Astragalus lackschewitzii (Lackschewitz' Milkvetch)
Conservation Status Rank Summary

Date Published: September 3, 2026

For details on assessment and ranking methodology, see: *Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species*

Rarity and Trends

Rank Factor	Date Assessed	Value Factor Rating	Score	Data Source	Comments
Rarity					
Range Extent	2026-02-26	350.0 km² C = 250-1,000 km²	1.570	MTNHP Range Maps	Currently known observations span a range of approximately 350 sq km. Reported observations near Cave Mtn and Cliff Mtn are excluded as they are likely misidentified.
Area of Occupancy	2026-02-26	8 | 4km² cells D = 6-25 4-km² grid cells	2.060	MTNHP Database	Of the 96,004 2km x 2km grid cells that cover Montana, known observations of the species occupy 8 grid cells.
Number of Occurrences	2026-02-26	8 B = 6 - 20	1.380	MTNHP Databases	Currently known observations group into 8 occurrences.
Population Size	2026-02-26	* F = 10,000 - 100,000 individuals	3.930	MTNHP Databases	Observation data appears to support a range-wide, population estimate of over 10,000 plants.
# of Occurrences in Good Condition	2026-02-26	* C = Few (4-12) occurrences with excellent or good viability or ecological integrity	2.200	MTNHP Databases	At least 4 occurrences are large and likley have good viability.
% of Area Occupied in Good Condition			-		**Factor not used in ranking.**
Environmental Specificity	2025-03-01	Very narrow A = Very narrow; specialist or community with key requirements scarce	-	Expert Opinion	**Factor not used in ranking.** Assessed by Scott Mincemoyer
Rarity is calculated by averaging weighted factor scores: **((1.57 × 1) + (2.06 × 2) + (1.38 × 1) + (3.93 × 2) + (2.20 × 2)) / 8 = 2.42**					
Trends					
Short-term Trend	2026-02-26	* G = Relatively Stable (=10% change)	0.000	Expert Opinion	Short-term trends are unknown. However, the habitat is intact and remote, so it seems likely that populations have been relatively stable or experienced only minor declines in the recent past.
Long-term Trend	2026-02-26	* U = Unknown	-		**Factor not used in ranking.** Long-term trends are unknown. However, the habitat is remote and it would seem likely that populations have been relatively stable or experienced only small declines.

Trends score is calculated by summing weighted short and long-term trend scores:
((0.00 × 2)) = 0.00

*Values may be absent if not precisely estimated; factors may still be assessed for rank if a Factor Rating can be assigned.

Threats

Rank Factor	Date Assessed	Value / Factor Rating	Score	Data Source	Comments
Threats					
Overall Threat Impact		Medium - Low / CD = Medium - Low	[3.670, 5.500]		Significant threats have not been reported though climate change poses a potential risk to the state's populations.
Intrinsic Vulnerability	2026-02-26	Moderately vulnerable to not intrinsically vulnerable / BC = Moderately vulnerable to not intrinsically vulnerable	-	Expert Opinion	**Factor not used in ranking.** Assessed by Scott Mincemoyer
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: **([3.67, 5.50]) = [3.67, 5.50]**					

Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments
Human Intrusions & Disturbance	2026-02-26	Low	Small	Slight	High	Some of the population on Mt. Wright is next to a trail and some trampling impacts could occur.
Climate Change & Severe Weather	2026-02-26	High - Low	Pervasive	Serious-Slight	High-Low	Climate change, including increases in temperature, decreases in snowpacks and increases in the frequency and severity of drought may negatively impact the species. It is rated as "Highly Vulnerable" to climate change in a CCVI analysis.
Threat Tally: 0 - Very High, [0,1] - High, 0 - Medium, [1,2] - Low Overall Threat Impact* = Medium - Low						

*See Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species for calculation of Overall Threat Impact based on the number and impact of individual threats.

Conservation Status Rank Calculation

Raw score

Rarity: (2.42 × 70%) + Threats: ([3.67, 5.50] × 30%) + Trends: (0.00) = [2.79, 3.34]

Calculated Rank: S3

Accepted Rank	S3
Author(s)	Andrea Pipp
Rank Approved By	Andrea Pipp
State Rank Reason	*Astragalus lackschewitzii* is endemic to Montana endemic, where plants are restricted to rocky, alpine slopes in the Rocky Mountain Front. The species' habitat is remote and generally not subject to human disturbance. *Astragalus lackschewitzii* is vulnerable to extirpation in the state cause of Its limited distribution and relatively small population sizes. Revisits to known occurrences, at specified intervals, to collect data on population parameters, habitat conditions, and potential threats are necessary to maintain an accurate and timely state conservation status rank. Monitoring at a subset of occurrences is necessary to track population trends.

Supplementary Information

Montana Natural Heritage Program. 2021. Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species. 18 p.
https://mtnhp.mt.gov/docs/Montana_State_Rank_Criteria_20211201.pdf

Montana Field Guide Species Account:
https://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDFAB0FBH0

Predicted Suitable Habitat Model:
https://mtnhp.mt.gov/resources/models/?elcode=PDFAB0FBH0

Information Needs

Information needs are assessed by considering the availability of factors used to assess species status as well as the quality of these assessments. Current information availability and quality to inform Conservation Status Rank for this species are highlighted.

Rank Factor	Assessment Category	Value	Criteria
General Status	Status Quality	Adequate	Calculated rank has low uncertainty and is represented by a single rank (e.g. S3); accepted rank may be adjusted to a range rank (e.g. S2S3)
		Poor	Rank assessed as SU or calculated rank has notable uncertainty and corresponds to a range rank with 2 or more values (e.g. S2?, S1S3, or S4S5)
Rarity	Range Quality	Adequate	Range polygon adequately represents area of probable occupancy and does not include substantial unoccupied areas; range may be adequately defined and still include areas of unsuitable habitat (e.g. mountain ranges for plains species)
		Marginal	Range polygon defined, but may include or exclude notable areas where the species may or may not occur on the landscape
		Poor	Range polygon not defined
	Habitat Quality	Adequate	Species-habitat relationship is well-defined (e.g. relevant literature or robust habitat model available)
		Marginal	Understanding of species-habitat relationship is adequate among some but not all habitats (e.g. literature covers similar habitats outside of Montana or habitat model performance is only somewhat adequate)
		Poor	Species-habitat relationship is not well understood
Threats	Threat Quality	Adequate	Threat Impact is a single value (including "Unthreatened")
		Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")
		Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed
Trends	Recency	Current	Short-term Trend assessment date less than 10 years old
		Out of Date but Adequate	Short-term Trend assessment date is more than 10 years old or Unknown, but species is Unthreatened
		Out of Date	Short-term Trend assessment date more than 10 years old
		Not Available	Short-term Trend data are not available
	Trend Quality	Sufficient	Short-term Trend assessed at a single value or multiple values with a minimum trend greater than -10% (stable or increasing)
		Unknown but Sufficient	Short-term Trend is Unknown, but species is Unthreatened
		Poor	Short-term Trend is less than -10% (in decline) with two or more values selected
		Unknown	Short-term Trend is Unknown

Summary of Information Availability

Summary of Information Needs

Revisits to known occurrences, at specified intervals, to collect data on population parameters, habitat conditions, and potential threats are necessary to maintain an accurate and timely state conservation status rank. Monitoring at a subset of occurrences is necessary to track population trends.

Additional Threat Details

The table below contains the complete threats assessment for this species. While the Conservation Status Rank Calculation is based on cumulative, broadly categorized (Level 1) threats data, threats are assessed and tracked for more specifically categorized (Level 2) threats when available.

Threat Category	Date Assessed	Assessed By	Data Source	Scope	Severity	Imme-diacy	Comments
Human Intrusions & Disturbance - 6.1 - Recreational Activities	2026-02-26	S. Mincemoyer	MTNP Threat Assessment, Expert Opinion	Small	Slight	High	Some of the population on Mt. Wright is next to a trail and some trampling impacts could occur.
Climate Change & Severe Weather - 11	2026-02-26	S. Mincemoyer	CCVI, Expert Opinion	Pervasive	Serious-Slight	High-Low	Climate change, including increases in temperature, decreases in snowpacks and increases in the frequency and severity of drought may negatively impact the species. It is rated as "Highly Vulnerable" to climate change in a CCVI analysis.