

Best Management Practices to Avoid Wolverine

INCIDENTAL HARVEST & TRAPLINE DAMAGE

WOLVERINE, (*Gulo gulo*)

The wolverine is the largest terrestrial member of the weasel (*Mustelidae*) family. About the size of a medium-sized dog, this short-legged, stocky animal resembles a cross between a badger, skunk and a small bear. It has dark fur with a shaggy appearance and an often distinct broad band of lighter coloured fur that extends along the flanks, meeting at the base of a long bushy tail. Its head is broad and rounded, with black extending from the eyes to the tip of the snout and a band of light coloration across the forehead. It has a short stout neck, broad forehead, small eyes and short rounded ears.

The wolverine has a powerful build similar in size to a medium-sized dog: adult males usually weigh 14-27.5 kg and females 7-14 kg. It is adapted for survival in harsh winter climates with long and dense fur and large feet that allow it to travel easily through deep snow.

Wolverines are able to exploit a wide variety of foods, but can best be characterized as "scavenging predators" that rely mostly on scavenging during the winter months, while broadening their diets in the snow-free months. The wolverine has powerful teeth and strong jaw muscles that allow it to cut through frozen meat and bone. ■



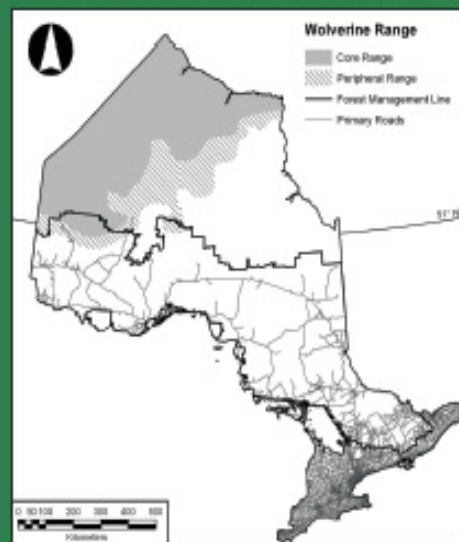
HABITAT

Wolverines occupy both forested and open habitats where they occur in the world. In Ontario, they reside in boreal and taiga forests. They require areas that are relatively remote from human settlement, snow cover that remains through the denning season in May/June, and a consistently available prey base, particularly large ungulates. Their requirements for den sites tend to be more specific in nature, with denning mothers using areas that

provide protection from predators, human disturbance, adequate insulation, and a prey base for rearing her young.

Wolverines have a well-deserved reputation as wanderers who can commonly travel very long distances. They are both symbols of the wilderness and inspiration for near mythic tales of their strength, ferocity and destruction of cabins and food caches. Such a reputation, while dramatic and

RANGE IN ONTARIO



Map prepared by Wildlife Conservation Society Canada. Data Source: Ontario Wolverine Project, a collaboration between the Ontario Ministry of Natural Resources, Wildlife Conservation Society Canada and The Wolverine Foundation.*

The wolverine is broadly distributed through boreal and tundra habitats in North America. In Ontario, this species once ranged as far south as the southern tip of Lake Huron. Now wolverines can only be found in the Northwestern portion of the province, from Red Lake – Sioux Lookout to the Fort Severn – Peawanuck area. ■

deeply rooted in legends and folklore, is largely undeserved, since most wolverines will go about their own business. ■

WHAT IF A CAPTURED WOLVERINE IS STILL ALIVE WHEN FOUND BY A TRAPPER

Sometimes when a wolverine has been caught incidentally, it will still be alive when the trapper comes upon it, particularly if it is a leghold set. It may be possible to set the wolverine free, if

it is caught by only a toe, for example. But many times a captured wolverine is aggressive and jumping around when caught and releasing it safely may not be possible. If the animal does not have

a reasonable chance for survival in the wild it should be killed in a humane manner. In such cases, you should notify your local MNR office or Enforcement Officer. ■

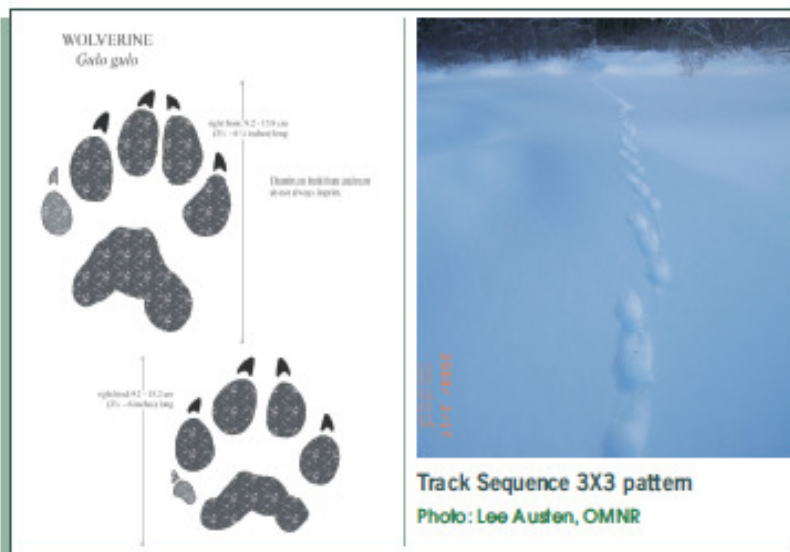
HOW TO TELL WHEN WOLVERINES ARE PRESENT ON A TRAPLINE

It is a rare event to observe a wolverine wandering in the wild, so most evidence for wolverine presence on a trapline will be from tracks. When sighted, wolverines are most easily confused with fishers, as both mustelids have a similar body form

and loping tendency. The features that generally distinguish a wolverine from a fisher will be its larger body size, pale stripe on the flanks, and a shorter, bushier tail. It is not always possible to differentiate between a wolverine that is passing through from one that

is "resident" on a trapline, but regular sightings over multiple winters generally indicate the latter.

Wolverines have large feet (6-9 cm wide) that do not sink much unless the snow is very feathery. All five toes and claws are usually visible, although not always the 5th toe on the front. The rear pad is visible on the front but not the rear track. The most common track sequences for wolverine appear in 2x2 (diagonal) and 3x3 patterns, both with diagonal orientation. Usually if followed for far enough, a 3x3 diagonal pattern appears at some time in the track segment; the middle track is made of one print on top of another. When walking in a 2x2 pattern, wolverine feet are much larger than marten and fisher, which have similar gaits. Wolverines are usually solitary and tracks tend to have extensive drag marks (often curved) on the outsides when walking. ■



Acknowledgements: Many thanks to trappers of Red Lake and Ear Falls who participated in this project by spending their personal time sharing their experiences, testing some proposed approaches, and bringing new ideas to the table. We would also like to acknowledge the trappers from Western Canada and the U.S. that contributed data for this project. The development and publication of this wolverine BMP fact sheet involved a partnership with the Ontario Fur Managers Federation, Red Lake District MNR, trappers in Red Lake and Ear Falls, Dr. Justina Ray with the Wildlife Conservation Society Canada and the Species at Risk Stewardship Program.

Assistance for this project was provided by the Government of Ontario.

The Importance of Your Feedback: All of the recommended approaches in this brochure could benefit from further field testing where wolverines are present. The direct input/feedback of trappers is a critical element in determining the effectiveness of the approaches and whether improvements can be made. This collection of beneficial trapping practices can be modified accordingly as additional trapper insight is acquired.



WHAT TRAPPERS CAN DO

If you are trapping for other species in an area where wolverines may occur you should take steps to avoid the incidental capture of wolverine. This will help to reduce the mortality rate of wolverines in your area.

Experience in the Red Lake/Ear Falls region of Ontario has demonstrated that the most common sets where wolverines are captured incidentally are leghold traps targeting lynx. Snares set for lynx and wolves, trail sets for otter where they cross over land between bodies of water, and occasionally killing

traps set for marten and fisher, are also known to incidentally capture wolverines. While wolverines have been caught in other sets, and may escape, these account for the majority of known trap mortalities of wolverine in Ontario.

Trappers may choose to remove snares, legholds, or killing traps that are most likely to capture a wolverine where its sign is evident. Alternatively, sets can be modified to lessen the likelihood of capturing a wolverine. Certain behavioural characteristics of wolverine

in contrast to lynx and wolves, for example, can guide how sets may be adjusted to favour capture of furbearers other than wolverine. The following recommendations have been compiled from trapper interviews conducted in the Red Lake and Ear Falls districts of Ontario and in other jurisdictions within wolverine range. Although none will independently guarantee the avoidance of incidental captures, they may collectively help to reduce the likelihood of incidentally capturing wolverines. All require continual testing and improvement. ■

► Baitpiles

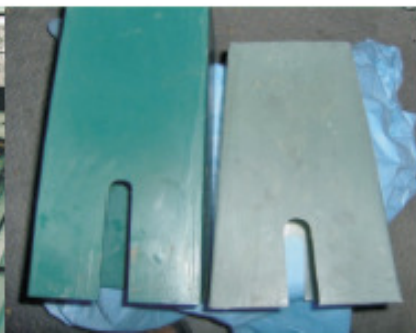
Trappers often use carcass or "bait piles" for the purpose of luring wolves to their trapline, but also to avoid the necessity of storing bait at home. Because they are scavengers (particularly in winter), wolverines are naturally attracted to such piles, and can come from long distances away to visit and devour the meat. On the one hand, this can serve to distract wolverines away from trap sets in the area and can therefore be beneficial. However, if snares or other traps are set in association with the bait pile, wolverines become vulnerable to incidental harvest if they are in the area. It is therefore recommended that snares and other traps that are close to bait piles be pulled if wolverines are known to be present in the area.

AVOIDING DAMAGE TO MARTEN BOXES

Although wolverines may reside on a trapline without bothering trappers, there are occasions when a wolverine will damage or

destroy trap sets and/or trapped furbearers, especially marten. While damage is most often limited to a handful of sets at a time, it can occasionally be more extensive. Traditional wooden cubbies with wire mesh are particularly susceptible to damage when tossed to the ground by a hungry wolverine that is after the bait and tears the mesh in the process. Repairing these boxes translates into unwelcome costs to the trapper in terms of time, money, and energy.

Trappers in the Red Lake/Ear Falls area have been testing plastic cubbies with solid backings as a potential means of replacing wooden marten cubbies in wolverine country. Plastic newspaper tubes could serve the same purpose, and have the additional advantage of being light-weight and stackable. Experience has already demonstrated that in cases where such sets have been thrown on the ground following a wolverine visit, they can simply be retrieved from the ground undamaged and re-set. ■



PHOTOS: Leschoid damaged traps, marten plastic box, lynx leghold or cubby set.

WOLVERINES AS A PROTECTED 'SPECIES AT RISK' IN ONTARIO

Wolverines are a threatened species in Ontario, and are protected under Ontario's Endangered Species Act. This prohibits the killing, harming, harassing, and capturing of wolverines. This designation was assigned because their occupied range within the province has declined by roughly 50%. The decline is attributed to human presence and resource development activities of which the wolverine population was not

capable of withstanding. Their low reproductive rates and large home range sizes make them sensitive, and slow to recover from this loss of individuals. Wolverine deaths along the southern fringe of their current range are particularly important because they are likely making a more direct contribution to further range recession. With this in mind trappers without established Treaty and Aboriginal rights

in their trapping area may not intentionally trap wolverine even if the wolverine is causing damage on the trapline. If a trapper without such rights captures a wolverine in a trap set for another species (s)he is required to report the capture to the Ministry of Natural Resources. If the animal was killed, the trapper may be required to surrender the entire wolverine including the pelt. ■

► Lynx Legholds

In contrast to wolverines, whose strength and tendency to thrash around when captured, lynx are relatively passive when captured in a leghold. Accordingly, a leghold can be modified to set the jaws open a bit to allow the wolverine to be able to pull its leg free, whereas a lynx will stay put. Additionally, cables could be tethered on a pole two feet apart to allow a wolverine to self-release, in contrast to a lynx.

► Lynx Snares

A lynx will tend to remain relatively calm after being caught in a snare, whereas a captured wolverine will try and use its strength to get out at all costs and jump and twist and turn. Therefore, trappers should build snares in such a way that they will readily break away when a certain amount of pressure is applied. Using break away snares with an s hook attached to the lock and the looped end of a snare, will allow the snare to fall off a wolverine when the pressure exceeds the strength of the s hook (see photo).

Snare pictured here is 1/16th breakaway snare (S-hook attached to cam lock and looped ferrule).



► Wolf Snares

Wolverines are not as wary as wolves and so tend to be easily captured in wolf snares. One way to reduce incidental wolverine harvest in wolf snares would be through adjustment of snare height. Since wolves are taller than wolverines, ensuring that the snare loop remains relatively high off the ground may make them less of a target than wolverine. This approach is challenged by new snow, which lowers the snare height, so trappers will need to be vigilant and adjust snare height as soon as possible once this occurs. An additional recommendation is to set wolf snares just off the trails, and place a distraction on the trail such as a shiny material, a pop can, or even a glove. Because wolves have a tendency to spook easily, they may dive right off the trail in response and get snared, leaving the trail open for the wolverine to keep walking.

► Otter Sets

Because wolverines are both comparable in size to otter and tend to wander in similar patterns in and around waterways, there is always a chance that wolverines will be captured in killing traps set on land for otter. Placing otter sets under water or downstream away from the beaver dam may help avoid capture of wolverine when they are present.

► Bait

Because wolverines in Ontario rely heavily on beaver for food, reducing the use of beaver and beaver castor for bait and lure may diminish the attraction of wolverine to sets made for other species. Whether increasing the use of species-specific gland lures and urines has the potential to reduce the attraction of wolverine to trap sets requires testing.