

Species:

***Eremothera
pygmaea***
**Dwarf evening-
primrose**

Index Result:

Highly Vulnerable

Scientific Name
Common Name
Taxonomic Group
Geographic Area

Confidence Low
(based on entered data)

Date Assessed 1/22/2020

GRank G3
SRank S1

Cave/Ground Water Obligate: No
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	0	
	A 4.5F	95	
	A 3.9F	5	
	A <3.9F	0	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	26	
	-0.096	56	
	-0.073	18	
	-0.05	0	
	>-0.028	0	
Sea level rise Natural barriers Anthropogenic barriers Climate Change mitigation	B1	N	Not close to the sea; interior species
	B2a	N	
	B2b	N	
	B3	N	
Dispersal/Movement	C1	SI	Range is somewhat large but species not abundant where found.
Historical thermal niche	C2ai	N	
Physiological thermal niche	C2aii	N	has experienced average temperature variation
Historical hydrological niche	C2bi	Inc	Gravelly areas, washes; not particularly cool or cold sites
Physiol. hydrological niche	C2bii	Inc	Highest value: 15.918, lowest 10.29; difference=5.628
Disturbance dependence	C2c	N	probably dependent on local seasonal moisture conditions
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	N	Gravelly areas
Other spp create habitat	C4a	N	
Dietary Versatility	C4b	U	In general evening primrose pollinated by moths and bees
Pollinator Versatility	C4c	SI	
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 Miminum Mapping Boundary-Convex Hull on ORBIC element occurrence data. 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 Dwarf evening-primrose (*Eremothera pygmaea*). Institute for Natural Resources, Portland State University, Portland, OR.