**\***֎***Astragalus mollissimus* Torr. var. *thompsoniae* (S. Watson) Barneby –**

**Thompson’s woolly locoweed**

**Fabaceae – pea family**

Account written by Don Mansfield (and Beth Corbin), December 1, 2021֎\* & 2/17/2022

Recommended Rank assigned by Rare Plant Working Group on 10/13/2021, 12/8/2021, & 2/14/2022 as S1

**Current Conservation Status:**

\*NatureServe3: G5 T4 SNR (not recorded by NatureServe for Idaho) [but S5 in Utah (?); S4 New Mexico; SNR for Arizona, Colorado, and Nevada]

2009 INPS rank²: Not on list

BLM: No status

FS Reg 1: NA

FS Reg 4: No status

FS Reg 6: NA

FWS: No status

**Taxonomy:** Published as *Astragalus thompsoniae* by S. Watson in 1895 (Proc. Amer. Acad. Arts 10:334)*.* Moved to *A. mollissimus* var. *thompsoniae* by Barneby in 1964 (Mem. New York Bot. Gard. 13:747) based on specimens by E.P. Thompson, Kanab, UT in 1872 and F.M. Bishop, s. UT in 1873*.* In IMF (vol. 3b:144) as *A. mollissimus* var. *thompsoniae*.

*Synonyms:* None in use

*Other Subspecies/Varieties, if applicable:* No other varieties in Idaho.

*Type Locality:* Kanab, UT.

*\*Taxonomic key(s)7:* IMF Vol. 3B (1989).

**Species Description (OPTIONAL):** Subacaulescent, densely tufted perennial herb to 1.5 dm with pilose-tomentulose basifixed pubescence, free stipules, numerous, rounded leaflets (19-31); long, narrow purple flowers; plumply ovoid, stiff-walled, white-tomentulose pod, bilocular below the beak.

**Biology:** Perennial forb; reproduces by seed; flowers in Idaho in April-May.

**Similar species:** *Astragalus newberryi* and *Astragalus purshii* both have unilocular pods.

**Habitat:** Chalk hills or open shrubland slopes with sandy soil in eastern Owyhee Front; elevation 2,769 - 3,235 feet.

*\*֎Environmental Specificity10:* Narrow

**Cultural and commercial values:** Unknown. “Locoweed” with addictive alkaloids toxic to livestock (especially horses) per IMF.

**Landownership:**  Federal (BLM – Boise District, Bruneau Field Office).

**Distribution:**

*Global Range*: Southeastern WY to NM, CO, NV AZ and UT. Ours is widely disjunct.

*\*Range Extent Descriptor6:* Disjunct

֎*Rank Calculator Idaho Range Extent:* 30 mi2 = A

֎*Area of Occupancy:* Three 4-sq-km cell = C

*\*Idaho Counties9:*  Owyhee

*Idaho Specimens:*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Record source (Herbarium, IFWIS, person)** | **Date observed/ collected** | **Observer** | **County** | **Location** | **Abundance, threats, habitat condition** |
| CIC, BBLM | 4/7/2020 | Holly Hovis s.n. | Owyhee | Chalk Hills, Base of Little Jacks Ck. canyon | One population |
| SRP | 5/23/2018 | J.F. Smith 14963 | Owyhee | Castle Creek Road 42.97657 116.34179 | Open shrubland, sandy soil, slope up to cliffs and rock outcrops. |
| SRP, IDS | 5/23/2018 | J.F. Smith 14992 | Owyhee | Castle Creek Road 42.92848 116.35077 | Open shrubland, sandy soil, slope up to cliffs and rock outcrops. |

*Literature Records:* No literature records for Idaho.

*Databases/Herbaria consulted (and query date):* CPNWH 10/9/2021 & 12/1/2021; SEINet 10/9/2021 & 12/1/2021

*Research Notes:*

* Hovis specimen confirmed by Aaron Liston and Don Mansfield.
* Possibly introduced with livestock, but does not appear likely (per Liston).
* CPNWH specimen at IDS (Ray J. Davis 5625) previously shown as “*Astragalus thompsoniae*” is actually *Peteria thompsoniae*; Trista Crook fixed it.
* SEINet specimen at NY (Atwood 23743) currently showing as “*Astragalus mollissimus* var*. thompsoniae*”; duplicate at BBLM annotated to *A. newberryi* var. *castoreus* by Valerie Geertson.
* Smith 14963 and Smith 14992 recently (Nov 2021) annotated to *A. mollissimus* var. *thompsoniae* by D. Mansfield.

**Abundance:**

*\*֎Number of Occurrences8:* Three = A

*֎Population Size:* Unknown

*֎Number of Occurrences with Good Viability:* Presumably three (recent records) = B

**Conservation concerns:**

*֎Threats (include scope, severity and timing, if known):* Most likely weeds, OHVs, and livestock grazing/trampling. Potential mining (based on big zeolite mine just north of Castle Creek).

*\*֎Overall Threat Rank11:* High

*֎Intrinsic Vulnerability:* (Optional; Used only if Threats unknown. A= highly, B=moderately, C=not intrinsically vulnerable.) Unknown

**Population trend:**

*֎Short:* Unknown

*֎Long:* Unknown

**Proposed rank information:**

*\*Date Ranked5:* Preliminary 10/9/2021 and 12/1/2021, v 3.2

Threats added 2/14/2022 – Calculated S1

*\*Proposed Rank:* S1

*\*Proposed INPS Status2:* Add to RARE list

*\*Comments12:*  Discussed at Oct 13 and December 8, 2021 and Feb 14, 2022 SIRPWG meetings.

**\*Recommended actions13:**

* Recommend Boise BLM add to Sensitive Species list.
* Revisit locations and get information on abundance and threats.