

# *Chrysochloris asiatica* – Cape Golden Mole



<b>Regional Red List status (2016)</b>	<b>Least Concern*</b>
National Red 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

Carl Linnaeus, who described this species in 1758, mistakenly thought that the type specimen (which was collected in the Cape of Good Hope) came from Siberia and therefore named this species *asiatica*.

## Taxonomy

*Chrysochloris asiatica* (Linnaeus 1758)

ANIMALIA - CHORDATA - MAMMALIA - AFROSORICIDA - CHRYSOCHLORIDAE - *Chrysochloris* - *asiatica*

**Common names:** Cape Golden Mole (English), Kaapse Gouemol, Kaapse Kruipmol (Afrikaans)

**Taxonomic status:** Species

**Taxonomic notes:** Provisionally includes *Kilimatalpa* as a subgenus (Bronner 1995), although recent (but still unpublished) phylogenetic analyses suggest that *Kilimatalpa* should be recognized as a separate genus; see comments under *C. stuhlmanni*. Up to ten subspecies have previously been recognized, but size and colour vary clinally, hence the validity of these taxa is dubious (Meester et al. 1986).

## Assessment Rationale

The Cape Golden Mole is a widespread species that does not appear to be in decline. Although habitat alteration/

degradation is ongoing in some parts of this species range, it has adapted well to mildly transformed habitats ranging from vineyards and pasturelands to city parks and gardens; habitat alteration is not, therefore, considered to be a major threat and this species is listed as Least Concern. However, molecular research is necessary to ascertain possible species of putative subspecies.

## Distribution

This species is endemic to South Africa, and ranges from the Cape Peninsula (Western Cape) south-eastwards across the Cape Flats to Bredasdorp, Swellendam, possibly as far as Knysna (although there are no confirmed records to prove this); and northwards along the Atlantic coast to Port Nolloth in Northern Cape (Figure 1). They occur inland to Ceres, Worcester, Sutherland and Stellenbosch in the south, and Calvinia, Garies and Kamieskroon in the north, but do not penetrate the arid Karoo (Figure 1). One specimen (type of *C. damarensis*) recorded from Damaraland in Namibia is probably a misidentified specimen from Little Namaqualand (Meester et al. 1986).

## Population

*Chrysochloris asiatica* is common in most habitats, depending on soil friability and invertebrate prey resources. They are less common on rocky mountain slopes, but nevertheless have still colonized even some mountain plateaux. In prime habitat, inferred densities are up to 4 individuals / ha (G.N. Bronner unpubl. data).

**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

**Number of subpopulations:** Unknown

**Severely fragmented:** No

## Habitats and Ecology

The Cape Golden Mole occurs within sandy soils in the Fynbos and Nama-Karoo biomes, and has been recorded from a wide variety of vegetation types, most commonly in Renosterveld, Fynbos and Strandveld Succulent Karoo. They are common in parks, gardens and cultivated lands, and are known to readily invade lawns and golf courses. This species also forages on beaches, presumably for amphipods and isopods associated with kelp wracks (Bennett & Spinks 1995; Bronner 2013). They coexist with Fynbos Golden Moles (*Amblysomus corriae*) in the Stellenbosch region, but comparatively prefer drier, sandier soils (Broom 1907).

Cape Golden Moles are predominantly active at night or during the late afternoons, particularly after rainfall events (Skinner & Chimimba 2005). As a solitary and occasionally

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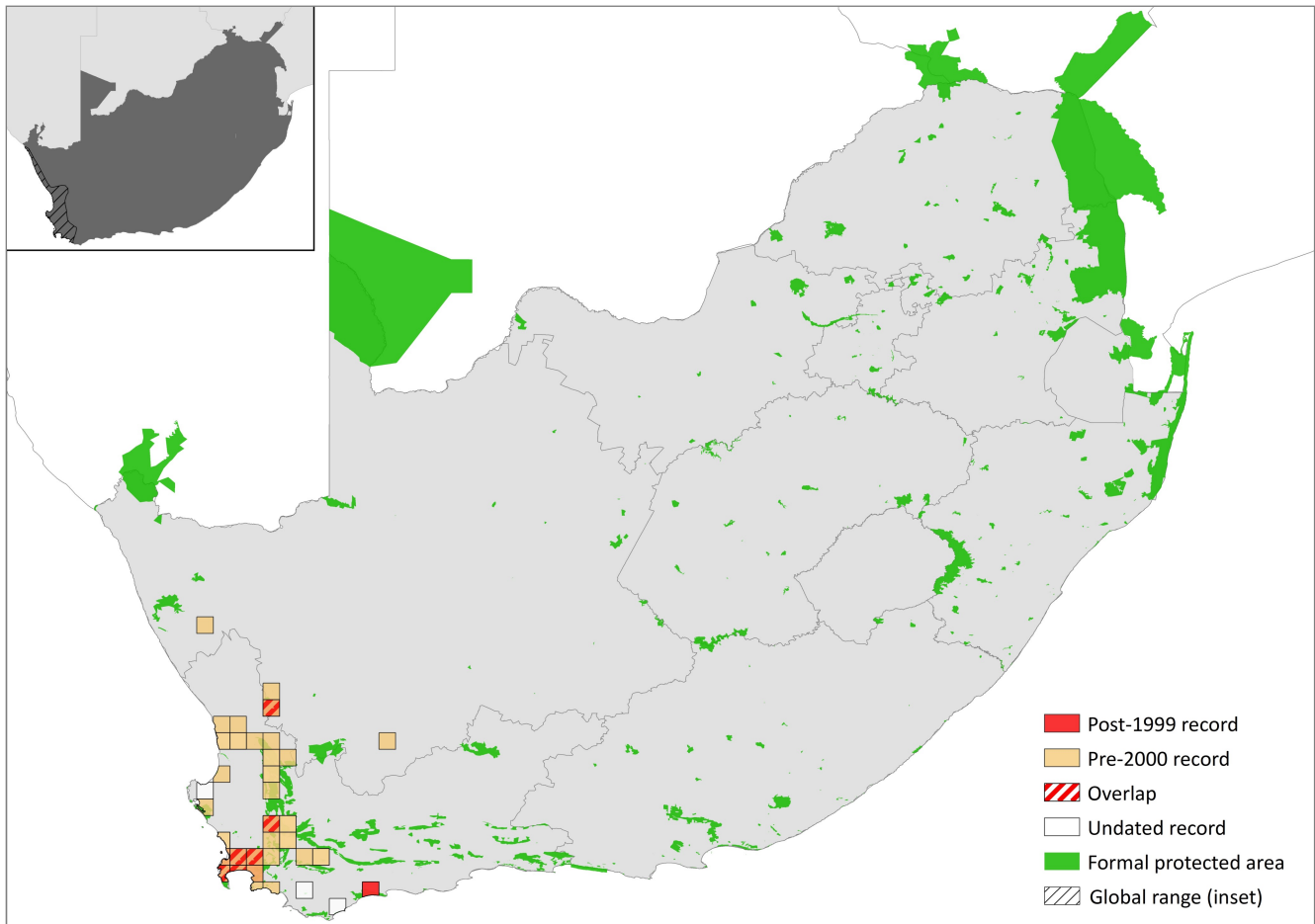


Figure 1. Distribution records for Cape Golden Mole (*Chrysochloris asiatica*) within the assessment region

Table 1. Countries of occurrence within southern Africa

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

aggressive (to conspecifics) species, only females raising young coexist (Skinner & Chimimba 2005). Breeding is restricted to the wet winter season of the Western Cape, with females producing between one and three young (Skinner & Chimimba 2005).

## Use and Trade

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

## Threats

The natural habitats of this species have undoubtedly been dramatically altered by urbanization, coastal tourism developments, mining for alluvial diamonds and agriculture during the past 350 years, but this is not considered a threat as it coexists (indeed even thrives) in close association with humans. They are, however,

persecuted by gardeners and greenkeepers, and regularly caught by domestic dogs and cats, but such mortalities are negligible given the abundance of this widespread species, and its cryptic nature.

**Current habitat trend:** Stable. However, minor threats inferred to be increasing with urban settlement expansion, which has increased by 9% in the Western Cape Province (GeoTerralimage 2015). Similarly, Pence (2014) calculated that between 2006 and 2011, 536 km<sup>2</sup> of land was converted to agriculture (107 km<sup>2</sup> / year, which equates to 0.08% of the surface area of the province per year).

## Conservation

This species is protected in many national and provincial conservation areas. At present, no species-specific conservation actions are deemed necessary.

### Recommendations for land managers and practitioners:

- None, this species adapts well to transformed habitats providing that transformation is not too severe.

### Research priorities:

- Research to clarify the status of described forms/subspecies is needed, as some of these may be distinct taxa given that their range largely corresponds with the Western Cape Fold Mountains, which may serve as barriers to gene flow between some populations.

**Table 2. Threats to the Cape Golden Mole (*Chrysochloris asiatica*) 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 <i>Housing &amp; Urban Areas</i> : habitat loss from development in urban areas. Current stress 2.1 <i>Species Mortality</i> : increased persecution from gardeners or domestic pets.	GeoTerralimage 2015	Indirect (land change from remote sensing)	Regional	Increasing
2	1.2 <i>Commercial &amp; Industrial Areas</i> : habitat loss from development.	GeoTerralimage 2015	Indirect (land change from remote sensing)	Regional	Increasing
3	1.3 <i>Tourism &amp; Recreation Areas</i> : habitat loss from coastal tourism development.	GeoTerralimage 2015	Indirect (land change from remote sensing)	Regional	Increasing
4	2.1.3 <i>Agro-industry Farming</i> : habitat loss from intensive agricultural expansion.	Pence 2014	Indirect (land cover change from remote sensing)	Regional	Increasing
5	2.3.3 <i>Agro-industry Grazing, Ranching or Farming</i> : habitat loss from intensive livestock ranching expansion.	Pence 2014	Indirect (land cover change from remote sensing)	Regional	Increasing
6	3.3 <i>Renewable Energy</i> : development of wind and solar farms.	-	Anecdotal	-	-

- Surveys needed to determine subpopulation size, trend and distribution, particularly within urban and agricultural areas.

#### 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 native vegetation gardens.

T, Happold M, Kalina J, editors. Mammals of Africa, Volume I: Introductory Chapters and Afrotheria. Bloomsbury Publishing, London, UK.

Broom R. 1907. A contribution to the knowledge of the Cape golden moles. Transactions of the South African Philosophical Society **18**:283–311.

GeoTerralimage. 2015. Quantifying settlement and built-up land use change in South Africa.

Meester JA, Rautenbach IL, Dippenaar NJ, Baker CM. 1986. Classification of southern African mammals. Transvaal Museum Monographs **5**:1–359.

Pence GQK. 2014. Western Cape Biodiversity Framework 2014 status update: Critical Biodiversity Areas of the Western Cape. Unpublished CapeNature project report. Cape Town, South Africa.

Skinner JD, Chimimba CT. 2005. The Mammals of the Southern African Subregion. Third edition. Cambridge University Press, Cambridge, UK.

## Data Sources and Quality

**Table 3. Information and interpretation qualifiers for the Cape Golden Mole (*Chrysochloris asiatica*) 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

Bennett NC, Spinks AC. 1995. Thermoregulation and metabolism in the Cape golden mole (Insectivora: *Chrysochloris asiatica*). Journal of Zoology **236**:521–529.

Bronner GN. 1995. Systematic revision of the golden mole genera *Amblysomus*, *Chlorotalpa* and *Calcochloris* (Insectivora: Chrysochloromorpha; Chrysochloridae). Ph.D. Thesis. University of KwaZulu-Natal, Durban, South Africa.

Bronner GN. 2013. *Chrysochloris asiatica* Cape Golden Mole. Pages 226–227 in Kingdon J, Happold D, Hoffmann M, Butynski

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