

Threatened Species of the Northern Territory

VRD BLACKSOIL CTENOTUS

Ctenotus rimacola camptris

Conservation status

Australia: Not listed

Northern Territory: Vulnerable



Photo: Alaric Fisher

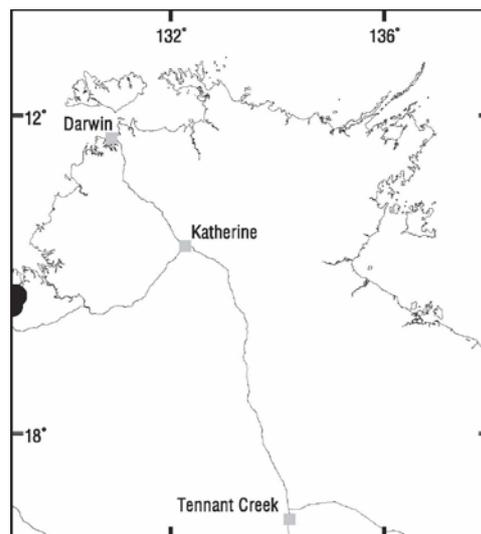
Description

The VRD blacksoil ctenotus is a moderately large (body length 80 mm) and robust skink, with prominent dark vertebral stripe. It is most similar to the blacksoil ctenotus *C. joanae* from the Barkly Tablelands and the more widespread robust ctenotus *C. robustus*, but distinguished from that species by a combination of scale and size characteristics (Horner and Fisher 1998). There are two subspecies of *Ctenotus rimacola*: subspecies *rimacola* has a grey ground colour while subspecies *camptris* has an olive-brown ground colour and narrower dorsal stripe.

Distribution

Ctenotus r. camptris has a narrow geographic range, restricted to the floodplains of the lower Ord and Keep Rivers (including the far NE Kimberley, Western Australia). *Ctenotus r. rimacola* is restricted to the Victoria River District.

Conservation reserves where reported:
None.



Known locations of *Ctenotus rimacola camptris*
● = post 1970

Ecology

Ctenotus rimacola is restricted to grasslands, or grasslands with a sparse woodland overstorey, on cracking clay soils. It forages on the ground and shelters within the soil cracks. Its diet comprises a range of invertebrates.



Habitat for *C. rimacola* in the Victoria River District
(Photo: Alaric Fisher.)

Conservation assessment

Ctenopus rimacola was recognised only as recently as 1998, so there is limited information available on parameters relevant to conservation assessment. The total available habitat within its distribution is approximately 14,000 km² for subspecies *rimacola*, but less than 8,000 km² for subspecies *camptris*, of which 370 km² is in the Northern Territory. While subspecies *rimacola* appears to be relatively abundant in suitable habitat, there are few records for subspecies *camptris* despite intensive biological survey in the Ord / Keep floodplains.

Fisher (2001) demonstrated that this species is sensitive to grazing pressure, and that almost all of its range is subjected to pastoralism. Based on grazing gradient studies, the population in the VRD may have been substantially reduced because of pastoralism. While the subspecies appears secure under current management regimes, further population decline may occur under current proposals to intensify grazing pressure.

Ctenopus rimacola camptris may face more intensive threats from recent proposals to clear around 50% of its habitat for intensive horticultural production (mostly sugar cane) (Kinhill 2000). The future of this development is currently unclear, but the Keep River Plain

remains a focus for potential agricultural development.

Based on this information, *C. r. camptris* is considered **Vulnerable** (under criteria A3c) due to:

- a population size reduction of >30%, projected or suspected to be met within the next 10 years or three generations;
- decline in area of occupancy, extent of occurrence and/or quality of habitat.

The other subspecies, *Ctenopus r. rimacola* does not meet any of the set of criteria for threatened status, but this should be reassessed if pastoral land use is significantly intensified in the Victoria River region.

Threatening processes

The most acute threat facing this lizard is potential broad-scale clearing associated with conversion of native grassland to horticulture in the lower Ord and Keep River systems.

The species is also subject to a pervasive threat from grazing by livestock (and feral herbivores), probably associated with a decrease in vegetation cover and changes in composition of the ground layer.

Predation by feral cats may also cause some decline in total population size. Longer-term vegetation change (notably invasion of grasslands by some woody species, such as rosewood *Terminalia volucris*), associated with fire and livestock management and global warming may reduce the area of suitable habitat.

Conservation objectives and management

Research priorities are to:

- i. examine the impacts of possible intensification of pastoral management.

Management priorities are to:

- ii. ensure adequate areas of suitable habitat are maintained under any scenario of increased horticultural use of the lower Ord and Keep River valleys; and
- iii. ensure adequate areas of suitable habitat are maintained under any scenario of increased intensification of pastoralism in the Victoria River District.

Complied by

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References

- Fisher, A. (2001). *Biogeography and conservation of Mitchell grasslands in northern Australia*. PhD thesis. (Northern Territory University, Darwin.)
- Horner, P., and Fisher, A. (1998). *Ctenotus rimacola* sp. nov. (Scincidae), a new species of lizard with two allopatric subspecies, from the Ord-Victoria region of north-western Australia. *Records of the Western Australian Museum* 19, 187-200.
- Kinhill Pty. Ltd. (2000). *Ord River Irrigation Area Stage 2. Proposed development of the M2 area*. Draft Environmental Impact Statement. (Kinhill, Perth.)