Amblysomus hottentotus – Hottentot's Golden Mole


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Regional Red List status (2016)	**Least Concern***
National List status (2004)	Data Deficient
Reasons for change	Non-genuine change: New information
Global Red List status (2015)	Least Concern
TOPS listing (NEMBA)	None
CITES listing	None
Endemic	Yes

*Watch-list Data

This is the most widespread golden mole species, and ongoing genetic studies indicate it includes several cryptic lineages that are probably worthy of species status.

Taxonomy

Amblysomus hottentotus (A. Smith 1829)

ANIMALIA - CHORDATA - MAMMALIA - AFROSORICIDA - CHRYSOCHLORIDAE - *Amblysomus* - *hottentotus*

Synonyms: *Amblysomus iris* (Thomas & Schwann 1905)

Common names: Hottentot Golden Mole, Zulu Golden Mole (English), Hottentot-gouemol, Hotnot-kruipmol (Afrikaans)

Taxonomic status: Species complex

Taxonomic notes: Traditionally taken to include populations that Bronner (1996, 2000) recognized as valid species, namely *A. septentrionalis, A. robustus, A. marleyi* and *A. corriae* (in part). *Amblysomus hottentotus* includes five subspecies: *hottentotus, pondoliae, iris, longiceps* and *meesteri* (Bronner 1995, 2013). Recent cytogenetic and molecular analyses show that *A. h. longiceps* and *A. h. meesteri* are unique lineages and will likely be elevated to species status (Gilbert et al. 2008; Mynhardt et al. 2015). Furthermore recent analyses using mitochondrial DNA reveal several evolutionarily significant units in the Greater Maputaland–Pondoland–Albany region (Mynhardt et al. 2015), and thus demonstrate *A. hottentotus* to comprise a species complex.

Assessment Rationale

The Hottentot Golden Mole ranges extensively across the eastern regions of South Africa, adapts well to mildly-transformed habitats, is located in a number of protected areas, and presumably has a large population which is not expected to be in decline. For these reasons, this species is listed as Least Concern. However, it will require reassessment once the taxonomy of the species complex is resolved, as some cryptic species may be threatened.

Distribution

This species, as presently known, is found in South Africa and possibly also Swaziland (but whether the Swaziland specimens represent this species or *Amblysomus septentrionalis*, or both, awaits confirmation by genetic data). *Amblysomus hottentotus* occurs coastally from the Eastern Cape, in the vicinity of Van Staden's River, northwards to St Lucia district in KwaZulu-Natal (Figure 1). It ranges inland to the foot of the Drakensberg escarpment, from Maclear/Ugie in the south to Van Reenen in the north, possibly with a marginal intrusion into north-eastern Free State (Bronner 2013) (Figure 1), but these records again may pertain to *A. septentrionalis*. An apparently isolated subspecies (*A. h. meesteri*) occurs in the Barberton/Graskop region of Mpumalanga (Figure 1), and likely represents a cryptic species as recent molecular work supports it as a monophyletic lineage highly divergent from *A. hottentotus* (Mynhardt et al. 2015). Similarly, there are at least four distinct lineages within the Greater Maputaland–Pondoland–Albany region where previously only three subspecies were recognised (Mynhardt et al. 2015). Previously reported from Lesotho, based on a misidentified specimen (representing *Chlorotalpa sclateri*); a marginal occurrence in Lesotho in the northern Drakensberg (near Bethlehem) cannot, however, be discounted as species limits and distributions of this taxon and *A. septentrionalis* await clarification. The estimated extent of occurrence is 280,000 km^2.

Population

The Hottentot Golden Mole is considered common within its range, exhibiting densities up to 25 individuals / ha in areas of optimal habitat (Kuyper 1985; Bronner 2013).

Current population trend: Unknown

Continuing decline in mature individuals: No

Number of mature individuals in population: Unknown

Number of mature individuals in largest subpopulation: Unknown

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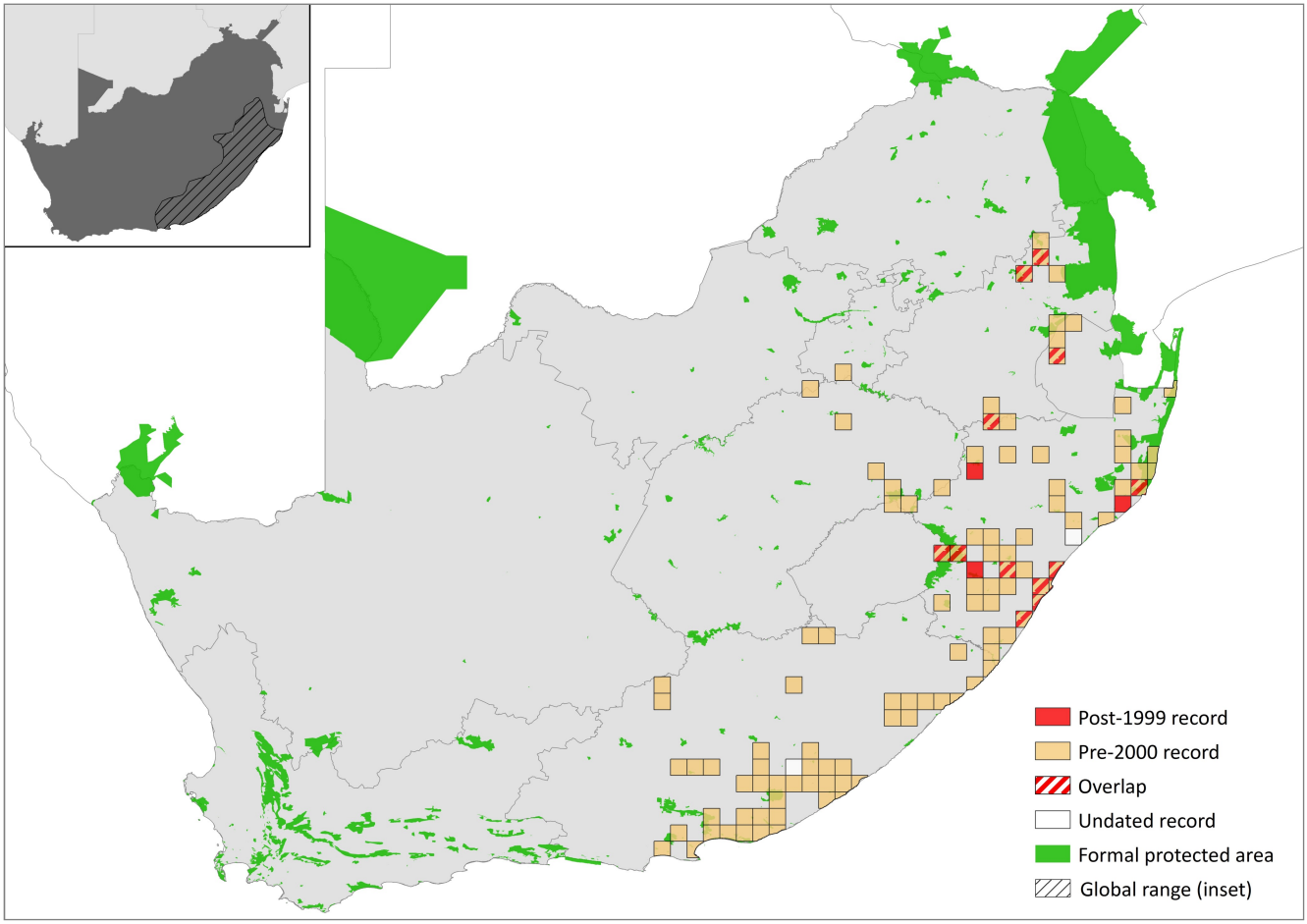

Figure 1. Distribution records for Hottentot Golden Mole (*Amblysomus hottentotus*) within the assessment region

Table 1. Countries of occurrence within southern Africa

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

Number of subpopulations: Unknown

Severely fragmented: No

Habitats and Ecology

This species occurs predominantly within the mesic eastern regions of South Africa, across a broad range of habitats from Afromontane and coastal dune forests to marshes, temperate grasslands and woodland savannahs (Skinner & Chimimba 2005). There is marginal intrusion of this species into the Fynbos and Nama-Karoo biomes in the southern part of its range. They seem to prefer moist soils near water sources, however they are able to survive far from water providing that soils remain soft enough for burrowing, and invertebrate prey is common. They adapt easily to modified landscapes, and are frequently associated with agricultural areas, golf courses and gardens but are less common in exotic plantations.

Similar to other golden moles, this species usually consumes earthworms and insects; however it has also been documented feeding on snails and plant material, for example potatoes and bulbs (Kuyper 1985). Although largely solitary, *A. hottentotus* has been recorded in sympatry with African Mole-rats (*Cryptomys hottentotus*), even to the point of sharing burrow systems. Hottentot Golden Moles breed aseasonally, however they are significantly less active in winter than summer, and will burrow deeper during the colder winter months, often entering a state of torpor (Skinner & Chimimba 2005). Generally this species produces two young per litter (Bernard et al. 1994; Schoeman et al. 2004). Studies have shown that when wet, a layer of air retained in their fur allows them to maintain a certain degree of buoyancy, thus enabling them to swim (Kuyper 1985; Hickman 1986). This becomes a valuable survival technique when burrows flood during heavy rainfall events.

Ecosystem and cultural services: This species is not known to provide any specific ecosystem services, but this may simply reflect the paucity of information available for this poorly-known species. They have, however, been identified as a source of food for predators, such as Barn Owls (*Tyto alba*). They become vulnerable to predation when they leave the safety of their burrows to feed, as well as following rainfall events, when activity increases substantially (Skinner & Chimimba 2005).

Use and Trade

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

Table 2. Threats to the Hottentot Golden Mole (*Amblysomus hottentotus*) 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	*1.1 Housing & Urban Areas*: habitat loss from residential and urban development.	GeoTerraImage 2015	Indirect (land cover change from remote sensing)	Regional	Increasing
2	*1.3 Tourism & Recreation Areas*: habitat loss from residential and urban development.	GeoTerraImage 2015	Indirect (land cover change from remote sensing)	Regional	Increasing
3	*2.1.2 Small-holder Farming*: habitat loss from agricultural expansion.	Jewitt et al. 2015	Indirect (land cover change from remote sensing)	Regional	Increasing
4	*5.1.3. Persecution/Control*: poisoning and persecution in rural or urban settings.	-	Anecdotal	-	Increasing in tandem with settlement expansion.

Threats

No major threats have been identified for this species. Inferred minor threats include persecution and poisoning by landowners, habitat alteration (especially in urban and coastal resort areas) and predation by domestic dogs and cats. Although not suspected to cause widespread population declines, local declines may be occurring. Local threats will have to be re-evaluated once the taxonomy is resolved.

Current habitat trend: Stable. However, across the Eastern Cape, Mpumalanga and KwaZulu-Natal Provinces, urban development has increased by 6–11%, and rural development by 1–7%, between 2000 and 2013 (GeoTerraImage 2015). Similarly, there is an ongoing loss of natural habitat in KwaZulu-Natal at an average of 1.2% per year since 1994 (Jewitt et al. 2015).

Conservation

The species is adequately conserved in many protected areas across its range; see Bronner (1995) for a list of these. Currently, no specific interventions are required for this species. However, this may change should molecular research reveal more range-restricted endemic species.

Recommendations for land managers and practitioners: None

Research priorities:

- Studies on subpopulation sizes, trends and distributions.
- Studies assessing the severity of threats faced by this species.
- Molecular studies to disentangle the species complex.

Encouraged citizen actions:

- Report sightings on virtual museum platforms (for example, iSpot and MammalMAP), especially outside protected areas.
- Deposit any dead specimens found in a state or provincial museum, together with information on the date and site where found.
- Create indigenous vegetation gardens.

Data Sources and Quality

Table 3. Information and interpretation qualifiers for the Hottentot Golden Mole (*Amblysomus hottentotus*) assessment

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

References

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