

Threatened Species of the Northern Territory

ARNHEM LEAF-NOSED BAT

Hipposideros inornatus

Conservation status

Australia: Endangered

Northern Territory: Vulnerable



Description

The Arnhem leaf-nosed bat is a moderately large (30 g) insectivorous bat. It is pale brown above and slightly paler on the belly. It has large, acutely pointed ears and a very well-developed nose-leaf. There are no similar species in the Northern Territory.

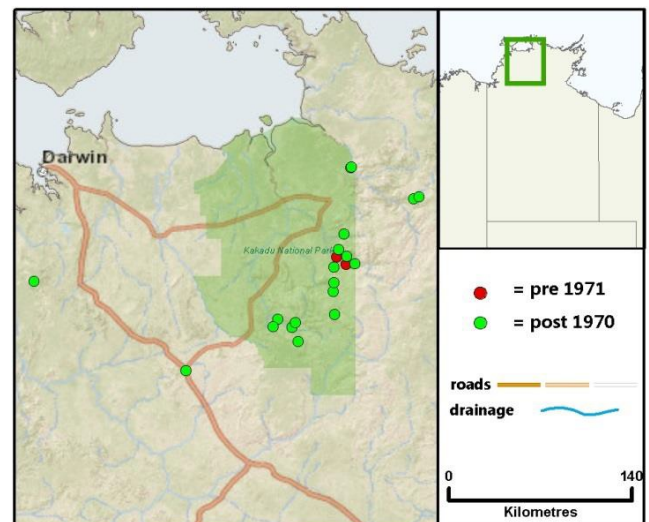
This bat was previously considered to be a very distinctive subspecies of a polymorphic species that ranges from the Asian mainland through to the Solomon Islands, and includes a larger subspecies *H. d. reginae* from northeastern Queensland. However, Churchill (2008) provided justification for recognition at a species level and this is generally supported.

Distribution

The Arnhem leaf-nosed bat was first collected as recently as 1969 (McKean 1970) and has been recorded only from a few locations in the western Arnhem Land sandstone massif (Deaf Adder Gorge and upper South Alligator River area) and from one site (Tolmer Falls) in Litchfield National Park (McKean and Hertog 1979).

Conservation reserves where reported:

This taxon is known from two conservation reserves, Litchfield and Kakadu National Parks. However, it has not been recorded from Litchfield since 1983 (Churchill 1998).



Known locations of the Arnhem Leaf-nosed Bat.

Ecology

This taxon roosts in caves or abandoned mine adits in cool draughty areas, close to water (Churchill 2008; Corbett and Richards 2002). Little is known of its foraging habitat, but it has been reported foraging in riparian areas and in eucalypt tall open forests. Its main diet is large invertebrates including beetles (Coleoptera) and moths (Lepidoptera) (Milne et al, submitted). Some individuals, when

trapped on rocks, surrounded by water, will escape by swimming rapidly to a nearby rock or shore.

Conservation assessment

This bat appears to have a very restricted distribution (although large areas of the rugged western Arnhem Land escarpment have not been sampled), fairly narrow habitat (roost-site) requirements, is probably highly sensitive to disturbance, and has probably disappeared from one of its few known sites between 1983 and 2000.

The species qualifies as **Vulnerable** (under criteria B2ab(i,ii,iii,iv,v)) due to:

- extent of occurrence estimated to be
- <2000 km²;
- severely fragmented and known to exist at no more than 10 locations; and
- a continuing decline observed, inferred or projected.

Threatening processes

The disappearance of the population at Litchfield National Park may have been due to disturbance from humans visiting roosting caves (Corbett and Richards 2001). At this site, this threat has now been ameliorated. The known sites in western Arnhem Land are generally remote and very rarely visited.

Conservation objectives and management

Research priorities are to:

- i. survey to determine whether this bat still occurs within Litchfield National Park

Management priorities are to:

- i. maintain controls over visitation to sites known to be used for roosting and breeding. Such controls are currently

in place in both National Parks from which it is known; and

- ii. established a non-intrusive monitoring program in at least one site.

Complied by

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[updated November 2015]

References

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