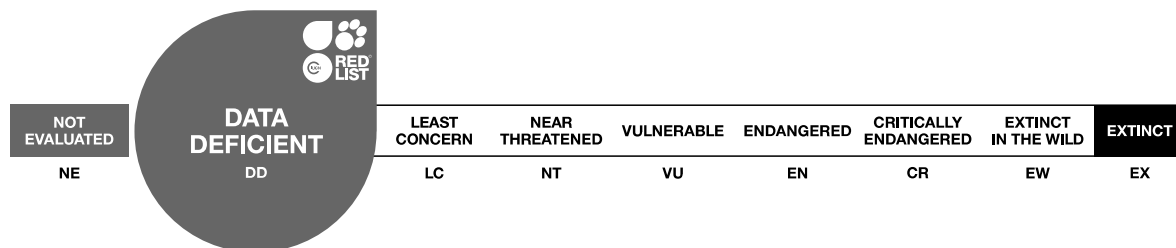


Trixoscelis proxima

Assessment by: Nunes, R. & Borges, P.A.V.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Diptera	Trioxselididae

Scientific Name: *Trioxselis proxima* (Seguy, 1936)

Synonym(s):

- *Trichoscelis proxima* Seguy, 1936

Assessment Information

Red List Category & Criteria: Data Deficient [ver 3.1](#)

Year Published: 2021

Date Assessed: March 27, 2018

Justification:

Trioxselis proxima is an endemic species of the Azores (Portugal), known from a single disturbed site on S. Miguel island. From the historical data, this species could have a very small Extent of Occurrence (8 km²) and Area of Occupancy (8 km²), and it is possible that this species has declined in the past as a result of human activity. The present situation of this species needs to be further assessed, and further research is needed into its population, distribution, threats, ecology and life history. Conservation/restoration of native vegetation, as well as invasive species control could also potentially aid this species' conservation. Based upon the lack of recent data regarding this species' population, distribution, threats and ecology, this species is assessed as Data Deficient (DD).

Geographic Range

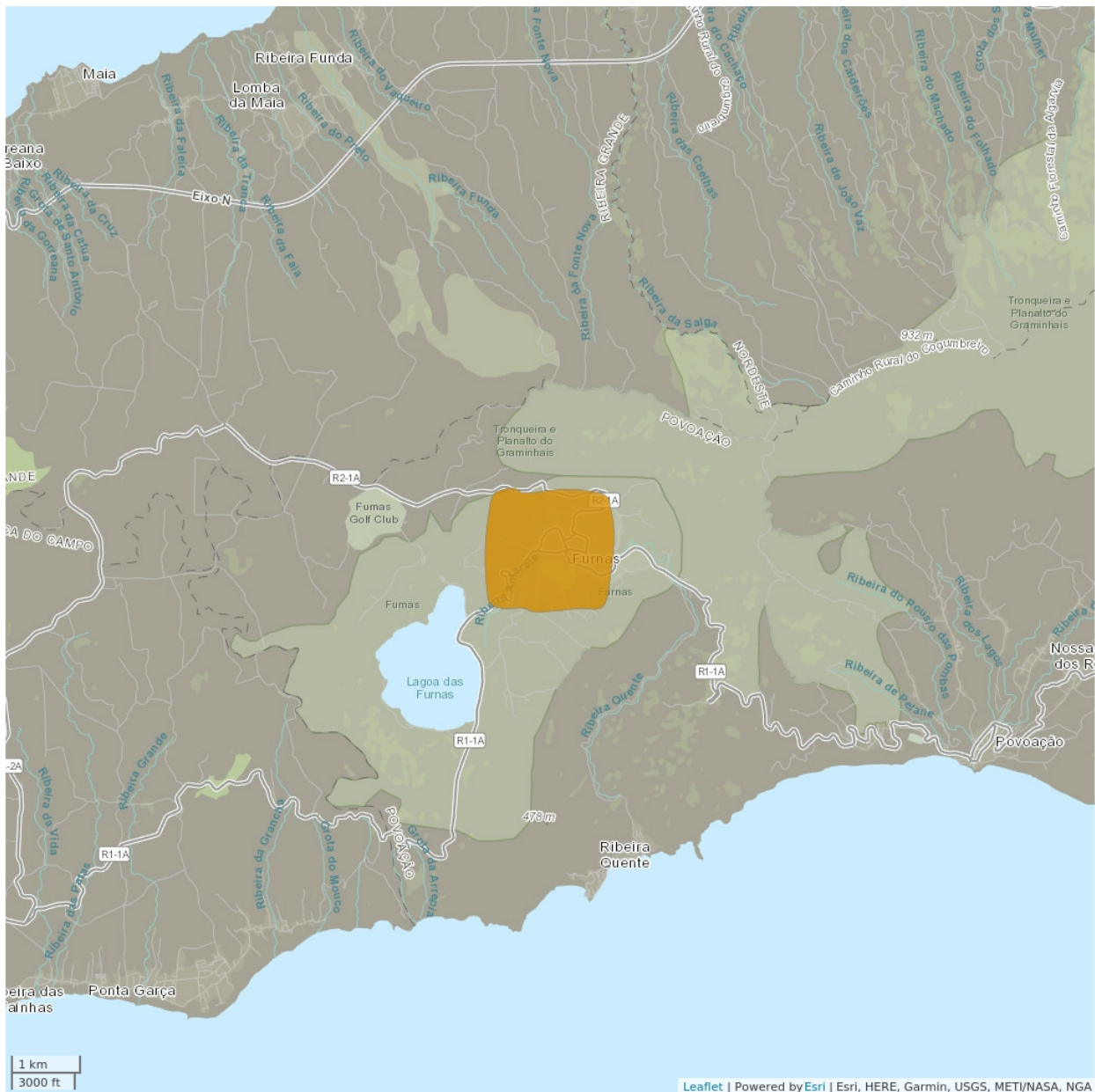
Range Description:

Trioxselis proxima is an Azorean-endemic species that was described from a single site (Furnas) on S. Miguel island (Azores, Portugal) (Borges *et al.* 2010), which currently is highly disturbed. Based on the old historical data (Séguy 1936), the Extent of Occurrence (EOO) would be ca. 8 km² and the Area of Occupancy (AOO) would be ca. 8 km². However, there is no recent information regarding the distribution of this species.

Country Occurrence:

Native, Extant (resident): Portugal (Azores)

Distribution Map

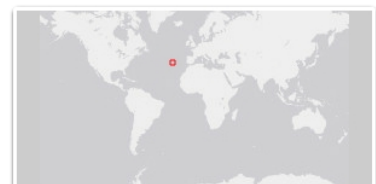
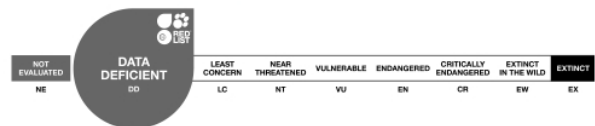


Legend

EXTANT (RESIDENT)

Compiled by:

Azorean Biodiversity Group 2018



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



Population

No current population size estimates exist for this species.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

The ecology and traits of this species are unknown. Little is known of the ecology and life history of the Trixoscelididae and the immatures are unknown (McAlpine *et al.* 1987). Species of this family are widely distributed through the Mediterranean Basin and Mongolian Highlands (and the Palearctic in general), being apparently adapted to warm semi-arid sand dunes, grasslands or shrubby areas, in association with some flowers and various other plants (Woźnica 2007). *Trixocelis proxima* specimens were collected in an area with hot springs, and lakes and rivulets of geothermal origin.

Systems: Terrestrial

Threats (see Appendix for additional information)

A lack of complete information regarding the distribution and population status of this species precludes a full assessment of potential threats. Nevertheless, the presence of this species in only one highly disturbed site (Furnas) with high human activity, and where major historical land use changes took place, might imply that this species is being affected by habitat degradation. Invasive species might also contribute to the habitat degradation. Based on Ferreira *et al.* (2016), habitat declines as a consequence of climate change might also affect this species. Additionally, given that this species was only recorded from a area of hot springs, future violent geothermal activity may also compromise this species

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law. The present situation of this species needs to be further assessed, and further research is needed into its population, distribution, threats, ecology and life history. From what is known of habitat its preferences, conservation of native forest and vegetation, and invasive species control could potentially aid this species' conservation. Historically, this species was present in one area that is currently highly disturbed, but included in the Natural Park of S. Miguel.

Credits

Assessor(s): Nunes, R. & Borges, P.A.V.

Reviewer(s): Russell, N.

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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

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	Resident	Suitable	-
3. Shrubland -> 3.4. Shrubland - Temperate	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.12. Wetlands (inland) - Geothermal Wetlands	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.3. Scale Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.4. Scale Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	Unknown	Slow, significant declines	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
10. Geological events -> 10.1. Volcanoes	Future	Unknown	Very rapid declines	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Future	Unknown	Slow, significant declines	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		

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
In-place land/water protection
Occurs in at least one protected area: Yes

Conservation Actions Needed

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

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

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 8
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km ²): 8
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): Unknown
Continuing decline in number of locations: Unknown
Extreme fluctuations in the number of locations: Unknown

Distribution
Lower elevation limit (m): 200
Upper elevation limit (m): 400
Population
Continuing decline of mature individuals: Unknown
Extreme fluctuations: Unknown
Population severely fragmented: Unknown

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