

# MANAGING RECREATION IN MONTANE WOLVERINE HABITAT

Wolverines are an important part of British Columbia's forest ecosystems, but they have declined severely since the early 1900's. With growing demand for recreational opportunities in wolverine habitat, better guidance is needed to effectively manage human disturbance, particularly in the Coast, Cascade, Columbia and Rocky Mountains.

*This document highlights key information for land managers, commercial recreation operators, and anyone who enjoys recreation in our mountain landscapes.*



Denning habitat\* is especially important for wolverine persistence. Wolverines hide their young from predators and the elements in maternal and natal dens for the first few months.

*\*Wolverine give birth and rear young in dens located near tree line.*



Recreational activity can lead a wolverine to abandon her den site, and compromise reproductive output.



Increased human activity ultimately reduces the availability of suitable denning habitat on the landscape.

## Disturbance risk depends on several, interacting factors:

### TIMING

JAN - MID MAY      MID MAY - JUL      JUL - DEC

HIGH      LOW



Wolverines are most sensitive early in the year, prior to and during denning. This period carries the greatest risk of den abandonment.

### FREQUENCY

> 5 GROUPS / 2 WEEKS      < 2 GROUPS / 2 WEEKS

HIGH      LOW



Wolverines have a low threshold for human disturbance. Risk occurs at low numbers but increases as the number of groups increase.

### DISTANCE (from den site)

< 2 km      2 - 5 km      > 5 km

HIGH      LOW



Activities that occur anywhere within or near denning habitat can disturb wolverines, but activities are higher risk the closer they are to a den site.

### FOOTPRINT

> 0.5 km / km<sup>2</sup>      0.1 - 0.5 km / km<sup>2</sup>      < 0.1 km / km<sup>2</sup>

HIGH      LOW



The larger the spatial extent of recreation, the more habitat is lost and the greater the impact to wolverines.

### PATTERNS OF USE

DISPERSED      CONFINED

HIGH      LOW



Activities that occur more consistently or are confined to a specific area (trail, track or road) are more predictable to wolverines.

## Together, these factors interact to produce the overall disturbance risk of an activity.

One factor may magnify another — for instance, the distance from the den site becomes more important if an activity is high frequency or dispersed.



**Following this risk management framework can help lower the overall disturbance level to wolverine so they can retain their breeding territories.**

To learn more about the framework and how different activities compare, read the full report here: [doi.org/10.22230/jem.2024v24n1a631](https://doi.org/10.22230/jem.2024v24n1a631)