

Threatened Species of the Northern Territory

YELLOW-SNOUTED GECKO

Lucasium occultum

Conservation status

Australia: Endangered

Northern Territory: Vulnerable



Photo: T. Johansen

Description

The yellow-snouted gecko is a small ground lizard (snout-vent length 40 mm); dark brown above with a reddish head, four large, squarish pale brown blotches along the back, and whitish spots scattered on the flanks and limbs.

Distribution

The yellow-snouted gecko is endemic to the Northern Territory (NT) and is known from only a few locations. It was originally described from three specimens from the north-west of Kakadu National Park (King *et al.* 1982). More recent surveys have located it in the Wildman River portion of the Mary River National Park and adjacent Annaburroo Station (Johansen 2006), and in the Mt Bunday Training Area (P. Horner *pers. comm.*).

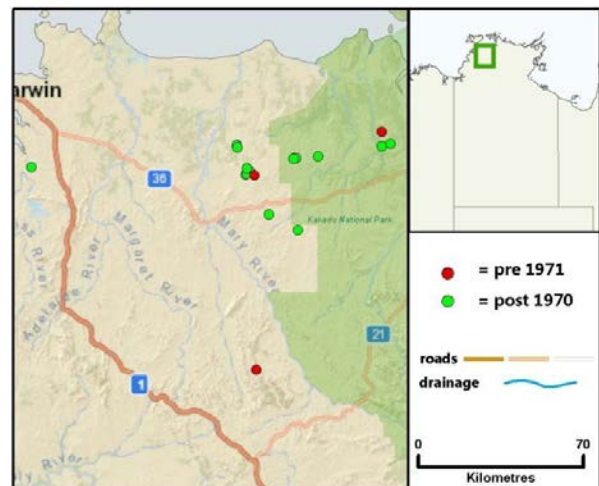
Conservation reserves where reported:

Kakadu National Park and Mary River National Park.

Ecology

Very little is known of the ecology of this species. All individuals captured to date have occurred in areas with well-developed leaf litters and grasses (King *et al.* 1982; Johansen 2006) in open forests dominated by

Eucalyptus miniata and *E. tetradonta*, typically with red sandy-loam soils. Records from Wildman Reserve include sites with sparse to moderate occurrences of introduced Gamba Grass (*Andropogon gayanus*) (K. Beggs *unpubl.*).



Known locations of yellow-snouted gecko

Conservation assessment

Conservation categorisation for the yellow-snouted gecko is problematic because of lack of information on its distribution and population trends at the known sites. However, it can be reasonably inferred that this species has a relatively small total population within its limited and fragmented range. Since its description, there have been

remarkably few further records, despite intensive searches (Johansen 2006).

The species qualifies as **Vulnerable** (under criteria B1ab(ii,iii,iv,v)) due to:

- extent of occurrence <20 000 km²;
- known to exist at <10 locations; and
- continuing decline, observed, inferred or projected.



Habitat on Wildman Reserve – open *Eucalyptus miniata* forest (photo: K. Beggs)

Threatening processes

Based on meagre data, the likely threats to the yellow-snouted gecko are related to inappropriate fire regimes and spread of introduced pasture species. There have been fewer than five further records from Kakadu National Park since the capture of one individual near Kapalga in 1988, where part of its habitat was subjected to frequent, intense fire regimes. Most subsequent records (outside Kakadu) have been at sites unburnt for five or more years (Johansen 2006). It is therefore likely that this species requires conservative fire management (infrequent fires or small areas burnt early in the Dry season, and no extensive late Dry season fires). It is also likely that this species will be disadvantaged by the spread of exotic pasture grasses (especially Gamba Grass) which form a denser understorey and promote more intense and extensive fires.

Conservation objectives and management

There is no existing management program for the yellow-snouted gecko in the NT.

In August 2000, two individuals from Wildman Reserve were brought into captivity at the Territory Wildlife Park, and from March 2001 they produced 12 hatchlings in a 12 month period (G. Husband *pers. comm.*).

Research priorities are:

- to undertake further survey work and baseline ecological research aimed at establishing the distribution, abundance and ecological requirements of the yellow-snouted gecko; and
- to establish a monitoring program for at least representative populations.

Management priorities are to:

- reduce the incidence, extent and severity of fires within its limited range; and
- reduce the extent of invasive exotic grasses in its limited known range.

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References

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