

Threatened species of the Northern Territory

Bronzeback

Ophidiocephalus taeniatus

Conservation status

Australia: Vulnerable

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Endangered

Territory Parks and Wildlife Conservation Act 1976



Credit: C. Jolly

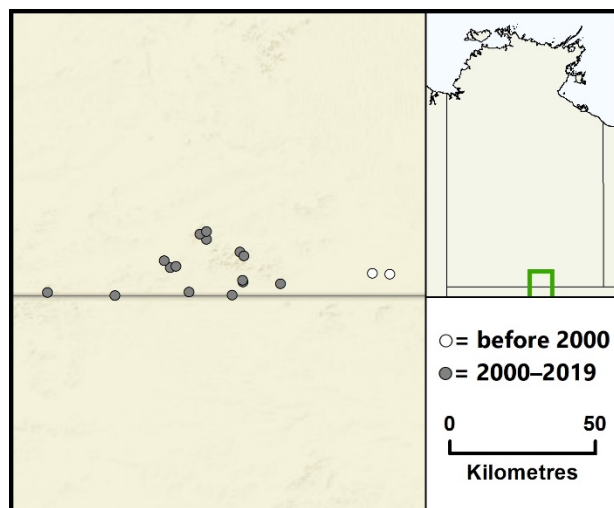
Description

The Bronzeback is a small species of legless lizard with a snout-vent length of up to 102 mm and an even longer tail. The upperbody is bronze or rich fawn, which contrasts with the pale grey head and a broad dark-brown lateral band that runs from the snout to the tail tip. The underparts are greyish brown. The ventral and lower lateral surfaces have a reticulated pattern formed by the white margins of the scales contrasting against the darker basal pattern.

Distribution

The Bronzeback is found only in central Australia, where it occurs in two disjunct areas: one straddling the border of the Northern Territory (NT) and South Australia, and the other >130 km further south in central South Australia. The two areas are separated by the Perdika Desert. The species was first collected in the 1880s or 1890s in the vicinity of Charlotte Waters, but was not recorded again until 1978 in South Australia¹ and 2008 in the Northern Territory².

NT conservation reserves where reported: None.



Caption: Known localities of the Bronzeback in the NT (nrmmaps.nt.gov.au)

Ecology and life-history

The Bronzeback typically occurs in *Acacia*-dominated open woodlands with a low open shrub understorey. In the NT at least, the species is closely associated with ephemeral drainage channels that dissect stony gibber plains, areas of shale and siltstone mesas³.

Bronzebacks are fossorial and inhabit deep leaf litter underlain with loose sandy loam soil at the base of a tree or shrub. In the NT, the species has been recorded under the litter mats of four shrub

species: *Acacia aneura*, *A. cambagei*, *A. latzii* and *A. sibirica*³.

The Bronzeback is most likely crepuscular or nocturnal. Its diet comprises invertebrates, including termites, cockroach nymphs, moth and beetle larvae, and spiders. Reproduction is poorly known, but it appears to lay eggs rather than give birth to live young.

Threatening processes

The impact of threats on Bronzeback localities are poorly understood. Nonetheless, damage to litter mats and soil erosion caused by livestock and feral herbivores is regarded as a significant threat. Litter mats can also be damaged or destroyed by surface flows during flood events, which may be exacerbated by reduced vegetation cover, soil compaction and soil erosion resulting from cattle grazing (and historically European Rabbits *Oryctolagus cuniculus*).

During a survey in 2008 in the NT, no Bronzebacks were located under litter mats that had been trampled by livestock, and the introduction of cattle had obviously reduced the amount of suitable habitat³. Damage to litter mats away from bores was predominantly caused by feral Horses *Equus caballus* and Camels *Camelus dromedarius*. As was observed in South Australia⁴, litter mats had been washed away or covered in silt in many areas, rendering them unsuitable for Bronzebacks³. Litter mats on elevated creeklines were generally unaffected by flooding, and may act as critical source populations for litter mats affected by flood events downstream³.

Conservation objectives and management

There is no current conservation program for the Bronzeback in the NT. Monitoring the species is problematic as the only suitable survey method—raking litter mats to expose individuals—results in considerable damage to their habitat. Conservation objectives should therefore be directed towards the management and mitigation of known threats.

Management priorities for the Bronzeback are to: i) improve stakeholder understanding of the species and its threats; ii) discourage relevant leaseholders from expanding stock watering points further into the Beddome Ranges hill complex; and iii) support relevant leaseholders in the control of feral herbivores.

References

- ¹ Ehmann, H., Metcalfe, D., 1978. The rediscovery of *Ophidiocephalus taeniatus* Lucas and Frost (Pygopodidae, Lacertilia) the Bronzeback. *Herpetofauna* 9, 8–10.
- ² McDonald, P., 2009. The rediscovery of the bronzeback snake-lizard *Ophidiocephalus taeniatus* (Lucas and Frost, 1897) in the Northern Territory after a 111 year absence of records. *Herpetofauna* 39, 46–47.
- ³ McDonald, P., Fyfe, G., 2008. A survey for the bronzeback snake-lizard (*Ophidiocephalus taeniatus*). Department of Natural Resources, Environment, the Arts and Sport, Alice Springs.
- ⁴ Ehmann, H., 1992. The apparent severe decline of the bronzeback legless lizard (*Ophidiocephalus taeniatus*) at Abminga. *Herpetofauna* 22, 31–33.