

# GREEN ALERT

With the weather warming and the mating season beginning, snakes will be more active, so be on the lookout. These green-coloured species are particularly well camouflaged.

By Robin and Bryan Maritz

⚠ Never handle a snake that you cannot identify.

**TIP** Scan the sunny parts of vegetation during mid-morning for your best chance to glimpse a green-coloured snake.

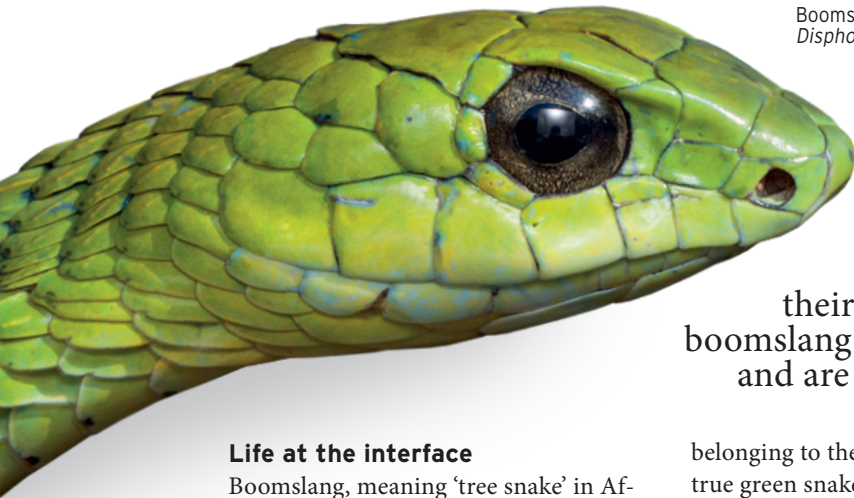
Eastern green mamba  
*Dendroaspis angusticeps*

Barely discernible among the vegetation, using their green colouration to blend in, are seven of South Africa's snake species. When you spot a green snake in the tree canopy or a leafy bush, the species may appear similar at first glance; identifying them from a fleeting glimpse or a low-resolution photograph is often impossible. Instead, note where the snake occurred. While some of these diurnal, green-coloured snakes are almost entirely arboreal, a few of the species find life on the ground to be more suitable.

### Life in the canopy

The most arboreal and graceful of the green snakes is the eastern green mamba *Dendroaspis angusticeps*. Although green mambas occur widely across the continent, in South Africa they are limited to coastal lowland forests in KwaZulu-Natal. Found predominantly in the tree canopy, which

they blend into perfectly, they venture onto ground in search of a ground-dwelling bird or mammal on rare occasions. Unlike snakes which use constriction to immobilise prey, the highly venomous green mamba injects a complex mixture of proteins that interfere with the functioning of nerves and muscles, including the heart. ▶



Boomslang  
*Dispholidus typus*

As indicated by their rather large eyes, boomslang have acute vision and are very alert snakes.

**Life at the interface**

Boomslang, meaning 'tree snake' in Afrikaans, are known for their climbing abilities and are frequently encountered in trees and shrubs, sometimes even in thatched roofs. We spend a lot of time looking into camel thorn and blackthorn trees for boomslang as part of our research in the Kalahari, and can confirm that their green colouration is highly effective camouflage.

Only a subset of male boomslang are completely green. Males in the Western and Eastern Cape are black, green and yellow. Females throughout the range are typically brown in colour. Adding to the complexity, juveniles (<80 cm) have a completely different appearance, with a dark-coloured back, light underside and large green eyes.

While boomslang do spend time basking and hunting in trees and shrubs, they spend a reasonable amount of time on the ground either resting among vegetation, moving between areas or hunting prey. As indicated by their large eyes, boomslang have acute vision and are very alert. They are highly venomous, using a cocktail of venom proteins to cause internal haemorrhaging in their prey. Their diet consists of chameleons, bird chicks and bird eggs. Listening for birds sounding their alarm calls is a great way to find a hunting boomslang.

**True green**

Although regularly misidentified as a boomslang or a green mamba, snakes

belonging to the genus *Philothamnus*, the true green snakes, are the most commonly encountered green-coloured snakes in South Africa. These species are much skinnier than boomslang and green mambas. All four green species in South Africa have a thick black ring encircling their iris, which boomslang and green mambas lack. They can be challenging to differentiate due to variability in colour patterns and similarity in body shape. Herpetologists often rely on counting the number of scales on the head, and noting their placement, to differentiate between species.

Green snakes are agile climbers and several of the species are skilled swimmers. It is not uncommon to see them on the ground. The most arboreal species is the spotted bush snake, readily found in woodland habitat. They are commonly encountered basking or hunting in gardens and may well be seen trying to swallow a foam nest frog. Of the true green snakes, the southeastern green snake, sometimes referred to as the green water snake, is the least arboreal and may be seen swimming or even eating a fish, although their diet consists mostly of grass frogs and river frogs. The remaining two green snakes are similar to each other and researchers concluded only recently that they are distinct species. Notably, the eastern Natal green snake prefers a well-forested habitat in the lowveld, while the western Natal green snake is found more commonly in moist savanna and at forest edges. ▶



Spotted bush snake  
*Philothamnus semivariatus*

Southeastern green snake or green water snake  
*Philothamnus hoplogaster*

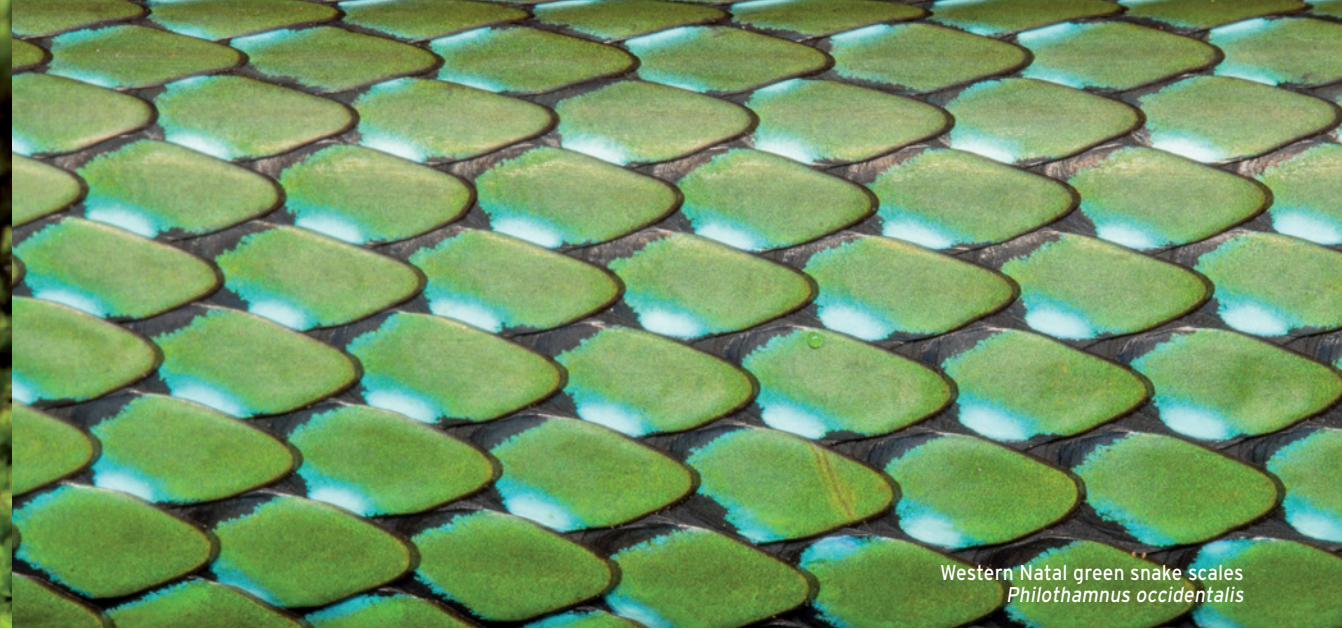
Eastern Natal green snake  
*Philothamnus natalensis*

Western Natal green snake  
*Philothamnus occidentalis*

LUKE AND URSULA VERBURGT (ENVIRO-INSIGHT)



Many-spotted snake  
*Amplorhinus multimaculatus*



Western Natal green snake scales  
*Philothamnus occidentalis*

Several of the true green snakes can be quite aggressive and often bite if handled. Unlike green mambas and boomslang, true green snakes are not considered dangerous to humans because they lack potent venoms. Although they are considered non-venomous, their saliva is thought to contain a toxin that paralyses their prey, which makes swallowing easier.

**Who's who?**  
A closer look at SA's green-coloured snakes reveals a remarkable collection of ecologically diverse species. Here's how they differ in respect of behaviour, habitat preference, distribution, venom and feeding choice.



TRUE GREEN SNAKES

TRUE GREEN SNAKES

**Life on the ground**

Many-spotted snakes *Amplorhinus multimaculatus* are brown with a series of spots that runs along their back. However, rare bright green and olive morphs have been found in Mpumalanga, KwaZulu-Natal and the Eastern Cape. Look out for them among reeds near water as well as on fynbos or grassland slopes. Of the green-coloured snakes, this species is the least arboreal and the most elusive. Little is known about their venom composition but it may cause irritation in humans. Although few feeding observations exist, they are thought to prey on ground-dwelling rodents and frogs. 🐾

	<b>WESTERN NATAL GREEN SNAKE</b> <b>HARMLESS</b>	<b>EASTERN NATAL GREEN SNAKE</b> <b>HARMLESS</b>	<b>SOUTHEASTERN GREEN SNAKE</b> <b>HARMLESS</b>	<b>SPOTTED BUSH SNAKE</b> <b>HARMLESS</b>	<b>MANY-SPOTTED SNAKE</b> <b>MILDLY VENOMOUS</b>	<b>EASTERN GREEN MAMBA</b> <b>HIGHLY VENOMOUS</b>	<b>BOOMSLANG</b> ♂ <b>HIGHLY VENOMOUS</b>
<b>SCIENTIFIC NAME</b>	<i>Philothamnus occidentalis</i>	<i>Philothamnus natalensis</i>	<i>Philothamnus hoplogaster</i>	<i>Philothamnus semivariiegatus</i>	<i>Amplorhinus multimaculatus</i>	<i>Dendroaspis angusticeps</i>	<i>Dispholidus typus</i>
<b>TYPICAL SIZE</b>	80-90cm	80-90cm	50-60cm	70-90cm	40-50cm	160-180cm	110-140cm
<b>FREQUENTLY FOUND</b>	In shrubs and trees in wooded grassland and savanna	In shrubs and trees in lowland forest	Near water in lowland forest, wooded grassland, savanna and fynbos	In shrubs and trees in lowland forest and savanna	Marshy vegetation in fynbos and grassland	In tree canopy in coastal lowland forest	In shrubs and trees in all but most arid habitats
<b>ARBOREALITY</b>	++	++	+	++	-	++++	+++
<b>REPRODUCTION</b>	4-6 eggs	4-6 eggs	5-6 eggs	6-12 eggs	4-5 live young	8-10 eggs	10-14 eggs
<b>COMMON PREY</b>	Frogs, geckos, skinks	Frogs, geckos, skinks	Frogs (grass, river, reed)	Foam nest frogs, geckos, skinks	Frogs and small mammals	Birds (all ages), rodents	Bird (chicks and eggs), chameleons
<b>ID CLUES</b>	Blue hues on head and tail	Head flatter than <i>P. hoplogaster</i>	Smallest and thickest of the <i>Philothamnus</i>	Heavy black spotting on front half fading into a bronze-coloured tail	Stocky for its length, indistinct head	Big-bodied, slender coffin-shaped head	Big-bodied, very large eye, short head
<b>DISTRIBUTION</b>							

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