



**SAVING OUR SPECIES**

**Masters Charopid Land Snail**

2020-2021 annual report card

**Overall status\***

- **Populations at all sites are known to be on track.**
- Threat management is known to be on track at all sites, and population status is unknown at one or more sites.
- Threat management is known to be off track at one or more sites, and population status is unknown at one or more sites.
- Populations at one or more sites are known to be off track.

\* For SoS priority management sites (may not include all locations where the species occurs in NSW)

**Summary**

<b>Management sites</b>	Southern Mountains
<b>Action implementation</b>	2 (of 2) management actions were fully or partially implemented as planned for the financial year.
<b>Total expenditure</b>	\$208,410 (\$2,910 cash; \$205,500 in-kind)
<b>Partners</b>	Australian Museum; Environment, Energy and Science; Lord Howe Island Board



**Scientific name:**  
*Mystivagor mastersi*

**NSW status:**  
Critically Endangered

**Commonwealth status:**  
Critically Endangered

**Management stream:**  
Site-managed species

Photo: Adnan Moussalli

# Priority management site: Southern Mountains



## Local government area:

Lord Howe Island -  
Unincorporated Area

## Partners:

Australian Museum;  
Environment, Energy and  
Science; Lord Howe Island  
Board

## Population outcome

-  **On track**
-  **On track (inferred)**
-  **Not on track (inferred)**
-  **Not on track**

## Monitoring

*Species population monitoring by one or more methods indicates response to management over time and provides an outcome measure.*

<b>Monitoring metric</b>	Level of occupancy
<b>Annual target</b>	To confirm the presence of the species through targeted searches at a minimum of 50 sites across Lord Howe Island. Annual target for 2020–21 – minimum of one record.
<b>Long term target</b>	By 2050 species occupancy records using current methodologies will increase to 30% of all transects/searches or >6 individuals per year.
<b>Monitoring result</b>	A single shell was recorded from the lower eastern flanks of Mt Lidgbird. This is a new location for this species.
<b>Scientific rigour of monitoring method</b>	Moderate
<b>Conducted by</b>	Environment, Energy and Science

## Investment

Participant	Cash	In-kind
Australian Museum	\$0	\$3,000
Environment, Energy and Science	\$2,910	\$2,500
Lord Howe Island Board	\$0	\$200,000

## Management actions

The following actions are those identified as being required in financial year 2020-2021 to secure the species in the wild.

Threat	Management action	Implemented as planned?
Susceptible to predation by ship rat ( <i>Rattus rattus</i> )	Environment, Energy and Science to provide support to the Lord Howe Island Board to help implement the Lord Howe Island Rodent Eradication Project when appropriate.	Yes
Poor understanding of the species distribution, abundance and habitat use across Lord Howe Island.	Undertake targeted systematic surveys for the species on Mt Gower and the upper to mid-slopes of Mt Gower and Mt Lidgbird.	Yes

## Threat outcome

Assessment on the status of critical threats at this site.

Threat	Annual target	Threat status
Susceptible to predation by ship rat ( <i>Rattus rattus</i> )	Environment, Energy and Science to provide support to the Lord Howe Island Board to help implement the Lord Howe Island Rodent Eradication Project when appropriate.	On track
Poor understanding of the species distribution, abundance and habitat use across Lord Howe Island.	Undertake targeted systematic surveys for the species on Mt Gower and the upper to mid-slopes of Mt Gower and Mt Lidgbird.	On track

## Site summary

Detailed systematic surveys were undertaken on the Mt Gower summit, and throughout the southern highlands, with a focus on sites that had not been recently collected (e.g. Little Slope, Black Face, Barrow Flats, summit and upper slopes of Mt Lidgbird). A grid based occupancy approach was used on the summit of Mt Gower where we surveyed 24 evenly spaced sites across the summit (one hour of visual search effort per site). Techniques included searching leaf litter, turning palm fronds, logs and rocks, looking in palm trees and searching wet rock faces. At other sites, we used a similar visual search technique but performed longer searches with a larger search radius at a smaller number of sites. The person-hours were recorded for each site. A total of 38 sites were surveyed taking 93 person-hours of effort.

A single shell of *Mystivagor mastersi* was recorded from the lower eastern flanks of Mt Lidgbird. This is a new location for this species.

The Lord Howe Island (LHI) rodent eradication baiting phase was completed in late 2019. Three hundred and thirty permanent monitoring devices have now been established to monitor for signs of rodents across key locations on LHI. Between October 2019 and April 2021 there were nil detections of rodents on LHI giving a high level of confidence that the original rodent eradication project resulted in the eradication of rodents from LHI. Recent detections in April and May 2021 are likely to be the result of a new incursion onto the island and are being treated as a biosecurity issue with an incursion response plan currently being implemented.

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Saving our Species 2020-2021 annual report card for Masters Charopid Land Snail (*Mystivagor mastersi*). For more information refer to the specific strategy in the Saving our Species program.