# Brewer's Blackbird (*Euphagus cyanocephalus*) Conservation Status Rank Summary

December 27, 2023

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	Factor Date Value		Score Data Source		Comments	
Rarity						
Range Extent	2023-12-27	S: 380530.8 km²	4.710	MTNHP Range Maps	None	
Area of Occupancy	2023-12-27	9426   4km² 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 n		Factor not used in ranking.	
Environmental Specificity			- Factor not use		Factor not used in ranking.	

Rarity is calculated by averaging weighted factor scores:  $((4.71 \times 1) + (4.81 \times 2)) / 3 = 4.78$ 

Trends								
Short-term Trend	2023-12-20	3-12-20 [-9.6, 8.0%]		IMBCR	IMBCR trend in population estimates for Montana. "- 95% CI"			
Long-term Trend			-		Factor not used in ranking.			

Trends score is calculated by summing weighted short and long-term trend scores:  $(([-0.07, 0.00] \times 2)) = [-0.14, 0.00]$ 

## **Threats**

Rank Factor	Date Assessed	Value	Score Data Source		Comments			
Threats								
Overall Threat Impact			-		Factor not used in ranking.			
Intrinsic Vulnerability			-		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:  $(4.78 \times 100\%)$  + Threats: (0.00) + Trends: ([-0.14, 0.00]) = [4.64, 4.78]

Calculated Rank: S5

Accepted Rank	S5B				
Date Approved	2023-12-27				
Approval Authority	Heritage Program				
Rank Justification Species is common and population is stable					

## **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=ABPBXB5020

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=ABPBXB5020

#### **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		Value	Criteria				
Factor							
General	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)				
Status		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 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				
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")				
inreats		Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed				
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed				
	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				
Trends		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**

All data to assess rank are present and generally of good quality.

#### **Summary of Information Needs**

No additional data 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	
Ī	No threats data available for this species								