

## *Hystricella leacockiana*, Madeiran Land Snail

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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae

**Taxon Name:** *Hystricella leacockiana* (Wollaston, 1878)

**Synonym(s):**

- *Discula leacockiana* (Wollaston, 1878)

**Common Name(s):**

- English: Madeiran Land Snail

## Assessment Information

**Red List Category & Criteria:** Vulnerable D2 [ver 3.1](#)

**Year Published:** 2013

**Date Assessed:** September 24, 2010

**Justification:**

This species has a total area of occupancy of 8 km<sup>2</sup> with the main population on a small hillslope area where the species is found in the western part of the island, with an additional small subpopulations near the eastern coast where the habitat has been subject to changing land-use practice, and as such the quality of the habitat at the site has declined over the last thirty years, although the main area falls within a designated protected area. However, the current threats are mainly to the coastal sites, and so the other subpopulations are thought to be less threatened (Cameron and Groh, pers. comm., 2010). Therefore this species is assessed as Vulnerable D2. Should the threats impact the other subpopulations, then the species would directly qualify as Endangered B2ab(iii).

**Previously Published Red List Assessments**

1996 – Vulnerable (VU)

1994 – Rare (R)

1990 – Vulnerable (V)

1988 – Vulnerable (V)

1986 – Vulnerable (V)

1983 – Vulnerable (V)

## Geographic Range

**Range Description:**

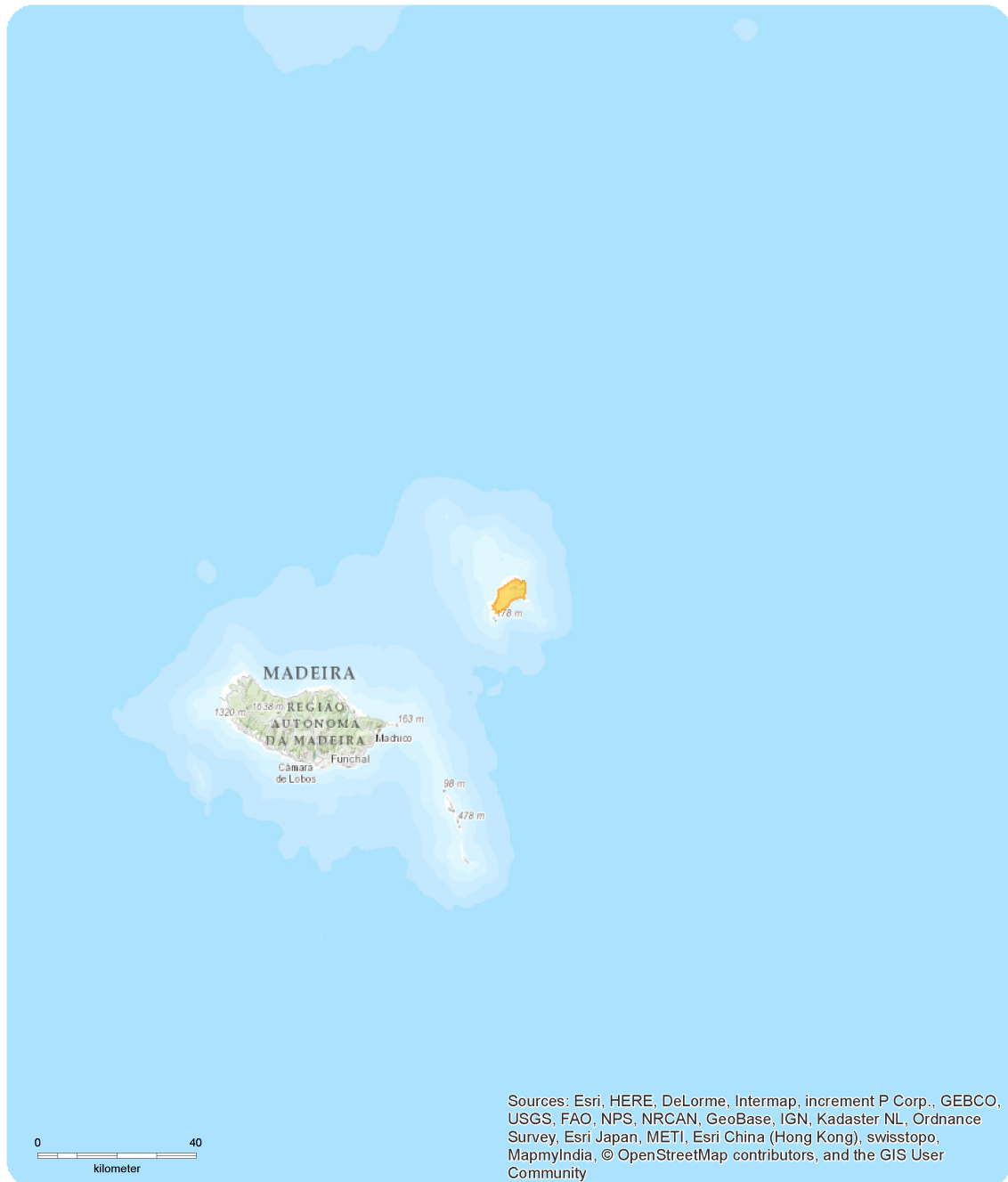
This species is endemic to Porto Santo, Madeiran islands. It is restricted to the west end of the island,

around Pico d'Ana Ferreira, with one record from the east end of the island. It is rarely found as a Quaternary fossil, possibly reflecting range restricted distribution through time (Seddon 2008).

**Country Occurrence:**

**Native:** Portugal (Madeira)

# Distribution Map

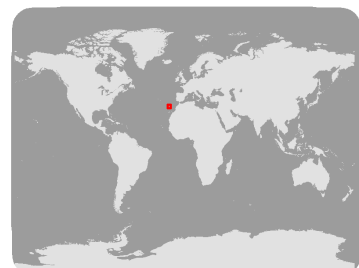


## *Hystricella leacockiana*

Range

■ Extant (resident)

Compiled by:  
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The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

This species when present, can be abundant, however it is very localised.

**Current Population Trend:** Unknown

## Habitat and Ecology (see Appendix for additional information)

This species is found under stones on grassland, and in scree, leaf-litter at base of small rock crags or in quarries.

**Systems:** Terrestrial

## Use and Trade

The species is not known to be utilised, although occasionally sold by shell collectors.

## Threats (see Appendix for additional information)

The species is found in the western part of the island, with an additional small subpopulations near the coast where the habitat has been subject to changing land-use practice due to hotel and villa construction, and use of sand deposits for small quarries, and as such the quality of the habitat has declined over the last thirty years. The areas behind are used for recreation as well as grazing land and although the main area falls within a designated protected area, the major threats would be change of land-use (construction) or invasive plants.

## Conservation Actions (see Appendix for additional information)

This species is listed on the EU Habitats and Species Directive Annex II and the Council of Europe Bern Convention Appendix 2. This species is present in a small grassland on western Porto Santo, so recommended conservation actions include management of the grassland areas for maintenance of this species and to ensure no loss of further habitat and possible selection of part of the range as a protected area. Research actions include population monitoring and habitat monitoring, especially for the populations near to tourist facilities.

## Credits

**Assessor(s):** Seddon, M.B.

**Reviewer(s):** Cameron, R., Groh, K., Cuttelod, A. & Neubert, E.

**Contributor(s):** Abreu, C. & Teixeira, D.

## Bibliography

Cameron, R.A.D., Cook, L.M. and Gao, G. 1996. Variation in snail species widespread on Porto Santo, Madeiran archipelago. *Journal of Molluscan Studies* 62(2): 143-150.

Groombridge, B. (ed.) 1994. *1994 IUCN Red List of Threatened Animals*. IUCN, Gland, Switzerland.

IUCN. 1990. *IUCN Red List of Threatened Animals*. IUCN, Gland, Switzerland and Cambridge, UK.

IUCN. 2011. IUCN Red List of Threatened Species (ver. 2011.1). Available at: <http://www.iucnredlist.org>. (Accessed: 16 June 2011).

Seddon, M.B. 2008. An illustrated compendium of the landsnails and slugs of the Madeiran archipelago. *Studies in Biodiversity and Systematics of Terrestrial Organisms from the National Museum of Wales*. Biotir Reports.

Wells, S.M., Pyle, R.M. and Collins, N.M. (compilers) 1983. *The IUCN Invertebrate Red Data Book*. IUCN, Gland, Switzerland and Cambridge, UK.

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## External Resources

For [Images and External Links to Additional Information](#), please see the Red List website.

## Appendix

### Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
4. Grassland -> 4.4. Grassland - Temperate	-	Suitable	Yes
0. Root -> 6. Rocky areas (eg. inland cliffs, mountain peaks)	-	Suitable	Yes

### Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive & other problematic species & genes -> 8.1. Invasive non-native/alien species -> 8.1.2. Named species	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		

### Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: No

### Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Conservation Actions Needed</b>
1. Land/water protection -> 1.1. Site/area protection
2. Land/water management -> 2.1. Site/area management

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Research Needed</b>
1. Research -> 1.2. Population size, distribution & trends
3. Monitoring -> 3.4. Habitat trends

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 8
Number of Locations: 2-4
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: No

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