Paracynictis selousi – Selous' Mongoose

Regional Red List status (2016)	**Least Concern***
National Red List status (2004)	Data Deficient
Reasons for change	Non-genuine
Global Red List status (2016)	Least Concern
TOPS listing (NEMBA) (2007)	None
CITES listing	None
Endemic	Edge of range

*Watch-list Data

De Winton named this species after the famous hunter F.C. Selous who lived near Bulawayo, Zimbabwe, and made an extensive collection of small mammals.

Taxonomy

Paracynictis selousi (De Winton 1896)

ANIMALIA - CHORDATA - MAMMALIA - HERPESTIDAE - *Paracynictis - selousi*

Synonyms: *Cynictis selousi (*De Winton 1896)

Common names: Selous' Mongoose (English), Klein Witstertmuishond (Afrikaans), Iduhwa, Ubuchakide (Ndebele), Phefô (Setswana), Jerenyenje (Shona), Insengane (Zulu)

Taxonomic status: Species

Taxonomic notes: Coetzee (1977) recognized four subspecies: 1) *P. s. selousi* (De Winton 1896), 2) *P. s. sengaani* Roberts 1931, 3) *P. s. ngamiensis* Roberts 1932 and 4) *P. s. bechuanae* Roberts 1932. However, Meester et al. (1986) regarded *ngamiensis* and *bechuanae* as synonyms of *P. s. selous*i, with the latter occurring throughout the southern African subregion, excluding northeastern KwaZulu-Natal and southern Mozambique, occupied by *P. s. sengaani*.

Assessment Rationale

Selous' Mongoose is listed as Least Concern since although it is uncommon and likely living at low-density across its range (with possibly fewer than 1,000 mature individuals in the assessment region), it is relatively widespread, and occurs in well-protected savannah woodland and grassland habitats. The expansion of wildlife ranching in Limpopo may have created additional suitable habitat. Although it may be experiencing local declines from dog hunting, snaring, and poisoning, there is no evidence to suggest that this is causing range-wide decline as there are recent records across its distribution. However, camera-trap monitoring should be used to assess occupancy more comprehensively and to estimate densities. This species' conservation status should be reassessed when better data become available.

Regional population effects: Although this species is on the edge of its range in the assessment region, dispersal is likely across the northern borders and therefore rescue effects are presumably possible.

Distribution

Selous' Mongoose ranges from Angola in the west to Malawi in the east, with its most southward extension in northeastern KwaZulu-Natal in South Africa (Skinner & Chimimba 2005; Stuart & Stuart 2013). A recent study found that the species is likely to occur in the Lower Zambezi Protected Area Complex in Zambia (Bird & Mateke 2013). It also occurs in Zimbabwe (except in the northeast) and in Mozambique (Skinner & Chimimba 2005). While it does occur in Namibia, its distribution within the country is marginal and it is only found in the most northeastern reaches of the country (close to the Quito and Okavango rivers) (Skinner & Chimimba 2005).

Within the assessment region, Selous' Mongooses have been recorded in Limpopo and Mpumalanga eastern lowveld, the Limpopo River Valley and northern KwaZulu-Natal, but sightings are rare. The northeastern KwaZulu-Natal marks their southernmost limit at present (Skinner & Chimimba 2005). Camera-trapping studies in the Ka-Ndengeza and Vyeboom villages, Vhembe district (Limpopo Province, South Africa) had numerous detections of this species (L.H. Swanepoel pers. obs. 2014). It has not been recorded from Swaziland (Monadjem 1998; A. Monadjem pers. comm. 2013), but may well occur in the eastern areas of the country (Skinner & Chimimba 2005).

Population

Selous' Mongoose is generally uncommon, although many parts of its known range have not been well surveyed (Stuart & Stuart 2013). In addition, it can easily be confused with the more common White-tailed Mongoose (*Ichneumia albicauda*) or the relatively rare Meller's Mongoose (*Rhynchogale melleri*). Within the assessment region, there are probably fewer than 1,000 mature individuals but more surveys are needed to

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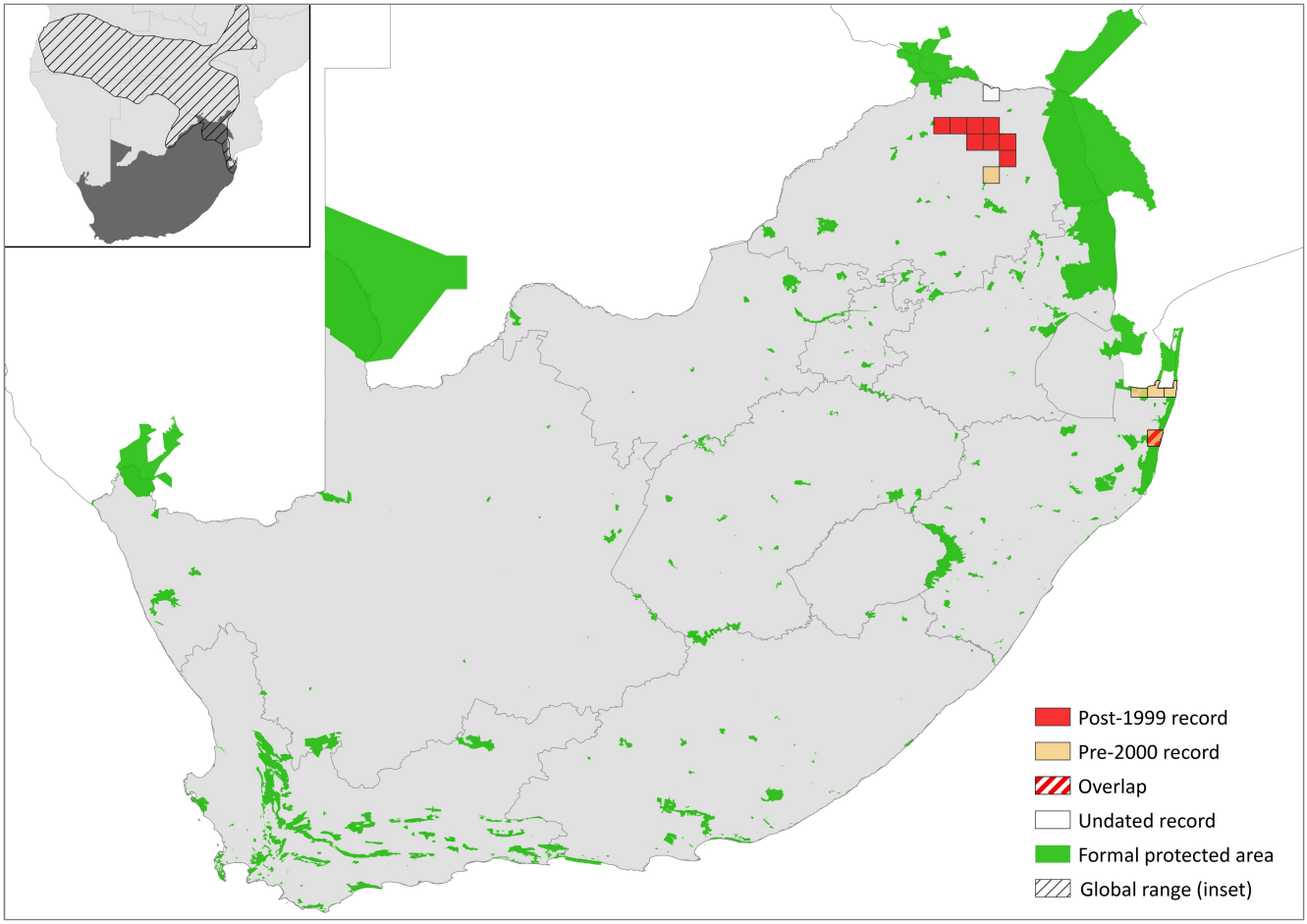

Figure 1. Distribution records for Selous' Mongoose (*Paracynictis selousi*) within the assessment region

Table 1. Countries of occurrence within southern Africa

Country	Presence	Origin
Botswana	Extant	Native
Lesotho	Absent	-
Mozambique	Extant	Native
Namibia	Extant	Native
South Africa	Extant	Native
Swaziland	Possibly extant	-
Zimbabwe	Extant	Native

estimate population size and trends. However, because there are no major threats to this species, we infer that the population is stable.

Current population trend: Unknown, but probably stable.

Continuing decline in mature individuals: No

Number of mature individuals in population: Probably < 1,000

Number of mature individuals in largest subpopulation: Unknown

Number of subpopulations: It is not currently possible to determine the extent or number of subpopulations.

Severely fragmented: No. Favourable habitat is relatively well connected across this species' range.

Habitats and Ecology

Selous' Mongoose is restricted to savannah grassland and woodland; it is absent from forest and arid areas (Gelderblom et al. 1995; Stuart & Stuart 2013). It often occurs in habitats such as *Acacia* scrub and woodland which have a sandy substrate (Skinner & Chimimba 2005). Selous' Mongooses prefer habitats with a softer, sandy substrate where they can excavate their burrows more efficiently. Cultivation and bush clearing does not seem to limit this species' distribution as it is often found in these habitats (Skinner & Chimimba 2005). It has not been found to be water dependent, which might be related to the fact that water is often restricted within its distribution (Skinner & Chimimba 2005).

Like that of other mongooses, its diet mainly consists of murids, small birds and reptiles, eggs and insects (Skinner & Chimimba 2005). There have been records of Amphibia species (e.g. toads *Bufo* spp.) contributing to their diet, as well as Aranea and Myriapoda species (e.g. centipede *Scolopendra morsitans*).

Selous' Mongoose is believed to be solitary, although pairs have been occasionally recorded (Skinner & Chimimba 2005). It is described as essentially nocturnal, with individuals lying in burrows during the day. Such burrows are excavated by themselves in sandy ground. The entrances to their burrows are often located under the shelter of a low bush but will occasionally appear in the open (Skinner & Chimimba 2005). Besides the fact that females give birth to two to four young during the warm and wet summer period, little is known of the reproductive biology of this species. A short survey conducted in

Table 2. Threats to the Selous' Mongoose (*Paracynictis selousi*) ranked in order of severity with corresponding evidence (based on IUCN threat categories, with regional context)

Rank	Threat description	Evidence in the scientific literature	Data quality	Scale of study	Current trend
1	*8.1.2 Invasive Non-Native/Alien Species/Diseases:* increasing population of domestic/feral dogs and cats from expanding human settlements. Current stresses *2.3.2 Competition*: Selous' Mongoose excluded competitively by domestic/feral dogs; and *2.1 Species Mortality*: species killed by dogs and maybe cats.	-	Anecdotal	Local	Increasing
2	*5.1.2 Hunting & Collecting Terrestrial Animals:* species killed accidentally when hunting ungulates and lagomorphs with dogs.	-	Anecdotal	Local	Increasing
3	*5.1.2 Hunting & Collecting Terrestrial Animals:* species killed unintentionally through poisoning and snaring to control damage-causing animals.	-	-	-	Probably minimal and stable.
4	*5.1.3 Persecution/Control*: species killed for perceived predation on poultry.	-	-	-	Probably minimal and stable.

Zambia found that Selous' Mongoose does not play a role in the epidemiology of rabies in that country (Sawchuk & Rottcher 1978). Parasites and diseases of this species have never been studied thoroughly.

Ecosystem and cultural services: None reported, but it is likely that Selous' Mongoose may play an important role in insect and rodent pest control in crop plantations. Further research is needed to quantify both the use of, and the diet of this species in agricultural habitats.

Use and Trade

Selous' Mongoose is not suspected to be utilised in any form. The expansion of wildlife ranching likely created additional suitable and preserved habitat for this species, notably in Limpopo Province.

Threats

There are no major threats to the species, although we believe that domestic/feral dogs and cats outcompete or even kill Selous' Mongoose at a local level. It is also suspected that the species is accidentally killed by hunting dogs and caught as bycatch in snares which are intended for other game species, and killed occasionally for perceived predation on poultry.

Leptospirosis, a bacterial disease which can affect the kidneys, has been found in Selous' Mongoose in Botswana (Jobbins et al. 2014). However, its effect on the species and its South African population are not yet well understood.

Current habitat trend: Stable

Conservation

Selous' Mongoose is known to be present in several protected areas in the assessment region, including Kruger National Park.

There are currently no conservation actions which target this small carnivore. It is recommended to collect more information on its biology and ecology and better evaluate the impact of identified and suspected threats in view of properly determining whether conservation interventions have to be devised and implemented. Until this is achieved, some general conservation interventions will certainly benefit the species.

Recommendations for land managers and practitioners:

- Use holistic (selective or non-lethal) control methods for damage-causing animals.

Research priorities:

- Assessing occupancy and estimating densities in selected areas of this species' distribution, possibly by means of camera-trapping.
- More information is required on the species basic biology (e.g. reproduction) and ecology (e.g. home range size, habitat use, activity patterns).

Table 3. Conservation interventions for the Selous' Mongoose (*Paracynictis selousi*) ranked in order of effectiveness with corresponding evidence (based on IUCN action categories, with regional context)

Rank	Intervention description	Evidence in the scientific literature	Data quality	Scale of evidence	Demonstrated impact	Current conservation projects
1	*2.1 Site/Area Management*: avoid use of poison and promote use of the "holistic" approach to the management of damage-causing animals instead.	-	Anecdotal	-	-	-
2	*4.3 Awareness & Communications*: establish a national campaign to educate the public (especially in rural areas) about responsible domestic dog and cat ownership, as well as the role of small carnivores in pest control.	-	Anecdotal	-	-	-

Encouraged citizen actions:

- Report sightings on virtual museum platforms (for example, iSpot and MammalMAP), especially outside protected areas. As confusion with other mongoose species is possible, a photograph is required for confirmation of identification.

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Data Sources and Quality

Table 4. Information and interpretation qualifiers for the Selous' Mongoose (*Paracynictis selousi*) assessment

Data sources	Field study (literature, unpublished), indirect information (literature, expert knowledge, unpublished)
Data quality (max)	Inferred
Data quality (min)	Suspected
Uncertainty resolution	Expert consensus
Risk tolerance	Evidentiary

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Details of the methods used to make this assessment can be found in *Mammal Red List 2016: Introduction and Methodology.*