

## **Mountain School Tech Tips: Handrails, Backstops and Tick Off Features**

If you are like me, you might feel as if you spent most of this winter nosing about in a complete fog. Certainly, I had my share of challenging trips this winter trying to navigate through high mountain terrain in various degrees of white-outs ranging from can't see your hand in front of your face to if I squint a real lot I can just barely (I think) see the ridgeline over there. After a couple of particularly spectacular days out when we barely knew where we were all day, I reverted to some serious pre-trip planning using some old-fashioned, but still highly effective navigational techniques to avoid further embarrassment. Of course, I'm referring to handrails, backstops and tick-off features.

Handrails are clear terrain features running parallel to your desired route that you can easily follow. Some examples are ridgelines, creeks, or cliff bands. A handrail can be followed to a backstop – a perpendicular terrain feature that signals a change in course or the start of the next leg of your journey. A backstop might be a ridgeline, a creek or an old roadbed. Along the way, you'll also likely make use of tick-off features, easily recognizable terrain features that indicate you are on route, such a creek crossing, climbing a short steep hill or passing a lake.

If you've worked your route out ahead of time, traveling from one handrail to another, using backstops and tick-off features to stay on route, it makes mountain travel much easier, safer and faster. There's not much worse than standing about in a blinding snowstorm in gale force winds on the top of a ridge somewhere with the entire 1:50,000 topographical map flapping about in the breeze trying to work out where you are or what your next handrail should be.

Breaking the journey into legs also helps. On our March chicks ski trip, our group had our route to the top of White Queen broken down into a series of clear legs each with distinctive handrails, backstops and check-off points. Our first leg involved weaving a route through the cross-country ski trails to the jumping off point for Hummingbird Pass. The cross country trails are the obvious tick-off features here, and we also had the terminus of the cross-country trails for a backstop. Traveling through forest above Hummingbird Pass we were able to use Hummingbird Pass itself as a handrail, and the old mine site is a clear tick-off feature and indicator that it is time to change direction. The small creek that drains the valley between White Queen and Mount Beattie was a handrail to reach our next backstop, - the ridgeline between White Queen and Mount Beattie - and the marsh we passed along the way was a good tick-off feature which confirmed we were on route. Our backstop, became the handrail of our next leg of the journey as we used the north ridge of White Queen as a handrail to reach the summit.

You can get more navigational tips from these books which are available in the KMC library:

- *Technical Handbook for Mountain Guides*
- *Staying Found: The Complete Map and Compass Handbook*

- *Be Expert With Map and Compass.*