

Head **to** head

When two snake biologists came across a Cape cobra hunting a puff adder, little did they know that the Kalahari showdown would last for the next 36 hours
By Robin & Bryan Maritz

The tracks impressed on the sandy surface suggested that the battle started hours before we arrived. As two snake biologists, stationed in the Kalahari for research on Cape cobras, the opportunity of a lifetime was gifted to us when we watched a Cape cobra hunt a puff adder.

Centre stage was a slightly speckled cobra following a slow-moving female puff adder amongst a network of gerbil burrows. The battle escalated when the puff adder received a bite from the cobra. However, the puff adder seemed unfazed by the envenomation. The puff adder's strategy was defensive. She repositioned her head continuously to shift it into a less vulnerable position. Snakes almost always swallow their prey head first, making the puff adder's strategy highly effective against the cobra. Although the cobra left the puff adder behind several times, it would resurface from a rodent burrow every so often to continue its pursuit. In search of a refuge from the midday ►

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endandunt essimi,

The cobra delivered several more bites, but the puff adder continued to block access to her head .





THE FEATURED OPPONENTS

	PUFF ADDER (<i>Bitis arietans</i>) Highly venomous , cytotoxic (cell-destroying) venom	CAPE COBRA (<i>Naja nivea</i>) Highly venomous , neurotoxic (nerve-destroying) venom
LENGTH	Average 80 cm, maximum 1.4 m (in southern Africa)	Average 1.4 m, maximum 2 m
APPEARANCE	Distinct chevron-like dark markings, stocky build with triangular-shaped head, keeled (rough) scales	Variable; yellow, dark brown, or a speckled combination, slender build, ability to display hood, smooth scales
DIET	Mostly rodents, but also frogs, birds and lizards	Snakes (including other Cape cobras), lizards, small mammals, birds (especially sociable weavers) and frogs
DISTRIBUTION	Throughout southern Africa	Restricted to the western parts of South Africa and the southern parts of Namibia and Botswana



A range of gurgling and chewing sounds were produced as the cobra walked its jaws over the puff adder.

sun, the cobra retreated to the shade of several small blackthorn trees and the puff adder followed suit. Suffering from the effects of the midday sun, we too retreated to a better thermal environment.

Hours later we returned to find the two snakes face-to-face in some shade. Five more bites were administered by the cobra, but much of the cobra's time was spent waiting adjacent to the puff adder — waiting for it to be subdued and consumable. The effects of the venom or exhaustion were apparent in the puff adder; she was sluggish but continued to respond with defensive positioning whenever the cobra approached. The pair also caught the attention of a pair of chat flycatchers who proceeded to alarm call and stare curiously at the preoccupied predators. Eventually we left the two snakes for the night thinking we would find only a fattened cobra the next day, but more realistically an abandoned scene and uncertainty regarding the outcome.

With just a dim glow in the sky, we set out fully prepared to find only tracks in the sand. However, there, exposed in the open, centre stage, was the puff adder! The sand was littered with tracks suggesting that it had been a long night for the puff adder, and it was clear that the cobra's venom had started to affect her. Seconds before we decided to leave, as if on cue, the cobra stuck its head out of the burrow and stared directly at us. We watched in disbelief as the cobra emerged intent on finding the puff adder that it had left behind.

It was a new day, but the same battle

continued. The cobra delivered several more bites, but the puff adder continued to block access to her head and demonstrated that she still had some fight left. The puff adder went on the offence and struck at the attacking cobra, which prompted a quick retreat by the cobra into a nearby burrow. For the next 45 minutes, we watched as the puff adder lumberingly left the hot Kalahari sunshine for some shade. Finally, she took shelter in a large burrow. However, it was the same burrow that the cobra had been using as his stage entrance.

Upon our return that evening, we illuminated the burrow that had harboured the puff adder earlier that day and the light revealed a cobra in place of the puff adder! After 36 hours of fighting and waiting, the cobra was victorious, and it began ingesting the puff adder head first. The cobra was fully engrossed in its prey which allowed us to get quite close to the burrow, close enough to hear a range of gurgling and chewing sounds that were produced as the cobra walked its jaws over the puff adder. As the light faded we retreated to let the winner eat its prized, energy-rich meal in peace.

Puff adders and Cape cobras are frequently seen in Kgalagadi Transfrontier Park, West Coast National Park and Table Mountain National Park. Although both species become relatively inactive during the winter months, making them difficult to see, the increased temperatures associated with spring bring increased chances of finding these fascinating predators that sometimes become the prey. 🐾



GURU Robin & Bryan Maritz are researchers at the University of the Western Cape and are involved in an ongoing study of Cape cobra biology.