Ericameria parryi var. montana (Parry's Mountain Rabbitbrush) Conservation Status Rank Summary

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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	2025-11-29	119.3 km² A = 100 km²	0.000	MTNHP Range Maps	Current range map over-represents the known range, which is less than 100 sq km.
Area of Occupancy	2025-11-29	1 | 4km² cells A = 1 4-km² grid cell	0.000	MTNHP Modeling	One occurrence occupying one grid cell.
Number of Occurrences	2025-11-29	1 A = 1 - 5	0.000	MTNHP Databases	None
Population Size	2025-11-29	* BC = 50 - 1000 individuals	[0.790, 1.570]	MTNHP databases	The single occurrence was documented as having about 200 plants in MT with another 300 or so plants in ID.
# of Occurrences in Good Condition			-		**Factor not used in ranking.**
% of Area Occupied in Good Condition			-		**Factor not used in ranking.**
Environmental Specificity	2025-03-01	Very narrow to narrow AB = Very narrow to narrow	-	Expert Opinion	**Factor not used in ranking.** Assessed by Scott Mincemoyer
Rarity is calculated by averaging weighted factor scores: **((0.00 × 1) + (0.00 × 2) + (0.00 × 1) + ([0.79, 1.57] × 2)) / 6 = [0.26, 0.52]**					
Trends					
Short-term Trend	2025-11-29	* FG = Decline of 30% to relatively stable	[-0.070, 0.000]	Expert Opinion	Short term trends are unknown though the species occurs in remote, alpine habitat, so it likely has been relatively stable or only undergone minor declines.
Long-term Trend	2025-11-29	* FH = Decline of 30% to increase of 25%	[-0.070, 0.070]	Expert Opinion	Long term trends are unknown though the species occurs in remote, alpine habitat, so it likely has not seen significant changes.
Trends score is calculated by summing weighted short and long-term trend scores: **(([-0.07, 0.00] × 2) + ([-0.07, 0.07] × 1)) = [-0.21, 0.07]**					

*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]		No significant and widespread threats to the taxa are known beyond those potentially posed by climate change.
Intrinsic Vulnerability	2025-03-01	Not intrinsically vulnerable / C = 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
Climate Change & Severe Weather	2025-11-29	High - Low	Pervasive	Serious-Slight	High-Low	Climate change including increased temperatures, decreases in snowpack and increases in the frequency and severity of drought may adversely impact the population over the long term. It is rated as "Extremely Vulnerable" to climate chanage as part of a CCVI analysis.
Threat Tally: 0 - Very High, [0,1] - High, 0 - Medium, [0,1] - 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

Due to rarity, species is automatically classified as S1

Calculated Rank: S1

Accepted Rank	S1S2
Author(s)	Scott Mincemoyer
Rank Approved By	Scott Mincemoyer
State Rank Reason	**DRAFT: Requesting feedback on the 2026 revised rank, factors, and State Rank Reason outlined below and in the Conservation Status Rank Report.** Ericameria parryi var. montana is known from only one population rangewide along the Montana-Idaho border. The species does not appear to be threatened, and it has likely been relatively stable due to the remote, alpine nature of its habitat. However, climate change impacts could adversely impact the population in the future. Overall, it's extreme rarity makes it highly vulnerable to extirpation in the state. The only data available for the population is over 3 decades old. Current data on population levels and extent for the single occurrence are needed. Surveys of potentially suitable habitat in the area of the known occurrence are also needed to verify if other occurrences exist.

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=PDAST2C098

Predicted Suitable Habitat Model:
https://mtnhp.mt.gov/resources/models/?elcode=PDAST2C098

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

None

Summary of Information Needs

Current data on population levels and extent for the single occurrence are needed. Surveys of potentially suitable habitat in the area of the known occurrence are also needed to verify if other occurrences exist.

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
Climate Change & Severe Weather - 11	2025-11-29	S. Mincemoyer	Expert Opinion	Pervasive	Serious-Slight	High-Low	Climate change including increased temperatures, decreases in snowpack and increases in the frequency and severity of drought may adversely impact the population over the long term. It is rated as "Extremely Vulnerable" to climate chanage as part of a CCVI analysis.