The IUCN Red List of Threatened Species™
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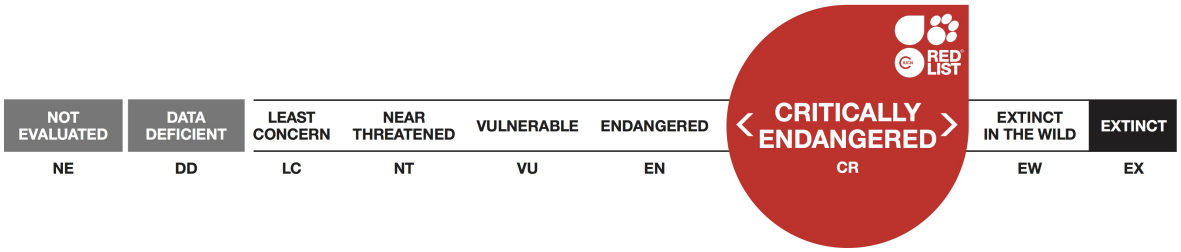
Homoeodera edithia, Edith's Fungus Weevil

Assessment by: Pryce, D. & White, L.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Coleoptera	Anthribidae

Taxon Name: *Homoeodera edithia* Wollaston, 1877

Common Name(s):

- English: Edith's Fungus Weevil

Assessment Information

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

Year Published: 2014

Date Assessed: August 22, 2014

Justification:

This is clearly a rare species. It has been found at three locations most often in association with the dead wood of unspecified endemic 'Cabbage Tree' species of the family Asteracea, it has also been found occasionally in Gorse (*Ulex europaeus* L.) and Smokebush Buddleja (*Buddleja madagascariensis* Lam.). The She Cabbage Trees (*Lachanodes arborea* (Roxb.) B.Nord.) with which it was associated at one of its three locations have been lost and it is not known if it has been able to persist in non-native vegetation at this location. The species has not been seen since May 1967. It has an extent of occurrence (EOO) and area of occupancy (AOO) both of 8 km² and the population is considered severely fragmented. While this species belongs to a group of invertebrates specifically targeted by a recent survey (Mendel, Ashmole and Ashmole, 2008) and was not found at this time, it does appear to have a requirement for dead wood in a particular rot state that may not have been met with during the survey and it could well still persist. The species is therefore assessed as Critically Endangered.

Geographic Range

Range Description:

Endemic to the island of St Helena, in the South Atlantic Ocean, where it is found at middle and upper elevations.

Country Occurrence:

Native: Saint Helena, Ascension and Tristan da Cunha (Saint Helena (main island))

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Distribution Map

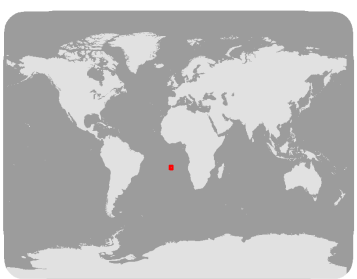
Homoeodera edithia

NE DD LC NT VU EN CR CRITICALLY ENDANGERED EW EX

Range

Extant (resident)

Compiled by:
St Helena National Trust



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

This species was described from a single specimen collected in 1875-6 (Wollaston 1877). During the two Belgian expeditions of the mid- to late 1960s it was found at three locations: the High Central Ridge, High Peak and at Rural Retreat Gut (Basilewsky 1972); at this time there were endemic She Cabbage Trees (*Lachanodes arborea* (Roxb.) B.Nord.) still present at the last site which have since been lost. The species was not found during the last major survey of its habitat (Mendel, Ashmole and Ashmole 2008), despite this group of beetles being a particular target of the research; however environmental conditions (seasonality) could explain this. With a general decline in habitat quality and an increase in the number of invasive non-native predators (*e.g.* Formicidae) it is inferred that this species is declining in numbers.

Current Population Trend: Decreasing

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

This species is primarily associated with the dead wood of unspecified endemic 'Cabbage Tree' species of the family Asteraceae, and in particular with the fungi associated with this material; more than 87% of specimens have been collected specifically from this material. The only specified host plants material has been the rotting wood of a She Cabbage Tree (*Lachanodes arborea* (Roxb.) B.Nord.) - 6% of specimens; dead wood of non-native Gorse (*Ulex eropaeus* L.) - 6% of specimens, and the rotting trunk of non-native Smokebush Buddleja (*Buddleja madagascariensis* Lam.) - 0.6% of specimens (Basilewsky 1972).

Systems: Terrestrial

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

There has been a general decline in habitat quality and the loss of one of its endemic host plants at one location. There is an increase in the number of invasive non-native predators (*e.g.* Formicidae). Global warming is also a potential threat to habitat quality with an increasing risk of extreme climatic events occurring.

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

Any research and monitoring of this species would be of value. Of critical importance is the continued expansion and linking of habitat fragments as well as removal of invasive non-native species where this is possible.

Credits

Assessor(s): Pryce, D. & White, L.

Reviewer(s): Gerlach, J.

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Disclaimer

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?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	Resident	Suitable	Yes

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

Threat	Timing	Scope	Severity	Impact Score
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:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Future	Whole (>90%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place
(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Action Recovery plan: No
Systematic monitoring scheme: No
In-Place Land/Water Protection and Management
Conservation sites identified: No
Occur in at least one PA: Yes

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

Conservation Actions Needed
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.2. Invasive/problematic species control

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Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km^2): 8
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km^2): 8
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 3
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 610
Upper elevation limit (m): 792
Population
Population severely fragmented: Yes
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Movement patterns: Not a Migrant

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