# Common Sagebrush Lizard (*Sceloporus graciosus*) Conservation Status Rank Summary

January 28, 2025

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 Source	Comments		
Rarity							
Range Extent	ange Extent 2025-01-28 Y: 1655		.65537.1 km <sup>2</sup> 3.930		None		
Area of Occupancy	2025-01-28	2455   4km <sup>2</sup> cells	4.130	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	2013-05-09	Narrow	-	MTNHP Species Rank Data Table	Factor not used in ranking. Narrow. Specialist Species seems to be largely dependent on rocl outcrops and sandy soils that connect them, b these habitats are relatively common across th species' known range in Montana.   Methodology: NS (2003)   Original Score: B		
Trends	Rarity	/ is calculated by a ( (3.93 × 1)	+ (4.13 × 2)	) / 3 = 4.06	tor scores:		
Short-term Trend	nort-term Trend 2013-05-09 0.0		0.000	MTNHP Species Rank Data Table	Presumed stable based on regular detection a handful of sites that have been revisited in southeastern Montana in the past 9 years. Methodology: NS (2003)   Original Score: E		
Long-term Trend	-term Trend 2013-05-09		0.000	MTNHP Species Rank Data Table	Rock outcrop habitats within the range of the species in Montana are within +/- 25% of pre European levels.   Methodology: NS (2003)   Original Score: E		
Tren	ds score is cal	•	ng weighte 2) + (0.00 × 1		long-term trend scores:		

# **Rarity and Trends**

# Threats

Rank Factor	Rank Factor Date Assessed		Score	Data Source	Comments				
Threats									
Overall Threat Impact		Low/No Threats	5.500		Degradation of habitat for small portions of population may be a minor threat to this species				
Intrinsic Vulnerability	2018-05-03	Moderately vulnerable	-	MTNHP Species Rank Data Table	<b>Factor not used in ranking.</b> Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance within 5- 20 years or 2-5 generations. Species has good dispersal ca   Methodology: NS (2003)   Original Score: B				
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	2025-01-28	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, Process, Rank Factors, and Calculation of State Ranks for Montana Species</u> for calculation of Overall Threat Impact based on the number and impact of individual threats.

### **Conservation Status Rank Calculation**

#### Raw score

Rarity: (4.06 × 70%) + Threats: (5.50 × 30%) + Trends: (0.00) = 4.49

Calculated Rank: S4

Accepted Rank	S4					
Date Approved	2025-01-28					
Approval Authority	MTNHP Staff					
Rank Justification	Species is apparently secure and not at risk of extirpation or facing significant threats in all or most of its range.					

## **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=ARACF14030

Predicted Suitable Habitat Model:

https://mtnhp.mt.gov/resources/models/?elcode=ARACF14030

# **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	Mahua	Criteria
Factor	Category	Value	Criteria
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 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)
	Dan an Onalita	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	Threat 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
		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 None

Summary of Information Needs None

# **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	2025-01-28	None	None	None	None	None	None