valid yet rapid techniques for monitoring bird populations, and better partnerships between ornithologists and decision makers/land managers. Yet the largest section in this volume is devoted to detailed population studies of a few species. Simberloff attacks the notion that the metapopulation concept has any utility in bird conservation, and yet Paul Opdam et al. propose it as the basis of nature conservation policy within the Netherlands. Mace and Collar point out that known population density declines were the commonest reason for IUCN listing of Europe's 20 threatened bird species, whereas localised geographical ranges or small known populations were the commonest reason for listing Australia/New Zealand's 93 species and Africa's 207. Yet the only paper focussing on methodology deals with detecting density declines in Britain (Greenwood et al.).

Some bird conservation issues and ecological processes which feature frequently in the Australian literature and are also important elsewhere in the tropics and/or southern hemisphere were scarcely touched on. These include: fire; management of habitat structure including tree hollows and understorey; seasonal dynamics of fruit and nectar availability; interactions with grazing regimes; flyways of migratory species; habitat assessment methodologies; sustainable land-use; and methods for assessing and monitoring geographical distribution when the density of ornithologists is low. This list reflects a different focus, on habitat and communites rather than on population density and dynamics. Wiens' paper was the only one of the 35 that included reference to the vigorous Australia-based research effort in linking theory with practice in bird conservation. Perhaps there is a need for further similar conferences in our own region, combined with support for publication such as that offered by the British Ornithologists Union. In the absence of such a compilation, interested Australian ornithologists can consult the large handful of recently published proceedings of several local conferences aimed at the conservation of Australian wildlife in general (and a couple dealing with birds in particular). The Ibis supplement will be most useful to researchers interested in population models, fragmentation theory, and bird conservation issues in the north temperate region.

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Publications recently received

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*BIRD NUMBERS 1992: DISTRIBUTION, MONITORING AND ECOLOGICAL ASPECTS (VOLUMES 1 & 2) Edited by E.J.M. Hagemeijer and T.J. Verstrael

1994. Proceedings of the 12th International Conference of IBCC and EOAC, Noordwijkerhout, The Netherlands. Statistics Netherlands, Voorburg-Heerlen

& SOVON, Beek-Ubbergen. Pp. 728 & 161, 240 x 175 mm. Dutch gld 100.00 (plus postage).

*A CENTURY OF AVIFAUNAL CHANGE IN WESTERN NORTH AMERICA Edited by J.R. Jehl Jr. and N.K. Johnson

1994. Studies in Avian Biology No. 15. Cooper Ornithological Society, Allen Press, Lawrence, Kansas, USA. Pp. 136, 253 x 175 mm. US\$16.00.

THE NORTHERN GOSHAWK: ECOLOGY AND MANAGEMENT Edited by W.M. Block, M.L. Morrison and M.H. Reiser

1994. Studies in Avian Biology No. 16. Cooper Ornithological Society, Allen Press, Lawrence, Kansas, USA. Pp. 348, 260 x 180 mm. US\$40.00.

THE BIRDS OF THE CAPE VERDE ISLANDS by Cornelis J. Hazevoet

1995. B.O.U. Check-list No. 13. British Ornithologists' Union, c/o The Natural History Museum, Tring, Herts HP23 6AP, UK Pp. 192, colour photographs 48, b&w plates 1, 250 x 160 mm. £18.75.

SWIFTS: A GUIDE TO THE SWIFTS AND TREESWIFTS OF THE WORLD by Phil Chantler and Gerald Driessens

1995. Pica Press, Robertsbridge, East Sussex, UK. Pp. 237, colour plates 24, b&w figures 62, 248 x 175 mm. £26.

*To be reviewed in Emu.