Amblysomus corriae – Fynbos Golden Mole


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Regional Red List status (2016)	Near Threatened B2b(iii)
Red List status (2004)	Near Threatened B2ab(iii)
Reasons for change	No change
Global Red List status (2015)	Near Threatened B2ab(iii)
TOPS listing (NEMBA)	None
CITES listing	None
Endemic	Yes

This species exists in broad sympatry with *Chlorotalpa duthieae* along the southern Cape coast, but trapping data suggest they select different micro-habitats, *A. corriae* preferring forest fringes and associated fynbos, and *C. duthieae* preferring deeper forest.

Taxonomy

Amblysomus corriae (Thomas 1905)

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

Common names: Fynbos Golden Mole (English), Fynbos Gouemol (Afrikaans)

Taxonomic status: Species

Taxonomic notes: The species *Amblysomus corriae* now includes two groups previously classified as the subspecies *Amblysomus iris corriae* and *Amblysomus hottentotus devilliersi* (Meester et al. 1986). *Amblysomus iris* was subsequently reclassified as a subspecies of *A. hottentotus*, and *corriae* was elevated to species level, including the subspecies *devilliersi* (Bronner 1996). Currently two subspecies are recognised: *A. c. corriae* from the Western and Eastern Cape, and *A. c. devilliersi* from the Western Cape (Bronner 1995, 2013).

Assessment Rationale

The Fynbos Golden Mole is an endemic species dependent on moist, soft soils in the Western and Eastern Cape. Although their extent of occurrence is over 20,000 km², they have only been confirmed at 16 locations, with an area of occupancy estimated at less than 500 km². The population is not, however, considered severely fragmented, as it can survive successfully in anthropogenically altered habitats, such as residential gardens and agricultural areas. Although populations are expected to be declining in some locations, no significant overall population fluctuations are projected. Given this restricted range, as well as widespread habitat alteration, loss and degradation, we list *A. corriae* as Near Threatened B2b(iii).

Distribution

Endemic to South Africa, this species is found from the Western Cape Province, from Groot Winterhoek Wilderness Area (near Porterville) in the north, south-eastwards along the southern Cape mountains to Hawequas Forest and Limietberg Mountains (near Worcester), and then westwards through Paarl and Stellenbosch to the coastal plain and slopes of the Langeberg Mountains in the Riversdale district, then north-eastwards along the coastal plain and slopes of the Outeniqua, Kouga and Baviaanskloof mountain ranges from the vicinity of George to Humansdorp (Eastern Cape) (Figure 1). In the southern parts of the Western Cape it appears to be confined to higher-altitude, montane fynbos habitats. They coexist with the Cape Golden Mole (*Chrysochloris asiatica*) in Stellenbosch and Paarl, but are absent from the Cape Peninsula, where the Cape Golden Mole is common (Bronner 2013). *Amblysomus c. corriae* extends from George (Western Cape) eastwards to Humansdorp (Eastern Cape), while *A. c. devilliersi* is restricted to the Western Cape, with a range expanding from Worcester to Stellenbosch (Skinner & Chimimba 2005).

Population

Common within its range, this species is limited to soft soils and regions supporting adequate food sources in the form of invertebrates. Their prevalence in rocky montane habitats is limited to scattered microhabitats of friable soils.

Current population trend: Unknown

Continuing decline in mature individuals: Unknown

Number of mature individuals in population: Unknown

Number of mature individuals in largest subpopulation: Unknown

Number of subpopulations: Unknown

Severely fragmented: No, can exist in modified and agricultural landscapes.

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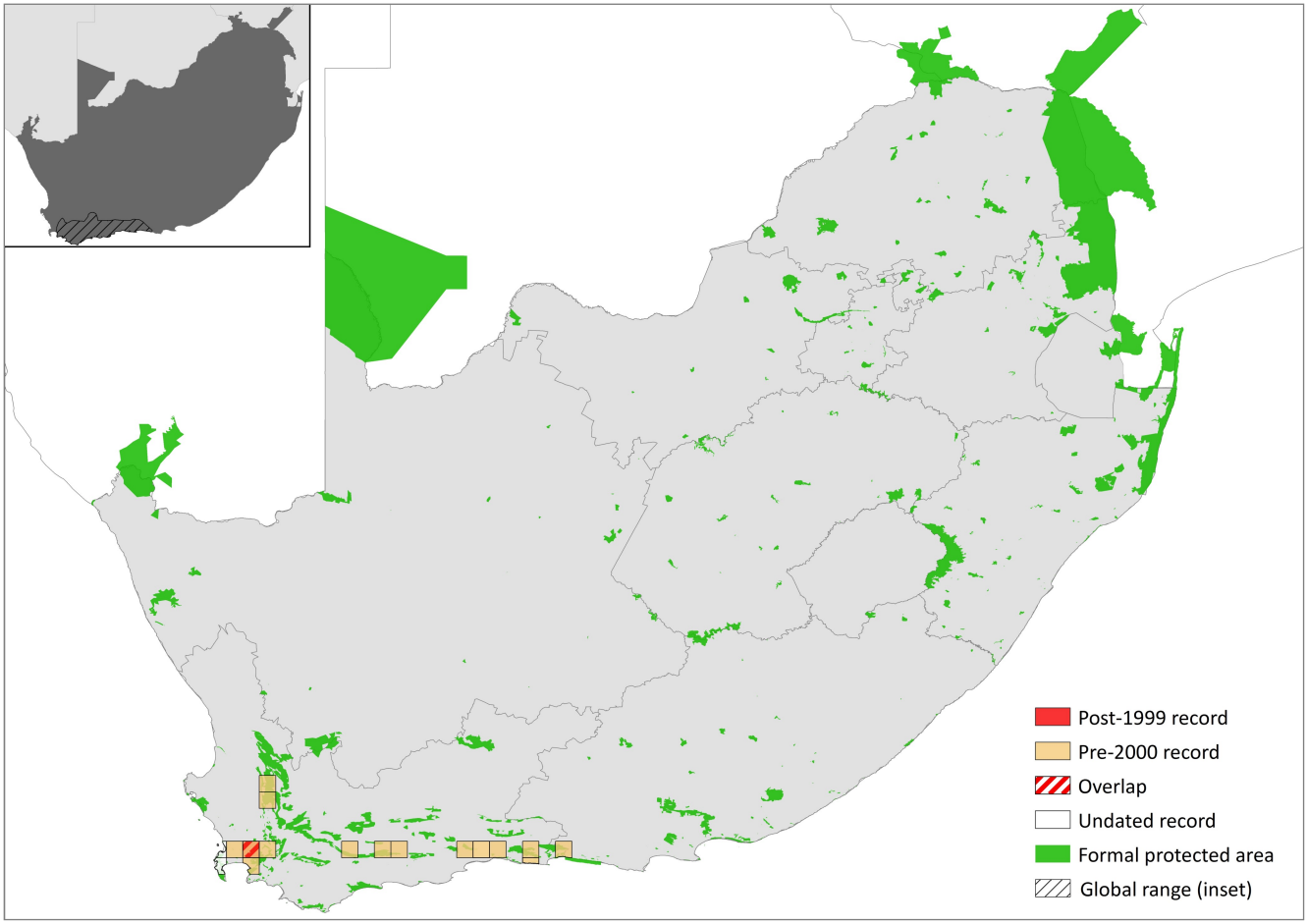

Figure 1. Distribution records for Fynbos Golden Mole (*Amblysomus corriae*) within the assessment region

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	-

Habitats and Ecology

The Fynbos Golden Mole is limited to sandy soils and soft loams associated with fynbos, afromontane forest, moist savannah (southern Cape coast) and renosterveld habitats of the south-west Cape. Additionally, this species is frequently found in anthropogenically modified habitats, such as gardens, nurseries, golf courses, livestock enclosures and exotic plantations (Skinner & Chimimba 2005), although at lower densities in the latter (Bronner 2013). In the vicinity of Stellenbosch, it coexists with the Cape Golden Mole, *Chrysochloris asiatica*, but prefers wetter and richer soils in comparison (Broom 1907). Additionally, along the southern coast, they survive in sympatry with Duthie's Golden Mole, *Chlorotalpa duthieae*, but seem to differ somewhat in their microhabitat preference. *A. corriae* favours the edge of the forest and adjoining fynbos, while *C. duthieae* prefers deeper areas of forest.

Amblysomus corriae feeds on invertebrates, predominantly earthworms and insects in the wild (Skinner & Chimimba 2005), but have been known to consume a range of food types while in captivity (G.N. Bronner unpubl. data). The subspecies, *A. c. corriae* and *A. c. devilliersi* are somewhat identifiable based on pelage colour; with grey-black and reddish-back/brown dorsal colourations respectively. Males are slightly larger in size compared to females; however, the cranial measurements between sexes do not differ significantly (Bronner 1995, 1996).

Use and Trade

This species is not traded or utilised in any form.

Threats

Widespread habitat alteration, degradation and loss has occurred historically throughout the range of this species, as a result of agriculture, forestry and urbanisation, but it appears to adapt well to transformed habitats providing that the intensity of disturbance is not too severe. However, the expansion of agricultural, plantation and urban areas continues to cause habitat loss, degradation and alteration of habitat for this species. This is especially prevalent along the southeastern coast of Western Cape owing to tourism developments and increasingly intensive agricultural practices. These factors, along with the increasing threat of climate change where 51–65% of the Fynbos Biome is projected to be lost by 2050 (Midgley et al. 2002), could lead to a substantial decline in appropriate habitat, as well as the fragmentation of subpopulations.

Table 2. Threats to the Fynbos Golden Mole (*Amblysomus corriae*) 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 tourism development.	GeoTerraImage 2015	Indirect (land cover change from remote sensing)	Regional	Increasing
3	*11.1 Habitat Shifting & Alteration*: habitat loss from climate change.	Midgley et al. 2002	Simulation	Regional	Increasing: 51-65% of Fynbos Biome projected to be lost by 2050.
4	*2.1.2 Small-holder Farming*: habitat loss from agricultural expansion.	Pence 2014	Indirect (land cover change from remote sensing)	Regional	Increasing
5	*2.1.3 Agro-industry Farming*: habitat loss from agricultural expansion.	Pence 2014	Indirect (land cover change from remote sensing)	Regional	Increasing
6	*5.1.3 Persecution/Control*: poisoning and persecution in rural or urban settings.	-	Anecdotal	-	Stable
7	*7.1.1 Increase in Fire Frequency/Intensity*: increase in fire frequency from poor land management causes habitat degradation.	-	Anecdotal	-	Stable
8	*8.1.1 Invasive Non-Native/Alien Species/ Diseases – Unspecified Species*: habitat degradation from invasive plant species.	Van Wilgen et al. 2012	Indirect	National	Increasing: spread rate *c.* 10% / year.

Although *A. corriae* is able to survive successfully in disturbed habitats, this remains dependent on the extent of transformation (Rouget et al. 2003). At a smaller scale, additional threats to this species include poisoning, persecution by landowners and predation by domestic pets.

Current habitat trend: Declining in area and quality. In the Western Cape Province, Pence (2014) calculated that between 2006 and 2011, 536 km^2 of land was converted to agriculture (107 km^2 / year, which equates to 0.08% of the surface area of the province / year). Similarly, urban areas have expanded by 8.6% between 2000 and 2013 (GeoTerraImage 2015). The impact of invasive alien plants on natural habitats in the Western Cape may also be worsening. Invasive alien plants displace native species, significantly altering not only habitat composition and structure, but fire and moisture regimes, to the detriment of indigenous flora and fauna. Van Wilgen et al. (2012) estimate that spread rates (~10% / year) are currently exceeding clearing rates.

Conservation

Although no specific conservation interventions are deemed necessary for this species, Fynbos Golden Moles are likely to benefit from the expansion of protected areas, as well as biodiversity stewardship schemes. Specifically, *A. c. corriae* is known to occur within the Garden Route National Park, Diepwalle Forest Reserve, Ruitersbos State Forest, Saasveld State Forest and the Bergplaas Nature Reserve; while *A. c. devilliersi* has been recorded from the Jonkershoek Conservation Area (Stellenbosch), Grootwinterhoek Wilderness Area (Porterville), Limietberg Nature Reserve, Limietberg Nature Reserve and Hawequas State Forest (Worcester) and the Boosmansbos Wilderness Area (Swellendam), Grootvadersbosch Forest Reserve (Heidelberg) and Garcia State Forest (Riversdale). This species may occur more extensively in other fynbos conservation areas.

Table 3. Conservation interventions for the Fynbos Golden Mole (*Amblysomus corriae*) ranked in order of effectiveness with corresponding evidence (based on IUCN action categories, with regional context)

Rank	Intervention description	Evidence in the scientific	Data quality	Scale of evidence	Demonstrated impact	Current conservation projects
1	*1.1 Site/Area Protection*: protected area expansion.	-	Anecdotal	-	-	CapeNature
2	*1.2. Resource & Habitat Protection*: biodiversity stewardship schemes.	-	Anecdotal	-	-	CapeNature
3	*2.1 Site/Area Management*: correct fire management and alien invasive vegetation removal.	-	Anecdotal	-	-	Working for Water programme, Department Environmental Affairs

Recommendations for land managers and practitioners:

- Reduce stocking rates and use correct fire regime.

Research priorities:

- Field studies to determine life history traits and ecological tolerances of this species.
- Studies on the population size, trends and distribution.
- The assessment of specific threats to this species and the associated severity.

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 4. Information and interpretation qualifiers for the Fynbos Golden Mole (*Amblysomus corriae*) assessment

Data sources	Museum records, field study (unpublished), indirect information (unpublished)
Data quality (max)	Inferred
Data quality (min)	Suspected
Uncertainty resolution	Best estimate
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.*