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**Cretaceous–Tertiary High-Latitude Palaeoenvironments**, edited by J.E. Francis, D. Pirrie & J.A. Crame, 2006. Geological Society Special Publication 258. Geological Society, London, Special Publications 274. The Geological Society Publishing House, Unit 7, Brassmill Enterprise Centre, Brassmill Lane, Bath BA1 3JN, United Kingdom. Hardback, 216 pages. Price GBP 75.00 (GBP 37.50 fellow price; GBP 60.00 corporate affiliates price; GBP 45.00 other societies' price). ISBN 978-1-86239-197-0.



This book is above all about the exciting Cretaceous-early Paleogene greenhouse time-span in part of Antarctica. Of course this begs the question at what latitude Antarctica was positioned at the time, and this question was hard to answer in the book itself. Presently, the James Ross Basin is at 64°S, and a look at Scotese's paleomap has it even further south in the Late Cretaceous. A chapter about the plate-tectonic history would have helped to introduce the reader into the history of the peninsula.

The contents of the book are therefore driven by what is encountered in the thick James Ross Basin at the Antarctic Peninsula (by itself exciting) rather than forming a comprehensive systematic treatment of the area. This is reflected by the wide diversity of the 14 chapters in this book, dominated by paleontological findings. The chapters range from short taxonomic compilations of shark teeth to well conceived chapters about the then plant diversity (Hayes et al.; Poole et al.) and the fossil history of giant penguins (Tambussi et al.). Also, as an afterthought, a chapter is added that deals with the glacial history of the controversial Miocene glaciation in the area (Hambrey & Smellie), by itself a worthy subject. The stratigraphic history of the area is described well in the chapters by Crame et al. and Whitfield et al., but they deal only with the Cretaceous part of the basin sequence.

I found the best chapters those by Hayes et al. and Poole et al. about the fossil floras of the region. They provide good feedback from GCM modeling and other paleoclimate studies in order to place the James Ross fossil assemblages in a climate with mean annual temperatures of about 20 °C. It is stunning to realize from the amazing upright tree trunks that subtropical to temperate forests once covered the area.

The book provides a good state-of-the-art of what the James Ross Basin has to offer, but I notice a few omissions. Brian Huber recently commented on the discovery of the first champsosaurs from Antarctica (tropical, crocodile-like extinct reptiles) and the hadrosaurs from Vega Island. No information is given on the extraordinarily well-preserved ammonite assemblages of Seymour Island. Nor is any information provided on the exciting Cretaceous/Tertiary transition on Seymour island. On the other hand, the book is well edited, in a consistent style throughout the chapters.

This book is a valuable addition to your library if you need information about the Antarctic Peninsula and warm Cretaceous climates, and it should be the starting point for further information.

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