Trout-perch (*Percopsis omiscomaycus*) Conservation Status Rank Summary

September 25, 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>

Rarity and Trends

Rank Factor	Date Assessed	Value	Score	Data Source	Comments			
Rarity								
Range Extent	2024-09-25	Y: 1164.8 km²	2.360	MTNHP Range Maps	None			
Area of Occupancy			-		Factor not used in ranking.			
Number of Occurrences	2024-09-25	2	0.000	MTNHP databases, iNaturalist	2 records available			
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	2024-09-25	Unknown	-		Factor not used in ranking.			
Rarity is calculated by averaging weighted factor scores:								

Rarity is calculated by averaging weighted factor scores: $((2.36 \times 1) + (0.00 \times 1))/2 = 1.18$

Trends							
Short-term Trend	2024-09-25		-		Factor not used in ranking.		
Long-term Trend	2024-09-25		-		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			-		Factor not used in ranking.		
Intrinsic Vulnerability	2024-09-25	Unknown	-		Factor not used in ranking.		
No threat or vulnerability data used in ranking this species							

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: $(1.18 \times 100\%)$ + Threats: (0.00) + Trends: (0.00) = 1.18

Calculated Rank: S1

Accepted Rank	SU
Date Approved	2024-09-30
Approval Authority	Montana Species of Concern Committee
Rank Justification	Species is found in the river systems east of Glacier National Park on the Rocky Mountain Front. Species presence is based on 2 records and very little is known about its range, trends and 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.

https://mtnhp.mt.gov/docs/Montana_State_Rank_Criteria_20211201.pdf

Montana Field Guide Species Account:

https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AFCLC01010

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=AFCLC01010

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 States Constitution		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 Quality	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)				
	Danas 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)				
	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 Quality	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				
Trends		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

Almost all information is needed on this species. Little is known beyond presence in the state.

Summary of Information Needs

Surveys to confirm presence, and establish baseline for trend analysis.

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	2024-09-25	None	None	None	None	None	None
No threats data available for this species							