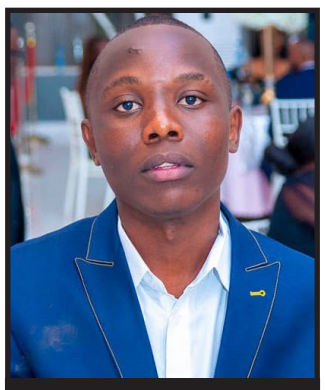
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BEYOND FEAR:
UNDERSTANDING AFRICA'S SNAKES

By MUBITA KATETE

FEW creatures can trigger fear as quickly as a snake.

For generations, snakes have been surrounded by stories of danger, death, revenge and superstition, with some beliefs passed from one generation to another.

But how much do we really know about these secretive reptiles?

In his book, In African Snakes Behaviour & Biology, Marcel van Driel sets out to answer that question, taking readers beyond fear and traditional stories to examine how African snakes live, hunt, reproduce, sense their surroundings and survive.

With more than 700 snake species found across the continent, the author presents a world that is far more diverse and complex than the common image of a dangerous reptile waiting to strike.

MORE THAN A FIELD GUIDE

The book grew partly from van Driel's experience managing the Zambian Snakes and Other Crawlies Facebook group, which he established in 2015. Repeated questions from members convinced him that there was a gap in accessible information about snakes beyond basic identification.

That gap shapes the book. Rather than simply listing species and their locations, van Driel explores taxonomy, anatomy, senses, behaviour, reproduction, venom, conservation, myths and identification.

This gives the book a wider purpose: helping readers understand why snakes look and behave the way they do.

FROM ANATOMY TO BEHAVIOUR



The Gaboon Adder (*Bitis gabonica*) is adorned with an intricate, symmetrical pattern of shapes in various shades of dark and light brown, buff, purple and pink. In its preferred habitat, the leaf-littered forest floor, the snake virtually disappears. Its broad, flat head and body shape further enhance its ability to remain undetected by both predators and prey.

The early chapters provide the scientific foundation.

Chapter One introduces taxonomy and explains how snakes are classified according to their physical and genetic characteristics. Although the subject can be technical, the use of familiar African species makes it easier to follow.

Chapter Two is particularly engaging. Van Driel challenges the popular idea that snakes simply "unhinge" their jaws to swallow large prey. Instead, he explains the complex movement of their skull and jaws, showing how specialised anatomy allows them to consume prey larger than their heads.

Chapter Three tackles another common misconception - that snakes are blind. By examining sight, smell, hearing, touch and heat sensing, the author demonstrates that snakes experience their surroundings in highly specialised ways.

Chapter Four then moves into behaviour. The discussion of basking shows that what may appear to be a snake simply lying in the sun is actually connected to temperature regulation, digestion, hunting, reproduction and protection from predators.

These chapters are among the book's strengths because they transform seemingly ordinary observations into explanations of sophisticated biological adaptations.

THE HUMAN-SNAKE RELATIONSHIP

The later chapters give the book greater practical and social relevance.

Chapter Five examines reproduction, including mating behaviour and the role of pheromones, while Chapter Six tackles one of the most feared and misunderstood aspects of snakes venom.

Van Driel first makes an important distinction between venom and poison. Venom is delivered into the body, usually through specialised structures such as fangs, while poison enters through ingestion, inhalation or contact.

The distinction is particularly useful when considering snakebite and medical treatment.

The author explains that not all snakes are venomous and that venom varies considerably between species. Snake venom is a complex form of modified saliva containing mainly proteins and peptides, with different combinations producing effects such as cytotoxic, neurotoxic and haemotoxic activity.

Importantly, venom is primarily an adaptation for capturing prey. Its composition can reflect the type of prey a snake normally hunts, while its potency and toxin composition can vary between species and individual snakes.

By explaining what venom is, how it works and how it differs from poison, the chapter continues the book's effort to replace generalised fear with a more precise understanding of snake biology.

VENOM, SNAKEBITE AND PUBLIC SAFETY

Chapter Six becomes particularly important when van Driel moves from explaining venom to discussing snakebite.

The author stresses that first aid can influence the outcome of a bite, while warning that incorrect interventions can cause additional harm.

The chapter's practical value lies in its rejection of harmful responses such as cutting or sucking the wound, applying substances to the bite, using extreme temperatures or relying on unproven remedies.

Instead, the emphasis is on keeping the victim calm, limiting movement and seeking medical attention as quickly as possible.

This is one of the book's strongest public-health contributions because it connects scientific information with decisions that can have immediate consequences. It also fits particularly well with Chapter Eight, where van Driel examines myths that can delay proper treatment.

The discussion of so-called unprovoked bites adds another dimension. The author notes reports of some spitting cobras biting sleeping people, particularly where poor housing allows snakes to enter homes.

His argument that better housing, raised sleeping arrangements and barriers such as mosquito nets can reduce opportunities for snake-human encounters shifts the discussion from simply responding to bites to preventing them.

The section is most valuable because it functions as a bridge between snake biology, public-health awareness and prevention.

CONSERVATION AND COEXISTENCE

Chapter Seven moves into conservation, highlighting habitat loss, human activity and the indiscriminate killing of snakes.

Van Driel makes the important point that snakes are predators that help regulate populations of other animals and therefore have an important ecological role.

The conservation discussion is persuasive in explaining why snakes matter, although some of its treatment of cultural and religious beliefs could have examined differences between African communities more broadly.

The chapter nevertheless strengthens one of the book's central arguments: understanding snakes is not only about avoiding danger but also about understanding their place in the environment.

WHERE MYTHS BECOME DANGEROUS

Chapter Eight is arguably the book's most socially relevant section.

Van Driel examines myths and superstitions surrounding snakes and, importantly, shows that some beliefs can have consequences beyond folklore. He discusses snakebite beliefs that may cause victims to delay seeking medical treatment.

The chapter is strongest because the author does not simply ridicule people who hold these beliefs. Instead, he attempts to explain how misconceptions develop and why they need to be corrected.

However, the chapter could have gone further by examining practical ways health workers, traditional leaders and conservationists could work with communities to challenge dangerous beliefs.

This would have strengthened the book's contribution to public education, particularly in communities where traditional explanations of snake behaviour and snakebite remain influential.

IDENTIFICATION - USEFUL BUT NOT SIMPLE

The final chapter returns to the practical question of identifying snakes.

Van Driel advises readers to consider location, habitat, size, body shape and colouration rather than relying on one characteristic. This is sound advice, particularly because species can look similar and size can vary between juveniles, adults, males and females.

But the chapter also exposes one limitation of snake identification: knowing the characteristics does not necessarily make identification easy for a beginner.

Where venomous species are concerned, overconfidence can be particularly problematic. A stronger emphasis on the limits of identifying snakes from a distance would have made the chapter more useful.

A BOOK WITH A CLEAR PURPOSE

Overall, African Snakes: Behaviour & Biology succeeds because it is more than a catalogue of species. Its greatest strength is the connection it makes between science, human perception, public safety and conservation.

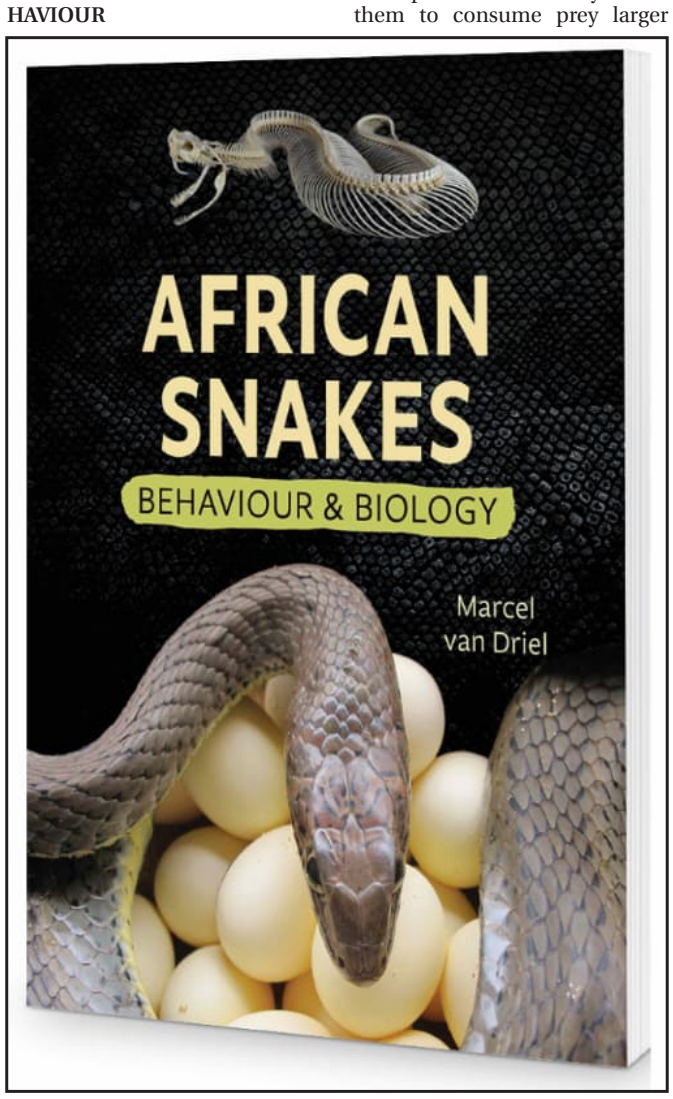
The book does, however, demand patience from the reader. Some sections are technical, and the volume of biological terminology may be challenging for readers without a background in science. At times, it reads more like a reference work than a conventional narrative book.

Yet, that is also part of its value. Van Driel has taken information often scattered across scientific literature and specialist publications and attempted to make it accessible to a wider audience.

The book ultimately challenges readers to reconsider an animal that is often feared before it is understood.

Its most important contribution may therefore be its simplest message knowledge can change the way people see snakes and, potentially, the way they treat them.

The book is for sale at the following book world outlets: Manda Hill, East Park Mall, Cosmopolitan Mall, Pinnacle Mall, KKIA Airport, Kitwe, Ndola, Solwezi and Livingstone.



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