

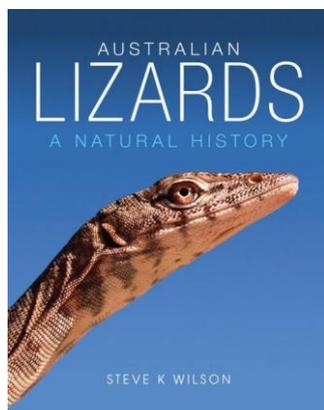
**Some Recent Natural History Publications #18  
October 2012**

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***Australian Lizards; a natural history***

Steve K Wilson

CSIRO Publishing. 208 pages. RRP \$49.95



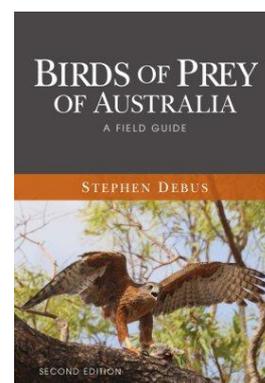
If you're fascinated by lizards, I suspect you've been waiting for this book for a long time. If you're not specifically an aficionado, but are interested in the natural world, you may not know that you've been waiting for it – but you have! I thought I knew a bit about lizards, but delving into this book convinced me that I'd been deluding myself. Wilson – an information officer at the Queensland Museum – is a storehouse of information, and is very good at divulging it. The range of topics covered is very comprehensive, including habitat, senses, temperature control, protection, diet, water management, reproduction ('How Lizards are Made') and conservation; each such chapter ranges across the groups of lizards, with numerous specific cases. Among the snippets I happily absorbed are that the Golden-tailed Gecko and its relations exude from their tails a sticky repellent substance that dries to threads; that an Eyrean Earless Dragon will stand erect "like a miniature Meerkat", adjusting its stance relative to the sun to control temperature; that many arboreal geckoes (which I'd always assumed to be carnivores) supplement their diet with lapped-up tree sap; and that some Australian geckoes practise parthenogenesis, with all-female populations which produce only female clones. A highlight of the book is its photos; indeed I started by working through them and reading the captions. We expect photos in such a book nowadays to be technically good, but the subjects here are sometimes remarkable action shots, revealing mating and protective behaviour, and lizards eating other lizards, various insects, flower nectar, large spiders and scorpions, and flowers – and being eaten by praying mantises, spiders, snakes, birds and dunnarts. (Oddly, the photos are not individually credited; there is a blanket list in the Acknowledgements, but that's all.) An important addition to the Australian natural history library; time to start hinting for Christmas, I'd suggest.

***Birds of Prey of Australia; a field guide***

Stephen Debus

CSIRO Publishing. 180 pages. RRP \$39.95

This book originally came out in 1998, published by Oxford, and while anything written by Debus on raptors is going to be good, there were some frustrations, particularly to do with the positioning of the plates separate from the relevant species text. This second edition is truly a new whole new book, with a more traditional field guide approach (a page of paintings showing sex and age differences, flight patterns, colour morphs where appropriate, opposite a page of text) and a rather neat idea of showing 'split pictures' of similar species for comparison; I'm not sure yet if this will actually help out in practice, but I always admire novel ideas. More fundamentally a lot of new understandings of raptors in the last 14 years have been incorporated into the text. In addition to the field guide, there is a Handbook section, with a couple of pages of more general information on each species. If you found the first edition helpful, it's probably time to upgrade. If you don't know it, and have a particular interest in raptors, it would be well worth having a good look.

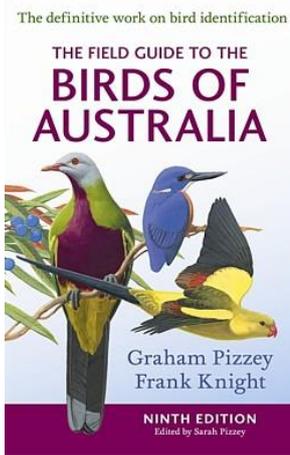


***The Field Guide to the Birds of Australia; ninth edition***

Graham Pizzey and Frank Knight; edition edited by Sarah Pizzey

Harper Collins. 608 pages. RRP \$45

In some circumstances I might raise an eyebrow at the "The" that starts the title, especially in conjunction with the front cover heading "the definitive work on bird identification" – except that, in this case, I probably agree. It is surprising how tribal people can be with regard to their bird field guides (surprising at least to a non-birder), and loyalty is not always supported by reasoned argument. I may well be as guilty in this as the next birder, but I've always been a fan of Graham Pizzey, one of the great Australian natural history writers; for me his wonderful prose compensated for the awful layout of the first edition, with text, illustrations and maps all in separate sections. When Frank Knight redid all the illustrations, and the layout was appropriately altered, it was, for me at least, unapproachable as the premier



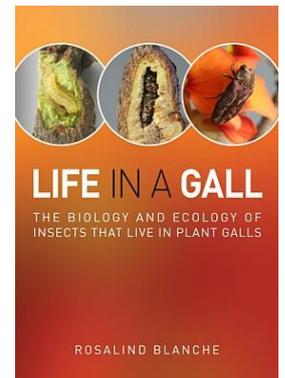
Australian bird field guide in a crowded field; this edition only strengthens its position. After Pizzey's death in 2001, eminent Victorian zoologist Peter Menkhorst edited the next two editions; for this one Graham Pizzey's daughter Sarah has taken over the role. She has continued the direction that Menkhorst was pursuing, bringing the species order and taxonomy into line with the most recent edition of Christidis and Boles' *Systematics and Taxonomy of Australian Birds* (2008). This means that this guide is out of kilter with all others currently available, but it's not just a matter of following a fad; the order of listing reflects our understanding of how birds are related and evolved, so is important information in its own right. For instance, in this edition pigeons have been pushed right forward to follow the venerable grebes, reflecting the current belief that they're a much older group than previously thought. Owlet-nightjars juxtapose swifts, to reinforce another surprising recent revelation. Five 'new' species, resulting from splits of extant species, are also included. As birders have come to regularly target remote territories – such as Cocos (Keeling) Islands, Christmas Island, Ashmore Reef and the Torres Strait islands – more and more vagrant visitors have been added to the Australian list, and this guide has become the first one to include all 80 so far recorded. If you've got a recent edition, you may not need to update yet (though I've just listed some reasons why you might), but if yours is any older than about the 7<sup>th</sup> edition, now's the time!

### **Life in a Gall**

Rosalind Blanche

CSIRO Publishing. 80 pages. RRP \$29.95

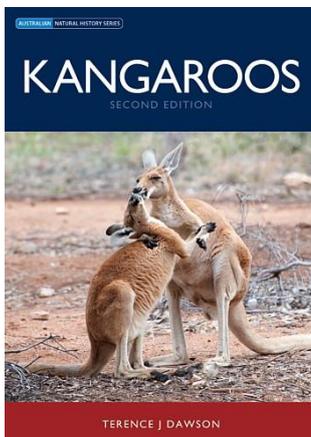
I've always been intrigued by galls, and have sometimes struggled a bit to get useful information. This little book goes a long way towards filling that void (but not all the way, as I'll explain). Galls are abnormal growths of plant tissue – which may be on leaves, stems, branches or buds – stimulated by an insect laying eggs in the tissue. The larva is nourished by, and it and subsequently the pupa are protected by, the walls of the gall. One thing I learned is that we still don't know exactly how the insect triggers the gall formation; at least now I can say “no-one knows”, rather just than “I don't know”! Chapters cover a range of relevant topics, including economic issues, and a nice concluding chapter on the role of amateur scientists in such studies. A major gap however is in ignoring of all other gall-forming organisms than insects; for instance mites, fungi, viruses and bacteria can all initiate galls, and lack of any mention beyond a brief acknowledgement at the start is unfortunate. It's also a fairly slight volume for the price, but that's the nature of the book industry today. Overall though, good to see galls get a guernsey!



### **Kangaroos; second edition**

Terence J Dawson

CSIRO Publishing. 216 pages. RRP \$39.95



There are not many people who know more about kangaroos than Terry Dawson, who has studied them for some 45 years via the University of NSW. (Indeed he founded the *Australian Natural History Series* of books to which this volume belongs, when it was published by UNSW Press.) I am a long-standing fan of this series, which brings to laypeople the latest scientific understandings of a range of Australian vertebrate groups and species. Dawson originally 'did' this book back in 1995, but a huge amount has changed with regard to our understanding of roos since then and the book has been entirely updated and rewritten. As is expected from this series (with one ignoble exception, but that was years ago now) the chapters are comprehensive, covering all imaginable aspects of taxonomy, behaviour, ecology and human interactions. Sometimes the text is pretty dense; it is certainly readily accessible to anyone interested, but isn't always easy reading, unlike some other titles in the series. Nonetheless, anyone who has a serious natural history library probably needs

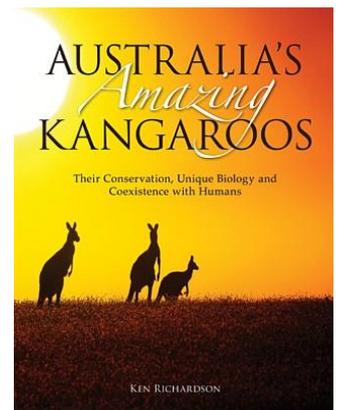
to find room in it for this. *But*, see the next book before you commit...

## Australia's Amazing Kangaroos

Ken Richardson

CSIRO Publishing. 240 pages. RRP \$49.95

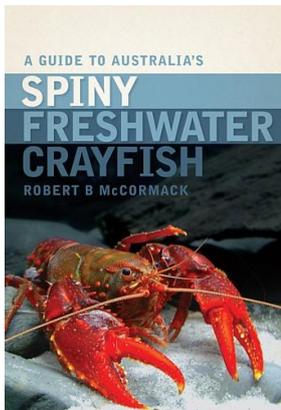
At one level it seems a surprising decision on the part of CSIRO to release this volume and the previous one at much the same time, but on the other hand they complement each other quite well, at least in terms of the market. In many ways this is the lay version of Dawson's more technical tome, though certainly not a 'dumbed down' version of it. Richardson is also highly qualified to write such a book, as a Murdoch Uni vertebrate zoologist and veterinarian, specialising in vertebrate adaptations. It covers much the same ground as does Dawson, though with more emphasis on each species, with each allocated a two-page spread (of almost A4 size) with an emphasis on conservation issues and large photos. (The book's chunky subtitle is *Their Conservation, Unique Biology and Coexistence with Humans*, and the contents reflect it.) Much of the same ground as Dawson's is covered in the excellent section on adaptation, but with more emphasis on clear everyday descriptions, and less on technical terminology and graphs and tables. The *Kangaroos and Humans Today* concluding section includes discussions on Tourism, Culling and aspects of the commercial kangaroo harvesting industry. A particularly useful inclusion is a section on *Responses to comments for and against the sustainable harvest of kangaroos*, none of which is going to convince anyone who has already made up their mind on the issues, but will certainly inform discussion for those who wish it. If you want just one book on kangaroos on your shelf – and what's an Australian natural history library without one? – this would be a good choice.



## A Guide to Australia's Spiny Freshwater Crayfish

Robert B McCormack

CSIRO Publishing. 248 pages. RRP \$59.95



Each time we think that the options for new topics in the wonderfully rich world of Australian natural history literature must be getting a bit limited, we're proved wrong yet again. This isn't just a book on freshwater crayfish either – in fact it concentrates on just one genus of them, *Euastacus*, thereby leaving future options open! In south-eastern Australia the one member of this genus that most interested people will have heard of is the Murray Crayfish, *Euastacus armatus*; if I were to ask you how many there were in the genus altogether, I wonder how many would say 50? I wouldn't have, but I now know it's true. You will have already divined that I'm not an aficionado, but if any book could do it for me, this is the one. I have to respond to the enthusiasm of anyone who starts off: "Australia is the lucky country, with the three largest freshwater crayfish species in the world." (Mind you, only one of them, the Murray Cray, qualifies for this book!)

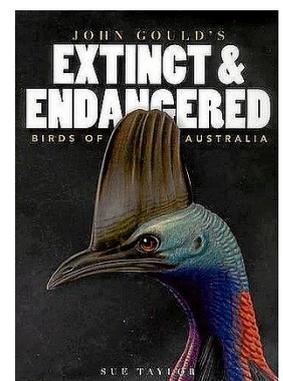
Each species gets three pages, including excellent photos – I found myself browsing them and marvelling at the beauty and variety of the animals. I also learnt that I've many times walked alongside the rare Fitzroy Falls Spiny Crayfish and not noticed them (probably distracted by lyrebirds or orchids) although they are apparently quite unconcerned by people. The cover notes claim that the book "will be of interest to researchers, conservationists, libraries and crayfish enthusiasts"; it might even create a few more of the latter.

## John Gould's Extinct and Endangered Birds of Australia

Sue Taylor

National Library of Australia. 252 pages. RRP \$49.95

Sue Taylor first came to our attention in 2001 with her somewhat quirky and well-received *How Many Birds is That?*, the account of how an enthusiastic but relatively novice Victorian birder and her tolerant husband set out to bring her life total to 600 Australian species. Though inexplicably published before she'd achieved her goal, it was written cheerfully, briskly and self-deprecatingly, and I certainly enjoyed it. It was followed in 2005 by *Why Watch Birds*, a beginner's guide, and Radio National started going to her for comment pieces. Then, silence until now. This one is a big lush weighty book, based on a selection of the superb paintings which illustrated John Gould's magnificent 1848 seven volume blockbuster *The Birds of Australia*. The National Library of Australia has already

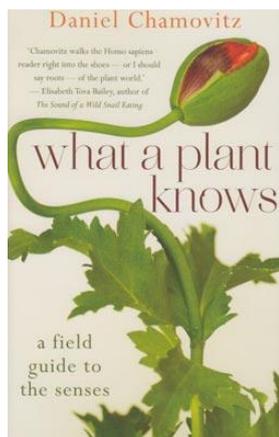


generously made them available to us on line, and their beauty, delicacy and power is remarkable. Probably wisely there is no attempt here to reiterate the considerable amount of recently published information on Gould himself, such as the NLA's *The Business of Nature; John Gould's Australia*, by Roslyn Russell. This is a very different book from Taylor's previous ones. It's about birds, but there's not much other similarity, and in particular there's very little of Taylor in it, which I regret; she manages to discuss dispassionately birds she must have spent time with, and which are teetering on the precipice, something I find hard to understand. Further, there is no explanation as to what she was trying to achieve, so it's hard to judge how successful she's been. Nonetheless any book based on the Gould paintings, and his written accounts, is going to be beautiful, and the NLA continues to surprise with the affordability of big glossy productions.

### ***What a Plant Knows; a field guide to the senses***

Daniel Chamovitz

Scribe. 177 pages. RRP \$49.95



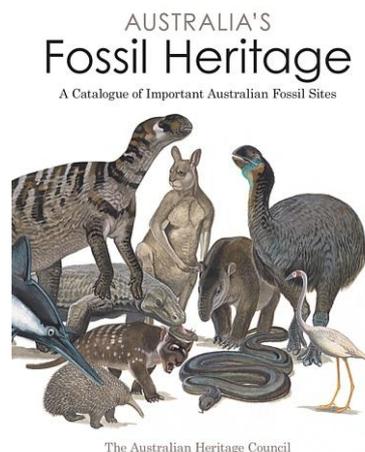
Fortunately Daniel Chamovitz, a respected botanist at Tel Aviv University, has decided it's time to introduce the rest of us to the real and sometimes remarkable science that's been revealing the various senses of plants for centuries. Sadly, the whole field was set back decades by the anti-scientific fruit-loopery of the 1973 *Secret Life of Plants*, by Tompkins and Bird, which purported to show that plants are sentient, and even supernatural, and which made many botanists nervous about being lumped with them if they did serious work on the subject. While careful to avoid any *Secret Life* suggestions that plants use the same senses that we do, Chamovitz uses human sense terms – seeing, smelling, hearing and feeling, plus remembering – to discuss plant responses. The key is not *how* these senses work, but what they respond to. And there is no doubt that plants respond in different ways to light, to chemicals in the air, to sensations such as wind movement, touch, heat and cold, and being chewed. There are even tentative indications that plants might respond to some sounds, including those produced by either pollinating or hungry insects. (This has nothing to do with the very dodgy 'experiments' conducted by Dorothy Retallack in the US and published in 1973 as *The Sound of Music and Plants*; all this revealed was that plants unsurprisingly shared her love of muzaak and distaste for Hendrix.) This book is full of wonderful information based on up-to-date research; eg the parasitic vine dodder sniffs out, and grows towards, its preferred host plant species – and within that species can identify and select healthy individuals over less desirable sickly ones. Truly fascinating reading, and totally accessible; great Christmas present potential!

### ***Australia's Fossil Heritage; a catalogue of important Australian fossil sites***

Australian Heritage Council

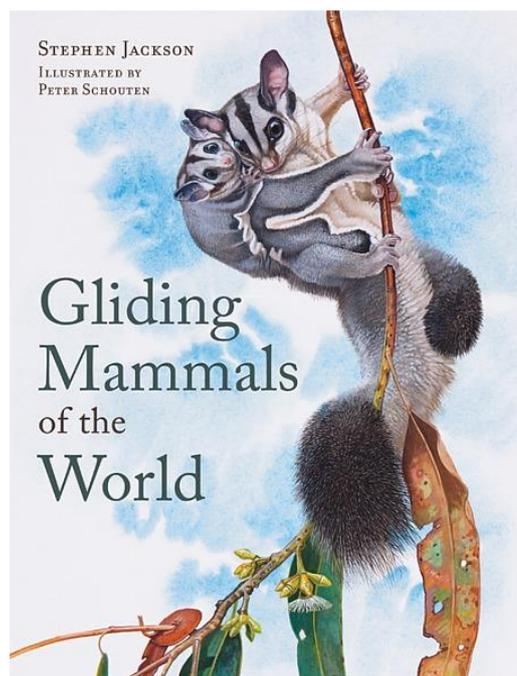
CSIRO Publishing. 200 pages. RRP \$59.95

Australia has a rich and ancient history, and much of it is told in the rock pages in the form of fossils. Sites of world significance include Riversleigh and Naracoorte (mammals), Ediacra (ancient soft-bodied marine life), the Pilbara stromatolites (oldest recorded life on earth) and Lark Hill (world's most extensive dinosaur footprints). This detailed guide to major fossil sites, in each state and the Northern Territory (but not the ACT) is based on the recommendations of museum palaeontologists. The nature and significance of every site is explained, with photos and a series of painted reconstructions of ancient habitats and their inhabitants by the admirable Peter Schouten, who has previously worked with Tim Flannery to our great benefit (and illustrated the next book); these are fascinating, but sadly uninterpreted. This is not a book for everyone – most of the sites are not open to the public, so it's not an excursion guide – but it's a key reference, and an accessible story of our past for anyone interested.



## Gliding Mammals of the World

Stephen Jackson and Peter Schouten  
CSIRO Publishing. 232 pages. RRP \$99.95



This is a simply glorious book – Peter Schouten is one of the best wildlife artists around, and here he is at his best, putting animals (including some pretty obscure and little-known species) into an environmental context, and he has been given big canvases, each larger than an A4 page, to work on. I loved his remarkable illustrations to *Feathered Dinosaurs* (see number 10 in this series of reviews, from July 2008). Jackson is an ecologist currently employed by the NSW government, who has specialised in Australian mammals, and co-edited the monumental *Biology of Australian Possums and Gliders* in 2004. This is the first monograph to examine all of the world's species of gliding mammals. I became fascinated by gliding some years ago, when I was looking at aspects of flight for a bird course I teach. Gliding isn't flying of course – there is no 'thrust' to drive the glider along – but is a very sophisticated way of getting around, and has been remarkably widely adapted. Indeed, most vertebrate groups (including fish, frogs, lizards and snakes) have some members, living or dead, which have taken it on as a lifestyle. Plus, of course mammals – an amazing 65 species, from six different families, glide; this means it has evolved at least six times among living mammal

groups. Australia is well-represented; in fact gliding has evolved three times among Australian possums (the feathertail gliders, the Sugar Glider group, and the Greater Glider). However the real mammal gliding specialists are the rodents (!), among squirrels and the unrelated scaly-tailed flying squirrels, or anomalures, of central and west Africa. The sixth family comprises two species of the unfortunately named 'Flying Lemurs' (they don't and aren't, respectively) or Colugos of south-east Asia, which are utterly unrelated to any other mammals. After a detailed introduction to gliding, there are individual species accounts (text and map facing the painting), then appendices, including a detailed 'where to find' listing of regions of the world at a state/province level with the gliders of each. It is in here that I found something curious; for South Australia there were two species of Feathertail Glider listed (*Acrobates pygmaeus* and *A. frontalis*) the second of which I'd never heard of. A bit of online research revealed that it is a newly described and named species, found in generally drier and more open habitat, previously lumped together. It is not mentioned in the text, nor listed under the other eastern mainland states where it occurs; clearly it 'arrived' too late for the publication date, but the single unexplained reference in that appendix does seem odd. However this is minor and in no way detracts at all from an overall very informative and beautiful, albeit expensive, book.

*Ian Fraser is a Canberra-based professional naturalist and writer (viz, he doesn't make much money!) who is the author of seven books on local natural history, most recently A Bush Capital Year, CSIRO Publishing 2011, with artist Peter Marsack. He has run the educational Environment Tours nature-based tours program since 1984 and has been the voice of natural history on local ABC radio since 1992. 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 <http://www.botanicalbookshop.com.au/reviews.asp> for which my thanks to Tom Butts of the Botanical Bookshop.*

*calochilus51@internode.on.net*