Heritage Ranking Form - State Rank

Scientific Name: Astragalus mulfordiae

Common Name: Mulford's milk-vetch

Classification: Vascular Plant

Range Extent: C = 250-1,000 sq km (~100-400 sq mi)

About 550 km2 in the Snake River Plain area in northeastern Malheur County, Oregon.

Population Size: DE = 1000 - 10,000 individuals

Comments: About 1500 counted in recent surveys, but often population numbers were not reported, or sites have not been recently revisited.

Number of Occurrences: B = 6 - 20

Comments: About 8 extant occurrences using 1km separation distance.

Area of Occupancy: D = 6-25 4-km2 grid cells

Comments: 22 4km2 grid cells occupied by extant occurrences.

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

Comments: Most sites note threats of weeds, vehicles, or grazing.

Environmental Specificity: Not Evaluated

Comments: None

Short Term Trends: E = Decline of 30 - 50%
Comments: All 6 sites in the Institute for Applied Ecology grazing study decreased from 2008 to 2012 by about 30-80%. These sites also saw a significant increase in Bromus tectorum cover. Idaho Conservation Data Center studies have shown annual population fluctuations.

**Long Term Trends:**

U = Unknown

Comments: None

**Threat Impact:**

B = High

Comments: Threats include non-native plants, OHV disturbance, grazing and trampling by cattle and sheep, insect herbivory, disturbance from trails, and fire. IAE grazing study (2012) concluded that Bromus tectorum was a significant threat while cattle grazing had a minimal effect on Astragalus success. Calculated as not vulnerable to climate change.

**Intrinsic Vulnerability:**

Not Evaluated

Comments: None

**Heritage Rank:**

S1

Comments: Few occurrences in a small range. Population probably a few thousand plants. No sites considered protected. Trends from grazing study 2008-2012 show a decline in plant numbers and an increase in Bromus tectorum cover.

Rank Notes: None


Rank Date: 4/22/2013
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