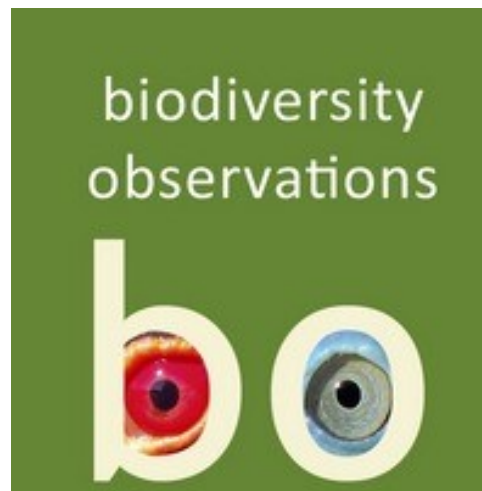


# Reptiles and Amphibians of the Cape of Good Hope Nature Reserve, Western Cape, South Africa

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## Herpetology

# Reptiles and Amphibians of the Cape Of Good Hope Nature Reserve, Western Cape, South Africa

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## Summary

The status of all the reptile and amphibian species that have been recorded in the Cape of Good Hope Nature Reserve (the southern section of the Table Mountain National Park) is described. A total of 57 species has been recorded, comprising seven tortoises and turtles, 14 lizards, one chamaeleon, 20 snakes, two platannas, and 13 frogs and toads. The Reserve is an important stronghold of the IUCN-classified 'Endangered' Cape Platanna *Xenopus gilli*, and holds the discrete southern population of the range-restricted, 'Near Threatened' Cape Peninsula Moss Frog *Arthroleptella lightfooti*.

## Introduction

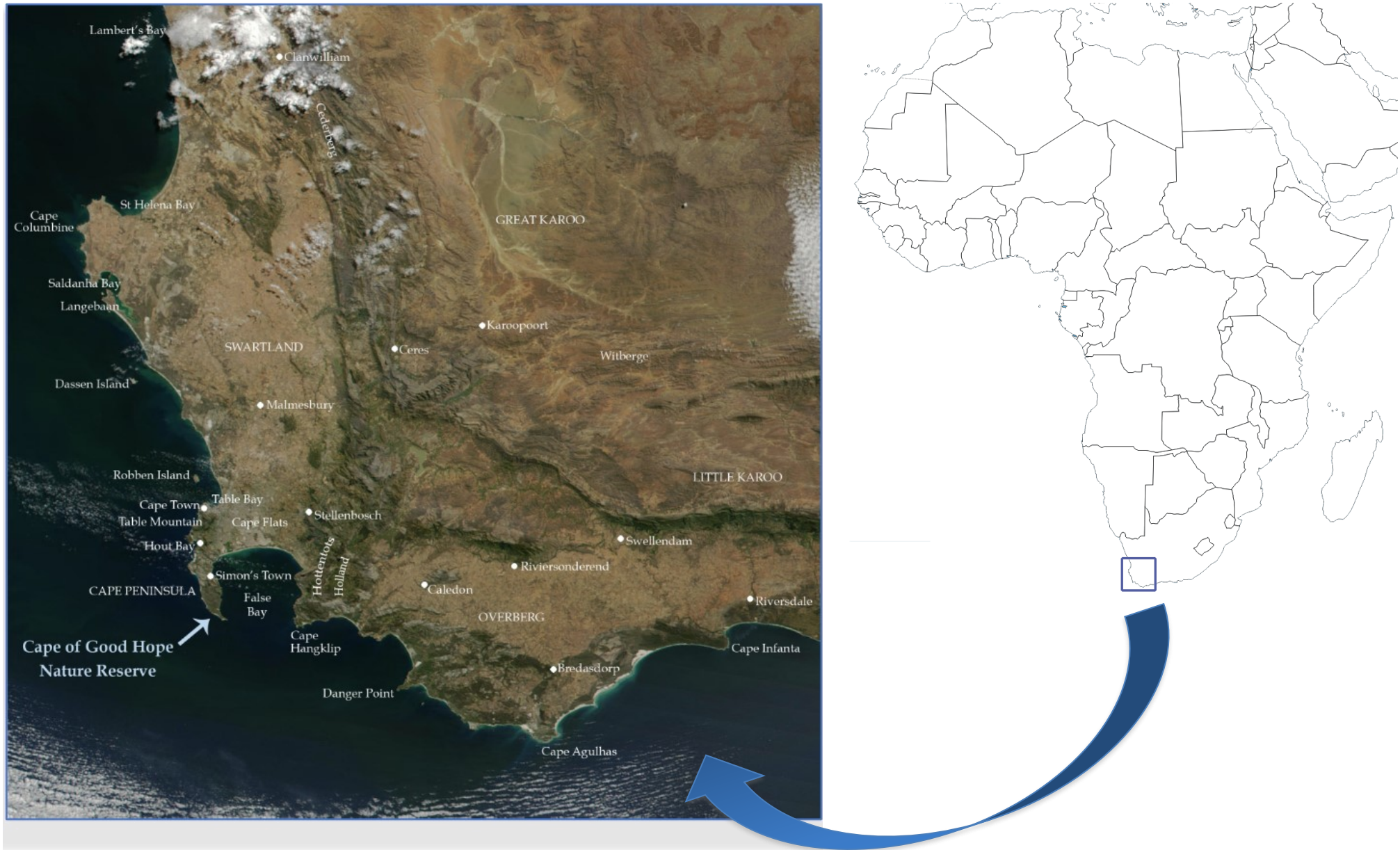
The Cape of Good Hope Nature Reserve is 7,750 ha in size and lies at the tip of the Cape Peninsula, 40 km south of Cape Town, South Africa (Figures 1 and 2). It was established in 1939 and incorporated into the Table Mountain National Park in 1998. The Reserve is managed by South African National Parks which provides information for visitors [here](#).

The natural and unnatural history of the Reserve has been described by Fraser and McMahon (1994). The Reserve's birds are detailed in [Fraser \(2014\)](#) and updated in Fraser (2016), and the mammals by [Fraser \(2022\)](#). These publications and references therein should be consulted for details of the habitats, vegetation types, topography, and climate of the area.

The present article is based on a manuscript that I completed just before leaving South Africa in 1996. With a few exceptions, I have not attempted to comprehensively update the status of the various species at the Reserve, although this is unlikely to have changed significantly for many of them over the past two decades. This can be seen, therefore, as primarily an historical account on which any future description and assessment can be based. Taxonomy and nomenclature follow Minter *et al* (2004) for frogs, and Bates *et al* (2014) for reptiles. Scientific names are given in the individual species accounts.

The Reserve is home to or visited by 57 species of herpetofauna, a term that embraces, for want of a better word, tortoises and turtles, snakes, lizards, frogs and toads. These are, for the most part, not very conspicuous creatures but you can be certain that many more of them will see you than will be seen by you.

The member of this group that you are most likely to encounter is the Angulate Tortoise. These are very common at the Reserve and on warm days at any time of year are often seen ambling across and along the main roads.



**Figure 1a, b:** The Cape of Good Hope Nature Reserve (a, left) lies at tip of the Cape Peninsula, the south-westernmost point of the African continent (b, right). Satellite image courtesy of NASA, <https://images.nasa.gov/>.



**Figure 2a, b:** The Cape Peninsula and the Cape of Good Hope Nature Reserve, with main place names (a, left, from Fraser and McMahon 1994. Satellite image (b, right), courtesy of NASA, <https://images.nasa.gov/>.

The snakes are generally cryptic (notably Puff Adder) or just want to get out of your way, which they can do with surprising speed - a tail end disappearing into thick vegetation is the most you can expect for the majority of species. The best views are generally had when chancing upon a snake crossing a road, but even here your sighting will be rarely more than fleeting (with the exception of the Puff Adder, which takes more time about such things).

Reserve regulations do not allow visitors to turn over of rocks or otherwise disturb the habitat in the hunt for skulking snakes or any other animals. As many of the species that you might come across in this way are very poisonous (some to the extent of being lethal), such rules are as likely to benefit you as much as the wildlife they were designed to protect. There have, however, been no documented instances of anyone being bitten by a snake at the Reserve, which is perhaps surprising given the abundance of both people and snakes here. Nevertheless, all visitors, particularly those who take to the trails, should be sensibly shod and suitably vigilant.

Two species of lizard, Black Girdled Lizard (Figure 3) and the Southern Rock Agama, are particularly conspicuous and both may be easily seen by visitors at the car park at Cape Point and the steps up to the old lighthouse there. Both are very confiding and allow close approach. They can also be seen elsewhere in the Reserve basking on rocks on warm days. Other lizard species are less easy to see, even those that live above ground, but a walk along the trails will provide the opportunity to see the likes of Cape and Red-sided Skinks (particularly on the coast) and the speedy Knox's Desert Lizard.

The detection of frogs and toads requires not so much good eyesight as good hearing. Most of the species are small and difficult to see, but in winter and spring, and after an unseasonal shower in summer, they can be extremely vocal. For such small animals, they have surprisingly loud and far-carrying calls. To pinpoint and see a calling frog or toad is not easy, but as each species has a distinctive chirp, cheep, burp or beep, you can hone your auditory identification skills and enjoy the chorus even if you can't see the choir.



**Figure 3:** Black Girdled Lizard *Cordylus niger* recorded at Cape of Good Hope Nature Reserve by Daniel Engelbrecht. [ReptileMAP Record 159605](#).

The most thoroughly researched member of the Reserve's amphibians, and the one which you are perhaps least likely to see, is the Cape Platanna. This is not strictly a frog, nor a toad for that matter, but a member of the Pipidae, one of the most primitive of amphibian families. It is a species that merits attention by virtue of rarity rather than good looks (it is a rather shapeless little item, with piggy eyes and few endearing features). It occurs in a few of the blackwater vleis, living in conditions of extreme acidity, low nutrient status and almost zero visibility. So specialised are these very narrow habitat requirements that the Cape Platanna is found only in the south-western Cape and is considered to be one of the rarest amphibians in the world. Work by Dr Mike Picker and Atherton de Villiers and others has investigated aspects of its biology in detail. This research has led to a

greater understanding of its needs and the implementation of appropriate conservation measures to save it from extinction. A very useful and engaging account of the species, describing its curious lifestyle and the problems it faces at the Reserve and elsewhere within its very limited range, is provided by Picker and de Villiers (1989).

While a number of frog and toad species occurs widely in seasonally damp or inundated areas, others, such as the platannas, are restricted to the few permanent waterbodies. The Reserve's major drainage system is the Krom River. This rises in the Smitswinkel Flats and flows northwest, joining the Klaasjagers River before emptying into the estuary at Die Mond. Smaller streams run into the sea at Brightwater, Platboom, Buffels Bay and Booi se Skerm. The largest of the Reserve's 14 permanent or near-permanent open freshwater bodies is Sirkelsvlei (6.3 ha and 1.4 m deep when full). Groot Rondevlei, a shallow depression about 50 m in diameter in the old dunes near Die Mond, is the second largest, but dries up in summer when the temperature in the mats of sedges and waterweed can exceed 50°C (Loveridge 1980).

The remaining waterbodies are smaller and the shallow ones usually dry up in summer. Numerous pans or vleis form in winter where the water table reaches the surface. Sirkelsvlei may be spring-fed; the other vleis receive their water input mainly from ground-surface trickle and soil seep. Water temperature on the surface ranges between 11°C and 30°C; in the deeper vleis the bottom water may be 9°C cooler than the surface, but a difference of 2°-5°C is more usual (Gardiner 1988). The water is generally very acidic (Suurdam can have a pH as low as 3.0). Sirkelsvlei is atypical in having a relatively high pH and high salinity, possibly because its greater age and size have exposed it to greater input of wind-blown salt spray than the other vleis. All the Reserve's permanent waterbodies are "blackwaters", being characteristically nutrient poor, dark (the colour of strong tea) and peaty because of high concentrations of suspended matter and humic substances, the polyphenols that are the breakdown products of fynbos plants and their anti-herbivore chemical defences.

A number of the Reserve's vleis are semi- or completely artificial, having been excavated from existing seeps, marshes or ephemeral pans in the 1960s and '70s to provide drinking water for introduced buck. Such vleis tend to be deeper, steeper sided and more regular in shape than natural ones. Geps Dam, for example, was excavated in the 1970s and is almost 1 ha in area and 2 m deep. Suurdam is about 0.6 ha and retains a consistent depth of about 1.2 m throughout the year. Theefontein was excavated to supply water to the farmhouse there (long since a ruin) and for many years was surrounded and over-canopied by introduced, non-native oaks *Quercus* spp and dense gums *Eucalyptus* spp and wattles *Acacia* spp whose leafy input over the years altered its water chemistry. Peat was extracted from the marshy wetland at Skaife in the 1960s. The vlei there served as a dump for domestic rubbish until then. Sirkelsvlei was strafed by aircraft and bombarded by ground artillery during target practice in World War II. Large numbers of shell-cases also found their way there during and after the war. As many as possible were removed (by the truckload) in 1969 (Gardiner 1988). Copper shell-cases, lengths of copper piping, and copper sulphate were added to some of the vleis in the 1970s to provide trace elements for the introduced large mammals. The animals, in turn, added nutrients to the water via their dung, further altering its chemistry. Concrete ducts and lining in the Homestead pond and the planting of its catchment with alien vegetation have raised the pH above that which would occur naturally. All these factors will have impacted on the amphibians that live permanently in these waterbodies or visit them seasonally to spawn, and on the aquatic invertebrates that they eat. Perhaps only Groot and Klein Rondevlei and, to a greater extent now that the shell-cases have been removed, Sirkelsvlei, are the only relatively large waterbodies at the Reserve that can be considered natural.

In addition to the physical and chemical changes that have been inflicted upon them, the vleis have been historically subjected to biological assault. In the past, this took the form of the introductions of alien fish for recreational angling or perceived visitor interest. One hundred Smallmouth Bass *Micropterus dolomieu* and a similar number of Banded Tilapia *Tilapia sparrmanii* (on which the bass would have fed) were introduced to Sirkelsvlei by the Department of Nature Conservation in 1956 with other undocumented introductions apparently taking

place subsequently. Largemouth Bass *M salmoides* were introduced to Sirkelsvlei “prior to 1978”, and Mozambique Tilapia *Oreochromis mossambicus* in 1979/80 (Gardiner 1988). The fish all died in 1982 when the vlei dried out. Tilapia, of one or both species, persist in the Homestead Pond but it is not known when they were introduced there.

The impact of these alien fish on the Reserve’s amphibians and other freshwater fauna is unknown. It is highly likely, however, that they will have negatively impacted upon the native species directly through predation and indirectly through competition for invertebrates and other food (see, eg, Ellender and Weyle 2014).

The only native freshwater fish at the Reserve is Cape Galaxias *Galaxias zebratus*. A small number was recorded in the late 1980s in rainwater-filled wheel-ruts along the Theefontein track and it is likely to occur in the nearby (150 m away) Krom River (Fraser and McMahon 1994). In a study of the Cape Platanna, Collett (1992) caught some small fish in Modderdam, Theefontein and an old, flooded quarry in the Krom River valley. These were presumably galaxias.

## Species Accounts

The following species accounts summarise the status of the Reserve’s herpetofauna. They also show how little is known [at least by 1996] of many of the reptiles and amphibians and how few publications there are to which one can refer for information specifically about the Reserve. Future research will hopefully improve our understanding of these important animals and perhaps add new species to the list.

### TORTOISES, TURTLES AND TERRAPINS

**Side-necked terrapins** Family Pelomedusidae

**South African Marsh Terrapin *Pelomedusa galeata*. Locally common.** Restricted to the larger permanent waterbodies such as the

Homestead pond and Sirkelsvlei and Skilpadvlei (“terrapin pond”). Terrapins are rather undemonstrative and normally apparent at Sirkelsvlei only from a protruding snout that quickly submerges if the animal is disturbed. On warm days a few will haul out to bask on rocks at the water’s edge. If the vleis dry out in summer the terrapins aestivate in chambers under the mud, emerging with the onset of the winter rains.

**Modern sea turtles** Family Cheloniidae

**Loggerhead Turtle *Caretta caretta*. Uncommon marine migrant.** Associated with cells or filaments of warm Agulhas Current water and recorded from Rooikrans perhaps five times each summer. Occurs in temperate and tropical waters throughout the world; nests on subtropical beaches, the nearest being in Maputaland in Kwazulu-Natal. As with the Leatherback (below), “wrecks” of immatures (which spend the first 5-10 years of their lives at sea in the Agulhas Current) have occurred on beaches elsewhere in False Bay having been swept down the coast and blown ashore by the southeaster.

**[Green Turtle *Chelonia mydas*. Unconfirmed marine migrant.** A turtle probably of this species has been seen once off Rooikrans (B Rose). A substantiated record will probably occur soon as the species has been recorded from time to time elsewhere in False Bay. Its nearest breeding grounds are on Europa Island in the Moçambique Channel but it ranges widely in tropical and subtropical waters.]

**Leatherback Turtle** Family Dermochelyidae

**Leatherback Turtle *Dermochelys coriacea*. Uncommon marine migrant.** A large and bulky reptile, measuring up to 2.5 m long and weighing up to 1,500 kg. One or two are seen each summer from Rooikrans by divers and anglers (B Rose). The nearest breeding beaches are in Kwazulu-Natal but the species ranges widely at sea. Although found more typically in warm water, Leatherbacks occasionally round the Cape to enter the cold west-coast Benguela Upwelling System. Hatchlings are quite common in False Bay and are sometimes washed ashore on the beaches, but there are no documented records of such strandings at the Reserve.

## Land tortoises Family Testudinidae

**Angulate Tortoise *Chersina angulate* (Figure 4). Common and widespread.** The most abundant and easy-to-see tortoise and found in all but the thickest bush. Wright (1988) found the species to be generally sedentary and recorded home ranges of individuals at the Reserve of 0.5-1.0 ha, averaging 0.92 ha. Population densities were 2-6 (average 3.4) tortoises per hectare in six-year-old fynbos, and 0-1 (average 0.16) per hectare in two-year-old vegetation. Many are killed by veld fires, a natural and ecologically essential phenomenon in fynbos from which the tortoise population recovers in time through recolonisation from adjacent unburnt areas. Having detected the approach of a fire, tortoises in rocky areas apparently seek shelter in crevices and under boulder overhangs and thus have a lower mortality rate than those in the open plains where there is little or no rock cover (Wright 1988). Tortoises that move into the recovering fynbos after a fire has swept through are likely to benefit from the abundance of relatively nutritious and digestible fresh growth.

Adult tortoises are dropped onto rocks by Verreaux's Eagles *Aquila verreauxii* that then eat the shattered remains (Fraser 1985); hatchlings are eaten by White-necked Ravens *Corvus albicollis* and Cape Grey Mongoose *Galerella pulverulenta*. Egg laying has been recorded in May. A number of "acquisitions" of Angulate Tortoises has been made by the Reserve, mainly in its early years. The most notable of these was of 700 in March 1950 from a Mr ATJ Schultz.

**Parrot-beaked Dwarf Tortoise *Homopus areolatus*. Status uncertain; probably rare.** This species favours lowland renosterveld rather than fynbos. Wright (1985b) classifies it as "Not a common species, sometimes being seen on roads" and it proved extremely rare subsequently. Although found very occasionally just beyond the boundary fence at Scarborough, the most recent records are of one or two at Klaasjagersberg in the mid-1980s (B Dyer). Reserve records note that "Grooved" tortoises were introduced in 1961 (11) and 1967 (1); these were presumably Parrot-beaked.



**Figure 4:** A very young Angulate Tortoise dozes under a blue Lobelia. New hatchlings are only about 35 mm long; they grow relatively rapidly for their first ten years or so, reaching a typical maximum length of 15-25 cm (Photo: Mike Fraser).

**Geometric Tortoise *Psammobates geometricus*. Introduced alien; now extinct.** Three were introduced in early 1967, the gift of a Dr S Scott of Plumstead, but probably did not survive. At least they were not seen again, and the carapace of a *Psammobates* tortoise now preserved at the Reserve headquarters at Klaasjagersberg (Wright 1985b) presumably accounts for one of them.

Geometric Tortoise does not occur naturally in fynbos (in its strictest botanical sense) but is confined to remnant patches of low-lying renosterveld of the south-western Cape coast and the Cape Fold Mountain belt. Here, habitat destruction has seriously reduced its population such that it is classified as 'Critically Endangered' (Baard and Hofmeyer 2014) and generally considered to be the second-most endangered tortoise species in the world.



**Leopard Tortoise *Stigmochelys pardalis*. Introduced alien; uncommon and localised.** The natural range of this large tortoise (it can attain 40 kg) includes the eastern and southern Cape but not the winter-rainfall region of the western Cape. Nine were introduced to the Reserve in 1953-57 and 60 in 1958, with a few singletons or pairs thereafter. Many of the old introduced specimens have a hole drilled in a rear scale of their shells, evidence that they were once tethered “pets”.

Generally confined to disturbed grassy coastal areas, such as Olifantsbos, and the lawns around Klaasjagersberg, the Homestead and Brightwater. Some wander down the Krom River Valley to Die Mond (where one was observed swimming across the lagoon) and are occasionally seen well away from their centres of distribution. The species may live up to 75 years and although adults apparently survive quite well at the Reserve, their reproductive output appears to be extremely low (A de Villiers). The only contemporary record of a youngster appears to be one on Circular Drive in November 1993.

## GECKOS, LIZARDS, CHAMAELEONS, SKINKS, AND AGAMAS

**Geckos** Family Gekkonidae

**Marbled Leaf-toed Gecko *Afrogecko porphyreus*. Locally common.** Recorded on rocky outcrops, sea cliffs and in and around human habitation or artificial structures (ranging from the Cape Point lighthouse to between the broken slabs of a gravestone at Olifantsbos). Also found under the loose bark of alien trees.

**Ocellated Gecko *Pachydactylus geitje*. Uncommon and local.** Recorded in sandy areas at Klaasjagersberg, Olifantsbos and Cape Maclear (B Dyer). A small (6-8 cm) and somewhat secretive species; more extensive searching may broaden its known distribution.

**Lizards** Family Lacertidae

**Knox's Desert Lizard *Meroles knoxii*. Common and widespread.** Frequent in dry, sandy areas with sparse vegetation, particularly inland and on gentle, often rocky slopes. Fleeting glimpses are often had of this very speedy lizard as it runs across footpaths in the fynbos when disturbed.

**Common Sand Lizard *Pedioplanis lineocellata*. Status unknown.** The subspecies *P l pulchella* is shown in Turner (2014a) as occurring at the tip of the Cape Peninsula.

**Lizards** Family Corydylidae

**Cape Grass Lizard *Chamaesaura anguina*. Locally common.** Very snake-like, having only minute limbs. Quite common in grassy areas near the coast, in the Krom River Valley, and in disturbed areas around Sirkelsvlei and the artificial vleis.

**Cape Girdled Lizard *Cordylus cordylus*. Status unknown.** The distribution map in Mouton (2014) shows this species as occurring at the tip of the Cape Peninsula.

**Black Girdled Lizard *Cordylus niger*. Common and widespread.** This distinctive, all-black species is found anywhere in the Reserve where there are rocks and boulders for it to perch on and shelter under. The “Kaapse krokodille” are conspicuous on warm days when they sunbathe on the ridges of rocks anywhere from the boulder beaches to outcrops in the Reserve’s interior, and on bridge parapets along the roadside. Very tolerant, and perhaps curious of, visitors at the Cape Point viewing sites. Often ventures onto the roads in the early morning, presumably to absorb heat from the warming tarmac. White (1962) recorded 33 on the road surface between Bordjiesrif junction and the Main Gate in the early morning of 12 November 1961, for example. This habit results in many being killed by traffic. Known to be preyed upon by African Harrier-hawk *Polyboroides typus*, Rock Kestrel *Falco rupicolis*, and Cape Cobra.

Formerly treated as a subspecies of the Cape Girdled Lizard *Cordylus cordylus*, but now afforded specific status. Although common at the Reserve, Black Girdled Lizard has an extremely limited distribution, being confined to the Saldhana area just north of Cape Town, and to the Cape Peninsula which supports its main population (Mouton 2014).

#### **Lizards** Family Gerrhosauridae

**Yellow-throated Plated Lizard *Gerrhosaurus flavigularis*. Local and rare.** A few individuals recorded from Circular Drive in December 1995 (B Rose) and Klaasjagersberg in the early 1970s (B. Dyer). It may occur elsewhere on the Reserve but is clearly something of a rarity.

**Short-legged Seps *Tetradactylus seps*. Locally common.** Occurs in dry, grassy areas. Its legs are so short that when it moves through the vegetation its movements and general appearance more resemble a small snake than a lizard.

**Common Long-tailed Seps *Tetradactylus tetradactylus*. Status uncertain.** Recorded by Wright (1983) without details. The species has not been seen since and its occurrence here may require verification, particularly as it generally favours renosterveld, a vegetation type not found in the Reserve.

#### **Skinks** Family Scincidae

**Cape Legless Skink *Acontias meleagris*. Common and probably widespread.** A fossorial (subterranean) species recorded from Olifantsbos and Klaasjagersberg. Likely to be common in the deeper, well-drained sandy soils along the coast and in the richer soils of the river valleys and around habitation. Grows up to 30 cm.

**Cape Skink *Trachylepis capensis*. Locally common.** Often observed in disturbed coastal areas, particularly in dense Buffalo Grass *Stenotaphrum secundatum* and in sandy clearings. Occasionally

found in inland fynbos. A fairly large (25 cm), rotund skink, widely distributed in southern Africa.

**Red-sided Skink *Trachylepis homalocephala*. Locally common.** Has much the same distribution and abundance as the Cape Skink but is perhaps more numerous in coastal vegetation. A slender species, the male often has brilliant orange legs, flanks, and underside.

**Silvery Dwarf Burrowing Skink *Scelotes bipes*. Uncommon but probably widespread.** Small numbers of this skink have been recorded from the rocky escarpment above Olifantsbos and on the lower western slopes of Paulsberg. A burrower found under rocks and in sandy soils, a more accurate assessment of its abundance and distribution at the Reserve would be difficult without systematic searching. This mercurial species has no front legs and much-reduced hindlimbs.

#### **Chamaeleons** Family Chamaeleonidae

**Cape Dwarf Chamaeleon *Bradypodion pumilum*. Status unknown.** The map in Tolley (2014) shows Cape Dwarf Chamaeleon as occurring at the tip of the Cape Peninsula, although there were no records from the Reserve pre-1996. Elsewhere on the Peninsula it is found in gardens, wooded river courses and reedbeds around vleis. Such habitat is found in riparian vegetation and evergreen thicket along the coast and around the Reserve offices at Klaasjagersberg. These areas may hold chamaeleons, assuming that any could make their way across the relatively inimical (to them) fynbos from further north.

#### **Agamas** Family Agamidae

**Southern Rock Agama *Agama atra*. Common and widespread.** Confined to rocky areas but widely distributed from mountain-tops to the coastal belt. Second in apparent abundance at the Reserve only to the Black Girdled Lizard. The two species often share sunbathing sites or the same rock crevice shelter. Appears to inhabit more

densely vegetated areas, such as where mats of mesembryanthe-mums (vygies; Aizoaceae) or other plants cloak the rocks, than girdled lizard, and is common amongst old driftwood above the high tide line south of Olifantsbos Bay and at Gifkommetjie.

The males sport brilliant turquoise heads and signal to other males by energetically bobbing (or doing press-ups). If danger threatens, the head colour fades and the lizards flatten against the rock surface, against which they become almost invisible. The species can grow up to 32 cm long, although those at the Reserve rarely attain 25 cm.

## SNAKES

### Blind snakes Family Typhlopidae

**Delalande's Beaked Blind Snake *Rhinotyphlops lalandei*. Uncommon and local.** A fossorial species found in sandy soils under stones and amongst roots. Absent from the Reserve's inland fynbos (M Picker) but has been recorded at Klaasjagersberg and Olifantsbos (AL de Villiers, B Dyer). Feeds on insects, particularly termites and ants and their brood.

### Thread snakes Family Leptotyphlopidae

**Black Thread Snake *Leptotyphlops nigricans*. Status unknown; probably locally common.** Recorded by Wright (1985a) at Klaasjagersberg. A fossorial species, growing to only 20 cm. Thread snakes secrete pheromones that suppress the defensive behaviour of soldier termites, enabling them (the snakes) to raid termite nests with impunity.

### Vipers Family Viperidae

**Puff Adder *Bitis arietans* (Figure 5). Widespread and common.** One of the most frequently encountered snakes at the Reserve and found in all habitats, including picnic sites, alongside and on trails and roads and other areas used by visitors. It becomes active mainly to-



**Figure 5:** Two male Puff Adders at Olifantsbos entwine in a combative tussle for the mating rights to a female. The species is rarely as conspicuous as these individuals at the Reserve but can be occasionally seen on the roads and trails (Photo: Howard Langley).

wards evening and may be found basking on the warm road surface at this time on sunny days prior to the night's hunting. A robust, big-headed snake which can attain 120 cm, it eats a variety of small vertebrates including mice, lizards and frogs.

A very attractive species, with a less than attractive reputation, Puff Adders rely on camouflage to avoid detection and escape predators.

This is effective to the extent that treading on one is a very real danger at the Reserve, notwithstanding the warning, “hiss” from which it takes its name. In an apparent geographical idiosyncrasy, however, south-western Cape Puff Adders may hiss coincidental with a strike or not at all.

Despite the many occasions when hiker and snake come very close to each other (the former usually in blissful ignorance) there have been no records of anyone being bitten by one at the Reserve. The potentially lethal venom is cytotoxic, destroying body tissue, and delivered by fangs up to 18 mm long. Juveniles are just as irascible as adults and should be treated with equal respect.

**Berg Adder *Bitis atropos*. Rare.** Three records: one near Kanonkop on 23 May 1983 (A Mecinski); one dead on the Main Road below Rooihogte on 31 July 1994 (C Nortier); one dead at the Buffels Bay/Main Road junction on 17 September 1995 (AJL van Zyl). This species is widespread but scarce on the higher and rockier parts of the Peninsula as a whole.

[**Rhombic Night Adder *Causus rhombeatus*. Unconfirmed.** A record on Reserve files from 1973 is considered unacceptable. The species is easily confused with Rhombic Egg-eater (below) and there are no unequivocal sightings west of Riversdale in the southern Cape. Turner (2014b) questions the accuracy of three historic records from the Cape Peninsula.] (Figure 6).

**Snakes** Family Atractaspididae

**Spotted Harlequin Snake *Homoroselaps lacteus* (Figure 7). Locally common.** A brightly coloured burrowing species that is likely to occur amongst loose rocks and rubble wherever the underlying soils are sandy and relatively rock-free. Specimens have been found under rocks and logs at Skaife, Olifantsbos, Klaasjagersberg, Gifkommetjie and the old quarry in the Krom River Valley. Feeds on invertebrates and burrowing lizards.



**Figure 6:** Rhombic Night Adder *Causus rhombeatus*. [ReptileMAP Record 22](#) by Faansie Peacock.



**Figure 7:** Spotted Harlequin Snake *Homoroselaps lacteus*. [ReptileMAP Record 155326](#) by Jason Boyce.

**Typical (advanced) snakes** Family Lamprophiidae

**Aurora Snake *Lamprophis aurora*. Status uncertain; probably rare and localised.** Wright (1985a) records one dead specimen and suggests that this nocturnal species is rare here. Two live specimens were apparently found “in a disused quarry” although further details are lacking (per AL de Villiers).

[**Yellow-bellied Snake *Lamprophis fuscus*. Unconfirmed; status uncertain.** Reported from Theefontein, Olifantsbos, and Klaasjagersberg in the mid-1980s. These records are considered equivocal, however, as the species is generally rare and it can easily be confused with the Aurora Snake. Any olive-green house snake found at the Reserve should be carefully scrutinised to confirm identification.]

**Olive Ground Snake *Lycodonomorphus inornatus*. Uncommon but widespread.** Found throughout the Reserve wherever there are rocks to shelter under and hunt amongst, but perhaps most numerous in the damper coastal areas.

**Brown Water Snake *Lycodonomorphus rufulus*. Locally common.** Largely restricted to permanent freshwater, including the Klaasjagers River and the deeper vleis where it hunts for frogs and their tadpoles. Numerous at Olifantsbos where 16 were caught and released one morning along a short stretch of streambank (MD Picker, B Rose).

## Family Psammophiidae

**Cross-marked Sand Snake *Psammophis crucifer* (Figure 8). Common and widespread.** Found in a variety of thinly vegetated and rocky fynbos habitats, but appears to avoid tall, dense bush. Seen taking agama and girdled lizards. Uniformly light-brown specimens are occasionally recorded.

**Cape Sand Snake *Psammophis leightoni*. Status unclear; probably rare.** One record from Klaasjagersberg in 1985. Easily confused



**Figure 8:** A Cross-marked Sand Snake, a very fast mover that is mildly venomous and can grow up to 70 cm in length, eats a Common Sand Lizard (Photo: Liz Fraser).

with the previous species, so further observations may be required to confirm this record. The map in Maritz (2014), however, notes it from the tip of the Peninsula.

**Karoo Sand Snake *Psammophis notostictus*. Status uncertain; probably rare but widespread.** A fast-moving, slender snake of dry, rocky habitats which hunts in the heat of the day in short, sparse fynbos.

**Spotted Grass Snake *Psammophylax rhombeatus*. Common and widespread.** Found in all vegetation types and often seen crossing the roads (on which it is often a casualty). A very pretty species that grows to about a metre long. Its Afrikaans name “skaapsteker” means “sheep biter” although there is no evidence that it will attack anything bigger than a mouse or lizard.

Family Pseudoxyrhopiidae

**Many-spotted Snake *Amplorhinus multimaculatus*. Status uncertain; probably localised and uncommon.** Recorded “along the main road” in April 1989 (ME Schuman), and from Olifantsbos and near Klein Bonteberg. Gerber (1973) states that the species “frequents moist areas” at the Reserve and notes that specimens “found near Kanonkop were of the green variety, those from Die Mond of the brown”. The green race, however, is restricted to Zimbabwe, so the identity of Gerber’s snakes in this instance is unclear. A fairly aggressive species whose venom causes short-term bleeding and painful swelling.

**South African Slug-eater *Duberria lutrix*. Uncommon and localised.** This small species is seen most frequently in the lawns and gardens around Klaasjagersberg and the Homestead, in the moist, grassy areas of the Krom River valley and in the calcareous outcrops at Bordjiesrif. It is absent from the dry, rocky fynbos of the Reserve’s interior. Feeds on snails, coping easily with small indigenous species, but may drown in its dinner when attempting to overpower large specimens of the alien *Helix adspersa* which secretes copious amounts of defensive froth.

Family Pseudaspidae

**Mole Snake *Pseudaspis cana* (Figure 9). Locally common.** Occurs where the soil is sufficiently deep and loose to harbour its favoured prey, the Cape Dune Molerat *Bathyergus suillus*. Most often seen, therefore, in the narrow coastal strip between Buffels Bay and Bordjiesrif and along most of the west coast. Specimens approaching 2 m in length are resident at Olifantsbos and Die Mond. This is not a venomous species but kills its prey by constriction. If molested, however, it will bite and inflict deep wounds that can quickly go septic if not treated.

**Cobras** Family Elapidae

**Cape Cobra *Naja nivea*. Common and widespread.** Found in all habitats but most numerous in coastal and alien thicket and around



**Figure 9:** Mole Snake *Pseudaspis cana*. ReptileMAP Record 153826 by Gerald Wingate.

buildings. The old drystone walls and crumbling foundations of the military buildings on Vasco da Gama Peak are well-frequented, as are the lighthouse buildings at the Point. Preys on small mammals (notably Striped Mice *Rhabdomys pumilio* in stands of *Acacia cyclops*), and other reptiles including girdled lizards. One was seen entangled with a large Puff Adder near Circular Drive (DL Clark).

Cobras at the Reserve are very variable in appearance, ranging from pale golden through mottled black and gold or brown, to uniform dark brown or purplish-black. The largest specimens measure 1.5 m. Its venom is neurotoxic and fatal if treatment (with antivenom or, more usually nowadays, symptomatic) is not timely.

**Yellow-bellied Sea-Snake *Hydrophis platurus*. Marine vagrant; stranding.** One record from Buffels Bay in or before 1983 (Reserve files). There are anecdotal reports of sea snakes washed ashore every now and then at the Reserve, and it does strand elsewhere in False Bay. A strikingly coloured species, it is abundant in tropical and subtropical seas from Kenya to California. Drifts along the south coast of Africa in the Agulhas Current but the cold waters of the Benguela Upwelling prevent its westerly spread into the Atlantic.

**Herald snakes, egg-eaters and Boomslang** Family Colubridae

**Red-lipped Snake *Crotaphopeltis hotamboeia*. Widespread but uncommon.** Recorded from a few sites, including Olifantsbos, Klaasjagersberg and Theefontein, and likely to occur elsewhere. An old name of "Red-lipped Herald" derives from the fact that it was christened in honour of the Eastern Province Herald newspaper of Port Elizabeth when it was first found in that area.

**Rhombic Egg-eater *Dasypeltis scabra*. Locally common.** A nocturnal species found occasionally along the dunes and near the high-tide line on sandy beaches. Here the eggs of White-fronted Plovers *Charadrius marginatus* are a likely attraction in spring and summer. Fairly common on rocky slopes along the western escarpment, but less numerous inland where, with a typically low density of birds (and hence their eggs; Fraser 1990), a precarious existence can be anticipated at best.

Eggeaters live exclusively on eggs; one the thickness of a finger can swallow a hen's egg. A non-venomous species, it has similar colour and patterning to the venomous Rhombic Night Adder. When threatened it extends the illusion by mimicking the behaviour of the adder by coiling up and rubbing its lateral scales together to produce a "hiss". As the night adder does not occur at the Reserve (see above), one wonders how effective this behaviour is in warding off potential predators here.

**Boomslang *Dispholidus typus*. Locally common.** Found in alien trees at Klaasjagersberg (where they seemed to be particularly numerous in the summer of 1994-95; A Mecinski) and Perdekloof, in alien and indigenous coastal thicket and densely vegetated seeps and streambanks throughout the Reserve. Occasionally seen in short fynbos along the western coastal belt, presumably when moving between areas of more suitable habitat. Likely to become less abundant with the clearance of alien vegetation.

Male Boomslangs are black above and canary-yellow below, females are brown. A most attractive and retiring snake that bites only if severely provoked or its escape route is blocked. It is back-fanged and needs to chew to inject its haemotoxic and potentially fatal venom.

## PLATANNAS, FROGS AND TOADS

**Platannas** Family Pipidae

**Common Platanna *Xenopus laevis*. Locally common.** Some of the Reserve's permanent artificial waterbodies, notably the Homestead pond and Groot and Klein Rondevlei, support this large species. It is likely to have colonised the Reserve only since the modification of existing waterbodies and the creation of artificial ones whose water chemistry differs from the natural and unmodified waterbodies, and now threatens the Cape Platanna through genetic swamping (see below). It is also a voracious predator.

Also known as the African Clawed Toad, the species was formerly used in pregnancy testing: when urine from a pregnant woman was applied to the toad it produced eggs within a few days. This historic laboratory use has resulted in it being transported throughout the world and, where it has escaped or been released, becoming feral and highly invasive in areas with a suitable climate. In South Africa its spread has been facilitated by the construction of farm dams and other man-made waterbodies (Measey 2004).

**Cape Platanna *Xenopus gilli*. Locally common.** In conservation terms, the most important vertebrate at the Reserve and one of the rarest amphibians in the world. Listed as “Endangered” in the Red Data Book (Minter *et al* 2004).

Cape Platanna has very particular habitat requirements and is confined to a scattering of permanent blackwater lakelets and seeps along the south-western Cape coast. It is virtually extinct on the Cape Flats where it was first discovered in 1925 (Rose and Hewitt 1927), and was first recorded at the Reserve in the late 1960s. Here and elsewhere in its range it is threatened by habitat destruction and changes in the unique chemical nature of its blackwater habitat brought about by, amongst other factors, changes in landuse and the removal of indigenous vegetation from wetland areas, and the insurgence of the Common Platanna facilitated by changes to the water chemistry of the vleis. Both species of platanna migrate in winter (Cape Platannas have been known to move up to 1.5 km), allowing the Common Platanna to colonise those vleis that previously were occupied exclusively by Capes and to interbreed with them. Hybrids were first found in 1976 at Groot Rondevlei and now occur sporadically in various ponds around the Reserve.

The general character of the vleis that the Cape Platanna favours can be summarised as dark, relatively shallow, non-permanent, non-flowing with a pH below 5.0 and low in nutrients but high in dissolved solids (Loveridge 1980). It is absent from clear-water alkaline vleis.

The egg and larval stages of Cape Platanna are better adapted to withstand the combined effects of low pH and high phenolic tannin

levels than the Common Platanna (Picker *et al* 1993, Picker and de Villiers 1993). Where acidity and water colour are “intermediate”, Cape Platanna co-occurs and hybridises with the Common Platanna, threatening the former’s genetic integrity. Such conditions are found in the Reserve’s waterbodies that were excavated from existing seeps or vleis to provide drinking for introduced large herbivores and around which much of the fynbos vegetation was overgrazed or removed (Fraser 2021). Interestingly, however, Cape Platanna does not seem to have been permanently impacted by the historic modification of these waterbodies, and healthy populations persist therein (de Villiers 2004). As more than 50% of the species’ habitat elsewhere in its range has been lost to urban development, agriculture, pollution and eutrophication, the Reserve is of increasing importance to its survival.

Measures to conserve the Cape Platanna and to prevent interbreeding and competition with Common Platanna include the removal of hybrids during the annual platanna surveys, the construction of a concrete wall around Gepsdam to exclude migratory Commons, and the eradication of alien vegetation (which can affect water chemistry) and restoration of riparian fynbos. To limit hybridisation opportunities, 154 juvenile Cape Platannas were translocated from the Reserve to blackwater pools in Silvermine Nature Reserve, further north on the Peninsula, in 1988. The species had been recorded at Silvermine in 1926.

The Cape Platanna eats a variety of insects and the occasional mollusc, but 50% of its diet comprises tadpoles of its own species (Jolliffe 1993). The species is eaten by herons *Ardea* spp, cormorants, (presumably the freshwater Reed Cormorant *Phalacrocorax africanus*) and Water Mongoose *Atilax paludinosus* (de Villiers 2004c). The arrival at the Reserve in the late 1980s of Sacred Ibis *Threskiornis aethiopicus*, a potential predator of the platanna and now present in large numbers, may have a damaging impact on the species, but this has not been investigated (Fraser 2104).

**Toads** Family Bufonidae

**Western Leopard Toad *Sclerophrys pantherine* (Figure 10). Rare and localised.** Recorded from Klaasjagersberg and Perdekloof. At





**Figure 10:** Western Leopard Toad is endemic to the coastal lowlands of the south-western Cape and has a restricted distribution in the Reserve (Photo: Liz Fraser).

the latter site it used to be a regular nocturnal visitor to stoeps to feed on light-attracted insects, but by the mid-1990s was rarely seen (A Mecinski). Alternative names are the Snoring and August Toad, which reflect its voice and most active season, respectively. Requires permanent water for breeding.

Western Leopard Toad was split from Eastern Leopard Toad *B. pardalis* in 1998 on the basis of morphological and distributional differences, although this taxonomic status is not entirely supported and remains unresolved. Either way, it is becoming increasingly rare and is classified as “Endangered” (de Villiers 2004a).

**Sand Toad *Vandijkophrynus angusticeps*. Locally common.** Occurs in seasonal vleis in sandy areas along the west coast and in permanent water bodies throughout the Reserve.

**Cape Mountain Toad *Capensibufo rosei*. Common and widespread.** Found throughout the Reserve in flat, sandy areas with a cover of restios. Spawning aggregations of 20-30 have been recorded at tiny puddles near Olifantsbos in September (B Rose). The means of communication of this remarkable species are unknown as it has no sound-generating or auditory apparatus.

**Rain frogs** Family Brevicipitidae

**Rose’s Rain Frog *Breviceps rosei*. Locally common.** This species is endemic to a narrow coastal belt in the south-western Cape. At the Reserve it is common in white dunes along the coastal belt. The rain frogs or “blaasops” do not swim and never enter water voluntarily (Rose 1962); their eggs are laid in a damp underground chamber where metamorphosis through tadpole to froglet takes place.

**Cape Mountain Rain Frog *Breviceps montanus*. Rare and local.** One collected at Klaasjagersberg in 1973 (B Dyer) and occasionally seen in rocky habitat elsewhere on the Reserve (A de Villiers).

**Sand and river frogs** Family Pyxicephalidae

**Cape Sand Frog *Tomopterna delalandii*. Locally common.** Occurs in areas with deep, fine sands ranging from the well-drained lower slopes of the west-coast escarpment to damp streamsides and the edges of vleis. Occasionally found in fresh heaps excavated by Cape Dune Molerats, and quickly burrows backwards into the sand if exposed.

**Cape River Frog *Amietia fuscigula*. Locally common.** Found at still and running permanent waterbodies. Its deep croak and the loud “plop” as it leaps into the water from the bank at the approach of danger are characteristic sounds at the Olifantsbos Bulrush *Typha*

*capensis* patch, the Buffels River, and the Homestead pond. The tadpoles can grow to a prodigious size and take up to two years to metamorphose into frogs.

**Clicking Stream Frog *Strongylopus grayii*. Common and widespread.** Found in ephemeral vleis, short restio-dominated damp flats and rank streamside and seepage vegetation. The constant “chipping” call of this species can be heard virtually throughout the Reserve in winter and spring and is one of the most evocative, if monotonous, sounds at these seasons. A very variably coloured and patterned species.

**Banded Stream Frog *Strongylopus bonaespei*. Common and widespread.** Characterised by exceptionally long toes, this attractive frog is most common along streamsides and in rank vegetation on the coastal forelands.

**Boettger’s Caco *Cacosternum boettgeri*. Locally common.** Recorded from Skilpadvlei near Circular Drive by Wright (1985c) and from seasonal vleis at Olifantsbos (B Dyer, B Rose), where it is common.

**Cape Peninsula Moss Frog *Arthroleptella lightfooti*. Common and widespread.** Found in seeps throughout the Reserve, but particularly common along the northwest coastal belt. This species is endemic to the Cape Peninsula, with two separate populations: one at the Reserve and the other in the Table Mountain/Constantiaberg massif (Harrison *et al* 2001, Channing 2004).

**Rattling Frog *Semnodactylus wealii*. Rare.** One caught on the coastal foreland about 1 km north of Olifantsbos in August 1985 (ME Schuman). This appears to be the only Reserve record. According to du Preez (2004) the species has been recorded locally only in the northern Peninsula and only prior to 1996.

**Arum Lily Frog *Hyperolius horstockii* (Figure 11). Rare and localised.** This attractive and unmistakable species has been recorded only from Groot Rondevlei (Wright 1985c). There is limited suitable

habitat for it elsewhere on the Reserve, but it may be marginally more common than this single record would suggest. There are unsubstantiated reports from the Homestead pond (per B Dyer) that would extend its range beyond that given by Braack (2004). Endemic to the southern and south-western Cape.

### Potential additions to the Reserve list

South Africa has an extraordinarily rich herpetofauna, with 421 species known to occur (Bates *et al* 2014). The Greater Cape Floristic Region (GCFR; as per Manning and Goldblatt 2012), of which the Reserve is a part, supports 191 reptile species of which 45 are consid-



**Figure 11:** Arum Lily Frog has been recorded only from one site (Groot Rondevlei) in the Reserve. When not snug in the spathes of its eponymous lily, which flowers in June-December, it lives on the ground among restios and other vegetation in damp areas (Photo: Liz Fraser).

ered to be endemic (Bauer 1999, Colville *et al* 2014). Only 30% of these are represented at the Reserve, so it might appear that there is no shortage of potential new candidates to be found here.

The south-western Cape, at the bottom left-hand corner of the GCFR, is particularly rich in lizards. Many of these and its other reptiles and amphibians are, however, unable to travel significant distances, at least in the short term within a few generations. They are also typically very range restricted, being confined and adapted to, for example, small, isolated mountains or wetlands. Of these, a number of geckos, cordylids and chamaeleons are likely to be 'substrate specific', that is they are very strongly associated with or confined to particular rocky substrates or vegetation types (Bauer 1999, Colville *et al* 2014).

Having such narrow ecological requirements makes it unlikely, therefore, that these species would leave their niche habitats to colonise new areas. This parallels one of the distinguishing features of the botanically megadiverse Cape flora (Manning and Goldblatt 2012, Allsopp *et al* 2014), by which many plant species have extremely small natural ranges resulting in a superabundance of taxa being crammed into the landscape, each occupying one microhabitat amongst the diverse range on offer. Such habitat specialists have, however, limited dispersal capabilities, a trait which would extend to the relatively high number of niche-specific, range-restricted reptiles and amphibians within the Cape Floristic Region.

Furthermore, reaching the Peninsula was not possible some 15,000 years ago as it was an island, with higher sea levels submerging the low-lying Cape Flats that connect the Peninsula to the adjacent continental mainland. If local species-extinctions occurred on the Peninsula during its insularity, subsequent recolonisation and the arrival of new species were very unlikely.

With a drop in sea level, the Peninsula has since become reconnected with the mainland, providing a theoretical bridge across which terrestrial species could travel. The almost complete destruction of the Cape Flats natural habitats, and increasing development, infestation by non-native plants, and an unnaturally high frequency of fires in the

remaining natural veld of the Peninsula, make it improbable, however, that new species will now be able to make their way down to the Reserve of their own accord from the 'mainland'. On this basis, few, if any, new species are likely to colonise the Reserve naturally from any distance despite the herpetological richness of the rest of the adjacent south-western Cape.

Nevertheless, there are a few species that occur on the northern Peninsula that might already be at the Reserve but remain undetected. Considered to be a potential addition to the list is the Micro Frog *Microbatrachella capensis*. This is a "Critically Endangered" species with similar distribution and habitat requirements to the Cape Platanna and which, on the Peninsula, is currently confined to the 10 ha patch of relict sand-plain fynbos and associated wetlands in the centre of the Kenilworth Racecourse. A population on the Reserve would certainly boost its conservation rating as this tiny species (adults have a body length of less than 18 mm), like the Cape Platanna, is threatened with extinction through the loss of the coastal lowlands to a variety of anthropogenic factors.

Other new species that might be discovered at the Reserve include Cape Mountain Lizard *Tropidosaura gularis* and Common Mountain Lizard *T montana*. Both occur in higher ground elsewhere on the Peninsula mountains. The Cape Crag Lizard *Pseudocordylus microlepidotus* has been recorded from the top of Klaas Jagersberg, the hill just to the north of the Reserve, and might well exist in the rocky slopes and peaks south of the boundary fence. Green Turtle is also a likely addition to the list, as is Hawksbill Turtle *Eretmochelys imbricata*. According to the map in Nel and Hughes (2014) the latter has occurred off the southern tip of the Peninsula, although it is not known if the shore-based sightings necessary to qualify it for inclusion were involved.

I encourage visitors to look out for new and unusual species and to report their observations. In this way the herpetofauna of this relatively unspoilt area can be evaluated, conserved, and enjoyed. In terms of amphibians, the western Cape lowlands are the hottest of hotspots in South Africa, with 14 'Red Listed' species (Branch and Harrison 2004). The south-western Cape, and especially its folded belt moun-

tains, are also the primary centre of range-restricted amphibian species in South Africa (Alexander *et al* 2004). As more of the lowlands and other habitats in the region disappear under development, agriculture and alien plants, the Reserve and other protected areas will become even more critical for the conservation of these and many other species.

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**Table 1:** Checklist and status of reptiles and amphibians recorded (and unconfirmed records) at the Cape of Good Hope Nature Reserve. Categories: **1** = Naturally occurring; **2** = Introduced/escapee; **3** = Extinct; **4** = Unconfirmed

Species	1	2	3	4
South African Marsh Terrapin <i>Pelomedusa galeata</i>	*			
Loggerhead Turtle <i>Caretta caretta</i>	*			
Green Turtle <i>Chelonia mydas</i>				*
Leatherback Turtle <i>Dermochelys coriacea</i>	*			
Angulate Tortoise <i>Chersina angulata</i>	*			
Parrot-beaked Dwarf Tortoise <i>Homopus areolatus</i>	*			
Geometric Tortoise <i>Psammobates geometricus</i>		*	*	
Leopard Tortoise <i>Stigmochelys pardalis</i>		*		
Marbled Leaf-toed Gecko <i>Phyllodactylus porphyreus</i>	*			
Ocellated Gecko <i>Pachydactylus geitje</i>	*			
Knox's Desert Lizard <i>Meroles knoxii</i>	*			
Common Sand Lizard <i>Pedioplanis lineocellata pulchella</i>	*			
Cape Grass Lizard Lizard <i>Chamaesaura anguina</i>	*			
Cape Girdled Lizard <i>Cordylus cordylus</i>	*			
Black Girdled Lizard <i>Cordylus niger</i>	*			
Yellow-throated Plated Lizard <i>Gerrhosaurus flavigularis</i>	*			
Common Long-tailed Seps <i>Tetradactylus tetradactylus</i>	*			

Species	1	2	3	4
Cape Legless Skink <i>Acontias meleagris</i>	*			
Cape Skink <i>Trachylepis capensis</i>	*			
Red-sided Skink <i>Trachylepis homalocephala</i>	*			
Silvery Dwarf Burrowing Skink <i>Scelotes bipes</i>	*			
Cape Dwarf Chameleon <i>Bradypodion pumilum</i>	*			
Southern Rock Agama <i>Agama atra</i>	*			
Delalande's Beaked Blind Snake <i>Rhinotyphlops lalandei</i>	*			
Black Thread Snake <i>Leptotyphlops nigricans</i>	*			
Puff Adder <i>Bitis arietans</i>	*			
Berg Adder <i>Bitis atropos</i>	*			
Rhombic Night Adder <i>Causus rhombeatus</i>				*
Spotted Harlequin Snake <i>Homoroselaps lacteus</i>	*			
Aurora House Snake <i>Lamprophis aurora</i>	*			
Yellow-bellied House-snake <i>Lamprophis fuscus</i>				*
Olive House-snake <i>Lycodonomorphus inornatus</i>	*			
Brown Water-snake <i>Lycodonomorphus rufulus</i>	*			
Cross-marked Sand Snake <i>Psammophis crucifer</i>	*			
Cape Sand Snake <i>Psammophis leightoni</i>	*			
Karoo Sand Snake <i>Psammophis notostictus</i>	*			
Spotted Grass Snake <i>Psammophylax rhombeatus</i>	*			



**Table 1 continued:** Checklist and status of reptiles and amphibians recorded (and unconfirmed records) at the Cape of Good Hope Nature Reserve. Categories: **1** = Naturally occurring; **2** = Introduced/escapee; **3** = Extinct; **4** = Unconfirmed

Species	1	2	3	4
Many-spotted Snake <i>Amplorhinus multimaculatus</i>	*			
Common Slug-eater <i>Duberria lutrix</i>	*			
Common Mole Snake <i>Pseudaspis cana</i>	*			
Cape Cobra <i>Naja nivea</i>	*			
Yellow-bellied Sea-Snake <i>Hydrophis platurus</i>	*			
Red-lipped Snake <i>Crotaphopeltis hotamboeia</i>	*			
Rhombic Egg-eater <i>Dasypeltis scabra</i>	*			
Boomslang <i>Dispholidus typus</i>	*			
Common Platanna <i>Xenopus laevis</i>	*			
Cape Platanna <i>Xenopus gilli</i>	*			
Western Leopard Toad <i>Sclerophrys pantherina</i>	*			
Sand Toad <i>Vandijkophrynus angusticeps</i>	*			
Cape Mountain Toad <i>Capensibufo rosei</i>	*			
Rose's Rain Frog <i>Breviceps rosei</i>	*			
Cape Mountain Rain Frog <i>Breviceps montanus</i>	*			
Cape Sand Frog <i>Tomopterna delalandii</i>	*			
Cape River Frog <i>Amietia fuscigula</i>	*			
Clicking Stream Frog <i>Strongylopus grayii</i>	*			
Banded Stream Frog <i>Strongylopus bonaespei</i>	*			
Boettger's Caco <i>Cacosternum boettgeri</i>	*			

Species	1	2	3	4
Cape Peninsula Moss Frog <i>Arthroleptella lightfooti</i>	*			
Rattling Frog <i>Semnodactylus wealii</i>	*			
Arum Lily Frog <i>Hyperolius horstockii</i>	*			
<b>Totals</b>	<b>57*</b>	<b>2</b>	<b>1</b>	<b>3</b>

\*Excluding unconfirmed