Threatened species of the Northern Territory

Fitzroy Station rocksnail Mesodontrachia fitzroyana

Conservation status

Australia: Not listed

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Critically Endangered Territory Parks and Wildlife Conservation Act 1976



The Fitzroy Station Rocksnail is a large camaenid land snail, with a shell diameter of 17–23 mm and a height of 10–14 mm. The light brown shell has a medium-yellow horn, white lip and 5–6 whorls. The apex and spire are moderately elevated, somewhat rounded above¹.

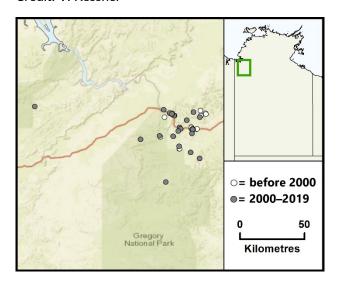
Distribution

The Fitzroy Station Rocksnail is endemic to the Northern Territory (NT), where it is known from a few low limestone hills on the Ngaliwurru/Nungali Aboriginal Land Trust, both north and south of the Victoria Highway, 24 km east of Timber Creek. The hills are about 8 km long and meet sandstone hills 1–2 km to the south and run out 4–5 km north of the highway.

NT conservation reserves where reported: Judburra/Gregory National Park.



Credit: V. Kessner



Caption: Known localities of the Fitzroy Station Rocksnail in the NT (nrmaps.nt.gov.au)

Ecology and life-history

The Fitzroy Station Rocksnail is restricted to open eucalyptus woodland and small vine-thicket patches on limestone hills with terraces and steep slopes. Here they spend much of the year aestivating under rocks, typically emerging only after heavy rain.



Threatening processes

Frequent fires during the dry season have reduced both the quality of habitat and the number of mature individuals of the Fitzroy Station Rocksnail². Cattle grazing in the area may also result in direct trampling of snails and their exposure when stock overgraze the covering vegetation³.

Feral predators such as rats, mice and Cane Toads *Rhinella marina* can have a significant impact on other land snail populations³. Cane toads now occur across the region, but their impact is unknown, and there is no evidence that introduced rodents currently occur at this locality.

Conservation objectives and management

There is currently no management program for the Fitzroy Station Rocksnail in the NT.

The primary research priority is to quantify specific threats at the known locality. Depending upon assessment of threats, management priorities may include: improving safeguarding the known locality through encouraging appropriate fire regimes and protecting the site from heavy grazing; and protecting the Fitzroy Station Rocksnail from Cane Toads if these are found to be a predator of the species.

References

¹ Solem, A., 1985. Camaenid land snails from Western and Central Australia (Mollusca: Pulmonata: Camaenidae). V Remaining Kimberley genera and addenda to the Kimberley. Rec. West. Aust. Mus. Suppl. 20, 707–981.

² Michael Braby personal communication

³ Vince Kessner personal communication