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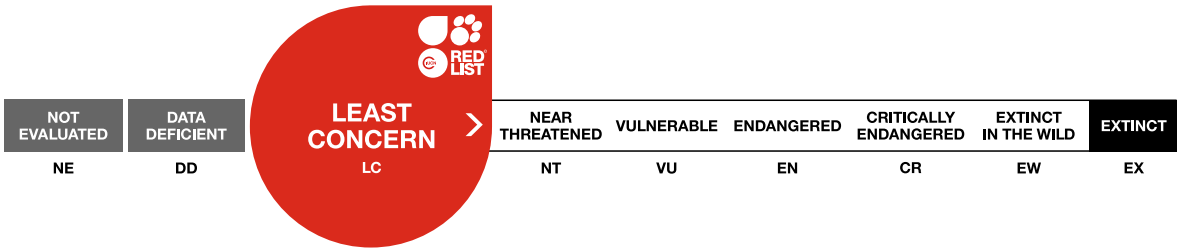
Pardosa acorensis

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



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Lycosidae

Scientific Name: *Pardosa acorensis* Simon, 1883

Taxonomic Source(s):

Platnick, N.I. 2014. The World Spider Catalog, Version 14.5. P. Merrett & H.D. Cameron (eds). American Museum of Natural History. Available at: http://research.amnh.org/iz/spiders/catalog/index.html. (Accessed: 31 March 2014).

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2020

Date Assessed: October 1, 2017

Justification:

Pardosa acorensis is a wolf spider species occurring on all nine islands of the Azorean archipelago (Azores, Portugal) (Borges *et al.* 2010). It has a large Extent of Occurrence (EOO = 43,265 km²) and a relatively large Area of Occupancy (AOO = 636-2,228 km²). This species is the most widespread Azorean endemic spider and is particularly abundant from mid to high elevations in bogs, semi-natural pastures and a rare habitat at high elevations, the natural grasslands. The species is also able to occur in intensively managed pastures for dairy cattle. Based upon the large Extent of Occurrence, the good adaptation to human modified habitats, and few threats the species is assessed as Least Concern (LC).

Geographic Range

Range Description:

Pardosa acorensis is a wolf spider species occurring in all the nine islands of the Azorean archipelago (Azores, Portugal) (Borges *et al.* 2010). Within these nine islands it is known from eighteen Natural Forest Reserves: Caldeiras Funda e Rasa and Morro Alto e Pico da Sé (Natural Park of Flores); Caldeira do Faial and Cabeço do Fogo (Natural Park of Faial); Mistério da Prainha, Caveiro and Caiado (Natural Park of Pico); Pico Pinheiro and Topo (Natural Park of S. Jorge); Biscoito da Ferraria, Pico Galhardo, Caldeira Guilherme Moniz, Caldeira Sta. Bárbara e Mistérios Negros and Terra Brava (Natural Park of Terceira); Atalhada, Graminhais and Pico da Vara (Natural Park of S. Miguel) and Pico Alto (Natural Park of S. Maria). The Extent of Occurrence (EOO) is 43,265 km^2 and the Area of Occupancy (AOO) is 636-2,228 km^2.

Country Occurrence:

Native, Extant (resident): Portugal (Azores)

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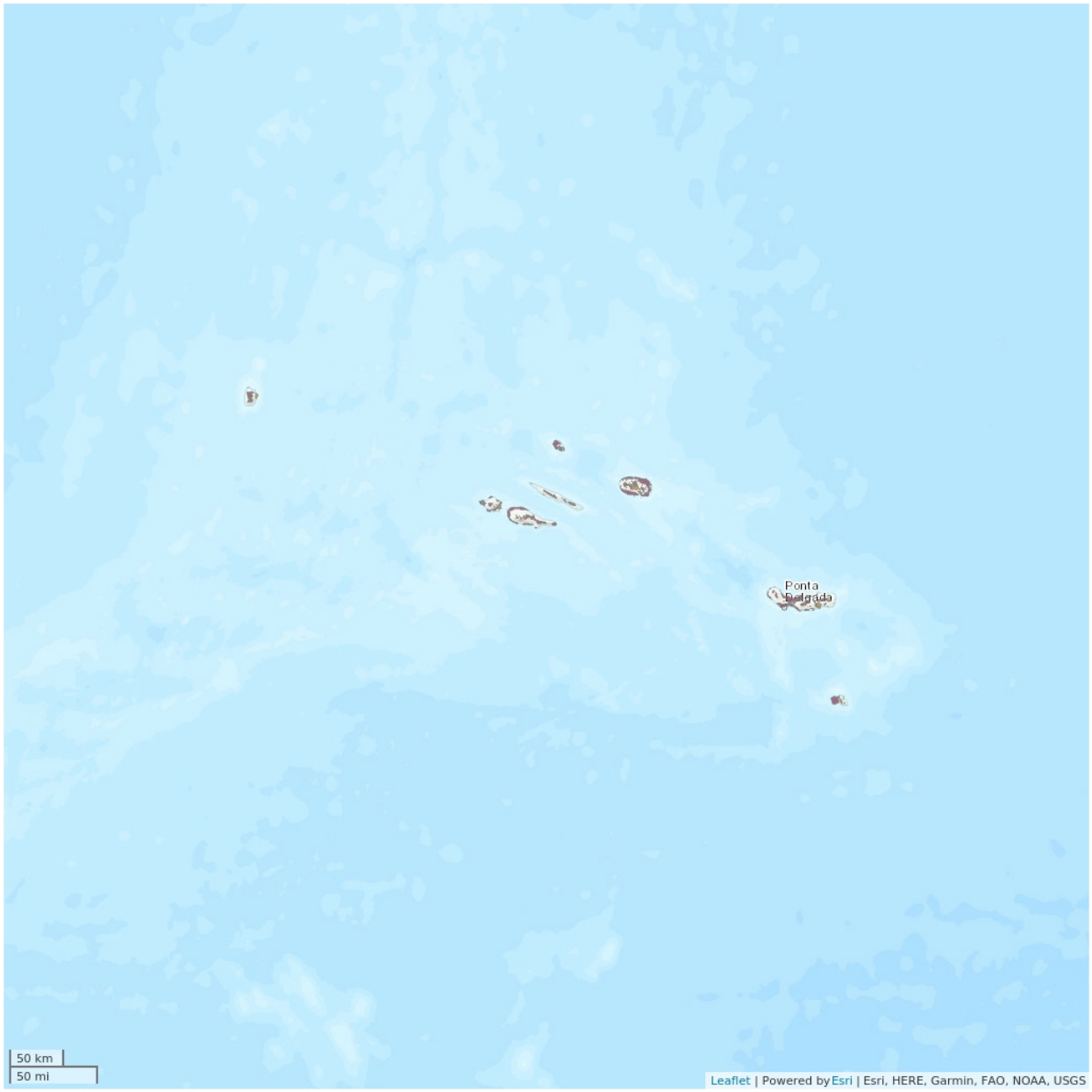
Distribution Map



Legend

EXTANT (RESIDENT)

POSSIBLY 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.

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Population

Pardosa acorensis is a widespread and highly abundant species (Borges and Wunderlich 2008). The species has a stable population and occurs on all nine islands of the Azores, in almost all habitats. We assume no threats for the population since the species is able to occur even in high intensively managed pastures for dairy cattle.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

This is the most generalist Azorean endemic spider, occurring in almost all known Azorean native and arthropogenic habitats (Borges and Wunderlich 2008, Borges *et al*. 2008). However, the species is particularly abundant from mid to high elevations in bogs, semi-natural pastures and a rare habitat at high elevations, the natural grasslands. The species is also able to occur in intensively managed pastures for dairy cattle. Females were observed carrying egg sacs in spring and summer. Adults are active during the day, as well as at night. The species occurs from sea level to the highest elevation at Pico mountain (Pico island).

Systems: Terrestrial

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). Despite major ongoing changes in many of the habitats in which the species occurs, the populations now seem to be stable with no known threats. However, based on Ferreira *et al.* (2016) the habitat will decline as a consequence of climate change (increasing number of droughts, and habitat shifting and alteration).

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law, but its habitat is in regionally protected areas (Natural Parks of all nine Azorean islands). Degraded bog areas, degraded due to invasive plant species (particularly *Hedychium gardnerianum*) and pastures should be restored and a strategy needs to be developed to address the future threat by climate change. Formal education and awareness are needed to allow future investments in restoring bog habitats. Further research is needed into its ecology and life history to obtain adequate information on population size, distribution and trends. It is also necessary to develop a monitoring plan for the wider invertebrate community in its habitat in order to contribute to a potential future species recovery plan, if needed. A monitoring every ten years using the BALA protocol will inform about habitat quality (see e.g. Gaspar et al. 2011).

Credits

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Authority/Authorities: IUCN SSC Spider and Scorpion Specialist Group

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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	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
14. Artificial/Terrestrial -> 14.2. Artificial/Terrestrial - Pastureland	Resident	Suitable	No

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 -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
11. Climate change & severe weather -> 11.2. Droughts	Future	Whole (>90%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		

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: Yes
In-place land/water protection
Conservation sites identified: Yes, over part of range
Percentage of population protected by PAs: 61-70

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Conservation Action in Place
Area based regional management plan: No
Occurs in at least one protected area: Yes

Conservation Actions Needed

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

Conservation Action Needed
1. Land/water protection -> 1.1. Site/area protection
2. Land/water management -> 2.1. Site/area management
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
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km^2): 636-2228
Continuing decline in area of occupancy (AOO): No
Extreme fluctuations in area of occupancy (AOO): Unknown
Estimated extent of occurrence (EOO) (km^2): 43265
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): No
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: Unknown

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Distribution
Lower elevation limit (m): 0
Upper elevation limit (m): 2,339
Population
Continuing decline of mature individuals: No
Population severely fragmented: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: No
Generation Length (years): 1

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.