

histories of various past slides. The Foreword also asserts that 'the venue of the symposium at Santorini provided a unique incentive to present various case histories...around volcanic islands'. Maybe so, but it only seems to have led to two short papers, one on Santorini itself and the other just across the water at Milos Island.

In other words, the book's content has fallen some way short of the laudable aspirations of the conference. It is little more than a compilation of conference papers, a snapshot of where things are in this field: work in progress.

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PROTHERO, D. R. 2006. *After the Dinosaurs. The Age of Mammals*. xvi + 362 pp. Bloomington, Indianapolis: Indiana University Press. Price US \$39.95 (hard covers). ISBN 0 253 34733 5.
doi:10.1017/S0016756808004433

Good books reviewing the Cenozoic are few and far between, and in *After the Dinosaurs*, Donald R. Prothero has succeeded in producing what might be the first well-rounded, modern review of the biological, geological and climatological history of the last 65 million years. The volume is very well illustrated and written for the non-specialist, though even seasoned veterans should find it a useful compilation.

Special attention is given to areas where interpretations and ideas have recently been revised or augmented: Prothero provides extensive coverage of the remarkable greenhouse conditions of the early Eocene, the middle-late Eocene extinction event, and the Oligocene transition to 'icehouse' conditions. Much of the coverage here of the tempo and possible causes of these events will be new to people who don't specialize on the Palaeogene. His sceptical coverage of the catastrophic mass extinction scenarios sought to explain events in the Late Cretaceous and Eocene present the case for gradualism well.

Particularly novel and compelling is his well-argued chapter on how the rise and fall of human civilizations and cultures have been tied to climatic events. The Holocene Climatic Optimum of 6000–7000 years ago saw the rise of the great civilizations of Egypt, Mesopotamia, India and China, and the Subatlantic Deterioration of about 2500 years ago, the Medieval Warm Period of 2000–700 years ago, and the Little Ice Age of 450–150 years ago can all be linked to cultural events and the changing fortunes of different societies. Rather than being the inevitable result of our intelligence, a good argument can be made that the rise of human civilization owed itself to fortuitous timing. The book ends with a summary of modern trends in biodiversity and habitat loss, and leaves us with a depressing, but absolutely realistic, look at the future.

I will admit that I expected this book to be mostly about fossils mammals – and indeed you might get this impression given the artwork on the cover – and thus more like an updated version of Bjorn Kurtén's *The Age of Mammals*. Fossil mammals do receive a considerable amount of discussion, but many groups (particularly those that are particularly interesting and/or charismatic) are only mentioned in passing, and for details you'll need to go elsewhere. I noted a few questionable or incorrect statements about fossil mammals: *Eurotamandua* is described as an anteater (the evidence marshalled in support of this is suspect, and the affinities of this taxon probably lie elsewhere), and the diminutive Paleocene proboscidean *Phosphatherium* is inadvertently referred to as *Paschatherium* (there is

a Paleocene mammal called *Paschatherium*, but it's a hyopsodontid, not a proboscidean).

A good selection of field and specimen photos is included, and the book is very well illustrated with both black-and-white and colour reconstructions of fossil mammals. While there are clearly some very talented artists producing some excellent reconstructions of fossil mammals, there remains an awful lot of ground to cover: many of the pictures that show some of the obscure animals date to the first few decades of the 20th century, among them Robert Bruce Horsfall's pictures from Scott's 1913 *A History of Land Mammals of the Western Hemisphere*.

As with so many of the Indiana University Press books, it is unfortunate that the editing in this volume is not so hot, and various typos and other errors have slipped through the cracks. While, as mentioned above, the author appears to have gone to great pains to include as many illustrations as possible, some pictures are of truly appalling quality, the commonest problem being that they are far too dark. Several images look like they've been hurriedly scanned from their original sources, and the text on the other side of the figure can still be seen. Poor image reproduction seems endemic to Indiana University Press and, given the many times it's been commented on by reviewers, you'd think that they might have sorted this out by now.

After the Dinosaurs is an excellent and enjoyable review that should be widely promoted by those who study, or teach about, the Cenozoic, or geological history in general. The author has produced an accessible work that both reviews our current state of knowledge, and (with a bibliography exceeding 30 pages) acts as a good introduction to the literature.

Darren Naish

References

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SCOTT, W. B. 1913. *A History of Land Mammals of the Western Hemisphere*. New York: Macmillan, 693p.

GUBBINS, D. & HERRERO-BERVERA, E. (eds) 2007. *Encyclopedia of Geomagnetism and Paleomagnetism*. xxvi + 1054 pp. Berlin, Heidelberg, New York: Springer-Verlag. Price Euros 399.99, SFr 695.00, US \$499.00, £307.00 (hard covers). ISBN 9781 4020 3992 8.
doi:10.1017/S0016756808004469

This is major work whose aim is to provide a comprehensive review of all aspects of geomagnetism and palaeomagnetism as the subjects are currently understood. With well over 200 contributors, all specialists in their particular field, it is hardly surprising that the individual articles are both current and sufficiently detailed to satisfy most users of such a volume. However each article also provides a sound starting reference list for those wishing to pursue things to a greater depth. While it is impossible to bring attention to the complete scope of such a work it was a pleasure to find the many short biographies of leading historical contributors to the field which helps put the development of the subject into perspective.

The editors have obviously worked hard to ensure that the articles are well illustrated, well written and comprehensible