A SURVEY OF THE
MAMMALS OCCURRING IN THE
GOLDEN GATE HIGHLANDS NATIONAL PARK

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Abstract — This paper reports on a survey of the mammals of
the Golden Gate Highlands National Park, Republic of South
Africa. Fifty-seven species are mentioned, the majority re­
corded through material or sight records. Those species which
may occur in the Park, as deducted from their overall distri­
bution ranges, or from other indirect observations such as
spoor or droppings, are considered as well. Habitat pre­
ferences are mentioned wherever possible, and the conserva­
tion status and relocation histories of the antelope species are
quoted.

Introduction

The main object of this study is to provide a checklist of
mammals for the Golden Gate Highlands National Park, Republic
of South Africa, but stems from an interest in the taxonomy and
zoogeography of the mammals of southern Africa. These interests
can only be successfully pursued through intensive and continuous
collecting. When the late Dr. N. J. van der Merwe, and later his suc­
cessor Dr. G. de Graaff, prompted myself and my predecessor Mr
C. G. Coetzee to produce such a checklist for this Park, we
obligingly agreed without hesitation.

This Park in the northeastern Orange Free State on the border
of Lesotho, was proclaimed in 1963, primarily for its scenic beauty.
Six farms were dispossessed, comprising a total area of 4 792 ha
of mountain sourveld (van Rensburg 1968). The Park constitutes
the upper catchment area of the Little Caledon River, and varies in
altitude from 1 800 m at the riverbed to 3 000 m at the peak of
Rhebokkop. The watershed between the Orange-and Vaal River
systems is at the eastern boundary of the Park.

The National Parks Board of Trustees, in agreeance with its con­
servation policy, subsequently reintroduced the game animals that
long ago disappeared from the area as a result of human settlement
and agricultural interests (Liebenberg 1964; Penzhorn 1971). For
obvious reasons the Board could not reintroduce some of the
former residents such as lion, wild dog, hippopotamus and elephant. Primarily as a result of pressing conservation problems in other national parks, very little research has thus far been conducted on the fauna and flora of the Golden Gate Highlands National Park. Roberts (1969) pioneered research within the Park by conducting a botanical survey.

**Material and Methods**

In aid of this survey, the area has been visited three times, i.e. for a ten-day period during July 1965, as well as two additional ten-day periods during May and November 1969. The species discussed in the text include not only those whose presence have been confirmed through sight or material records, but also those whose occurrence are suspected through circumstantial evidence such as general species range, or spoor and faeces encountered in the Park. This latter group comprises predominantly mammals in the medium-size range which migrate or wander mostly unnoticed over great distances.

Specimens of only those species still presenting taxonomic problems were collected, being without exception in the smaller-mammal species range. Specimens were procured through the normal mammal-collecting techniques, which need no elaboration here as it has been extensively described in the literature. Trapping was done predominantly in those area offering the best habitat. The animals collected were prepared as standard study-material and have been incorporated in the permanent collection of the Transvaal Museum.

**Results**

The following species have been noted to occur, or may occur in the Park:

*Erinaceus frontalis* Smith, 1831

Hedgehog

*Krimpvarkie*

Although as yet not recorded from the Park, it almost certainly occurs here, since suitable habitat is available, and since the Park falls within the known range of the species. It has been recorded from the nearby Reitz and Senekal districts (Lynch 1975).

*Myosorex varius* Smuts, 1832

Forest Shrew

*Bos Skeerbek*

A large series of 17 males and 21 females have been collected, mostly on the grassy slopes of Bakenkop. A few specimens were also procured in dense grass on the riverbanks near Wilgenhof.
*Crocidura flavescens* I. Geoffroy, 1827  
Red Musk Shrew  
Rooi Skeerbek  

Although this species has never been recorded from the O.F.S., it is almost certain to occur in the Park, as it falls within the species range and affords suitable habitat. Faeces, presumably of this species, was found in old rock walls, but attempts at trapping animals were unsuccessful.

*Crocidura cyanea* Duvernoy, 1838  
Reddish-Grey Musk Shrew  
Rooigrys Skeerbek  

A single specimen was procured in dense grass along a stream.

*Amblysomus hottentotus* A. Smith, 1829  
Hottentot Golden Mole  
Hotnot-Kruipmol  

Four females were collected during November 1969 under willow trees on the banks of the Small Caledon River. At this locality this species co-exists with the rodent mole (*Cryptomys hottentotus* Lesson, 1826) in the same area, albeit in separate tunnel systems. On the surface the tunnel systems of these two unrelated fossorial animals cannot be distinguished. The substrate was of a black clayish type. Two of the females were reproductively active.

*Chlorotalpa sclateri* Broom, 1907  
Sclater’s Golden Mole  
Sclaterse Kruipmol  

No material has as yet been collected within the Park, but three specimens in the Transvaal Museum collection have been collected from the nearby Clocolan district (2827DC). The characteristic shallow subsurface tracks of this species have been found in the low-lying areas of the Park.

*Pipistrellus kuhli* Natterer, 1817  
Kuhl’s Pipistrelle  
Kuhlse Vlermuis  

Recorded by Lynch (1975) from areas adjacent to the Park. The species is as a consequence almost certain to occur within the boundaries of the Park.

*Eptesicus capensis* A. Smith, 1829  
Cape Serotine  
Kaapse Dakvlermuis  

Lynch *(op. cit.*) recorded this species within 25 km east of Golden Gate, and it is therefore not unlikely that it will in time be recorded from within the Park.

*Papio ursinus* Kerr, 1792  
Chacma Baboon  
Kaapse Bobbejaan  

A fairly large troop has regularly been observed in the Park on the mountain slopes and crests.
Lepus saxatilis F. Cuvier, 1823

Scrub hare
Kolhaas

A single specimen was collected during November 1969. Hares of the genus Lepus are not at all common in Golden Gate. Lynch (1975) unfortunately did not verify the identification of this specimen while extracting Transvaal Museum records for his paper, and consequently incorrectly cited it under Lepus capensis Linnaeus, 1758.

Lepus capensis Linnaeus, 1758

Cape Hare
Vlakhaas

It is not impossible that this species is to be found at Golden Gate, but no material exists from the near vicinity of the Park to substantiate such a speculation. Lynch (1975) claims the presence of this species in the Park and vicinity, but apart from a misidentified specimen recorded, the remainder of his records are non-material. He did not state whether the latter are from roadkills or sightings. It is of course impossible to distinguish between L. capensis and L. saxatilis in the wild state.

Pronolagus rupestris A. Smith, 1834

Smith’s Red Hare
Smith se Rooihaas

Two specimens, a male and a female, were collected in the hills behind Glen Reenen camp during November 1969. The female was lactating. Judging from the number of toilet-sites found, so characteristic of the genus, this species is relatively abundant in the Park. The measurement parameters quoted by Petter (1971) in his identification key are not clear, and as a consequence the key and taxonomic approach of Ellerman, Morrison-Scott and Hayman (1953) is followed here.

Cryptomys hottentotus Lesson, 1826

Common Mole Rat
Hotnot Grysmol

Three specimens were collected in the Park to date. This species occurs in the low-lying areas as well as on the higher platos and hillslopes, indicating a wider habitat tolerance than the golden moles.

Hystrix africaeaustralis Peters, 1852

Cape Porcupine
Ystervark

Although this species has never been observed during collecting trips, its presence has been confirmed by several quills found in the veld, particularly at the bases of rockfaces on the lower hillslopes.

Pedetes capensis Forster, 1778

Springhare
Springhaas

Springhares have never been observed during night-hunting operations, but they almost certainly occur here. Lynch (1975) reports sight records from the near vicinity of the Park.
Graphiurus murinus Desmarest, 1822
Forest Dormouse
Boswaierstertmuis

Although the vernacular name of this insectivorous rodent denotes its preferred habitat, it is also to be found in rocky places, as for instance the Golden Gate material. All three specimens were trapped amongst rock debris at the foot of the Sentinel. The only female in the series was pregnant upon collection during November; four foetuses, one in the left and three in the right uterus horn.

Aethomys namaquensis Smith, 1834
Namaqua Rock Rat
Namakwalandse Klipmuis

This is an abundant inhabitant of the rocky mountain slopes of Golden Gate.

Aethomys chrysophilus de Winton, 1897
African Bush Rat
Afrikaanse Bosrot

Not recorded through this project. Lynch (1975) claims its presence in the near vicinity of this Park, which entails a 100 km westwards extension of the known range as defined by Davis (1974). However, the streambanks lined with Ouhout Leucosidea sericea as found in the Park, do not appear to offer suitable habitat when compared with the bushveld conditions selected over the rest of the species range.

Leggada minutoides A. Smith, 1834
Dwarf Mouse
Dwergmuis

A series of four was collected in the long grass near the Brandwag camp.

Mus musculus Linnaeus, 1758
House mouse
Huismuis

A single specimen was procured in the non-white compound.

Praomys natalensis Smith, 1834
Multimammate mouse
Vaalveldmuis

A common rodent in the denser grass of low-lying areas.

Rattus rattus Linnaeus, 1758
House Rat
Huisrot

Several specimens were trapped in the living quarters of the bantu staff of the Park.

Rhabdomys pumilio Sparrman, 1784
Striped mouse
Streepmuis

A common rodent in the Park, especially in dense tall grass. According to Coetzee (in litt.), it was also found to construct its grassnests in old rockwalls up to almost a meter above ground level, which is a deviation from the normal behaviour.
Dendromus melanotis Smith, 1834  
Grass Climbing Mouse  
Grassklimmuis  
A single specimen was collected in long grass along the road near the Brandwag camp.

Dendromus mystacalis Heuglin, 1863  
Lesser Climbing Mouse  
Kleiner Klimmuis  
Four specimens were collected, all from dense tall grass either along the road, the river or the base of a hill at Wilgenhof. One specimen had the remains of insects in its stomach. This is a new record for the Orange Free State as the result of a westwards range extension along the 29° latitude.

Malacothrix typica Smith, 1834  
Large-Eared Mouse  
Grootoormuis  
Recorded by Lynch (1975) in the Bethlehem/Kestell districts, near the Park.

Mystromys albicaudatus Smith, 1834  
White-Tailed Rat  
Witstertrot  
As yet not recorded from the Park itself. It is essentially a grassland-plains species, but may in time prove to be a resident of Golden Gate as it has been recorded from the nearby districts (Davis 1974; Lynch 1975).

Tatera brantsi A. Smith, 1834  
Highveld Gerbil  
Hoëfeldse Nagmuis  
Several colonies were found in sandy patches of low-lying areas.

Otomys irroratus Brants, 1827  
Vlei Rat  
Vleirot  
A common rodent of the grassy areas near water. Somewhat atypically, the species was also recorded on the lower hillslopes, especially where the ground is soggy at the bases of rocks. Coetzee collected two specimens with pure-white hindquarters in the Park during a Museum collecting trip in 1965. According to him (in litt.) this is the only instance of partial albinism known in this species south of Zaïre.  
Note: Without examining the specimen, Lynch (1975) accepts as authentic the identity of an Otomys specimen from Golden Gate, housed in the TM collection, but misidentified as O. unisulcatus. The unfortunate result is that he plots the occurrence of O. unisulcatus at Golden Gate, some 200 km out of range (Davis 1974) in completely atypical habitat. I examined the specimen in question, and found it answers to the description of O. irroratus. Consequently Lynch’s (1975) record of O. unisulcatus from Golden Gate is rejected here.
Otomys sloggetti Thomas, 1902  
Rock Karoo Rat/Ice Rat  
Klip Karrooorot/Ysrot  
This species certainly occurs in the Park, but unfortunately no substantiating material could as yet be collected. The typical Otomys faeces have, however, been found higher up on the mountain slopes in typical *O. sloggetti* habitat.

Vulpes chama A. Smith, 1833  
Silver Fox  
Silwervos  
Not recorded during our visits, but as this is a widely distributed species in the Orange Free State, individuals will undoubtedly occur in the Park from time to time.

Canis mesomelas Schreber, 1775  
Black-Backed Jackal  
Rooijakkals  
An individual was encountered during night-collecting operations.

Aonyx capensis Schinz, 1821  
Cape Clawless Otter  
Groototter  
The spoor and characteristic droppings of this species was found along the river as well as at the big dam in the game camp.

Lutra maculicollis Lichtenstein, 1835  
Spotted-Necked Otter  
Klein-Otter  
The presence of this species in the Park could as yet not be confirmed. Since it has been reported from the nearby districts (Lynch 1975), a resident population, or at least migrants through the Park, is very likely.

Ictonyx striatus Perry, 1810  
Striped Polecat  
Stinkmuishond  
Individuals have been observed in the Park, but as yet none could be collected. A roadkill is reported by Coetzee (*in litt.*) on the main road near the Park entrance.

Genetta trigrina tigrina Schreber, 1776  
Large-Spotted Genet  
Grootkolmuskejaatkat  
Two specimens were live-trapped in the shrub along watercourses. After deliberation with C. G. Coetzee and J. Pringle (*pers. comm.*) these specimens were assigned to this subspecies, in difference to Lynch (1975) who recognizes only *G. genetta* Linnaeus, 1758 in this area and the rest of the Orange Free State. Consequently this constitutes a new record for this Province.

Cynictis penicillata G. Cuvier, 1829  
Yellow Mongoose  
Geelmeerkat  
No specimens of this species were collected, but a colony to the east of the game camp has often been observed.
Herpestes pulverulentes Wagner, 1839  Cape Grey Mongoose  Kleingrysmuishond

Certainly the most common carnivore in the Park, and several were live-trapped of which two were prepared as specimens. They seem to prefer the wooded banks of the various streams flowing through the Park. A female collected during November was lactating.

Ichneumia albicauda G. Cuvier, 1829  White-Tailed Mongoose  Witstertmuishond

Lynch (1975) reports this species from areas adjacent to Golden Gate. As the Park offers suitable habitat this animal may in time be shown to occur here as well.

Atilax paludinosus G. Cuvier, 1777  Marsh Mongoose  Kommetjiesgatmuishond

The spoor and faeces of this animal was found, but it was not collected or seen during our visits.

Proteles cristatus Spaarman, 1783  Aardwolf  Maanhaarjakkals

This species was never encountered, but spoor seen in the Park was probably that of this animal. The fact that the aardwolf is widely distributed in the Orange Free State renders it very likely to be present in the Park.

Felis caracal Schreber, 1776  Caracal  Rooikat

Spoor were found on several occasions, while a former ranger has seen a caracal in the Park.

Felis libyca Forster, 1780  Cape Wild Cat  Vaalboskat

Several of these animals were seen during night collecting trips, but unfortunately none were collected.

Procavia capensis Pallas, 1766  Cape Dassie  Klipdas

Three specimens were collected, of which one was heavily infected with lungworms. Dassies are particularly abundant in Golden Gate.

Equus burchelli Gray, 1824  Burchell’s Zebra  Bontkwagga

The Burchell’s zebra were reintroduced from the Kruger National Park (Penzhorn 1971). The population has settled down well and is expanding (National Parks Board of Trustees Annual Report 49:1974/75).
Phacochoerus aethiopicus Pallas, 1766  Warthog
Vlakvark
Reintroduced from the Hluhluwe Game Reserve (Penzhorn 1971), but the animals have apparently not adapted very well.

Syncerus caffer Sparrman, 1779  Cape Buffalo
Kaapse Buffel
Reintroduced from the Addo Elephant National Park (Penzhorn 1971).

Taurotragus oryx Pallas, 1766  Eland
Reintroduced from the Kalahari Gemsbok National Park, Addo Elephant National Park, and the Willem Pretorius Game Reserve (O.F.S.) (Penzhorn 1971). The population is slowly expanding (National Parks Board of Trustees Annual Report 49).

Redunca arundinum Boddaert, 1785  Reedbuck
Rietbok
Reintroduced from Northam (Tv!.) (Penzhorn 1971), but these animals are adapting poorly to their new environment.

Redunca fulvorufa Alzél, 1815  Mountain Reedbuck
Rooiribbok
Reintroduced from Lückhoff (O.F.S.) (Penzhorn 1971). Population numbers have not increased significantly since 1971 (National Parks Board of Trustees Annual Reports 46–48).

Alcelaphus buselaphus caama G. Cuvier, 1804  Cape Hartebeest
Rooihartbees
Reintroduced from the Addo Elephant National Park, Kalahari Gemsbok National Park, Willem Pretorius Game Reserve (O.F.S.), Rooipoort Estates (Kimberley, C.P.), and Setlagodi (C.P.) (Penzhorn 1971). Only three have survived since 1971 and they are not reproducing (National Parks Board of Trustees Annual Reports 46–49).

Damaliscus dorcas phillipsi Harper, 1939  Blesbok
Reintroduced from the Mountain Zebra National Park, Willem Pretorius Game Reserve (O.F.S.), Van Riebeeck Nature Reserve (Pretoria, Tv!.), Kestell (O.F.S.), Petrus Steyn (O.F.S.), Pietersburg (Tv!.), and Nduli National Reserve (Umtata, Transkei) (Penzhorn 1971). The population has settled down very well and is rapidly expanding (National Parks Board of Trustees Annual Reports 46–49).
Connochaetes gnou Zimmermann, 1780  Black Wildebeest  
Swartwildebees
Reintroduced from the Willem Pretorius Game Reserve (O.F.S.), Oden­
daalsrus (O.F.S.), and Makwassie (Tvl.) (Penzhorn 1971). The population 
is viable and expanding rapidly (National Parks Board of Trustees Annual Reports 46–49).

Antidorcas marsupialis Zimmermann, 1780  Springbok
Reintroduced from the Bontebok National Park, Kalahari Gemsbok 
National Park, Mountain Zebra National Park, and Cookhouse (C.P.) 
Penzhorn 1971). The population is rapidly expanding (National Parks 
Board of Trustees Annual Reports 46–49).
The animals were reintroduced from the ranges of two subspecies, i.e. 
A. m. marsupialis from the Republic and A. m. hofmeyri Thomas, 1926 from 
the Kalahari Gemsbok National Park. The present Golden Gate popula­
tion therefore could elucidate the hitherto unsettled state of subspecia­
tion in this species.

Ourebia ourebi Zimmermann, 1783  Oribi  
Oorbietjie
Reintroduced from Greytown (Natal) (Penzhorn 1971). Births have been 
recorded (National Parks Board of Trustees Annual Report 48) and the 
population seems to be thriving.

Raphicerus campestris Thunberg, 1811  Steenbok
The present day population is endemic (Penzhorn 1971), but its status is 
unknown.

Pelea capreolus Forster, 1790  Grey Rhebuck  
Vaalribbok
The existing population is also endemic (Penzhorn 1971), and appears 
to be stable although exact numbers are not known.

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REFERENCES


