	Species:	Index Result:	
Scientific Name	*Senecio ertterae*	Extremely Vulnerable	
Common Name	Ertter's senecio	Confidence	High
Taxonomic Group	Vascular Plant	(based on entered data)	
Geographic Area	SW Oregon	Date Assessed	1/30/2020
		GRank	G2
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	100	
	A 4.5F	0	
	A 3.9F	0	
	A <3.9F	0	
Hamon AET:PET Moisture Metric Scope	< -0.119	0	
	-0.119	0	
	-0.096	52	
	-0.073	48	
	-0.05	0	
	>-0.028	0	
Sea level rise	B1	N	Interior species
Natural barriers	B2a	GI	Endemic to ash flows in the Leslie Gulch and Owyhee River area
Anthropogenic barriers	B2b	N	
Climate Change mitigation	B3	N	
Dispersal/Movement	C1	SI	Restricted to ash flows; can disperse within required substrate but substrate limited
Historical thermal niche	C2ai	N	Mean seasonal variation about 68-69 degrees
Physiological thermal niche	C2aii	N	Not restricted to cool or cold climates
Historical hydrological niche	C2bi	SI	Highest value=22.8844; lowest 8.5887; difference=14.2956
Physiol. hydrological niche	C2bii	GI	Strongly associated with local moisture conditions
Disturbance dependence	C2c	N	
Ice/snow dependence	C2d	N	
Physical habitat restrictions	C3	Inc	Restricted to eroded ash flow tuffs (Kaye and Massey 1990)
Other spp create habitat	C4a	N	None
Dietary Versatility	C4b	U	
Pollinator Versatility	C4c	U	
Other spp for dispersal	C4d	U	
Pathogen sensitivity	C4e	N	None
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).

References:

Kaye, Thomas and Susan Massey. 1990. Status report for Senecio ertterae. Oregon Dept. of Agriculture, Conservation Biology Progam. 38 pp.

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 Ertter's senecio (Senecio ertterae). Institute for Natural Resources, Portland State University, Portland, OR.