

Species Data:
Lepidium davisii
Davis' peppergrass
 Vascular Plant
 Malheur county

Index Result:
Highly Vulnerable
Confidence Low
 (based on entered data)

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

GRank G3
 SRank S1
 Assessor Caitlin Lawrence

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	90	
	A 4.5F	10	
	A 3.9F	0	
Hamon AET:PET Moisture Metric Scope	A <3.9F	0	
	< -0.119	0	
	-0.119	0	
	-0.096	38	
	-0.073	57	
Sea level rise Natural barriers Anthropogenic barriers Climate Change mitigation	-0.05	5	
	>-0.028	0	
	B1	N	
	B2a	N	
Dispersal/Movement Historical thermal niche Physiological thermal niche Historical hydrological niche Physiol. hydrological niche Disturbance dependence Ice/snow dependence Physical habitat restrictions Other spp create habitat Dietary Versatility Pollinator Versatility Other spp for dispersal Pathogen sensitivity Competition sensitivity Interspecific Relationship Measured genetic variation Bottlenecks Plant reproductive system Phenological response	B2b	N	Vernal pool/playa species. Plant size and flower number have been shown to correlate with precip. (Bernatas and Moseley 1995) Restricted to a very narrow set of habitat conditions: flat, hard floors of dry lake beds known as vernal pools or playas. (Bernatas and Moseley, 1991)
	B3	N	
	C1	SI	
	C2ai	N	
	C2aii	N	
	C2bi	Inc	
	C2bii	Inc	
	C2c	SI	
	C2d	N	
	C3	Inc	
	C4a	N	
	C4b	U	
	C4c	N	
	C4d	N	
	C4e	SI	
	C4f	N	
C4g	U		
C5a	U		
C5b	U		
C5c	U		
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.