

Heritage Ranking Form - Global Rank

Scientific Name: Lupinus lepidus var. cusickii

Common Name: Cusick's lupine

Classification: Vascular Plant

Range Extent: A = <100 sq km (< ~40 sq mi)

About 11 km² using convex hull.

Population Size: E = 2,500 - 10,000 individuals

Comments: 2010 population estimate of four survey sites was about 5,000 mature plants, another 5-6000 seedlings.

Number of

Occurrences: A = 1 - 5

Comments: 3 EOs using 1 km separation distance.

Area of Occupancy: AB = <5 km²

Comments: 4 4km² grid cells occupied with extant populations.

Good Viability: B = Very few (1-3) occurrences with excellent or good viability or ecological integrity

Comments: 2 EOs with good to excellent viability using 1 km separation distance.

Environmental

Specificity: AB = Very narrow to narrow

Comments: Tuffaceous hillsides around 4000' elevation.

Short Term Trends: G = Relatively Stable (<=10% change)

Comments: Population numbers fluctuate from year to year. Massatti et al. report from 2009 shows plant densities at three sites were similar in 1993 and 2009, despite increases and decreases in the years between.

Long Term Trends: U = Unknown

Comments: None

Threat Impact: C = Medium

Comments: Invasive weeds, ORV use, cattle, human disturbance are potential threats, though there is little or no documentation of direct impacts to populations. 2010 Newton and Thorpe report noted there was no immediate danger to the four sites they surveyed. Calculated as highly vulnerable to climate change.

Intrinsic Vulnerability: B = Moderately vulnerable

Comments: Pollinated by bees and bumblebees; large seed crop may be dependent on well-timed summer rainfall (Meinke et al. 1990). No vegetative reproduction.

Heritage Rank: S1

Comments: This taxon is only known from one small area in ne Oregon. It is restricted to a habitat (ash deposits) that is limited in extent. Although populations appear stable, only two populations exist using a 1 km separation distance. Calculated as extremely vulnerable to climate change. Other threats do not appear to be immediate dangers.

Rank Notes: Calculator Rank (unrevised)=T1.

Reference: Newton, R.E and A.S. Thorpe. 2010. Assessing the status of *Lupinus lepidus* var. *cusickii* in Denny Flat, Baker County, Oregon. Institute for Applied Ecology, Corvallis, Oregon and USDI Bureau of Land Management, Vale District. iii + 7 pp. Massatti, R.T., A.S. Thorpe, and T.N. Kaye. 2009. *Lupinus lepidus* var. *cusickii* population monitoring in Denny Flat, Baker County, Oregon. Institute for Applied Ecology, Corvallis, Oregon and USDI Bureau of Land Management, Vale District. iv + 16 pp.

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