

## THREAT LEVEL

### US ENDANGERED SPECIES ACT

Threatened



### CANADA SPECIES AT RISK ACT

Threatened



## CALL TO ACTION

- ▶ Monitor woodland caribou and predator populations
- ▶ Research how climate change affects lichen, a key food source
- ▶ Protect and conserve habitat



# Woodland Caribou

(Southern Mountain Population)

*Rangifer tarandus caribou*

Photo Credit: David Moskowitz (davidmoskowitz.net)

## OVERVIEW

High elevations, mature forests, and peatlands are essential habitat for Woodland Caribou. Reduced snowpack, warming temperatures, and altered fire regimes threaten caribou habitat and their chances of survival. Ongoing habitat degradation and loss continue to threaten the species. With intense conservation efforts, the population is slowly returning to the area. KTOI and other Ktunaxa and Tribal and First Nations' governments have been working with provincial, state and federal counterparts to reintroduce caribou into these areas. Efforts have proven successful so far and should continue well into the future.

## CONSERVATION CONSIDERATIONS

### VULNERABILITY RANKING

CLIMATE

High

NON-CLIMATE

High

CONFIDENCE

High

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

- ▶ Caribou populations are very small which limits adaptation and genetic diversity
- ▶ Caribou require a wide range for migration

### 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

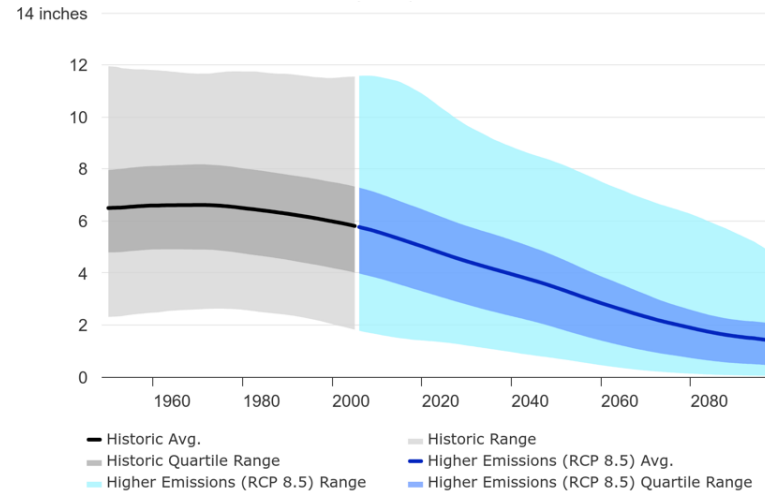
## Habitat Degradation & Loss

Logging, mining, road development, and construction are the main contributors to habitat loss. Increased timber harvest in areas has led to encroachment of elk, deer, and moose and attracted predators, such as wolves and bears.

## Climate Change

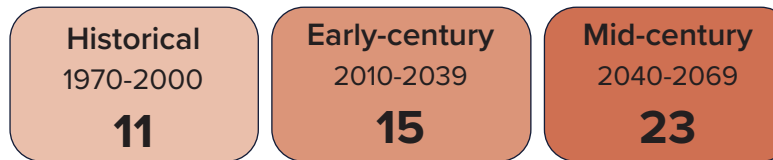
- ▶ Woodland caribou rely on snow to navigate high elevation areas during winter. Decreasing snowpack makes that more challenging.
- ▶ An increase in the intensity and frequency of wildfires threaten the old growth forests that woodland caribou prefer. New forest stands grow back after fires, attracting deer, elk, and predators.
- ▶ Warming temperatures may reduce availability of lichen, which is a primary food source for woodland caribou. Lichen has a symbiotic relationship with woody vegetation. As temperatures warm, woody vegetation may outcompete lichen for light and resources necessary for the survival of lichens. Warming temperatures also encourage deer and elk to move up in elevation, creating competition for food sources.

## SNOW WATER EQUIVALENT (DEC-JAN) BOUNDARY COUNTY, ID



Source: Climate Toolbox. Accessed April 23, 2025

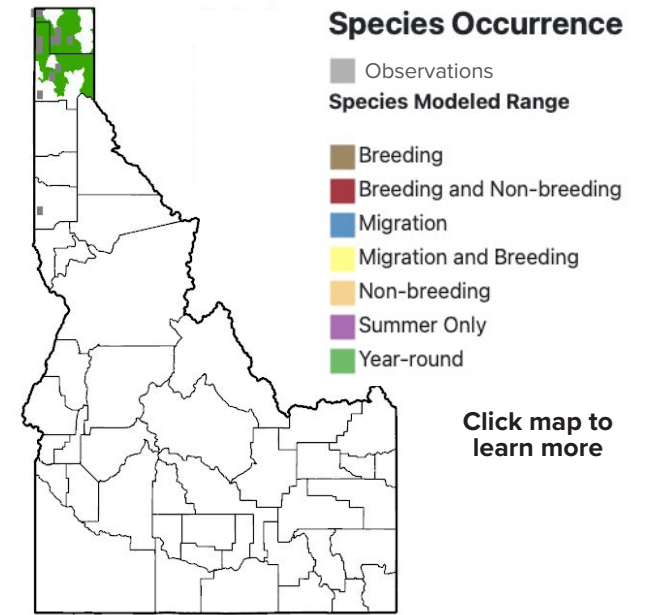
## “EXTREME” FIRE DANGER DAYS (RCP8.5) KOOTENAI BASIN



Source: Climate Toolbox. Accessed November 18, 2025



Photo Credit: David Moskowitz (davidmoskowitz.net)



Source: Idaho Fish & Game

## REFERENCES

Department of the Interior, Fish and Wildlife Service. (2019). *Endangered and Threatened Wildlife; Endangered Species Status for Southern Mountain Caribou Distinct Population Segment*. <https://www.federalregister.gov/documents/2019/10/02/2019-20459/endangered-and-threatened-wildlife-endangered-species-status-for-southern-mountain-caribou-distinct>.

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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