Yellow-pine Chipmunk (*Neotamias amoenus*) Conservation Status Rank Summary

September 12, 2024

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

Rank Factor	Date Assessed	Value	Score	Data Source	Comments		
Rarity							
Range Extent	Range Extent 2024-09-12 Y		3.930	MTNHP Range Maps	None		
Area of Occupancy	2024-09-12	8443 4km ² cells	4.810	MTNHP Modeling	None		
Number of Occurrences			-		Factor not used in ranking.		
Population Size			-		Factor not used in ranking.		
# of Occurrences in Good Condition			-		Factor not used in ranking.		
% of Area Occupied in Good Condition			-		Factor not used in ranking.		
Environmental Specificity			I		Factor not used in ranking.		
	Rarity	v is calculated by a ((3.93 × 1)	averaging v + (4.81 × 2))		tor scores:		
Trends							
Short-term Trend	2018-05-03		-	MTNHP Species Rank Data Table	Factor not used in ranking. No data on trends available Methodology: NS (2003) Original Score: U		
Long-term Trend	g-term Trend 2018-05-03		[-0.070, 0.070]	MTNHP Species Rank Data Table	Habitat is likely stable within +/- 25% since European settlement. Forest management practices may have impacted habitat quality but species is flexible and it is unlikely that there is 25% less habitat due to these perturbations. Methodology: NS (2003) Original Score: E		
Tren	ds score is calo	•	ng weighte 07] × 1)) = [-		long-term trend scores:		

Rarity and Trends

Threats

Rank Factor	Date Assessed	Value	Score	Data Source	Comments			
Threats								
Overall Threat Impact		Low/No Threats 5.500 No operational threats in the nex identified			No operational threats in the next 15-20 years identified			
Intrinsic Vulnerability	Intrinsic Eactor not used in ranking.							
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 Threat Identified	2024-09-12	Low	None	None	None	None		
Threat Tally: 0 - Very High, 0 - High, 0 - Medium, 1 - Low Overall Threat Impact* = Low/No Threats								

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

Conservation Status Rank Calculation

Raw score

Rarity: (4.52 × 70%) + Threats: (5.50 × 30%) + Trends: ([-0.07, 0.07]) = [4.74, 4.88]

Calculated Rank: S5

Accepted Rank	S5					
Date Approved	2024-12-18					
Approval Authority	MTNHP					
Rank Justification	Species is relatively common within suitable habitat and widely distributed across portions of the state					

Supplementary Information

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

Montana Field Guide Species Account: https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AMAFB02030

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=AMAFB02030

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	Malua	Criteria
Factor	Category	Value	Criteria
General	General 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	Status Quanty	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)
	Dance Quelity	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
	Threat Quality	Adequate	Threat Impact is a single value (including "Unthreatened")
Threats		Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")
Threats		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

Data to assess status are available

Summary of Information Needs

No additional information are needed at this time.

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	2024-09-12	None	None	None	None	None	None
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