HOW COMMON ARE FOSSORIAL SNAKES?

R.M. Douglas

The word "fossorial" is derived from the latin word FOSSOR, which means digger. Therefore a fossorial snake is a snake which is adapted for digging and lives a large part, or all of its life underground.

Fossorial snakes are usually identified by the shape of the head or structure of the snout. This may vary from a wedge-shaped head, when viewed from the side to a rounded snout with large heavy protective scales. Because fossorial snakes spend much time underground their eyes are not as large as those of other snakes, but usually very small to almost undetectable in some species. The tail is also usually short and is blunt at the end.



The Side stabbing snake, (Atractaspis bibronnii) showing pointed snout for burrowing.

But how common are fossorial snakes?

In the Orange Free State the venomous Stiletto or Side-stabbing snake, *Atractaspis bibroni*, was first collected at Bothaville in 1973. It was only in 1986 that another specimen surfaced which was actually collected in 1977 at Bloemfontein. Thus only these two specimens have been collected in the Orange Free State.

The example of the Quill-snouted snake Xer.ocalamus b. bicolor, was given in National Museum News No 30. The first specimen was collected in 1939 and the second, some 46 years later in 1985. Both specimens were from Bloemfontein. Other Free State semi-fossorial snakes which are infrequently found include the Cape coral snake, Aspidelaps I. lubricus, the Garter snake, Elapsoidea sundevalli media, and the Striped dwarf garter snake, Homoroselaps dorsalis.

Elsewhere most fossorial snakes are also uncommon. Up until 1970 only seven specimens of the Purple gloss snake, *Amblyopidsas concolor*, were collected in South Africa while from 1970 to 1982 a further seven specimens were collected.

Are these snakes rare only because of their fossorial habits?

If we look at the other side of the coin, we find that other fossorial snakes such as the Blind snake, *Typhlops lalandei*, and the Worm snake, *Leptotyphlops s. scutifrons*, are fairly common within the Orange Free State. They are also more fossorial in habit than the previously mentioned species. Perhaps this is because they are encountered more frequently in gardens and termite mounds where they are more likely to be found.



The Coral snake, (Aspidelaps I. lubricus) has an enlarged rostral shield for burrowing.



The Quill snouted snake, (Xenocalamus b. bicolor) showing wedge shaped head and rostral scale.

Available evidence would therefore suggest that some fossorial snakes are rarer than others, but whether they are indeed rare, or perhaps just being overlooked because of their habits and the habitat in which they occur, is unknown. These then are some of the many questions about fossorial snakes which remain to be answered



The Blind snake, (Typhlops bibronii) showing rudimentary eye and pointed snout for burrowing.

BIBLIOGRAPHY

DE WAAL SWP 1978 The Squamata (Reptilia) of the Orange Free State
South Africa Mem nas Mus Bloemfontein 2 1-160

DOUGLAS R.M. 1982. A new size record and notes on feeding in captivity of Amblyodipsas concolor (A. Smith). J. Herp. Ass. Africa. 28, 14-16.

HAACKE, W.D. 1982. Further notes on reproduction and distribution on the Natal Purple gloss snake *Amblyodipsas concolor* (A. Smith). *J. Herp. Ass. Africa*, 28, 24-25.

ERRATUM:

Nas. Mus. News 30, page 19

Read van Dijk for van Disk.

DIJK. D.E. van 1966. Systematic and field keys to the families, genera and species of Southern African Anuran tadpoles. *Ann. Natal Mus.* 18: 231-286.



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