

	Species:	Index Result:
Scientific Name	<i>Erythranthe inflatula</i>	Less Vulnerable
Common Name	Disappearing monkeyflower	Confidence Moderate
Taxonomic Group	Vascular Plant	(based on entered data)
Geographic Area	Oregon	Date Assessed 1/14/2020
		GRank G3
Cave/Ground Water Obligate: No		SRank S2
Migratory area included in assessment: No		Assessor Sue Vrilakas

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	4	
	A 4.5F	50	
	A 3.9F	27	
	A <3.9F	19	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	23	
	-0.096	48	
	-0.073	26	
	-0.05	3	
	>-0.028	0	
Sea level rise	B1	N	Interior species
Natural barriers	B2a	N	
Anthropogenic barriers	B2b	N	
Climate Change mitigation	B3	N	
Dispersal/Movement	C1	SI	Range within the state is quite broad Mean temperature variation about 60 deg.
Historical thermal niche	C2ai	N	
Physiological thermal niche	C2aii	N	Highest value 68.3575; lowest about 42-47; difference 26 - 21
Historical hydrological niche	C2bi	N	
Physiol. hydrological niche	C2bii	GI	Most recent reports are from eastern OR where it predominantly grows in moist areas, creeks, vernal wetlands, and lakeshores
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
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Additional Notes:

Range map created using ArcMap Minimum Mapping Boundary-Convex Hull on ORBIC element occurrence data but edited to include the general non-mappable sites in western Oregon at Brownsville and Grants Pass (Nesom annotations made in 2013). 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).

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.

Citation:

Oregon Biodiversity Information Center. 2020. Climate Change Vulnerability Index assessment for Disappearing monkeyflower (*Erythranthe inflatula*). Institute for Natural Resources, Portland State University, Portland, OR.