

## THREATENED SPECIES OF THE NORTHERN TERRITORY



# NORTHERN HOPPING-MOUSE

## *Notomys aquilo*

### Conservation status

Australia: Vulnerable.

Northern Territory: Vulnerable.

### Description

The northern hopping-mouse is a small (25-50 g) rodent of unmistakable appearance within its range. It has an extremely long tail (around 140-150% head-body length) tipped with a tuft of longer dark hairs, large ears and eyes, and very long (35-40 mm) narrow hind-feet. It is sandy-brown above and white below.

It is the only hopping-mouse in the Top End of the Northern Territory. The spinifex hopping mouse *N. alexis* extends north to the Barkly Tableland, and is generally of similar morphology.



Northern hopping-mouse (Photo: S. Ward)

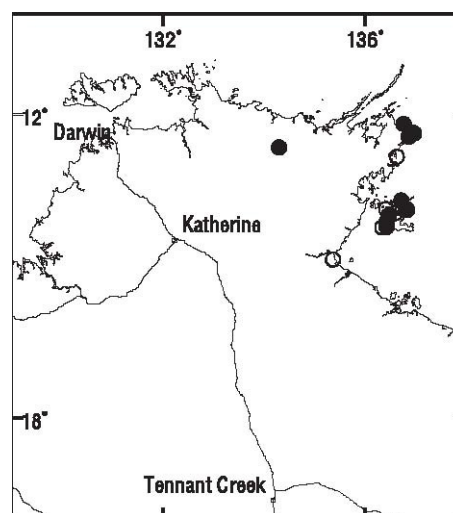
### Distribution

There are remarkably few documented records of the northern hopping-mouse (Woinarski *et al.* 1999; Woinarski 2004). In the Northern Territory, it is known from Groote Eylandt and coastal north-eastern Arnhem Land, with unvouchered records from a few hundred kilometres further south, west and inland; and one specimen from inland central

Arnhem Land (Dixon and Huxley 1985; Woinarski *et al.* 1999). Beyond the Northern Territory, it has also been recorded from Cape York Peninsula (one specimen with an imprecise locality record from the last half of the nineteenth century).

### Conservation reserves where reported:

Anindilyakwa (Groote Eylandt) Indigenous Protected Area, Nanydjaka (Cape Arnhem) Indigenous Protected Area.



Known locations of the northern hopping mouse.

○ = pre 1970; ● = post 1970.

### Ecology

The northern hopping-mouse is largely restricted to sandy substrates, particularly those supporting floristically diverse heathlands and/or grasslands (Woinarski *et al.* 1999). It constructs elaborate communally-used burrow systems, whose vertical entrances may be obscured by a thin layer of sand (Johnson 1964; Dixon and Huxley 1985). It is active at night, and it forages entirely on the ground.



Northern Territory Government

Department of Natural Resources, Environment and the Arts

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Its diet comprises mainly seeds, but also some other vegetative material and invertebrates. The species appears to be trap-shy and may be most readily detected by its characteristic hopping tracks.

### Conservation assessment

Conservation assessment is hampered by the lack of precise information on range, population size and trends, to such an extent that it may qualify best as Data Deficient. However, in the Northern Territory, it can be assigned the status of **Vulnerable** (under criteria B2ab) based on:

- area of occupancy estimated to be <2000 km<sup>2</sup>;
- severely fragmented or known to exist at no more than 10 locations; and
- continuing decline, observed, inferred or projected.

This assignment rests on a presumption that:

- only a small proportion of the Top End sandsheet environments is suitable for (and/or occupied by) the species;
- that feral cats may be increasing predation levels; and
- that a range of factors (including spread of weeds, changed fire regimes, and grazing by domestic and feral stock) are operating to reduce habitat quality.

### Threatening processes

There is no detailed information on threatening processes. It is plausible that there are increased numbers of feral cats across much of its range, and that these are affecting population numbers. Fire regimes have changed across its range, notably to a higher incidence of extensive hot late dry season fires, with consequent reduction in floristic diversity. This may be to the detriment of this species, although such a link has not yet been established.

### Conservation objectives and management priorities

A recovery plan for this species has been prepared recently (Woinarski 2004).

The main research priorities are to better define the distribution and status of this species and to assess the impacts of a range of putative threatening processes. Such information is needed before management prescriptions can be formulated appropriately.

A collaborative project between scientists of the NT Department of Natural Resources, Environment and the Arts and rangers from the Anindilyakwa Land Council commenced in 2006, supported by NHT, and aimed at improving knowledge of its status, and developing management and monitoring programs.

### Compiled by

John Woinarski  
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### References

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- Woinarski, J.C.Z., Gambold, N., Wurst, D., Flannery, T.F., Smith, A.P., Chatto, R., and Fisher, A. (1999). *Distribution and habitat of the Northern Hopping Mouse Notomys*



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