

Appendix F
Cumberland Land Snail Information Sheet



Cumberland Plain Large Land Snail

Meridolum corneovirens (Pfeiffer, 1851)

Meridolum corneovirens is listed as an **endangered species** on Schedule 1, Part 1 of the new South Wales *Threatened Species Conservation Act*, 1995 (TSC Act).

Description

M. corneovirens is a native snail species with a typical adult shell diameter ranging between 15-30mm. The colour is generally tan to dark brown with a green or yellow tinge. The under side of the shell, especially in living individuals, tends to have a glossy appearance and is semi-transparent, enabling the observer to see the animal colour and some internal organs. The upper side of the shell has a coarse wrinkly appearance. In adult shells the edge of the aperture is reflected, forming a slight lip. This is typically white in colour. However, the feature is absent in both juvenile and sub-adult individuals. The juveniles have a more angular shell and tend to have an open area in the central part of the underside of the shell, known as the umbilicus. Generally, in adults the umbilicus is closed or partially covered. Sometimes there is a reddish brown patch around the umbilical area.

M. corneovirens can be confused with introduced and native snails, particularly the common garden snail (*Helix aspersa*). *H. aspersa* is generally larger in size, is yellowish brown with blotchy patterns of brown and/or black, generally has a more inflated shell shape and the juveniles have a much weaker shell.

M. corneovirens can also be easily confused with other members of the genus *Meridolum*, especially those found along the edges of its' range.



Clark (1999)

Distribution

M. corneovirens occurs within the Cumberland Plain region of Western Sydney. *M. corneovirens* is currently known from over 100 locations. However, most of these populations are scattered throughout the region and are often small and isolated. Populations are known from Baulkham Hills, Blacktown, Camden, Camden, Campbelltown, Fairfield, Hawkesbury, Holroyd, Liverpool, Penrith, and Wollondilly local government areas in western Sydney.

Recorded occurrences in conservation reserves

The majority of the known populations for *M. corneovirens* occur outside of conservation reserves. It has been recorded from Scheyville National Park, Agnes Banks Nature Reserve, Castlereagh Nature Reserve, Windsor Downs Nature Reserve and the northern tip of Gulguer Nature Reserve (Bents Basin).

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Habitat

Current knowledge suggests that *M. corneovirens* is restricted to the Cumberland Plain and Castlereagh Woodlands of Western Sydney and also along the fringes of River Flat Forest, especially where it meets Cumberland Plain Woodland. *M. corneovirens* typically occurs under logs and other debris, amongst leaf and bark accumulations around bases of trees and sometimes under grass clumps. Where possible it will burrow into loose soil.

Ecology

Very little is currently known about the biology and life history of *M. corneovirens*. It is hermaphroditic and lays clutches of 20-25 small round white eggs. Eggs are laid in moist, dark areas such as under logs and take about 2-3 weeks to hatch. Recent observations suggest that *M. corneovirens* probably reproduces year round (when conditions are suitable). *M. corneovirens* is a fungal feeder and is generally active at night.

For further information contact

Threatened Species Unit, Central Directorate, NSW NPWS PO Box 1967 Phone (02) 9585 6678 or visit our website at www.npws.nsw.gov.au

References

Stephanie Clark. (personal observations, 1998-1999, as part of a PhD project looking at the *Meridolum* of the Sydney Region).

Rudman, W.B. 1999. Threatened and Endangered Landsnail species - *Meridolum corneovirens*.

<http://www.austmus.gov.au/science/division/invert/mal/endangered/meridolum.htm>

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Nothing is currently known about rates of fecundity, length of life span, dispersal patterns and over what distances individuals can move.

Threats

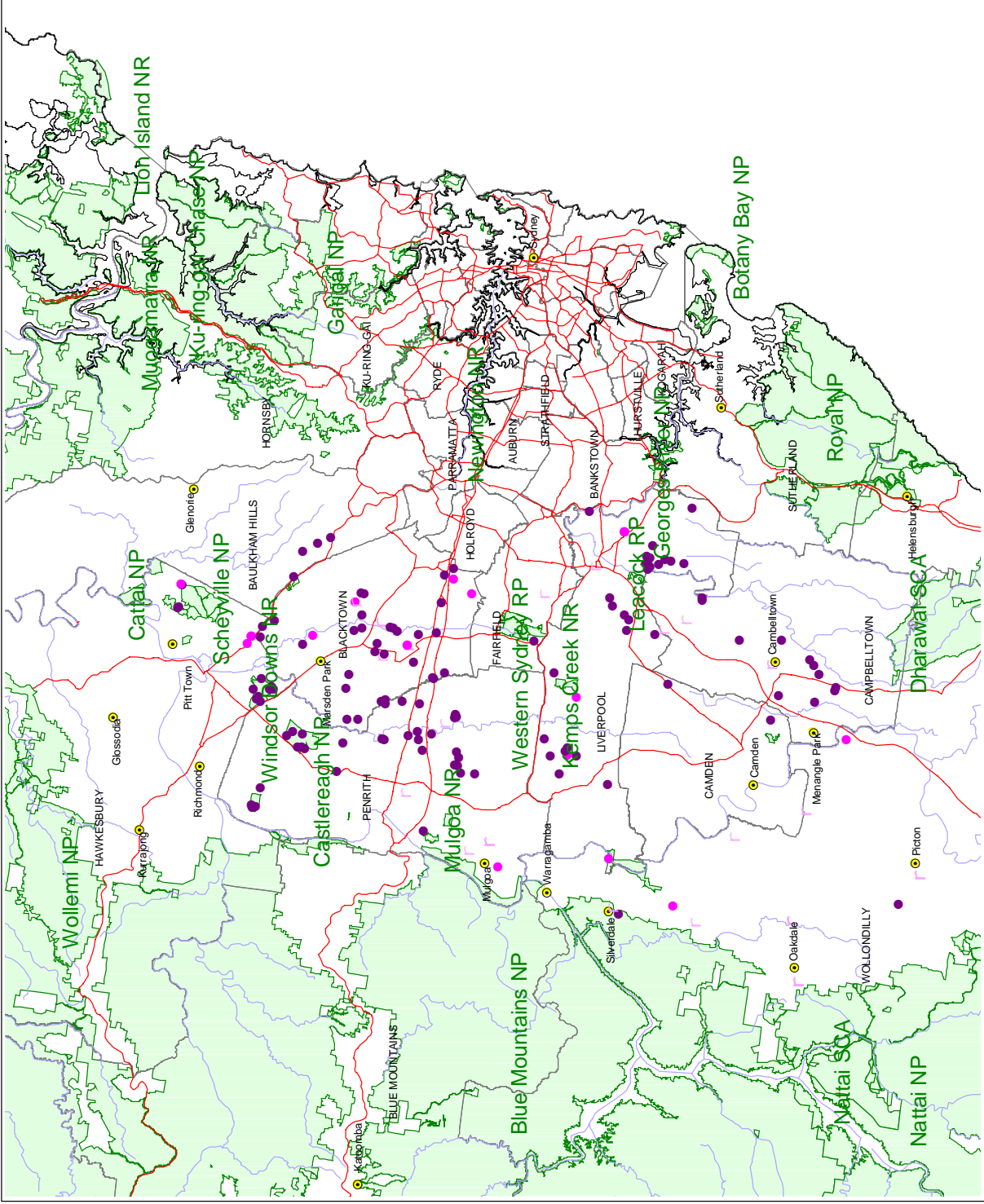
The bulk of the known populations are small, isolated and vulnerable to impacts from clearing and habitat modification such as weed invasion, inappropriate fire management and removal of ground cover. As this removes shelter, breeding habitat and sources of food.

Management

Management actions should be aimed at improving habitat, in particular controlling weed invasion, and the unnecessary removal or reduction of ground cover, thereby providing the habitat requirements for shelter, breeding and feeding.

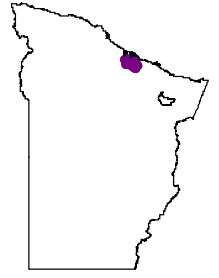
Recovery Plans

A recovery plan for the species has not yet been prepared.



Cumberland Land Snail

Meridolum carneovirens



Map compiled from:
 Species records from the NPWS Atlas of NSW Wildlife and from Clark (1989)
 Roads, Rivers and Towns from AUSLIG
 LGA boundaries from LC
 NPWS Estate from NSW NPWS

- Cumberland Land Snail records
- Pre 1950
 - 1950 - 1990
 - 1990 - present
 - Towns
 - Roads
 - Rivers
 - Coastline
 - Local Government Boundaries
 - NPWS Estate



PROJECTION
 Australian Map Grid
 Zone 56



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 NPWS Sydney Zone
 01 September 1999

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