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Reminder: The deadline for copy for Issue no 80 is 11th June 2012.

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'The Time Lords' chapter provides a brief account of the concept of time along with some historical background. Beginning with Copernicus, Galileo and Kepler, following the invention of the telescope, to James Hutton, the 'Father of Geology', the reader is carefully taken through the steps necessary to appreciate how we have developed an understanding of time. As an aside, Hutton had strong ties with Edinburgh and the Scottish borderlands, inheriting his father's farm in Berwickshire in 1750. The beautiful double-page spread of Hutton's unconformity at Siccar Point enables us to repeat his observations, and to catch a glimpse of the insights and thought processes that ultimately led to an understanding of geological timescales. Charles Lyell's contribution to geology, 'the present is the key to the past', explains why modern environments are considered in the book, since modern explanations of today's ocean ecosystems provide a foundation for understanding past environments.

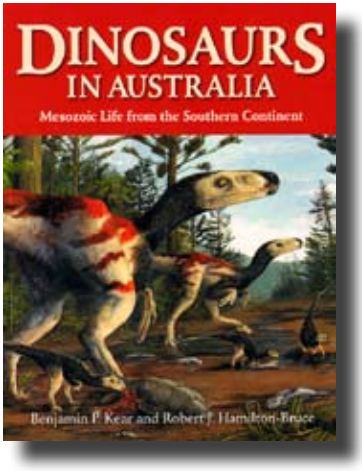
'Death of an Ocean' is dedicated to the authors' late friend Stuart McKerrow, whose 'unquenchable enthusiasm stimulated much of the intensive investigation over the past 40 years'. Euan's and Brian's enthusiasm ensures this legacy will continue for future generations. Thoroughly enjoyable to read, and a handy size, this book represents good value for money.

The cover insert states: "Euan Clarkson and Brian Upton bring their unique blend of enthusiasm, considerable expertise and clarity of style to this popular geological guide". This statement is no exaggeration!

Fiona Fearnhead
The Natural History Museum, London

Dinosaurs in Australia: Mesozoic Life from the Southern Continent

By Benjamin P. Kerr & Robert J. Hamilton-Bruce. 2011. CSIRO Publishing, Collingwood. 200 pp. AU$ 79.95. ISBN 978-0-643-10045-9



Australian palaeontologists have a long tradition of publishing large, lavishly illustrated coffee-table volumes about palaeontology, especially their Mesozoic faunas, with titles like *Wildlife of Gondwana* (Vickers-Rich and Rich 1993), *Dinosaurs of Australia and New Zealand* (Long 1998), *The Rise of Fishes* (Long 2010) among the most recent ones. Now we get *Dinosaurs in Australia: Mesozoic Life from the Southern Continent*.

After reading the book, I have to admit that the title *Dinosaurs in Australia* is perhaps a little misleading, as the book covers the entire Mesozoic flora and fauna of Australia, both marine and terrestrial. Dinosaurs actually only appear on 37 of the 180 pages, so a more appropriate title might have been *The Complete Mesozoic Flora and Fauna of Australia*. However, in publishing for the popular and mainstream markets, publishers appear to have developed their own zoological divisions, with only two groups of animals distinguished – dinosaurs and non-dinosaurs. If dinosaurs are

mentioned anywhere in the text, however fleetingly, the word "dinosaurs" will be highlighted in the title (a good example is Prothero's (2006) book about Cenozoic mammal evolution, *After the Dinosaurs: the Age of Mammals*. I am sure you can guess which taxon was printed largest on the cover).

But back to *Dinosaurs of Australia*. The book is beautifully illustrated, with large high-quality photographs of the fossils as well as colourful reconstructions of many of the animals. The book is divided into seven chapters, starting with a general introductory chapter that gives a basic introduction to fossils, the geological timescale, plate tectonics and so forth. Chapter two sets the scene for the rest of the book by giving an overview of Australia's palaeogeographical and climate evolution throughout the Mesozoic, along with a map of the present day outcrops of Mesozoic rocks in Australia. The next chapter is devoted to the Triassic period, which is dominated by fish, amphibians and marine reptiles, and the first occurrence of dinosaurs in the form of theropod footprints. Then follows the Jurassic period, which is mostly dominated by marine reptiles, but a few dinosaur finds also make it on to the pages. The Cretaceous Period is, in terms of fossils, by far the most well-represented time period in Australia, and is consequently spread out over the last three chapters of the book. Chapter five deals with the marine fauna from the great inland sea that covered most of the Australian interior during the Early Cretaceous, and had a rich fauna of marine reptiles. Chapter six covers the non-marine Early Cretaceous faunas, and it is here that dinosaurs really begin to make their appearance in the book. The last chapter deals with the Late Cretaceous period when much of the inland sea had retreated, and we get a more terrestrial fauna of dinosaurs and pterosaurs, but still have an extensive record of marine reptiles. The chapter (and the book) ends abruptly with Late Cretaceous pterosaurs. However, because the book presents such a comprehensive overview of the Mesozoic flora and fauna of Australia, a short summary chapter – setting the scene for the Cenozoic evolution of Australia – would have been nice. Perhaps the authors might consider this idea for a second edition.

The language in the book is kept non-technical, which makes the book accessible for non-specialists. A two-page glossary further helps to explain the instances where technical jargon is encountered. There are no bibliographical references within the text, but at the end of the book there is an extensive 20-page bibliography with references to key papers arranged by topic. This provides a good starting point to dig into the technical literature, although I would have preferred references in the text itself, as in the previously published volumes (Long 1998, Vickers-Rich and Rich 1999). This would make it easier to distinguish between the authors' personal interpretations and what is derived from the literature.

So who is this book aimed at? Being the only palaeontologist at the museum I work in, people expect me to know a bit about everything in palaeontology, and despite the Lower Palaeocene marine ecosystem theme of my museum, I still get daily questions about all kinds of dinosaurs from the visiting school kids. As my work hours and family life do not allow me to read up on the technical literature on every palaeontological subject, I find "overview" volumes such as *Dinosaurs in Australia* rather appealing, as they represent the latest updates in their fields in a quickly accessible form, and allow me a reasonable overview of the different faunas around the world. The price of AU$79.95 (approximately £65) is very high for a paperback edition, and many potential buyers will probably be deterred by this. But if you are interested in Australian Mesozoic faunas and want an easily accessible overview (and have plentiful funding to buy books with), then it definitely

deserves its place on the coffee table in your office, as lighter, enjoyable reading between the more technical literature.

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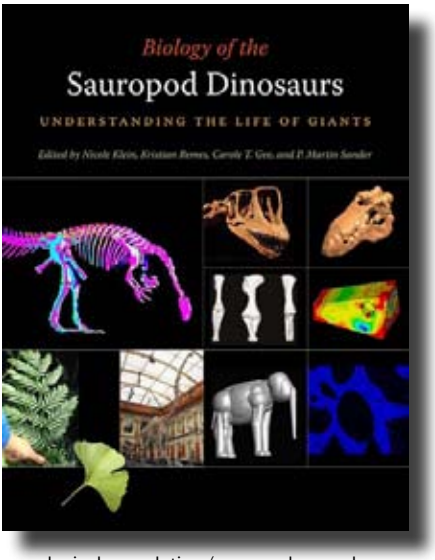
Biology of the Sauropod Dinosaurs: Understanding the Life of Giants

Edited by Nicole Klein, Kristian Remes, Carole T. Gee and P. Martin Sander. 2011. Indiana University Press. 331pp. US$59.95. ISBN 978-0-253-35508-9.



Ask a member of the public to name a dinosaur, and the chances are, if they don't name *Tyrannosaurus rex*, they will say "*Brontosaurus*". The most famous of all junior synonyms (the subjective senior synonym is the less evocative *Apatosaurus*), the enduring public fascination with "*Brontosaurus*" reflects the iconic status of sauropods, which are perhaps *the* stereotypical dinosaurs. With their enormous length (up to 30 metres or more), long necks and tails, and small heads, the sauropod *Bauplan* is among the most recognisable of any extinct organism. Body mass estimates for the largest members of the clade range up to 80 tonnes or more, making them by far the largest animals ever to walk on land, and as much as an order of magnitude larger than most members of other dinosaur clades such as ornithischians. This jaw-dropping and almost implausible size has stimulated endless palaeoecological speculation (sauropods were long portrayed as aquatic animals, unable to support their massive weight on land) as well as much fruitful scientific research addressing the questions of *why* sauropods became so large and *how* they were able to do so.

Since 2004, the German Research Foundation (DFG) has provided extensive support for a research unit coordinated by Martin Sander (University of Bonn) and focused on understanding the *how*