

Mountain School Tech Tips: Safe Glacier Travel



Kokanee Glacier, late summer

This is a picture of the normal ascent route to the Kokanee Glacier from the Smugglers Ridge area. On the left of the photo, just out of view, is the Battleship, and I am standing on the upper end of Smugglers Ridge, also known as the north ridge of Mount Kitchener. As you can see, the entire tongue of glacier that protrudes between these two rock buttresses is heavily crevassed. In fact, one large crevasse (hard to see in this picture) runs horizontally across the entire glacier tongue. It's also obvious, that there is no snow left on the glacier.

Environmentalists will see this as a sign of global warming. Indeed, the glaciers of the Selkirks are retreating at a great rate and undoubtedly global warming plays a role. For hikers however, there is a more pressing concern, large, poorly bridged crevasses that open further each year. It's obvious from this photo that the only snow bridging crevasses in an average year is the snow that fell in the last seasons winter. And that is not necessarily a large amount of snow.

So, how do you travel safely across the Kokanee Glacier? Well, if you were to ask veteran ACMG mountain guide Joe McKay¹, he would say "rope up when there is snow on the glacier, rope up when the glacier is covered by snow, rope up if the glacier ice has snow on it ..." and, well, you get the picture. The answer then, is obvious, take a rope, adequate rescue gear (prussics, ice screws, pickets/deadmen, carabiners, pulleys, etc.) and use it. The rope will prevent long falls into crevasses, it will also (if properly employed) prevent any member of your party from being wedged into a narrow wet icy chasm from which there is little hope of escaping alive.

If you choose **not** to use a rope across the Kokanee Glacier make sure you and everyone else in your party is fully aware of the risks. The vast majority of unroped crevasse falls - particularly those where the fallen individual is not wearing a harness - result in fatalities either from the fall or from hypothermia. Extricating someone who has become wedged in an icy crack is no easy feat and frequently requires the use of anti-freeze to melt the ice surrounding the victim. It's a rare hiking party that is equipped for such a rescue.

The KMC runs crevasse training workshops every year, free of charge and open to every member. Learning safe glacier travel techniques is neither hard nor particularly onerous. In fact, in a single day, you can get a good understanding of the basic principles. A small amount of extra gear is

¹ View Joe's entertaining and instructive climbing videos go here:
<http://www.youtube.com/user/mikebarter387#p/u/40/IMDFRQ91NXg>

required, but most of it can be acquired relatively cheaply (a perfectly serviceable glacier harness can be made from a short piece of webbing, for example). And frankly, most of us value our lives at more than \$50. I know I do.