

# Western Tiger Salamander (*Ambystoma mavortium*)

## Conservation Status Rank Summary

January 27, 2025

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
<b>Rarity</b>					
Range Extent	2025-01-27	Y: 292792.3 km <sup>2</sup>	4.710	MTNHP Range Maps	None
Area of Occupancy	2025-01-27	15579   4km <sup>2</sup> cells	5.500	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	2018-05-03	Broad	-	MTNHP Species Rank Data Table	Factor not used in ranking. Although restricted to lentic sites for breeding, species is found across a range of habitats   Methodology: NS (2003)   Original Score: D
Rarity is calculated by averaging weighted factor scores: $( (4.71 \times 1) + (5.50 \times 2) ) / 3 = 5.24$					
<b>Trends</b>					
Short-term Trend	2018-05-03		0.000	MTNHP Species Rank Data Table	Populations appear stable based on lentic surveys conducted over the last 15 years.   Methodology: NS (2003)   Original Score: E
Long-term Trend	2018-05-03		0.000	MTNHP Species Rank Data Table	Since European arrival, riparian habitat has been altered and lost but it is unlikely that populations have changed significantly   Methodology: NS (2003)   Original Score: E
Trends score is calculated by summing weighted short and long-term trend scores: $( (0.00 \times 2) + (0.00 \times 1) ) = 0.00$					

## Threats

Rank Factor	Date Assessed	Value	Score	Data Source	Comments
<b>Threats</b>					
<b>Overall Threat Impact</b>		Low/No Threats	5.500		No operational threats in the next 15-20 years identified
<b>Intrinsic Vulnerability</b>	2018-05-03	Not intrinsically vulnerable	-	MTNHP Species Rank Data Table	Factor not used in ranking. This species has high fecundity, a low age of maturity, but recruitment can be low.   Methodology: NS (2003)   Original Score: C
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: <b>( 5.50 ) = 5.50</b>					

### Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments
<b>No Threat Identified</b>	2025-01-27	Low	None	None	None	None
Threat Tally: 0 - Very High, 0 - High, 0 - Medium, 1 - Low Overall Threat Impact* = Low/No Threats						

\*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:  $(5.24 \times 70\%)$  + Threats:  $(5.50 \times 30\%)$  + Trends:  $(0.00) = 5.32$

Calculated Rank: S5

<b>Accepted Rank</b>	S5
<b>Date Approved</b>	2025-01-27
<b>Approval Authority</b>	MTNHP Staff
<b>Rank Justification</b>	Species is common, widely distributed, and 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](https://mtnhp.mt.gov/docs/Montana_State_Rank_Criteria_20211201.pdf)

Montana Field Guide Species Account:

<https://fieldguide.mt.gov/speciesDetail.aspx?elcode=AAAAA01142>

Predicted Suitable Habitat Model:

<https://mtnhp.mt.gov/resources/models/?elcode=AAAAA01142>

## 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
No Threat Identified - 0	2025-01-27	None	None	None	None	None	None