SOUTH AFRICAN FOSSILS AND THE RUSSIAN CONNECTION

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Fossilized remains of reptiles which roamed the Karoo more than 200 million years ago have long been known to scientists and studied by them. Certain of these reptiles seem to be the ancestors of mammals which first appeared on earth about 165 million years ago.

A further interesting point is that scientists have long supposed that the ancestors of these prehistoric South African reptiles actually came from Russia, and that they migrated to southern Africa when all the continents of the northern and southern hemispheres were linked together. However, certainty on this fact has never been reached because, although the Russian reptiles are more primitive and older than the South African forms, there is a morphological gap between the two forms.

In 1964 Mr Roy Oosthuizen, a farmer and amateur palaeontologist from Prince Albert, found a fossilized reptile skull on his farm which, he believed, was older than anything previously discovered in southern Africa. He subsequently brought this exciting discovery to the attention of the authorities at the South African Museum in Cape Town. Mr Oosthuizen was honoured by having this newly found species named *Eodicynodon oosthuizeni* after him. This find came from the Ecca group of rocks in which nobody had previously found any fossils.

The palaeontology department at the National Museum has embarked on a project to discover and study more of this prehistoric reptilian fauna so that more might be known of the origins of the Karoo reptiles. Fortune has smiled favourably on this project so far and at least 30 fossils are now known from the Ecca rocks which were previously considered barren of fossils.

The majority of these primitive fossils belong to a family known as the dicynodonts and were the most common plant-eating reptiles which once roamed the Karoo. Although the skulls of these animals are small (± 9 cm long) and hence

A well preserved skull of EODICYNODON OOSTHUIZENI in the possession of the National Museum.

unimposing to the layman, to the scientist they are extremely fascinating as they show some features which are not present in any of the previously known South African dicynodonts, but are present in the older Russian forms.

This fact, although it does not confirm earlier beliefs that the Karoo reptiles are descended from the Russian forms, certainly adds tremendous weight to these theories. Further confirmation of these ideas can only be achieved if lots more of these old and scarce fossils could be discovered and studied.

Research on them is progressing well at the museum, but the work is unfortunately greatly hampered because the rock encasing these precious fossils is extremely hard and takes a long time to remove before a fossil can be studied. However, it is hoped that in the not too distant future we shall know far more about the origins of the prehistoric reptiles which once roamed the Karoo, and their Russian connection.