

Approved Conservation Advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
Semotrachia euzyga

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

Description

Semotrachia euzyga, Family Camaenidae, is a small yellow-brown camaenid land snail, with a shell diameter of about 8 mm and a slightly elevated spire. Camaenid snails typically become mature in their second wet season and may live for 10–15 years (TSSC, 2006b).

Conservation Status

Semotrachia euzyga is listed as **endangered**. This species is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, in 2006, the Minister considered the Threatened Species Scientific Committee's (TSSC) advice under section 189 of the EPBC Act and amended the list under section 184 to include *Semotrachia euzyga*. The TSSC determined that this species met criterion 2 of their eligibility criteria (TSSC, 2006b). The species is also listed as endangered under the *Territory Parks and Wildlife Regulation Act 2000* (Northern Territory).

Distribution and Habitat

Semotrachia euzyga is found in a large area extending to more than 250 km from Alice Springs in the Northern Territory. Its range extends from the Rockhampton Downs in the north to James Ranges, south-west of Alice Springs, and west to Mt Junction.

Semotrachia euzyga lives in rocky litter under native fig trees (*Ficus platypoda*). When adults aestivate (become dormant) they seal themselves to rocks (Solem, 1993). The localities under fig trees have a naturally fragmented distribution in moister areas of Alice Springs (TSSC, 2006b). The species is protected in the West MacDonnells National Park (Woinarski et al., 2007) and Alice Springs Telegraph Station Historical Reserve, although it has almost disappeared from the latter area (NTG, 2006). This species occurs within the Northern Territory Natural Resource Management Region.

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

Threats

The main identified threats to *S. euzyga* are changed fire regime that has resulted from exotic Buffel Grass (*Cenchrus ciliaris*) invading its habitat, and by urban development occurring in and around Alice Springs (TSSC, 2006a).

Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Design and implement a monitoring program (TSSC, 2006a).

Regional and Local Priority Actions

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of *Semotrachia euzyga*.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats (TSSC, 2006a).
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Manage threats to stands of fig trees that support populations of *Semotrachia euzyga*.
- Minimise adverse impacts from land use at known sites.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on *Semotrachia euzyga*.
- Ensure road widening and maintenance activities (or other infrastructure or development activities) do not adversely impact on known populations.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or further inclusion in reserve tenure (TSSC, 2006a).

Invasive Weeds

- Develop and implement a management plan for the control of Buffel Grass in the local region.

Fire

- Develop and implement a suitable fire management strategy for the vegetation that forms natural habitat for *Semotrachia euzyga*.
- Develop and implement a suitable fire management strategy for Buffel Grass in the area.
- Provide maps of known occurrences to local and state rural fire services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Conservation Information

- Raise awareness of *Semotrachia euzyga* within the local community.

Enable Recovery of Additional Sites and/or Populations

- Investigate options for linking, enhancing or establishing additional populations.

This list does not necessarily encompass all actions that may be of benefit to *Semotrachia euzyga*, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Alice Springs Telegraph Station Historical Reserve Plan of Management (NTG, 2001), and
- Report to the Desert Knowledge Cooperative Research Centre on the dispersal, impact and management of buffel grass (*Cenchrus ciliaris*) in desert Australia (Friedel et al., 2006).

This prescription was current at the time of publishing; please refer to the relevant agency's website for any updated versions.

This Conservation Advice was approved by the Minister / Delegate of the Minister on:
3/7/2008

Information Sources:

Friedel, M, Puckey, H, O'Malley, C, Waycott, M, Smyth, A & Miller, G 2006, *Buffel grass: both friend and foe*, An evaluation of the advantages and disadvantages of buffel grass use and recommendations for future research, Desert Knowledge Cooperative Research Centre, Alice Springs.

Northern Territory Government (NTG) 2001, *Alice Springs Telegraph Station Historical Reserve Plan of Management*, Parks and Wildlife Commission of the Northern Territory, viewed 4 April 2008, <<http://nt.gov.au/nreta/parks/manage/plans/pdf/alicepom.pdf>>.

Northern Territory Government (NTG) 2006, *Threatened Information Sheet: Land Snail: Semotrachia euzyga*, Parks and Wildlife Commission, Northern Territory, viewed 4 April 2008, <http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/inverts/Semotrachia_euzyga_EN.pdf>.

Solem, A 1993, 'Camaenid land snails from Western and central Australia (Mollusca: Pulmonata: Camaenidae) VI Taxa from the Red Centre', *Records of the Western Australian Museum Supplement No. 43*, pp. 983-1459.

Threatened Species Scientific Committee (TSSC) 2006a, '*Commonwealth Conservation Advice on Semotrachia euzyga*', Department of Environment, Water, Heritage and the Arts, viewed 1 April 2008, <<http://www.environment.gov.au/biodiversity/threatened/species/pubs/semotrachia-euzyga-conservation.pdf>>.

Threatened Species Scientific Committee (TSSC) 2006b, '*Commonwealth Listing Advice on Semotrachia euzyga*', Department of Environment, Water, Heritage and the Arts, viewed 1 April 2008, <<http://www.environment.gov.au/biodiversity/threatened/species/pubs/semotrachia-euzyga-listing.pdf>>.