Northern Pocket Gopher (*Thomomys talpoides*) Conservation Status Rank Summary

September 16, 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 Sourc		Comments		
Rarity							
Range Extent			-		Factor not used in ranking.		
Area of Occupancy	2024-09-16	17093 4km² cells	5.500	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			-		Factor not used in ranking.		
	Rarity	is calculated by a ((5.5)	averaging w 50 × 2)) / 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	2018-05-03		[-0.070 <i>,</i> 0.070]	MTNHP Species Rank Data Table	Habitat is likely stable within +/- 25% since European settlement 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 Sourc		Comments	
Threats						
Overall Threat Impact		Low/No Threats	5.500		No operational threats in the next 15-20 years identified	
Intrinsic Vulnerability	2018-05-03	Not intrinsically vulnerable	-	MTNHP Species Rank Data Table	Factor not used in ranking. Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has a high fecundity such that populations recover quickly (5 years or 2 generations) from decreases in abundance. Species has good dispersal capabilities such that e Methodology: NS (2003) Original Score: C	
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	2024-09-16	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: (5.50 × 70%) + Threats: (5.50 × 30%) + Trends: ([-0.07, 0.07]) = [5.43, 5.50]

Calculated Rank: S5

Accepted Rank	S5			
Date Approved	2024-12-18			
Approval Authority	MTNHP			
Rank JustificationSpecies is common within suitable habitat and is widely distributed. It face known threats.				

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=AMAFC01040

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=AMAFC01040

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					
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)				
			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	Threat Quality	Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")				
Threats	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 Unthreate				
		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	2024-09-16	None	None	None	None	None	None
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