

Threatened Species of the Northern Territory

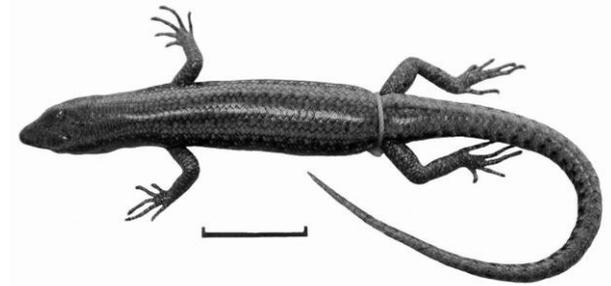
ARAFURA SNAKE-EYED SKINK

Cryptoblepharus gurrumul

Conservation status

Australia: Endangered

Northern Territory: Endangered



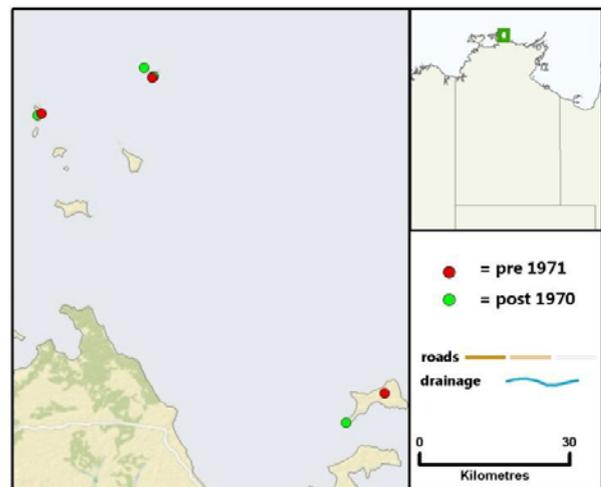
Description

The Arafura snake-eyed skink is a small slender, relatively long limbed, shallow headed species of snake-eyed skink, with dark, ovate scales on palms and heels of the feet. There are five digits on each foot and hand. It generally has a grey-brown to blackish colour, with a longitudinally aligned, complex body pattern dominated by dark, broad vertebral zone and obscure, pale stripes on flanks. The intensity of body pigmentation and patterning is variable, ranging from obscure to prominent.

This species was previously referred to as *Cryptoblepharus* sp. New Year and Oxley Islands, but its taxonomy has been resolved (Horner, 2007).

Distribution

The known distribution is restricted to three islands: North Goulburn Island (36 km²), and two small (about 2 km²) islands, New Year and Oxley, north-east of Croker Island, Northern Territory (NT). Brief searches on other islands in this area have failed to detect this species. The North Goulburn Island population was discovered only in 2006 (K. Brennan *pers. comm.*).



Known locations of the Arafura snake-eyed skink

Conservation reserves where reported:
None.

Ecology

This agile and fast moving terrestrial species is locally common in littoral habitats, including beach sands, rocks and coral rubble, on the three islands. The species forages amongst rocks in intertidal zone, and retreat to fringing vegetation when confronted by an incoming tide, feeds on both terrestrial and small marine invertebrates such as amphipods and polychaete worms.

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

Conservation assessment

Scientists noted that the species was common on two small islands when visited in 1982 (P. Horner *unpubl.*), but there is no detailed information on population size, trends or ecological requirements.

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

- extent of occurrence estimated to be <5000 km²;
- severely fragmented and known to exist at no more than five locations; and
- projected or inferred decline. Population decline is inferred because of storm surge associated with cyclones, sea-level rise, or inadvertent or deliberate introduction of exotic predators to the two small islands.

Threatening processes

Lack of ecological information makes threat assessment difficult. Restriction to three small islands presents a substantial risk. The coastline habitat of these islands may be exposed to periodic storm surges associated with cyclones (which may purge much of the terrestrial biota) and will be reduced in size with any rise in sea level: the highest points on Oxley and New Year Islands are about 12 m above sea level, but most of the islands' areas are <5 m above sea level.

Conservation objectives and management

The primary research priority is to better evaluate the species' population size and ecological requirements.

Management priorities are to:

- i. reduce the possibility of introduction of any new predators to these islands;
- ii. evaluate the potential impact of climate change and sea-level rise on the species; and
- iii. consider spreading the risk of extinction by translocation of some individuals to other suitable islands or nearby mainland.

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References

- Horner, P. (2006). Systematics of the Snake-eyed Skinks, genus *Cryptoblepharus* Wiegmann (Squamata: Scincidae). PhD thesis, Charles Darwin University.
- Horner, P. (2007). Systematics of the snake-eye skinks, *Cryptoblepharus* Wiegmann (Reptilia: Squamata: Scincide) – an Australian-based review. The Beagle, Records of the Museum and Art Galleries of the Northern Territory, Supplement 3 December 2007
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