

Backcountry Problems – Fatigue

By Rich McAdams, January 2008

Beyond all the assorted backcountry medical emergencies as well as those pesky “routine” accidents, and assuming you employ skills and methodologies that minimize the chances that you will become lost, there are still a myriad of other problems backcountry travelers experience. As what typically occurs, and weighing heavily on expert opinion, hindsight suggests that many of these other problems are preventable.

I believe that if not altogether prevented then at least the frequency or severity can be reduced. Regular thought on your part anticipating what could potentially go wrong, will allow you the opportunity to address proactively. With that said, here is my personal

Top Four Problem List:

- Fatigue
- Equipment failure
- Breakdown in group dynamics
- Lack of contingency planning

In preparation for a hike, it would appear that many believe that they already do a great job addressing this list, some feel that these problems are inevitable (that this is the risk we accept when we hike), and others simply lack the experience and insight to adequately consider what could be done to prevent. My goal is to share thoughts with this later group, while hoping the first two groups sneak a peek.

First, can we completely prevent these problems from occurring? The answer depends on whom you talk to.

Often, the media implies that the conclusions drawn during the rescue group’s Post Incident Reviews suggest that all problems are preventable. For example:

- Lightning accident? There was weather coming in ...shouldn’t have been there.
- Avalanche? With those snow conditions ...shouldn’t have been there.
- Bear mauling? ...shouldn’t have been there.

Perhaps, but beyond these obvious conclusions, one should try and examine the more subtle cause and effect. In the real world, sometimes stuff happens. The best-laid plans, developed by the most experienced mountaineers, sometimes do not turn out well (no argument here). However, since hiking and mountaineering are all about the unknown, managing the risk is something that we need to do to minimize an unfortunate outcome. So, how do we minimize the chances that these incidents might occur?

There is usually no disagreement within the outdoor community that our most important piece of equipment in our hiking/climbing/mountaineering arsenal is the brain. For all practical purposes, this point of view is irrefutable. The brain is our most indispensable asset.

Emergency Situations

Backcountry travel requires thought, preparation, and an on-going discussion about the “what ifs.” I call this proactive thinking. Since the majority of time during our outdoor adventures consists of that methodical walk up the trail, there is certainly plenty of mental downtime. So, in addition to deciding what you will do at the next rest stop, and between humming verses of, say, Old Suzanna, wouldn't it be apropos to give some thought to the “what ifs?”

So, with all that said I have selected one item from the above list of four with the fundamental premise that when the pace of the group begins to slow, the ability to reach the destination is at risk.

Fatigue

Although people usually contemplate fatigue in terms of how it affects them, I am suggesting that you monitor, and are quite aware of, the fatigue quotient of your teammates. Said differently, here is an opportunity for everyone to support and take care of each other. So, as part of your pre-departure trip planning:

1) Consider the physical conditioning and nutritional habits of your team:

➤ **Has someone been cutting corners with their conditioning program?**

We all have. We all do. Life happens. So in the interest of honesty, let's just admit that we spend more time at the pie shop than at the gym. Getting that understanding out on the table will allow the proposed hike to be tweaked and adjusted to accommodate those hikers not yet at optimal conditioning.

An individual that is the group's token turtle (or for that matter even the individual who is an unbounded cornucopia of energy), can result in a hike that is not fun for anyone.

➤ **What did you eat the night before? What did you eat this morning?**

Eating a well balanced diet the night before can build up the reserves necessary for a long day out. A well balanced diet would consist of all the necessary fats, proteins, and carbohydrates. These components interact and will have interdependencies with each other, so eliminating any one from the evening dinner would not be prudent.

The morning breakfast, on the other hand, should be much more carb-oriented as the energy (calories) burned on the hike come from the carbohydrates. Skipping breakfast because you have no appetite at 5 am is understandable, so consider bringing something in the car to eat during the drive to the trailhead. (See the Nutrition chapter.)

2) Avoid selecting an overly ambitious hike:

➤ **The peculiarities of the Colorado environment**

Climbing in Colorado has several nuances that can sneak up on you. First, you will be hiking in somewhat steep terrain (these are the Rockies), then at altitudes

starting at 9,000 feet and occasionally exceeding 14,000. Even in mid-summer, being at altitude can result in an environment that is cooler, colder, or even downright bitter. All of these variables can take their toll, and all will have an impact on the baseline strength, energy, and stamina of your group.

➤ **Consider the time you have allotted for the hike.**

As the collective pace of the group slows (think steepness, altitude, wind, and temperature), will there be enough daylight to complete your climb? Certainly, there is more wiggle-room in the summer, because summer is more forgiving with up to 15+ hours of daylight. In winter, daylight can be less than nine hours.

Of course, everyone plans for an early start, but one trick to conserve daylight is to get a pre-dawn departure from the trailhead. If the trail is good, with no technical obstacles, and the route finding is straightforward, the group may be able to get a few miles under their belt before sunrise.

3) Understand and accommodate the technical abilities of the other trip participants:

➤ **Gauge the route.** Is grandma really up to the east face of Long's Peak? Since all guidebooks will reference some hiking/climbing classification system, refer to them to gauge the technical aspects of your trip. The most commonly used system consists of text similar to:

First and second class: Typically on-trail (1st class) or easy off-trail (2nd class) hiking. Most people don't give 1st and 2nd class hiking much thought.

Third class: This is harder hiking that enters the climbing realm, and consists of sections where one will likely get into a scrambling mode. Here we appreciate an occasional handhold for balance, and the use of hands and feet to scramble over boulders with short (slightly) steep sections is not atypical. Folks may opt to wear a climbing helmet for protection in case of rock fall. Some might discover they have an uncomfortable feeling with respect to their perception of height and the consequences if they slipped.

Fourth class: This is serious climbing and usually consists of sections of very steep terrain. These steep sections are always exposed. (In this context exposure refers to how hard and/or far you would go if you fell..) In the fourth class arena you would most likely use rope protection for your ascent and rappelling for your descent, in addition to the now mandatory climbing helmet.

Fifth class: Forget about it. Picture vertical terrain, very exposed long falls, and hard landings.

➤ **Stay conservative.** Just because you can (probably) do the hike, does not necessarily mean others in your group will be able; and if potentially able, will they have an enjoyable experience. If you anticipate you may need to push your own abilities, keep in mind that this could easily get someone else far out of their zone of comfort.

4) Considerations during the trip:

So far, the discussion has revolved around the pre-trip planning process. The hike is matched to the people and the people are matched to the hike. Your proposed climb is not overly ambitious and it appears within the technical abilities of the group. Very good, Grasshopper.

The next area of consideration is, of course, what occurs during the hike:

➤ Food and water

Most people clearly understand the need for food and water while hiking. In practice, however, it may not be a crystal clear understanding. It's all about nuances. Although many can successfully complete an easier hike with little food and some water, to thrive in this sport requires a more conscientious and determined effort.

For the more strenuous hikes, and especially for the more demanding climbs, food and water intake almost always needs to be increased. To be fair, water intake has become less of a concern over the last few years with the widely adopted in-pack water bladders with hose (Camelbak, Platypus). Not only can these bladders reach up to three liters, but the convenience of the external hose allows people to drink frequently while hiking. In the old days, when the only option was to carry traditional water bottles inside the pack, water intake occurred only when the group did their rest stop.

Conversely, food consumption, critical to maintain energy, still has a ways to go. Again, in the old days (I remember them well) the mantra was to eat frequently, but frequently was always in the eyes of the beholder. A new phrase that seems more spot-on, with less room for individual interpretation, is to eat constantly. This suggests that at no point are you not eating; it especially implies that you are eating while hiking. To accommodate eating while hiking, one can choose from the many varieties of hard candy, or choices from the new high-tech, high-carb soft products (like Clif Shot Blocs, GU Gel) which can be sucked on while hiking. In addition, there are varieties of water additives that can provide energy while taking those frequent drinks. There is really no excuse these days for hikers to experience the energy peaks and valleys (i.e. the blast, then bonk) so common in days of old. It is easier today to maintain a more constant and elevated level of energy. (See the Nutrition chapter.)

During the hike is not the time to diet or, for example, increase fiber intake. If one needs to cut back on their calories or increase their fiber, that can be done Monday through Friday. One should eat, and one should eat those food items that consist of high carbohydrates. (Another note of honesty: I enjoy eating a sandwich during the lunch stop, or snacking on a piece of cheese during a break, as I have a personal preference for something that will balance/offset all those carbs. So, I sneak in a little fat/protein when no one is looking, but this is in addition to the carbs... not instead of.)

Conventional wisdom implies that food and energy requirements are less important on the descent. Sure, we all agree that it is physically less demanding to

hike downhill, but if the conditions of the descent requires control, balance, and sure-footedness (and I believe most do) then the down-hike also requires food for energy. In other word, there is no dispute that the climb to the summit requires carbs to keep those leg muscles working – here we need raw power. Remember that the descent back to the trailhead also requires the muscles to work, but this time for balance and control. Do not neglect your energy requirements during the hike down.

And as a last comment for perspective: Everyone needs to consider that the best hiking foods, whether a traditional energy bar or one of those state-of-the-art high tech gel products, will do you no good if you can't eat it. Considering your personal taste, along with your individual diet requirements and limitations, suggests that there is no one perfect hiking menu. Use all the various recommendations as points of reference, but make adjustments to accommodate your personal dietary and nutritional needs.

➤ **Rest stops and lunch break.**

Although periodically the team will stop to allow everyone to group up, get organized, and rest, not everyone makes the most efficient use of the time allotted. Yes, the group leader does need to be flexible, but the group participants need to assume the primary responsibility to meet their own needs. For example, given a 10-minute break, if you as a hiker spend five minutes socializing, then a few minutes digging out the camera to take that photo, will you still have time to eat, drink, potty, put on sunscreen, check the map and compass, then add or remove clothes?

Since hiking and climbing are serious business, some people find that they need to make a mental list of what they will do at the next stop. And, since there may not be enough time to work through the entire list, what are your priorities? Given a five-minute stop, what do you need to do first?

Of course you can always reply that the break is as long as you want it to be, so you will always be able to complete your list. Fine. If you are doing a casual hike with friends and family? Sure. However, this approach works less well when you are hiking with a group that has a particular destination in mind, and is reasonably determined to reach that destination. So, for the sake of good group dynamics, common courtesy, and to demonstrate a level of professionalism, taking a more methodical approach to breaks and lunch stops may be appropriate.

If you enter a rest stop with your two most critical considerations in mind (first potty, then eat), followed by those that are simply important (get oriented using map and compass), then using any time left for the remaining activities (clothing adjustment, sunscreen), you will at least have taken care of the issues that are important for comfort, energy sustenance, and safety. Hmm, no photo and no socializing? Well for this particular stop, there just wasn't time to do it all.

What if you are told that several in your party are beat, and may not be able to go on? Before giving it up and turning back, weather permitting of course, perhaps you decide to take an extended break. This may be a good time for an early lunch.

Emergency Situations

Allow the hikers (or yourself) to sit, put on some extra clothes if necessary, get comfortable and eat (Eat them carbs!). Many times, after a chance to recuperate, the team will decide to continue on to the destination; they just needed a chance to rejuvenate.

➤ **Modulate the pace.**

Usually this means slow down to better accommodate the group, but more so it implies adjusting the pace to maintain constant forward momentum. Sprinting a hundred feet up a slope only to then stop for several minutes to catch your breath, is a guaranteed path to fatigue. As the slope becomes steeper, a better approach would be to transition from your ordinary hiking pace to a rest step pace. (See Dry land Travel.) The rest step is a slower, more methodical pace that will allow you to maintain your forward progress for extended periods. Slower pace, fewer stops, summit success!

➤ **Turn back if the summit or destination seems unrealistic.**

Although there are countless legitimate reasons to turn back, in the context of this article we are discussing fatigue. Yes, weather and any anticipated technical challenges are frequent considerations, but the residual strength, stamina, and endurance levels of the group are also critical.

Until one develops that practiced eye, that is the ability to look up toward the summit and accurately estimate the time to arrive, the vastness of the Colorado Rockies can lead to misguided judgment. Is the destination really 15 minutes away or – at the group’s pace and considering the conditions – is it really more like one hour? If the team is somewhat whipped now, what would you expect after another 60 minute ascent with the corresponding 30 minute descent? Stated differently, what would you anticipate the condition of the group to be 90 minutes from now, standing in this same spot, with the remaining distance back to the trailhead still to go?

By considering the comments in this article, it should be clearer that more thought needs to be put into selecting the appropriate destination and the appropriate route to that destination, all based on the strength, stamina, and technical skills of the participants. In addition, during the hike itself there are considerations, if implemented, can maximize the chance of reaching your desired point. Even if the destination ultimately becomes unrealistic, you have a few more considerations necessary to keep the group safe.

So, regardless of when or why you begin your descent, a tired group is likely to become slower and more tired, tends to be more prone to slips and falls, the team may accidentally get separated thereby losing sight of each other, and there could be route finding challenges. Lastly, take precautions to minimize the chances that you become a victim of those pesky “routine” accidents.

What will you do, Grasshopper?