

Reptiles

Puff Adder Bitis a. arietans

This sluggish snake emerges at dusk. It ambushes its prey, which are mainly rodents and birds. Puff Adder produce a cytotoxic venom which affects muscles, causing swelling and pain. When threatened, the puff adder will hiss and strike. The chevron patterning of the snake varies regionally.



Sand snakes

Psammophis spp.

Sand snakes (two species) are very slender and fast moving. Encounters are normally a fleeting flash of brown as they quickly disappear. Sharp-eyed visitors may encounter well concealed individuals stationary, in a low-lying shrub or vegetation clump. They are common in the park and are often active at high temperatures, actively pursuing their primary prey, lizards.

Black-necked spitting cobra and Cape cobra

Naja nigricollis woodi and Naja nivea

Both cobras are long slender snakes. Cape cobras are variable in colour and include black, yellow, and speckled (yellow and brown) phases while black-necked spitting cobras are uniform black. Both are diurnal and are also active in the early evening. Both cobras eat a variety of small vertebrates, including other snakes. Cape cobras are often seen raiding sociable weaver colonies. They should be viewed at a distance and not provoked. It produce a neurotoxic venom and is dangerous.



Augrabies Flat Lizard

Platysaurusbroadleyi

Spectacular colour and often bizarre behaviour make the Augrabies flat lizard a marvel to watch. This unique lizard is readily visible in and around the various viewing sites in the park, particularly near the Falls. While they scurry about in search of food and mates, they are often under foot, their multicoloured skins shimmering in the desert sun. Because the Augrabies population is among the densest of any lizard population world-wide, visitors are frequently rewarded with unique viewing experiences of lizard social behaviour. This eye-catching social behaviour ranges from male dominance contests to courtship and sexual harassment.

Viewing lizards

Flat lizards in the viewing areas are habituated to people and allow close approach often ignoring people until they are only a few metres away. This makes for perfect lizard viewing! Flat lizards are active throughout the year, but for shorter periods during winter and only if it is sufficiently warm. During summer, they are most active during morning hours and escape to the shade during the heat of the day. The breeding season is the best time to observe social behaviour. Males are most aggressive from August-December, although aggressive behaviour will persist to some degree until autumn. Most copulations occur during September and October and hatchlings begin appearing during late December-January.

Flat lizards have learnt that humans occasionally drop morsels of food and are quick to seize an unattended sandwich. (Feeding of animals changes their natural behaviour and this should therefore be avoided.)

The rainbow lizard

The multicoloured males and drab females almost appear to be different species. Males are brightly coloured because they compete for the attention of females and females equate brightness with 'quality'. Females are drab because avoiding predation is their chief concern. However, males and females have one thing in common, they are both flat! This allows them to squeeze into tight rock crevices where they are safe from predators. A number of animals eat flat lizards. At Augrabies, their chief



predator is the rock kestrel, and to a lesser degree the sand snake.

Male rivalry and badges of status.

Some of the most spectacular lizard behaviour occurs when rival males meet. During the breeding season, these interactions stem from aggression related to reproductive behaviour (males are territorial). Males use status signalling badges to signal levels of aggression and fighting ability. These badges occur on the lizard's abdomen and are orange, yellow, or a combination of the two. Generally, better fighters have larger badges. By signalling fighting ability, males can determine the superior fighter in a matter of seconds, without having to engage in fights which are often costly. The "loser" can therefore back down without any risk of injury. Under some circumstances, the badges may be ineffective and two males may engage in a fight. Besides biting, fights involve various forms of displays in which males attempt to intimidate their opponents.

Territories, sneaking, and courtship.

Males are territorial, but the unique situation at Augrabies makes for an interesting story. Because the population is so dense, good territories are in short supply. The result? Many males adopt a 'sneaker' strategy. That is, they essentially sneak around in search of females because it doesn't pay to defend a low quality territory. Sneaking is a common phenomenon among territorial animals. Sneaking involves trying to secure matings using



A male Augrabies flat lizard displaying to a rival male

alternative means. In flat lizards, sneaker males intercept travelling females.

During courtship, the male bobs his head while circling the female. Males may grab a female by a limb or the neck and attempt copulation. This activity often attracts the attention of other sneaker males and in high density areas, it is not uncommon to see 2-3 males pulling a female from different directions and climbing on her back. During such pandemonium, males rarely succeed in mating with the female. Males will also attempt to displace rivals from a female; copulating pairs are sometimes disrupted in this manner. Females can reduce this effect by spending much of their time in a single male's territory. The territorial male will keep sneaker (and other) males at bay.

Lizards on a diet of figs and flies.

Flat lizards are primarily carnivorous and much of their diet at Augrabies consists of black flies, which occur in large plumes along the fast flowing stretches of the Orange River. This will no doubt cheer any visitor that is troubled by the swarms of flies inhabiting the park! They may also feed on larger insects that stray across their path. Lizards feeding on flies represent a spectacular sight. They frequently leave the ground as they snap flies from the air and some even perform complete somersaults!

Flat lizards can also be seen gorging themselves on Namaqua figs, undoubtedly their favourite food. When lizards discover a fruiting fig tree, they will return daily until all ripe figs on the ground

have been eaten. However, they experience stiff competition from birds such as starlings and bulbuls that also feed on figs. Because figs are so nutritionally valuable, lizards sometimes attempt to steal ripe figs from the mouths of other flat lizards. To reduce this threat, lizards quickly pick up their prize and run to lizard-free areas to eat in peace!

Female Augrabies Flat Lizard

Bibron's thick-toed gecko

Pachydactylus bibronii

This is a large, stout brown gecko with white tubercles (enlarged scales) prominent on its back. Bibron's gecko is nocturnal (active at night) and is commonly seen on and in buildings where they feed on insects attracted to lights. In fact, probably the best place to see them is the ablution block in the camp ground! (Bibron's geckos naturally occur on rock outcrops and can often be seen sheltering in rock crevices during the day.)



Southern rock agama

Agama atra

Rock agamas are stocky, brightly coloured lizards that are frequently seen perched on rocks in an elevated, pushup position. Males are territorial and display to rivals and potential mates using head bobs and pushups. Bobbing and pushups are often rapid and sometimes directed at humans if they feel threatened! Rock agamas are diurnal (day-active) and are common throughout the park, but particularly on rocks bordering the road to the Ararat viewpoint.

Nile or water monitor Varanus niloticus

Water monitors (leguans) are the largest lizards in Africa, with a record specimen measuring 2 420 mm (about 8 feet) but most individuals are substantially smaller. Water monitors are associated with water bodies, and are, thus common along the Orange River, and are often observed near some of the Klipspringer Trail huts. They are diurnal and feed on a wide variety of invertebrates and small vertebrates. These large lizards are nervous, and evade human presence by diving into the water.





Leopard Tortoise

Geochelone pardalis

This is the largest land tortoise in South Africa. During the dry months tortoises will seek shelter and remain dormant. They are usually seen in the rainy season. The leopard tortoise is the only tortoise in South Africa that does not have a neck shield. This tortoise will gnaw on bones and droppings to obtain calcium for shell and egg development.