Preserving Wildlife: An International Perspective

Mark. A. Michael, 2000. Humanity Books, New York. 307 pp. ISBN 1-57392-727-9. RRP AUD\$63.

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PRESERVING Wildlife: An International Perspective is an anthology of twenty papers exploring the issues related to the preservation of wildlife, with an emphasis on related management approaches. This topic is introduced philosophically with a discussion of moral values associated with human activities. Sport hunting, the medical aid of injured wild animals and the manipulation of wildlife during ecological field studies are discussed within this context. The focus then shifts to a selection of wildlife management strategies including habitat protection, captive breeding, culling of non-native species, eco-tourism and marketing of wildlife products.

Examples of successes and failures are used to stress the necessity for independent treatment of each wildlife preservation situation, in terms of possible management strategies. For instance, a significant part of this book is dedicated to emphasizing that Western methods of wildlife conservation are often unsuitable and ineffective in less developed countries. No attempt is made to cover all possible solutions or management options available to the discussed examples. Rather, the book encourages readers to think about wildlife preservation and to question the morality and efficacy of commonly accepted management approaches.

Although most of the articles are extracted from professional journals, technical terms are kept to a minimum. As a result, the subject matter should attract a wide audience. It will appeal to anyone who is concerned about the preservation of wildlife, but equally will arouse the interest of those with little understanding of these issues.

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The Directory of Australian Birds: Passerines

R. Schodde and I. Mason, 1999. CSIRO Publishing, Collingwood, Vic., Australia 800 pp., Hardback ISBN 0 643 06456 7 RRP USD\$180.00

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THIS large, expensive and beautifully produced volume arrived on my desk in October 1999. There it has sat while I awaited it to be reviewed elsewhere. My intention was, and is, to not only review the book, but to review the reviews. I now have reviews by Allan Burbidge and John Blyth (Western Australian Bird Notes 95: 3-5), Walter Boles (Australian Zoologist, in press), W. (Ted) Davis (The Wilson Bulletin, in press), Stephen Debus (Australian Bird Watcher 18: 320-321), Ned Johnson (The Condor 103: 200), and Allen Keast (Emu 100: 341-2). Of these, Boles, Johnson and Keast are recognised avian systematists, while Burbidge, Blyth, Davis and Debus, as I am, are just plain old ornithologists. I say this because an Australian avian systematist once told me that I had no right to comment on the names of Australian birds because I was only an ecologist, but that has never stopped me before and will not now, and it appears that I am in good company.

The *Directory* is basically a book of names for Australian passerines with two more volumes in preparation to cover the remainder of the avifauna.

It is nice to see somebody start with the passerines for a change so, if the remaining volumes are not forthcoming, the most interesting birds in Australia have been dealt with. How many "handbooks" begin with the non-passerines and the authors never live long enough, or the money runs out, to complete the passerines? By profession, if not nature, systematists seem to have a very ordered approach to their publications — begin at the beginning, end at the end.

The reviews of the *Directory* have been uniformly positive, even glowing. Davis describes it as an "important book" and points out that it is the first attempt since Mathews 100 years ago to deal with the taxonomy of Australian birds at the subspecies level. Johnson commends Schodde and Mason for respecting the work of others (is this not normal in taxonomy?) and considers the work "admirable", the authors "bold" and the work "scholarly" and "sophisticated". Debus also thinks the effort is "scholarly" and that it is "state of the art" taxonomy. Burbidge and Blyth are of the opinion that this "is an important document". Like Johnson, Keast appreciates the generosity of Schodde and Mason "in giving credit to their predecessors" (maybe taxonomists don't normally do this) and says "The Directory is to be admired". Boles tends to sidestep the praise and says only that the aims of the work are "highly commendable". As an ecologist who simply studies birds, even I am impressed and

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unlikely to dispute the sentiments of the other reviewers in describing the efforts of Schodde and Mason as scholarly and admirable. It was certainly a lot of work.

Despite the high level of respect afforded The Directory by other reviewers, there are the inevitable minor (de' rigour) quibbles. Davis, as well as Burbidge and Blyth, appear to have reservations about some of the maps and both reviews note the incorrect distribution of the Samphire (Slender-billed) Thornbill Acanthiza iredalei in Western Australia depicted on its distribution map. Burbidge and Blyth are of the opinion that too many distributions of Western Australian birds are inaccurate (mentioned are Brown-headed Honeyeater Melithreptus brevirostris, Thick-billed Grasswren Amytornis textilis, Purple-gaped Honeyeater Lichenostomus (Meliphaga) cratitius, Gilbert's Whistler Pachycephala inornata, as well as the thornbill) and detract from the book's authority. Given the poor knowledge of birds in Australia and their distributions, I suppose we should not be too critical of Schodde and Mason for some distributional gaffes, but I wonder why the errors were not picked up by the two referees of the manuscript from Western Australia. Maybe a wider selection of referees is needed for the forthcoming volumes.

Given the extraordinary taxonomic detail of The Directory and the large number of subspecies resurrected (an interesting word that) or newly described (Burbidge and Blyth, P. 4), as well as the splitting and lumping of taxa, the reviewers of The Directory are extremely calm about the revisions made. The nomenclatural changes are pretty impressive, but I expect that from the authors. Debus mentions four recombinations and 17 splits at species level, and four splits and four lumps at genus level. Boles enumerates 2 new subfamilies, 4 new subgenera, 46 [new] subspecies/ultrataxa, as well as splitting 18 species and merging 7 others. Boles may understate the expected response by saying a revision of this magnitude "will undoubtedly bring objections". He also says that rather than treating the revisions as a nuisance, the efforts of Schodde and Mason should be welcomed as a "crucial contribution" to understanding Australia's avian biodiversity and contributing to conservation by enabling better informed decisions on which taxa are sufficiently differentiated to be considered as units of conservation.

Burbidge and Blyth say that some of the changes made to Western Australian taxa are unwarranted and unlikely to be followed, while Debus thinks the decisions on "generic and specific limits" are sensible. However, he goes on to suggest that "taxonomists [seem] to want make their mark in some way, by describing new taxa or making controversial taxonomic decisions". He is also critical of what he sees as "...the excessive use of nonsensical anagrams of existing subspecific names as labels for new subspecies... when scientific names ... are supposed to be descriptive (or eponymous) and say something about the taxon." Whew! Imagine that a name should convey information. But remember, Debus is not a recognized taxonomist and may not be qualified to express this view, despite his depth of knowledge of the Australian avifauna. As

an ecologist, I also hold the view that bird names should be informative. Indeed, conveying information about a bird's biology is as an important function of the nomenclature as is identifying its phylogenetic relationships. The last time I put that in writing (when I commented on the draft list of recommend English names for Australian birds) I got my knuckles rapped.

The Directory is much more than a revision of taxa. As Boles explains, Schodde and Mason introduce two unconventional terms: "ultrataxa" and "infragenera". The latter refers to any taxa within a genus, but above the level of a species (subgenera and superspecies). The ultrataxon is Schodde and Mason's unit of adaptation and evolution. This is introduced to overcome the fact that subspecies are not taken seriously in conservation programmes in Australia. Their ultrataxon includes both subspecies and monotypic biological species and has the admirable goal of promoting the importance of recognizable variants (subspecies) and affording them the same conservation value as species. This is actually an interesting trend in Australia with mammalogists attempting to do something similar by endlessly splitting genera (e.g., splitting Antechinus (Dasyuridae) into multiple species). The only logic that I can see in this is that if you erect enough species each becomes a monotypic population meritorious of conservation listing by virtue of the smaller number of individuals the species represents, but I may be unfair. Boles, for example, appears quite positive about the benefits that could flow from the application of the ultrataxon concept to conservation efforts.

The other reviewers do not develop the same linkages between these new taxonomic units and conservation. Davis is not convinced about the value of the ultrataxon and would stick with binomial designations for monotypic species and trinomials for polytypic species. Johnson, as a taxonomist, seems equivocal about the new taxon, but does say this " bypasses much of the controversy and intellectual baggage surrounding subspecies and "phylogenetic' species while ... retaining the biological species concept in which [Schodde and Mason] expressly believe". Debus, as well as Burbidge and Blyth, offer no opinion on the merits or otherwise of the new taxon other than to note (Burbidge and Blyth, P. 4) that it is "radical". However, Burbidge and Blyth remind us that the conservation of Australian birds has concentrated on species and, if carried to an extreme, could result in the loss of significant avian diversity.

Keast is of the opinion that "ultra" implies "a supra-, rather than an infra-specific category" as would seem to be the intent of Schodde and Mason. Nonetheless, Keast ventures that the conservation component of *The Directory* may be one of its most important contributions. Presumably, this could have been achieved without introducing a new taxon, but would Schodde and Mason's efforts receive as much notoriety?

Leaving aside the ultrataxon, Keast (P. 341) raises much more serious concerns about the approach in Australian ornithology to reclassifications. These are concerns that he and I have discussed exhaustively

ever since the Royal Australasian Ornithologists Union (now submerged in Birds Australia) introduced its Recommended English Names for Australian Birds (Emu 77, Supplement (1978)) and the Interim List of Australian Songbirds, Passerines (R. Schodde, RAOU 1975) and required these to be followed in the Emu.

Keast is concerned about the "habit" in Australian ornithology of following major revisions without appropriate or critical review. As Keast notes (P. 342) this often on the basis of reclassifications proposed by one or two taxonomists. This is also done in other disciplines (e.g., botany, mammalogy) within Australia and is must partly reflect the paucity of taxonomists and taxonomic research throughout Australian science. Missing from Australian ornithology is the equivalent of the Checklist Committee of the American Ornithologists Union which adjudicates taxonomic issues in North America. According to Keast, there was a comparable Australian Committee until the 1960s when it was disbanded by the RAOU at the request of its convenor, Herb Condon, who purportedly could not get on with other members (Keast, P. 342). A consequence has been the uncritical acceptance of revisions of both the scientific nomenclature and English names in Australian ornithology. Not only has this created confusion, but has forced Australian ornithologists seeking to publish in the Australian ornithological literature to use names that they personally reject on scientific and other criteria.

Foremost among my reasons for refusing to follow the Recommended English Names for Australian Birds is the failure to be consistent in the changes made. For example, warbler was dropped in favour of gerygone, the genus being raised to the vernacular, for birds in the genus Gerygone on the grounds they were not in the same phylogenetic lineage as "warblers" in England, while robin was retained for birds in the general Petroica and Eopsaltria. This is despite Australian robins differing phylogenetically from robins in Europe with the change not being made possibly because Petroica and Eopsaltria are not euphonious". In replacing warbler with gerygone, there was a significant loss of "information". It is not immediately obvious when being told "there is a gerygone" that one is looking for a bird, or that the bird is likely to be small, insectivorous and foraging in the vegetation above the ground, as most warblers in Australia, Europe and North America do.

Much more seriously, revisions of phylogenetic relationships (i.e., splitting of genera, lumping of species) have been adopted without detailed explanations of reasons and in the absence of adequate quantitative and genetic analysis. Splitting the genus *Meliphaga* (Meliphagidae) is a case in

point. Keast (P. 342) in referring to some of the revisions presented in Schodde and Mason's *The Directory* expresses the need for "... prior reviews/ articles [which] would have permitted completeness of ... variation and sample sizes to be explored. More comprehensive sets of measurements could have been made available." In recent years, too many revisions of Australian birds have been made in books which are expensive, and occasionally only available in limited editions: revisions which should first have been submitted to critical peer review in the scientific literature and then be allowed to stand the test of critical assessment by the ornithological community. Despite such concerns, Boles is adamant that Schodde and Mason have provided a solid basis for future work in Australian ornithology.

I am quite happy to defer to Boles' conclusion on the merits of the work, but the absence of independent critical refereeing is an issue with The Directory of Australian Birds: Passerines. CSIRO sought advice on the manuscript from only five reviewers, two of whom are or were employees of CSIRO, although the three external referees apparently provided the most detailed commentary (Schodde and Mason 1999, P. x). For a book of this magnitude and possible impact on Australian nomenclature, this seems inadequate. While not agreed to unanimously, there are sound reasons for independent and anonymous refereeing of all scientific works. Pacific Conservation Biology, for example, routinely submits manuscripts to three independent, anonymous referees and only accepts or rejects papers on receipt of two reports. Had a wider range of opinion and advice been sought by CSIRO, the problems of distribution and species relationships of Western Australian birds referred by Burbidge and Blyth might have been avoided. Given the strong conservation theme used to promote the concept of the ultrataxon, the text should also have been referred to individuals directly concerned with conservation and management. As the revisions proposed by Schodde and Mason may find their way înto the literature, or even be required by Australian ornithological journals, persons, such as avian ecologists, concerned with the importance of names for communication also needed to be consulted.

That said, there is a great deal in *The Directory of Australian Birds: Passerines* which is thoughtful, thought-provoking and useful. Useful even to ecologists such as myself, but I am unlikely to follow the recommended revisions until they are subjected to critical review. This will not happen until Australian ornithologists form a professional society prepared to take on the responsibilities accepted by the American Ornithologist Union's Checklist Committee.