

Threatened species of the Northern Territory

Great desert skink

Liopholis kintorei

Conservation status

Australia: Vulnerable

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976

Description

The Great Desert Skink is a large, smooth-bodied lizard with an average snout-vent length of 200 mm (maximum of 440 mm) and a body mass of up to 350 g. Males are heavier and have broader heads than females. The tail is slightly longer than the snout-vent length. The upperbody varies in colour among individuals, from bright orange-brown or dull brown to light grey. The underbody colour ranges from bright lemon-yellow to cream or grey. Adult males often have blue-grey flanks, whereas those of females and juveniles are either plain brown or vertically barred with orange and cream.

Distribution

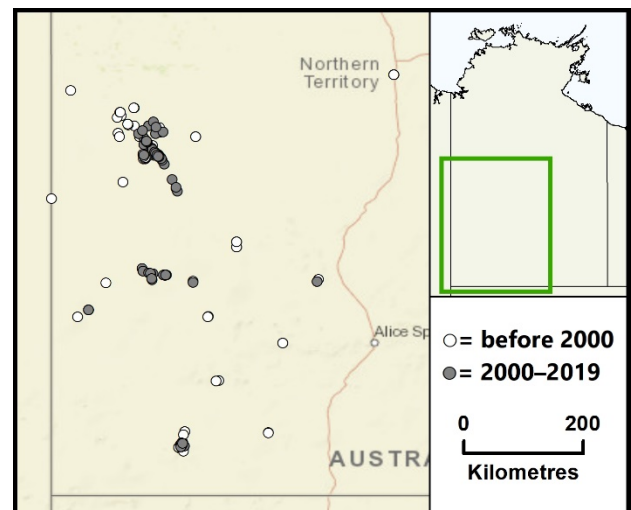
The Great Desert Skink is endemic to the Australian arid zone. In the Northern Territory (NT), most records after 1980 were collected within the western deserts region, from Uluru-Kata Tjuṯa National Park north to Rabbit Flat in the Tanami Desert. The Tanami Desert and Uluru populations are strongholds for the species.



Caption: : M. Whiting

Outside the NT, the species occurs in north-west South Australia and in the Gibson Desert and southern sections of the Great Sandy Desert of Western Australia. Its former range included the Great Victoria Desert, as far west as Wiluna, and the Northern Great Sandy Desert.

NT conservation reserves where reported: Uluru-Kata Tjuṯa National Park and Watarrka National Park.



Caption: Known localities of the Great Desert Skink in the NT (nrmmaps.nt.gov.au)

Ecology and life-history

The Great Desert Skink occupies a range of vegetation types, with the major habitat being sandplain and adjacent swales that support hummock grassland and scattered shrubs. In the Tanami Desert, it also occupies paleodrainage lines on lateritic soils supporting *Melaleuca* shrubs.

The diet of the Great Desert Skink consists of a wide variety of invertebrates (particularly termites), small vertebrates, and the leaves, flowers and fruits of plants.

Great Desert Skinks construct complex burrow systems¹. The species is gregarious, with up to ten individuals sharing a large burrow system that may have 5–10 entrances within a 10-metre radius. Latrines, where animals defaecate over an area of 1–3 m², are located near the entrances of occupied burrows.

The Great Desert Skink gives birth to one-to-five live young between December and February.

Threatening processes

Several potential threats have been identified for the Great Desert Skink, but no single threat has been demonstrated to have caused the decline of this species.

Habitat homogenization resulting from the cessation of traditional land management practices may be a serious threat throughout much of its range. Intense and extensive wildfires that result from a lack of patch burning can devastate or fragment local sub-populations. Predation by feral Cats *Felis catus* and the Red Fox *Vulpes vulpes* may also be a serious threat, as could predation by native predators such as the Dingo *Canis familiaris dingo* or raptors (particularly in recently burnt areas). European Rabbits *Oryctolagus cuniculus* have the potential to destroy burrow systems of the Great Desert Skink.

Conservation objectives and management

Management priorities for the species in the NT identified in this plan are to: i) assess causal factors in the recent decline or local extinction of the species in particular localities, and to identify critical habitat; ii) manage the sub-population in Uluru-Kata Tjuṯa National Park to maintain or improve its size (as measured by number of active burrows) against an initial baseline figure derived from previous monitoring; iii) improve community knowledge of the species and to improve community involvement in its conservation; iv) determine the best fire regime that leads to sustained or increased populations of Great Desert Skink; v) reduce the number, extent and impact of severe wildfires; and vi) implement feral-predator control programs that result in sustained reductions in feral predator populations in Uluru-Kata Tjuṯa National Park.

References

- ¹ McAlpin, S., Duckett, P., Stow, A., 2011. Lizards cooperatively tunnel to construct a long-term home for family members. PLoS One 6, e19041.
- ² McAlpin, S. F, 2001. A Recovery Plan for the Great Desert Skink (*Egernia kintorei*), 2001–2011. Arid Lands Environment Centre, Alice Springs.