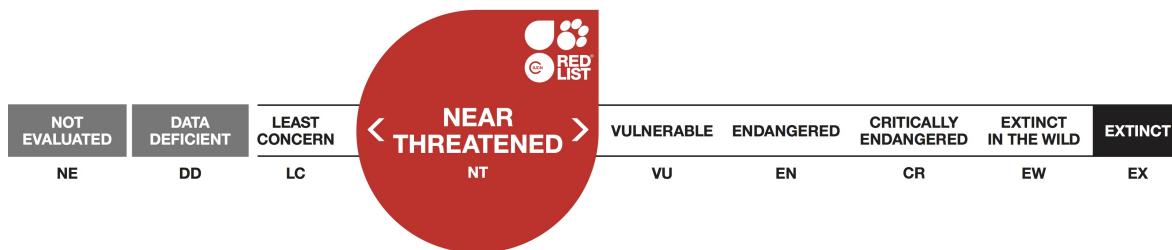


Eupteryx azorica, Leaf hopper

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



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Hemiptera	Cicadellidae

Taxon Name: *Eupteryx azorica* Ribaut, 1941

Common Name(s):

- English: Leaf hopper

Taxonomic Source(s):

De Jong, Y., Verbeek, M., Michelsen, V., Bjørn, P.P., Los, W., Steeman, F., Bailly, N., Basire, C., Chylarecki, P., Stloukal, E., Hagedorn, G., Wetzell, F.T., Glöckler, F., Kroupa, A., Korb, G., Hoffmann, A., Häuser, C., Kohlbecker, A., Müller, A., Güntsch, A., Stoev, P. and Penev, L. 2014. Fauna Europaea – all European animal species on the web. *Biodiversity Data Journal* 2: e4034. DOI: 10.3897/BDJ.2.e4034.

Assessment Information

Red List Category & Criteria: Near Threatened [ver 3.1](#)

Year Published: 2018

Date Assessed: February 9, 2017

Justification:

Eupteryx azorica is an endemic species present in eight islands of the Azorean archipelago, not being recorded so far from S. Maria (Azores, Portugal). It has a relatively large extent of occurrence (EOO = ca 22,000 km²) but a relatively small area of occupancy (AOO = 148 km²). The species occurs associated with herbaceous vegetation, mostly endemic but also exotic ferns. It can occur in human modified vegetation, but is more abundant in native habitats, namely natural grasslands. Based upon the small AOO and the fact that the area of occupancy of this species continues in decline due to habitat degradation in the native forest (mostly due to invasive plants) and to habitat fragmentation, it is assessed as Near Threatened (NT).

Geographic Range

Range Description:

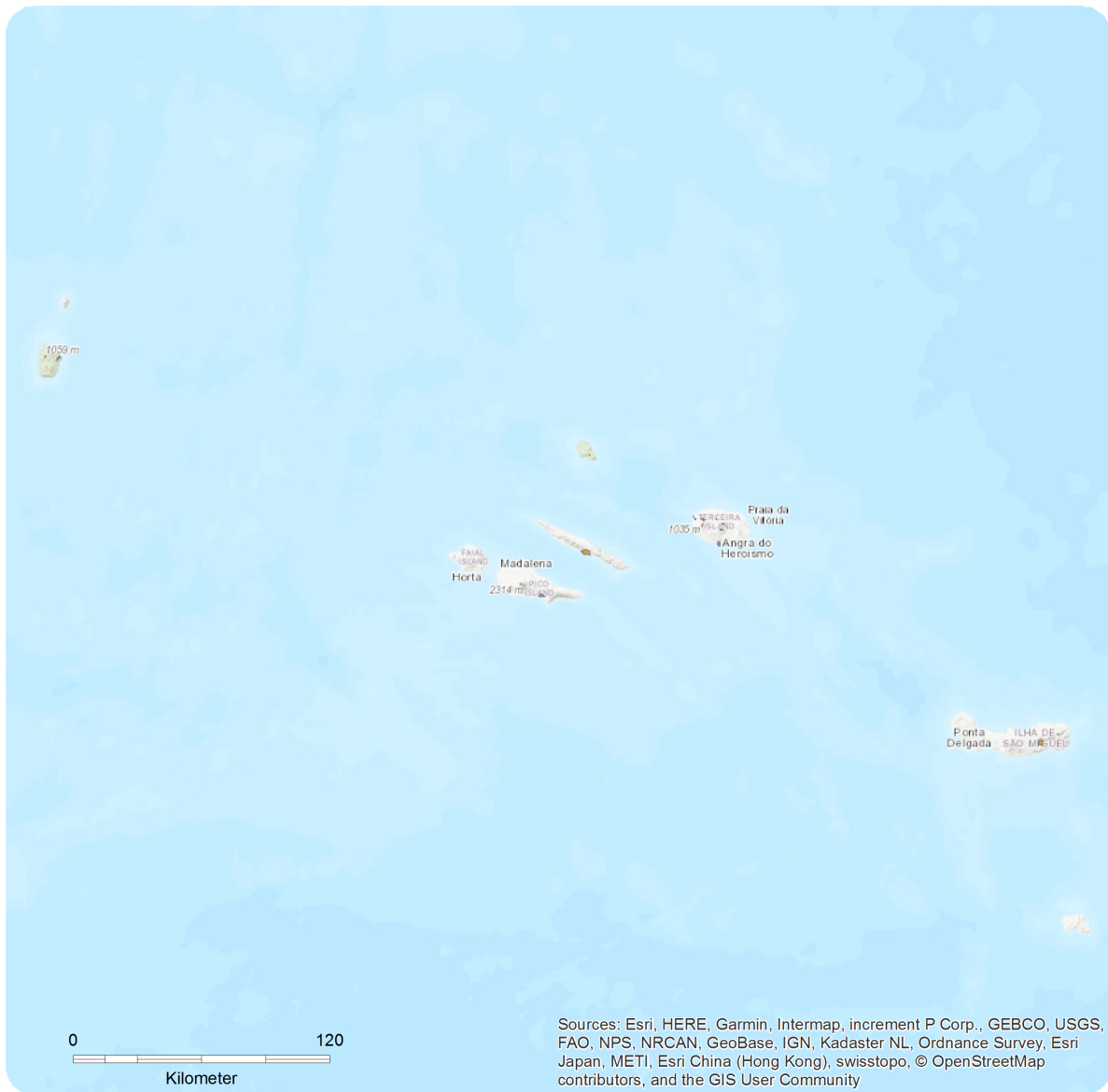
Eupteryx azorica is an endemic species present in eight islands of the Azorean archipelago, not being recorded so far from S. Maria (Azores, Portugal) (Borges *et al.* 2010). Within these eight islands it is known from seven Natural Forest Reserves of Cabeço do Fogo (Faial); Caiado (Pico); Pico Pinheiro and Topo (S. Jorge); Caldeira Guilherme Moniz and Caldeira Sta. Bárbara e Mistérios Negros (Terceira); Pico da Vara (S. Miguel). The extent of occurrence (EOO) is ca 22,200 km² and the maximum estimated area of occupancy (AOO) is 148 km².

Country Occurrence:

Native: Portugal (Azores)

Distribution Map

Eupteryx azorica



Range

Extant (resident)

Compiled by:

Paulo Borges



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



Population

Eupteryx azorica is a widespread and highly abundant species mostly in pristine native forest and grassland habitats. Ongoing spread of invasive plants is changing the habitat dramatically in some sites with an inferred impact on the population abundances.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This leafhopper is a diurnal phytophagous species that is associated with herbaceous vegetation, mostly endemic but also exotic ferns. It can occur in human modified vegetation, but it is more abundant in native habitats, namely native forest, natural grasslands and bogs.

Systems: Terrestrial

Use and Trade

The 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 and quality (Triantis *et al.* 2010, Terzopoulou *et al.* 2015). However, the species seems to have survived in some remaining native forests of Azores, as well as in some Human modified habitats. The main current threat is the spread of invasive species namely *Hedychium gardnerianum*. Based on Ferreira *et al.* (2016) the habitat will further decline as a consequence of climate change (increasing number of droughts and habitat shifting & alteration).

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law. Its habitat is in regionally protected areas (Natural Parks of Faial, Pico, S. Jorge, Terceira, and S. Miguel). The Terceira Natural Park administration is currently starting control measures of the invasive plants. Degraded habitats should be restored and a strategy needs to be developed to address the future threat by climate change. Since this species occurs in relict native Azorean forests, some awareness measures should be implemented. Further research is needed into its ecology and life history in order to find extant specimens in more natural grassland sites and obtain information on population size, distribution and trends. Monitoring every ten years using the BALA protocol will inform about habitat quality (see e.g. Gaspar *et al.* 2011).

Credits

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

Reviewer(s): Danielczak, A.

Contributor(s): Lamelas-López, L.

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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
3. Shrubland -> 3.4. Shrubland - Temperate	Resident	Suitable	Yes
4. Grassland -> 4.4. Grassland - Temperate	Resident	Suitable	Yes
5. Wetlands (inland) -> 5.4. Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	Resident	Suitable	Yes
0. Root -> 16. Introduced vegetation	Resident	Marginal	-

Threats

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

Threat	Timing	Scope	Severity	Impact Score
10. Geological events -> 10.1. Volcanoes	Future	Whole (>90%)	Very rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
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		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations	Ongoing	Minority (50%)	Causing/could cause fluctuations	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		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Minority (50%)	Causing/could cause fluctuations	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		

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
Action Recovery plan: No
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): 71-80

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
3. Monitoring -> 3.1. Population trends

Research Needed
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 148
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km ²): 22200
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 15
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: Unknown
Lower elevation limit (m): 100
Upper elevation limit (m): 1200
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
Generation Length (years): 1
Movement patterns: Not a Migrant

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