Book Reviews



Invisible Connections: Why migrating shorebirds need the Yellow Sea.

P. Battley, B. McCaffery, D. Rogers, J. Hong, N. Moores, J. Yung-Ki, J. Lewis and T. Piersma. Jan van de Kam (Photographs) 2010. CSIRO Publishing. Paperback, 160 pp, 240 colour photographs. ISBN 9780643096592. RRP \$49.95.

Australia's shorebirds are in trouble!

This beautifully illustrated book originally released at the 10th Conference of the Parties to the Ramsar Convention in Seoul, South Korea is designed to highlight the vital importance of the Yellow Sea for migratory shorebirds. The original version of the book was written in three languages (Korean, English and Chinese). In this version published by CSIRO, Jan Lewis has edited the text for better consistency. It complements the stunning photographs of Jan van de Kam. The photographs in the book took over 12 months to collect; taking Jan from the main non-breeding grounds of shorebirds in New Zealand and Australia across eastern Asia to their breeding grounds in Alaska and eastern Siberia. The reader is treated to a 160-page photographic essay of the spectacular range of shorebird species. It shows their changing plumages and habitats in different seasons as they migrate through the entire East Asian-Australasian Flyway.

The book is written for the public and intended to provide a dramatic visual representation of shorebirds, their needs and the vital importance of the Yellow Sea for their survival. It is broken into eight chapters that are written by well-known shorebird experts. The scene is set by Brian McCaffery, with an evocatively written introduction to migratory shorebirds and the intimate role of the Yellow Sea in their life cycle. The title, "Time is running out" is an apt description of the situation facing the intertidal flats in the Yellow Sea. Brian shows how the survival of shorebirds is intimately linked with the continued functioning of intertidal flats in the Yellow Sea. His text and Jan's photographs highlight the importance of this region to people and shorebirds, and sets the scene for the rest of the book.

The next chapter on shorebird lifestyles introduces the reader to the diverse range of life-histories of shorebirds. It explains the general ecology of migratory shorebirds and the habitats and prey they depend upon. The structure of this chapter was a bit disorganised and I found myself unsure of the chapter's objective. Chapter 3 is on "Flyways" and talks about the common migratory routes taken by many shorebirds and other waterbird species. Shorebirds from Australia and New Zealand migrate within the East Asian-Australasian Flyway. The chapter introduces the reader to the role of the intertidal flats in the Yellow Sea as a critical staging area for so many shorebird species. It touches on some of the impressive migratory feats of shorebirds and highlights how little we know about their behaviour.

The next two chapters look in more detail at the two destinations of these long migrations – the breeding grounds in the Arctic tundra and the non-breeding grounds in Australia and New Zealand. Brian McCaffery has again written very elegantly about the Arctic tundra he knows so well and the text complements the photographs very well. Similarly, Danny Rogers paints a very good picture of the trials and trade-offs shorebirds face at their non-breeding grounds. Again, the photographs complement the text and show the range of conditions migratory shorebirds face during the Austral summer.

Chapter 6 focuses more on the value of intertidal flats to humans and shorebirds as important sources of food. It also talks about the effects of reclamation on shorebirds, especially the loss of over 50 per cent of the intertidal flats in the Yellow Sea in the last 50 years. The remaining intertidal flats are probably at their carrying capacity, so, on-going and further reclamations can only continue to have a dramatic effect on the ability of shorebirds to successfully migrate and breed.

The chapter on international partnerships focuses more on the scientific partnerships rather than on the drier government to government agreements. This is interesting for a general read about migration research in the East Asian-Australasian Flyway. However, it does not acknowledge the important role of governments in shorebird conservation. This is especially true of the Australian and Japanese governments who have engaged with China and Korea to try and reduce the rate of intertidal flat loss in the Yellow Sea. While most of this international diplomacy is ineffective, it does seek to improve

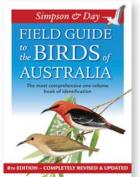
habitat management, which is at the heart of the problems in the Yellow Sea.

The final chapter provides a more detailed account of the annual cycle in the Yellow Sea and the role it plays for shorebirds and other users of the extensive intertidal flats. It is mostly focussed on the seasons and places in Korea, but these are representative of the situation throughout the Yellow Sea. The chapter concludes with a box of useful websites where information about shorebirds and their enthusiasts can be found.

One should buy this book for the spectacular photography. It's not designed to provide detailed information about shorebird ecology, but to highlight the importance of the chain of coastal wetlands that is used by millions of shorebirds in the East Asian-Australasian Flyway. It should make the reader think about the issues of coastal reclamation and look at shorebirds in a new light the next time they visit a beach or intertidal flat and see flocks of feeding or roosting shorebirds.

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Field Guide to the Birds of Australia: 8th Edition.

Ken Simpson and Nicholas Day 2010. Penguin Group, Australia. Paperback, 396pp, 132 coloured plates. ISBN-13: 9780670072316. RRP \$39.95.

When I was first asked to undertake this review, I pictured in my mind the original *Simpson & Day* which was published in 1984 as a hard cover A4 size book titled *The Bird of Australia: A Book of Identification* with a painting of Golden-shouldered, Hooded and Paradise parrots on the cover. At that time it was widely regarded as the ultimate book for

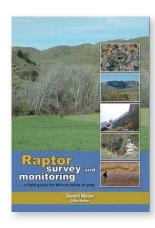
identification of Australian birds, but with two big draw backs – size and weight. Avid field observers had to wait five years, for the 3rd edition, before the book was reformatted to its current size with a soft, water resistant cover, to be a practical and fantastic field guide.

Simpson & Day has now been around for over a quarter century since the concept was originally published, but what has changed? The new edition has been completely revised and updated since the 2004 7^{th} edition. It includes recent taxonomic changes based on DNA technology that has changed names and family relationships, but the revised field guide retains the same basic format as the last five editions. The original book had three major components – A Key to Families; Field Information (the field guide section): and The Handbook (a brief outline of bird life cycles, habitats and basic ornithology). The 8^{th} edition retains these three components, but much, much more.

The original book had 128 colour plates for bird identification. This current edition has 132 colour plates covering all Australian bird species, 40 of which are new or revised since the 7th edition. The distribution maps for all species have been revised and, where appropriate, show the distribution of subspecies and breeding and non-breeding season ranges. There are also over 900 black and white illustrations to further enhance the field guide section. 'True vagrants' have been transferred from the field information pages to a new and expanded 'Vagrant bird bulletin' section which contains illustrations, maps and text covering some 85 vagrant species. The field guide now also contains improved information on how to observe birds; habitats and breeding; checklists for Australian island territories; revamped appendices for birdwatchers; a core library list – suggested titles for the keen observers to build up their personal libraries; and easy to use indexes.

I noticed only one small setup error (Pied Butcherbird distribution map), but this small anomaly does not detract from what I regard as the premier field guide for Australian birds. I commend the 8th edition of *Simpson & Day* and strongly recommend that you upgrade your earlier edition to take advantage of all this new and updated information when in the field.

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Raptor Survey and Monitoring - A Field Guide for African Birds of Prey.

Gerard Malan 2009. Briza Publications, Pretoria (South Africa). Paperback, 184 pp, colour photographs, line drawings, figures. ISBN 978-1-920146-03-0. RRP 230 Rand (\$A36 approx.) + p&p (R110, \$A17 approx.) from the Endangered Wildlife Trust – Bird of Prey Program (email Tanya Fouché, tanyaf@ewt.org.za).

"Raptors have a special place in the hearts of most people with an interest in birds. In fact, raptors have a near-cult status in many quarters, and those who have mastered the problems of doing serious research on raptors, and have the

results to show for it, occupy a special place in ornithological circles." So opens the foreword to this book, and I also quote the editor and principal author's opening lines to the preface: "To succeed in conserving any threatened animal population, we need to know how many animals there are, how they are distributed, and what they need to survive." This from an academic who clearly hasn't shied away from concerns about sufficient sample sizes in raptor study: concerns expressed by some Australian academics regarding proposed honours or postgraduate field projects on raptors

One academic baulked over the viability of a proposed Wedge-tailed Eagle honours project, on the grounds that there was supposedly only one known nest in the study area. The would-be (and subsequently successful) student replied: "Oh, I know of 30!" Clearly, much depends on the motivation and skill of the aspiring raptor student, and it is to such people that this book is directed. It is essentially a 'how to' manual on initiating and conducting a field-based raptor research project, with the emphasis on measuring aspects of populations. Its stated aim is to give anyone interested in birds of prey the skills and tools to participate in raptor research, and to equip the reader with the theoretical and practical tools to begin a raptor study, and the knowledge to build a valuable contribution towards the understanding and conservation of raptors.

After introducing the rationale of the book (Chapter 1), and reviewing and tabulating the ecological characteristics and conservation status of the southern African raptor fauna (Chapter 2; one could mentally substitute the Australian species), the book launches into the whys and hows of measuring ecological parameters. Chapter 3 deals with roadside surveys (including fixed-width or indefinite-width transects versus spot counts), covering biases, caveats, logistics, sampling design (including data capture, storage and analysis), and field procedures. The emphasis is on long-term counts over specific routes, and on standardisation for comparison. In retrospect, the formative stages of our BOPWatch scheme (and its participants) would have benefitted greatly from this chapter.

The book then proceeds by habitat and nesting habits, dealing with how to survey, study and monitor raptors that nest in trees (Chapter 4), gregarious raptors that nest (vultures) or roost (wintering migrant kestrels) colonially in trees (Chapter 5), raptors that nest on cliffs (Chapter 6), and raptors that nest on the ground or in wetlands (harriers, owls; Chapter 7). These chapters also apply the rigour of Chapter 3, with respect to the research aspects noted above.

Chapter 4 (coauthored by Bill Howells) covers all one needs to know about finding stick nests in trees and surrogate artificial structures by ground search, including behavioural and vocal cues from the birds (with call-playback protocol). It covers what and how to measure and record, including aspects of nest-site selection (using random trees for statistical comparison). It also contains a sophisticated section, with sampling considerations, on aerial searching for large stick nests in trees. It finishes with a categorised tabulation of African raptors that nest in trees. The principles, and indeed many of the genera in the table, are directly applicable to Australia.

Chapter 5 (by Ara Monadjem and Anthony van Zyl) is not strictly applicable to Australia (i.e. no vultures or colonial insectivorous kestrels here), but the principles on counting and sampling etc. could be adapted to communal roosts of the elanine or milvine kites.

Chapter 6 (by Andrew Jenkins) applies the same exhaustive level of detail as Chapter 4 to finding, studying and documenting the nest sites of raptors that breed on cliffs and artificial cliff-like structures. As well as a thorough discussion of searching from the ground, it covers aerial searching (down to not only helicopter versus fixed-wing, but e.g. the type of helicopter, for particular tasks). Among the tables is a very useful one on the behavioural cues of cliff-nesting raptors at various stages of the breeding cycle. This chapter will be most relevant to the Peregrine Falcon in Australia, but could apply to the Eastern Osprey, White-bellied Sea-Eagle, Nankeen Kestrel and perhaps even the Sooty and Masked Owls in some areas.

Chapter 7 (by Rob Simmons and John Mendelsohn) follows in similar vein, describing how to find terrestrial harrier and owl nests (Grass Owl, Marsh Owl), using behavioural and vocal cues and specific search procedures. This chapter is directly applicable to our Swamp Harrier and Eastern Grass Owl.

The final chapter describes how to monitor raptors over the short term, long term and lifetime (of the raptor!), and the sorts of data so gained and their value. Although not describing trapping and marking techniques, it does consider the benefits of having an individually marked population, and some of the pitfalls with band/tag types and trying to read them in the field. The chapter contains several sample data sheets for single-season and longitudinal studies and, for instance, a discussion of the Mayfield method (for nest success), calculation of survival and longevity, and lifetime breeding success.

Most chapters list expert advisor(s) consulted (e.g. Ch. 3: Mark Anderson; Ch. 4: Alan Kemp *et al.*). Each chapter finishes with a comprehensive list of relevant (mostly African) references, and the book finishes with appendices (on the Beaufort wind scale, and trigonometry to calculate tree heights) and a comprehensive species and subject index. Throughout, the emphasis is on planning, survey design, sampling effort (e.g. minimum sample sizes), standardisation and research ethics. There is also discussion on making the best use of technology (e.g. maps, GPS, GIS), and how results might be disseminated and implemented. The underlying assumption is knowledge for effective conservation (e.g. to understand how raptors organise themselves over space and time in the landscape), because raptors "reflect the welfare of complex and often threatened ecosystems".

Much of the book's content may be intuitive to experienced Australian raptor biologists, but it is very helpful to have it all in one compact, readable volume. It will be of most use to aspiring and beginning raptor students, but there is much for the advanced raptor biologist too. For instance, by Chapter 8 the authors seem to be writing with conservation biologists and academics in mind: a logical progression.

The book covers owls as well as diurnal raptors, although hollownesting owls receive little specific mention (probably because many African owls breed in old stick nests in tree or on cliffs). Otherwise, there is little an Australian reader could quibble about, except for the many typos and the occasional misspelling, odd expression or wrong word (its/it's, compliment/complement, illicit/elicit, dependant/-ent). Notwithstanding Professor Malan's first language apparently being Afrikaans, the many native English-speaking coauthors or advisors could have edited and proofed it more thoroughly.

Professor Malan having studied raptors for his PhD, and having supervised raptor projects since, his book should be the cure for the Australian reluctance to take on comparable academic and postgraduate research here. Equivalent to the British 'Raptors: A Field Guide for Surveys and Monitoring' (Eds J. Hardey *et al.*, the Stationery Office, Edinburgh, 2009), but more relevant to the Australian environment than that volume, it is a different sort of book from 'Raptor Research and Management Techniques' (Eds D. M. Bird and K. L. Bildstein, Hancock House, 2007). Encouragingly, Malan nominates a minimum sample size of ten nests for a given species as sufficient: surely achievable for any Australian diurnal or nocturnal raptor species.

I agree with the foreword that this book is a "timely contribution to encouraging... collecting [of] information in a structured way about birds of prey and thereby contribute to their conservation", and that it "needs to be in the hands of every raptorphile". For Australians, it could only be topped by an Australian version, using Australian examples and expertise, and taking in the improvements and expansion invited by Malan on his first edition.

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