

## Some Recent Natural History Publications #7 March 2007

\*\*\*\*\*

### *A Complete Guide to Native Orchids of Australia*

David Jones. Reed New Holland. 496 pages. RRP \$75.

I somehow just missed this one for my previous reviews last November, which is surprising given that it's such a glorious book on one of my very favourite topics. Jones is Canberra-based (at the National Herbarium), and widely regarded as the doyen of Australian orchid taxonomy; with Mark Clements he's certainly rewritten a very large part of it in recent years! This is an entire rewrite of his 1988 classic *Native Orchids of Australia*. It's not a field guide (especially at over 2.6kg!), with no keys and no distribution maps (though there are detailed descriptions of range), but it's not intended to be. Virtually every species is illustrated by lovely clear photographs, and after a detailed description are Notes (on habitat and pollination) and Recognition, comprising aspects of the species which will aid in identification. What is missing from the previous title (and is such a valuable feature of Tony Bishop's *Field Guide to Orchids of NSW and Victoria*) are clues to separating the species from similar ones. The main concern about the book though, which I have already heard expressed more than once, relates to the radical new taxonomy, most of which is due to Jones' own work. Most of the familiar Australian genera are affected; *Caladenia* ('fingers' and spiders) has now been divided into some eight genera and *Pterostylis* (the greenhoods) into 16! I am not qualified to comment on the validity of the changes, and they have been thoroughly explained by the authors in the journal *Orchadian*. However they are quite unfamiliar to most lay-people so it would have seemed prudent to have offered some explanation; it would also have been helpful to give previous names in the text. Perhaps one can get too close to one's topic. The old names are given in the index, so it is possible to cross-reference, albeit laboriously. Overall though this is a beautiful and essential edition to every Australian natural history library.

### *The Encyclopedia of Mammals*

David MacDonald (ed). Oxford University Press. 936 pages. RRP \$110.

This is a mighty publication at all levels. I became aware of the need to update my 2-volume 1984 edition while reading *The Ancestor's Tale* (see below), where I discovered that my understanding of modern mammal taxonomy is way out of date. This is in matters ranging from the confirmation that there are two species each of African elephants, gorillas and orang utans, to the recognition that whales are more closely related to pigs and antelope than the latter are to horses and rhinos, to the newly recognised division of Eutherian mammals into four 'strands'. The most ancient of these strands, the Afrotheres, comprises elephants, 'elephant shrews', tenrecs (both previously included in Insectivores), dugongs, hyraxes and aardvark. It is all very new and exciting – as is the entire book. There is an almost unimaginable amount of information here, on every conceivable topic, and it is all entirely accessible to non-experts. It is magnificently illustrated, with both photos and paintings. If you have any interest in mammals at all, you need this book – and I rarely suggest that about a \$100+ book. But it is brilliant.

### *Crocodile; evolution's greatest survivor*

Kelly Lynne. Allen and Unwin. 272 pages. RRP \$35.

I find few non-fictional book genres more satisfying than the study of all aspects of a particular animal group by someone who cares, and can transmit their enthusiasm. This is such a book. It covers all the world's crocodylians (23 species of crocodiles, alligators and the gharial) but Kelly is Australian so there is something of a local emphasis. Stories abound. It starts with an Aboriginal creation story, proceeds straight into an account of the excitement of Benjamin Helpman of the *Beagle* at finding himself among huge numbers of Saltwater Crocs on the Adelaide River in 1839, and ends with Kipling's *The Elephant's Child* and *Peter Pan*. (I hadn't met Helpman before, but am glad I now have; he comments on the heat, hard beds and mozzies then concludes "Everything novel, and all to see. Who would not be happy?" Well indeed!) In ten very readable chapters we meet the world's species and the legends associated with them, their 'form and function', evolution, crocodile attacks on humans, the study, hunting, farming and display of crocodiles. I learned heaps from this book, and greatly enjoyed doing it.

*Patriots; defending Australia's natural heritage*

William Lines. University of Queensland Press. 406 pages. RRP \$34.95.

This is a history of Australian environmental activism since the 1940s. The detail involved is such that it could only have been written by someone who was there, or who talked to lots of people who were. The latter seems to be the case. The research and the accounts of campaigns are excellent and the book is to be valued for that. I am a lot less enthusiastic about the solid lumps of political theory that suddenly land on pages like a road block to the reader; I confess too to being less interested than Lines is in his own opinions on how things could have been done better. He makes no pretence to being a disinterested historian, which is fine as long as it's transparent. After a couple of pages I decided that I could do as well without ploughing through the regular bogs of opinionated polemic; I took to just jumping over them, and interestingly had no sense of missing anything. If one was 'there', even peripherally, and knew some of the players cited in the book, it's tempting to pick at details, but I'll resist that. If you're more comfortable than I am with academic discourse, you'll get a lot out of it, particularly if you're still involved at the green coal face. But even if you're not, this is worth reading for the often vivid accounts of vital, and often exciting, parts of our recent history.

*Voyages to the South Seas; in search of Terres Australes*

Danielle Clode. Miegunyah Press. 315 pages. RRP \$32.95.

Do you know who, and of which nationality, first intentionally landed on Antarctica? (On this occasion I don't think we need to specify 'European' – who else would be mad enough?!) Have you ever heard of Jules D'Urville? Well, it was him, and he was French. (And no, I didn't know either.) This, a string of linked stories about the French exploration of early Australian biology, is one of the most engaging histories I've read. Danielle Clode is almost uniquely qualified to write a book; not only is she a (Rhodes Scholar) zoologist and science writer, but she spent a significant part of her childhood on small sailing boats off the Australian coast. I knew some of the stories in this book, but by no means all of them, and Clode does something special. She manages to tell the stories through the eyes of the protagonists, based on what we know of their characters, and for me at least it works beautifully. We swing back and forward from Europe – visiting Louis XVI (en route to the guillotine), Josephine Bonaparte, Jean-Baptiste Lamarck, Joseph Banks – to Australia and the Pacific. The stories segue convincingly between names we know – including D'Entrecasteaux, Peron, Baudin and Freycinet (but Rose rather than Louis!) – and others we may not readily recognise. The less familiar include an unknown survivor of the Lapérouse expedition, wasting away on Vanikoro. The overall tale is one of heroism, loneliness, tragedy and excitement – throughout the driving force is the desire to learn and discover. I am not the only one to have been struck by the 'civilised' attitude of many of the French leaders to indigenous people; I can't easily imagine an English counterpart in the 1780s having said, as Lapérouse did, "[surely]... religion could no longer be used as a pretext for violence and rapine?". And not for the first time this book encourages me to wonder how long it would have taken our British forebears to explore the biology of this country in detail if they had not been pushed and encouraged by the French example? This book is a joy to read, either as history or just for the stories.

### *The Evolution Revolution; design without intelligence*

Ken McNamara and John Long. Melbourne Uni Press. 304 pages. RRP \$31.95.

If you think this title rings a bell, you're not imagining it. It first appeared (without the challenge of the sub-title!) in 1998, when it greatly excited me as the first comprehensive and readily accessible exploration of the wealth of Australian fossil evidence for the nature of evolution here. I've only just received this, but have ascertained that it's not just repackaging – there has been a lot of updating to take account of recent discoveries, including a new introductory chapter on 'a new look at evolution'. (This is actually a redraft of a chapter which appeared later in the first edition, but it's a well-thought move). From the first chapter *We are the Champions!: the long-playing microbial fossil record*, to the last *Children of the Evolution: human evolution from the inside*, the whole mighty sweep of life is covered. From the amazing developments in the sea to the momentous (at least from our biased point of view) step ashore, to birds and flowering plants and the role of predation in driving evolution – the grand epic is elegantly explained, as written in Australian rocks. McNamara (from the Western Australia Museum and Curtin University) and Long (Museum Victoria) are professional palaeontologists who can communicate apparently easily with lay-people. In practice of course such writing is not easy, but when done well the reading of it is. So it is with *The Evolution Revolution*.

### *The Ancestor's Tale; a pilgrimage to the dawn of life*

Richard Dawkins. Phoenix Press. 685 pages. RRP \$29.95.

This is a bit of a cheat on my part, in that it's not a new book; it came out in 2004 but I somehow missed it then. I have now caught up (courtesy of Paul Taylor, to whom my grateful thanks) and am anxious to briefly share my enthusiasm for it with you, in case you too missed it. I think that Dawkins is – especially since the tragic death of Stephen J Gould – among the most incisive and important contemporary thinkers in the world of biology, and beyond. The concept of this book, a sort of Canterbury Tales of the whole of life, is startling in its breadth and ambition. We move back through time, paralleling the journeys of all other living organisms, to discover our ancestors. As we go backwards we meet other pilgrim bands, at the point where our ancestors and theirs parted company. There are 39 such Rendezvous, going back to our origins among the eubacteria; at each we meet the environment of the time and the new arrivals, and some of them tell Tales. (I'd have loved Dawkins to try to tell these in first person, but he wisely demurs!) These tales cover every aspect of genetics and evolutionary theory and practice of which I can possibly conceive. This review must be either brief or ridiculously long. The latter is probably more appropriate, but the book isn't new, and I couldn't do it justice. If you have an interest in understanding life on this planet better there are no better single resources that I can think of. It is beautifully and rewardingly written; some of it's challenging, but if we are determined enough it is penetrable. In any case there is more than enough of it that can be read and digested without any struggle. Have a look.

### *Roadkill*

Len Zell. Wild Discovery Guides. 102 pages. RRP \$19.95.

Finally, this one hit my hand just before I was about to send this edition out. It didn't take long to assimilate, though the point of it still evades me. (Or rather, any point beyond the author/publisher's requirements; I think it's pertinent that we are told he has another five books "in development".) The preface expresses the hope that "either through shock or information" we may "reduce ... impact on our special animals... by driving differently". Eh? He then goes on to deal briefly with climate change, terror and war, though it's not entirely clear whether he thinks a collection of his pictures of dead animals will resolve those too. The subjects/victims were selected by the utterly random process of finding them on the roadside. Each gets a one-sentence superficial treatment (eg for Magpie-lark; "easily recognised 'pee-wit' call generally made by male and female together"). Not much of an obituary really – at least, unlike some of the others, this one manages not to mislead or contain factual errors. I was interested to learn that frogmouths have "strong frog-like beaks". OK, I could go on picking at this nonsense, but it doesn't warrant the words, so I'll stop wasting your time on it.