

Mountain School Tech Tips: To Knot or Not to Knot

Last summer while descending the standard rappel route after climbing the NW ridge of Sir Donald, an American climber died after rappelling off the end of her rope and falling 300 metres between the fourth and fifth rappel stations. Like many rappel accidents, this one was totally preventable, a knot in both ends of the rappel rope, and the use of some type of backup device such a piece of cordellette hooked to the climbers harness and attached to the climbing rope with either a prussic knot or a autoblock knot would have precluded this fatality.

So why don't more climbers put knots in the end of their climbing ropes while rappelling or use autoblock back-ups on rappel? The most common arguments advanced are (a) knots in the ends of the climbing rope may cause the rope to get hung up when throwing the rope down at the start of the rappel, (b) you might forget to remove the knots from the ends of the rope when pulling the rope at the end of the rappel and thus end up with a stuck rope, (c) putting an autoblock on the rope takes time, and (d) the autoblock knot may jam. If you are worried about (a), uncoil the rope as you rappel, (b) requires you to use some brain power - sorry, there is just no way around that one, (c) with practice, this takes less than one minute and can be done while the first person is still on the rappel rope, thus not taking any extra time at all, and (d) put the autoblock knot below the rappel device and use an autoblock knot instead of a prussic knot - autoblock knots are easier to release when weighted.

Practice your techniques in a controlled environment ahead of time so that when you come to be rappelling off the west ridge of Gladshiem in an electrical storm like we were last summer, everything goes smoothly when you really need it to.

Check out this technical note for a full discussion of the pros and cons of various methods of safeguarding rappels

<http://www.rescuedynamics.ca/articles/pdfs/rappel.pdf>