# Blue-gray Gnatcatcher (*Polioptila caerulea*) Conservation Status Rank Summary

December 4, 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 Value		Score Data Sourc		Comments				
Rarity									
Range Extent	2024-12-04	S: 12078.5 km²	3.140	MTNHP Range Maps	None				
Area of Occupancy			-		Factor not used in ranking.				
Number of Occurrences	2024-12-04	57	2.750	MTNHP Databases	None				
<b>Population Size</b>			-		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	2009-01-29	Narrow	-	MTNHP Species Rank Data Table	Factor not used in ranking. Limited to Utah Juniper and adjacent sagebrush.   Methodology: NS (2003)   Original Score: B				
	Rarity	is calculated by a ( <b>(3.14 × 1)</b>	averaging v ) + <b>(2.75 × 1)</b> )	•	tor scores:				
Trends									
Short-term Trend	2024-12-04		[0.000,MTNHPavailable, but it has increased0.070]Datapast few decades and is record		Structured survey data for the species are not available, but it has increased its range over the past few decades and is recognized as increasingly common in Montana.				
Long-term Trend	ng-term Trend 2009-01-29		0.140	MTNHP Species Rank Data Table	Utah Juniper habitat stable since European arrival, but species is increasing since first breeding detection in state in 1996.   Methodology: NS (2003)   Original Score: F				
Trends score is calculated by summing weighted short and long-term trend scores: ( ([0.00, 0.07] × 2) + (0.14 × 1) ) = [0.14, 0.28]									

# **Rarity and Trends**

# Threats

Rank Factor	Date Assessed	Value		Data Source	Comments	
Threats						
Overall Threat Impact			-		Factor not used in ranking.	
Intrinsic Vulnerability	2009-01-29	Moderately vulnerable	2.750	MTNHP Species Rank Data Table	Methodology: NS (2003)   Original Score: C	
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: ( 2.75 ) = 2.75						

#### **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: (2.95 × 70%) + Threats: (2.75 × 30%) + Trends: ([0.14, 0.28]) = [3.03, 3.17]

Calculated Rank: S3

Accepted Rank	S3B				
Date Approved	1997-03-01				
Approval Authority	Montana Species of Concern Committee				
Rank JustificationSpecies is rare within much of Montana, but populations have begun to es within the Pryor Mountains of South Central Montana and in in the vicinity Whitehall. Species has slowly increased in area occupied. Threats are not w understood. No additional data are needed to assess status for this species					

### **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=ABPBJ08010

Predicted Suitable Habitat Model: https://mtnhp.mt.gov/resources/models/?elcode=ABPBJ08010

# **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 Factor	Assessment Category	Value	Criteria		
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	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 Qualita	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	Thurset Quelity	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		
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

Trend is based on observational data and threats are poorly characterized. As the species is expanding in range, rarity is adequate but could be improved with more widespread survey effort.

#### Summary of Information Needs

Trend is inferred from a general increase in observations and occupancy within the state. Some monitoring has been conducted by Montana Bird Advocacy in the Pryor Mountains, but these efforts have not provided recent estimates of trend. Threats are poorly characterized and likely include fire and grazing, but how these impact this species are not described in the state. Species specific monitoring across the known range and in areas with potential for colonization on both public and private lands would address these needs. Monitoring of the species should continue as it is declining and to assess threat impacts.

# **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	2024-12-04	None	None	None	None	None	None
No threats data available for this species							