

Backcountry Problems – Getting Lost (or Staying Found)

By Rich McAdams, January 2008

Throughout the years, there have been many books and articles written with respect to getting lost. Most do a great job discussing the skills and techniques pertinent for “lost prevention,” then offer tips and additional techniques should you find yourself lost anyway (even after all they have done for you).

After 30 years of high peak climbing in Colorado, and making many of these mistakes, I have identified what I feel are the critical few. Although I would suspect that other skilled Colorado mountaineers have their own personal How to Stay Found list, there should be significant overlap so feel comfortable using these comments as your starting point.

Minimize the Chances of Getting Lost (or Maximize the Chances of Staying Found)

The art of staying found depends predominantly on being proactive and constantly being aware of what could go wrong. At first, the thought process might seem cumbersome, but as your skills sharpen, your judgment improves, and you begin to develop that mountaineering intuition, you will find that the work involved becomes minimal. With practice, a quickie bearing using the compass, an orienting glance at the map, and an eyes-up observation of the real world takes, all told, perhaps a minute.

➤ **Chart Your Hiking Progress**

First, become proficient with the map and compass. Sure, it’s initially challenging for many of us, but we all improve with diligence. Attending classes such as the Colorado Mountain Club’s Wilderness Trekking School is an easy way to develop the necessary skill. WTS teaches students how to follow a bearing, how to compensate for magnetic declination, how to triangulate a position from two known topographical features, how to interpret the elevation contour lines, and how to visualize your real-world three dimensional hiking progress onto a flat two dimensional map.

OK, let’s be honest. In the interest of full disclosure, I too have been a victim of the classic gotchas:

- Deferring all route finding and navigation to the trip leader
- Waiting until lost to figure out where I am

Most of us, once lost or in some other disorienting experience, vow never to let that happen again. The panic and worst-case scenarios that we typically conjure up remain etched in our brains forever. If truly lost, necessitating an unplanned over night stay, with some tempestuous weather thrown in to boot, will do more harm to your psyche than simple etching. An overnight winter stay could become a life changing experience.

Now that I have your attention, remember, it all begins at the trailhead. Of course, you have a map and you have a compass, and for just this brief moment, there is no doubt as

Emergency Situations

to where you are. The idea here is that the trailhead is a great opportunity to actually pull out the map and compass and begin charting your route as you hike up the trail.

Inconvenient, you might say? Well consider the inconvenience of getting lost! My philosophy is simple: If you always know where you are on the map, and you can translate that to where you are in the real world, then you can never be lost. What a comfortable feeling.

➤ **Mark or flag problematic situations**

I will start out with the more straightforward and obvious, and then proceed to the more nuanced.

- **Fork in the trail:** You are hiking along and you notice a fork in the trail. What to do? Well, assuming you decide to do something, you might decide to scrape an arrow in the dirt even though you know this will not last long. You might also consider laying down a tree branch as a marker, building a rock monument, or hanging some item of personal clothing (Caution: If the trail is littered with forks you could very well run out of clothes). Perhaps you simply take a moment to memorize this spot. Pretty obvious and pretty straightforward. The point is you were aware, took some time, and did something.

Less obvious, and what seems to catch hikers off-guard is when they fail to see the fork because it angles into the trail sorta from behind. We are caught up in good conversation, we daydream, or we somehow are distracted and miss that subtlety. Obviously, this particular fork in the trail only becomes a problem during our return, and because it is now late in the day and everyone is tired, any inefficiency due to taking the wrong route can compound our predicament.

- **Exiting tree line:** As one makes their ascent up to some summit, more often than not you will leave the trees, shrubs, and bushes behind and embark on a portion of the journey where the trail may be less defined. You may discover as you climb up talus, over boulders, and through rock gullies that there is not even the hint of a trail.

At this time, it might be wise to mark or flag your exit point from tree line. From here, looking up your general direction may be clear, but from above looking down you might simply see a broad swath of vegetation. If you need to re-enter tree line at a specific point, for example, to pick up the trail, knowing the entry point will be important.

- **Gaining the ridgeline:** It's been said that if you've seen one gully, you've seen 'em all. Well, in the interest of illustrating this next point, let's consider that a true statement. As I discuss below, the ascent is easy... just keep going up. Eventually you will crest the ridge, make your turn, and proceed toward the summit.

Wait a second. Let's think. Upon cresting the ridge, remember, that when descending you will need to drop off the ridge back into that nondescript gully. When descending, at what point on the ridge do you make the opposite turn? Wouldn't it have been nice if you had set up a cairn (a little mini pile of rocks), or put out some colored flagging (aka surveyor's tape)? Even if the various gullies joining that ridge all have unique characteristics, don't assume upon your return that

you will have adequate visibility to make that observation. It is not unusual for visibility in the mountains to drop to only a few hundred feet.

- **The nondescript route:** If you see no meaningful route indicators on the ascent, what will be the case for your descent? I pondered for some time why more people seem to get lost or disoriented on the descent than during their bid for the summit? My assessment of this anomaly is that on the ascent there is one fundamental assumption. That is, if one keeps climbing one will eventually reach the top. To put this in overly simplistic terms, there is one route to the top, and it's always up.

However, when descending there are an infinite number of routes; in theory as many as there are points on the compass. One cannot simply head down, willy-nilly, and expect to pick up the trail. One has to descend with a plan, traveling in a reasonably specific direction, while making all the correct turns and traverses as necessary.

So, what to do? Be aware that on the ascent there is this tunnel vision. Our eye is on the summit, "it's just up there. All we need to do is scramble over that ridge, into that gully, through that narrow rock band, and we be there." For me, when I find that I am being drawn into that myopicness, I first give myself a hearty slap in the face. I vividly remember the brain etching that occurred years before. Smarting from the slap, my new focus now is to set up those cairns, place flagging on the tricky sections, and/or try to memorize significant topographical features that will help me on my return.

Another great technique is to look back frequently. Periodically look back down the trail to become familiar with what the view will be when you return. Failure to do this will likely ensure that your hike home is another brand new experience. Unless you crave constant adventure, it doesn't need to be this way.

- **Departing the summit:** How nice. What a great day. Everyone made the top. But caution, over the years, as packs were hoisted and it was time to descend, I have witnessed an uncomfortable number of times where one or more of the climbers started off in the wrong direction. Descending the wrong ridge is not typically recommended, but happens. It happens. So, the proactive climber will recall this anomaly as he/she reaches the summit and make that all important mental note as to direction.
- **Deteriorating visibility:** What if visibility on your climb becomes impaired? The obvious example includes weather that drifts in, afternoon clouds that can form, windblown snow causing a whiteout, or it is late so our day slowly becomes night. Although a GPS can help you navigate through these conditions, not everyone carries one, not everyone is proficient or understands the nuances, and few are prepared in the case of dead batteries, general malfunction, or misplacement. If you rely primarily on a GPS, you also need a viable Plan B.

➤ **Anticipate and consider the options.**

If traveling on snow you can place wands (little poles with bright streamers at one end). If hiking on rock you can set up those cairns, or use that colored flagging. You can also more closely monitor the map and compass just in case.

Emergency Situations

➤ **Group discussion of the topology**

I refer to the term group discussion, but it could also be an out loud chat between you and yourself. The concept is that when hikers take a few minutes to discuss problematic areas aloud, two good things can happen:

1. The verbal discussion helps you to remember key route finding features for the way back.
2. Additional people actively participating begets more people considering the “what ifs,” more people involved in the route finding, and more eyes-up looking at the bigger picture.

Bear in mind, the discussion needs to focus on the more unique landmark features. Having a drawn out conversation about a dead tree (as there could be numerous dead trees along the way) is less beneficial than pointing out, for example, a large rock formation that looks like a giant granite bunny rabbit (yes, I actually found this one).

➤ **Pack up the tents and go home**

Weighing all the different scenarios, another very appropriate option is to abandon your climb. Climbing and hiking is supposed to be an enjoyable activity, so, again thinking proactively, if you suspect that the conditions for the day will strip away that enjoyment factor, then implement your contingency plan.

Every group has a different contingency, and many of these contingencies develop in real-time as adverse field conditions become apparent. Some groups might now pick a less technical route to the summit, others will abandon their summit bid and opt to continue hiking but at a lower elevation. Some will decide to return to civilization for a late morning breakfast or mid-afternoon lunch (my personal favorite). Depending on conditions, it may even make sense to just go home and plan to re-climb this peak some other day.

OK, I Think I’m Lost (Maybe)

In spite of your best intentions, through no fault of your own, you suddenly have that initial realization that things don’t look familiar. Since we don’t typically memorize every inch of the route, it is not all that unusual to have those momentary feelings. However, if the feelings persist, you need to have the discipline to stop.

➤ **S.T.O.P.**

Adapted from Ron Bookman’s (Alpine Search and Rescue) article from 1988, here is some excellent advice: S.T.O.P. Since the first 30 minutes are critical, as soon as you suspect you are lost, STOP.

○ **Sit Down**

- Remain calm and do not panic. Although, easier said than done... do it.
- Accept the fact that you are lost.
- Conserve your physical and mental resources.

S.T.O.P

1. Sit down
2. Think
3. Observe
4. Plan

- Select a hospitable place to sit with protection from the elements.
- If you need an excuse to stop and sit down, then consider that it is probably time to eat and drink.
- **Think**
 - Retrace your route in your mind.
 - Where and when was the last time you knew for sure where you were?
 - What obvious landmarks have you passed which might provide a clue?
 - What general direction have you been heading, and does this jive with where you wanted to go?
- **Observe**
 - Look around you. Do you recognize any familiar landmarks?
 - What is the weather doing?
 - What time is it?
 - What is your condition? Are you fresh and dry, or exhausted and wet?
- **Plan**
 - Make yourself a game plan.
 - Develop a short-term plan (next several hours) and consider a longer-term plan (overnight).
 - If it is reasonably early in the day, with anticipated good weather, you might decide to explore just a bit. Perhaps you hike to a high point to gain better visibility.
 - If nightfall is approaching, and/or if the weather is threatening, you might decide to use what little time you have to establish your campsite.
- **Evaluate the chances of being rescued**
 - **Rescue unlikely or will be delayed** – If you are out alone, and/or have not told anyone about your trip plans, and/or you have traveled far into the wilderness well away from a trailhead, you may have to rely on yourself to get out of trouble.
 - **Rescue likely** – If you are part of a group or have advised someone about your trip, you may decide to wait it out and rely more on being rescued.
- **Attempt to Determine Your Location**

Here is where the brain is most needed. During the STOP, you ate your sandwich, drank some water, took a photo, went potty, calmed down, and cleared your head. The good news is that unless you panic and head out on an unplanned dead-run bushwhack, sitting here will not get you any more lost. Relax. Breathe. Take stock. Ohmmmmmm.

With the map and compass in hand, try to estimate what general area you are probably in. Look for significant real-world topographical features such as ridges, valleys, open meadows, tree line, creeks, peaks and peaklets, roads, and trails. With a little patience

Emergency Situations

and some trial and error, one should be able to narrow down the overall vastness of the geography to a more manageable area.

Daylight and weather permitting, if you absolutely know you can follow your back trail, i.e. you can go back to that last known spot, then do so. As an extra precaution, mark the route you take on this back trail in case you are wrong. If there is any doubt about that last known spot, then consider staying where you are.

➤ **Move to higher ground.**

Assuming it is not too far off, the weather is acceptable, and the ascent to this higher ground is safe, moving to a high point could provide the additional visibility that you need to get re-oriented. With better visibility, here is another great opportunity to get out that map and compass.

➤ **Wagon Wheel**

Another technique is to assume that where you are sitting is the hub of a wagon wheel. Clearly mark this location so you can return to the same spot. Walk away from your hub, in a straight line, for several hundred yards. Don't forget to mark this route so you can easily return. As you hike away from the hub (yes, this route now becomes a wagon wheel "spoke"), do you see any familiar landmarks? If not, return to the hub and embark in a slightly different direction creating another spoke.

Having explored all directions with no luck, again daylight, and weather permitting, repeat this exercise, but this time, extend the spokes of your exploratory walks by another few hundred yards.

➤ **Signal for Help**

Take inventory of the items in your pack. Besides developing a mental list of all the clothing items you have that can keep you warm, and all the food items you have to help maintain energy, what do you have that you can use to call or signal for help?

Let's see. Cell phone with fresh battery, whistle, mirror (perhaps the one in your compass?), magnesium road flare, sparklers, fire starter, and a Mylar space blanket. Good, all the basics on-hand.

- **Cell phone** – Probably a great first start, but if the batteries die or there is no reception...
- **Whistle** – We all know that three of most anything is the international distress call (three whistle blows, three gunshots, etc.). The whistle is indispensable, as it will long outlast your ability to shout for help. Keep the whistle handy (such as attached to your pack's sternum strap).
- **Mirror** – With a bit of sunlight mirror reflections can be seen for miles (however no sun, no reflection). This technique is great for signaling large distances or for getting the attention of a search plane.
- **Road flare** – Burns bright and can last 15-20 minutes. A flare is visible in low light conditions and at night. Arguably, heavy to carry in your pack, for some it is considered indispensable.

- **Campfire** – Smoke can be an excellent signaling device if there is little wind. Burning green vegetation, like grass and pine boughs, makes for good campfire smoke. Others can see and smell smoke from a distance and spot a campfire easily at night.
- **Mylar space blanket** – Not a durable item, so not necessarily a great mechanism for a shelter, but if you have the type with the bright colored orange backing, then this can be laid out as a signaling device or to enhance your campsite visibility. Note: The reflective side is NOT visible from the air.
- **Bright colored clothing** – To make yourself more visible, you may want to wear some of your brightly colored items of clothing. You can hang those items not immediately needed to keep you warm and dry on surrounding trees and bushes. Have fun with this; make your campsite look like a small-town carnival.
- **Sparklers** – Use these to celebrate as the rescue team arrives. You need to show your appreciation.

➤ **Wait it Out**

Using all your wisdom and judgment, you have decided to make camp. Although the objective is protection from the elements (rain, snow, cold, wind) try to avoid concealing or camouflaging your shelter. All things being equal, consider setting up in a meadow or similar open area. For shelter, some climbers hike with a bivy sack (sort of a nylon waterproof tube they can crawl in) or a medium duty tarp with grommets. Most serious climbers and hikers refrain from relying primarily on the Mylar space blanket, as the space blanket lacks even basic durability.

Once you have your shelter established, gathered your wood, started your fire, melted snow for your water (if necessary), then re-inventory your food, clothing, and signaling supplies. I mention the inventory (again) simply because many lost hikers would have fared better had they rediscovered and utilized all the additional items stashed away so long ago. In addition, it provides the hiker with something to do.

If you left word regarding your trip plans, help will be on the way. How long depends on the expectations you set back home. Statistics indicate that most lost hikers are found within 48 hours, so there should be (usually) light at the end of the tunnel.

Important – During the wait, be prepared to immediately signal should you suspect help is near. Keep the mirror and compass handy, and have dry grass or boughs ready to put in the fire. Now, where is that whistle?

➤ **The Post Mortem**

OK, if you failed to survive your ordeal... we are probably done here. Sorry.

If you did survive, light another sparkler.

Regardless of whether you were supremely proactive and managed to avoid getting lost, experienced only a few minor glitches, or were part of some almost-catastrophe, your last responsibility requires that you do some sort of post incident review.

The review is important. In order to prosper, become wise, and live to a ripe old age, you need to consider what worked well and what did not. Based on this review, what worked well should be a skill or technique that you will want to repeat next time.

Emergency Situations

On the other hand, if your methodology was horribly flawed, you now have an opportunity to do a course correction. In other words, if it is apparent your approach did not work, stop doing it! Use this experience to not only personally learn, but also use this as an example to share with others. Sharing your newfound wisdom will minimize the number of times one invents the proverbial wheel.

If you methodically learn from your mistakes, you can even use these experiences ultimately to develop your own personal How to Stay Found list. My bet is that there will be significant overlap between your list and mine. It's all good.

References:

<http://www.alpinerescueteam.org/>