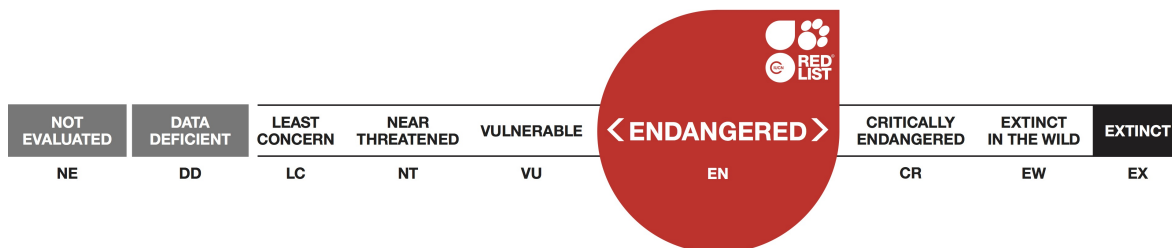


Sphingonotus rugosus, Rugose Sand Grasshopper

Assessment by: Hochkirch, A.



View on www.iucnredlist.org

Citation: Hochkirch, A. 2016. *Sphingonotus rugosus*. *The IUCN Red List of Threatened Species* 2016: e.T16084496A74512956. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T16084496A74512956.en>

Copyright: © 2016 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).

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](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Orthoptera	Acrididae

Taxon Name: *Sphingonotus rugosus* (Bland & Gangwere, 1998)

Synonym(s):

- *Wernerella rugosa* Bland & Gangwere, 1998

Common Name(s):

- English: Rugose Sand Grasshopper

Taxonomic Source(s):

Eades, D.C., Otte, D., Cigliano, M.M. and Braun, H. 2016. Orthoptera Species File. Version 5.0/5.0. Available at: <http://Orthoptera.SpeciesFile.org>.

Assessment Information

Red List Category & Criteria: Endangered B1ab(ii,iv,v)+2ab(ii,iv,v) [ver 3.1](#)

Year Published: 2016

Date Assessed: May 2, 2016

Justification:

The Rugose Sand Grasshopper is endemic to Lanzarote and Fuerteventura, where it occurs only in very few areas with fine soil. It has a small extent of occurrence (EOO) and area of occupancy (AOO). The population is severely fragmented and there is a continuous decline in the area of occupancy, number of subpopulations and number of individuals. It is therefore assessed as Endangered.

Previously Published Red List Assessments

2012 – Vulnerable (VU) – <http://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T16084496A17276028.en>

Geographic Range

Range Description:

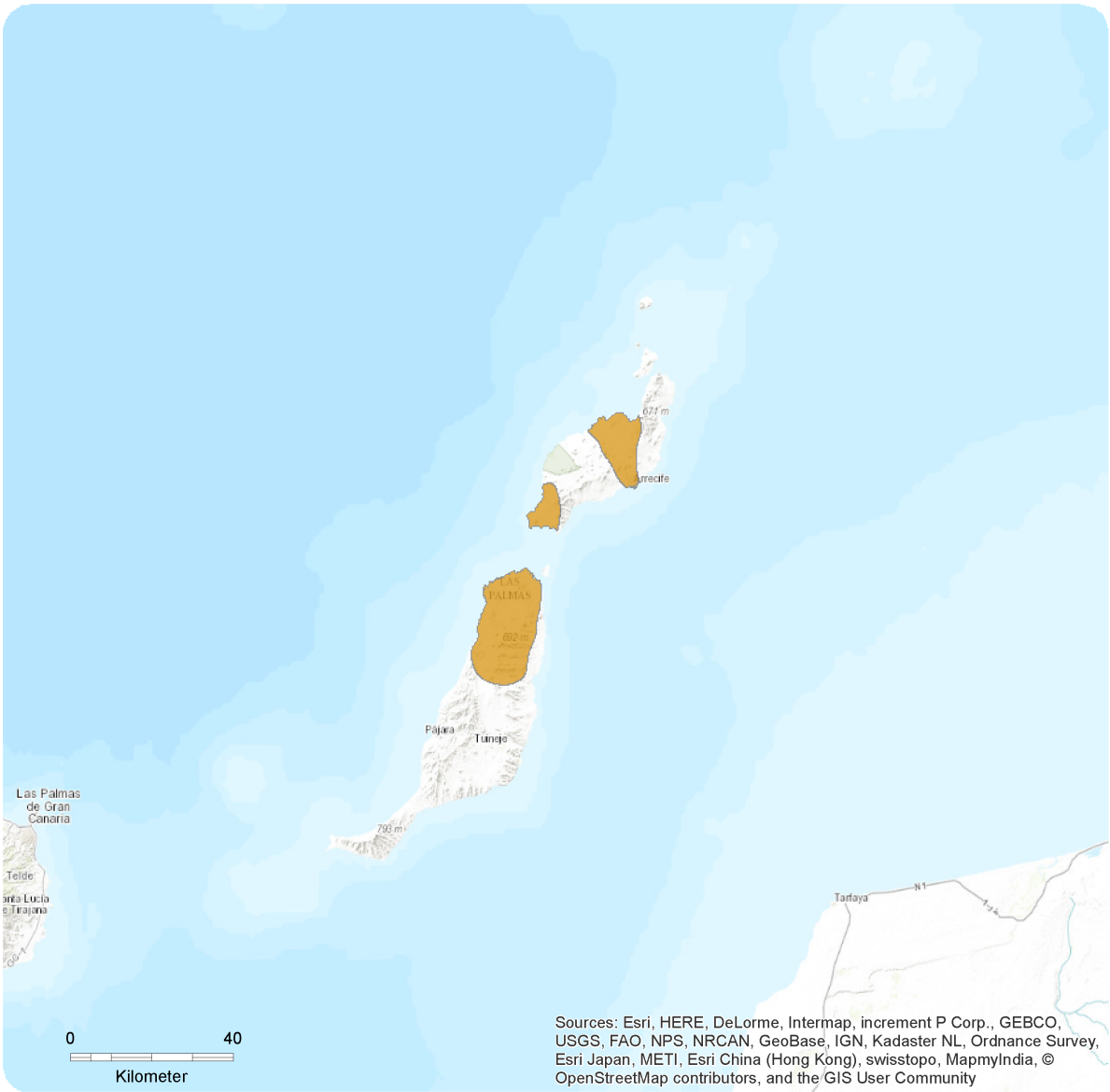
The Rugose Sand Grasshopper is endemic to Lanzarote and northern Fuerteventura (Bland and Gangwere 1998, Hochkirch 2003, Hochkirch and Husemann 2008). Its extent of occurrence (EOO) is c. 1,800 km², while its known area of occupancy (AOO) is 48 km², with a maximum estimate of 200 km².

Country Occurrence:

Native: Spain (Canary Is.)

Distribution Map

Sphingonotus rugosus



Range
Extant (resident)

Compiled by:
SSC Grasshopper Specialist Group



Population

This species is quite rare and the subpopulations are very small and isolated. There is probably little genetic exchange between them and they may go extinct with a reduced probability of recolonization. The population is therefore considered severely fragmented. Recent searches for this species at two known localities in Lanzarote were not successful. Therefore, it is assumed that the population is decreasing.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This species occurs in bare open habitats with fine soil (Hochkirch 2003). Its elevation range is 50 - 300 m.

Systems: Terrestrial

Use and Trade

This species is not utilised.

Threats (see Appendix for additional information)

The major threat to this species is touristic development. It may also be affected by volcanic activities on Lanzarote.

Conservation Actions (see Appendix for additional information)

No specific conservation action is in place for this species, but it occurs in protected areas throughout its range. Research on its population trend, distribution, ecology and threats is needed. The remaining subpopulations need to be studied in more detail and appropriate habitat management needs to be applied in the reserves where it occurs.

Credits

Assessor(s): Hochkirch, A.

Reviewer(s): Odé, B. & García, M.

Contributor(s): Jakobs, D. & Kranz, M.

Bibliography

Bland, R.G. 2001. Additions to the Orthoptera (sens. lat.) of the Canary Islands. *Journal of Orthoptera Research* 10: 113-119.

Bland, R.G. and Gangwere, S.K. 1998. A new species of *Wernerella* Karny (Orthoptera: Acrididae: Oedipodinae) from the Canary Islands, Spain. *Journal of Orthoptera Research* 7: 23-28.

Hochkirch, A. 2003. Earth, Wind and Fire - Die Heuschrecken von Lanzarote (Insecta: Orthoptera). *Verhandlungen des Westdeutschen Entomologentages* 15: 71-84.

Hochkirch, A. and Husemann, M. 2008. A Review of the Canarian Sphingonotini with Description of a New Species from Fuerteventura (Orthoptera: Acrididae: Oedipodinae). *Zoological Studies* 47(4): 495-506.

IUCN. 2016. The IUCN Red List of Threatened Species. Version 2016-3. Available at: www.iucnredlist.org. (Accessed: 07 December 2016).

Citation

Hochkirch, A. 2016. *Sphingonotus rugosus*. *The IUCN Red List of Threatened Species* 2016: e.T16084496A74512956. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T16084496A74512956.en>

Disclaimer

To make use of this information, please check the [Terms of Use](#).

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?
8. Desert -> 8.2. Desert - Temperate	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
10. Geological events -> 10.1. Volcanoes	Past, likely to return	Minority (50%)	Very rapid declines	Past impact
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes

Conservation Actions Needed

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

Conservation Actions Needed
1. Land/water protection -> 1.1. Site/area protection
1. Land/water protection -> 1.2. Resource & habitat protection

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

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 48-200
Estimated extent of occurrence (EOO) (km ²): 1753
Lower elevation limit (m): 50
Upper elevation limit (m): 300

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](#).