

Yellow-billed Cuckoo (*Coccyzus americanus*)

Conservation Status Rank Summary

December 4, 2024

For details on assessment and ranking methodology, see: [Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species](#)

Rarity and Trends

Rank Factor	Date Assessed	Value	Score	Data Source	Comments
Rarity					
Range Extent	2024-12-03	S: 289350.3 km ²	4.710	MTNHP Range Maps	None
Area of Occupancy			-		Factor not used in ranking.
Number of Occurrences	2024-12-03	19	1.380	MTNHP Databases	None
Population Size			-		Factor not used in ranking.
# of Occurrences in Good Condition	2024-12-04		2.200		None
% of Area Occupied in Good Condition			-		Factor not used in ranking.
Environmental Specificity	2009-01-27	Narrow	-	MTNHP Species Rank Data Table	Factor not used in ranking. Riparian specialist, but riparian shrub and open forest habitats are widespread. Methodology: NS (2003) Original Score: B
Rarity is calculated by averaging weighted factor scores: $((4.71 \times 1) + (1.38 \times 1) + (2.20 \times 2)) / 4 = 2.62$					
Trends					
Short-term Trend	2024-12-03		-	MTNHP Data	Factor not used in ranking. No monitoring data for this species
Long-term Trend	2009-01-27		-0.140	MTNHP Species Rank Data Table	While western North American populations have suffered catastrophic range reductions in the 20th century due to loss of riparian habitat through clearing for agriculture, flood control, and urbanization and because of low recolonization rates, there is go Methodology: NS (2003) Original Score: U/D
Trends score is calculated by summing weighted short and long-term trend scores: $((-0.14 \times 1)) = -0.14$					

Threats

Rank Factor	Date Assessed	Value	Score	Data Source	Comments
Threats					
Overall Threat Impact		Medium	3.670		Habitat loss, altered riparian hydrology through flood control, exotic species, and pesticides.
Intrinsic Vulnerability	2009-01-27	Moderately vulnerable	-	MTNHP Species Rank Data Table	Factor not used in ranking. Methodology: NS (2003) Original Score: B
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: (3.67) = 3.67					

Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments
Agriculture & Aquaculture	2024-12-04	Medium	Large	Moderate	High	Conversion of riparian forests adjacent to rivers to agriculture
Natural System Modifications	None	Low	Restricted	Moderate	High	Warning: Auto-rolled multiple Level 2 threats to Level 1
Threat Tally: 0 - Very High, 0 - High, 1 - Medium, 1 - Low Overall Threat Impact* = Medium						

*See [Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species](#) for calculation of Overall Threat Impact based on the number and impact of individual threats.

Conservation Status Rank Calculation

Raw score

Rarity: $(2.62 \times 70\%)$ + Threats: $(3.67 \times 30\%)$ + Trends: (-0.14) = 2.80

Calculated Rank: S3

Accepted Rank	S3B
Date Approved	TBD
Approval Authority	Provisional, not yet approved
Rank Justification	Species is an eruptive rare breeder across much of Montana, with few breeding records in the state. Populations west of the Continental Divide are currently listed as "Threatened" by the USFWS. There is no recent trend data for this species in the state. It faces low level threats from habitat degradation and loss of riparian and deciduous forests related to conversion to agriculture, ongoing impacts of dams on cottonwood recruitment and fire.

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=ABNRB02020>

Predicted Suitable Habitat Model:

<https://mtnhp.mt.gov/resources/models/?elcode=ABNRB02020>

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	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)
		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)
Rarity	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
		Poor	Range polygon not defined
	Habitat Quality	Adequate	Species-habitat relationship is well-defined (e.g. relevant literature or robust habitat model available)
		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
Threats	Threat Quality	Adequate	Threat Impact is a single value (including "Unthreatened")
		Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")
		Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed
Trends	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
		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

Data to assess species status are generally available, but short-term trend is not.

Summary of Information Needs

As results of ongoing monitoring are not yet available, this monitoring should be concluded, and the data analyzed to explore trend within the last 10 years.

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	Immediacy	Comments
Agriculture & Aquaculture - 2.1 - Annual & Perennial Non-Timber Crops	2024-12-04	Dan Bachen	Expert Opinion	Large	Moderate	High	Conversion of riparian forests adjacent to rivers to agriculture
Natural System Modifications - 7.1 - Fire & Fire Suppression	2024-12-03	Dan Bachen	Expert Opinion	Restricted	Moderate	High	Loss of deciduous forest embedded within ponderosa pine forest in Southeast Montana and western Montana.
Natural System Modifications - 7.2 - Dams & Water Management/Use	2024-12-03	Dan Bachen	Expert Opinion	Small	Moderate	High	Loss of riparian forest due to hydrologic changes on the Missouri river.