

# Human Use Implications for Western Wolverine in the mountain National Parks

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Several considerations have led Parks Canada to monitor wolverines. First, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) lists Western wolverine (*Gulo gulo*) as a species of Special Concern. British Columbia lists wolverines as a Blue listed species that includes any indigenous species or subspecies considered to be of Special Concern (formerly Vulnerable). Alberta assigns wolverine as 'May be at Risk' of extinction or extirpation, and is therefore a candidate for a detailed risk assessment. Second, in the mountain National Parks (i.e., Waterton Lakes, Banff, Kootenay, Yoho, Jasper, Revelstoke/Glacier) historical records show wolverine presence, but little else about abundance and population demography is available for this elusive species. Third, the Mountain Parks receive over 5 million visitors annually making them among the most heavily visited National Parks in Canada (Den Otter 2003) and the influence of this level of human use on wolverine distribution and abundance remains unclear. Finally, it remains unfeasible to monitor and manage all species in an ecosystem, so wolverine may serve as an umbrella species to assess the integrity of montane cordilleran ecosystems in winter.

In 2000, Parks Canada began a three-year pilot study to monitor both wolverine presence/absence and amount of winter visitor use in the Lake Louise area. Human-use data was gathered by strategically placing trail counters to assess the quality and quantity of human use in the study area. Track detections and back tracking of intercepted tracks provided baseline information on wolverine presence and winter habitat use.

Preliminary data shows very low wolverine detections and given the apparent low wolverine densities in the area, track counts provide very limited information on wolverine relative abundance. Almost all wolverine activity was detected north of the TransCanada Highway (TCH), which bisects the study area, although historical records place wolverines south of the TCH. Human use activity in the landscape also showed predictable patterns, with most visitors staying on trails that are easiest to access.

Most notably, wolverine detections correspond to areas where there were lower amounts of human use.