

Approved Conservation Advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for
Egernia obiri (Arnhem Land Egernia)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

Description

Egernia obiri, Family Scincidae, also known as the Arnhem Land Egernia, is a large thickset ground-dwelling skink growing to at least 20 cm snout-vent length. It is grey to light brown above with a brown longitudinal streak and dark irregular patches on the flanks, behind the ear openings that merge into faint transverse bands between the front and back legs. The legs are short and chunky (Woinarski et al., 2007).

Conservation Status

Egernia obiri is listed as **endangered**. This species is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, in 2006, the Minister considered the Threatened Species Scientific Committee's (TSSC) advice under section 189 of the EPBC Act and amended the list under section 184 to include *Egernia obiri*. The TSSC determined that this species met criteria Criterion 2 of their eligibility criteria (TSSC, 2006b). The species is also listed as endangered under the *Territory Parks and Wildlife Regulation Act 2000* (Northern Territory).

Distribution and Habitat

The Arnhem Land Egernia is endemic to the Northern Territory and is restricted to the western Arnhem Land plateau and outliers, such as Jabiluka. Within this range, it has been recorded at 10 locations, including Nawurlandja (Little Nourlangie Rock), Jabiluka, near Oenpelli, near El Sherana and Koolpin Gorge. Approximately one-quarter of the known range and distribution of the species is in Kakadu National Park. This species is largely restricted to sandstone outcrops, typically with extensive fissures and cave systems. It is probably at least partly nocturnal or crepuscular (Sadler, 1990). This species occurs within the Northern Territory Natural Resource Management Region.

Since 1980, there have only been 10 records of the species and due to the patchiness of distribution, it is likely that there are a number of isolated subpopulations with a total area of occupancy of less than 50 km² within a range that spans 34 000 km² (Woinarski et al., 2007). A recent targeted survey of the 10 previous locations caught one individual, observed another, and found the desiccated remains of another (Armstrong & Dudley, 2004).

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

Threats

The main identified threats to the Arnhem Land Egernia are its restricted range and likely small population size. A poor understanding of the species' ecology limits the ability to recognise and advise on specific threats.

The main potential threats to the Arnhem Land Egernia include changes to food resources and habitat quality caused by altered fire regimes, predation by feral cats (*Felis catus*), and impacts from Cane Toads (*Chaunus marinus*) (TSSC, 2006b; Woinarski et al., 2007).

Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Continue and expand the existing monitoring program.
- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes (TSSC, 2006a).
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrence/remnants.

Regional and Local Priority Actions

The following priority recovery and threat abatement actions can be done to support the recovery of the Arnhem Land Egernia.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Minimise adverse impacts from land use at known sites.
- Investigate formal conservation arrangements such as the use of IPAs, covenants, conservation agreements or inclusion in reserve tenure.

Animal Predation or Competition

- Where possible, maintain actions to reduce the impacts of Cane Toads.
- Develop and implement a management plan for the control and eradication of feral cats in the local region (EA, 1999; TSSC, 2006a).

Fire

- Develop and implement a suitable fire management strategy for the Arnhem Land Egernia, incorporating this within the existing Kakadu fire strategy for the stone country.
- Provide maps of known occurrences to rangers and other fire managers and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Conservation Information

- Raise awareness of the Arnhem Land Egernia within the local community.

Enable Recovery of Additional Sites and/or Populations

- Investigate options for linking, enhancing or establishing additional populations.

This list does not necessarily encompass all actions that may be of benefit to the Arnhem Land Egernia, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Threat Abatement Plan for Predation by Feral Cats (EA, 1999),
- Management approaches for controlling Cane Toads, can be found in Taylor and Edwards (2005),
- Kakadu National Park Management Plan 2007–2014 (KBM, 2007), and
- Arnhemland Plateau Draft Fire Management Plan (KNP, 2007)

These prescriptions were current at the time of publishing; please refer to the relevant agency's website for any updated versions.

This Conservation Advice was approved by the Minister / Delegate of the Minister on:
3/7/2008

Information Sources:

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Sadler, RA 1990, 'A new species of scincid lizard from western Arnhem Land, Northern Territory', *The Beagle*, vol. 7, pp. 29-33.

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Woinarski, J, Pavey, C, Kerrigan, R, Cowie, I, & Ward, S (eds) 2007, *Lost from our landscape: threatened species of the Northern Territory*, Northern Territory Government, Darwin.