

BOOK REVIEW



Cockatoos

Matt Cameron 2007. CSIRO Publishing. 220 pp, colour and monochrome photos. ISBN 9780643092327. RRP \$40.

This is another in the 'Australian Natural History' series, the meatiest bird volume so far both in length and in breadth of treatment. The bird titles in the series, recently taken under the CSIRO banner, have been of variable quality. Previous reviews of some of these books in this journal, e.g. 'Australian Magpie' and 'Tawny Frogmouth' (*Corella* 29: 10 and 32: 46), have glossed over many important errors and shortcomings (see *Australian Field Ornithology* 22: 162–163, *Australian Field Ornithology* 25: 49–51 and *Emu* 108: 99–100 for alternative reviews of these books). It is a pleasure, therefore, to be able to say that 'Cockatoos' is one of the finest bird titles in the series so far, up there with 'Kookaburra' (Sarah Legge, 2004) and 'Wedge-tailed Eagle' (Penny Olsen, 2005). It clearly outshines other multi-species bird titles in the series.

The introductory chapter explores the global diversity and biogeography of cockatoos, the two families (parrots and cockatoos) in the order Psittaciformes, and the members and characteristics of the cockatoo family. Interestingly, but too late for this book, the kakas and relatives have been raised to family rank (Nestoridae), thus emphasising the regional endemism of the group and the heightened significance of the extinction of the Norfolk Island Kaka. Chapter 2 profiles each cockatoo species, its ecology and threats. Chapter 3 summarises the evolution of cockatoos, reviewing key factors from plate tectonics to glacial cycles and early parrot origins to account for the global distribution and speciation of modern cockatoos. It then focuses on Australia, with case studies on speciation in some Australian cockatoos, and flags some regional suites of cockatoo species based on climate and vegetation. Chapter 4 discusses the distinct morphological characters of cockatoos from an evolutionary perspective, as their responses to environmental challenges and the need to feed, mate and reproduce. Chapter 5 describes the habitats and distribution of cockatoos, from the perspective of resource availability, the birds' physiological adaptations, and species interactions. Chapter 6 describes the foraging and seasonal movements of cockatoos, in relation to stable or fluctuating food supplies, and discusses how morphology (wing shape) and flocking behaviour relate to lifestyle. Chapter 7

describes food and feeding of the various species, in relation to nutrition, daily activity patterns, energy balance, food supply and food selection. Chapter 8 discusses cockatoo reproduction, from nest sites and abundance of tree hollows in relation to site productivity, to breeding season in relation to food peaks, and reproductive success in relation to food supply. Chapter 9 discusses cockatoos as pests, in agriculture and in urban situations (e.g. their destructive chewing, and noise). It reviews the causes of cockatoo pest issues, and some mitigation measures. Chapter 10 discusses the trade in cockatoos, mainly the threatened species in Wallacea, but also of various species in Australia. Finally, Chapter 11 inevitably discusses the conservation status of cockatoos, and the threats they face, focusing on habitat loss, depletion of hollow trees in wood-production forests, and tree loss in agricultural landscapes. The chapter concludes with a 'box' on the required actions and research priorities for cockatoo conservation.

Three appendices provide common and scientific names of plants and animals mentioned in the text, a glossary, and profiles of artists and photographers who contributed illustrations (with their tips for successful photos). The book concludes with a very thorough reference list, and a comprehensive index. The text is enlivened with colour and monochrome photos of the birds and their habitats, and with David Mackay's masterful drawings of the seed capsules of several cockatoo food plants. The text is also enhanced with tables, maps and graphs, and with 'boxes' of information on specific topics.

This book is an excellent overview of the cockatoos, and their origins, radiation, behaviour, and virtually all aspects of their biology. The all-pervasive ecological perspective is particularly pleasing, because it is adaptation to, and surviving and reproducing in, their environment that drives how birds 'tick'. The author's expertise, experience in field research particularly on the Glossy Black-Cockatoo, and his familiarity with the various species and the literature on them, are clearly evident. If I could find one minor fault, it would be that Ian Temby's book 'Wild Neighbours' (Citrus Press, Sydney, 2005) might have been considered in Chapter 9 and listed in the References.

Pleasingly, the text was almost flawless, a welcome change from some of the previous bird titles. I noticed an instance of 'equitable' (for equable) climate, and misuse of the word 'ecology' as a synonym for environment (as in 'affect the ecology of' an area when ecology is a discipline, not a physical entity). The Palm Cockatoo is treated as a black-cockatoo, but it is basal to the 'white' and black cockatoos and has some features in common with both; it is not a black-cockatoo in the same sense as the *Calyptorhynchus* species, as it lacks a coloured tail panel (among other fundamental differences). Finally, it was not until Appendix 1 that a few typos appeared, in scientific names.

This book is highly recommended as the 'bible', easily understood by the amateur birder or layperson, on the biology and ecology of cockatoos in the wild. It certainly does justice to these iconic birds, which have such a prominent place in the Australian psyche.

Stephen Debus
Division of Zoology
University of New England