

# SLIPPERY CUSTOMERS

Gabon is home to some of the world's most exotic and poisonous snakes, but finding them, explains herpetologist Olivier Pauwels, requires some cunning...

**D** IARIES BY THE FIRST TRAVELLERS TO GABON recount jungles infested with snakes. In his *Explorations and Adventures in Equatorial Africa*, the colonial explorer Paul Du Chaillu (1831 - 1903) even admitted that he had nightmares about them. More recently, in the twentieth century, in *La mémoire du fleuve* (The River's Memory), travel writer Jean Michonet describes an interminable (and improbable) fight between a gigantic python and an elephant.

Yet, when you actually go into Gabon's forests, you will be seriously disappointed if you expect to see thousands of snakes as Du Chaillu described. Unless you know where to look, you can spend weeks without finding a single one.

Gabon's snakes work hard to keep it that way. To find them, you have to go into the forest at night and, by the weak light of a headlamp, search out the little twig that moves suspiciously in the absence of any wind. You will have to choose the right rotten tree-stump, lift up the very piece of bark under which a

snake might be hiding, and, in a quarter of a second, make your move and snatch the tail that is making a dash for the nearest patch of muddy water.

And you will have to know your snakes well so that you can tell at a glance which ones are poisonous and which ones are not, and predict the ways in which they will defend themselves. Most important of all, you will have to cope with all the other risks and discomforts that are part and parcel of jungle expeditions, whether by day or night, such as elephant and buffalo charges, insect bites, hunters' traps and many more.

It is only because a handful of herpetologists (biologists who specialise in the study of reptiles) have spent endless nights tracking these snakes through Gabon's swamps and been eaten alive by mosquitoes and leeches, that today we have at last a reasonably good idea of the snake species that live there.

There are no less than 70 of them, of which the smallest, the Brahminy Blind Snake or Flowerpot Snake (*Ramphotyphlops braminus*), an exotic Asian species that was introduced and is →

The whip snake (*Psammophis cf phillipsii*) feeds on rapid moving diurnal prey such as lizards



Caesar's African Water Snake (*Grayia caesar*) and right, African rock python (*Python sebae*), a non-venomous species. While not considered endangered or threatened, this species is listed as a CITES Appendix II species because their distinctive skin is used in the leather industry

now well established in Libreville, measures just under 20 centimetres. The longest is the Seba Python (*Python sebae*), which can reach up to six metres in length.

In theory, the adult of this species is big enough to attack and eat a human being, but there do not seem to be any recorded instances of this happening in Gabon. In any case, few individuals reach the maximum size, because they are usually killed by hunters early on. Python meat is highly prized in many parts of the country. It is pinkish and a bit like veal, but tougher. Pythons often venture into the villages, attracted by the alluring smell of the hen-houses, but the squawking of the hens often gives them away, waking the man of the house and the snake ends up in the cooking pot.

### Ferocious fangs

Gabon has 30 species of venomous snakes, almost half the total number of species recorded in the country. Most are only mildly poisonous, but several, mainly the vipers, the cobras and the mambas, can deliver a potentially lethal bite. The most famous is the Gabon Viper, a solid, thick snake that can reach a length of 180 centimetres. The fangs that contain its venom can measure up to five centimetres and are the longest of any snake.

The Gabon Viper is not especially aggressive, but it is so well camouflaged by the carpet of leaves on the forest floor that people are sometimes bitten when they step on it accidentally. On the other hand, it is a dish that is much enjoyed in the north of Gabon. This dish is called The Bible, because the insides of the slices, which show the line of the snake's ribs, look a bit like lines of writing, and on the outside the snake's brown skin suggests the leather binding of the Holy Scriptures.

You hear people in Gabon talk about the Black Mamba, but in fact that species is not found there. The name refers to the Forest Cobra (*Naja melanoleuca*), Gabon's commonest venomous snake. Not only is its venom extremely toxic, but it has no fear of man and ventures into houses and other structures, particularly latrines, a habit that makes it responsible for the country's highest number of serious cases of snake-bite annually.

The only true mamba found in Gabon is the Jameson's Mamba (*Dendroaspis jamesoni*), which is green, black and yellow. It is shy, lives in trees and rarely goes into villages. Its venom is highly toxic, and hunters are usually bitten when they try to kill it with a machete, but fail.

In Gabon, snakes are

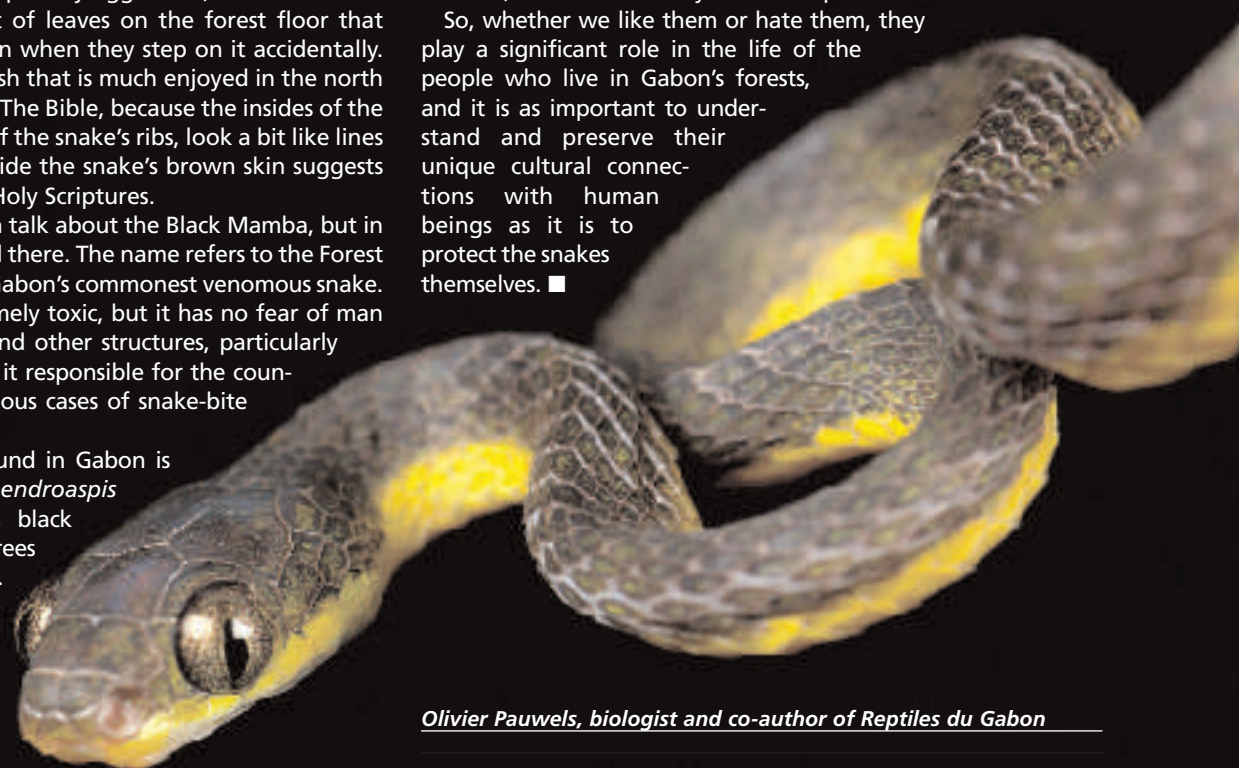
used in all kinds of traditional remedies and magic rituals. The heads of pythons and other venomous snakes are sometimes used for making knuckle-dusters to give an enemy a good thrashing. The smoked head of the Ornate Water Snake (*Grayia ornata*) is used to help women who are experiencing a difficult labour when their waters have broken but the baby is taking its time to be born.

This aquatic snake hunts in the water at night and rests during the day on overhanging branches. When it is disturbed, it jumps into the water head first. The logic of the traditional birth remedy is therefore that the baby's head will do the same and try to get back to the waters its mother has lost!

Many kinds of snakes are also used in so-called 'vaccinations', ritual practices that consist of sprinkling on incisions the ash left after complicated mixtures have been burnt, which is believed to confer protection. The Ornate Water Snake that eats fish is used in vaccinations designed to improve the performance of fishermen and swimmers.

In their book *Rituals and popular beliefs in Gabon*, André Raponda-Walker and Roger Sillans mention the use of snakes in making talismans and various other traditional rituals. The uses made of snakes vary widely from one part of the country to another, and involve many different species.

So, whether we like them or hate them, they play a significant role in the life of the people who live in Gabon's forests, and it is as important to understand and preserve their unique cultural connections with human beings as it is to protect the snakes themselves. ■



Olivier Pauwels, biologist and co-author of *Reptiles du Gabon*

## OLIVIER PAUWELS UP CLOSE



### What is it about reptiles that fascinates you enough to make them your life's work?

The most fascinating thing about snakes is how little we know of them. Snakes make up a research subject that is neglected by other scientists, mainly due to the unpopularity of snakes, even among the scientific community. What I love is researching the private life of snakes: what they eat, where they live, where they hide? Surprisingly, we know very little about these basics, including what each species eats. Another very exciting thing is to discover a species new to science and naming it.

### Where else have you worked with snakes in the world?

Besides tropical Africa, I have studied the snakes and other reptiles and amphibians of Southeast Asia. In Asia, the potential number of new species

## “WHAT I LOVE IS RESEARCHING THE PRIVATE LIVES OF SNAKES: WHERE THEY LIVE, HUNT AND HIDE”

waiting to be discovered is very high. During every field trip, we found new species. My colleagues and I found five new species of Bamboo Pit Vipers; they were all around a metre long, very venomous and very colourful, and it is just incredible that nobody had discovered them before.

### Which of Gabon's snakes most intrigues you and why?

The most secretive snakes are the blind snakes that live underground. They are small and harmless. They rarely come to

the surface and almost nothing is known of their biology. A lot of new species are still awaiting scientific classification. I once found one of these blind snakes on Mount Iboundji in central Gabon. It was small and pink, and, although these snakes never usually come out of the ground, this one came crawling towards me, as if it wanted to be caught – and it turned out to be a new species!

### Tell me about the most exciting snake discovery you made in Gabon?

I love aquatic snakes. The snake that I was most delighted to discover in Gabon was a water snake (*Hydraethiops laevis*) which I caught in a forest stream in the Chaillu Mountains in central Gabon. Before I collected this specimen, the species was formerly known by only two other individuals and discovered in Cameroon, more than 500km away, a century before.

### What is the most memorable meeting you have had with a snake in Gabon?

My first encounter with a Gabon Viper was very impressive; I had never handled such a massive creature; it was more than a metre long and very aggressive. The venom fangs of adults can reach a length of five centimetres.

### What precautions do you take when you are hunting for snakes?

Anti-venoms have to be stored in a cool room so they can't be carried with you into the field. The best way to avoid a problem is to be careful and well trained, to learn to tell by sight what kind of snake you are dealing with and to anticipate their likely defensive behaviour. You can't improvise if you are a snake researcher. To study snakes and stay safe requires training, gained mainly by first accompanying more-experienced people into the field. It is

important, too, to have an emergency plan in case of snake bite. That means having a ready means of get-away and the contacts of the closest hospitals equipped with anti-venoms.

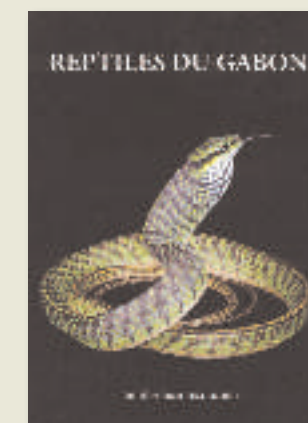
### Is there a snake that is still on your wishlist?

I love discovering new species, so any snake new to science is welcome. New species are often found in unexplored areas, usually in difficult-to-access mountains. You really have to deserve new species. However, sometimes they are found in unexpected places: a colleague and I recently classified a new species from Hong Kong.

### Why have you chosen Gabon as the country to focus your research?

Gabon has huge appeal for biologists; it has one of the best preserved forests on earth and at the same time one of the least studied. Besides the biological aspects, Gabon has a very welcoming population, good food, a fascinating history and culture and extraordinary landscapes. Where else can you find all this? ■

Interview by Sarah Monaghan



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