Nycteris hispida – Hairy Slit-faced Bat


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Regional Red List status (2016)	**Least Concern***
National Red List status (2004)	Near Threatened B2a
Reasons for change	Non-genuine: New information
Global Red List status (2016)	Least Concern
TOPS listing (NEMBA) (2007)	None
CITES listing	None
Endemic	Edge of range

*Watch-list Data

As this species occurs widely in savannah and woodland habitats over much of Africa, its absence from savannah habitats in much of Zimbabwe and northern South Africa is puzzling (Monadjem et al. 2010).

Taxonomy

Nycteris hispida (Schreber 1775)

ANIMALIA - CHORDATA - MAMMALIA - CHIROPTERA - NYCTERIDAE - *Nycteris* - *hispida*

Synonyms: *Vespertilio hispidus* Schreber 1774, *Nycteris daubentonii* E. Geoffroy Saint-Hilaire 1813, *Nycteris poensis* Gray 1843, *Nycteris villosa* Peters 1852, *Nycterops pilosa* Gray 1866, *Rhinolophus martini* Fraser 1843, *Nycteris pallida* Allen 1917

Common names: Hairy Slit-faced Bat, Hairy Long-eared Bat (English), Harige Spleetneusvlermuis (Afrikaans)

Taxonomic status: Species

Taxonomic notes: The species was originally described in Senegal (Skinner & Chimimba 2005). Meester et al. (1986) recognised two subspecies, with the nominate subspecies occurring throughout Africa and *N. hispida villosa* limited to south of the Zambezi River. However, these two subspecies do not appear to occupy geographically distinct regions and van Cakenberghe and de Vree (1993) concluded that *N. hispida* is uniform throughout its entire distribution area and thus cannot be divided into subspecies (although they were not able to examine specimens of the *villosa* form). Hence, in the absence of genetic data, no subspecies are recognised.

Assessment Rationale

Although only recorded from a few localities in a restricted range within the assessment region (extent of occurrence estimated as 35,706 km^2), recent records from the Eastern Cape coast indicate a wider distribution than previously known and the species is believed to be widespread (they are not often caught in mist nets but are not rare). While deforestation from agricultural expansion and mining is a threat to this species, it is well protected in the north of its range and can occur in modified landscapes. Further field surveys are needed to more accurately delimit its southern distribution and to determine subpopulation trends. Currently, in the absence of any evidence for decline, we list as Least Concern. Given its rarity in southern Africa, this species should be reassessed once further population data are available.

Regional population effects: Although this species has low wing loading (Norberg & Rayner 1987), and thus dispersal is presumably limited, there is assumed to be an inflow from Mozambique as the habitat is mostly connected and thus rescue effects are probably possible.

Distribution

This species has a wide range, encompassing much of sub-Saharan Africa in forest and savannah habitats (Skinner & Chimimba 2005), with the exception of the Horn of Africa and parts of southern Africa (ACR 2015). While sparsely distributed in South Africa, Mozambique and northern Zimbabwe, niche models indicate suitable habitat over much of central Mozambique (from where it has not been recorded) and along the eastern coastline of South Africa (Monadjem et al. 2010). Indeed, while only having been recorded from northern KwaZulu-Natal Province in the previous assessment (Friedmann & Daly 2004), recent records from the Eastern Cape Province extend the extent of occurrence for this species within South Africa (ACR 2015; Figure 1). The estimated extent of occurrence (EOO) is now 35,706 km^2. It may occur more

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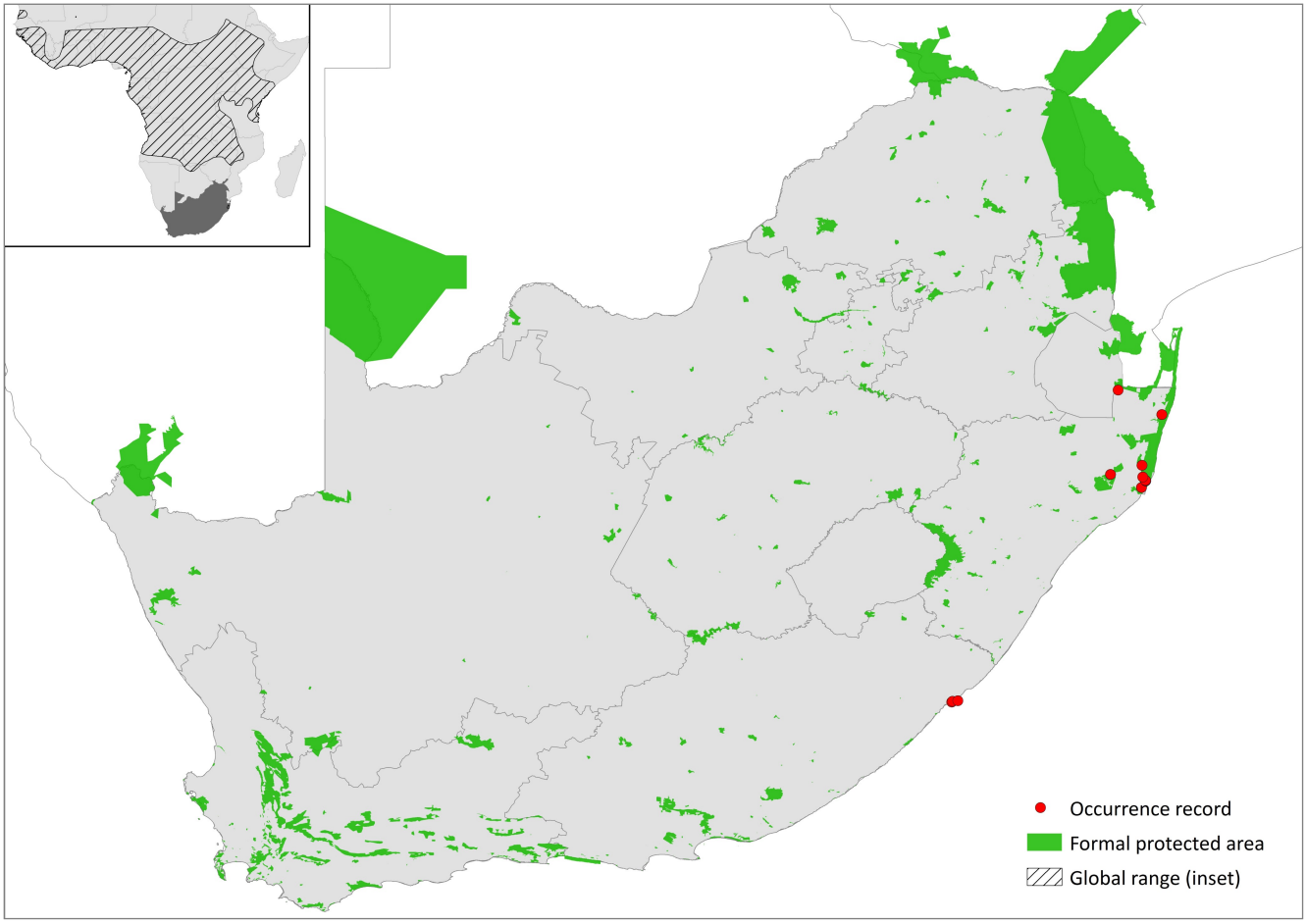

Figure 1. Distribution records for Hairy Slit-faced Bat (*Nycteris hispida*) within the assessment region

Table 1. Countries of occurrence within southern Africa

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

widely in the assessment region but further field surveys are needed to confirm this. Just including the northern KwaZulu-Natal records yields an EOO of 8,304 km^2.

Population

This is a very common bat in most parts of its range. However, it is not common in southern Africa (Skinner & Chimimba 2005), where only 28 specimens were examined in Monadjem et al. (2010). However, it may be under-sampled as it is rarely caught in mist traps. It is largely a solitary species but colonies range in size from individuals and pairs up to *c.* 20 bats (Skinner & Chimimba 2005; ACR 2015). The number of individuals present in colonies in the assessment region is unknown.

Current population trend: Stable

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

It occurs in a variety of habitats, from forest to dry savannah woodland to papyrus swamps, and has a broad tolerance of vegetation types (Rosevear 1965; Skinner & Chimimba 2005), including modified and disturbed habitats. It avoids open grasslands and arid zones (Monadjem et al. 2010). In the assessment region, the species is recorded from the Lowveld and Indian Ocean Coastal Belt bioregions. While commonly roosting in dense bush, it can also use a diverse range of shelters; for example Aardvark (*Orycteropus afer*) burrows, holes in termitaria, hollow trees, papyrus crowns and granite caves (Skinner & Chimimba 2005). In contrast to most other *Nycteris* species, *N. hispida* does not require a darkened cavity for a day roost (Monadjem et al. 2010). Individuals can weigh up to 10 grams with a variable pelage colour (Monadjem et al. 2010). It is an insectivorous clutter-edge forager, attracted by lights at night to hawk insects and frequently enters houses (Skinner & Chimimba 2005).

Ecosystem and cultural services: As this species is insectivorous, it plays an important role in controlling insect populations (Boyles et al. 2011; Kunz et al. 2011). Often, bats prey on the insect species which destroy crops (Boyles et al. 2011; Kunz et al. 2011). Ensuring a

Table 2. Threats to the Hairy Slit-faced Bat (*Nycteris hispida*) 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	*2.1.3 Annual & Perrenial Non-timber Crops*: habitat loss from agricultural expansion. Current stress *1.2 Ecosystem Degradation*: through fuelwood harvesting.	Jewitt et al. 2015	Indirect (remote sensing)	Regional	Ongoing
2	*3.2 Mining & Quarrying*: habitat loss from titanium mining.	Jewitt et al. 2015	Indirect (remote sensing)	Regional	Ongoing
3	*5.3.3 Logging & Wood Harvesting*: habitat degradation from fuelwood harvesting.	-	Anecdotal	-	Ongoing
4	*9.3.3 Agricultural & Forestry Effluents*: pesticide use reduces prey base.	-	Anecdotal	-	Ongoing

healthy population of insectivorous bats reduces the need to use pesticides.

Use and Trade

This species has not been found to be traded or utilised.

Threats

Overall, no major threats have been identified. However, it is potentially threatened by loss of habitat in KwaZulu-Natal Province, due to deforestation from agricultural expansion, titanium mining, firewood and charcoal production (Friedmann & Daly 2004; ACR 2015). Pesticide use will presumably reduce its prey base in agricultural landscapes.

Current habitat trend: Declining in area and quality. In KwaZulu-Natal Province, there was an average loss of natural habitat of 1.2% per annum from 1994 to 2011, due primarily to agriculture but also plantations, built environments and settlements, mines and dams (Jewitt et al. 2015). However, while there is decline in general habitat, the forests in which this species occurs are well-protected and we infer there is no continuing decline.

Conservation

In the assessment region, the species has been recorded in the protected Hluhluwe-iMfolozi Game Reserve and the iSimangaliso Wetland Park. No direct conservation measures are currently needed. However, further protected area expansion, especially transfrontier parks (*sensu* Smith et al. 2008), will presumably benefit this species.

Recommendations for land managers and practitioners:

- Reduce pesticide use in agricultural landscapes.

Research priorities:

- Field surveys are needed to more accurately delimit its distribution in the southern parts of its range (for example, the Eastern Cape).
- To determine how climate change may affect the species, specifically their narrow distribution in South Africa.

Encouraged citizen actions:

- Citizens can assist the conservation of the species by reporting sightings on virtual museum platforms (for example, iSpot and MammalMAP), and therefore contribute to an understanding of the species distribution.

Data Sources and Quality

Table 4. Information and interpretation qualifiers for the Hairy Slit-faced Bat (*Nycteris hispida*) assessment

Data sources	Field study (unpublished), indirect information (literature, expert knowledge), museum records
Data quality (max)	Inferred
Data quality (min)	Suspected
Uncertainty resolution	Best estimate
Risk tolerance	Evidentiary

References

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Table 3. Conservation interventions for the Hairy Slit-faced Bat (*Nycteris hispida*) ranked in order of effectiveness with corresponding evidence (based on IUCN action categories, with regional context)

Rank	Intervention description	Evidence in the scientific literature	Data quality	Scale of evidence	Demonstrated impact	Current conservation projects
1	*1.1. Site/Area Protection*: protected area expansion for key forest habitats.	-	Anecdotal	-	-	-

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