

Niebla ramosissima

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Ramalinaceae

Scientific Name: *Niebla ramosissima* Spjut

Assessment Information

Red List Category & Criteria: Vulnerable D2 [ver 3.1](#)

Year Published: 2020

Date Assessed: July 9, 2020

Justification:

Niebla ramosissima is narrowly endemic to San Nicolas Island where it is known from one location and its Area of Occupancy = 16 km² (up to a maximum of 32 km²). The main threats that could rapidly drive this species from Vulnerable to Critically Endangered or Extinct would be if invasive species and climate change transformed its natural habitat, the sea-side low-shrub vegetation with a predominance of soil crusts in Mediterranean California. Therefore, it is listed as Vulnerable, D2.

Geographic Range

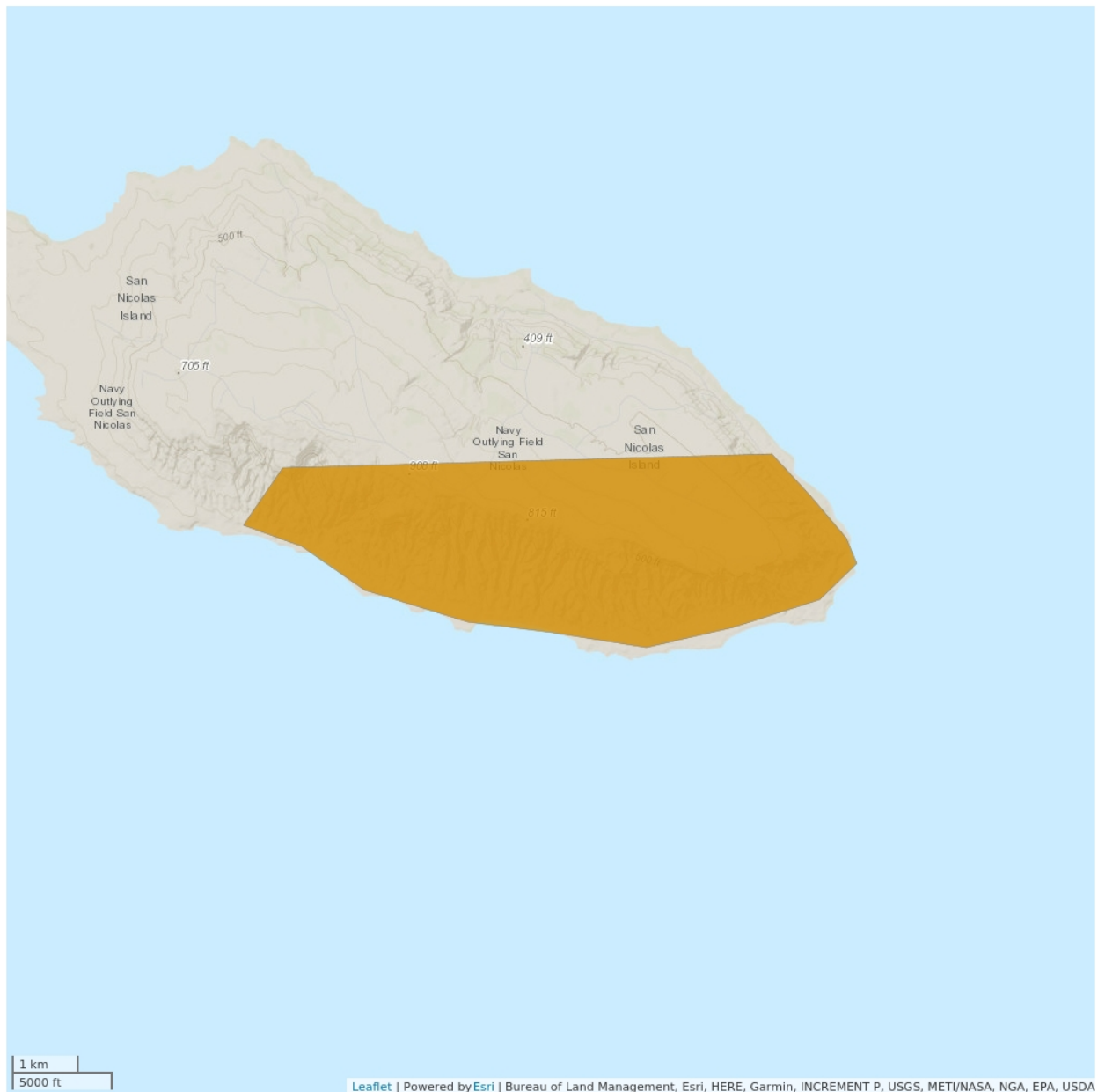
Range Description:

This species is a narrow endemic of San Nicolas Island, California. All observations are from the south/south-east end of the island, but it could have a slightly wider distribution on the island.

Country Occurrence:

Native, Extant (resident): United States (California)

Distribution Map

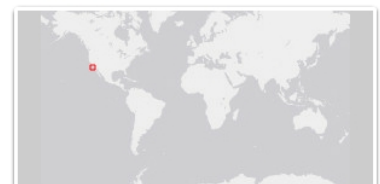


Legend

■ EXTANT (RESIDENT)

Compiled by:

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

Population

The species is common on San Nicolas Island, where it can dominate large patches of soil on the south/south-east end of the island. Currently, it appears to be stable.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

Niebla ramosissima is a terricolous species growing on calcareous soil rich in gypsum. It is an asexual, clonal species spreading by fragmentation. Wind or erosion easily break off branches of the thallus which then form a new individual. The south/south-eastern part of the island where the lichen occurs is dominated by canyons. The vegetation consists mainly of low-growing sub-shrubs and herbs, but the majority of the ground cover consists of soil-crusts. San Nicolas has a semi-arid climate with Mediterranean characteristics. Although the island only receives around 200 mm precipitation a year, dense fog is a common phenomenon.

Systems: Terrestrial

Threats (see Appendix for additional information)

Several invasive plants (e.g. *Mesobryanthemum* spp.) have established on the island, and could pose a threat in the future. Climate change could affect the species through decreased fog regime and potentially through sea level rise.

Conservation Actions (see Appendix for additional information)

The island is owned by the United States Navy and it is not open to the general public. Some areas of the island, including areas where the species occurs, are off limits to most Navy personnel. The species is currently not protected. Federal protection would require the Navy to take protective actions. The species would greatly benefit from removal of invasive plants such as *Mesobryanthemum*, which tends to dominate areas where it establishes. This may prove to be extremely difficult because of the very rugged terrain on the island. Research into its full population size and distribution would also be beneficial, if logistically possible.

Credits

Assessor(s): Reese Næsborg, R.

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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?
3. Shrubland -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation	Resident	Suitable	Yes
13. Marine Coastal/Supratidal -> 13.1. Marine Coastal/Supratidal - Sea Cliffs and Rocky Offshore Islands	Resident	Suitable	Yes

Plant Growth Forms

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

Plant Growth Form
LC. Lichen
M. Fungus

Threats

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

Threat	Timing	Scope	Severity	Impact Score
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	Whole (>90%)	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance 2. Species Stresses -> 2.3. Indirect species effects		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	Whole (>90%)	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
11. Climate change & severe weather -> 11.2. Droughts	Ongoing	Whole (>90%)	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
11. Climate change & severe weather -> 11.4. Storms & flooding	Ongoing	Whole (>90%)	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		

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: No
In-place land/water protection
Conservation sites identified: Yes, over entire range
Percentage of population protected by PAs: 0
Area based regional management plan: No
Occurs in at least one protected area: No
Invasive species control or prevention: No
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No

Conservation Actions Needed

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

Conservation Action Needed
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.2. Invasive/problematic species control
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 16-32

Distribution
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km ²): 16-32
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 1
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: No
Population
Extreme fluctuations: No
Population severely fragmented: No
Continuing decline in subpopulations: No
Extreme fluctuations in subpopulations: No
All individuals in one subpopulation: Yes

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