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# A conservation assessment of *Herpestes pulverulentus*

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# Herpestes pulverulentus – Cape Grey Mongoose



Trevor Hardaker

<b>Regional Red List status (2016)</b>	Least Concern
National Red List status (2004)	Least Concern
Reasons for change	No change
Global Red List status (2015)	Least Concern
TOPS listing (NEMBA) (2007)	None
CITES listing	None
Endemic	Near endemic

Although the Cape Grey Mongoose primarily consumes rodents and insects, one individual has exceptionally been observed attacking Cape Grysbok (*Raphicerus melanotis*) lambs by tearing at the nose and mouth, eventually killing them (Langley 1986).

## Taxonomy

*Herpestes pulverulentus* (Wagner 1839)

ANIMALIA - CHORDATA - MAMMALIA - CARNIVORA - HERPESTIDAE - *Herpestes - pulverulentus*

**Synonyms:** *Galerella pulverulenta*

**Common names:** Cape Grey Mongoose, Small Grey Mongoose (English), Klein Grysmuishond, Kaapse Grysmuishond (Afrikaans)

**Taxonomic status:** Species

**Taxonomic notes:** Sometimes included in the genus *Galerella* (Meester et al. 1986; Wozencraft 2005; Veron et al. *in press*). Cavallini (2013) recognised three subspecies: *Herpestes pulverulentus pulverulentus* (present in most of the range), *H. p. basuticus* (present at higher altitudes, from the east of Lesotho to the west of KwaZulu-Natal), and *H. p. ruddi* (in the extreme northwestern section of the distribution range). Lynch (1981) noted that character gradients are present in individuals from contiguous areas.

## Assessment Rationale

The Cape Grey Mongoose is listed as Least Concern because it is common and adaptable, with a catholic diet, there are no major threats, and it is present in a number of protected areas in its range.

**Regional population effects:** The range is continuous and dispersal between regions occurs as this species is not constrained by fences.

## Distribution

This species is endemic to southern Africa, ranging throughout the Northern Cape, Western Cape and Eastern Cape provinces of South Africa, with a marginal intrusion into southern Namibia, east to Lesotho and extreme western KwaZulu-Natal (Cavallini 2013). In 1990, an animal was trapped in Wakkerstroom, Mpumalanga, 200 km north of known records in KwaZulu-Natal and Lesotho (Bronner 1990). It is present from sea level around the Western Cape to 1,900 m asl in KwaZulu-Natal (Cavallini 2013). Although there is a slight overlap in the distribution range of Cape Grey Mongoose and that of the closely related Slender Mongoose (*Herpestes sanguineus*), it is speculated that the otherwise disjoint distribution ranges are a result of competitive exclusion between these species (Skinner & Chimimba 2005).

## Population

The Cape Grey Mongoose is common within its wide range in the assessment region. Densities of up to 10 individuals / km<sup>2</sup> have been recorded in suitable habitat (Cavallini & Nel 1990a). As such, given this species' large distribution range and assuming a minimum average density of at least 0.1 individual / km<sup>2</sup>, we estimate that there are well over 10,000 mature individuals in the assessment region.

**Current population trend:** Unknown, but probably stable based on lack of threats and wide habitat tolerance and extent of occurrence.

**Continuing decline in mature individuals:** Unknown, but probably not.

**Number of mature individuals in population:** Probably > 10,000.

**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. Cape Grey Mongooses have a broad habitat tolerance and can exist in agricultural and rural landscapes.

## Habitats and Ecology

Cape Grey Mongooses have a wide habitat tolerance, although they are essentially found in Karoo and karroid

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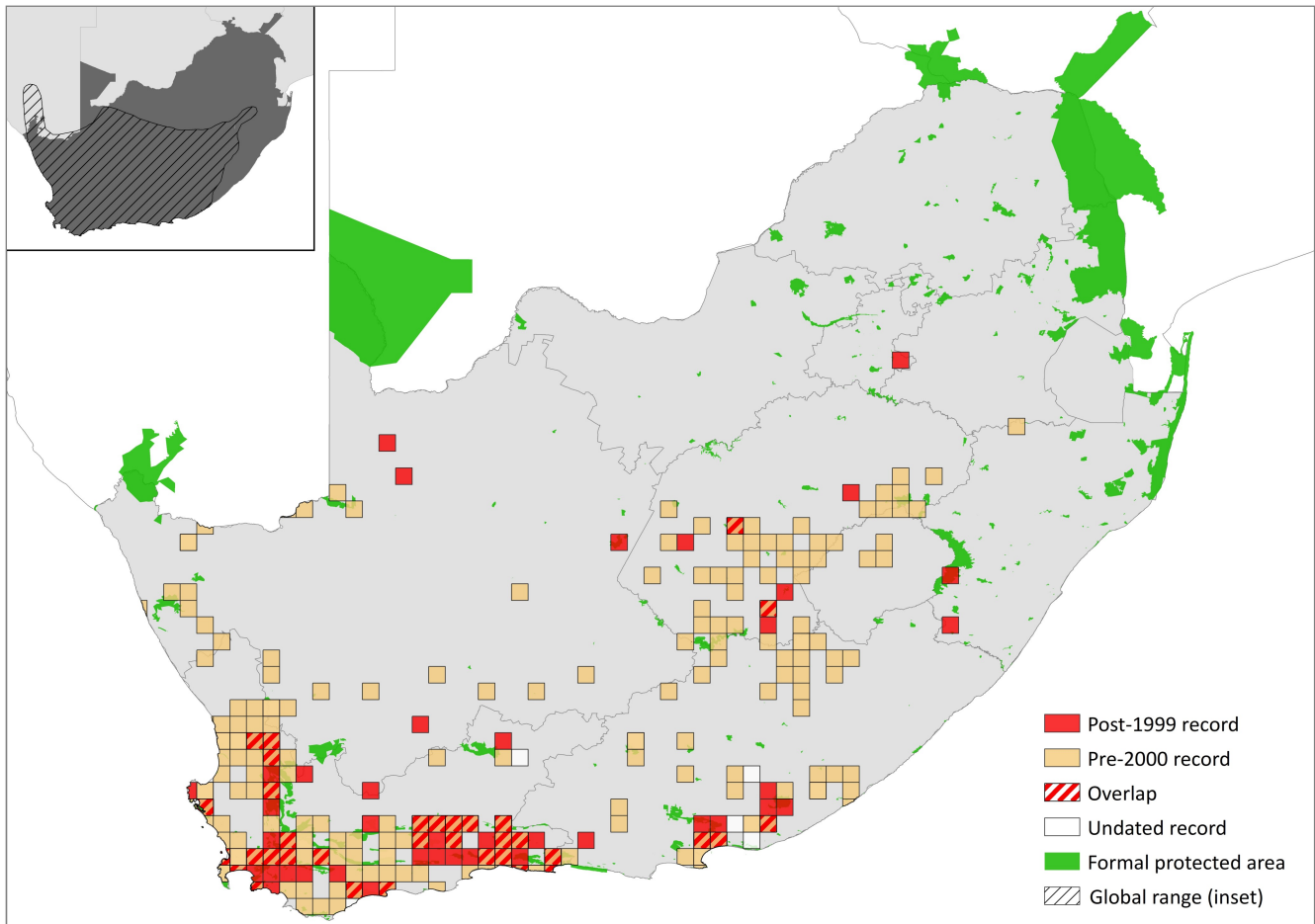


Figure 1. Distribution records for Cape Grey Mongoose (*Herpestes pulverulentus*) within the assessment region

Table 1. Countries of occurrence within southern Africa

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

bushveld and sclerophyllous scrub (Cavallini 2013). They are often associated with refuge areas, such as dense bushes and rocky outcrops, and avoid open fields with short vegetation, where they are easily spotted and thus vulnerable to predation by larger carnivores (*Caracal caracal*, Black-backed Jackal *Canis mesomelas*, etc.; E. Do Linh San & M.J. Somers unpubl. data) and large birds of prey (Cavallini & Nel 1990a). They appear to avoid moist and wet high forests (Crawford et al. 1983). They are essentially terrestrial, but readily climb bushes and tree trunks, which they occasionally use to defecate (latrines) or rest during the day (Photo 1). In the Great Fish River Nature Reserve, Eastern Cape, some radio-tracked individuals used riverine forests as nocturnal shelter – sleeping in hollow Cape Bushwillow (*Combretum caffrum*) trees – and as foraging grounds during the day (E. Do Linh San & M.J. Somers unpubl. data). Cape Grey Mongooses otherwise use dense bushes or rock crevices

to sleep during the night. They are not fossorial but may occasionally use burrows dug by other species. They are sometimes seen close to human settlements, foraging in gardens and on food scraps, and sleeping in attics (E. Do Linh San pers. obs. 2006; Cavallini 2013).

The Cape Grey Mongoose is essentially a diurnal species, with timing of onset and end of activity generally correlated with sunrise and sunset (E. Do Linh San & M.J. Somers unpubl. data). Longer activity periods and higher activity levels are recorded in summer, while activity is more restricted in winter. Cape Grey Mongooses are also less active under rainy and cold weather conditions, which likely reduce prey activity and therefore availability. They have a catholic diet, though their primary food is generally small mammals – *Rhodomys* spp., *Otomys* spp. and *Grammomys* spp. have been recorded as the most common prey species – and insects (du Toit 1980; Stuart 1981, 1991; MacDonald & Nel 1986; Cavallini & Nel 1990b; Avenant & Nel 1997; Stuart & Stuart 1998; Mbatyoti 2010), and readily kill snakes (Branch & Hanekom 1987). They have also been reported feeding on larger mammals such as Cape Porcupine (*Hystrix africaeaustralis*) and hares (*Lepus* spp.) (Cavallini 1992; Stuart & Stuart 1998), although this probably mostly takes place through scavenging, as directly observed with hares (E. Do Linh San pers. obs. 2007; Photo 2).

The Cape Grey Mongoose is regarded as a solitary species, but groups of two, three and up to five individuals have been observed (Stuart 1981, 1991). Groups often comprise one adult female and her offspring, sometimes with the presence of a second adult.



Male home range size in the West Coast National Park varied from 52 to 92 ha (Cavallini & Nel 1990a). Female home range size is likely smaller, as suggested by the case of one radio-tracked female who ranged over 31 ha. Juveniles may, however, move over much larger areas (Cavallini & Nel 1990a). Home range overlap has been recorded in both males and females (Cavallini & Nel 1990a; Stuart 1991). As observed in the Slender Mongoose (Waser et al. 1994), males exhibit some degree of tolerance or sociality, with two or three males of different sizes (and likely ages) ranging over a common area, although rarely sharing the same nocturnal resting site (Cavallini & Nel 1990a; E. Do Linh San & M.J. Somers unpubl. data).

The breeding season probably runs from June to December, as lactating females have been observed in August and from November to February (Stuart 1981; Lynch 1983). Litter size is 1–3 pups; it is unknown whether females can have two litters per breeding season. Pups are often reared in rock crevices, hollow trees, wood piles or farm outbuildings. Life expectancy in captivity is more than 11 years (Weigl 2005).

**Ecosystem and cultural services:** Like other small carnivores, the Cape Grey Mongoose may predate on pest species, such as rodents and insects (e.g. Cavallini & Nel 1990b; Mbatyoti 2010).

## Use and Trade

This species is not known to be harvested or traded in any form.

## Threats

There are no major threats to this species. Like most small carnivores the Cape Grey Mongoose is occasionally victim of road traffic collisions. On farmland it might also be poisoned accidentally when it feeds on carcasses set out for damage-causing predators such as Black-backed Jackals or Caracals.

**Current habitat trend:** Stable

## Conservation

This species occurs in a number of protected areas in its range, including the West Coast, Addo Elephant and Mountain Zebra national parks, as well as the Great Fish River Reserve Complex. No specific conservation interventions are necessary at this stage.

### Recommendations for land managers and practitioners:

- No specific management interventions have been identified.

**Table 2. Threats to the Cape Grey Mongoose (*Herpestes pulverulentus*) 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	4.1 Roads & Railroads: direct mortality due to road collisions.	W. Collinson unpubl. data	Empirical	National	Possibly increasing with new road construction.
2	5.1.2 Hunting & Collecting Terrestrial Animals: accidental poisoning from carcasses set out for other species.	-	Anecdotal	-	Stable, but possibly increasing in some areas.



**Photo 1. Cape Grey Mongoose (*Herpestes pulverulentus*) resting during the day on a small tree branch (Kate Webster)**



**Photo 2. Cape Grey Mongoose (*Herpestes pulverulentus*) about to scavenge on a hare (*Lepus* spp.) (Emmanuel Do Linh San)**

### Research priorities:

- Monitoring subpopulations to detect trends across various land-uses.
- General studies on the biology (notably reproductive aspects) and ecology of this species in different habitat types.

### Encouraged citizen actions:

- Report sightings on virtual museum platforms (for example, iSpot and MammalMAP), especially outside protected areas.

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## Data Sources and Quality

**Table 3. Information and interpretation qualifiers for the Cape Grey Mongoose (*Herpestes pulverulentus*) assessment**

Data sources	Field study (literature, unpublished), indirect information (literature)
Data quality (max)	Estimated
Data quality (min)	Inferred
Uncertainty resolution	Best estimate
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*.