

Reptiles of the Western Cape:

Snakes:

Berg Adder/ Berg Adder



Bitis atropos

Size: Adults reach an average length of 40 cm (max. 60 cm).

Description: A thick bodied snake with the head distinct from the body, but more elongated than other adders. The coloration is generally dark grey with a series of darker grey or dark brown half circles (flat side facing down) down the upper sides. Below this is a series of square to X-shaped dark grey or brown blotches. Both series of blotches are outlined with a thin white border. The top of the head normally has a spearhead-shaped darker marking, also outlined in white. The overall pattern effectively disrupts the snake's shape.

Biology: This snake is strongly associated with mountains and generally occurs at higher altitudes, but does also occur at low altitudes in the case where mountains arise from the low altitude such as on the Cape coast. It preys on rodents, lizards and amphibians. It is viviparous and gives birth to 4 to 15 young. It is a somewhat nervous snake and hisses profusely when approached and will usually retreat into thick cover immediately if approached. It is quite agile for an adder and can move quite quickly. If pursued or cornered, it will strike rapidly at an aggressor. Few people are bitten by this snake, but due to its good camouflage and relatively small size, it is sometimes not seen and stood or sat on resulting in severe injuries to the snake and sometimes a consequent bite to the offender. The venom causes a number of different symptoms including cytotoxic and neurotoxic effects. Envenomation by this species should be taken seriously and the patient should be hospitalized for appropriate symptomatic treatment.

Distribution: Mountains of the Western Cape, Mpumalanga and the Chimanimani Mountains of eastern Zimbabwe.

Distribution in CWCERT: This species is most likely to be found on the Darling Stagger and Eves trail.

Threats: None other than illegal collecting for the pet trade. This species does not normally settle well in captivity and often dies as a result.

Puff Adder / Pofadder



Bitis arietans arietans

Size: Adults may reach an average length of 90 cm, with specimens from East Africa attaining maximum lengths of 1.5 m.

Description: A heavily built snake that is very thick for its length. The head is wide and clearly distinct from the neck. There are two dark (usually black) bars running from the eye to the jaw. The eye has a vertical pupil. It has strongly keeled dorsal scales that create a matte effect. This, in conjunction with the pattern of wavy pale chevrons and spots on a dark brown to black background, creates superb camouflage for this snake.

Biology: Puff adders are generalists that tolerate a wide variety of habitats and environmental conditions across Africa. They are sit-and-wait predators that, although slow-moving, can strike very rapidly. Their primary prey is rodents, although they are known to take toads and lizards, particularly in the case of juvenile puff adders. They are, by African standards, relatively common and may occur in reasonable numbers in highly suitable habitat such as low, thick coastal bush. Puff adders are viviparous and are known in exceptional cases to give birth to very large litters and a litter of 156 has been recorded in East

Africa; in South Africa litters are usually between 20 and 40. Puff adders have a strong venom with primarily cytotoxic effects that may lead to death if not treated. Puff adders are responsible for a large percentage of the venomous snakebites in Africa. This may be ascribed to their excellent camouflage and relatively slow speed of escape and their very fast strike, which allows people to approach too closely or even step on the snake. If the snake becomes aware of an oncoming human it will normally take evasive action if given time or will hiss very loudly. Only when approached too quickly for the snake to avoid a confrontation, it will strike. Bites from this snake are serious due to the strong venom and the relatively long fangs that allow deep injection of the venom. Patients suffering a puff adder bite should be immobilized and taken to a hospital as soon as possible for specialist treatment.

Distribution: Puff adders occur from the Arabian Peninsula throughout most of Africa. The only areas in Africa from which they are absent are the true desert areas and tropical rainforest.

Distribution in CWCERT: The snake is most likely to be found on the Eve's, five bay and Darling Stagger trail.

Threats: The main threat facing puff adders is habitat destruction, particularly along coastal areas. Because of their venomous bite, these snakes are often killed. This should be discouraged as these snakes are very efficient rodent predators and these snakes can be easily moved from areas where they may endanger humans. They are slow-moving and heavy bodied and can thus be easily swept or prodded into a box and moved elsewhere by tipping the box over at the destination.

Boomslang



Dispholidus typus typus

Size: These snakes attain an average length of 1 m (max. 1.8 m).

Description: Males and females may differ significantly in coloration, but this large, slender and graceful snake with its massive eyes is easy to identify. Another identifying character is the diagonally keeled and elongated dorsal scales. Males from the Western Cape are generally black with cream to yellow spots along the lower sides and the ventral scales are black edged in yellow. Females are duller, varying from brownish grey to charcoal with pale yellow edged ventral scales. Hatchlings have very different coloration as they are a speckled grey, with white lips, pale brown or green eyes and orange interstitial skin on the throat which is visible if they expand their throat in threat.

Biology: The snakes are primarily arboreal and are amazingly agile in trees. They do venture onto the ground and when they do so they keep their head raised off the ground to enable them see their surroundings well. They generally move very fast when on the ground as they are more visible and vulnerable. They are often mobbed by birds, upon which they regularly prey. They are generalist feeders and will also eat lizards – particularly chameleons, frogs, rodents and other snakes. They are nervous, fast, agile snakes with excellent vision and thus manage to avoid encounters with humans. Most people only get to see a glimpse of the snake before they ascend a tree or disappear in thick vegetation. For this reason, and the rear position of the fangs, bites from this species are very rare and restricted to snake handlers. The venom is a slow-acting, but very potent haemotoxin for which a specific Boomslang antivenom or whole blood transfusion is required. They lay between 10 and 25 eggs.

Distribution: They are distributed throughout the well-vegetated parts of Africa.

Distribution on the CWCERT: is most likely to be found on the Darling stagger trail, Berg river trail and Eve's trail

Threats: Habitat destruction and intentional killing by people. Although this snake possesses potent venom, it poses almost no danger as it avoids close encounters with humans and does not bite readily and also has fangs situated far back in the mouth. Avoiding killing this snake will also help avoiding the opportunity for being bitten.

Common Egg Eater /Gewone Eiervreter



Dasypeltis scabra

Size: Adults reach an average length of 50 cm (max. 1m)

Description: This slender snake is normally well marked with a clear set of square, dark brown blotches down its back with paler background patches between the dark blotches. There is another row of irregular dark brown blotches down each side. The background colour varies from a greyish brown to beige. The scales are noticeably keeled. The head is small and indistinct from the neck.

Biology: This snake is well known for its peculiar and specialized diet of bird eggs and its amazing ability to swallow eggs much larger than its own head width. This is accomplished by stretching the highly elastic hyoid cartilage that allows the jaws to open very wide. Specialized projections of the vertebrae break the eggshell and the liquid contents are squeezed into the snake's stomach. The empty eggshell is then regurgitated. Eggs containing developed birds are normally rejected. This slow-moving, nocturnal snake is an accomplished climber of bushes and trees in which it finds its egg prey. It may be seen crossing roads after rain. It is entirely harmless and does not even have the sharp teeth that most colubrids have as these would impede the ingestion of large eggs. However, this snake can perform an impressive show of bluster when threatened and prevented from escaping: rasping its rough scales together to form a 'hissing' noise and striking with its black (but almost toothless) mouth open. Strikes are normally pulled back before any contact is made. If contact is accidentally made, one can feel the soft mouth.

Distribution: This snake is very widely distributed throughout southern and eastern Africa. It avoids true desert and rain forest habitats.

Distribution on the CWCBRT: This specie could be seen on the Eves and Bergriver trails

Threats: Habitat destruction and road deaths.

Common Slugeater /Gewone Slakvreter, Tabakrolletjie



Duberria lutrix lutrix

Size: Adults reach an average length of 25 cm (max. 40 cm).

Description: A small brown snake with a head that is not distinct from the body. On closer inspection it can be seen that the back is normally a browner colour than the sides, which are often grey. A very fine, neat black line often separates the back and sides. The sides are also separated from the white edges of the belly by a similar thin black line. The middle of the belly is usually a yellowish brown.

Biology: These snakes are entirely harmless - they are non-venomous and refuse to bite even when threatened. They are very useful snakes to have in gardens and agricultural areas as they prey exclusively on slugs and snails. They give birth to 5 to 12 live young.

Distribution: They are restricted to the damper areas where they can find their diet of slugs and snails of the Western Cape, through the eastern Cape into KwaZulu-Natal, Eastern Free State, Mpumalanga, Gauteng, eastern Limpopo Province and eastern Zimbabwe.

Distribution in CWCBRT: the specie is most likely to be seen on all five Trails the Cape West Coast Biosphere has to offer

Threat: Habitat destruction due to urban and agricultural expansion. It is a slow-moving species that is frequently killed by vehicles on roads. This species should be actively protected and encouraged in rural and urban areas due to its useful role in eating slugs and snails.

Herald snake, Red lipped snake / Rooilipslang



Crotaphopeltis hotamboeia

Size: These snakes have an average length of 45 cm (max. 1 m).

Description: Some specimens of this snake have unmistakable red or orange lips, but often this feature is absent and the lips are cream or white. However, this snake always has black temples and fine white speckles on the brown to grey body. When alarmed, herald snakes will coil into striking position and flatten the head which makes the black temple regions obvious and resulting in the head looking much bigger.

Biology: This snake prefers to eat frogs, but will take lizards and in adulthood, small rodents. It is normally associated with damp habitats and is sometimes found in urban gardens where there is sufficient moisture to sustain its amphibian prey. It is a back-fanged snake with a mild venom that does not result in significant medical symptoms for humans – they are effectively harmless to humans. They bite readily when first captured, but soon settle.

Distribution: It occurs widely throughout the damper parts of the Western Cape and northwards up the eastern coast and inland to Gauteng.

Distribution in CWCBR: Probably occur on the Five bay, Eves and the Darling Stagger trails.

Threats: Habitat destruction in the moister parts of the country due agricultural and urban expansion.

Brown house snake /Bruin huislang



Lamprophis capensis

Size: Adults reach and average size of 60 cm (max 1.2 m).

Description: A slender brown snake with two distinctive pale stripes above the eyes.

Biology: The name House Snake is appropriate in this species as it is often found near human habitation as it is drawn to them by the rodents that inevitably accompany humans. The brown house snake is harmless and an economically valuable snake as it preys primarily on rodents. This snake has become popular in the South African pet market because it is harmless, settles and breeds well in captivity. As with all other South African snakes, permits are required for possession. It lays six to 12 eggs which hatch after two and a half to three months.

Distribution: The Brown House Snake is very widely distributed throughout Sub-Saharan Africa. As it is a human-associated species (and is probably inadvertently transported by humans) its distribution is probably expanding.

Mole snake / Mol slang



Pseudaspis cana

Size: Adults reach an average length of 1.2 m (maximum 1.8 m).

Description: A large, thickset snake with a pointed head that has a noticeably long, sharp snout. It has several variations in colour from beige to pitch black. Most Western Cape adult specimens are black. Juveniles are very differently coloured. They have a beige background with a row of brown spots down each side and a wavy dorsal strip and the eyes have a red iris.

Biology: This snake is inoffensive, non-venomous and will always attempt to move off if encountered. If cornered and provoked it will hiss and strike and if restrained will attempt to bite. The bite is powerful and the teeth may inflict painful cuts, but this is not serious as there is no venom. This species is a major predator of mice, rats and mole-rats and thus a very useful species to have in agricultural and urban areas. This snake is a good burrower and spends much time underground where it finds its rodent prey. Its sharp snout, smooth scales and powerfully muscled body aid its underground movement. Males engage in combat during the breeding season in spring. It gives birth to live young and sometimes in very large litters of 25-40 and even up to 95. This snake is active above ground during spring and may be relatively common in suitable habitat, i.e., coastal sands with large populations of mole-rats.

Distribution: The mole snake is widely distributed throughout southern Africa particularly in the drier, sandy areas.

Distribution on the CWCERT: The Mole snake is a very common snake to be seen in the west coast,. And could be encountered on all Five of the Cape West Coast Biosphere Trails.

Threats: Habitat destruction due to urbanization, particularly on sandy flats. This species is killed by vehicles on the road, particularly in spring when this snake is active.

Spotted Skaapsteker / Gevlekte Skaapsteker



Psammophylax rhombeatus rhombeatus

Size: Adults may attain an average length of 50 cm (maximum 1.2 m).

Description: This is a medium-sized snake with a head that is not very distinct from the body. The anterior part of the body has a row of dark brown, round spots down each side on a grey to olive brown background. There is a similar row of spots on the back. These spots often coalesce further down the body to form bands of dark brown down the back and sides. Specimens in the Western Cape are very attractively marked as the spots do not coalesce as much and are often contrasted brightly against a pale background colour. The belly has bluish-grey to grey mottles. Some specimens have a few orange to red spots scattered around the sides of the belly and neck.

Biology: Skaapstekers are fairly common and most frequently found in mountainous terrain. They are normally found in moist habitats where they feed on frogs, lizards and, in larger specimens, small rodents. They are alert, somewhat nervous snakes that are capable of very rapid movement on a hot day. They are generally very docile, but may bite if they are restrained. They have weak venom that does not cause any medically important symptoms. Envenomation of people often does not occur at all due to their small gape and the backward position of the small fangs.

Distribution: The Spotted Skaapsteker is found mostly in the grassland and fynbos biomes.

Distribution on the CWCBRT: The Skaapsteker could be encountered on the Eves trail and also on the Darling Stagger Trail.

Threats: Habitat loss is the only known threat.

Lizards:

Large-scaled girdled lizard



Cordylus macropholis

Size: Adult snout-vent length ranges from 55-75 mm. Females reach larger body sizes than males, but males have larger heads than females.

Description: The head and body are not flattened an indication of a terrestrial lifestyle. The very large dorsal scales are strongly keeled and arranged in 14-18 longitudinal rows. The ventral's are also keeled and arranged in 10 longitudinal rows. The tail is relatively spiny and shorter than the body. Males have 7-9 and females 4-6 femoral pores. In both male and females, the number of generation glands range from 2-7. The back and sides are grey with irregular dark markings. The belly is light grey.

Biology: This small girdled lizard is one of the few ground-dwelling or terrestrial species in a predominantly rock-dwelling family. In parts of its range, it shows a distinct preference for the succulent plant, *Euphorbia caput-medusae* and other close relatives as shelter. The piled-up tuberculate stems of the succulent plant provide ideal hiding places, similar to rock crevices, and as many as 13 lizards have been found to shelter together in a single plant. These aggregations normally include only one adult male. Where *E. caput-medusae* is abundant, the lizard shelters exclusively in this plant, but elsewhere it has been found to shelter in limestone cracks, under rocks, and under debris. In areas where *E. caput-medusae* is used as shelter, the adult sex ratio is highly female-biased. The female bias extends down to the smaller size classes, except the neonate class. Males mature at a relatively small body size compared to other cordylids and it is believed that young males are excluded from *Euphorbia* plants by older territorial males to less optimal shelters where mortality due to predation is high. *Cordylus macropholis* is one of few cordylids where neonates already possess active generation glands; in other cordylids these glands only develop when sexual maturity is reached. Like other cordylids, it is a sit-and-wait forager that spends most of its time close to its shelter. It is insectivorous and eats a wide variety of small insects. Females attain larger body sizes than males, but males have relatively larger heads. The larger female

body size can be attributed to lengthening of the trunk, probably because these lizards shelter in tubular spaces between the stems of *Euphorbia* where gravid females may find it difficult to fit in. Lengthening of the trunk allows the embryos to fit in one behind the other thereby reducing the body circumference. Males display the typical prenuptial reproductive cycle. Mating takes place in spring and two to three young are born late March to April.

Distribution: Along the West Coast of South Africa, from Yzerfontein to Kleinsee.

Distribution on the CWCBRT: This species is most likely to be seen on the Darling stagger and the Eves Trail.

Threats: Habitat destruction through coastal development and mining activities is a major threat.

Karoo Girdled lizard



Cordylus polyzonus

Size: Males and females are more or less of equal body size. Adult body size ranges from 90-105 mm.

Description: A large girdled lizard with a flattened body, well-developed limbs, and a tail that is slightly longer than the body. The tail is moderately spinose and each whorl consists of two scale rows rather than one as in most other *Cordylus* species. The body scales are smooth and relatively small for a *Cordylus*. The lower eyelids have transparent discs. The nasal scales surrounding the nostrils are slightly tubular giving the nostrils a swollen appearance. Only males possess femoral and generation glands on the ventral aspect of the thigh. Adult coloration is extremely variable from region to region, but appears to be fairly conservative in juveniles. In the latter the back is yellow-brown, chequered with dark brown and pale cream and the tail is banded in dark-brown. In adults, the chequered pattern is usually less prominent than in juveniles or altogether absent, giving them a dark brown to black appearance. In the eastern parts of the Northern Cape, adults are olive-brown with bright orange flanks, while in the Darling area, individuals have a turquoise colour. Isolated melanistic populations occur along the west

coast from Saldanha in the south to Alexander Bay in the north. All populations have a characteristic black blotch on the side of the neck between the ear opening and the front limbs.

Biology: It is a rockdwelling species and individuals will occupy the same crevice for long periods of time. It is probably the most common species in the arid western and central parts of South Africa. It can typically be seen basking on rocks with the head and foreparts well-raised off the rock face. Unlike most other girdled lizards, it seems to prefer the warmer lowland areas and is usually absent from the top sections of the koppies and mountains within its range. It is a keen-sighted, agile lizard and will quickly disappear into its crevices when danger threatens. Typical of most girdled lizards when inside a crevice, the tail will be curled sideways to the front to shield the head and body from predators. Cranial kinesis is well developed and allow the lizard to press hard with the head against the roof of the crevice to prevent from being pulled out by a predator. Suitable crevices are normally occupied by one lizard only.

Although they will spend most of their time basking close to the crevice, individuals may venture considerable distances away from their shelters for better basking spots. Members of this species are typical sit-and-wait foragers. Juveniles are often found among vegetation some distance from rocks and probably actively search for prey items. Reproductive cycles of the males and females are synchronised and mating occurs in early spring. Females give birth to 1-5 babies during late summer to early autumn. The occurrence of melanistic populations along the west coast correlates with upwelling of cold water in the Atlantic Ocean.

Distribution: The Karoo Girdled lizard has the most extensive range of all the girdled lizards. It occurs in the central and western parts of South Africa, reaching northwards into southern Namibia. It is absent from the southern coastal regions.

Distribution on the CWCBR: If the specie is to be encountered it would be on the Eves trail.

Knox's desert Lizard



Meroles knoxii

Size: A medium-sized lacertid with adult snout-vent length in the region of 60-70 mm. Individuals from the northern part of the range are larger than from the southern part. The tail is about 2.5 times body length.

Description: It is easily confused with the spotted sand lizard (*Pedioplanis lineocellata*), but can be distinguished from the latter by the subocular scale that does not reach the lip. In all *Pedioplanis* species the subocular reaches the lip. The head and body are moderately depressed, and the snout is well-rounded with no sharp edge. The collar is slightly curved (straight in *P. lineocellata*). The scales on the dorsal neck region are granular and feebly keeled, but on the back, they are larger, rhombic and diagonally keeled, and smoother and larger on the sides of the body. The ventral body scales are normally arranged in 12 longitudinal rows. Usually 18-20 femoral pores occur on the ventral aspect of the femur. Adults are greyish to reddish-brown above with a dark brown to black band dorso-laterally, bearing pale brownish to white spots. Below the bands on the side of the body, the colour may vary from light grey to blackish with longitudinal series of yellow or brownish and black spots. The limbs have pale bluish-white dark-edged spots above. The ventral body and limbs are white to bluish-grey. Breeding males may have bright yellow infusions along the lips (see photo).

Biology: Knox's Desert Lizard is very common in Namaqualand. These very active, fast-running lizards live in sandy, scrub-covered areas. It follows an active foraging strategy and covers large areas in search of suitable prey, mainly small insects. At night, it shelters in a burrow dug among the roots of a scrub. In the southern part of its range where the species is smaller, females lay only two to three eggs during early summer, in the northern part of the range females may lay up to six eggs.

Distribution: This species occurs along the west coast from southern Namibia to the Cape Peninsula.

Distribution in the CWCBT: The specie is very common on the coast. And is most likely to be encountered on the Five bay, Darling stagger and Eves trail.

Skinks:

Gronovi's dwarf burrowskink



Scelotes gronovii

Size: Adult snout-vent length varies from 50-60 mm. No sexual size dimorphism occurs.

Description: Front limbs are completely lacking and the short hind limbs have only one toe each. Typical of burrowing forms, the snout is flattened and spadelike. The lower eyelid has a transparent window and the ear openings are very small. The tail is slightly shorter than the body. This wormlike lizard is silvery-grey above with the four middle scale rows spotted in brown and giving the appearance of thin longitudinal stripes. The scales on the sides of the body are also faintly spotted and may appear striped. The belly is a greyish to yellowish white and often heavily speckled.

Biology: Little is known about the biology of this species. It is often found under small calcrete rocks in coastal sand or under any kind of debris lying on sand, from just above the highwater mark to a few kilometers inland. When its shelter cover is lifted, it will quickly wriggle into the sand and disappear from sight. It is livebearing and one to two young are born in March to April.

Distribution: This dwarf burrowing skink occurs along the west coast of South Africa, from Doringbaai in the North to Bloubergstrand in the South. It also occurs on Dassen Island and on Robben Island.

Distribution in the CWCBRT: It is restricted to the west coast. And is most likely to be encountered on the Darling Stagger Trail.

Threats: Coastal development and mining activities.

Silver dwarf burrow skink



Silvery Dwarf Burrowing Skink - *Scelotes bipes*

Also known as the silver sand lizard, this silvery dwarf burrowing skink closely resembles a small snake, with two tiny hindlegs, each having two small clawed toes, one twice the length of the other, being the only characteristic to differentiate it from snakes.

Other names: Afrikaans -- Silwergrys dwerg grawende skink :

As with many other skink species, the limbs of the silvery dwarf burrowing skink have degenerated during the course of evolution, and the front legs have disappeared completely. This is a beautifully coloured little creature, totally at home in its sandy environment. The silvery dwarf burrowing skink burrows easily and quickly, maintaining a mostly underground existence. The flattened head, small, smooth scales, scaly lower eyelids and minute ear openings are all adaptations to this way of life. When above the ground, the movements of the silvery dwarf burrowing skink are even more snakelike, but its tail is shorter than its body, as with other skinks which have reduced legs, or no legs at all. The silvery dwarf burrowing skink feeds on an assortment of small insects, slugs, worms and the larvae of termites and beetles. The females produces no more than two live young at a time. They are born at the end of summer, measuring 60-65 cm in length. There are 14 dwarf burrowing species of skinks in southern Africa, and they have all undergone limb loss to some extent during the evolutionary process; ranging from no external limbs at all to having 4 in total.

Interesting facts about Silvery Dwarf Burrowing Skink statistics / bio:

Diet: The silvery dwarf burrowing skink feeds on an assortment of small insects, slugs, worms and the larvae of termites and beetles.

Reproduction (Breeding): The females produces no more than two live young at a time. They are born at the end of summer, measuring 60-65 cm in length.

Distribution (Range): The silvery dwarf burrowing skink is confined to the coastal strand-veld of the south western and southern Cape Province as far east as Mossel Bay.

Size: They grow to a length of 12-14 cm.

Colour: Their colour is shiny silvery grey, often tinged with buff, and with a faintly streaked or stippled appearance, caused by the dark brown canters to the scales.

Most like: All 14 species of burrowing skink in southern Africa, are similar, but the silvery skink is most like the low-veld dwarf burrowing skink, which also lacks forelimbs but has a pale stripe along each side of its body.

Habitat: They live under stones, in sandy ground, often among the roots of shrubs or clumps of grass.

Variegated skink



Trachylepis variegata

Size: Adult snout-vent length varies from 35-55 mm. No sexual size dimorphism occurs.

Description: The variegated skink is a small slender skink with well-developed limbs and a tail that is slightly shorter than the body. It has a small pointed head. Coloration is variable. Dorsally, it is normally grey to dark brown with a pair of pale lateral stripes, and is heavily flecked with black. Sometimes there is an additional vertebral stripe. The belly is white. Breeding males develop a reddish-brown blush below the hind legs and on the tail base.

Biology: It is the smallest of the *Trachylepis* species that occur in South Africa. It is common within its range and is usually confined to rocky areas. Although associated with rocks, it is not a typical rockdweller in that it seldom shelters in rock crevices, and in that it spends most of its activity time foraging at groundlevel among vegetation at the base of rocks. Like most skinks, it is a diurnal active forager and its diet includes various small invertebrate species. During periods of inactivity, it will shelter in burrows underneath rocks or logs. Occasionally, it may shelter in rock crevices

It is viviparous, giving birth to 2-4 babies usually during January-March. There are reports of births during August in the Namib Desert. This is not unusual as several species in the dry western parts of the country with unpredictable rainfall display aseasonal reproductive cycles.

Distribution: The variegated skink has an extensive range in the western half of the subcontinent and reaches as far north as southern Angola. It is absent from the southwestern districts of South Africa.

Distribution in the CWCBRT: If the specie should be encountered it would be on the Eves or Darling stagger trails.

Cape skink



Trachylepis capensis

Size: It is a large, often obese, skink with adult snout-vent length ranging from 80-135 mm. No sexual size dimorphism have been recorded.

Description: Typical of terrestrial forms, the body is slightly elongated and tubular and the limbs relatively short. There is no well-defined neck. The body is light brown to olive greyish brown, with three pale longitudinal stripes. Between the stripes and extending onto the flanks are series of dark brown to black spots or short bars. The belly is uniformly yellowish-white to grey. Occasional specimens are uniform grey-brown above, sometimes with vague stripes.

Biology: The Cape skink is probably the best known lizard in South Africa as it is common in gardens and has an extensive range in South Africa. It tames easily, and will eventually eat from one's hand. Such tame individuals may become very fat. Unfortunately, domestic cats have a considerable impact on the numbers of this lizard in urban areas. Like most skinks, the Cape skink is ground-living and shelters in tunnels that it digs at the base of bushes or boulders. It also favours any kind of debris to hide underneath and is, for example, particularly common at municipal dumps. It is a live-bearing species and gives birth to 5-18 babies in late summer. There are reports of females in certain areas also laying clutches of eggs, but this still needs to be confirmed. In the wild, it is fairly secretive and will more often be heard than seen. It is an active forager and hunts large insects.

Distribution: It occurs throughout South Africa (with the exception of the extreme northern regions and the lowveld) and reaches well into Namibia and Botswana. Relict populations also occur in Zimbabwe.

Distribution on the CWCBR: Is most likely to be encountered on the Eves trail.

Cuvier's blind legless skink



Typhlosaurus caecus

Size: A small blind legless skink with adult snout-vent length ranging from 150-210 mm.

Description: It lacks all traces of external limbs and the eyes are present only as dark spots underneath the head shields. Likewise, the external ear-openings are hidden. The rostral is very large and a long groove extends from the nostril to the posterior border of the rostral. The body is relatively thin and covered with large close-fitting scales, with 12-14 scale rows at midbody. A single large preanal plate is present. The body is yellowish-brown above and below with dark reticulations.

Biology: Very little is known about the biology of this species. It is a burrower that lives entirely underground. It lives in loose soil at the base of bushes and also shelters under stones lying on sand. It is viviparous and mating takes place during August-September.

Distribution: This species is restricted to the coastal areas of the Northern and Western Cape, from Alexander Bay to near Cape Town.

Distribution on the CWCBRT: This specie could be seen on the Darling Stagger as well as the Eve's trail.

Cape legless skink



Acontias meleagris

Size: A medium-sized legless skink with adult snout-vent length in the region of 200-240 mm.

Description: It lacks all traces of external limbs and has a short stubby tail. There are no external ear openings. It has movable, opaque lower eyelids and 3-4 supraciliary scales above each eye. There are three subocular scales and the second upper labial does not border the eye. The body scales are smooth, not enlarged on the belly, and arranged in 14-16 scale rows at midbody. The coloration is olive-brown, greyish-brown to a darker reddish-brown above, more or less uniform, or with a darker spot in the distal half of each scale, or yellow above with longitudinal series of transversely elongated dark spots. The darker dorsal side is usually sharply demarcated from the lighter yellowish-colored ventral side.

Biology: Like all African legless skinks, the Cape Legless Skink is a burrower and is normally found under stones or dead logs on loose soil in coastal and fynbos vegetation. It feeds on small soil invertebrates. It rarely drinks water and apparently obtains moisture from the surrounding soil and its food. The species is viviparous and gives birth to 2-4 young in late summer.

Distribution: This species occurs along the southern coastal regions of the Western and Eastern Cape, with isolated populations along the Karoo escarpment.

Distribution in the CWCBRT: This species could be encountered on the Darling Stagger and the Five bay trail.

Gecko's:

Marble leaf-toed gecko



Afrogecko porphyreus

Size: A small gecko with adult snout-vent length ranging from 45-50 mm .

Description: The head and body is flattened, an indication that it is a crevice dweller. The nostril is pierced between the rostral and three nasal scales. The calcium stores in the lateral neck region of females are often very prominent. The body is covered with small smooth granular scales. Each toe has a pair of leaf-shaped lamellae. There is often a dark streak from the nostril through the eye. The body is greyish to grayish-brown above, uniform, variegated or marbled with reddish to dark brown. Occasionally, specimens have a white stripe down the middle of the back. The underparts of the body are uniform white.

Biology: It is nocturnal and very common at houses in coastal areas of the Western Cape where it is often seen feeding on insects around outdoor lights. It is often regarded as a nuisance because of its faeces sticking to the walls. In nature, its habitat is very varied and it will shelter in any suitable hiding place, from rock crevices to under bark on dead trees. It is particularly common in coastal rock just above the highwater mark. It does not seem to be territorial as a number of individuals often live in the same retreat. Females lay two hard-shelled eggs in early summer and communal egg laying sites are common. The eggs hatch after one and a half to two months.

Distribution: It is found in the western and southern coastal regions, from Nieuwoudtville to Cape St Francis. It is also present on most of the offshore islands .

Distribution in the CWCBRT: This particular specie could be encountered on the Eves and the darling stagger trails of the Cape West Coast Biosphere Reserve.

Striped dwarf leaf-toed gecko



Goggia lineata

Size: A very small gecko with a snout-vent length of only 25-32 mm.

Description: It is very similar to the Cedarberg dwarf leaf-toed gecko, but can be distinguished from it by its cylindrical body, rounded snout and short, deep head. The tail is the same length as the body and is cylindrical. Males usually have five preanal pores. Coloration is varied, but the back is usually light grey with either a dark striped pattern or a pale-centered scalloped one. The belly is off-white and finely striped in grey.

Biology: The striped dwarf leaf-toed gecko is mainly a terrestrial species and shelters underneath rocks, under dead bark, and in rubble or rubbish piles. Like most geckos, it is nocturnal and emerges at sunset to feed on small insects, particularly termites. Its small size may make it less attractive for small mammals and snakes to feed on, but brings a whole new group of possible predators into play such as other geckos, scorpions and spiders. It readily sheds its tail when confronted by a predator and the wriggling tail will distract the predator, giving the gecko time to escape. The tail is later regenerated. Females normally lay a clutch of two eggs in early summer and a second one in late summer.

Distribution: The striped dwarf leaf-toed gecko occurs along the western coastal region of South Africa, just entering Namibia, with isolated populations in the Karoo.

Distribution in the CWCERT: This species could also be encountered on the Five bay and the Eves trail.

Ocellated thick-toed gecko



Pachydactylus geitje

Size: A small gecko with adult snout-vent length ranging from 45-50 mm.

Description: Indicative of its terrestrial lifestyle, the body is cylindrical. The rostral does not enter the nostril. The body is covered with uniform granular scales on the back. The tail is unsegmented and regenerated tails are very fat. The adhesive pads of the middle toes have 4-5 transverse lamellae. Coloration is very variable, but usually the back is greyish-brown to dark brown with scattered dark-edged white or yellow spots. Inland specimens sometimes do not have spots but rather diffuse, pale blotches. The belly is white and sometimes speckled with brown on the sides.

Biology: This small secretive gecko is terrestrial and is usually found living under loose stones and among dead leaves and brushwood. It appears to require moist conditions. It is nocturnal and feeds on small insects. When disturbed, it has the peculiar habit of standing stiffly erect on rigid fore limbs with the head raised sharply. It is, however, very gentle and will not attempt to bite. When at rest, it curls up just like a contented cat. Females lay two eggs in early summer, which, depending on weather conditions, will hatch in two months time. The habitat is varied, but it is particularly common in coastal strandveld.

Distribution: Occurs in the Western Cape and along the Cape Fold Mountains to as far as Port Elizabeth and along the inland escarpment mountains to as far as Cradock in the Eastern Cape.

Distribution in the CWCERT: Not common, but if to be encounter it would be on the Darling Stagger Trail.

Tortoise:

Parrot-beaked tortoise



Homopus areolatus

Size: The common padloper is another small padloper species endemic to South Africa. Females may reach a carapace length of 120 mm, shell height of 60 mm and could weigh up to 300 g. Males, which are smaller than females, grow to approximately 100 mm in length, 50 mm in height and may weigh up to 140 g.

Description: The shell of the common padloper is relatively flat and the shields on the carapace are smooth with large areolae. Unlike the other, this species has four claws on each of the front and hind feet. Buttock tubercles are absent in this species. The background colour pattern of the carapace in females is usually uniformly light to olive-brown, whereas the carapace of males is more uniformly orange-brown in colour. Each shield on the carapace has a thin black edge. The plastron or underside of the shell is usually dirty-white in colour. During breeding time, the head and nasal shields of males become brightly orange coloured. Males have a proportionately larger head than females and possess a distinctly hooked upper jaw, giving the appearance of a parrot-beak; hence the alternative English common name.

Biology: This species is mainly found in moister, coastal habitats throughout its distribution range, including the renosterveld and mountain fynbos in the West and eastwards through the southern Cape to the Valley Bushveld (Subtropical Thicket) in the Eastern Cape. Favourable inland climatic conditions, however, enable them to live in areas such as Clanwilliam in the Cederberg region, Middelpoos and Sutherland on the Roggeveld Escarpment and Cradock in the eastern Great Karoo. Being adapted to a

variety of habitats, they could be regarded as generalists in their habits. They frequent low-lying shrublands, subtropical thicket and transitional zones between forest and shrubland, but are also found in upland fynbos habitats onto the foothills of the Cape Fold Mountains for example. They remain active throughout most of the year, but their activity is severely curtailed by inland winter climates. Males are known to fight with each other and they can inflict severe wounds with their sharp beaks. Mating and egg-laying usually occur during spring to early summer and usually two eggs (or up to four) are laid more than once during the season. Eggs are known to hatch at the onset of the first winter rains in the winter rainfall region of the Western Cape. Because of the varied nature of their habitats, their diet is presumed to be varied as well, and specimens have been successfully maintained in captivity on a high fibre, low sugar and high bulk diet.

Distribution: Common padlopers occur from Clanwilliam and the Cederberg in the West in a broad coastal band eastwards through the southern Cape and up to East London. Inland populations have been recorded at Middelpoort and Cradock.

Distribution on the CWCBRT: This species has been encountered on the Darling stagger trail.

Threats: Similar to other species, habitat destruction through mainly indiscriminate agricultural development and poor landuse practices and illegal collection for the pet trade threaten healthy populations throughout their range. Fire, especially in coastal lowland, fynbos and thicket habitats, poses a threat to this species but like others, they also fall prey to many natural predators such as baboons, jackal, mongoose, badgers and predatory birds. Domestic dogs also pose a threat.

Angulate tortoise



Chersina angulata

Size This is a medium-sized tortoise species in which males grow larger than females. Adult males grow to approximately 270 mm in carapace length, 110 mm in shell height and may reach a mass of just over 2 kg. Adult females may reach 215 mm in carapace length, a shell height of just under 100 mm and could weigh up to 1.8 kg. Exceptionally large angulate tortoises of up to 300 mm may be encountered, but interestingly, cannot always be sexed accurately.

Description: Angulate tortoises have elongated, more or less convex shells which are never flattened, and with steep sides. The outstanding characteristic of angulate tortoise shells is the single gular or chinshield below the head. This is the only South African species which possesses a single gular shield; all the other species have a pair of widened gular shields, which never protrudes further than the head. There are five claws on the front feet with four on each hind foot. The colour pattern of these tortoises varies, but the normal pattern is light-brown and black. The vertebral scutes on the carapace usually have a dark centre surrounded by a light-brown border. The rest of the shield is dark-brown to black. Characteristically, each marginal shield on the side of the shell has a black triangle. The plastron or underside of the shell may be light-brown to pale yellow, but may be vividly coloured with yellow, orange or red, hence the common names: “rooipensskilpad” (=red-bellied tortoise) or “geelpensskilpad” (=yellow-bellied tortoise). Unconfirmed reports relate the colour of the plastron with its regional diet. Often, older specimens become uniformly brown-coloured and one can expect to find specimens in the Karoo with uniformly black carapaces.

Biology: The angulate tortoise occurs in a variety of natural habitats ranging from the Succulent Karoo in the Northwest, to West Coast strandveld and Fynbos habitats in the South, to inland Karoo habitats in the southeastern parts of its range, as well as the Subtropical Thicket or Valley Bushveld in the East. It is therefore unlikely that it has specialised habits and may be viewed as a true generalist species. These tortoises may remain active throughout the year, except in winter when their activity would normally be lower. Courtship and breeding behaviour is usually observed during spring when males actively court females and defend their territories against other males. Males will actively engage in combat with each other and will use the protruding gular shield to fight and attempt turning each other over. Females will lay 2 to 6 eggs a year, usually 1 to 2 per occasion. Eggs laid in spring will usually hatch after the first winter rains in the winter rainfall region, but may take longer to hatch if laid in summer, autumn or during early winter. Their natural diet is varied and is representative of the region in which they occur. Relatively dense populations are found in coastal regions, with the densest-known population on Dassen Island off Yzerfontein on the West Coast.

Distribution: Angulate tortoises occur in a broad coastal region from North of Alexander Bay (into Namibia), southwards along the West Coast to the southwestern Cape or Boland, and eastwards through the southern Cape to East London. Inland, populations extend into the Cederberg, Tankwa Karoo, the Little Karoo and the eastern Great Karoo. There is also a population recorded in the Karoo National Park.

Distribution in the CWCBRT: Angulate tortoises occur in healthy numbers in the whole Biosphere reserve and could be encountered on all five trails.

Threats: Habitat destruction through indiscriminate agricultural and urban development, illegal collection for the pet trade, and the killing of specimens for food are all threats that threaten healthy angulate populations throughout their range. Fire in natural habitats also kills many specimens. They also fall prey to many natural predators such as baboons, jackal, mongoose, badgers and predatory birds. Hatchlings may be captured and impaled on thorns by fiscal shrikes, and every year thousands of hatchlings fall prey to the ever-increasing Pied Crow population in the West Coast regions. Domestic dogs and motorists who deliberately run over tortoises on roads may be added to this list. For example, every year, many angulate tortoises die on the R27 regional road along the West Coast.

Chameleon:

Western dwarf chameleon



Derivation of scientific name

Bradypodion is derived from Latin and means 'slow-footed'.

Common names Little Karoo dwarf chameleon, Robertson dwarf chameleon

The Little Karoo dwarf chameleon is one of 15 currently identified dwarf chameleons that are endemic to South Africa. The Little Karoo dwarf chameleon is a small-sized species that changes colour as a method of communication, for defence and in response to environmental stimuli such as light and temperature. It is arboreal, living among trees and shrubs. Like other dwarf chameleons, it is ovoviviparous, which means that it gives birth to live young – in this case 10 to 15 young per litter. The current conservation status of the Little Karoo dwarf chameleon is Least Concern (LC), but because of its small and restricted range, it is becoming increasingly threatened by habitat loss and habitat fragmentation from changes in land-use patterns, mainly because of agriculture.

How to recognize a Little Karoo dwarf chameleon

The Little Karoo dwarf chameleon is a small species (80–150 mm in length) with a characteristic olive-grey body colour with brown and orange patterns. They have a well-developed casque, which is the raised structure on the back of the head. The gular crest along the midline of the lower jaw has pointed gular scales that are longer than wide. This character is often used to identify this species. The dorsal crest in the Little Karoo dwarf chameleon extends along the entire length of the body and halfway along the tail. They have enlarged tubercles along the flanks, which can be brown, green, orange or red. Their large turret-like eyes can move independently of each other and give almost a 360 degree view of their surroundings. The feet have five toes, each with a prominent claw. There are three toes on one side and two on the other, allowing a firm grip on thin branches.



Getting around

The Little Karoo dwarf chameleon is mostly arboreal, spending most of their time in trees or shrubs, but will occasionally move on the ground between shrubs. Their movement is slow, rocking backwards and forwards as they are walking.

Communicating

Little Karoo dwarf chameleons communicate through their posture, colouration, head bobbing and displaying of the inside of their mouths. When threatened, it will turn dark, blow itself up and open its mouth to display the orange inside. It may also hiss and lunge forward to dispel a potential threat. Males display brighter colours to get the attention of receptive females. If the female is not receptive she will be very aggressive, but when she is willing she will be calm and display brighter colours.

Distribution

Previously it was believed that the Little Karoo dwarf chameleon was restricted to the Robertson–Worcester region, but research has revealed that they have a much wider distribution. The Little Karoo dwarf chameleon occurs in the Little Karoo and surrounding Cape Fold Mountains, from the west of southern Cederberg to near Uniondale in the east, and from Robertson to the De Hoop Nature Reserve in the south.

Distribution in the CWCERT: This species is to be encountered on the Darling stagger, and Eves trail.

Habitat

The Little Karoo dwarf chameleon occurs in the drier regions of the Western Cape and is found in drier Fynbos, Renosterveld and in the Fynbos–Succulent Karoo transition zone.



Food

Little Karoo dwarf chameleons mostly find their food through a sit-and-wait method to ambush insects or by walking around on the vegetation in search of food. The diet mainly consists of insects like flies, crickets, grasshoppers, butterflies, beetles and spiders. Water is also essential in their diet and chameleons get most of their water from dew or rain drops on the plants.

SEX and LIFE CYCLES

Dwarf chameleons lack sexual dimorphism. The males and females are the same size and the only way to differentiate is to look closely at the tail, which has a broader base in the male than in the females. Chameleons generally have a short life span of three to five years. The Little Karoo dwarf chameleon is ovoviviparous, meaning that the fertilised eggs remain inside the body until they are ready to hatch and the female gives birth to live young. Mating occurs in spring and females give birth to 5–20 young per litter and may deliver two to three litters per season. The gestation period is about three months and the young are about 2 cm in size at birth.



Family life

Dwarf chameleons are solitary, but during breeding season they will tolerate each other. When the babies are born, they are immediately independent and can grasp, climb and feed voraciously on small insects such as fruit flies. Growth is rapid and maturity is reached in nine months. The mother will tolerate the babies for a while until they find their own territory.

THE BIG PICTURE

Friends and Foes

The enemies of chameleons are snakes, particularly the boomslang, birds and domestic animals. The Fiscal Shrike often pins chameleons on a thorn. Other birds that prey on chameleons are goshawks, sparrow hawks, egrets, herons and storks. Spiders will sometimes feed on the baby chameleons.

Friends are the people who do not use insecticides and have indigenous gardens that provide enough cover and food sources to attract chameleons.

Smart Strategies

Chameleons have very specialised feeding and locomotion behavior. They have laterally compressed bodies, prehensile feet and tail, well-developed eyesight and a long projectile tongue to catch their prey. The eyes can move independently from each other and this helps them to spot prey or danger. Chameleons are also well known for their ability to change colour.



Poorer world without me

Chameleons are an important insectivorous predator.

People & I

Chameleons are popular pets, and as a result have been widely moved to areas outside their natural range. In South Africa it is illegal for people to capture and trade in indigenous chameleons or have them as pets without a valid permit. Chameleons are harmless, but may bite when threatened. Some African cultures also fear chameleons and will kill them when they find one.

Conservation status and what the future holds

The current conservation status of the Little Karoo dwarf chameleon is Least Concern (LC), but because of its small, restricted range, the species is becoming increasingly threatened by habitat loss and habitat fragmentation from changes in land-use patterns because of agriculture. Other conservation threats to chameleons include veld fires and use of insecticides.



Relatives

The family Chameleonidae contains 197 known species of chameleons, which are found on the southern Arabian Peninsula, in southern Europe, southern India and Sri Lanka, as well as in Africa and on its associated islands such as the Seychelles and Comoros Islands. The family is divided into 11 genera of

which three are endemic to Madagascar (*Brookesia*, *Calummana*, *Furcifera*) and one to the Seychelles (*Archaius*). Seven genera (*Bradypodion*, *Chamaeleo*, *Kinyongia*, *Nadzikambia*, *Rhampholeon*, *Rieppeleon* and *Trioceros*) are found on the African continental main land. The dwarf chameleons belong to the genus *Bradypodion*, which is composed of 17 known species, 15 of which are endemic to South Africa. The species in this genus all have small and restricted natural ranges.

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