

THREAT LEVEL

IDAHO FISH & GAME

Critically Imperiled:
Species is rare or declining



US ENDANGERED SPECIES ACT

Threatened



CANADA SPECIES AT RISK ACT

Special Concern



CALL TO ACTION

- ▶ Monitor populations and genetic diversity
- ▶ Protect forests and other key habitats
- ▶ Limit habitat dysconnectivity caused by development or outdoor recreation



North American Wolverine

Gulo gulo luscus

Photo Credit: David Moskowitz and Cascades Wolverine Project

OVERVIEW

Wolverines are solitary animals, have large ranges, and prefer undisturbed habitats. They are found in Northern Idaho, mostly in boreal forests, alpine, and subalpine ecosystems. Wolverine are best suited for colder climates and rely on snowpack for food sources and reproduction. As depth and duration of snowpack declines, wolverines may become subject to increased competition with other species. High heat and wildfires impact the health and biodiversity of the forest habitats preferred by wolverines in Northern Idaho. These and other challenges highlight the need for expanded research, habitat conservation, and monitoring.

CONSERVATION CONSIDERATIONS

VULNERABILITY RANKING

CLIMATE

High

NON-CLIMATE

High

CONFIDENCE

High

Physiological, phenological, or ecological factors to consider when planning conservation projects:

- ▶ Wolverines are opportunistic scavengers and omnivores, allowing them to switch diets if needed.
- ▶ Wolverines are specially adapted to living in snow, relying on seasonal snowpack to den and store food.



Vulnerability Rankings Methodology

These priority species have been assessed for climate and non-climate vulnerability using a process adapted from the Washington Department of Fish & Wildlife's Methodology for ranking the Climate Change Vulnerability of Species. WDFW's approach includes rating each species' climate sensitivity and exposure. These two rankings are then averaged for a climate vulnerability ranking. The Tribe developed a non-climate vulnerability ranking to capture species' relative risk and adaptability to factors such as human-caused development, predator/prey relationships, or low population numbers. Confidence rankings were assessed based on the availability of scientific research.

KEY THREATS

Habitat Degradation & Loss

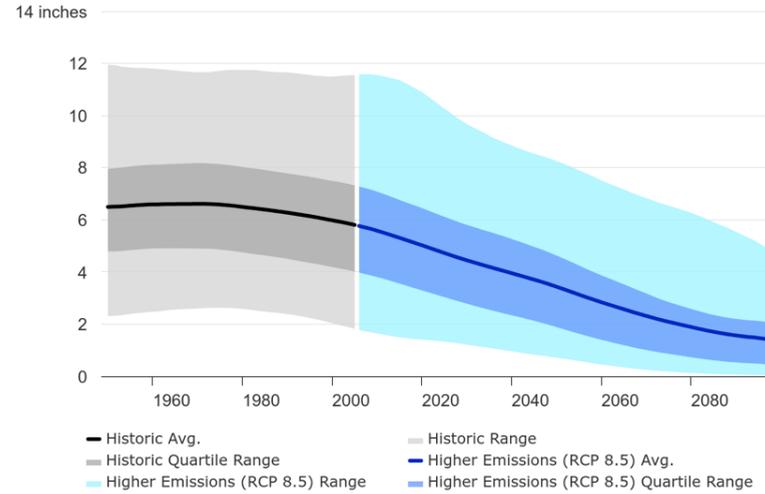
Poor forest management practices, increased outdoor recreation, and construction are limiting the availability and reducing the connectivity of important habitats. This degradation and loss can isolate populations, limit food availability, and increase competition with other species.

Climate Change

- ▶ Wolverines are accustomed to year-round cool temperatures and will struggle in warmer temperatures due to thick coats and large paws better suited for snow.
- ▶ Reduced spring snowpack reduces availability of food sources and impairs their ability to dig dens, which are essential for reproduction.
- ▶ Increased wildfires could lead to further isolation.
- ▶ Shrinking territory and isolation can impact genetic diversity, presenting additional challenges to resiliency.

SNOW WATER EQUIVALENT (DEC-JAN)

BOUNDARY COUNTY, ID



Source: Climate Toolbox. Accessed April 23, 2025

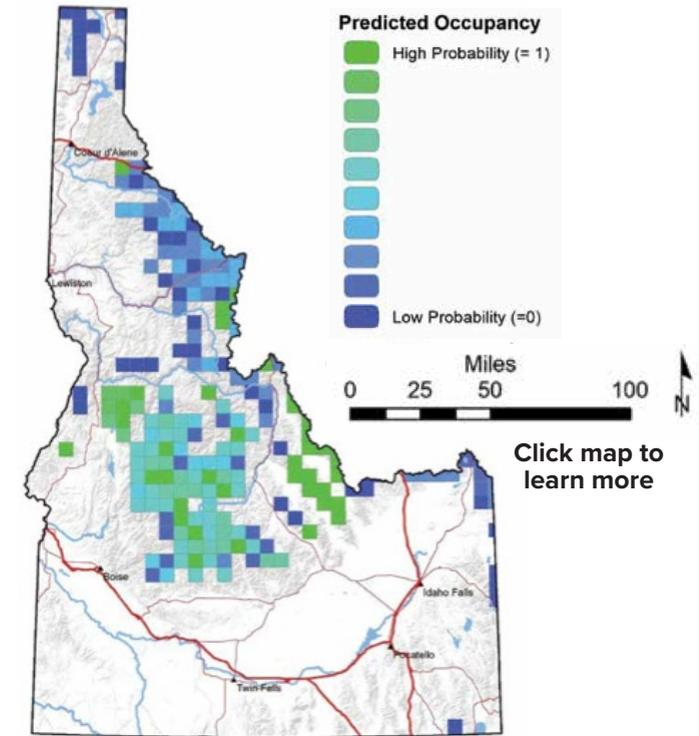
“EXTREME” FIRE DANGER DAYS (RCP8.5) KOOTENAI BASIN



Source: Climate Toolbox. Accessed November 18, 2025



Photo Credit: Idaho Governor's Office of Species Conservation



Source: Idaho Fish & Game

REFERENCES

- Idaho Fish & Game. (2023). *Management plan for the conservation of fisher, wolverine, and Canada lynx in Idaho*. Idaho Department of Fish and Game, Boise, USA.
- Idaho Fish & Game. *Gulo gulo (Wolverine)*. <https://idfg.idaho.gov/species/taxa/17557>.
- Idaho Governor's Office of Species Conservation. *North American Wolverine*. <https://species.idaho.gov/wildlife-species/north-american-wolverine/>.
- Wildfire chart: Source: Hegewisch, K.C., Abatzoglou, J.T. *Tribal Climate* web tool. Climate Toolbox. <https://climatetoolbox.org/>. (Accessed November 18, 2025).
- Snowpack chart: Source: Hegewisch, K.C., Abatzoglou, J.T. *Future Time Series* web tool. Climate Toolbox. <https://climatetoolbox.org/>. (Accessed April 23, 2025).
- NatureServe. 2025. NatureServe Explorer [Google Chrome]. NatureServe, Arlington, Virginia. Available <https://explorer.natureserve.org/pro/>. (Accessed May 24, 2025).

PRIORITY AT-RISK SPECIES KOOTENAI TRIBE OF IDAHO