



ASI SNAKE BOOKLET

COMMON SNAKES OF STANGER

Copyright: Johan Marais - African Snakebite Institute
First Edition published 2025

814 Wapadrand Rd,
Wapadrand Security Village,
Pretoria, 0081

Cell: +27 (0)82 494 2039
E-mail johan@asiorg.co.za
www.africansnakebiteinstitute.com

All rights reserved. No part of this publication may be reproduced or used commercially without the prior written permission of the copyright owner.

SNAKE COURSES

The ASI offers both public and corporate snake courses.

Public courses take place at various venues throughout South Africa.

The corporate training is done on-site, both in South Africa, as well as in 19 African countries.

We pride ourselves on teaching only the safest snake handling methods, to ensure the safety of both the handler and the snake.

We offer a range of different course options, including snake awareness, first aid for snakebite, venomous snake handling, venomous snake handling bootcamps, as well as advanced first aid for snakebite, advanced venomous snake handling and a reptile photography course.

For course info,
click [here](#) or email us on
courses@asiorg.co.za
for details.



www.AFRICANSNAKEBITEINSTITUTE.com



INTRODUCTION

The African Snakebite Institute is the leading training provider of Snake Awareness, First Aid for Snakebite and Venomous Snake Handling courses in Africa as well as the largest distributor of quality snake handling equipment, snake PPE and snakebite first aid kits. Our aim is to spread snake awareness as far and wide as possible, which is why we've launched our new free E-Book series.

Our CEO, Johan Marais is a well-known herpetologist with over 40 years of experience with snakes. He has worked at various reptile facilities and has collaborated on a variety of scientific studies with some of the world's leading herpetologists. He is also one of Africa's most prominent authors of snake books and has written the best-sellers *A Complete Guide to Snakes of Southern Africa*, *Snakes and Snakebite in Southern Africa* and *First Aid for Snakebite*, to mention just a few.



COMMON SNAKES OF STANGER

Kwazulu Natal has 80 different snake species. Of the 30 snakes that occur in Stanger seven are highly venomous, three are venomous, one can inflict a painful bite and the rest are mildly venomous or harmless. We've listed the common species in this booklet, showing venomosity, key ID features, full distribution, and snakebite info for venomous species.

Snakebite is problematic with most bites reported from the hot, wet regions in the eastern part of the country. More than 4,000 snakebites are reported annually with over 1,000 victims being hospitalised. Of those around 60% show signs of envenomation and the remaining 40% show no symptoms – these are referred to as dry bites or may be bites from mildly venomous or harmless snakes. In a recent 5 year survey of 879 snakebite cases in Zululand, nearly 98% of victims showed typical signs of cytotoxic envenomation – largely Mozambique Spitting Cobra, Puff Adder, Common Night Adder and Stiletto Snake bites. Despite their relative frequency, if treated correctly in hospital, these bites are rarely fatal. Most bites occurred in the early evening in the warm wet summer months from November to April/May. Around 84% of the bites were inflicted well below the knee. Less than 11% of these victims received antivenom and none of the bites in this survey were fatal.

Generally speaking we have 10 – 12 fatal snakebites a year in South Africa and these are invariably caused by the Black Mamba and Cape Cobra. Both of these snakes have a potent neurotoxic venom that may quickly affect breathing.

SNAKE HANDLING EQUIPMENT

The African Snakebite Institute is the leading provider of quality snake handling equipment in Africa. View our range online [here](http://www.AFRICANSNAKEBITEINSTITUTE.com).



www.AFRICANSNAKEBITEINSTITUTE.com

COMMON SNAKES OF STANGER / KWADUKUZA



The Stanger area has around 31 species of snakes. Seven species are highly venomous and another three are venomous. Four species are mildly venomous and another one can inflict a nasty bite. The other sixteen species are harmless.

HIGHLY VENOMOUS

Has caused human fatalities

VENOMOUS

Painful bite, but does not require antivenom

MILDLY VENOMOUS

Not thought to be harmful

HARMLESS

Not dangerous to humans



Black Mamba
(*Dendroaspis polylepis*)

HIGHLY VENOMOUS



Green Mamba
(*Dendroaspis angusticeps*)

HIGHLY VENOMOUS



Brown Forest Cobra
(*Naja subfulva*)

HIGHLY VENOMOUS



Mozambique Spitting Cobra
(*Naja mossambica*)

HIGHLY VENOMOUS



Common Night Adder
(*Causus rhombeatus*)

VENOMOUS



Puff Adder
(*Bitis arietans*)

HIGHLY VENOMOUS



Boomslang - male
(*Dispholidus typus*)

HIGHLY VENOMOUS



Southern Vine Snake
(*Thelotornis c. capensis*)

HIGHLY VENOMOUS



Bibron's Stiletto Snake
(*Atractaspis bibroni*)

VENOMOUS



Southern African Python
(*Python natalensis*)

CAN INFLICT A PAINFUL BITE



Short-nosed Grass Snake
(*Psammophis brevirostris*)

MILDLY VENOMOUS



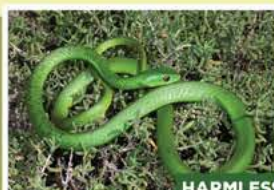
Herald Snake
(*Crotaphopeltis hotamboeia*)

MILDLY VENOMOUS



Spotted Bush Snake
(*Philothamnus semivariegatus*)

HARMLESS



Eastern Natal Green Snake
(*Philothamnus natalensis*)

HARMLESS



Brown House Snake
(*Boaedon capensis*)

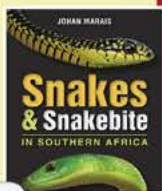
HARMLESS



Common Wolf Snake
(*Lycophidion capense*)

HARMLESS

JOHAN MARAIS is the author of various books on reptiles including the best-seller *A Complete Guide to Snakes of Southern Africa*. He is a popular public speaker and CEO of the African Snakebite Institute. The **African Snakebite Institute (ASI)** offers a variety of courses including Snake Awareness, Scorpion Awareness and Venomous Snake Handling. ASI is accredited by the **International Society of Zoological Sciences (ISZS)** and Travel Doctor-approved service provider. The courses are also accredited by the **Health Professions Council of South Africa (HPCSA)**. ASI is the largest provider of quality snake handling and safety equipment in Africa.



FREE ASI SNAKES APP

Johan Marais | African Snakebite Institute

+27 82 494 2039 | johan@asiorg.co.za

www.AFRICANSNAKEBITEINSTITUTE.com

EMERGENCY PROTOCOL

IN THE EVENT OF A SNAKE BITE

- 1 Keep the victim calm, immobilized and transport the victim to the closest hospital **without delay**.
- 2 If the victim stops breathing, resort to artificial respiration or make use of a Bag Valve Mask.
- 3 Call the Poison Information Centre help-line for further advice: 0861 555 777.

DO NOT

- ... apply a tourniquet.
- ... cut and suck the wound.
- ... use ice or very hot water.
- ... give the victim alcohol.
- ... apply electric shock.
- ... inject antivenom randomly. Antivenom (if required) must be administered by a doctor in a hospital environment.

Download the high resolution poster [here](#).

www.AFRICANSNAKEBITEINSTITUTE.com



HIGHLY VENOMOUS



Black Mamba

(Dendroaspis polylepis)

Maximum Length:
3.8 m



Other names:

Swartmamba

This is by far the largest venomous snake in Africa, with a maximum length of 3.8 m (historically specimens over 4 m were reported). Despite its reputation it is a shy, elusive snake that is quick to escape but will not hesitate to strike repeatedly if cornered. It is active during the day, often basking near a hole in an anthill or large rock crevice, into which it quickly disappears if disturbed. When threatened it will gape exposing the black inner lining of the mouth and it may form a narrow hood. The venom of this snake is potently neurotoxic and may cause difficulty with breathing within half an hour. Antivenom is effective but often required in large quantities (10 – 15 vials).



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



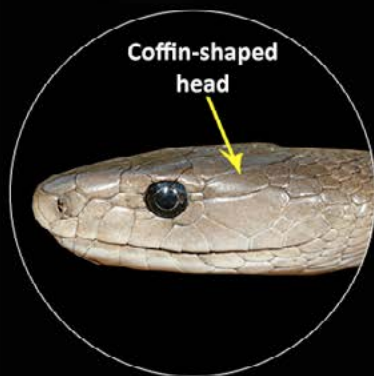
ASI EASY ID

Black Mamba (*Dendroaspis polylepis*)

HIGHLY VENOMOUS

Average length: 2.2 - 2.6 m. Maximum length: 4.5 m

Can be confused with: Boomslang, Olive Grass Snakes, Cobras



Coffin-shaped head

Can lift up to a third of its body off the ground

Colour varies from light olive to light grey, darkening with age to olive, greyish brown, or gunmetal grey. Sometimes has mottling

Elongated coffin-shaped head

Inside of the mouth is usually black

Forms a narrow hood when threatened

May have barring toward the tail

Light grey belly, sometimes with mottling

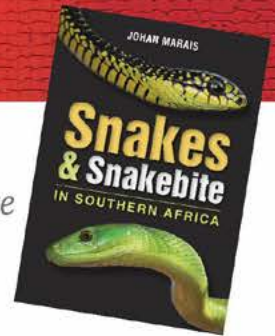
www.AFRICANSNAKEBITEINSTITUTE.com



SNAKEBITE PROFILE

BLACK MAMBA

Dendroaspis polylepis



Risk of Bites

The Black Mamba is a nervous snake and is quick to escape. If accidentally cornered in a confined space or surprised in the veld, it may strike out and bite more than once in quick succession. Contrary to popular stories, it does not chase people and bites are quite rare.



Most Bites

Most victims are bitten in the veld when they accidentally get very close to a Black Mamba basking. Or when accidentally cornering a mamba in a confined space like a pump house on a farm. Never approach a Black Mamba closely and do not try to kill or catch one.



Symptoms & Venom

A potent and fast-acting neurotoxic venom that results in pins and needles in the lips, hands and feet, as well as nausea, excessive sweating, drooping eyelids, difficulty in swallowing and eventually drowsiness and muscle pain followed by paralysis and respiratory failure. In severe cases victims become unresponsive within less than one hour.

See pages 43-45

– *Snakes and Snakebite in Southern Africa* (2024).



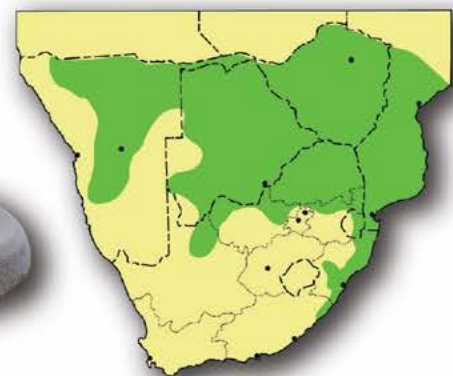
First Aid

Immobilise and reassure the patient, who must lie down in a rescue position. Immediately arrange transport to a hospital with emergency facilities. If far from a hospital, apply a pressure bandage (Page 19 of *Snakes and Snakebite in Southern Africa*). Resort to artificial respiration if the victim stops breathing.



Medical Treatment

In cases of severe envenomation where patients are not breathing, they are intubated and ventilated and treated with 12-15 vials of SAVP Polyvalent antivenom. Additional vials of antivenom may be required at a later stage.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



HIGHLY VENOMOUS



Green Mamba

(Dendroaspis angusticeps)

Maximum Length:
2.5 m



Other names:

Groenmamba

A bright green snake that in South Africa inhabits coastal KZN and is usually only found within a few kilometres of the sea. In Mozambique and Zimbabwe, the distribution may extend further inland. It is often confused with harmless green snakes of the genus *Philothamnus* and the green Boomslang. The Green Mamba spends most of its life in dense coastal vegetation and moist woodlands, where it hunts for tree-living mammals and birds, during the day. Its venom is potently neurotoxic but may also cause swelling. Antivenom is effective but bites are quite rare. Juveniles have a long head and are often green and turquoise. This species is not known from eSwatini or inland South Africa.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



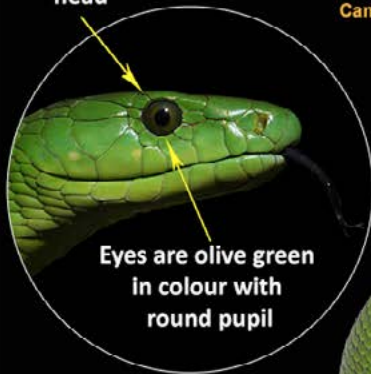
ASI EASY ID

Green Mamba (*Dendroaspis angusticeps*)

HIGHLY VENOMOUS



Coffin-shaped
head



Eyes are olive green
in colour with
round pupil

Average length: 1.6 m. Maximum length: 2.5 m

Can be confused with: Boomslang and green snakes of the genus *Philothamnus*

Distribution is
important

Velvety green snake
with large scales

Thick-set snake

Has occasional
yellow scale

Elongated coffin-shaped
head

Light green belly

Juveniles are more
turquoise in colour

www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

GREEN MAMBA

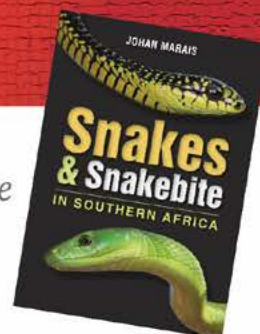
Dendroaspis angusticeps



Risk of Bites

The Green Mamba rarely accounts for bites in southern Africa, as it lives in thick coastal bush, which it is quick to disappear into.

See pages 46-48
– *Snakes and Snakebite
in Southern Africa*
(2024).



First Aid

Immobilise and reassure the patient, who must lie down in a rescue position. Immediately arrange transport to a hospital with emergency facilities. If far from a hospital, apply a pressure bandage (Page 19 of *Snakes and Snakebite in Southern Africa*). Resort to artificial respiration if the victim stops breathing.



Most Bites

Most victims are bitten on a hand while trying to catch or kill the snake. If given the chance, the Green Mamba is quick to escape into the nearest bush.



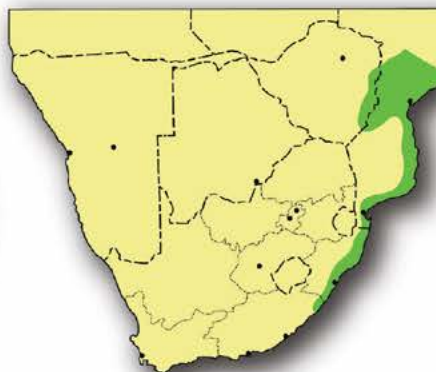
Symptoms & Venom

The venom is both neurotoxic and cytotoxic and does not appear to be anywhere near as potent to that of the Black Mamba. However, the bite is still very serious. Victims may experience a fair amount of swelling.



Medical Treatment

In cases of severe envenomation, where patients are not breathing, they should be intubated, ventilated, and treated with 10-15 vials of SAVP Polyvalent antivenom. Additional vials of antivenom may be required at a later stage.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



HIGHLY VENOMOUS



Brown Forest Cobra (*Naja subfulva*)

Maximum Length:
2.7 m



Other names:
Boskobra

This is our largest cobra species and may exceed 2.7 m in length. Adults are a light to medium shiny brown that darkens, becoming black towards the tail. The Brown Forest Cobra is active both during the day and night and favours dense bush where it hunts for small mammals, birds, frogs and other snakes. It is extremely shy and quick to escape – bites are rare. When cornered it will lift its head well off the ground and spread a narrow hood.

It occurs from Ballito in KZN northwards into Mozambique and elsewhere further north. It has recently been found in the northern Kruger National Park and extreme eastern Soutpansberg.

Forest Cobra venom is potently neurotoxic and cytotoxic. Polyvalent antivenom is effective.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Brown Forest Cobra (*Naja subfulva*)

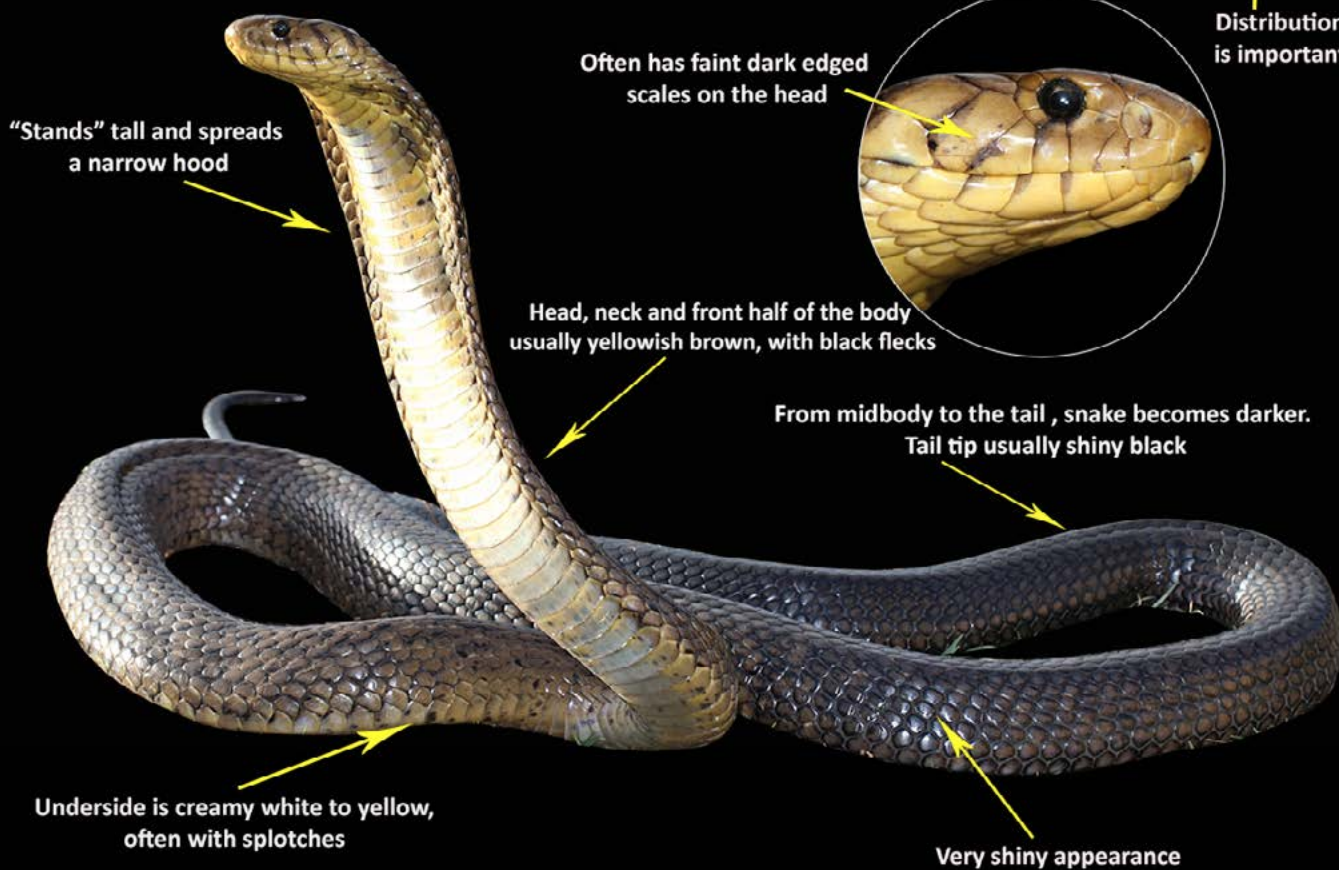
HIGHLY VENOMOUS

Average length: 1.4 - 1.8 m. Maximum length: 2.7 m

Often confused with: Snouted Cobras



Distribution
is important



www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

BROWN FOREST COBRA

Naja subfulva



Risk of Bites

Bites to humans from the Brown Forest Cobra are not common. This snake inhabits thick coastal bush. It is a shy snake, which tries to avoid humans at all costs, but is quick to hood in a defensive position when startled or cornered.



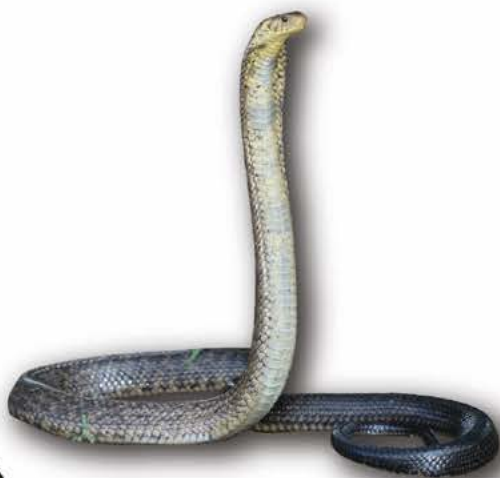
Most Bites

Bites are not common, except for incidents where snake keepers are bitten by captive snakes.



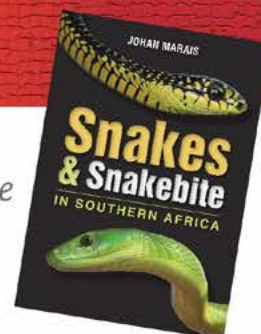
Symptoms & Venom

The venom of the Brown Forest Cobra is potentially neurotoxic, but the venom is also known to have cytotoxic symptoms. Symptoms include pain, progressive swelling of the affected limb and potentially necrosis at the site of the bite. Other symptoms include nausea, dizziness and respiratory distress.



See pages 56-57

– *Snakes and Snakebite in Southern Africa* (2024).



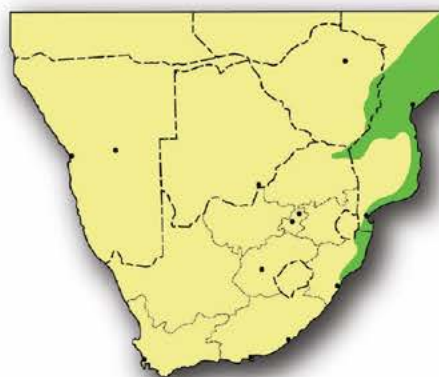
First Aid

Immobilise and reassure the patient and elevate the affected limb. Promptly transport the victim to the nearest hospital that has emergency facilities. Avoid all other first aid remedies including bandages.



Medical Treatment

In cases of severe envenomation where there are clear signs of progressive swelling, which extends more than 10-15cm per hour above the bite site, doctors will treat such bites with 12 ampoules (or more) of polyvalent antivenom. Anti-inflammatories (NSAID's) and antibiotics are not indicated in the short term. Fasciotomies are rarely justified and should generally be avoided. In cases where patients suffer tissue damage, surgery may be required but rarely in the first few days.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com

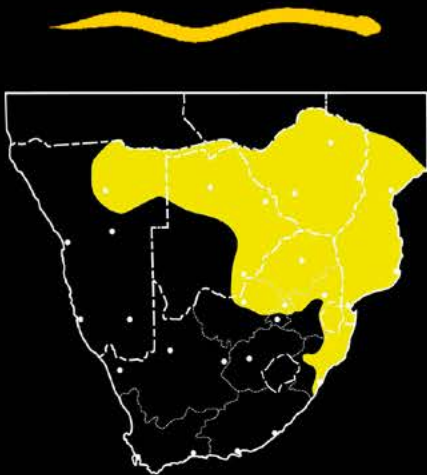


HIGHLY VENOMOUS



Mozambique Spitting Cobra (*Naja mossambica*)

Maximum Length:
1.8 m



Other names:

Mosambiekse Spoegkobra

The Mozambique Spitting Cobra occurs on the eastern side of South Africa, most of Mozambique, Zimbabwe, north-eastern Botswana, northern Namibia and further north in Africa. Its diet consists largely of frogs, small mammals, birds and snakes, including the Puff Adder. It is active on overcast days, but more active at night, often ending up in houses where people are bitten while asleep. This snake accounts for the majority of serious snakebite cases in southern Africa, but fatalities are rare. It also spits its venom and does not always spread a hood when doing so. The venom is potentially cytotoxic causing pain, swelling, blisters and in many cases severe tissue damage. Antivenom is effective if administered early and in large dosages.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



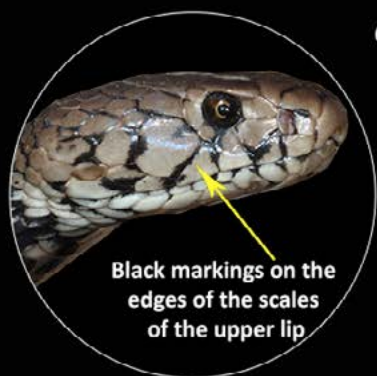
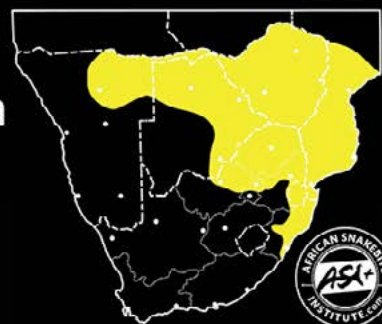
ASI EASY ID

Mozambique Spitting Cobra (*Naja mossambica*)

HIGHLY VENOMOUS

Average length: 80 cm - 1.2 m. Maximum length: 1.83 m

Can be confused with: Rinkhals, Snouted Cobras



Black markings on the edges of the scales of the upper lip

Can spit effectively up to 3 m

Salmon coloured throat

Black bars and blotches on the throat

Spreads a hood, but can spit from any position

Slate grey to olive brown body

Belly may be off-white, to salmon in colour

Black edged scales

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

MOZAMBIQUE SPITTING COBRA

Naja mossambica



Risk of Bites

Bites are common, as this snake is widespread throughout much of southern Africa. Along with the Puff Adder, these two snakes account for most serious snakebites in southern Africa. Dogs are at risk and often get bitten when attempting to kill the snake.



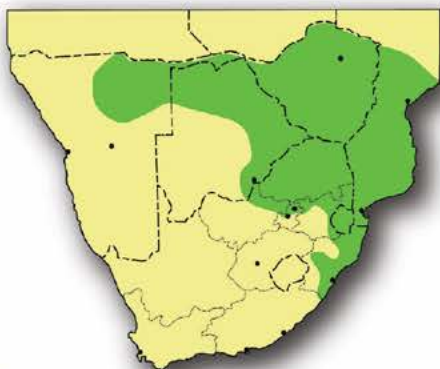
Most Bites

Most victims are bitten at night when accidentally stepping on the snake, or while in bed. The snake enters homes and may bite sleeping victims, often multiple times. Bites in bed appear to be somewhat of a feeding response with the snake smelling a mammal and biting. Should you live within the range of this snake it is advisable to ensure that exit doors seal well without gaps or to fix mosquito-proof doors to all exits. People are also encouraged to sleep under mosquito nets.



Symptoms & Venom

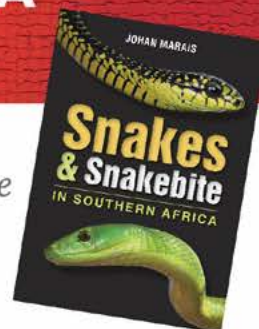
The venom is predominantly and potently cytotoxic. Symptoms include severe pain, progressive swelling, various lesions and, in some cases, severe tissue damage.



www.AFRICANSNAKEBITEINSTITUTE.com

See pages 64-65

– *Snakes and Snakebite in Southern Africa* (2024).



First Aid

Immobilise and reassure the patient. Elevate the affected limb and remove tight clothing and jewelry. Promptly transport the victim to the nearest hospital that has emergency facilities. Avoid all other first aid remedies including bandages. For venom in the eyes, wash the eyes out immediately using water or any other bland liquid and get the victim to a medical doctor for further examination and treatment.



Medical Treatment

In cases of severe envenomation where there are clear signs of progressive swelling, extending more than 10-15cm per hour above the bite site, doctors must treat such bites with 12 ampoules (or more) of polyvalent antivenom. It appears that SAVP polyvalent antivenom is not very effective against the venom of this snake, therefore it should be administered within an hour or two after a bite. Anti-inflammatories (NSAID's) and antibiotics are not indicated in the short term. Fasciotomies are rarely justified and should generally be avoided. In cases where patients suffer tissue damage, surgery may be required but rarely in the first few days.

Fatalities are rare.



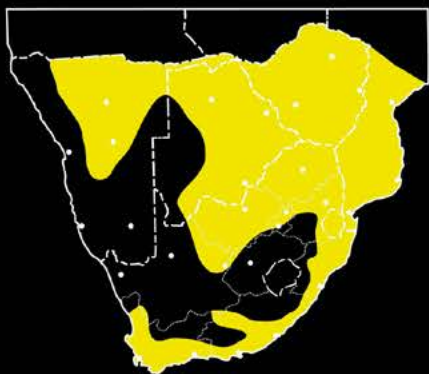


HIGHLY VENOMOUS



Boomslang (*Dispholidus typus*)

Maximum Length:
2.1 m



Other names:

Boomslang

The Boomslang is largely tree-living but may descend to the ground to bask. In trees it poses no threat to humans as it is extremely reluctant to bite, and bites are rare. Juveniles are grey with a massive emerald, green eye but change to the adult colours around a length of 1 m. Most males are bright green, sometimes with black between the scales, but in the Cape Provinces they are usually black above with green, yellow or orange sides. Females are usually brown to grey in colour. Boomslang venom is haemotoxic and compromises the blood clotting mechanism, causing uncontrolled bleeding if not treated. The South African Vaccine Producers manufacture a monovalent antivenom for bites from Boomslang that is very effective.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Boomslang (*Dispholidus typus*)

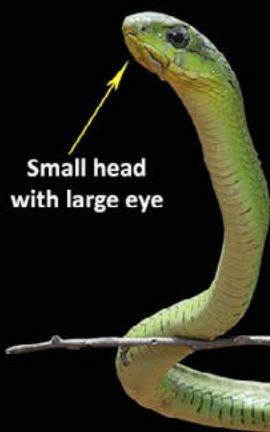
HIGHLY VENOMOUS

Average length: 1.2 m. Maximum length: 2.1 m

Often confused with: Black Mambas, Green Mambas, green snakes and sand snakes

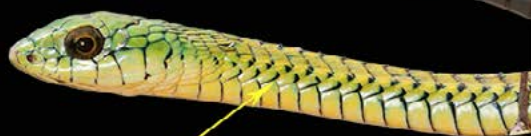
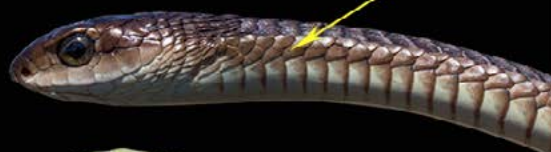


Females are normally olive grey to brown or brick red in colour



Small head with large eye

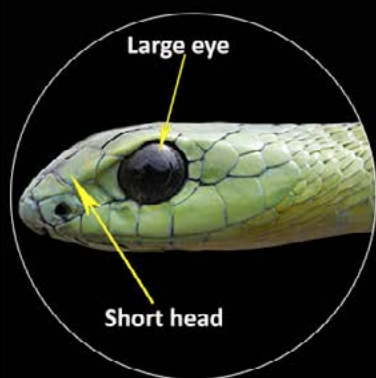
Scales are keeled giving snake a rough texture



Most males are green in colour



Males in the Cape are usually black above with yellow, green or orange sides



Large eye

Short head



Juveniles have big emerald green eyes

www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

BOOMSLANG

Dispholidus typus



Risk of Bites

Bites are not common in South Africa. This snake lives in trees and shrubs and interactions with humans are infrequent. It is a placid snake that only bites when provoked or handled. If spotted, it is quick to flee higher up into trees.



Most Bites

Bites occur when a basking snake is accidentally stepped on or grabbed, or when it is handled.

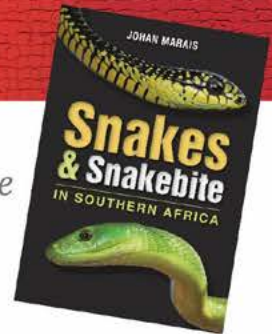


Symptoms & Venom

Drop for drop the Boomslang has the most potent venom of any snake in Africa. It is slow-acting, but potentially haemotoxic and symptoms include bleeding from the bite site, the nose, mucous membranes and internal bleeding.

See pages 79-81

– *Snakes and Snakebite in Southern Africa* (2024).



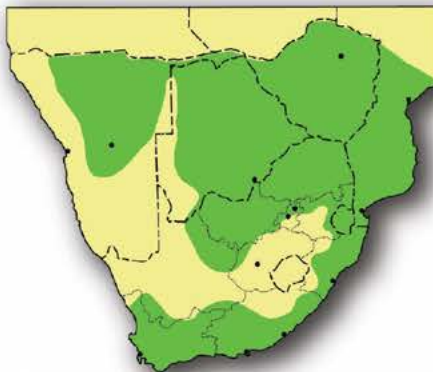
First Aid

Immobilise and reassure the patient. Elevate the affected limb. Promptly transport the victim to the nearest hospital that has emergency facilities. Avoid all other first aid remedies including bandages.



Medical Treatment

In cases of severe envenomation patients are treated with monovalent Boomslang antivenom. The initial dosage is two vials but, in some cases, a third vial may be required. This antivenom is produced by the South African Vaccine Producers. It is a Schedule 4 drug, therefore a script is required should one wish to purchase it. It comes in a 10 ml vial and must be refrigerated. It has a three year shelf life.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com

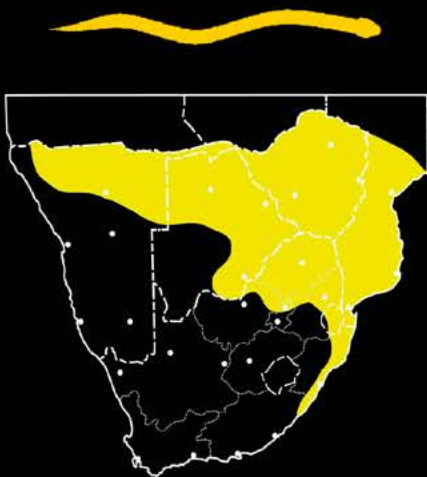


HIGHLY VENOMOUS



Southern Vine Snake (*Thelotornis capensis*)

Maximum Length:
1.47 m



Other names:

Twig Snake; Bird Snake; Takslang; Voëlslang

This perfectly-camouflaged tree-living snake is seldom seen because of its excellent camouflage and habit of remaining very still in low shrubs, observing the ground below for passing lizards and snakes. Birds often mob this snake, and it will inflate its neck with its bright orange tongue flickering – this leads to the incorrect assumption that they lure birds with their tongue. It is extremely placid but, if provoked, will inflate its neck and strike viciously. Most bites are to snake handlers. Like the Boomslang, the venom of this snake is haemotoxic affecting the blood clotting mechanism and causing uncontrolled bleeding. There is no antivenom for the venom of this snake and although a few fatalities have been reported, none were in South Africa.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



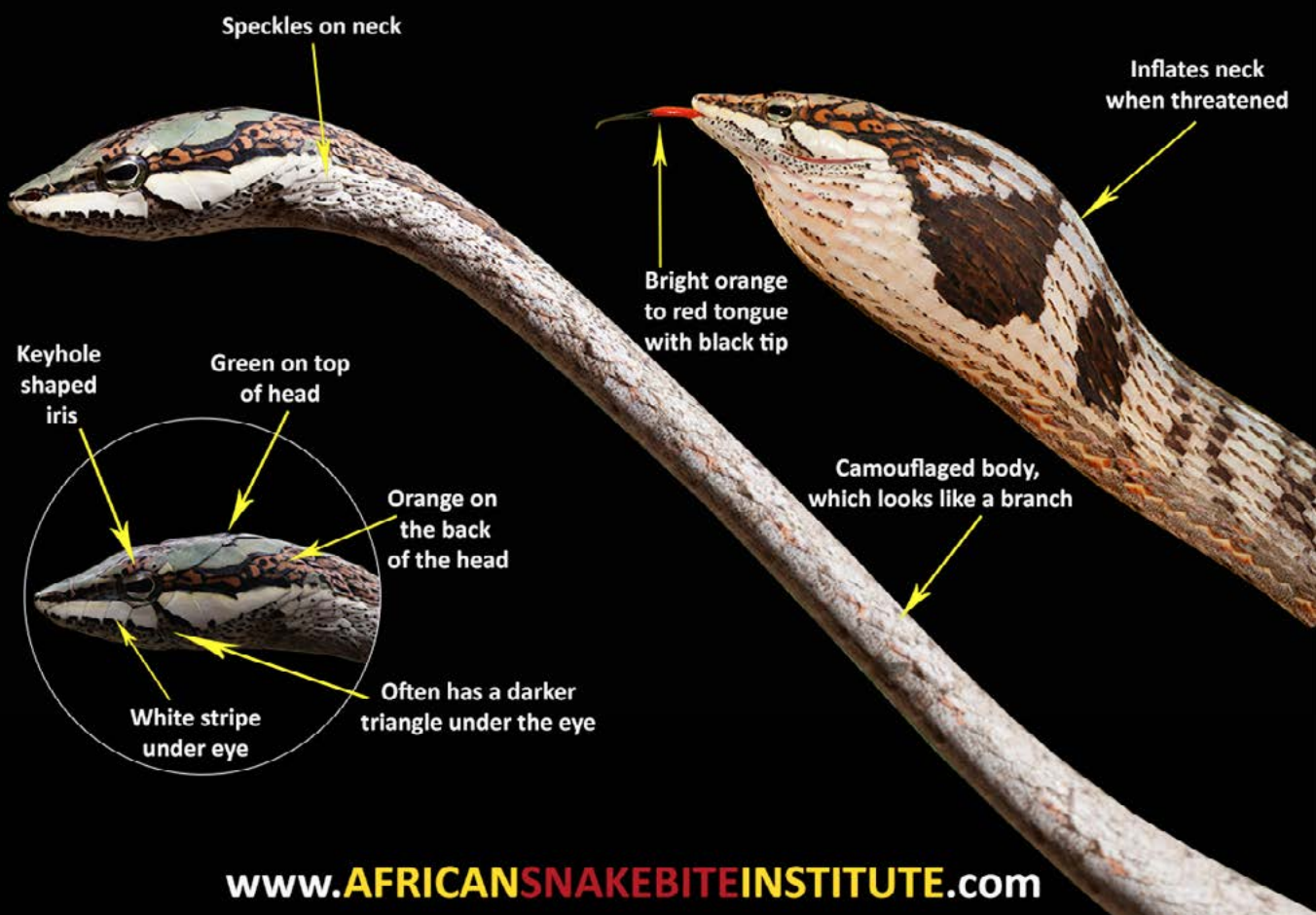
ASI EASY ID

Southern Vine Snake (*Thelotornis c. capensis*)

HIGHLY VENOMOUS

Average length: 1.2 m. Maximum length: 1.47 m

Often confused with: Juvenile Boomslang, Eastern Bark Snakes



www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

Southern Vine Snake

Thelotornis capensis



Risk Of Bites

This snake lives in trees and shrubs and interactions with humans are not common. It is a placid snake that only bites when provoked or handled. Bites are very rare in South Africa.



Most Bites

There are very few documented bites from this snake in southern Africa, except for incidents where snake keepers are bitten by captive snakes, or by other people handling this snake.

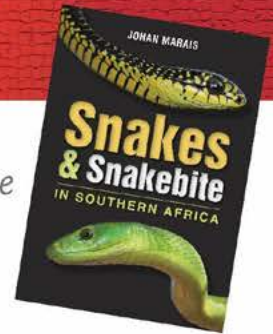


Symptoms & Venom

The venom is potently haemotoxic, like that of the Boomslang. Symptoms include bleeding from the nose, mucous membranes and bite site. This may eventually lead to internal bleeding.

See pages 82-84

– *Snakes and Snakebite in Southern Africa* (2024).



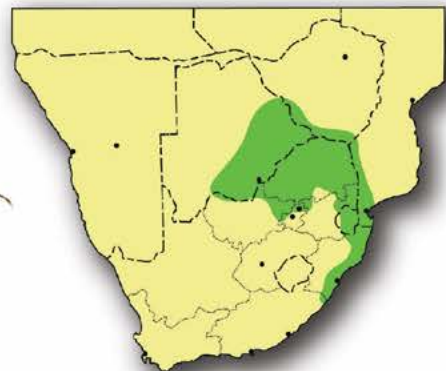
First Aid

Immobilise and reassure the patient. Elevate the affected limb. Promptly transport the victim to the nearest hospital that has emergency facilities. Avoid all other first aid remedies including bandages.



Medical Treatment

Polyvalent and Monovalent antivenom do not offer cross coverage for Vine Snake bites and should not be administered. Bites are treated symptomatically with blood transfers and platelets, but this may not be effective in severe bites. To date we do not have any documented fatalities in South Africa, however a few fatal bites have been recorded further north in Africa.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



HIGHLY VENOMOUS



Puff Adder

(*Bitis arietans*)

Maximum Length:
1.4 m



Other names:

Pofadder, Imbululu

The Puff Adder is widespread over much of southern Africa and further north into Africa. It is a heavy-bodied snake that relies on its excellent camouflage and is reluctant to move. Much of its life is spent in camouflage mode and recent research has shown that when hiding, the Puff Adder will not hiss or strike when approached, as this would give away its presence. It is an ambush hunter that will coil up into a striking position and await its prey. This can last several days or even weeks. Toads are lured closer with flicking of the tongue. Puff Adder venom is potently cytotoxic, causing severe pain, swelling, blistering and in many cases severe tissue damage. Polyvalent antivenom is effective.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



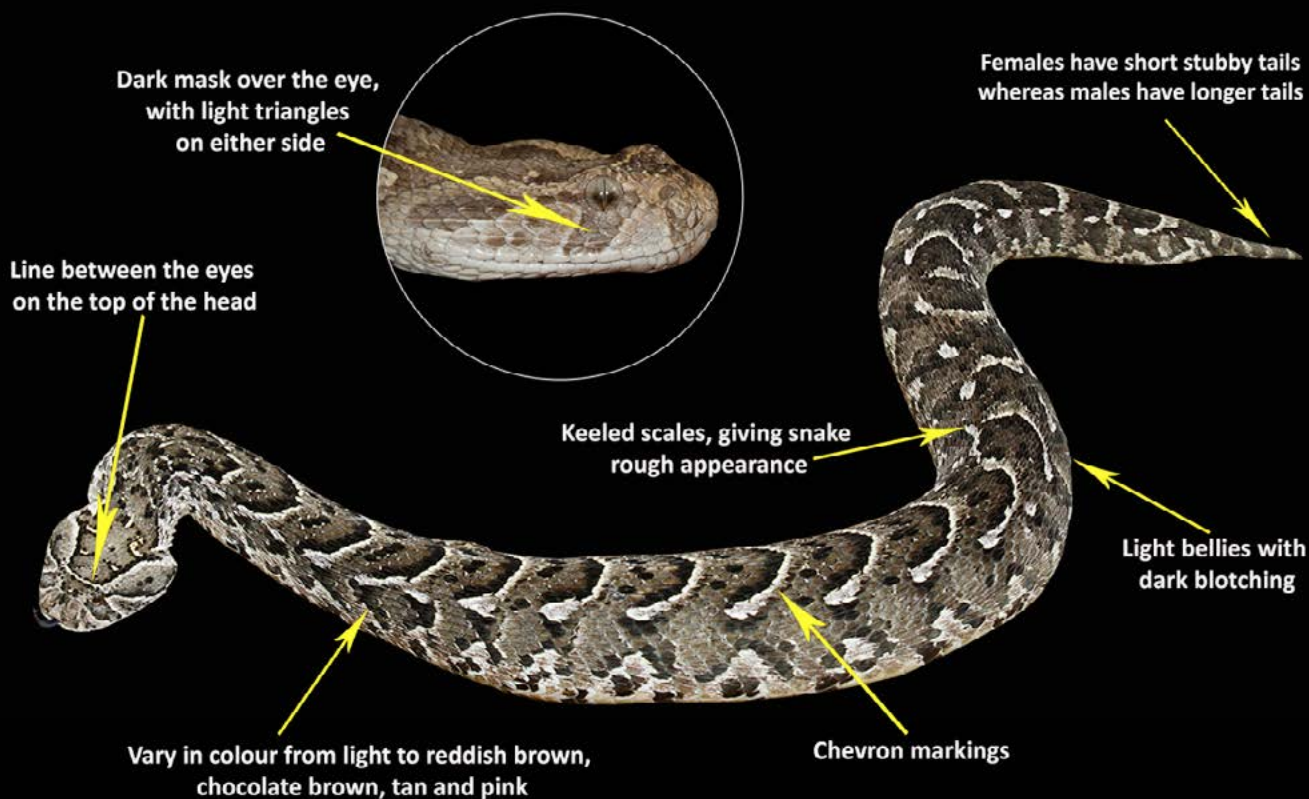
ASI EASY ID

Puff Adder (*Bitis arietans*)

HIGHLY VENOMOUS

Average length: 90 cm. Maximum length: 1.4 m

Often confused with: night adders and Berg Adders



www.AFRICANSNAKEBITEINSTITUTE.com



SNAKEBITE PROFILE

PUFF ADDER

Bitis arietans



Risk Of Bites

Bites are common as this snake is widespread throughout most of southern Africa. Along with the Mozambique Spitting Cobra, these two snakes account for the majority of serious snakebites in southern Africa. Dogs are at risk and often get bitten when attempting to kill the snake.



Most Bites

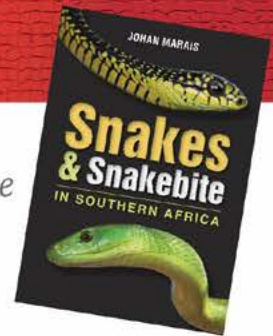
Most victims are bitten at night when accidentally stepping on the snake, but bites are also inflicted during the day when the snake is basking. Most bites are on the feet or lower legs.



Symptoms & Venom

The venom is potently cytotoxic as well as haemotoxic. Symptoms include severe pain, progressive swelling, bleeding from the fang punctures, blistering and tissue damage. The lymph nodes may also be affected. Dogs may perish after a bite from this snake, unless treated with polyvalent antivenom, if required.

See pages 26-28
– *Snakes and Snakebite
in Southern Africa*
(2024).



First Aid

Immobilise and reassure the patient. Elevate the affected limb and remove tight clothing and jewelry. Promptly transport the victim to the nearest hospital that has emergency facilities. Avoid all other first aid remedies including bandages.



Medical Treatment

In cases of severe envenomation where there are clear signs of progressive swelling, which extends more than 10-15cm per hour above the bite site, doctors will treat such bites with 6 ampoules (or more) of polyvalent antivenom. Anti-inflammatories (NSAID's) and antibiotics are not indicated in the short term. Fasciotomies are rarely justified and should generally be avoided. In cases where patients suffer tissue damage, surgery may be required but rarely in the first few days.

Fatalities are rare.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



VENOMOUS



Bibron's Stiletto Snake

(Atractaspis bibronii)

**Maximum Length:
70 cm**



Other names:

**Bibron se Sypikslang; Moladder; Mole
Viper; Burrowing Asp**

After the Mozambique Spitting Cobra and Puff Adder, the Bibron's Stiletto Snake accounts for most serious snakebites in South Africa. It spends most of its life underground but often emerges on hot humid nights and may be stepped on. With large hinged fangs it cannot be handled safely and also cannot be held behind the head – it merely twists its head sideways and will get a fang to penetrate a fingertip. It is usually blackish brown in colour and is easily confused for a variety of harmless snakes. This snake averages 30 cm but can exceed 70 cm in length. Its venom is potently cytotoxic causing severe pain, swelling, blistering and necrosis. Antivenom is not available for this snake.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Bibron's Stiletto Snake (*Atractaspis bibronii*)

VENOMOUS

Average length: 40 - 60 cm. Maximum length: 98 cm

Often confused with: wolf snakes, blind snakes, purple-glossed snakes



Body is brown to blackish in colour

Short stubby tail with spike on the end

Tries to bury head in sand, forming an arch in its neck

Has single subcaudal scales

Belly may be white or same colour as body

Small pig-like eyes

Large hinged fangs

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



SNAKEBITE PROFILE

BIBRON'S STILETTO SNAKE

Atractaspis bibronii



Risk of Bites

Bibron's Stiletto Snake is largely active at night, especially on warm summer nights after a bout of rain. It may also fall into swimming pools and may be brought indoors by cats.



Most Bites

Most victims are bitten picking up Stiletto Snakes, mistaking them for a harmless snake. Otherwise, when stood on while walking barefoot at night.

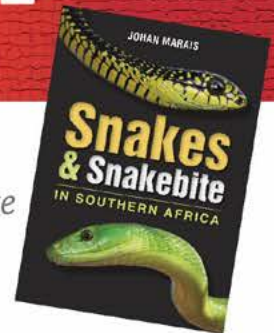


Symptoms & Venom

The venom of this snake is potently cytotoxic, causing severe pain, local swelling, blistering, and potentially local tissue damage.

See pages 85-87

– *Snakes and Snakebite in Southern Africa* (2024).



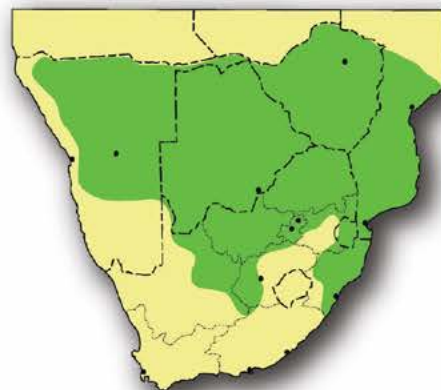
First Aid

There is virtually nothing that can be done. Elevate the affected limb and get to a hospital that has an emergency department.



Medical Treatment

As there is no antivenom for a bite from this snake, doctors need to treat for pain and rehydrate the victim. Anti-inflammatories, antibiotics and antihistamines are not effective and should not be administered. It is equally as important not to resort to any form of surgery for at least 5-7 days. Only thereafter should debridement be considered depending on the severity of the bite.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com

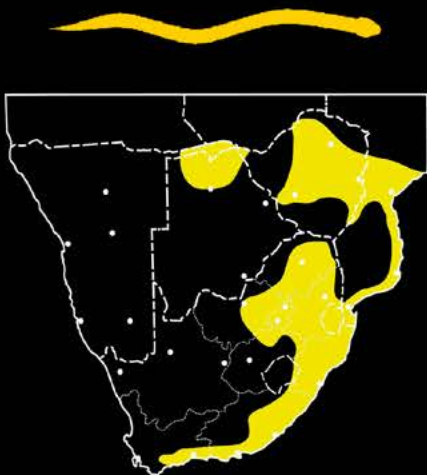


VENOMOUS



Common Night Adder (*Causus rhombeatus*)

Maximum Length:
1 m



Other names:

Rhombic Night Adder, Gewone Nagadder

Despite the common name, the Night Adder is more active during the day. It averages 30 – 60 cm in length, but can reach 1 m. It can be identified by the distinct dark V-marking on the head. It prefers damp localities and is a frog specialist. The Night Adder is generally a docile snake but will hiss aggressively and strike when provoked. It accounts for many bites, especially in KZN and the Eastern Cape. It is commonly found in suburban gardens.

Night Adder venom is cytotoxic, and most bites are not serious – causing pain and swelling. Having said that, the venom of this snake should never be underestimated, especially in children, as some victims require hospitalisation.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Common Night Adder (*Causus rhombeatus*)

VENOMOUS

Average length: 40 - 60 cm. Maximum length: 1 m

Often confused with: Rhombic Egg-eaters, Berg Adders and Puff Adders



Despite the common name,
they are mainly active during the day

Rhombic markings.
Dark brown, light-edged blotches
along the centre of the body and tail

Single distinct "V"
marking on the head.
The apex of the V ending
between the eyes

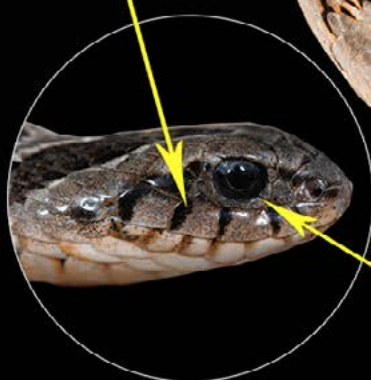
Black lines on the
edges of the scales
of the upper lip

Often has
dark mask
over eye

Belly usually white to
yellowish or light grey

Colour, varying shades
of light grey, olive,
or light to pinkish brown

Round pupil



www.AFRICANSNAKEBITEINSTITUTE.com



Snakebite Profile

COMMON NIGHT ADDER

Causus rhombeatus



Risk of Bites

Bites are quite common in coastal KwaZulu-Natal and the Eastern Cape. Despite the common name, this snake is active during the day and frequents moist areas at dams, rivers and streams, where it feeds largely on toads. Dogs are at risk and often get bitten when attempting to kill the snake.



Most Bites

People are bitten when accidentally stepping onto one of these snakes. Most bites are on the feet or lower legs. Some people are under the wrong impression that Night Adder venom is mild and get bitten when handling the snake.

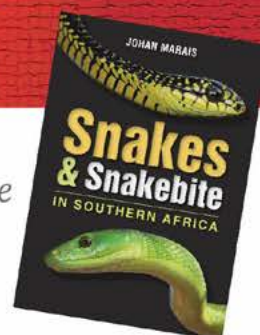


First Aid

Immobilise and reassure the patient, elevate the affected limb and rest it. In severe cases, especially in small children, the patient may require hospitalization for rehydration and pain.

See pages 40-41

– Snakes and Snakebite
in Southern Africa
(2024).



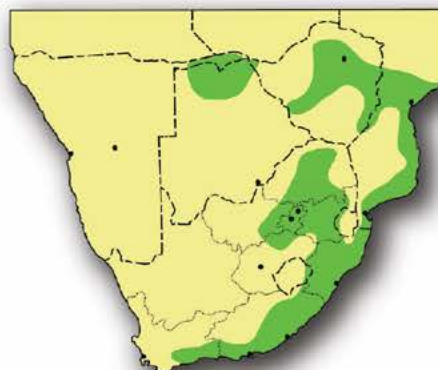
Symptoms & Venom

The venom is largely cytotoxic (cell-destroying), causing pain, local swelling, and discoloration of the bitten area within an hour or two. The lymph nodes may also be affected. Swelling and discoloration may persist for more than a week, but blistering is rare. The venom of this snake does not cause tissue damage but could be quite serious when dogs are bitten. Small dogs may perish after a bite from this snake.



Medical Treatment

There is no antivenom for this bite of a Common Night Adder. Both antibiotics and anti-inflammatories (NSAIDs) are not indicated and should not be given in the first 72 hours. If well rested, patients recover fully within a week or two.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



MILDLY VENOMOUS



Short-snouted Grass Snake (*Psammophis brevirostris*)

Maximum Length:
1.2 m



Other names:

Short-snouted Whip/Sand Snake, Kortsnoet Grasslang

A medium sized, fast-moving snake that is active during the day. It averages 40-60cm but may exceed a meter in length. This snake is fond of basking and very quick to escape. It may flee into low shrubs. If handled it will not hesitate to bite. Individuals captured by the tail will spin and snap a piece of tail off in order to escape. The Short-snouted Grass Snake feeds on lizards, snakes and small rodents. It is a common snake in Gauteng and occurs throughout most of the central part of southern Africa and as far south as the Eastern Cape. Also found in Limpopo, North West and elsewhere further north. The venom of this snake is mild and poses no threat to humans.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Short-snouted Grass Snake (*Psammophis brevirostris*)

MILDLY VENOMOUS

Average length: 60 cm. Maximum length: 1.2 m

Often confused with: Olive Grass Snakes, Female Boomslang



Distribution is important

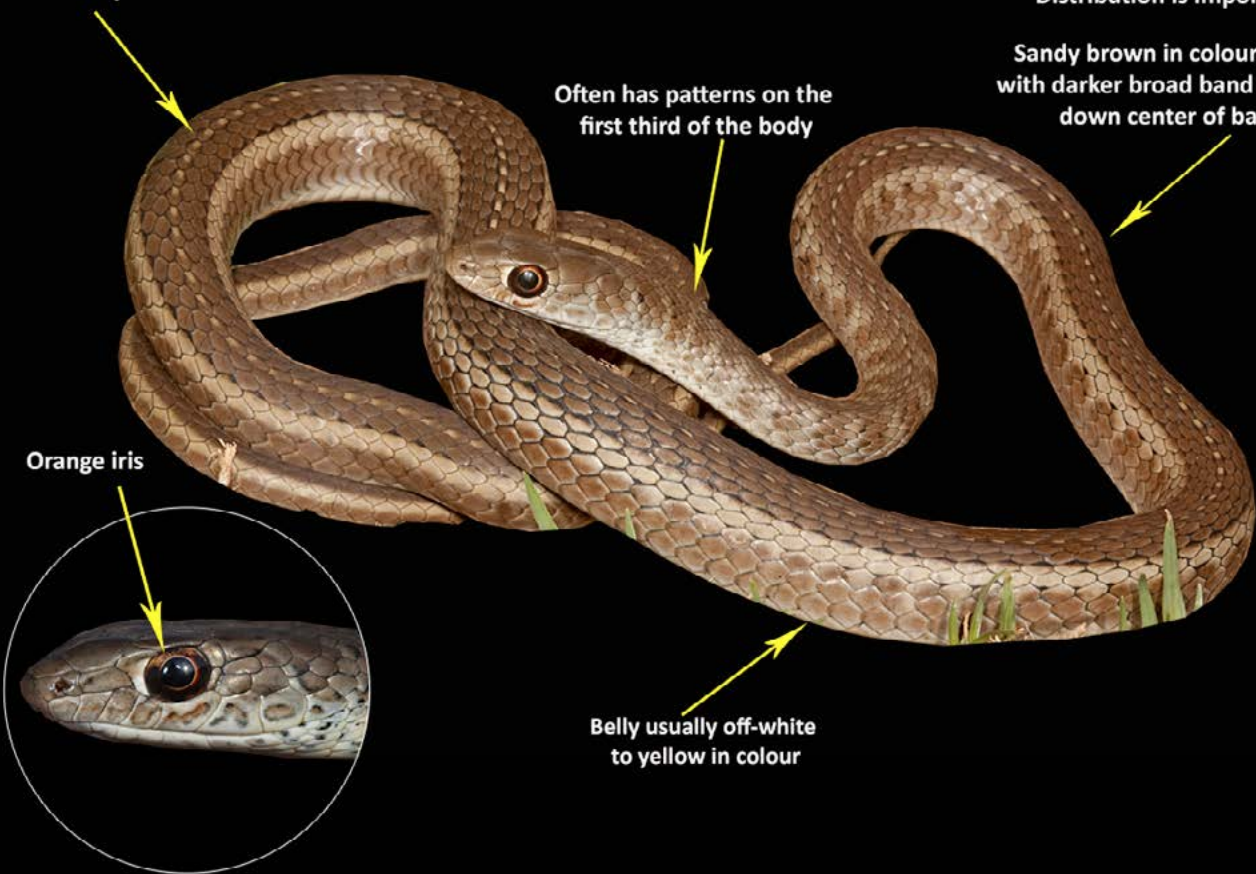
Sandy brown in colour, often
with darker broad band running
down center of back

Often has patterns on the
first third of the body

Often has lighter
vertebral stitching
down spine

Orange iris

Belly usually off-white
to yellow in colour



www.AFRICANSNAKEBITEINSTITUTE.com



MILDLY VENOMOUS



Photo Luke Kemp

Herald Snake

(Crotaphopeltis hotamboeia)

Maximum Length:

1 m



Other names:

Rooilipslang, Red-lipped Snake

A nocturnal snake that frequents suburban gardens, especially those with water features. It is a toad specialist and often eats toads that look far too large to swallow. The Herald Snake is usually greyish to olive-grey in colour, but some individuals are quite dark. The head is always darker than the body and there may be white speckles on the body. In parts of the range the upper lip is bright red, orange or yellowish to white. When threatened, this snake puts up quite a show, drawing the head back into a striking position with the mouth agape and the head flattened. It is mildly venomous and poses no threat to humans or domestic animals.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Herald Snake (*Crotaphopeltis hotamboeia*)

MILDLY VENOMOUS

Average length: 40 - 60 cm. Maximum length: 82 cm

Can be confused with: juvenile mambas and cobras



Head is distinctly darker
in colour than body.

Dark temples with
iridescent sheen

Dark temples

Upper lips can be red,
orange or white

Body usually light brown,
grey to olive grey

White speckles down the body

Belly is usually white,
to mother of pearl cream

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



HARMLESS



Spotted Bush Snake (*Philothamnus semivariegatus*)

Maximum Length:
1.3 m



Other names:

Variegated Bush Snake; Gespikkelde Bosslang

An alert, day-active snake, that climbs well and is often found between the walls and ceilings of outbuildings, where it hunts for geckos. Sadly, this harmless snake is often mistaken for a Green Mamba or Boomslang and needlessly killed.

The body is bright green to a copper-green with distinct blackish spots on the front half of the snake, but little or no dark marks on the back half. The belly is yellowish to white and the pupil orange.

This snake has keeled belly scales which enables it to climb up the bark of a tree or even up face-brick walls. It is commonly found in suburban gardens and juveniles are often killed by domestic cats.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Spotted Bush Snake (*Philothamnus semivariegatus*)

HARMLESS

Average length: 70 cm. Maximum length: 1.3 m

Often confused with: Western Natal Green Snakes,
Green Mambas, Boomslang



Prominent
yellow to red iris

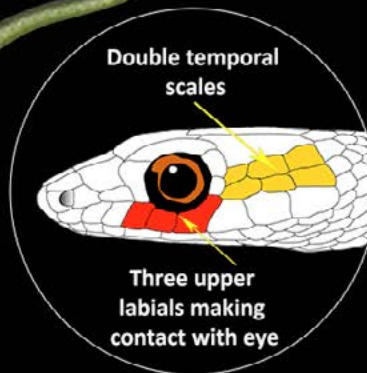
Blackish spots on the
first half of the body

Have bright metallic blue flecks

Excellent climbers, often found in trees and bushes
and in ceilings of outbuildings

In the north of their range,
they often have a
copper coloured tail

Yellowish to white belly
with keeled ventral
and subcaudal scales
for climbing



Double temporal
scales

Three upper
labials making
contact with eye



www.AFRICANSNAKEBITEINSTITUTE.com

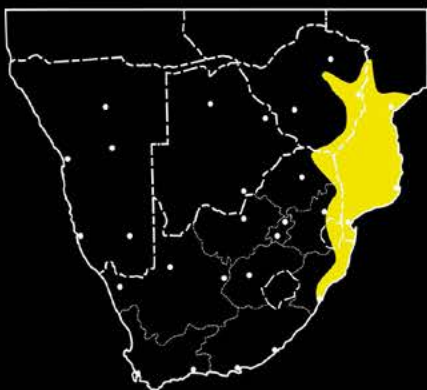


HARMLESS



Eastern Natal Green Snake (*Philothamnus natalensis*)

Maximum Length:
1.2 m



Other names:

Oostelike Natal Groenslang

An attractive bright, grass-green snake that is active during the day when it hunts for geckos and frogs. This snake climbs well and may be seen high up in trees. It is quick to escape when disturbed but may bite readily if handled. Because of the green colour it is often mistaken for a Boomslang or Green Mamba and needlessly killed. The Eastern Natal Green Snake has keels on the belly as well as the underside of the tail and tends to be bright green with some light yellow on the belly and chin. This snake occurs from Amanzimtoti northwards along the KZN coast and eventually into the Kruger National Park and Mozambique. It is completely harmless.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Eastern Natal Green Snake (*Philothamnus natalensis*)

HARMLESS

Average length: 70 cm. Maximum length: 1.3 m

Often confused with: Western Natal Green Snakes,
Green Mambas, Boomslang



Distribution is important
to distinguish from Western Natal
Green Snake

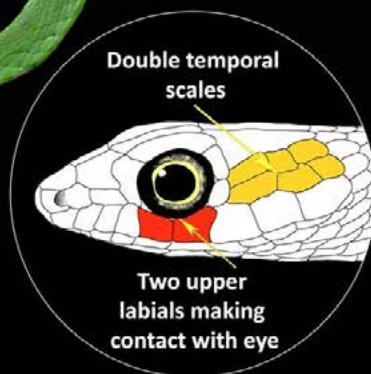
They occasionally have
black speckling along the body
and black between the scales

Rich green colour

Iris is light yellow
to orange

Has keeled
ventral and
subcaudal
scales

Light green belly,
sometimes with yellowish
tinge



www.AFRICANSNAKEBITEINSTITUTE.com



CAN INFLICT A NASTY BITE



Southern African Python (*Python natalensis*)

Maximum Length:
6 m



Other names:

Luislang, previously called a Rock Python

The Southern African Python is by far our largest snake, reaching a maximum length of around 6 m and weighing in excess of 65 kg. It feeds largely on warm-blooded prey like small antelope, monkeys, game birds and dassies, but also takes leguaans and even crocodiles. Attacks on humans are rare and fatalities virtually unheard of. This snake is largely active at night but is fond of basking during the day. It is at home in water and can remain submerged for long periods. Females produce 30 – 60 (but in exceptional cases more than 100) eggs, which are roughly the size of a tennis ball. The female remains with her eggs throughout incubation and the young measure 50 – 70 cm in length.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



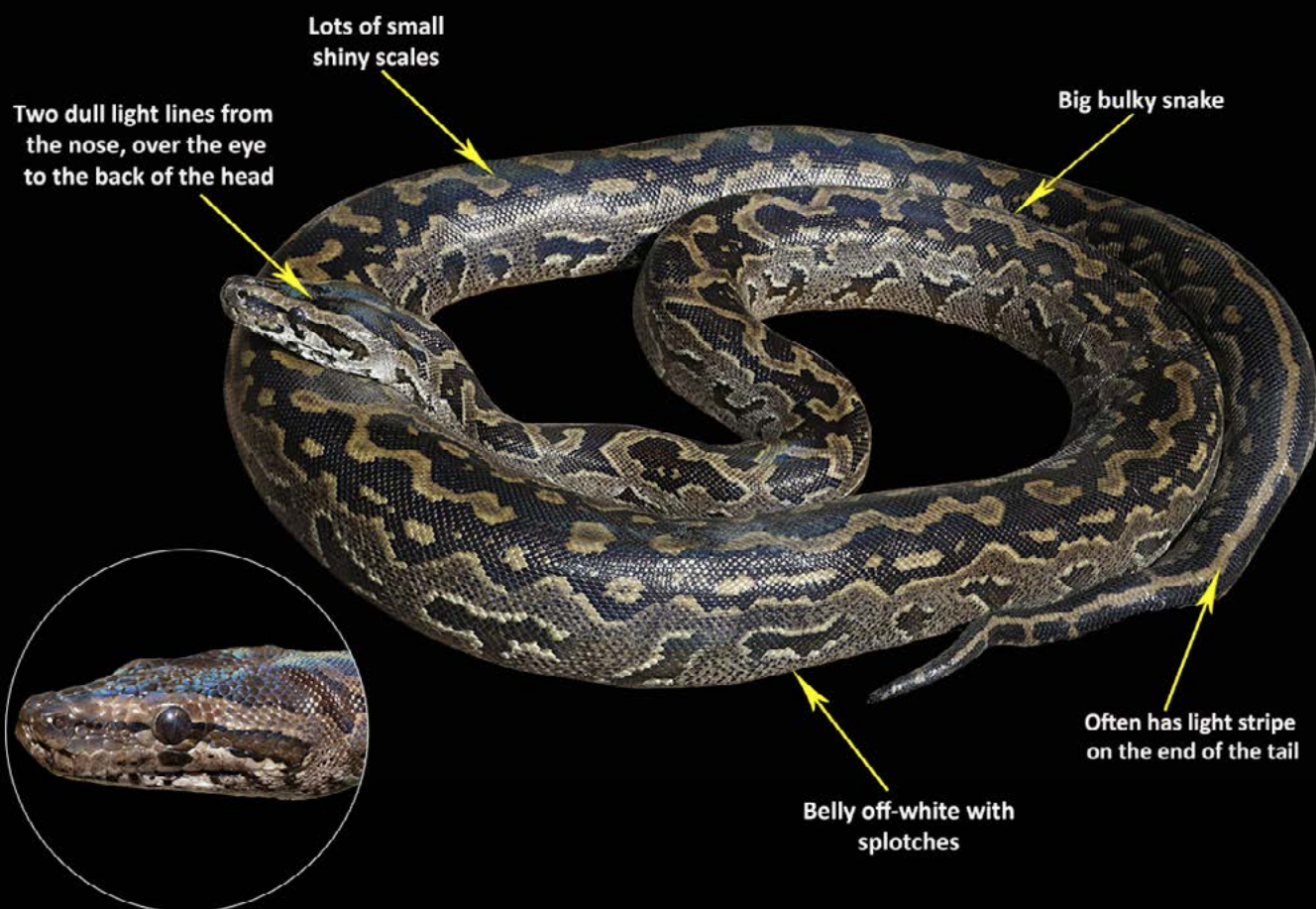
ASI EASY ID

Southern African Python (*Python natalensis*)

NON-VENOMOUS, BUT CAN INFLICT A NASTY BITE

Average length: 3 m. Maximum length: 5.5 m

Often confused with: Puff Adders



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



SNAKEBITE PROFILE

SOUTHERN AFRICAN PYTHON

Python natalensis



Risk of Bites

Pythons are ambush hunters and bites usually occur when walking down pathways or through thick bush, where a python is coiled up awaiting a passing prey animal.



Most Bites

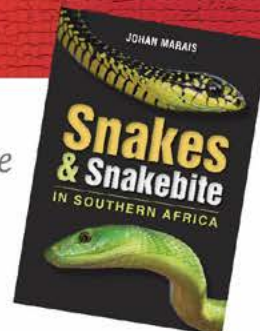
Most bites occur to the lower leg, when the snake lunges at a passerby. They are usually quick to release the bitten person, and often leave a row of small teeth punctures in the leg or calf.



Symptoms & Venom

Pythons have no venom, but have over 80 long recurved teeth, which they use to hang onto prey items. Large pythons may leave nasty wounds after a bite.

See pages 103-105
– *Snakes and Snakebite
in Southern Africa*
(2024).



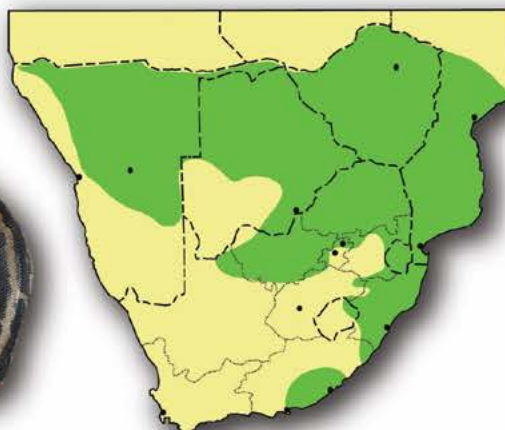
First Aid

Immobilise and reassure the patient. Bandage the bitten area to reduce blood loss and transport the victim to a hospital or doctor.



Medical Treatment

In severe bites victims may require stitches. Bites from pythons should be cleaned and disinfected and monitored for signs of infection. Doctors will also administer tetanus injection.



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com

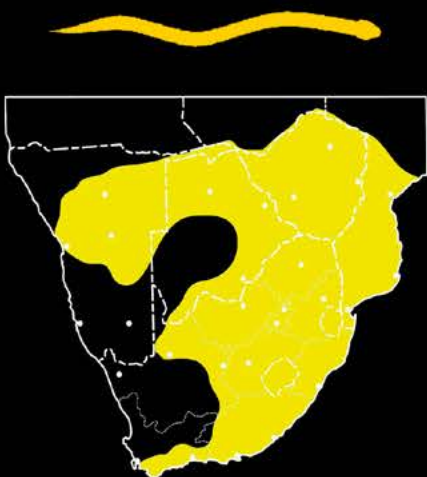


HARMLESS



Common Wolf Snake (*Lycophidion capense*)

Maximum Length:
65 cm



Other names:

Cape Wolf Snake, Gewone Wolfslang

This common little snake averages 25-40 cm in length and is frequently found in suburban gardens. It is active at night when it hunts for lizards, especially skinks and geckos. The Common Wolf Snake is fond of damp localities where it seeks refuge under rocks, logs and in rubbish heaps. Though harmless it has long, recurved teeth in both the upper and lower jaw, hence the common name. Females produce 3-9 eggs in early summer. The Common Wolf Snake is difficult to distinguish from the venomous stiletto snake. It differs by having a long thin tail, the head is distinct from the body, and it usually has light spots on the back of each body scale.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Common Wolf Snake (*Lycophidion capense*)

HARMLESS

Average length: 40 cm. Maximum length: 64 cm

Often confused with: stiletto snakes



Head is distinct
from body

Photo © Luke Kemp

Flattens body
when threatened

Has light spots on the back
of each body scale

Has a long thin tail

Has long recurved teeth
in both the upper and lower jaw,
hence the common name

Belly can be white or black.
Those with white bellies usually
have dark spots on belly

www.AFRICANSNAKEBITEINSTITUTE.com



HARMLESS



Brown House Snake

(*Boaedon capensis*)

Maximum Length:
1.5 m



Other names:

Bruin Huislang

The Brown House Snake, true to its name, frequents human dwellings where it feeds largely on rodents and lizards. It is completely harmless and relies on muscle power to constrict its prey. It is widespread in South Africa and very common in suburban gardens.

This snake is active at night and is relatively slow-moving. Most individuals are medium to dark brown with a mother-of-pearl belly and two light lines on either side of the head – one from the nose through the top of the eye to the back of the head and the other from the back of the eye to the angle of the jaw. The Brown House Snake comes in a variety of shades of brown, often with mottling of white along the neck.



© Johan Marais African Snakebite Institute 2022

www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



ASI EASY ID

Brown House Snake (*Boaedon capensis*)

HARMLESS

Average length: 55 cm. Maximum length: 1.5 m

Can be confused with: Slug-eaters



Varies in colour from light brown to reddish brown, chocolate brown, tan and pink

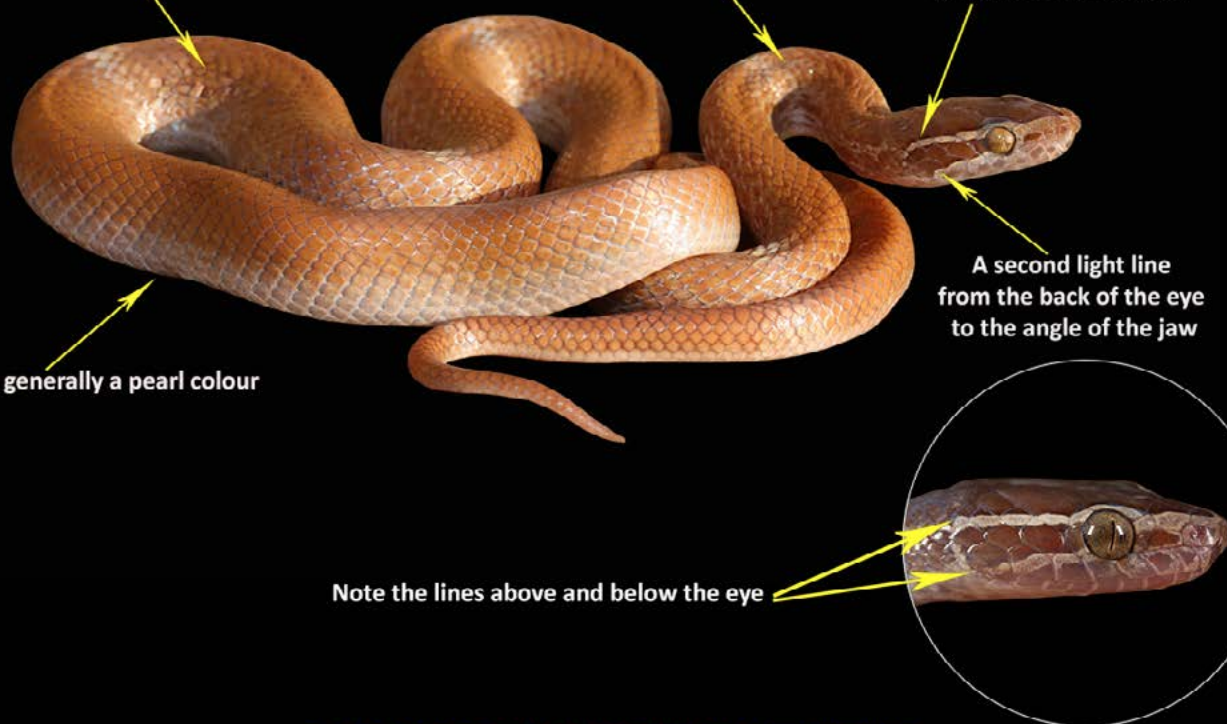
May have mottled markings down the neck

One light line from the nose through the top of the eye to the back of the head

Belly is generally a pearl colour

A second light line from the back of the eye to the angle of the jaw

Note the lines above and below the eye



www.AFRICANSNAKEBITEINSTITUTE.com

www.AFRICANSNAKEBITEINSTITUTE.com



FIRST AID FOR SNAKEBITE



IN THE EVENT OF A SNAKEBITE, DO...

- ✚ Do get the victim to a hospital as soon as possible and in a safe manner. This is by far the most important first aid measure. For medical advice in a snakebite emergency, call the African Snakebite Institute **+27 (0)82 494 2039**.
- ✚ Do keep the victim calm. Often easier said than done as people tend to panic in a snakebite emergency. Many snakebite victims go into shock, experience a drop in blood pressure and may even become nauseous and faint. If possible, do not allow the victim to walk, run, jump etc. Bear in mind that more than 99% of snakebite victims that are hospitalised within a few hours survive their snakebites.
- ✚ Do remove jewellery as well as tight clothing. If bitten on the hand/arm/foot/lower leg, remove rings, bangles, bracelets, watches, anklets and any other tight jewellery including tight clothing.
- ✚ Do administer artificial respiration if patient stops breathing. In serious snakebite cases involving snakes with predominantly neurotoxic venom, like the Black Mamba or Cape Cobra, the victim may soon experience difficulty with breathing, even within 20 minutes. This is a very serious medical condition and assisted breathing could be life-saving. Mouth-to-mouth resuscitation may be beneficial in the short term, but the proper use of a Bag Valve Mask is far better in such an instance.

SPITTING SNAKES

- ✚ The common spitting snakes in South Africa are the Mozambique Spitting Cobra or M'Fezi and the Rinkhals. In the western parts of the country these are replaced by the Black Spitting Cobra. These snakes spray their venom up to a distance of three metres and do so in self-defence to temporarily blind their attacker so that they can make a quick escape.
- ✚ Although spitting snakes accurately aim for the eyes, the venom diffuses into a spray over a wide area and may get onto your hair, face, arms and chest. Venom in the eyes is very painful and must be flushed or diluted as quickly as possible. The production of tears starts this process, but as a first aid measure, flush the eyes with water or a weak (normal) saline solution. The idea is to flush away any excess venom. Transport the victim to a medical doctor, who will examine the eyes for corneal damage and prescribe antibiotic eye drops to prevent secondary infection. There is no reason to use diluted antivenom – it has no proven benefits and may cause an allergic reaction.
- ✚ If treated quickly, the chance of permanent damage to the eyes is extremely remote.

SNAKEBITE EMERGENCY NUMBERS

Netcare Ambulance: 082 911

ER24 Ambulance: 084 124

Provincial Ambulance: 10177/112

African Snakebite Institute: +27 (0)82 494 2039

HOSPITALS AROUND STANGER

KwaDukuza Private Hospital
Tel: 032 815 3000
-29.347541, 31.276004
Theunissen Rd, KwaDukuza, 4449

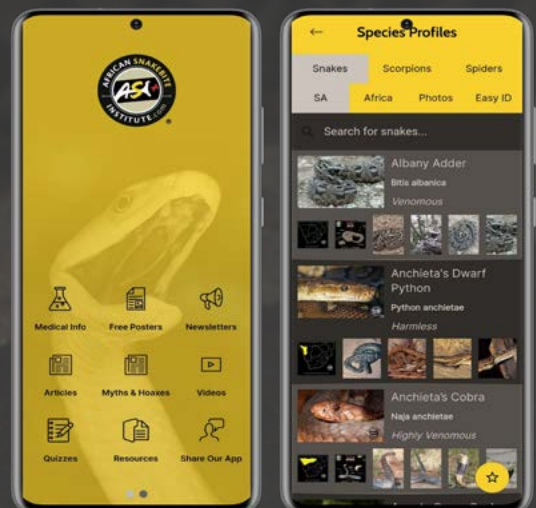
General Justice Gizenga Mpanza
Regional Hospital
Tel: 032 437 6000
-29.335879, 31.284423
23A KING SHAKA STREET, Stanger,
Durban, 4450



SNAKE REMOVERS CONTACTS

Find SNAKE REMOVERS in
Stanger
HERE

DOWNLOAD THE
FREE
ASI SNAKES APP
HERE



www.AFRICANSNAKEBITEINSTITUTE.com

ASI VEHICLE SPONSORS



The ASI team travels thousands of kilometres a month, often to remote parts of southern Africa, for both snake awareness and venomous snake handling training and for reptile surveys.

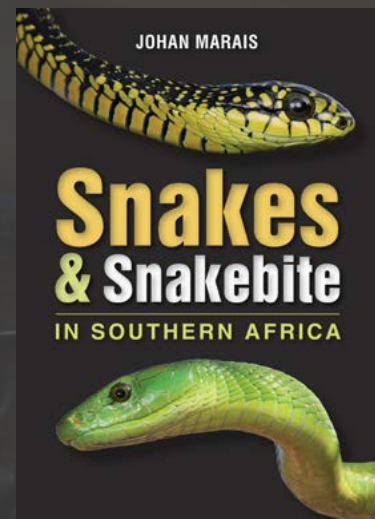
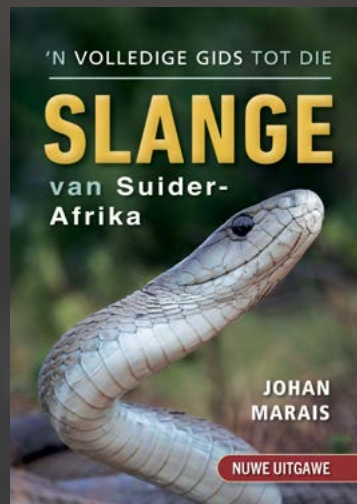
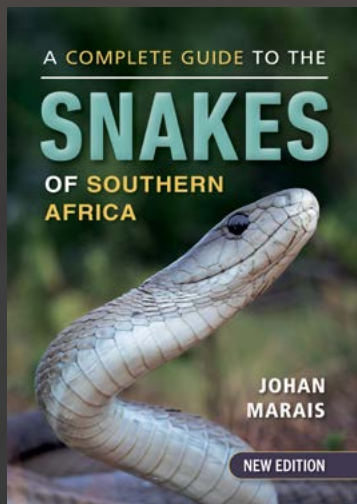
We're honoured to have great sponsors, who've made significant changes to our fleet of hardworking vehicles, ensuring they meet our every need.

We'd like to thank our sponsors for making the smooth travel possible.

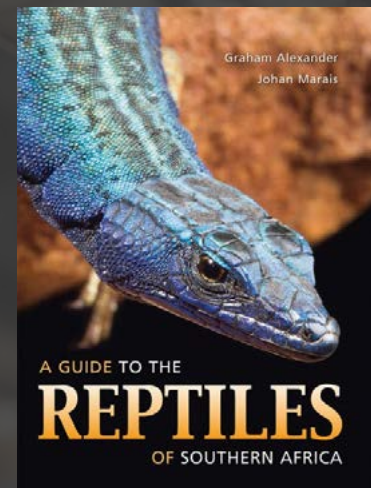
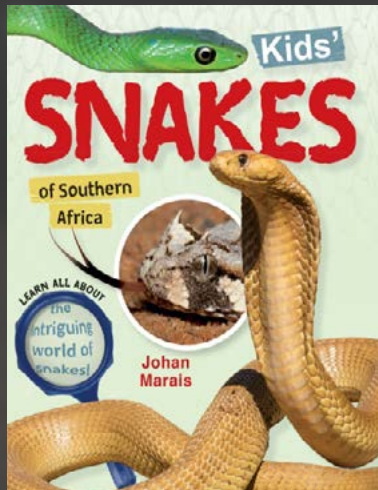
ASI VEHICLE SPONSORS



MORE RESOURCES



SHOP OUR RANGE OF BOOKS ONLINE [HERE](#).



CONTACT US

Snake Courses: +27 64 704 7229 or courses@asiorg.co.za

Snake Handling Equipment: +27 60 957 2713 or info@asiorg.co.za

Snake Identification: +27 72 979 1249 or support@asiorg.co.za

Snakebite Emergencies: +27 82 494 2039

WWW.AFRICANSNAKEBITEINSTITUTE.com