



# Five-clawed Worm-skink

*Anomalopus mackayi*

**Other common name** Mackays Burrowing Skink

## Conservation status

The Five-clawed Worm-skink is listed as an **Endangered Species** on Schedule 1 of the New South Wales *Threatened Species Conservation Act, 1995* (TSC Act). The species is also listed as a **Vulnerable Species** on Schedule 1 of the Commonwealth *Endangered Species Protection Act, 1992*.

**Description** (as summarised by Cogger 1992)

*Snout-vent*  
100 mm

Dark brown above, the individual scales each with a central dark spot, more conspicuous in northern populations. Yellow-green below, heavily flecked with darker posteriorly.

The Five-clawed Worm-skink possesses a didactyle hindlimb which distinguishes individuals from the similarly featured *A. leuckartii*.

## Distribution

The Five-clawed Worm-skink is distributed in sub-humid regions along the western slopes of the Great Dividing Range, in north-eastern NSW and south-eastern Queensland (Sadlier *et al.* 1996; Swan 1990; Wilson and Knowles 1988). Sadlier & Pressey (1994) state that it has a restricted national distribution and appears to have declined in NSW. The species formerly ranged west from the north-western slopes near Wallangra to near Goodooga in the western division of NSW (Cogger *et al.* 1993; Sadlier *et al.* 1996). Evidence from museum records collected prior to 1970 suggest that its range has contracted eastward (Cogger *et al.* 1993).

Over the past 20 years records in NSW have come from Wallangra, Mungindi and Wee Waa regions (Cogger *et al.* 1993).

## Recorded occurrences in conservation reserves

Not recorded in any conservation reserves (NPWS 1999).

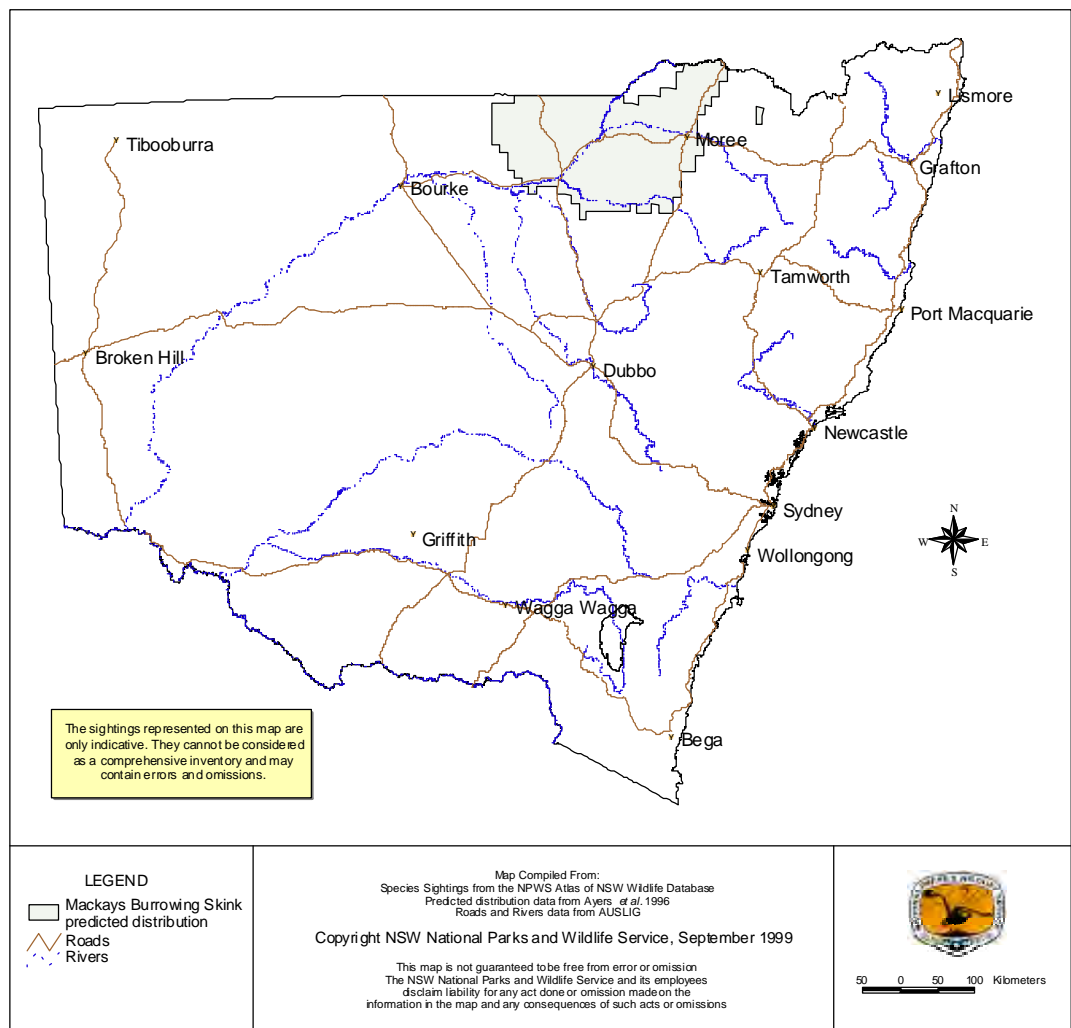
## Habitat

The species is found in open woodland areas with low grass cover (usually between 5 to 10 cm) and scattered eucalypts. This type of woodland is generally supported by red-black to black clay-loam soils (Shea *et al.* 1987). Individuals also occur in open grassy paddocks with scattered eucalypts and moist black soil (Swan 1990). It uses fallen logs and timber as sheltering sites and digs in loose soil to create permanent tunnel-like burrows (Ayers *et al.* 1996; Sadlier & Pressey 1994).

## Ecology

This medium sized, limbed, Five-clawed Worm-skink, has three fingers and two toes and is dark brown in colour with a green-yellow underside (Swan 1990). It shows adaptations to a semi-fossorial way of life where it digs and lives permanently in burrows under well-embedded timber. Activities which destroy or compact soil structure adversely effects this species by isolating populations in unaffected areas (Sadlier & Pressey 1994).

The species is apparently oviparous however the number of eggs produced remains unrecorded (Swan 1990). The diet of this species is unknown.



### NPWS records of the Five-clawed Worm-skink in NSW

**Threats** (summarised from Cogger *et al.* 1993; Sadler & Pressey 1994; Ayers *et al.* 1996)

- Habitat loss through clearing for agriculture is particularly severe within the known range of the species as cotton and wheat is grown extensively in the area
- Habitat degradation from overgrazing by stock which causes soil compaction and erosion appears to adversely affect this burrowing species
- Removal of refuge sites, particularly fallen logs
- Removal of ground litter can reduce soil humidity which can adversely affect the species
- Use of agricultural chemicals which pollutes soil and water may adversely affect this species
- Predation by foxes and cats may effect this species

## **Management**

- Further survey for the species, specifically in areas of potential habitat, including assessment of the habitat quality
- Protection and maintenance of known or potential habitat, including the implementation of protection zones around recent records. The extent of protection zones should depend on the assessed habitat quality and/or presence of individuals

- Feral animal control programs, specifically targeting recently disturbed areas with known or potential habitat for the species
- Alteration of prescribed burning and grazing regimes to ensure the enhancement and maintenance of floristic and structural diversity of the ground cover within known or potential habitat

## **Recovery plans**

A recovery plan is being prepared for this species.

## References

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- Wilson S. K. and Knowles D. G. 1988. Australia's Reptiles - A photographic reference to the terrestrial reptiles of Australia. Collins Publishers, NSW.

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