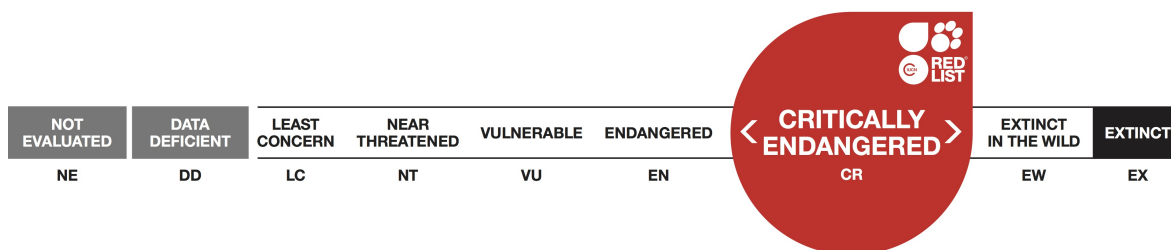


Discula testudinalis, Madeiran Land Snail

Assessment by: Seddon, M.B.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromiidae

Taxon Name: *Discula testudinalis* Pfeiffer, 1853

Common Name(s):

- English: Madeiran Land Snail

Assessment Information

Red List Category & Criteria: Critically Endangered B1ab(iii)+2ab(iii) [ver 3.1](#)

Year Published: 2013

Date Assessed: September 30, 2010

Justification:

This species has been listed since 1980s, and still remains rare, as well as susceptible to predation from non-native species. The area of occupancy is under 10 km², and hence meets the threshold for Critically Endangered, as the two closely located sites (Seddon 2008, map 174) are considered a single location given the threats of fire and predation from non-native species. There is concern for the survival of this species, as there are potential problems of changing land-use and evidence that a rodent is feeding on other species of *Discula* with similar shell size and form. This species is therefore assessed as Critically Endangered B1ab(iii)+2ab(iii).

Previously Published Red List Assessments

1996 – Critically Endangered (CR)

1994 – Endangered (E)

1990 – Vulnerable (V)

1988 – Vulnerable (V)

1986 – Vulnerable (V)

1983 – Vulnerable (V)

Geographic Range

Range Description:

This species is restricted to Porto Santo, on the north side of the main island. Waldén (1983) believed the species might be extinct but Seddon (pers. comm. 1992) noted it was still present in a small region of headland where originally found by Wollaston (1878), and the finding was reported in Wells and Chatfield (1992) where the species was noted to be present on dry stony ground on the headland of Pedragal in an area of 10 m² only. Another site was located close by during Cameron and Cook's surveys

and mapped by Seddon (2008).

Country Occurrence:

Native: Portugal (Madeira)

Distribution Map

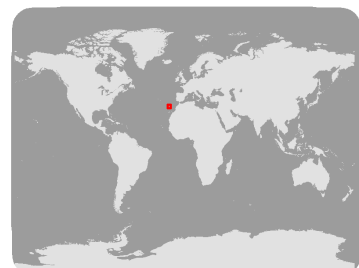


Discula testudinalis

Range

■ Extant (resident)

Compiled by:
IUCN



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



Population

The species is very rare. It is usually found in specialist surveys targeted at the species.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This species is found in grassland areas on cliffs, where it's found under stones or in small scree areas.

Systems: Terrestrial

Use and Trade

This species is not used.

Threats (see Appendix for additional information)

The main threats to this species are fire and predation from non-native species, in two closely sites on small headland, which is considered to be a single location.

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. At present the range does not lie in a designated SPA, and so protected area management is needed, as well as management of the introduced predators (rats) that are feeding on this species.

Credits

Assessor(s): Seddon, M.B.

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

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Walden, H.W. 1983. Systematic and biogeographical studies of the terrestrial Gastropoda of Madeira. With an annotated Check-list. *Annales Zoologica Fennica* 20: 255-275.

Wells, S.M. and Chatfield, J.E. 1992. *Threatened non-marine molluscs of Europe*. Nature and Environment (Council of Europe) No 64.

Wollaston, T.V. 1878 *Testacea Atlantica or the land and freshwater shells of Azores, Aderiras, Salvages, Canaries, Cape Verdes and Saint Helena*. London; Reeve.

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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
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
8. Invasive & other problematic species & genes -> 8.1. Invasive non-native/alien species -> 8.1.2. Named species	Ongoing	Whole (>90%)	Slow, significant declines	Medium impact: 7
	Stresses:	2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance 2. Species Stresses -> 2.3. Indirect species effects -> 2.3.8. Other		

Conservation Actions Needed

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

Conservation Actions Needed
1. Land/water protection -> 1.1. Site/area protection
2. Land/water management -> 2.2. Invasive/problematic species control

Research Needed

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

Research Needed
1. Research -> 1.3. Life history & ecology
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 4
Estimated extent of occurrence (EOO) (km ²): 42
Number of Locations: 1
Population
Population severely fragmented: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 5

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