

Species Data:

Index Result:

Species ***Castilleja schizotricha***
 English Name **Split-hair paintbrush**
 Taxonomic Group Vascular Plant
 Geographic Area Jackson and Josephine counties

Moderately Vulnerable
Confidence Moderate
 (based on entered data)
 GRank G3
 SRank S2
 Assessor Caitlin Lawrence

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

Climate Change Vulnerability Index Values: (greatest 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	45	
	-0.096	55	
	-0.073	0	
	-0.05	0	
	>-0.028	0	
Sea level rise	B1	N	This species is limited to the Siskiyou Mts. of Josephine and Jackson Counties, Oregon and northern California. Only known from areas further south, might not be appropriate habitat north. The populations are south of Medford, Grants Pass areas and may have difficulty moving north. North margin of range bordered by more urban/developed areas.
Natural barriers	B2a	SI	
Anthropogenic barriers	B2b	SI	
Climate Change mitigation	B3	N	
Dispersal/Movement	C1	SI	Range of only ~6 inches in the actual locations of the species. In the middle of its range there is lower precip but it's not known from that part of the range. Serpentine endemic, but over a fairly large range between northern CA and southern OR. (NatureServe)
Historical thermal niche Physiological thermal niche	C2ai	Inc	
	C2aii	N	
Historical hydrological niche	C2bi	Inc	
Physiol. hydrological niche	C2bii	SI	
Disturbance dependence	C2c	N	
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	SI	

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	U
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

Data sources and notes:

Climate and precipitation data from Climate Wizard using the A1B emissions scenario and ensemble average general circulation model. Historical = past 50 years; Future = mid-century (2050s). Species data from ORBIC database. Assessment performed in conjunction with the Element Rank Calculator. Other resources consulted: NREL national wind resources, 50m resolution (http://www.nrel.gov/gis/data_analysis_background.html); SILVIS lab Wildland Urban Interface 2010 layer (http://silvis.forest.wisc.edu/maps/wui_main); Oregon Department of Geology and Mineral Industries geologic map (<http://www.oregongeology.org/sub/publications/GMS/gms.htm>); US mining claims on federal lands (<http://mrddata.usgs.gov/mine-claim/>); Oregon Protected Areas Database (<http://gapanalysis.usgs.gov/padus/data/>).

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:

Extremely Vulnerable: Abundance and/or range extent within geographical area assessed extremely likely to substantially decrease or disappear by 2050.

Highly Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease significantly by 2050.

Moderately Vulnerable: Abundance and/or range extent within geographical area assessed likely to decrease by 2050.

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.
Insufficient Evidence: Information entered about a species' vulnerability is inadequate to calculate an Index score.