



Photo: I. Morris

## HOWARD RIVER TOADLET

### *Uperoleia daviesae*

#### Conservation status

Australia: Not listed

Northern Territory: Vulnerable

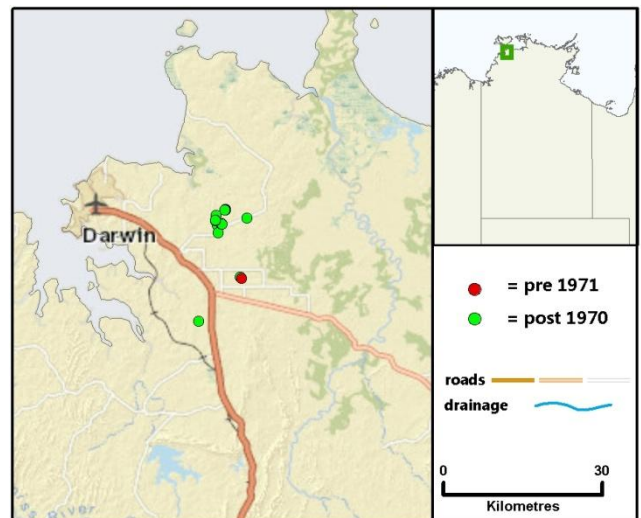
#### Description

This is a small species of *Uperoleia* (17-23 mm snout-vent length). The dorsal surface has numerous pale brown tubercles, surrounded by black, and a narrow yellow to pale red midvertebral stripe. The ventral surface is cream and the groin is orange-red. The toes are unfringed and have only slight basal webbing. Its short raspy call of 22 pulses distinguishes it from other sympatric species of *Uperoleia* (Young et al. 2005).

#### Distribution

*Uperoleia daviesae* is a Northern Territory endemic and was discovered in 2000. It is known from only a relatively small number of specimens and chorus recording. Results from recent surveys appear to suggest that the Howard River toadlet is confined to sandsheet heathland within the Howard and Elizabeth River Catchments close to Darwin (Fisher et al. 2011). Sandsheet heathlands are associated with alluvial plains, drainage lines and seepage zones.

Surveys by Fisher et al. (2011) suggest that the Howard River Toadlet is fairly specialized in its habitat requirements and is confined to sandy inundated areas in the Howard and Elizabeth river catchments (adjacent to each other). Both catchments are in the Darwin area.



Known locations of the Howard River Toadlet

*Conservation reserves where reported:*  
None.

#### Ecology

There is little information on the ecology of the species, other than it appears to be confined to sandsheet heath, areas of sandy soils with short vegetation that is inundated in the Wet season, or to adjacent melaleuca woodland areas.

Typically males of the species are found calling in small numbers, amidst choruses of other, more numerous, frog species (Fisher et al 2011.).

## Conservation assessment

There is little information on its population, distribution or trends in abundance. The Howard River Toadlet has been classified as **Vulnerable** (under criteria B1ab(iii)+2ab(iii); D2), based on:

- i. the small number of locations from which it is currently known;
- ii. threats to its habitat; and
- iii. a very small extent of occurrence (c. 200 km<sup>2</sup>) and area of occupancy (<20 km<sup>2</sup>) making it prone to the effects of human activities or stochastic events within a very short time period.

## Threatening processes

The species appears to be confined to sandsheets in the Howard and Elizabeth River catchments. These areas are:

- in the Darwin peri-urban growth area, so are threatened by the urban expansion of Darwin; or
- in areas under pressure from sand mining (Price *et al.* 2005).

## Conservation objectives and management

Recent research has provided limited data to help delineate distribution and habitat requirements. This research provides an important baseline for ongoing monitoring, which will help guide sand mining operations within the habitat of this species. Current knowledge is insufficient to provide much guide to management beyond protecting known populations from development and mining. Further research is required to more precisely delineate distribution, habitat preferences, and ecology of the species to ensure that all requirements of the Howard River Toadlet can be maintained alongside responsible and sustainable development.

## Compilers

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[updated December 2012]

## References

- Fisher, A., Mahney, T., Mackay, L., Tynan, C., Dostine, P., Young, S. and Fegan, M. (2011). Assessment of the terrestrial vertebrate fauna of the Weddell area. Final Report, July 2011.
- Price, O., Milne, D., and Tynan, C. (2005). Poor recovery of woody vegetation on sand and gravel mines in the Darwin region of the Northern Territory. *Ecological Management and Restoration* 6, 118-123.
- Young, J.E., Tyler, M.J., and Kent, S.A. (2005). Diminutive new species of *Uperoleia* Grey (Anura: Myobatrachidae) from the vicinity of Darwin, Northern Territory, Australia. *Journal of Herpetology* 39, 603-609.