

## Book review

***A Complete Guide to the Snakes of Southern Africa, Second Edition.*** By Johan Marais. 2004. 312 pp., approx. 400 colour photographs. Struik Publishers, Cape Town. ZAR 189.95 (Soft cover). ISBN 1 8 6872 932 X [also available in Afrikaans].

One may ask, why yet another snake book? In comparison with the rest of the southern African herpetofauna, snakes certainly receive more than their fair share of coverage in popular and semi-popular books. This book is intended for a general, non-specialist audience and does indeed offer something that no other snake book does: a visually-oriented guide to every species of southern African snake. The book has an attractive layout, with colour photos on virtually every page. It represents a major revision of the earlier (1992) edition, both in style and substance. The first edition was shorter by 100 pages and was illustrated by only about half as many colour photos as the second. It was also aimed at the public at large, but was somewhat schizophrenic, including features such as a seven page comparative scale count chart, names of the of describers of the species discussed, and a set of three head scale drawings for most species. These features, which were of use to specialists, but probably ignored by most other readers, have been dropped. The result is a book that is admirably true to its purpose - to bring an appreciation and understanding of southern Africa's snakes, their biology and diversity, to an audience coming largely from a background of both fear and fascination.

The volume opens with a short introduction that dispels some common misconceptions about snakes, discusses the often complicated relationship between people and snakes, and explains how to use the book. A simplified habitat map for southern Africa is also to be found here. The body of the book is arranged in five main sections. The first, "Biology and Behaviour", chiefly discusses sensory modalities, locomotion, and reproduction. The second, "Classification and Relationships", was

written by Lynn Raw and outlines the Linnean binomial system and its conventions and gives advice on counting scales, preserving specimens, and recording data. The third section, "Snakebite" includes information on venom types, the development of antivenom, first aid, and preventing snakebite. It also includes a list of poison centre and hospital emergency contacts in major South African cities, complete with telephone numbers and web addresses. The fourth section, "Snakes in Captivity", briefly covers everything from obtaining specimens, to feeding and breeding, to record keeping. To the author's credit, the text throughout advises the reader to avoid contact with dangerous snakes, to care for the welfare of both captive and wild snakes, and to adhere to local regulations with respect to both collecting and keeping.

The species accounts constitute chapter 5 and cover 150 species and numerous subspecies on 240 pages. Most taxa receive two pages, but puffadders, boomslangs, black mambas, and a few other charismatic species are covered in three, and less well known or less distinctive taxa are covered on just a single page. The accounts are grouped semi-taxonomically into "adders and vipers", "mambas, cobras and their relatives", "back-fanged and other venomous snakes", "fangless and non-venomous snakes", and "blind and worm snakes". While this arrangement may frustrate herpetologists (especially since even family designations are not provided for most taxa), it probably reflects quite accurately the priorities of the public at large (for whom degree of danger is more important than phylogenetic affinity), and thus serves its intended audience. Within each section the accounts are grouped by genus, but

neither the genera nor the species within them are alphabetized.

Each account provides the English and Latin names, along with other names in smaller font: Afrikaans (always), Xhosa, Zulu, and other English names (sometimes). The accounts are divided into the sections: Length, Scale count, Colour, Preferred habitat, Habits, Similar species, Enemies, Food and feeding, Reproduction, Danger to man, Venom, Subspecies, and First-aid procedures (the last three only as required). A very small map of southern Africa serves to illustrate the distribution of each taxon and one or more photographs, generally of good to excellent quality, usually illustrate the species. Only eight species (*Atractaspis congica*, *Prosymna angolensis*, *Lycophidion semiannule*, *L. nanum*, *Rhinotyphlops boylei*, *Typhlops obtusus*, *Leptotyphlops telloi*, *L. pungwensis*), most of which have restricted ranges or are peripheral to the area of coverage of the book, lack portrait photos and are illustrated with habitat photographs instead. A small "Look Out For" box highlights 3-6 morphological, behavioural or ecological traits of each species that will help to identify the species without recourse to scale counts. A distinctive series of icons that code information about each snake, together with an unlabeled head scale diagram, appears in a panel on the outer edge of the first page of each entry, completing the species account. These icons include a "danger bar" indicating the level of threat the snake poses to humans, a size indicator (comparing a snake silhouette to a human body or arm), a habitat key (ground, shrub or tree), and an activity indicator (sun for diurnal, moon and stars for nocturnal). This may help the uninitiated to "get a handle" on a species at a glance, but I found that the habitat key, especially, was so simplified as to be misleading in some cases. For example terrestrial surface active forms are not distinguished from burrowing taxa, and the designations of "bush" and "tree" are hardly appropriate for rock-living specialists such as *Hemirhagerrhis viperinus*.

The book closes with a 72 entry glossary, a bibliography with 74 entries (all but 10 published since 1990), and an index. I found relatively little to complain about in terms of inaccuracies or typographical errors. The taxonomy employed is up-to-date and all recently described taxa seem to be included. I do note, however, that Marais has included *Homoroselaps* in the Elapidae. The phylogenetic position of this enigmatic genus remains unresolved, but the most recent evidence suggests that it is allied to the Atractaspididae (Kelly *et al.* 2003), a placement more in line with that accorded to it in the first edition of *The Complete Guide*. The maps for some species, e.g., *Coluber zebрина*, *Aspidelaps lubricus*, *Hemirhagerrhis viperinus* are not quite accurate, but this is probably an inevitable outcome of plotting distributions on tiny maps with few points of reference. Elsewhere some names of taxa in the bibliography are not italicized and on page 39 "sedto" appears instead of "used to". One notable omission from the bibliography is the 1998 edition of Bill Branch's *Field Guide to Snakes and Other Reptiles of Southern Africa* (only the 1988 edition is cited). While at some level this might be seen as "the competitor" for Marais' book, it is clear that the two works take very different approaches and have only partially overlapping target audiences. I recommend both to members of the Herpetological Association of Africa.

## LITERATURE CITED

KELLY, C. M. R., N. P. BARKER & M. H. VILLET. 2003. Phylogenetics of advanced snakes (Caenophidia) based on four mitochondrial genes. *Syst. Biol.* 52: 439-459.

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