Dendromus nyikae – Nyika African Climbing Mouse

Photograph wanted

Regional Red List status (2016)	Data Deficient*
National Red List status (2004)	Near Threatened B1
Reasons for change	Non-genuine change: New information
Global Red List status (2016)	Least Concern
TOPS listing (NEMBA) (2007)	None
CITES listing	None
Endemic	Edge of range

*Watch-list Data

This species was first described from the Nyika Plateau in Malawi.

Taxonomy

Dendromus nyikae Wroughton 1909

ANIMALIA - CHORDATA - MAMMALIA - RODENTIA - NESOMYIDAE - *Dendromus* - *nyikae*

Synonyms: *angolensis, bernardi, longicaudatus*

Common names: Nyika African Climbing Mouse, Nyika Climbing Mouse (English), Nyikae-Klimmuis (Afrikaans)

Taxonomic status: Species complex

Taxonomic notes: Previously included under *Dendromus melanotis*, this species was subsequently recognised as distinct (Musser & Carleton 2005). However, the taxonomic status of the species within the assessment region, and its relationship to *D. melanotis,* remain in question. Further molecular work is required to confirm species status (Monadjem et al. 2015).

Assessment Rationale

This species exists as an isolated subpopulation in Limpopo Province. While it is widespread throughout the rest of its range and commonly collected in Zimbabwe, surveys have not revealed any further new specimens within the assessment region. It is possible that the few records have been misidentified with other *Dendromus* species. Further molecular work is required to confirm the taxonomic status of the species within the assessment region. For this reason, we list this species as Data Deficient until new evidence is available for reassessment.

Regional population effects: No dispersal is suspected, thus this is suspected to be an isolated population (Skinner & Chimimba 2005).

Distribution

This species occurs widely but patchily throughout southern Africa, extending into the Eastern Arc mountains of Tanzania in the north (Monadjem et al. 2015). It is found only in natural moist savannah habitat. Although widespread throughout Zimbabwe, within the assessment region it has only been collected from the Tzaneen district of Limpopo (Rautenbach 1982). While recent specimens from Phinda Private Game Reserve in KwaZulu-Natal were provisionally assigned to *D. nyikae* (Rautenbach et al. 2014), subsequent genetic analyses revealed the specimens to be *D. melanotis* sensu lato (Solano et al. 2014). It has not been recorded in Mozambique (Monadjem et al. 2015).

Population

It is generally uncommon but can be locally abundant (Happold 2013). It is a common species in Zimbabwe, but has not been recently recorded within the assessment region. The presence and taxonomic status of this species in South Africa needs further investigation.

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: This species has only been collected from two localities within the assessment region.

Severely fragmented: No

Habitats and Ecology

This species inhabits forest/grassland mosaic. It mainly occurs in long grass at higher altitudes and may occur in grassland habitats within pine plantations (Happold 2013). Specimens from Limpopo were found in dense grass in Mopane woodland at an altitude greater than 1,000 m (Rautenbach 1982). Information regarding the food, reproduction and habits of this species is extremely limited within the assessment region.

Ecosystem and cultural services: There are currently no known cultural services or folklores associated with this species. Similar to other small mammals, this species may play a role in regulating invertebrate numbers, seed dispersal, and nutrient cycling. Additionally, it is a valuable

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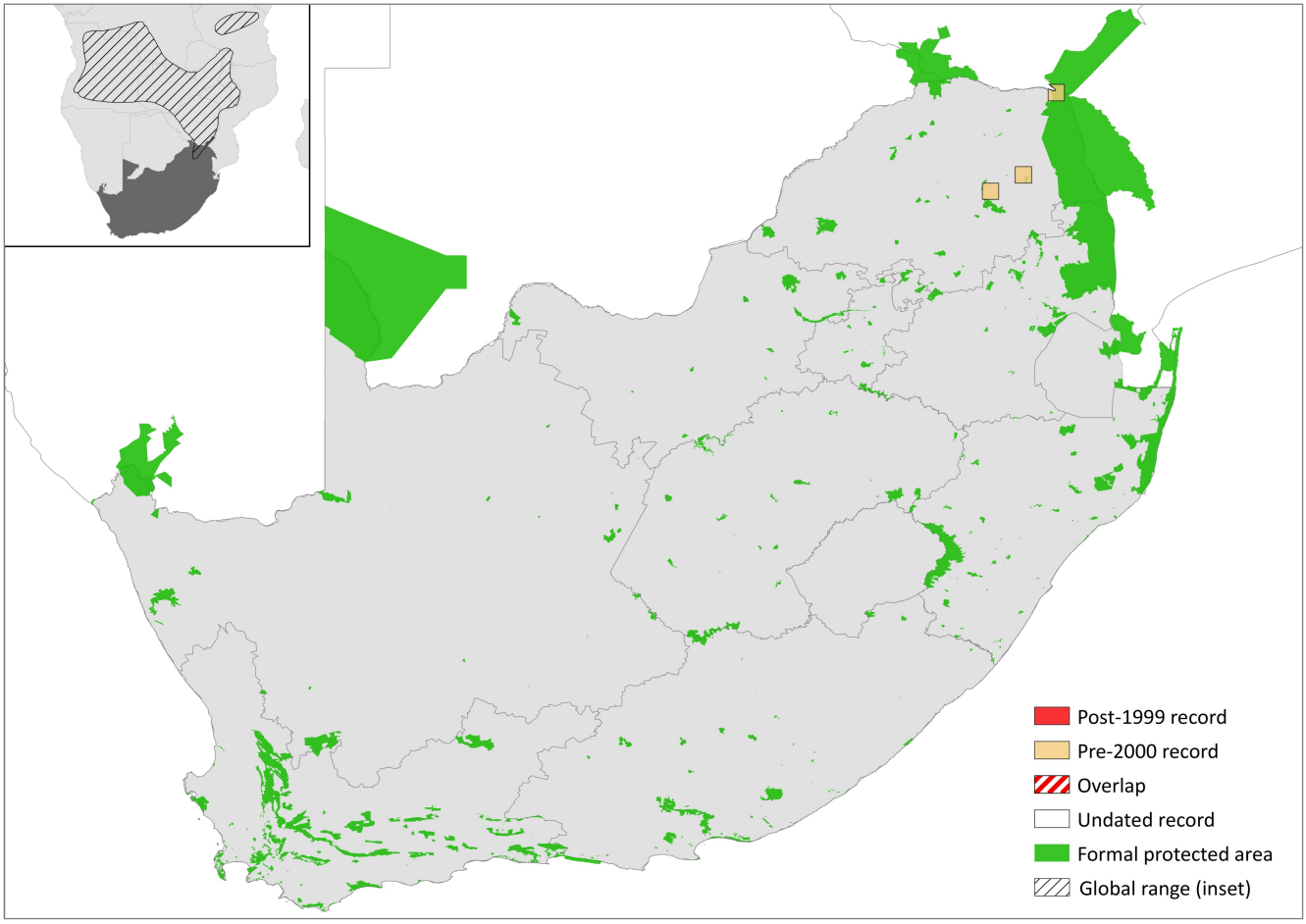

Figure 1. Distribution records for Nyika African Climbing Mouse (*Dendromus nyikae*) within the assessment region

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	Extant	Native

prey species and can comprise up to 30% of the diet of African Grass Owls (*Tyto capensis*) (Happold 2013).

Use and Trade

There is no known subsistence or commercial use of this species.

Threats

It is unknown whether this species faces any threats within the assessment region. It would be expected that disturbances through forestry and agriculture would impact suitable habitat in this localized area in the Limpopo Province. Overgrazing and incorrect fire regimes that reduce vegetation cover may lead to habitat degradation. More research is needed to quantify the potential threats facing this species.

Current habitat trend: Unknown

Conservation

Within the assessment area, it is uncertain whether the species occurs in any protected areas. No protected area expansion is possible without further molecular and survey work to clarify its taxonomic status and distribution. Once revised, a reassessment will be needed.

Recommendations for land managers and practitioners: It is important to first understand the status, distribution and habitat requirements within the assessment area prior to the provision of particular management recommendations.

Research priorities:

- This species is in urgent need of taxonomic resolution, specifically with historical and new genetic material from South African, Zimbabwean and Malawian populations.
- Determination of population size and trends.
- Understanding local movements and dispersal mechanisms.
- Habitat modelling must be used to determine habitat requirement of this species.

Encouraged citizen actions:

- Deposit any *ad hoc* specimens recorded from previously known localities to a natural history museum (for example, Ditsong Museum of Natural History).

References

Happold DCD. 2013. *Dendromus nyikae* Nyika African Climbing Mouse. Pages 181–182 in Happold DCD, editor. Mammals of Africa. Volume III: Rodents, Hares and Rabbits. Bloomsbury Publishing, London, UK.

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Data Sources and Quality

Table 2. Information and interpretation qualifiers for the Nyika African Climbing Mouse (*Dendromus nyikae*) assessment

Data sources	Museum records
Data quality (max)	Suspected
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.*