## **Route Planning and Navigation**

 Identify factors to be considered when planning a route. Purpose of the journey. Participants. Mode(s) of transport. Available resources. Climate. Terrain. Level of challenge. Dangers. Bailout/Plan B opportunities. Resupply. Distance. Time available. Shuttle/drop of and pickup. Legal. Points of interest.

Wilderness experience i.e. stay out one more night or are we in a rush to get back to the Stewarts/bar/TV etc. This was a particular problem with an EXP student who was interning for a very cool wilderness travel company. They consistently suggested to clients and staff "let's go just a bit further and we can be back in town tonight". Once the idea was planted clients at least started considering it as an option (this rarely happened if it was not suggested as an option). The ideal plan was to set camp at an idyllic spot while still in the wilderness, have a special breakfast and relaxing last day of travel with the clients, plenty of time for informal debriefs while traveling etc. This is an important part of every trip, it doesn't matter how good the trip was, it will be remembered based on the last day. What resulted was a stressful last day in the wilderness, often an extra day kicking around town waiting for transport out (leading to extra expense for the clients and the company), clients realizing they had missed 24 hours of what they had paid for, poorer reviews, fewer return customers, and no future internships or job opportunities for EXP students

- 2. What is the role of route planning in facilitating navigation? Choosing a route that is easy to navigate/not get lost on, rather than the shortest or easiest one.
- Strategies e.g. orienteering terminology/tactics Backstops, aiming off, controls, etc. see "orienteering terminology" document in useful stuff. Timing/pacing – see #5, contingency plans link to communication chapter.
- Discuss; "limit of adequate reserve"? See article on Useful Stuff "Crux points" is it just the danger points? Hint – no. "Go / no go" follow protocol or make decision in the field? etc.
- 5. Estimating speed, distance, time. Pacing vs. timing. What are the variables that affect speed? Naismith's rule etc. How many steps for 100m? When would you use this over timing? Maybe obvious how they are relevant to relevant to route planning but how would these be used while navigating? Probably more relevant while bush-whacking; using them as a back stop, when to alter course (one compass bearing to another) to avoid falling off the cliff/walking through the bog/paddling over a dangerous reef, etc.?

- 6. **Resources: maps** scale, compare publishers, what to look for, **compass** function, features, and how to choose, **guide books** do they show all possibilities or just the nice/honey pot bits, will they help you avoid crowds, does it take away from the "expedition/exploration" side of it (shouldn't you be considering writing the guide book?)?, **GPS** Location format, datum? **What other resources are available**? Google earth, etc.
- 7. Coordinate system e.g. UTM/UPS, Lat. /Long. What do other countries use?
- 8. When are legal permits required? How do you get them? How long will it take to get them?