

varies depending on what the author of the species account considered most significant for that species. Each account has a map showing breeding and non-breeding distributions. The accounts are referenced and this book is a useful resource for anyone interested in the biology and ecology of the world's waterfowl. For the species of most interest to this reviewer, the Grey Teal, the map showing the region of overlap in range with the Indonesian Teal, *Anas gibberifrons*, was most instructive. Such an understanding is difficult to appreciate from descriptions in regional publications on waterfowl or regional bird guides. Not all such overlaps between similar species are highlighted in the book and its inclusion in this case reflects the interest of the author who wrote the account and the latitude given them by the editor. Here lies the great value of this book—a consistent scientific treatment of all 165 species with enough scope to expand on points deemed crucial by the author of the species account. Would I want a copy on my bookshelf? Definitely.

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THE HAWAIIAN HONEYCREEPERS

By H. Douglas Pratt

2005. Bird Families of the World Series. Published by Oxford University Press, Oxford, UK. 342 pp. Hardcover, £95, \$US189.50 or \$A260, ISBN 0-19-854653-X.

Hawaiian Honeycreepers are a renowned case of adaptive radiation in birds: an amazing variety of species, 50+ described so far, all evolved from an ancestral finch in the short time frame of a few million years. As their name states, these birds are unique to the Hawaiian Islands. Evolution for specialised diets has moulded the bill shape of honeycreepers into an unimaginable diversity of forms, more so than with Galapagos finches. Perhaps because of this diversity, the editors of Oxford University Press stretched taxonomic classification a bit and gave Hawaiian Honeycreepers honorary family status (the birds are actually members of the Carduelidae, the cardueline finches) and their own monograph in the eminent *Bird Families of the World* series.

The editors also favoured the honeycreepers by enlisting Doug Pratt as author. Pratt (no relation to the reviewer) was well qualified by his personal familiarity with these birds, not only through extensive research in the field, museum, and library, but also by his talented artwork, for he painted the eight colour plates depicting all 37 historically known species. Development of the book was timely, too, as the landmark series, *The Birds of North America*, was then being published, and its species' accounts for Hawaiian birds offered an unprecedented goldmine of hard-earned informa-

tion. Pratt's excellent synthesis is the first modern and comprehensive treatise of the Hawaiian honeycreepers.

The Hawaiian Honeycreepers follows the general format of previous monographs in the series. Notable in the front material is a sympathetic section on the spelling and pronunciation of tongue-twisting, vowel-rich, Hawaiian names and words (Can you say `Akiapōlā`au? Or distinguish the `Ō`ū from the `Ou`?). The meat of the book is to be found in the ten general chapters of Part I and the species accounts in Part II. Part I is especially well crafted to feature honeycreeper themes, including adaptive radiation, insular evolution, and conservation issues, particularly avian disease.

The first chapter, *The Hawaiian honeycreepers: evolutionary triumph and ecological tragedy*, introduces the honeycreepers in the context of adaptive radiation and identifies their vulnerability as insular species. *The honeycreepers' world* sets the environmental and evolutionary stage of the Hawaiian Islands, the most isolated landmass on our planet, briefly chronicles its dismantling during the course of human settlement, and highlights impacts on the birds. *Discovery and research: historical perspectives* is just that, although this overview goes no further than the early 1990s and thereby omits perhaps the most active period of field research (results of these most recent studies are picked up and effectively covered in later chapters and species accounts). Chapters 4 and 5, *Origin and evolution* and *Classification*, examine historical hypotheses on the phylogeny of honeycreepers, a subject particularly dear to the author, who has spent much of his career researching the topic; Pratt's systematic conclusions and taxonomic recommendations have been largely adopted by the American Ornithologists' Union. Although Pratt claims that he follows AOU nomenclature in this book, in fact he slips in a few changes not yet accepted by the AOU, e.g. the sinking of genus *Vestiaria* in *Drepanis* and some additional species splitting. Three chapters, *Form and function*, *Behaviour*, and *Ecology and breeding biology*, fill out what is known about the adaptive radiation in the honeycreepers while explaining the birds' biology. Adaptive radiation involves more than foraging specialisation and lock-and-key bill form: there are consequences for reproductive behaviour and life history. These consequences are not explored with the same depth, mainly because they have not yet received much coverage in the primary literature.

Disease and parasites reviews current knowledge of the main problem afflicting honeycreepers today – a now classic case of disease as a wildlife conservation issue. In a nutshell, two diseases, avian malaria and pox virus, were accidentally introduced to Hawai'i and spread by another non-native organism, the night-flying mosquito. Honeycreepers highly susceptible to these diseases perished at the lower elevations inhabited by mosquitoes, and as a result the majority of species are confined to mountain tops and many are now endangered. This is a story that avian conservationists in

Hawai'i know by heart, and Pratt does an excellent job explaining it. *Status, conservation, and the future* sums up the remaining factors affecting honeycreeper survival, and the chapter gives a brief appraisal of what can be done to save the honeycreepers.

The *Species accounts* themselves are short and to the point, each generally 1–4 pages in length. Accounts include range maps and sonograms, when available. Readers looking for more detail should instead turn to *The Birds of North America*. Interestingly, *The Hawaiian Honeycreepers* also gives accounts for all known extinct species, both historic and subfossil, in appreciation that the missing species would be members of the modern avifauna if not for human-caused extinctions. Readers should be prepared for a long roster of the dead, as most species are gone and only 17 survive.

The Hawaiian Honeycreepers is well in line with other titles in the *Bird Families of the World* series and is arguably one of the best. It reflects a high level of scholarship and has benefited from a decade of preparation. Pratt's writing style is almost conversational and makes for thoroughly enjoyable reading. Pratt's plates are gorgeous, and numerous black-and-white photos of honeycreepers in action illustrate the text and bring the birds alive. This book is a classic summa-

tion of honeycreepers and will be a handy reference for many years to come.

This review would be remiss not to draw attention to the book's price. Oxford initially offered *The Hawaiian Honeycreepers* at US\$68, then soon raised the price to US\$189, which put it beyond the reach of many individual buyers. Future authors may want to consider this drawback when selecting a publisher.

The Hawaiian honeycreepers may seem a little far afield for most *Emu – Austral Ornithology* readers. However, as this book so well presents, the honeycreepers really are one of the most glorious adaptive radiations in birds, essentially an entire avifauna sprung from a single lineage, one novel species after another to admire. Sadly, the honeycreepers also offer an extreme hard-luck case demonstrating how an onslaught of continental species and processes can sweep away an insular world of birds. Much can be learned from this book about evolutionary creation and human-caused destruction.

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