The IUCN Red List of Threatened Species™
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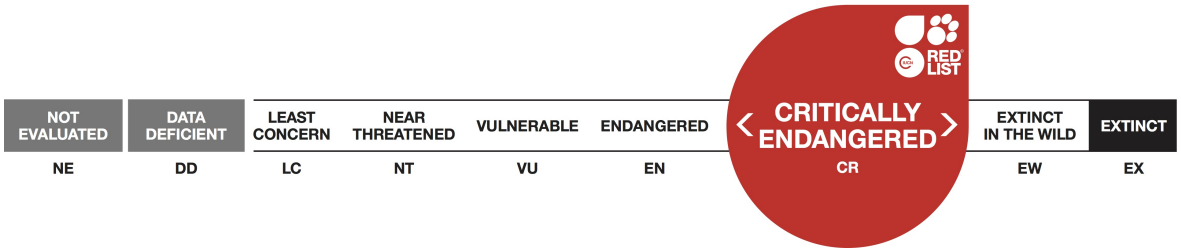
Scope: Global
Language: English

Eupithecia ogilviata, Geometer Moth

Assessment by: Vieira, V. & Borges, P.A.V.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae

Taxon Name: *Eupithecia ogilviata* (Warren, 1905)

Synonym(s):

- *Tephroclystia ogilviata* Warren, 1905

Common Name(s):

- English: Geometer Moth

Assessment Information

Red List Category & Criteria: Critically Endangered () B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v) ver 3.1

Year Published: 2017

Date Assessed: March 12, 2017

Justification:

Eupithecia ogilviata is a single island endemic species from Faial (Azores, Portugal) (Warren 1905, Borges *et al.* 2010). It is known just from one single male captured in Central Faial, 750 m Asl, in May 1903 (Warren 1905). It has been sampled in a laurel forest, that was later destroyed. We assume that this species is probably extinct in Azores. It has a very small extent of occurrence (EOO = 0-4 km²) and area of occupancy (AOO = 0-4 km²). Therefore, it is assessed as Critically Endangered (Possibly Extinct).
Date last seen: 1905

Geographic Range

Range Description:

Eupithecia ogilviata is a single island endemic species from Faial (Azores, Portugal) (Warren 1905, Borges *et al.* 2010). It is known just from one single male captured in Central Faial, 750 m Asl, in May 1903 (Warren 1905). We assume that this species is probably extinct in Azores.

Country Occurrence:

Possibly extinct: Portugal (Azores)

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Distribution Map

Eupithecia ogilviata

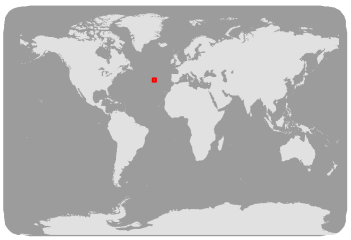
Range

Possibly Extinct

Compiled by:

Paulo Borges

NE DD LC NT VU EN CR CRITICALLY ENDANGERED EW EX



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

The species is only known from a single subpopulation inhabiting in Central Faial, which belong to laurel forest. A continuing decline in the number of individuals is inferred from historical record. We assume that this species is probably extinct.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Eupithecia ogilviata is only known from Central part of Faial island (Warren 1905). It has been sampled in a laurel forest, that was later destroyed and therefore this species is considered probably extinct. This is a phytophagous species. Altitudinal range: 700-750 m.

Systems: Terrestrial

Use and Trade

This species is not utilised.

Threats (see Appendix for additional information)

In the past, the species has probably strongly declined due to changes in habitat size. The major land-use changes in the island in the last 100 years resulted in the deforestation of the original patch of native forest between 700 and 750 m. If the species is still surviving in any small patch of modified forest, the current and future threats are the invasive plant *Hedychium gardnerianum* and climatic changes (Ferreira *et al.* 2016). These changes are decreasing the relative cover of endemic plants and changing the soil cover (decreasing the cover of bryophytes and ferns).

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law. Its habitat is in a regionally protected area (Natural Park of Faial). Further research is needed into its ecology and life history in order to find extant specimens. Degraded habitats should be restored and a strategy needs to be developed to address the future threat by invasive species and climate change. It is necessary a monitoring plan for the invertebrate community in the habitat in order to contribute to the conservation of this species. Monitoring every ten years using the BALA protocol will inform about habitat quality (see e.g. Gaspar *et al.* 2010).

Credits

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Citation

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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 -> 1.4. Forest - Temperate	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Future	Whole (>90%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 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 -> 11.2. Droughts	Ongoing	Whole (>90%)	Slow, significant declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
12. Other options -> 12.1. Other threat	Ongoing	-	-	-
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Hedychium gardnerianum)	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance		

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Systematic monitoring scheme: Yes
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range
Occur in at least one PA: Yes
Percentage of population protected by PAs (0-100): 91-100

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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
2. Land/water management -> 2.3. Habitat & natural process restoration
4. Education & awareness -> 4.1. Formal education
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-national level

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
2. Conservation Planning -> 2.2. Area-based Management Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends
0. Root -> 4. Other

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km^2): 0-4
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km^2): 0-4
Continuing decline in extent of occurrence (EOO): Yes
Extreme fluctuations in extent of occurrence (EOO): Unknown
Number of Locations: 1
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: Unknown
Lower elevation limit (m): 700

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Distribution
Upper elevation limit (m): 750
Population
Continuing decline of mature individuals: Yes
Population severely fragmented: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Movement patterns: Not a Migrant

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The IUCN Red List Partnership

The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership.

The IUCN Red List Partners are: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.