Viguiera multiflora (Many-flowered Viguiera)
Conservation Status Rank Summary

Date Published: August 28, 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	2026-01-07	3023.1 km² D = 1,000-5,000 km²	2.360	MTNHP Range Maps	The 2026 MTNHP range map likely over-estimates the species actual range which is based on documented occurrences. Regardless, both estimates fall within the same categorical option for assessing Range Extent.
Area of Occupancy	2026-01-07	[10, 11] | 4km² cells D = 6-25 4-km² grid cells	2.060	MTNHP Databases	Of the approximate 96,004 2km x 2km grid cells that cover Montana, 10 cells contain observations of the species.
Number of Occurrences	2026-01-07	* B = 6 - 20	1.380	MTNHP Databases	Recent observations group into at least 7 observations, not including those in Park Co along HWY 212 near Cooke City, which may be recent introductions.
Population Size	2026-01-07	* DF = 1000 - 100,000 individuals	[2.360, 3.930]	MTNHP Database/Expert Opinion	Most observations lack populations estimates. However, one occurrence had an estimated 100-1,000 plants and another listed the plant as abundant. The statewide population is likely at least a few thousand plants.
# of Occurrences in Good Condition	2026-01-07	* U = Unknown	-		**Factor not used in ranking.**
% of Area Occupied in Good Condition			-		**Factor not used in ranking.**
Environmental Specificity	2025-03-01	Narrow B = Narrow; specialist or community with key requirements common	-	Expert Opinion	**Factor not used in ranking.** Assessed by Scott Mincemoyer
Rarity is calculated by averaging weighted factor scores: **((2.36 × 1) + (2.06 × 2) + (1.38 × 1) + ([2.36, 3.93] × 2)) / 6 = [2.10, 2.62]**					
Trends					
Short-term Trend	2026-01-07	* U = Unknown	-	Expert Opinion	**Factor not used in ranking.** Short-term trends are unknown. The species may have declined in some areas but the species may have also expanded into new areas as it is being used ornamentally and in wildflower mixes. As a result, it is being observed in areas that are outside of its presumed historical range.

Long-term Trend	2026-01-07	* U = Unknown	-	Expert Opinion	**Factor not used in ranking.** Long-term trends are unknown. It may have declined in some areas due to declines in aspen, habitat conversion and land-use practices.
No trend data used in this rank					

*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]		Successional dynamics, fire suppression and general decline in aspen and invasive species are all potential threats, though the significance of the threats are uncertain.
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
No individual threats data used in this rank						

Conservation Status Rank Calculation

Raw score

Rarity: ([2.10, 2.62] × 70%) + Threats: ([3.67, 5.50] × 30%) + Trends: (0.00) = [2.57, 3.48]

Calculated Rank: S3

Accepted Rank	S3
Author(s)	Scott Mincemoyer
Rank Approved By	Andrea Pipp
State Rank Reason	*Viguiera multiflora* is rare to uncommon in Montana, where it occurs at the northern edge of its historical range. Data on population sizes and extent are limited, and it is unclear if the species is still extant at some of the historical collection sites. Overall, population trends are unknown. Habitat conversion, fire suppression, and vegetative succession may have negatively impacted some occurrences. Additionally, non-native, perennial grasses may have invaded some of the species' habitat. More recently, the species is being used ornamentally and in wildflower seed mixes where it appears to be escaping and persisting beyond its historical range. Observations of *Viguiera multiflora* along Highway 212, near Cooke City in Park County, are likely introduced. As a result there is some uncertainty concerning the species' true status in Montana, though native populations still appear vulnerable to extipation. Research is greatly need to identify native versus introduced populations within and outside of *Viguiera multiflora*'s native range. Monitoring at any introduced population is necessary to determine if the plants are persisting and/or spreading. Surveys are needed at all occurrences to document population sizes, extents, and viability, habitat conditions, and potential threats. Additional surveys are also needed into areas determined as having potential habitat in order to improve our understanding of *Viguiera multiflora*'s distribution in Montana.

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=PDASTDH040

Predicted Suitable Habitat Model:
https://mtnhp.mt.gov/resources/models/?elcode=PDASTDH040

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

Research is greatly need to identify native versus introduced populations within and outside of *Viguiera multiflora*'s native range. Monitoring at any introduced population is necessary to determine if the plants are persisting and/or spreading. Surveys are needed at all occurrences to document population sizes, extents, and viability, habitat conditions, and potential threats. Additional surveys are also needed into areas determined as having potential habitat in order to improve our understanding of *Viguiera multiflora*'s distribution in Montana.

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
Natural System Modifications - 7	2026-01-07	S. Mincemoyer	Expert Opinion	Large	Unknown	Unknown	Fire suppression and vegetation succession may negatively impact the species in some areas.
Invasive & Other Problematic Species, Genes & Diseases - 8.1 - Invasive Non-Native/Alien Species/Diseases	2026-01-07	S. Mincemoyer	Expert Opinion	Large-Restricted	Unknown	Unknown	Invasive species, especially non-native perennial grasses may negatively impact the species and its habitat.