

FOSSIL REPTILES OF THE SOUTH AFRICAN KAROO

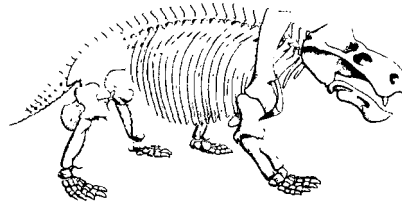
Book Review

Dr M A Cluver, head of the Department of Palaeontology at the South African Museum in Cape Town is the author of this very informative 50-page booklet. It is specially written for the uninitiated who would like to know a little more about our fossil reptile fauna. This fauna has made South African famous with palaeobiologists the world over and the lack of appreciation locally must be attributed to the fact that very few general works on this subject have been published to date. People are also more easily impressed with the gigantic dinosaurs of another age and place, but the South African Karoo reptiles shed light on the origin not only of these huge animals, but also the origins of the lizards and mammals.

The book reads easily and is amply illustrated with line and colour drawings. Technical terms are restricted to the barest minimum and a glossary of these terms is found at the back. A short list of books for further reading is also appended.

Fossil Reptiles of the South African Karoo can be ordered directly from the South African Museum, P O Box 61, Cape Town, or from the National Museum by using the order form on this page. Please note that the booklet is available in both English and Afrikaans and you should indicate which language you would prefer.

Of course, you are most welcome to visit the Museum and buy the book in the foyer. There are quite a number of articles on sale which might also be of interest to you.



Skeleton of *Pantherosaurus* a 2 metre long dicynodont of the Triassic Carnian stage Zone. This was the last of the Karoo dicynodonts, but animals related to *Pantherosaurus* persisted until the Upper Triassic in other parts of the world.

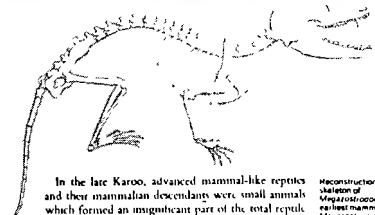
like animal through a succession of more specialized forms to culminate in the first true mammals in Late Triassic times can be discerned. Recently discovered mammals from the Upper Triassic Red Beds of the Karoo include *Erythrotherium* and *Megazostrodon*, and these tiny specimens show that by the end of the Karoo period, 190 million years ago, a new class of animal had appeared and stood ready to mutate, much later, the great Age of Mammals.

The final stages of mammal-like reptile evolution took place in a Karoo environment very different from that of earlier times. The climate during the Red Bed period became increasingly hot and dry, and the succeeding Cape Sandstone was laid down in semi-desert conditions, where wind-blown sand covered large areas of the Karoo. Finally, all life in the Karoo Basin was swept away by a series of great volcanic outbursts. Streams of lava flowed over the landscape and built up to a huge thickness capping the entire Karoo rock succession. Today, these volcanic rocks, known as the Drakensberg basalts, form the towering Drakensberg Mountains in the central and eastern parts of South Africa.

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The 13 cm long skull of *Trixylosodon*, an advanced mammal-like reptile from the Upper Triassic Red Beds of the Karoo. With its rodent-like snout, the *Trixylosodon* was once regarded as one of the first true mammals.



In the late Karoo, advanced mammal-like reptiles and their mammalian descendants were small animals which formed an insignificant part of the total reptile fauna. From their overwhelmingly dominant position in the early Karoo of *Lopingosaurus* times they were now, in turn, dominated by newcomers to the Karoo, the dinosaurs and their allies.

Reconstruction of the skeleton of *Megazostrodon*, one of the earliest mammals known today, 200 million years old, from the Upper Triassic Red Bed series of the Karoo. And was possibly a nocturnal insect-eating animal.

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