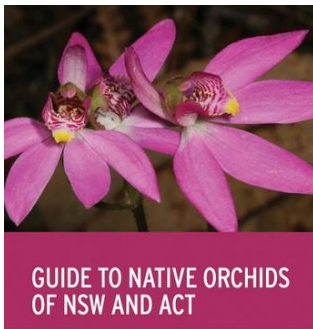


Some Recent Natural History Publications #30 January 2022

Guide to Native Orchids of NSW and ACT

Lachlan Copeland and Gary Backhouse
CSIRO Publishing. 456 pages. RRP \$50



LACHLAN M. COPELAND AND GARY N. BACKHOUSE



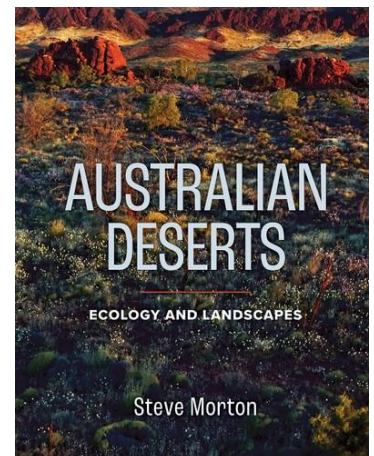
From here in Canberra one might think “*another* orchid guide?”, but for anyone living in NSW outside the ACT and surrounds this really is a rare treasure. The blurb describes it as “the most comprehensive guide... for the region”. I think they could have gone further and mentioned that it’s also the only one. I’m very aware of the late Tony Bishop’s excellent 1996 guide to NSW and Victoria, but it’s long out of print and of course the taxonomy has moved far on since then. The authors are very well qualified for the task. Copeland lives on the NSW north coast where he works as Senior Botanist for a major environmental consultancy, and has an association with the University of New England. He is a stalwart of the indispensable NSW Plant Identification Facebook page and has described many new plant species, including six orchids. He even has a *Prasophyllum* (leek orchid) named for him! Backhouse is a Victorian and author of several orchid books, including the definitive guide to Victorian orchids and a recent one on all Australian Caladenias. Quite a team in fact.

The guide covers all 582 known species in the state and territory, including 60 still undescribed (and there may be a minor logical wobble in that sentence, but you know what I mean). Each genus is introduced, and each species dealt with in a few well-chosen and well-written paragraphs, including the usual description, habitat, distribution (complemented by a good map) and, importantly, notes on the species including similar species. Photos (one or two per species, including a few not previously illustrated, we are told) are excellent, and seem to do the job admirably. I’ve not yet had the opportunity to field test the guide, and would love to take it somewhere new – well, wouldn’t we all like to travel somewhere new at the moment! This is an important addition to the already rich trove of Australian field guides, is a must for any NSW field naturalist, and would also be of practical interest to those in northern Victoria and south-eastern Queensland.

Australian Deserts; ecology and landscapes

Steve Morton
CSIRO Publishing. 304 pages. RRP \$60

A truly monumental book, the like of which I can’t readily recall since Penny van Oosterzee’s *The Centre* came out 30 years ago and, while (remarkably and deservedly) *The Centre* is still in print, its scope is more limited, focussed on the central deserts. The Australian deserts are very dear to my heart, and this book features two of my favourite interpreters of them. Morton has studied the ecology of deserts since moving to Alice Springs in 1984 to work with CSIRO. He is still there, as an Honorary Professorial Fellow with Charles Darwin University, and his knowledge of the deserts is encyclopaedic. And, though he doesn’t feature on the cover, the book owes much too to photographer Mike Gillam, an Alice Springs ‘character’, passionate and forthrightly outspoken about conservation and social issues. He is also, I believe, one of Australia’s foremost nature photographers, spending days off the grid in the desert to get the photos he wants, from close-up portraits of insects to huge panoramas. And he, like Morton, truly *understands* the deserts. As I suggested at the start, this is a grand book on a grand topic, covering all the Australian deserts and arid lands which, as the map in the preface shows, covers most of the country. Morton’s writing is lucid when describing the science, and even lyrical at other times. There is an excellent example of this in the introduction, where he muses on teenage memories of Brown Songlarks displaying on the Hay Plains, linked to stories by the property owner of singing in WWII POW camps and Morton’s own journey from farmer to desert ecologist. In the preface he states his intention to tell the story of the deserts ‘as it is’, and if you doubt that there is another way, please read his account of a visiting film crew in Alice Springs in the 1980s and their approach to making the desert fit popular misconceptions. You’ll find it in the first paragraph of the book. Chapters include the nature of Australian deserts (extremes of wet and dry) and plant life, with a focus on particular groups and species, including River Red Gums, Desert Oaks, mallee, and very many

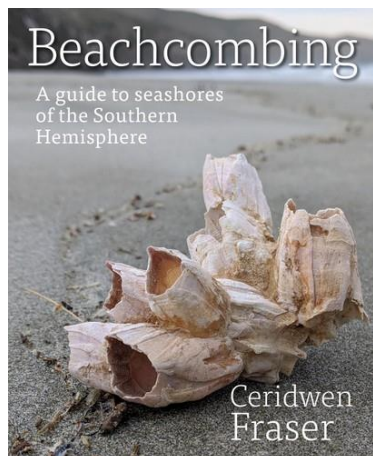


more. Discussions in this chapter include the implications of surplus sugar production, fire and the very origin of the desert plants. There is a long chapter on how a wide range of animals use various plant and fungal products, and another on recycling of plant litter and animal waste products. There is a particularly fascinating chapter on invertebrate predators, another on vertebrate predators and yet another on the role of waterholes. Each chapter ends with a helpful series of summary points to assist in revision if you're that way inclined, reinforced by an excellent overall summarising chapter. This is an important book, in that it helps demystify the majority of the country, by area, in a clear and accessible way. It also manages to be very beautiful – did I mention that the photos are superb? And yes, I really do love this book.

Beachcombing; a guide to seashores of the Southern Hemisphere

Ceridwen Fraser

CSIRO Publishing. 116 pages. RRP \$28



This, as the subtitle proclaims, is a book of very broad scope. As such it cannot be an identification guide (as one might be led to expect by the title) other than in very general terms. It is however a good introduction to what we might expect to find, be we in Australia, southern Africa or South America, sparkling with little snippets and anecdotes. Fraser (no relation) is a marine biologist who grew up exploring the NSW south coast, was a Canberran working at the ANU until 2019 and an Australian Academy of Science Fenner Medallist in 2018. She is now running a lab at the Marine Science Department of the University of Otago. The book is brief but clear with lots of interesting and 'fun' information for each group of plants and animals discussed. A brief history of the usage of sponges for cleaning human bodies leads into a discussion of the different groups of living sponges and their characteristics and structures, including their function as habitat for other organisms and their ability to recover from severe damage

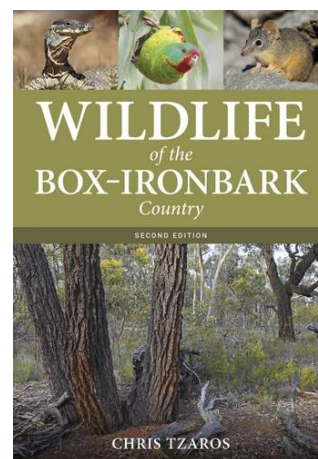
by assigning surviving cells to completely new roles. Wouldn't that be a useful trick?! Other perhaps unexpected offerings include a recipe for kelp ragout (a Chilean dish), different types of 'jelly blobs' and the use of goose barnacles to estimate how long it took the kelp they grew on to drift from the sub-Antarctic to New Zealand. I enjoyed this little book, which literally has 'something for all the family'. I don't doubt that it could have been expanded with benefit to us all (her research interests are broad) but perhaps that book is in the offing. If so I look forward to it.

Wildlife of the Box-Ironbark Country; second edition

Chris Tzaros

CSIRO Publishing. 288 pages. RRP \$50

This is a thoroughly updated version of an out-of-print classic originally published in 2005. The subject is the rich but fragmented box-ironbark eucalypt woodlands that stretch across central Victoria from Chiltern south-west to Stawell in an irregular amoeba-like strip. It incorporates a range of reserve types, from national park to state forest, plus a lot of unprotected land. If you have no intention of ever visiting Victoria I think that a) this review is probably not of interest to you and b) you're making a mistake. However for the rest of us this is a book worth getting for future trips to this nature-packed little state, and if you live there it's an absolute must. It is both a valuable backgrounder to the ecology, management issues and challenges of the system, with detailed descriptions of the sub-habitats, and a field guide to the vertebrates. The latter seems pretty ambitious, but a table at the end of the book, with all vertebrate species recorded in the zone, indicates that it's comprehensive with the exception of species that are rare vagrants, those at the limit of their range, and ones that are present within the area but don't use the box-ironbark habitats. Those are indicated in the table. Each field guide entry includes comprehensive information and a detailed map, plus a high-quality photograph. There's no guide to plants or invertebrates (understandably), though common plants are listed for each sub-habitat. An important concluding chapter introduces 16 reserves (or 'places to watch wildlife') with for each access information, detailed habitat description and 'notable natural values', and 'feature species', accompanied by an excellent map. Overall a valuable addition to the natural history literature and it will certainly be in our book box for our next trip south.



Photographic Field Guide to Australian Frogs

Mark Sanders

CSIRO Publishing. 376 pages. RRP \$50



PHOTOGRAPHIC FIELD GUIDE
TO AUSTRALIAN FROGS

MARK G. SANDERS



I know it's predictable, but I can't help saying it – how many field guides to a particular group of animals or plants is 'enough'? Less than two years ago, in reviewing the second edition of Tyler and Knight's *Field Guide to the Frogs of Australia*, I repeated words I'd written for the first edition 10 years earlier. "This is what I want of a modern field guide... You need this book." Do you no longer need it? No, I still think you do, but having said that I need to approach this current guide on its merits. It's good, there's no doubt about that. It's close to comprehensive (it has 16 less species than Tyler and Knight, but some of this may be down to taxonomic issues). Each species entry is generous, with lots of information including habitat, calls and how to distinguish from similar species. As the title tells us, it relies on photos, including details such as underside and feet where relevant. As expected these are good, but in some cases appear too small to provide enough detail, though the text largely covers for this I think. Maps are good and detailed, based on point records – the Atlas of Living

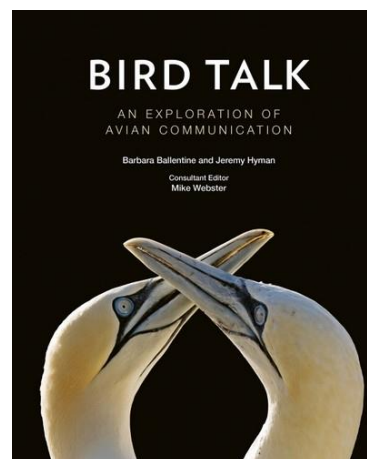
Australia makes a field guide's author's task much easier in this regard. Importantly, the scale of the map varies to fit the size of the distribution, so a range-limited species is shown on a map that only shows its distribution, rather than the whole country. If you're looking for a frog guide you should seriously consider this one. If you've already got one, have a look to see if you think you need this one too. As I say, it's good.

Bird Talk; an exploration of avian communication

Barbara Ballentine and Jeremy Hyam

CSIRO Publishing. 192 pages. RRP \$45

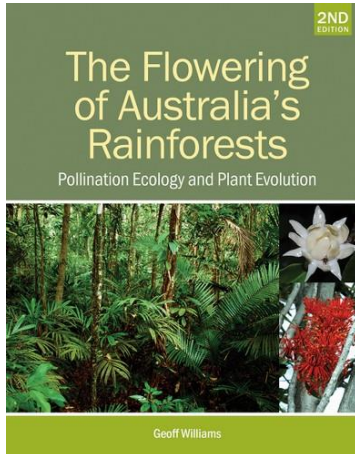
As I observed in my previous offering in this series of reviews, there is something of a surge in books on interpreting bird behaviour for laypeople, especially coming out of the US. This title falls squarely into this category, though it is more focussed than some others which seek to cover the entire gamut of bird behaviour, albeit necessarily pretty thinly. The authors are seemingly well-credentialed US university academics, and CSIRO is publishing this edition for Australia and New Zealand. Despite the sensible decision not to cover 'the life, the universe and everything' of bird behaviour, this is still a very substantial topic, so there is a strong element of surface skating here. That's not necessarily a problem for the intended audience, which is presumably anyone interested in birds and new to the concepts covered here. The chapters are entitled *What is Communication?*, *Communication Channels*, *Male-Female Communication*, *Territoriality and Dominance*, *Parent-Offspring Communication*, *Warning Signals*, *Group Life* and *Communication in a Noisy World*. That seems to me to cover the field (which of course involves much more than vocalisation, or 'talk' as the title suggests) pretty well. It is, naturally, fairly oriented to North America, but they are careful to use examples from all over the world, including Australia, which at least gets a mention in all but one chapter, and sometimes gets more attention than that. However the problem for me is still the unavoidable brevity of the accounts. 192 pages isn't a lot, and I estimate that at least half of the page area is given to photographs – these are pretty good, as we'd expect these days, but often don't contribute much except allowing us to envisage the birds being discussed, which of course can be of interest. I was surprised to be faced with a story which I found exasperating in the last book on bird behaviour that I reviewed. I now know that it comes from a 2012 paper from Flinders University, based on 'cross-fostering' experiments with Superb Fairywrens and Horsfield's Bronze-cuckoos. The wrens 'teach' their embryos a code call which enables them to be recognised by the parents when they hatch, and which of course the cuckoos don't know. *But* as we know cuckoo chicks have evolved to hatch before the host chicks, then evict the eggs or any chicks which have hatched, so in a natural situation they won't be competing in the nest. There may well be a valid response to this (eg the parents could then abandon the nest and the cuckoo chick, which does often happen) but it's not addressed and I don't see how it could involve the wren chicks being feed in preference to the cuckoo chick, which is what the book suggests. I want to read more than the authors are giving me here! Their presumed unfamiliarity with Australia might help explain this, but cuckoo parasitising behaviour is similar everywhere. There's plenty of interest here, lots of specific stories that are fun and fascinating to read. It's worth a read but you may not find all you're looking for.



The Flowering of Australian Rainforests; pollination ecology and plant evolution

Geoff Williams

CSIRO Publishing. 288 pages. RRP \$140



This is not a light read, but it's not intended to be. It's a monumental compendium of information, which the full title describes perfectly, written by someone widely recognised, including with an Order of Australia, for his work on conservation biology and pollination ecology. This is a much-expanded second edition, a decade after the first. In addition to new research, a lot of the new material, predictably and depressingly, involves fragmentation, invasive species and climate change, including increasing impacts of fire on rainforests. I think that the story of pollination, and particularly the interdependent 'contract' between plants and animals, is one of the grandest and most fascinating of all the great stories in nature. This book does a superb job of setting the scene through chapters on the origins of flowering plants alongside the more ancient plants such as cycads, the nature of flowers and the structures of rainforests that influence pollination strategies.

There is a chapter on the history of Australian vegetation and how that influenced the 'grand story' here, and another on the specific characteristics of pollination in Australia. I love the one which examines the role of each group of animal pollinators, from beetles to reptiles – and isn't the latter a delicious concept? One of the things I love about it is the subtitle: *who brings the 'flower children' in rainforest?* This is not a dry impersonal tome. The last chapter is a discussion on the implications of all this for the conservation of the fragmented Australian rainforests, followed by a series of very informative appendices and a voluminous bibliography, something the title just above this one might beneficially have considered. It is a book dense with information but it is superbly crafted and accessible to any interested layperson (such as me). It is written, as the blurb suggests, for 'ecologists and field naturalists, botanists, conservation biologists, ecosystem managers and community groups involved in habitat restoration'. Photographs appear as a block of 150 small plates, each with a brief caption, but each has a much longer and more informative version in an Appendix, a nice idea. Williams has a deft touch with words which I greatly enjoy; section headings include *Chemical warfare and the evolution of flowers* and *Attraction of the comely shape: orchid flowers and barren illusion*, though some others are a little more prosaic. By now you'll probably know if this book is potentially for you, and I suspect that might not be most of you. I readily acknowledge too that the price tag will be an impediment for many. But if this even might be of interest or benefit to you, I recommend strongly that you investigate it further. It is a mighty book, and even an enjoyable read, albeit probably in bites.

Ian Fraser is a Canberra-based professional naturalist and writer who is the author of eight books on local natural history, most recently Birds in their Habitats, journeys with a naturalist, CSIRO Publishing 2018. He ran the educational Environment Tours nature-based tours program from 1984 to 2015 and was the voice of natural history on local ABC radio for 24 years. The ABC in 2004 produced a four-CD set of his 'Around the Bush Capital' series. In 2001 he won the Australian Plants Award, Australian Native Plants Association, professional category and in 2006 he was awarded the Australian Natural History Medallion. In 2012 he launched the natural history blog 'Ian Fraser, Talking Naturally', at <http://ianfrasertalkingnaturally.blogspot.com.au/> He claims no expertise and has no natural history favourites – except for birds and orchids...

This periodic review is emailed free on request, in order to help anyone interested in Australian natural history to keep up with the burgeoning literature. Previous issues available at <https://botanicalbookshop.com.au/pages/ian-fraser-book-reviews> for which my thanks to the Botanical Bookshop at the National Botanic Gardens.

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