Scotoecus albofuscus – Thomas' House Bat


Wendy White

Regional Red List status (2016)	Near Threatened D2*
National Red List status (2004)	Vulnerable D2
Reasons for change	Non-genuine: Change in risk tolerance
Global Red List status (2008)	Data Deficient
TOPS listing (NEMBA) (2007)	None
CITES listing	None
Endemic	Edge of range

*Watch-list Data

A rare species; it is known from only three localities within the assessment region: Durban, Empangeni and St Lucia.

Taxonomy

Scotoecus albofuscus (Thomas 1890)

ANIMALIA - CHORDATA - MAMMALIA - CHIROPTERA - VESPERTILIONIDAE - *Scotoecus* - *albofuscus*

Synonyms: *Scotoecus albofuscus* (Thomas 1917) ssp. *woodi*

Common names: Thomas' House Bat, Thomas' Lesser House Bat, Light-winged Lesser House Bat (English), Thomas se Vlermuis (Afrikaans)

Taxonomic status: Species

Taxonomic notes: Meester et al. (1986) listed one subspecies from the assessment region: *Scotoecus albofuscus woodii* Thomas, 1917. However, its relationship with the nominate subspecies is not currently clear, as too few specimens have been collected to enable a taxonomic assessment (Monadjem et al. 2010).

Assessment Rationale

This rarely recorded species is known from three localities (Yellowwood Park in the Durban region, Empangeni and St Lucia, iSimangaliso Wetland Park) within the assessment region, but is widely (albeit patchily) distributed throughout East Africa. It is unknown whether its habitat is under threat because its habitat requirements are inadequately understood. As such, it is uncertain whether the localities represent locations. Furthermore, it is speculated that the species may be more widespread than the current records suggest (current estimated extent of occurrence is 1,795 km^2). Further field studies are needed to ascertain this and the species should be reassessed once more comprehensive data are available because it could qualify for either a more or less threatened status. Based on current information, this species qualifies as Near Threatened D2 as the number of localities within the assessment region is currently fewer than five, but it is unclear whether there are any plausible threats. Should further data reveal threats that could rapidly affect all individuals within the localities, the species will qualify for Vulnerable D2.

Regional population effects: It has medium wing loading (Schoeman & Jacobs 2008) and thus presumed to have adequate dispersal capacity but has a disjunct distribution between the assessment region and the closest extra-regional record in Zinave National Park in Mozambique (Monadjem et al 2010). Thus we assume no significant rescue effects are possible.

Distribution

This species has been sparsely recorded from across South Africa, Mozambique, Zambia and southern Malawi and also from scattered localities in Benin, Sierra Leone, The Gambia, Senegal, northern Uganda, southern Kenya, Tanzania, southeastern Democratic Republic of the Congo and Nigeria (Monadjem et al. 2010). Within southern Africa, it is known from Zinave National Park in southern Mozambique (Cotterill 2001), Lusaka in Zambia and Chiromo in Malawi (Happold et al. 1987). Within the assessment region, it is known from St Lucia (Kearney & Taylor 1997), a suburb of Durban (Taylor et al. 2004), and Empangeni (Bat Interest Group of KwaZulu-Natal unpubl. data). It was recorded for the first time in South Africa when two amateur bat workers responded to distress calls by a pregnant female bat (Bat Interest Group of KwaZulu-Natal unpubl. data), and additional specimens of this rare bat have been located in the Durban and Empangeni regions by bat rehabilitators (Monadjem et al. 2010). The estimated extent of occurrence (based on Figure 1) is 1,795 km^2. However, it is probably more widespread than current records suggest (Bronner et al. 2003).

Population

It is rare, reflected by its poor representation in museums with just six records examined in Monadjem et al. (2010). Little information is available on the abundance or population size of this species. Further field surveys are needed to determine colony sizes and trends. The use of elevated mist-nets may increase the number of records.

Current population trend: Unknown

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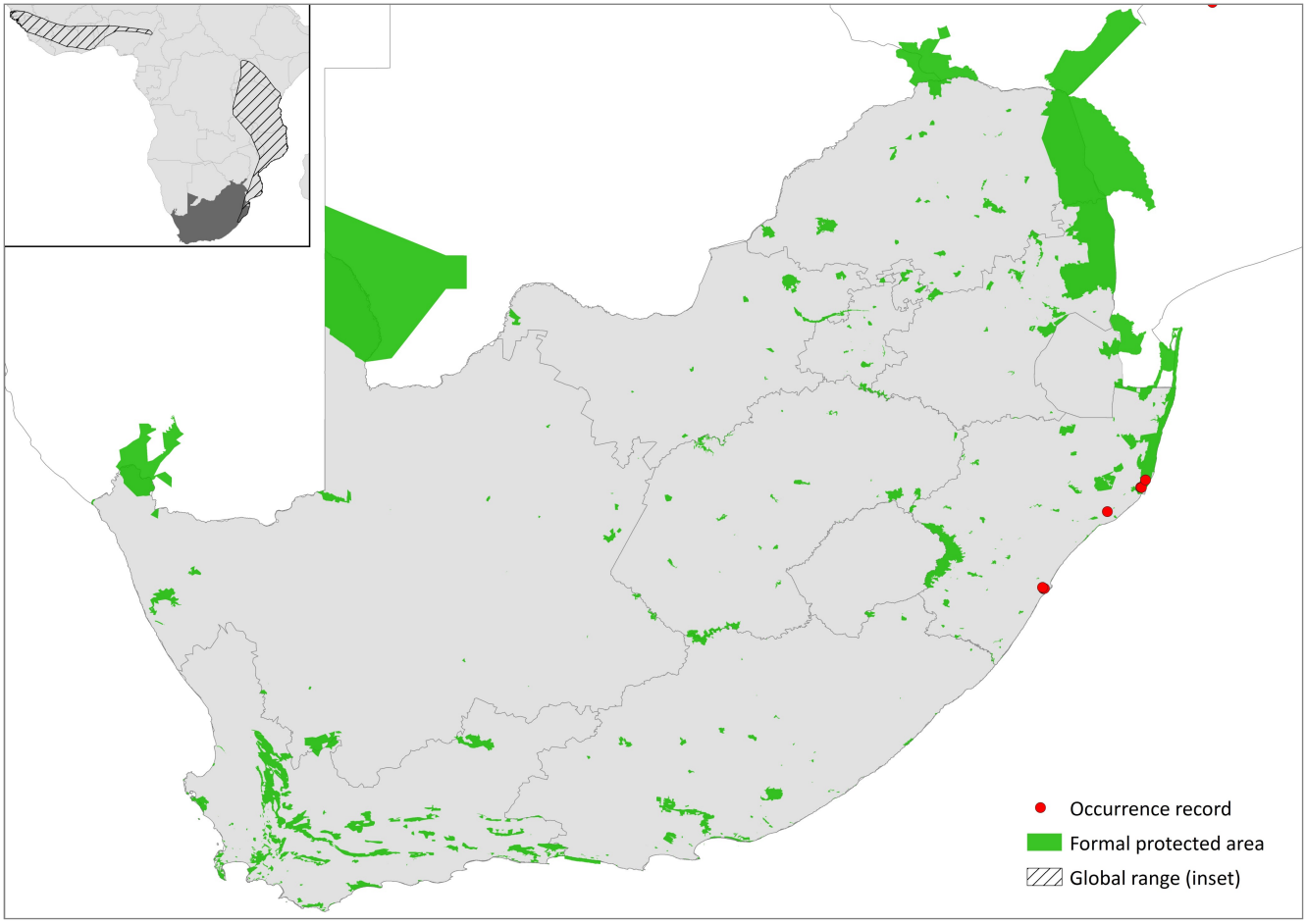

Figure 1. Distribution records for Thomas' House Bat (*Scotoecus albofuscus*) within the assessment region

Table 1. Countries of occurrence within southern Africa

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

Continuing decline in mature individuals: Unknown

Number of mature individuals in population: Unknown

Number of mature individuals in largest subpopulation: Unknown

Number of subpopulations: 3

Severely fragmented: No

Habitats and Ecology

The natural history of this species is very poorly known. The Malawi specimen was taken from the leaves of a *Hyphaene* palm tree in a forest (Happold et al. 1987). In the assessment region, the species is recorded from the Indian Ocean Coastal Belt. It appears to be associated with low-lying, humid savannahs of the coastal plains of Mozambique and northern KwaZulu-Natal, especially where large rivers or wetlands occur. It has been recorded from Dune Forest in KwaZulu-Natal (Kearney & Taylor 1997), and may occur in mangrove forests (W. White unpubl. data). The Empangeni specimens were collected near a golf course and the St Lucia record was collected from a public camp site (Bat Interest Group of KwaZulu-Natal unpubl. data), indicating that it might be synanthropic. It is insectivorous, feeding mainly on Hemiptera and Coleoptera (Whitaker & Mumford 1978).

Ecosystem and cultural services: None known

Use and Trade

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

Photo 1. The white or translucent wing membrane separates this species from other African *Scotoecus* species (Wendy White)

Table 2. Threats to the Thomas' House Bat (*Scotoecus albofuscus*) 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 & Perennial Non-timber Crops*: habitat loss from agricultural expansion.	Jewitt et al. 2015	Indirect (remote sensing)	Regional	Ongoing

Table 3. Conservation interventions for the Thomas' House Bat (*Scotoecus albofuscus*) 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 in KwaZulu-Natal Province.	-	Anecdotal	-	-	None

Threats

There are no major threats to this species as its habitats are generally well protected within the assessment region and it can occur in human modified habitats. More research is needed into potential local threats facing the species.

Current habitat trend: Stable. Savannah habitats are not threatened within the assessment region (Driver et al. 2012). However, there may be local declines in habitat. For example, there was a 20.4% loss of natural habitat in KwaZulu-Natal from 1994 to 2011, with an average loss of 1.2% per annum due primarily to agriculture, but also plantations, built environments and settlements, mines and dams (Jewitt et al. 2015).

Conservation

No specific interventions are possible at present as further studies are needed into the distribution, natural history and possible threats to this widespread but very poorly known species. Within the assessment region, this species is presumably protected within the iSimangaliso Wetland Park. Protected area expansion will benefit this species, but specialised research into its habitat requirements are a prerequisite.

Recommendations for land managers and practitioners:

- Record known roost sites and colony sizes.

Research priorities:

- Field surveys delimiting geographical distribution, subpopulation sizes and habitat preferences (Bronner et al. 2003).
- Quantification of threats potentially facing this species.

Encouraged citizen actions:

- Limit disturbance to roost sites.
- Deposit any dead specimens with the Durban Natural Science Museum or Ditsong Museum of Natural History.
- Report live sightings on virtual museum platforms (for example, iSpot and MammalMAP).

Data Sources and Quality

Table 4. Information and interpretation qualifiers for the Thomas' House Bat (*Scotoecus albofuscus*) assessment

Data sources	Field study (unpublished), indirect information (expert knowledge), museum records
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.*