

Species:

Index Result:

Scientific Name ***Eriophorum chamissonis***
 Common Name **Russet cotton-grass**
 Taxonomic Group Vascular Plant
 Geographic Area Western (coastal) Oregon

Highly Vulnerable
Confidence High
 (based on entered data)
 Date Assessed 5/6/2020
 GRank G5
 SRank S1
 Assessor Sue Vrillakas

Cave/Ground Water Obligate: No
 Migratory area included in assessment: No

Climate Change Vulnerability Index Values: (greatest score shown when range was selected)

Category	Factor	Score	Comments
Temperature Scope (predicted increase)	A >6.0F	0	
	A 5.5F	0	
	A 5.1F	0	
	A 4.5F	0	
	A 3.9F	0	
	A <3.9F	100	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	0	
	-0.096	100	
	-0.073	0	
	-0.05	0	
	>-0.028	0	
Sea level rise	B1	GI	All occurrences in coastal zone
Natural barriers	B2a	Inc	Restricted to coastal bogs and wetlands
Anthropogenic barriers	B2b	N	
Climate Change mitigation	B3	SI	
Dispersal/Movement	C1	N	Highest value 76.4790; lowest 65.9725; difference=10.5065
Historical thermal niche	C2ai	GI	
Physiological thermal niche	C2aii	GI	
Historical hydrological niche	C2bi	Inc	
Physiol. hydrological niche	C2bii	N	
Disturbance dependence	C2c	N	
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	N	
Other spp create habitat	C4a	N	
Dietary Versatility	C4b	U	
Pollinator Versatility	C4c	N	
Other spp for dispersal	C4d	N	
Pathogen sensitivity	C4e	N	
Competition sensitivity	C4f	N	
Interspecific Relationship	C4g	N	
Measured genetic variation	C5a	U	
Bottlenecks	C5b	U	
Plant reproductive system	C5c	U	
Phenological response	C6	U	
Documented response	D1	U	
Modeled change	D2	U	
Modeled overlap	D3	U	
Modeled protected areas	D4	U	

Additional Notes:

Range map created using ArcMap Minimum Mapping Boundary-Convex Hull on ORBIC element occurrence data, 4-29-2020 export. Climate and precipitation data from Climate Wizard using the A1B emissions scenario and ensemble average general circulation model: Historical = 1951-2006; Future = mid-century (2050s); Hamon AET:PET moisture metric (Hamon 1961).

References:**Data sources and notes:**

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Detailed definitions of criteria and methodology can be found in the documentation at <http://www.natureserve.org/conservation-tools/climate-change-vulnerability-index>

Legend and Definitions:

Affect to Vulnerability:
GI = Greatly increase
Inc = Increase
SI = Somewhat increase
N = Neutral
U = Unknown

Index Scores:

<p>Extremely Vulnerable: Abundance and/or range extent within geographical area assessed extremely likely to substantially decrease or disappear by 2050.</p> <p>Highly Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease significantly by 2050.</p> <p>Moderately Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease by 2050.</p> <p>Less Vulnerable: Available evidence does not suggest that abundance and/or range extent within the geographical area assessed will change (increase/decrease) substantially by 2050. Actual range boundaries may change.</p> <p>Insufficient Evidence: Information entered about a species' vulnerability is inadequate to calculate an Index score.</p>
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Citation:

Oregon Biodiversity Information Center. 2020. Climate Change Vulnerability Index assessment for Russet cotton-grass (*Eriophorum chamissonis*). Institute for Natural Resources, Portland State University, Portland, OR.