Threatened Species Profile

Department for Environment and Heritage

REPTILE

# Aprasia pseudopulchella

# Flinders Ranges Worm-lizard

AUS	SA	AMLR	Endemism	Residency
V	-	U	State	Resident



Photo: © Mark Hutchinson

## **Conservation Significance**

Endemic to SA. The AMLR distribution is a peripheral part of a very limited extant distribution in adjacent regions within SA. Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'.<sup>3</sup>

An infraspecific taxa 'morphologically and electrophoretically this species is only doubtfully distinct from *Aprasia parapulchella* of NSW and VIC' (Mark Hutchinson in litt.).<sup>2</sup>

While this is the only reptile species recorded in the SMLR with an EPBC conservation rating, it does not have a State NPW rating. This results from a recent review of the conservation status of reptiles in SA which took into account the increase in records of the species in grazing land in the Mid North in recent years (largely a by-product of studies on Pygmy Bluetongue (*Tiliqua adelaidensis*)) (Hutchinson and Edwards 2000).<sup>1</sup>

#### Description

Very small, legless, worm-like, burrowing lizard with poorly developed hindlimb flaps. Dark brown head that merges with a pale grey or grey-brown body, which in turn merges with a reddish-brown terminal half of the tail. Median longitudinal dark bars on the dorsal scales of the tail and part of the body give the impression of longitudinal lines. Can be distinguished from its close relative, the Pink-tailed Worm-lizard (*A. parapulchella*), by having more ventral scales (Cogger 2000).6

### **Distribution and Population**

Found exclusively in the Mount Lofty and Flinders Ranges blocks, with the southern extreme of its range in the foothills just north of Adelaide. Eight individuals recorded in the northern suburbs of Adelaide during a 30 month survey of the Cobbler Creek RP near Salisbury (Mitchell 1992; Cogger et al. 1993). Also occurs in Mount Remarkable NP/Mambray Creek (Cogger et al. 1993).

Post-1983 AMLR filtered records are few; west of One Tree Hill (near Cobbler Creek RP) and from Para Wirra  $\rm RP.^{2,3}$ 

Pre-1983 AMLR filtered records indicate an additional record from the Mylor area.<sup>3</sup>

#### Habitat

Occurs in open woodland, native tussock grassland, riparian habitats and rocky isolates (Cogger et al. 1993). Prefers stony soils or clay soils with a stony surface (Wilson and Knowles 1988; Cogger et al. 1993).<sup>2</sup>

Little is known about the abundance of this species. Populations may be in decline due to a number of factors, the main one being habitat degradation through cropping and pasture improvement. Often found under rocks in ant or termite nests and this is thought to be a critical combination for this lizard. Cultivation disturbs the rocks on the soil surface as well as the species of ants likely to be found in an area.<sup>4</sup>

Within the AMLR the preferred broad vegetation groups are Grassland and Grassy Woodland.<sup>3</sup>

## **Biology and Ecology**

Burrowing species found in a variety of habitats on loamy and sandy soils.<sup>7</sup>

The diet of most *Aprasia* species consists almost entirely of the larvae and pupae of ants and they can consume large amounts in a single meal. Individuals may feed only infrequently and only in warmer months of the year (Webb & Shine 1994).<sup>6</sup>

#### **Aboriginal Significance**

Post-1983 records indicate the majority of the AMLR distribution occurs in Kaurna Nation. Also occurs in northern Peramangk Nation.<sup>3</sup>

#### Further information:

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http://www.environment.sa.gov.au/

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# ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

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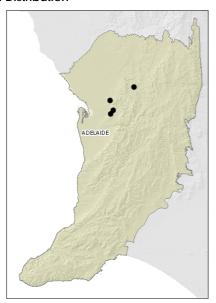
#### **Threats**

Reasons for decline and continuing threats are not well-known but probably include:

- loss or degradation of habitat through soil compaction, overgrazing by livestock, cropping and pasture improvement, and urbanisation<sup>2</sup>
- removal of rocks which provide shelter as well as habitat for the grassland ant and termite species that it feeds upon (Wilson & Knowles 1988)<sup>5</sup>
- habitat modification through tree planting in native grasslands and changed fire regimes, resulting in changes to vegetation structure and composition.<sup>4,6</sup>

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

## **Regional Distribution**



Map based on filtered post-1983 records.<sup>3</sup> Note, this map does not necessarily represent the actual species' distribution within the AMLR.

## References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

- 1 Armstrong, D. M., Croft, S. N. and Foulkes, J. N. (2003). *A Biological Survey of the Southern Mount Lofty Ranges, South Australia, 2000-2001.* Department for Environment and Heritage, South Australia.
- **2** Cogger, H. G., Cameron, E. E., Sadlier, R. A. and Eggler, P. (1993). *The Action Plan for Australian Reptiles*. Australian Nature Conservation Agency, Canberra.

- **3** Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database*. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.
- **4** Department for Environment and Heritage (2007). *Draft Regional Action Plan for the Recovery of Threatened Fauna in the Northern and Yorke Region of South Australia: Flinders Worm Lizard.* Unpublished Report, South Australia.
- 5 Department of the Environment and Water Resources (2007). Aprasia pseudopulchella in Species Profile and Threats Database. Department of the Environment and Water Resources, Canberra. Available from <a href="http://www.environment.gov.au/sprat">http://www.environment.gov.au/sprat</a> (accessed June 2007).
- **6** Threatened Species Scientific Committee (2008). *Commonwealth Conservation Advice on Aprasia pseudopulchella (Flinders Ranges Worm-lizard).* Department of the Environment, Water, Heritage and the Arts. Available from

http://www.environment.gov.au/biodiversity/threatened/species/pubs/1666-conservation-advice.pdf.

**7** Turner, M. S. (2001). *Conserving Adelaide's Biodiversity: Resources*. Urban Forest Biodiversity Program, Adelaide.



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