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Systematics and Taxonomy of Australian Birds by Les Christidis and Walter E. Boles, CSIRO Publishing, Melbourne, 2008. Hardcover, 17.5 × 25.5 cm, 278 pp. RRP \$60.

This volume replaces the previous work by Christidis & Boles (1994) as the current official Australian bird checklist, to be used in BOCA publications. Hence, contributors to *AFO* and the *Bird Observer* will need to be familiar with not only the English names, but also the scientific names and taxonomic sequence. Although general birders can find the new English names and sequence in the 2008 edition of the BOCA's *Little Blue Birdlist* (pocket checklist), it helps one's understanding of birds, and one's ability to identify them (by categorising them), if one appreciates their genetic relationships and how they fit in at the various levels of order, family and genus. And if the more amateurish or ignorant birders bemoan that fact that field guides are not organised alphabetically by bird names, those books have indexes!

The new Christidis & Boles opens with an explanation of taxonomic decisions, species concepts, taxonomic methods, and rationale for the English names. Then follows the main species list by order, family, genus and species, and a supplementary list of failed introductions and doubtful or unconfirmed species. A section on higher-level systematics explains the classification and sequence at order level and above, followed by the main body of the work, which is a detailed explanation and justification for the family, genus and species allocations and sequence. Each family account ends with a tabulation of the species in that family. In the main species list, and in the summary tables at the end of each family account, species are given superscripts to indicate whether they are vagrants, occur only on island territories, are introduced, or are extinct. The book finishes with a very comprehensive list of taxonomic references (42 pages!), and an index of scientific and English names. The contents table is a handy summary of the order and family arrangement adopted.

This new checklist contains many changes, mostly to scientific names and the sequence and composition of orders and families. Many of these arrangements are radical, but we'll just have to get used to them, as they are based entirely on the latest published evidence (mostly biochemical and genetic) in the peer-reviewed scientific literature. (That is, the authors have resisted introducing their own novel changes). The list reflects phylogenetic relationships, and hence degree of endemism at the various taxonomic levels, and can be used (for instance) to assign conservation priorities.

Many nomenclatural changes were anticipated in the 8th edition of Pizzey & Knight (2007), but some did not eventuate, and there are some additional changes not covered in Pizzey & Knight. Hence, that field guide cannot be used as the *de facto* current checklist. Many of the changes in the new Pizzey & Knight were mentioned elsewhere (Debus 2008), so only the more major discrepancies between the two books are listed here (in the new sequence, e.g. with pigeons early in the list). Differences from Christidis & Boles (1994) are tabulated on the Birds Australia website <www.birdsaustralia.com.au> (with the exception that *Hylacola* is not lumped with *Calamanthus*).

Pizzey & Knight name	Christidis & Boles name
King Quail <i>Coturnix chinensis</i>	<i>Excalfactoria chinensis</i>
Feral Pigeon	Rock Dove
Spotted/Laughing Turtle-Doves	Spotted/Laughing Doves
Wonga Pigeon <i>Leucosarcia melanoleuca</i>	<i>L. picata</i>
Albatross and mollymawk 'species'	Subspecies of Wandering, Royal, Black-browed, Yellow-nosed and Shy Albatrosses
Black-necked Stork <i>Ephippiorhynchus australis</i>	<i>E. asiaticus</i>
Little Bittern <i>Ixobrychus minutus</i>	Australian Little Bittern <i>I. dubius</i>
Great Egret <i>Ardea alba</i>	Eastern Great Egret <i>A. modesta</i>
Pied Heron <i>Ardea picata</i>	<i>Egretta picata</i>
Osprey <i>Pandion haliaetus</i>	Eastern Osprey <i>P. cristatus</i>
Brown Goshawk (Christmas Is.) <i>Accipiter fasciatus (natalis)</i>	Variable Goshawk <i>A. hiogaster</i>
Pale-vented Bush-hen <i>Amaurornis olivaceus</i>	<i>A. moluccana</i>
White-browed Crake <i>Porzana cinerea</i>	<i>Amaurornis cinerea</i>
Skuas <i>Catharacta</i>	<i>Stercorarius</i>
Pacific Barn Owl	Eastern Barn Owl
Eastern Grass Owl <i>Tyto capensis</i>	<i>T. longimembris</i>
Little/Azure Kingfishers <i>Alcedo pusilla/azurea</i>	<i>Ceyx pusillus/azureus</i>
Golden Bowerbird <i>Prionodura newtoniana</i>	<i>Amblyornis newtonianus</i>
<i>Chlamydera</i> bowerbirds	<i>Ptilonorhynchus</i>
Heathwrens <i>Calamanthus</i>	<i>Hylacola</i>
Speckled Warbler <i>Pyrrholaemus sagittatus</i>	<i>Chthonicola sagittata</i>
White-throated Gerygone <i>Gerygone olivacea</i>	<i>G. albogularis</i>
Australasian Figbird <i>Sphecotheres viridis</i>	<i>S. vieilloti</i>
Australian Magpie <i>Gymnorhina</i>	<i>Cracticus</i>
Frill-necked Monarch <i>Arses lorealis</i>	Frilled Monarch <i>A. telescopthalmus</i>
Mangrove Robin <i>Eopsaltria</i>	<i>Peneonanthe</i>
Grey-headed Robin <i>Heteromyias albispecularis</i>	<i>H. cinereifrons*</i>
Tree/Fairy Martins <i>Hirundo</i>	<i>Petrochelidon</i>
Red-rumped Swallow <i>Hirundo</i>	<i>Cecropis</i>
Native starlings <i>Aplonis</i>	<i>Aplonis</i>
Common Myna <i>Acridotheres</i>	<i>Sturnus</i>
Yellow Wagtail <i>Motacilla flava</i>	Eastern Yellow Wagtail <i>M. tschutschensis</i> , Green-headed Yellow Wagtail <i>M. taivana</i>
Black-backed Wagtail <i>Motacilla lugens</i>	Lumped with White Wagtail <i>M. alba</i>
Common Greenfinch <i>Carduelis</i>	<i>Chloris</i>

*Species list p. 37, but not changed in table p. 202

Note that our Little Bittern is now a near-endemic whose closest relative in New Zealand is extinct: a lesson on the urgent need for conservation of wetlands and their birds in Australia?

Some scientific names reflect the rediscovery of overlooked species names, or original spellings, in the original descriptions (e.g. Collared Sparrowhawk is now *cirrocephalus* without the 'h'). In addition, there are minor changes such as amended gender of species names, to reflect the correct Latin or Greek gender of certain genus names. All of the nomenclatural and sequence changes are fully justified by citation of the published supporting arguments. Most generic allocations or changes make sense (e.g. splitting the 'pied' honeyeaters generically), though a few do not (e.g. the Cicadabird as a *Coracina*, but the traditional view is retained in such cases where there is a lack of modern genetic evidence); the Mangrove Robin may be closer to (or congeneric with) the Hooded Robin rather than the yellow robins. Interesting changes include the placing of the button-quail family (Turnicidae) within the wader order (Charadriiformes), and the complete rearrangement of the honeyeater generic sequence, with the chats embedded therein.

Australian bird scientific nomenclature has been littered with indecision over the correct gender ending of various species names, or correct spelling of certain genus or species names. I take it, and hope, that the new Christidis & Boles is the final word on, for instance, *Grus rubicunda* (versus *rubicundus*), *Epthianura* (versus *Ephthianura*), and so on. However, there is still a discrepancy between *Ceyx pusilla* in the species list (p. 29) and the correct *C. pusillus* in the text (p. 169).

Overall, the new Christidis & Boles is a very thorough and scholarly work that is state of the art in understanding of the genetic relationships of Australia's birds though, as they admit, there are many taxonomic problems still to be resolved. However, they missed the justification for splitting the Brown Hawk-Owl into three species, of which the migratory Northern Boobook *Ninox japonica* is the vagrant to Australia (King 2002); and they did not cite Christidis's own genetic evidence for recognition of the Black-eared Miner as a full species (though, it was in the 'grey' literature and not published properly). Another puzzle is the Budgerigar, Ground and Night Parrots not placed near the base of the platycercine group of parrots.

Most of the established English names are intact, other than for taxonomic changes. The opportunity might have been taken to change 'gerygone' to the more sensible 'warbler' (such use of generic for common names seems affected), as the authors rightly point out that group-names are ecological rather than taxonomic. One of the original reasons for 'gerygone' was that we can't call them warblers because they're not sylviids, but that won't wash because we still have robins and magpies etc. that are not related to their original namesakes. Furthermore, many people can't pronounce 'gerygone', and we even had one field guide advising the wrong pronunciation (I've heard some howlers: gorOGonee, graygon etc.).

A lapse I noticed is that in the species list the Pacific Robin is missing the 'N' superscript for Norfolk Island. However, the book is very polished and I noticed only a very few cosmetic matters such as occasional errant punctuation. So, in conclusion, the new Christidis & Boles sets the standard, and Australian birders should be thoroughly familiar with at least the main species list, including the scientific names and family sequence.

- Christidis, L. & Boles, W.E. (1994), *The Taxonomy and Species of Birds of Australia and its Territories*, RAOU Monograph 2, RAOU, Melbourne.
- Debus, S. (2008), 'Review: *The Field Guide to the Birds of Australia*', 8th edn, *Australian Field Ornithology* 25, 47–48.
- King, B. (2002), 'Species limits in the Brown Boobook *Ninox scutulata* complex', *Bulletin of the British Ornithologists Club* 122, 250–257.
- Pizzey, G. & Knight, F. (2007), *The Field Guide to the Birds of Australia*, 8th edn (edited by P. Menkhorst), HarperCollins, Sydney.

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