Uinta Chipmunk (*Neotamias umbrinus*) Conservation Status Rank Summary

September 12, 2024

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

Rarity and Trends

Rank Factor Date Assessed		Value	Score Data Source		Comments			
Rarity								
Range Extent	2024-01-19	Y: 6344.0 km²	3.140	MTNHP Range Maps	None			
Area of Occupancy	2024-01-19	551 4km² cells	4.130	MTNHP Modeling	None			
Number of Occurrences	2024-05-13	12	1.380	MTNHP Databases	Likely a severe underestimate.			
Population Size			-		Factor not used in ranking.			
# of Occurrences in Good Condition	2024-05-13	12	2.200	Expert Opinion	The majority of the species occurrences are in good condition			
% of Area Occupied in Good Condition			-		Factor not used in ranking.			
Environmental Specificity	2018-05-03	Narrow	-	MTNHP Species Rank Data Table	Factor not used in ranking. Within Montana, found in association with high elevation forest and tundra Methodology: NS (2003) Original Score: B			

Rarity is calculated by averaging weighted factor scores: $((3.14 \times 1) + (4.13 \times 2) + (1.38 \times 1) + (2.20 \times 2))/6 = 2.86$

Trends								
Short-term Trend	2018-05-03		-	MTNHP Species Rank Data Table	Factor not used in ranking. No data on trends available. Species continues to be observed at several sites along the Beartooth Highway but these may not represent natural populations. Methodology: NS (2003) Original Score: U			
Long-term Trend			-		Factor not used in ranking.			

No trend data used in ranking this species

Threats

Rank Factor Date Assessed		Value	Score Data Source		Comments	
Threats						
Overall Threat Impact		Low/No Threats	5.500		Threats Unknown	
Intrinsic Vulnerability	ic 2018-05-03 Not intrinsically -		MTNHP Species Rank Data Table	Factor not used in ranking. Not Intrinsically Vulnerable. Species matures quickly, reproductive frequently, and/or has a high fecundity such the populations recover quickly (5 years or 2 generations) from decreases in abundance. Species has good dispersal capabilities such that is Methodology: NS (2003) Original Score: Commonwealth of the production		

Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: (5.50) = 5.50

Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments		
No individual threats data used in ranking this species								

Conservation Status Rank Calculation

Raw score

Rarity: $(2.86 \times 70\%)$ + Threats: $(5.50 \times 30\%)$ + Trends: (0.00) = 3.65

Calculated Rank: S4

Accepted Rank	S4
Date Approved	2024-12-18
Approval Authority	MTNHP
Rank Justification	Species distribution is limited to the Absaroka and Beartooth Mountains of southcentral Montana. Structured surveys to determine trend are unavailable, but incidental observations confirm that is relatively common within suitable habitat.

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=AMAFB02190

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=AMAFB02190

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	Assessment		Criteria				
Factor	Category	Value					
General	General Status Status Quality		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)				
Status			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)				
	Dan an Ovelite	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)				
	Range Quality	Marginal	Range polygon defined, but may include or exclude notable areas where the species may or may not occur on the landscape				
Rarity		Poor	Range polygon not defined				
		Adequate	Species-habitat relationship is well-defined (e.g. relevant literature or robust habitat model available)				
	Habitat Quality	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				
		Adequate	Threat Impact is a single value (including "Unthreatened")				
Threats	Throat Ouglity	Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")				
inreats	Threat Quality	Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed				
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed				
		Current	Short-term Trend assessment date less than 10 years old				
	Recency	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				
Trends	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

None

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
No Threat Identified - 0.5 - Unknown/Undetermined Threat	2024-01-19	None	None	None	None	None	Species not well characterized in Montana
No threats data available for this species							