

Brickellia oblongifolia (Mojave Brickellbush)

Conservation Status Rank Summary

Date Published: August 13, 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	2025-11-28	34349.7 km ² F = 20,000-200,000 km ²	3.930	MTNHP Range Maps	None
Area of Occupancy	2025-11-28	5 4km ² cells CD = 3-25 4-km ² grid cells	[1.380, 2.060]	MTNHP databases/ Expert Opinion	Currently known to occupy 5 grid cells though there are likely more occurrences in the state.
Number of Occurrences	2025-11-28	10 B = 6 - 20	1.380	MTNHP Databases	None
Population Size	2025-11-28	* CD = 250 - 2500 individuals	[1.570, 2.360]	MTNHP databases/ Expert Opinion	Populations appear to be small with the largest observation reported as "100-500 individual plants estimated". One other occurrence is estimated at "about 100 plants". Other occurrences are 30 plants each or do not have population data.
# of Occurrences in Good Condition	2025-11-28	* BC = Very few to few (1-12) occurrences with good viability	[1.100, 2.200]	MTNHP databases/ Expert Opinion	None
% of Area Occupied in Good Condition			-		Factor not used in ranking.
Environmental Specificity	2025-03-01	Narrow to moderate BC = Narrow to moderate	-	Expert Opinion	Factor not used in ranking. Assessed by Scott Mincemoyer
Rarity is calculated by averaging weighted factor scores: $((3.93 \times 1) + ([1.38, 2.06] \times 2) + (1.38 \times 1) + ([1.57, 2.36] \times 2) + ([1.10, 2.20] \times 2)) / 8 = [1.68,$					
Trends					
Short-term Trend	2025-11-28	* FG = Decline of 30% to relatively stable	[-0.070, 0.000]	Expert Opinion	Short term trends are unknown though it likely has remained relatively stable or experienced only minor declines as the habitat has remained mostly intact.
Long-term Trend	2025-11-28	* FG = Decline of 30% to relatively stable	[-0.070, 0.000]	Expert Opinion	Long term trends are unknown though its habitat is generally intact, it may have decreased somewhat in quality and extent from past livestock grazing and other activities.

Trends score is calculated by summing weighted short and long-term trend scores:
 $([-0.07, 0.00] \times 2) + ([-0.07, 0.00] \times 1) = [-0.21, 0.00]$

*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]		None
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
Agriculture & Aquaculture	2025-11-28	Low	Restricted	Moderate-Slight	High-Moderate	Livestock grazing at some occurrences may detrimentally impact populations and/or their habitat.
Human Intrusions & Disturbance	2025-11-28	Low	Small	Serious-Moderate	High	Threat reported for 1 out of 10 Species Occurrences.
Invasive & Other Problematic Species, Genes & Diseases	2025-11-28	Medium - Low	Large-Small	Moderate-Slight	High-Low	Non-native species including introduced annual and perennial grasses.
Threat Tally: 0 - Very High, 0 - High, [0,1] - Medium, [2,3] - 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: $([1.68, 2.32] \times 70\%) + \text{Threats: } ([3.67, 5.50] \times 30\%) + \text{Trends: } ([-0.21, 0.00]) = [2.06, 3.27]$

Calculated Rank: S2S3

Accepted Rank	S2?
Author(s)	Scott Mincemoyer
Rank Approved By	Andrea Pipp
State Rank Reason	<i>Brickellia oblongifolia</i> is rare in Montana with only a few known occurrences. Data on these occurrences is at least 20 years old. The status of one historical occurrence documented from a 1921 collection near Wilsall is unknown. Reported threats to the species in Montana are rated as low to moderate. Population trends, though undocumented, are presumed as relatively stable. Surveys that bring forth current information on distributions, population counts, habitat condition, and threats is greatly needed. Surveys in potentially suitable habitat is also needed to help assign a more accurate state conservation rank.

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=PDAST1H0Z0>

Predicted Suitable Habitat Model:

<https://mtnhp.mt.gov/resources/models/?elcode=PDAST1H0Z0>

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

Surveys that bring forth current data on distributions, population counts, habitat condition, and threats are greatly needed. Surveys in potentially suitable habitat is also needed to help assign a more accurate state conservation rank.

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	Immediacy	Comments
Agriculture & Aquaculture - 2.3 - Livestock Farming & Ranching	2025-11-28	S. Mincemoyer	Expert Opinion	Restricted	Moderate-Slight	High-Moderate	Livestock grazing at some occurrences may detrimentally impact populations and/or their habitat.
Human Intrusions & Disturbance - 6.1 - Recreational Activities	2025-11-28	S. Mincemoyer	MTNHP Threat Ranking 2021	Small	Serious-Moderate	High	Threat reported for 1 out of 10 Species Occurrences.
Invasive & Other Problematic Species, Genes & Diseases - 8.1 - Invasive Non-Native/Alien Species/Diseases	2025-11-28	S. Mincemoyer	Expert Opinion	Large-Small	Moderate-Slight	High-Low	Non-native species including introduced annual and perennial grasses.