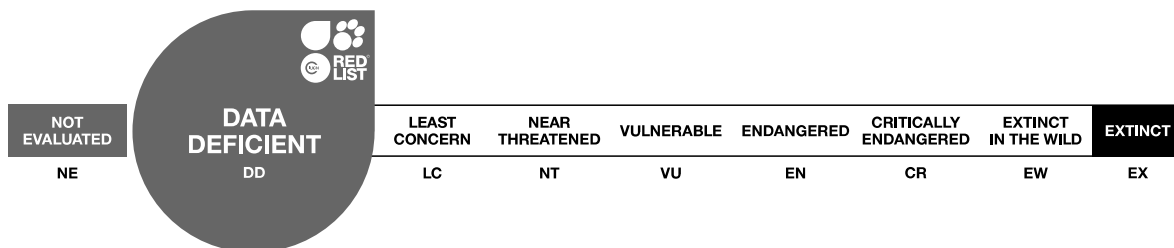


## *Mycetophila atlantica*

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



View on [www.iucnredlist.org](http://www.iucnredlist.org)

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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Diptera	Mycetophilidae

**Scientific Name:** *Mycetophila atlantica* Nielsen, 1966

## Assessment Information

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

**Year Published:** 2021

**Date Assessed:** March 28, 2018

### Justification:

*Mycetophila atlantica* is an endemic fly species of the Azores (Portugal), known from S. Jorge, Terceira and S. Miguel islands. This species has been collected from sites that are currently highly degraded. From the historical data, this species potentially has a small Extent of Occurrence (6,030 km<sup>2</sup>) and Area of Occupancy (92 km<sup>2</sup>); 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 of native habitats and humid areas could potentially aid this species' conservation. Based upon the lack of recent data regarding this species' population, distribution, threats and ecology, it is not possible to accurately estimate the extinction risk of the species and it could theoretically fall into any category. Therefore, this species is assessed as Data Deficient (DD).

## Geographic Range

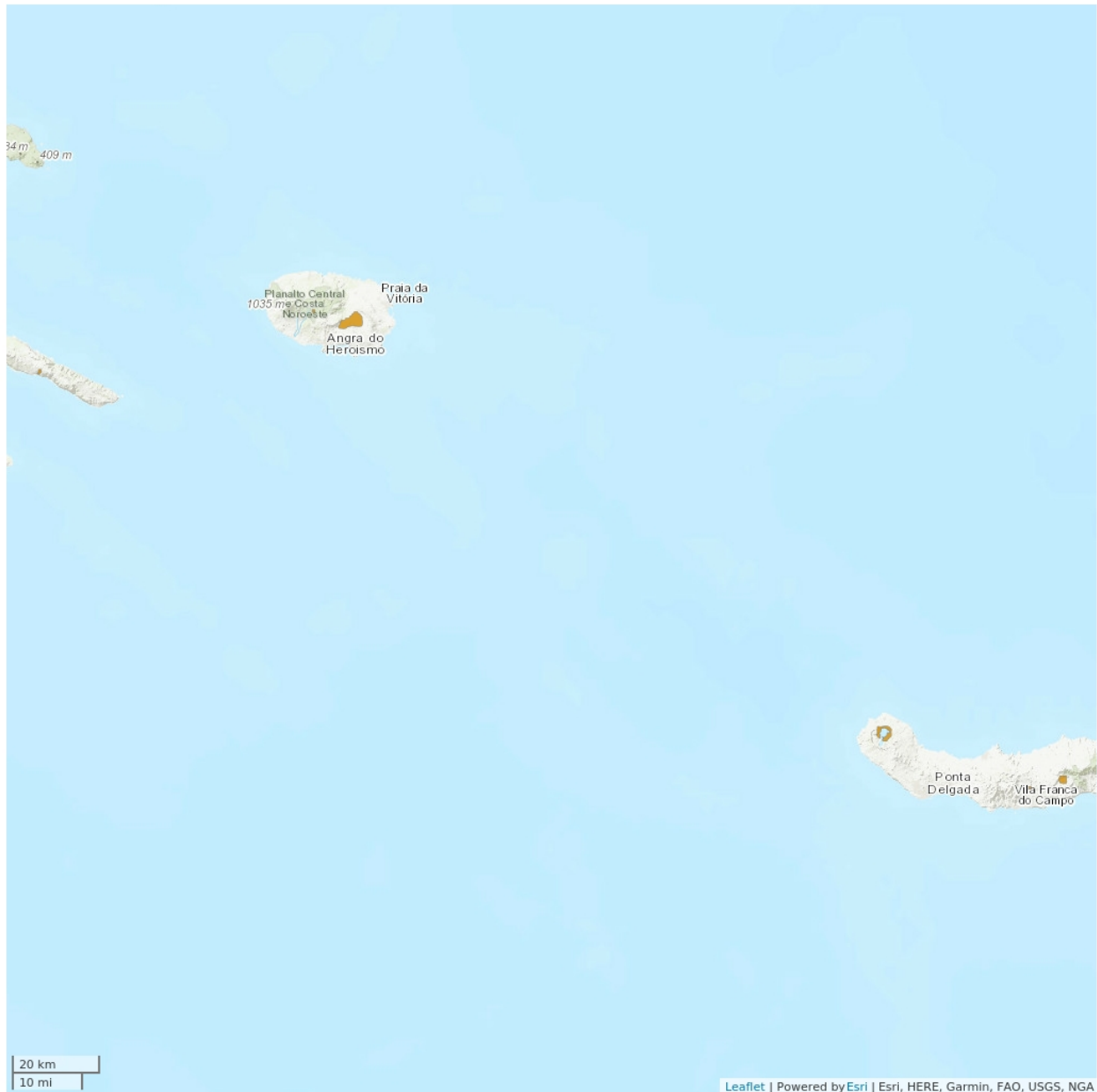
### Range Description:

*Mycetophila atlantica* is an Azorean-endemic fly species described from the islands of S. Jorge, Terceira and S. Miguel (Azores, Portugal) (Borges *et al.* 2010). This species has been collected in some sites that are currently highly degraded. Based on the historical data (Frey 1945), the Extent of Occurrence (EOO) could be ca. 6,030 km<sup>2</sup> and the Area of Occupancy (AOO) could be ca. 92 km<sup>2</sup>. However, there is no recent information regarding the distribution of this species, and the actual full distribution of the species is unknown.

### Country Occurrence:

**Native, Extant (resident):** Portugal (Azores)

# Distribution Map

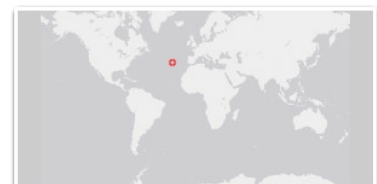
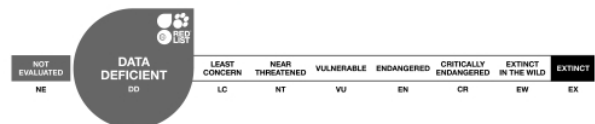


## Legend

 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, and the overall population size and trend are essentially unknown.

**Current Population Trend:** Unknown

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

The ecology and traits of this species are unknown. Mycetophilidae occur mainly in humid areas like moist forests (McAlpine *et al.* 1981), but also are quite common in swamps, while some species live in the moister parts of heath and open grassland and other species have been recorded on mosses and liverworts. The larvae of many species live in fleshy or woody fungi or in dead wood and usually feed on fungi, especially the fruiting bodies, but also spores and hyphae. Nevertheless, the larvae of some species, while still being associated with fungi, are at least partly predatory (McAlpine *et al.* 1981). A few species are monophagous or polyphagous, but the majority of species are restricted to particular genera or families of fungi. Pupation usually takes place in the ground but some species pupate in the host fungus (McAlpine *et al.* 1981). In one site, this species has been collected on wet arboreal ferns and some other sites are in the vicinity of fresh water bodies.

**Systems:** Terrestrial

## Threats (see Appendix for additional information)

A lack of information regarding the present status of this species precludes an assessment of potential threats. Nevertheless, the ecology of other members of the Mycetophilidae family suggests that this species might be affected by future habitat declines as a consequence of climate change (Ferreira *et al.*, 2016) and increased droughts. This species was collected from several highly disturbed sites, so past and present human disturbance and land use changes, coupled with habitat degradation by invasive species might have also affected it.

## 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, conservation of natural habitats water bodies and other wet areas, together with problematic species control, could potentially aid this species' conservation. Historically at least, this species was present in areas that are currently included in the Natural Parks of Terceira and S. Miguel, albeit in disturbed areas.

## Credits

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

**Reviewer(s):** Russell, N.

## Bibliography

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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?
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	Resident	Suitable	-
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	Resident	Suitable	-
5. Wetlands (inland) -> 5.12. Wetlands (inland) - Geothermal Wetlands	Resident	Unknown	-
14. Artificial/Terrestrial -> 14.2. Artificial/Terrestrial - Pastureland	Resident	Unknown	-
14. Artificial/Terrestrial -> 14.3. Artificial/Terrestrial - Plantations	Resident	Unknown	-

### Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.4. 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		
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		
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		
11. Climate change & severe weather -> 11.2. Droughts	Future	Unknown	Slow, significant declines	Unknown
	Stresses:	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>)

<b>Conservation Action in Place</b>
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>)

<b>Conservation Action Needed</b>
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>)

<b>Research Needed</b>
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

<b>Distribution</b>
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): Unknown
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
Lower elevation limit (m): 10
Upper elevation limit (m): 550

<b>Population</b>
Continuing decline of mature individuals: Unknown
Extreme fluctuations: Unknown
Population severely fragmented: Unknown

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