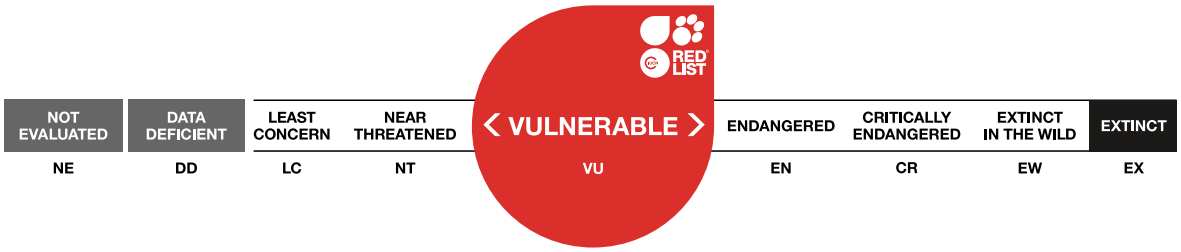
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2020: T176075840A176998727
Scope(s): Global
Language: English

Immersaria fuliginosa

Assessment by: Fryday, A.



View on www.iucnredlist.org

Citation: Fryday, A. 2020. *Immersaria fuliginosa*. *The IUCN Red List of Threatened Species* 2020: e.T176075840A176998727. https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T176075840A176998727.en

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If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with feedback so that we can correct or extend the information provided.

Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Lecideales	Lecideaceae

Scientific Name: *Immersaria fuliginosa* Fryday

Taxonomic Source(s):

Index Fungorum Partnership. 2020. Index Fungorum. Available at: http://www.indexfungorum.org.

Assessment Information

Red List Category & Criteria: Vulnerable D2 ver 3.1

Year Published: 2020

Date Assessed: June 8, 2020

Justification:

Immersaria fuliginosa is only known from two locations and its total Area of Occupancy is 8 km^2. Livestock grazing, fires, and/or climatic changes could quickly lead to the decline and extirpation of this species. Therefore, it is listed as Vulnerable under criterion D2.

Geographic Range

Range Description:

Immersaria fuliginosa is known only from two locations, the summits of Mt. Adam and Mt. Maria on West Falkland, Falkland Islands (Malvinas), from collections made in 1968. This species was not found during recent surveys in 2015 of the Falkland Islands (Malvinas), though the visits to the sites were brief and the species may still be extant at both sites (Fryday *et al.* 2019). Careful examination of ~10,000 collections from southern South America held in the herbarium at Michigan State University did not result in the discovery of any individuals of this species occurring on mainland South America (Fryday and Prather 2001). This thorough investigation supports the conclusion that *I. fuliginosa* is endemic to the Falkland Islands (Malvinas).

Country Occurrence:

Native, Extant (resident): Falkland Islands (Malvinas)

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Distribution Map



Legend

EXTANT (RESIDENT)

Compiled by:

IUCN (International Union for Conservation of Nature) 2020





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

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Population

There are two reported subpopulations from collections made in 1968. No other subpopulations have been reported, and recent surveys did not relocate the species (Fryday *et al.* 2019). The summits of Mt. Maria and Mt. Adam were both visited in 2015, but are remote and difficult to access, and there was limited time available on site (c. 30 mins at each site). The total number of mature individuals is unknown, and the previously documented subpopulations may have been extirpated, although given the limited amount of surveying possible they are both considered extant for this assessment. The population trend is currently unknown.

Current Population Trend: Unknown

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

Immersaria fuliginosa occurs only on siliceous rocks on the summits of Mts Adam and Maria on West Falkland, Falkland Islands (Malvinas).

Systems: Terrestrial

Threats **(see Appendix for additional information)**

Trampling by sheep and cows is a threat to rock-dwelling species and, as the area where it occurs is grazed, may pose a threat to *Immersaria fuliginosa* (Stenroos and Ahti 1992). Taxa found in the surrounding plant communities are threatened by overgrazing and fires initiated by farmers or lightning strikes. An ongoing decrease in summer rainfall and an increase in sunlight as a result of climate change and ozone depletion may negatively impact lichen species throughout the islands (McAdam 2013).

Conservation Actions **(see Appendix for additional information)**

This species currently does not have a formal protected status. The two most important conservation actions needed to preserve this species are: 1) protection of the land on which it occurs, and 2) education of local land owners/citizens about the presence of this species in their area. Additionally, further research is needed to ascertain the current status and distribution of this species.

Credits

Assessor(s): Fryday, A.

Reviewer(s): Lendemer, J.

Contributor(s): Allen, J. & Scott, T.

Facilitator(s) and Compiler(s): Scott, T. & Allen, J.

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Bibliography

Bachman, S., Moat, J., Hill, A.W., de la Torre, J. and Scott, B. 2011. Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool. In: V. Smith and L. Penev (eds) e-Infrastructures for data publishing in biodiversity science. *Zookeys* 150: 117–126.

Fryday, A. M. and Hertel, H. 2014. A contribution to the family Lecideaceae s. lat. (Lecanoromycetidae inc. sed., lichenized Ascomycota) in the southern subpolar region; including eight new species and some revised generic circumscriptions. *The Lichenologist* 46: 389–412.

Fryday, A. M. and Prather, L. A. 2001. The lichen collection of Henry Imshaug at the Michigan State University Herbarium (MSC). *The Bryologist* 104: 464-467.

Fryday, A. M., Orange, A., Ahti, T., Øvstedal, D. O. and Crabtree, D. E. 2019. Checklist of lichenized and lichenicolous fungi reported from the Falkland Islands. *GLALIA* 8(1): 1-100.

IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-3. Available at: www.iucnredlist.org. (Accessed: 10 December 2020).

McAdam, J. 2013. The impact of the Falklands War (1982) on the peatland ecosystem of the islands. *Landscape Archaeology and Ecology* 10: 143-162.

Stenroos, S. and Ahti, T. 1992. The lichen family Cladoniaceae in the Falkland Islands. *Annales Botanici Fennici* 29(1): 67-73.

Citation

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External Resources

For Supplementary Material, and for Images and External Links to Additional Information, please see the Red List website.

Appendix

Plant Growth Forms

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

Plant Growth Form
LC. Lichen

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Whole (>90%)	Slow, significant declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	Whole (>90%)	Unknown	Unknown
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	Whole (>90%)	Slow, significant declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

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

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: No

Conservation Actions Needed

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

Conservation Action Needed
1. Land/water protection -> 1.1. Site/area protection
4. Education & awareness -> 4.3. Awareness & communications

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km²): 8
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km²): 8
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): Unknown
Number of Locations: 2
Continuing decline in number of locations: Unknown
Extreme fluctuations in the number of locations: No
Population
Extreme fluctuations: No
Population severely fragmented: No
No. of subpopulations: 2
Continuing decline in subpopulations: Unknown
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Unknown
Generation Length (years): 30

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