Canada Lynx (*Lynx canadensis*)
Conservation Status Rank Summary

Date Published: April 23, 2026

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 Factor Rating	Score	Data Source	Comments
Rarity					
Range Extent	2024-05-13	152175.4 km² F = 20,000-200,000 km²	3.930	MTNHP Range Maps	None
Area of Occupancy	2024-05-13	6192 | 4km² cells H = 2,501-12,500 4-km² grid cells	4.810	MTNHP Modeling	None
Number of Occurrences	2024-05-13	10 B = 6 - 20	1.380	MTNHP Databases	None
Population Size			-		**Factor not used in ranking.**
# of Occurrences in Good Condition	2024-05-13	* C = Few (4-12) occurrences with excellent or good viability or ecological integrity	2.200		None
% of Area Occupied in Good Condition			-		**Factor not used in ranking.**
Environmental Specificity	2024-10-01	Narrow B = Narrow; specialist or community with key requirements common	-	MTNHP Data	**Factor not used in ranking.** Species uses mature forest with suitable prey species
Rarity is calculated by averaging weighted factor scores: **((3.93 × 1) + (4.81 × 2) + (1.38 × 1) + (2.20 × 2)) / 6 = 3.22**					
Trends					
Short-term Trend	2024-05-13	* G = Relatively Stable (=10% change)	0.000	USFWS 2023	Occupancy appears stable with a potential minor contraction in the Garnet Mountains
Long-term Trend	2024-10-01	* F = Decline of 10 - 30%	-0.070		None
Trends score is calculated by summing weighted short and long-term trend scores: **((0.00 × 2) + (-0.07 × 1)) = -0.07**					

*Values may be absent if not precisely estimated; factors may still be assessed for rank if a Factor Rating can be assigned.

Threats

Rank Factor	Date Assessed	Value / Factor Rating	Score	Data Source	Comments
Threats					
Overall Threat Impact		High / B = High	1.830		None
Intrinsic Vulnerability	2024-10-01	Not intrinsically vulnerable / C = Not intrinsically vulnerable	-	MTNHP Data	**Factor not used in ranking.** Species breeds annually and has good despersal capabilities
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: **(1.83) = 1.83**					

Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments
Biological Resource Use	2026-04-23	Medium	Large	Moderate	High	Some harvest practices can adversely impact the species. Forest management (including logging, mechanical fuels reduction, and prescribed burning) can negatively impact lynx by reducing and fragmenting available habitat for denning, foraging, and traveling. However, there has been substantial research on how forest management practices can promote high-quality lynx habitat.
Natural System Modifications	2024-05-13	Medium	Pervasive	Moderate	High	Large scale, high severity wildfires and fire suppression activities. Lynx can benefit from advanced regenerating forests produced post wildfire. However, historic fire suppression and climate change are leading to larger and more severe fires that may take longer to regenerate and cover vast areas lacking in habitat mosaics containing unburned refugia habitat. Unburned refugia is critical to sustain lynx populations until burns reach an advanced regeneration stage roughly 20 years post fire.
Climate Change & Severe Weather	2026-04-23	Medium	Pervasive	Moderate	High	Canada lynx are specialized to live in boreal environments with high winter precipitation during cold temperatures producing a deep fluffy snowpack. Warming temperatures are predicted to reduce the Montana lynx population from its current status as highly resilient to moderately resilient by mid-century, and to either moderately resilient or functionally extirpated by the end of the century.

						Warmer temperatures also threated lynx by contributing to increasingly catastrophic high severity wildfires, increased forest insect and disease outbreaks, and conversion of boreal spruce-fir forests to other forest types that may not provide suitable habitat for lynx.
Threat Tally: 0 - Very High, 0 - High, 3 - Medium, 0 - Low Overall Threat Impact* = High						

*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: (3.22 × 70%) + Threats: (1.83 × 30%) + Trends: (-0.07) = 2.73

Calculated Rank: S3

Accepted Rank	S3
Author(s)	Dan Bachen
Rank Approved By	Legacy Assessment: MTNHP Staff
State Rank Reason	Species is rare to uncommon across northwest and west central Montana. Is appears that occupancy is relatively stable and faces threats related to loss of mature forests and habitat fragmentation due to forestry practices, fire , and climate change.

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=AMAJH03010

Predicted Suitable Habitat Model:
https://mtnhp.mt.gov/resources/models/?elcode=AMAJH03010

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 status are available

Summary of Information Needs

No additional information 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
Biological Resource Use - 5.3 - Logging & Wood Harvesting	2026-04-23	Dan Bachen	SWAP Assessment	Large	Moderate	High	Some harvest practices can adversely impact the species. Forest management (including logging, mechanical fuels reduction, and prescribed burning) can negatively impact lynx by reducing and fragmenting available habitat for denning, foraging, and traveling. However, there has been substantial research on how forest management practices can promote high-quality lynx habitat.
Natural System Modifications - 7.1 - Fire & Fire Suppression	2024-05-13	Dan Bachen	SWAP Assessment	Pervasive	Moderate	High	Large scale, high severity wildfires and fire suppression activities. Lynx can benefit from advanced regenerating forests produced post wildfire. However, historic fire suppression and climate change are leading to larger and more severe fires that may take longer to regenerate and cover vast areas lacking in habitat mosaics containing unburned refugia habitat. Unburned refugia is critical to sustain lynx populations until burns reach an advanced regeneration stage roughly 20 years post fire.
Climate Change & Severe Weather - 11.1 - Habitat Shifting & Alteration	2026-04-23	Dan Bachen	SWAP Assessment	Pervasive	Moderate	High	Canada lynx are specialized to live in boreal environments with high winter precipitation during cold temperatures producing a deep fluffy snowpack. Warming temperatures are predicted to reduce the Montana lynx population from its current status as highly resilient to moderately resilient by mid-century, and to either moderately resilient or functionally extirpated by the end of the century. Warmer temperatures also threated lynx by contributing to increasingly catastrophic high severity wildfires, increased forest insect and disease outbreaks, and conversion of boreal spruce-fir forests to other forest types that may not provide suitable habitat for lynx.