

With some help from your intuition and some basic tools, you'll find yourself moving in the right direction.

thinking they are going in a straight line. Recently, I went on a solo hike in Rocky Mountain

I've heard that adults, when blindfolded, will walk in a circle,

National Park and inadvertently tested this theory. Halfway to Long's Peak, my intended

destination, I found myself standing on frozen Mills Lake in a complete whiteout. When the clouds engulfed me, I kept going until I came upon footprints that looked suspiciously like

my own. Initially surprised, I looked around for evidence of other hikers. When I found no

one, I realized that (a) the footprints were mine alone and (b) I was the only one who could

get myself out of this never-ending circle.

As a longtime backcountry traveler, I'm often left to my own experience when getting out of tricky situations. Though on principle I have nothing against asking for directions in urban settings, in the backcountry I've had little luck eking out navigation advice from black bears, marmots, or deer. Needless to say, as I stared at my solitary footprints on the lake, I was glad I had some navigation tricks of my own.



# the outdoor detective

First and foremost, your best navigational tool is inside of you. It's your intuition, and it's fairly keen and reliable. If you try hard enough, however, you can make any stream, knoll, or ridge the one you're looking for, so you'll need to back up your sixth sense with some of the tips below-to get lost in quiet reflection instead of dense forest.

- Use multiple reference points and make sure they agree. If the map, compass, and your gut all say you are next to Fern Lake, you're in good shape. If only the map says this and the other elements don't, take time to find more clues.
- Get to know the area. Physical landscape characteristics can give you the most definite information about where you are and help you get where you want to be. Once you start practicing these tricks, they'll become second nature. For example:
  - \* Look behind you. If you are planning an out-and-back hike, take time to stop along the way and look at the trail from the other direction. This will familiarize you with what you'll see on your way home. It's amazing just how different a trail looks when you're tired and approaching it from the opposite direction.
  - \* Talk about it. If you're hiking with someone else, talk about what you see. Describing the features out loud will help commit them to memory and keep you and your partner from disagreeing later on.
  - \* Find a handrail. A handrail is a feature you can follow to get you to a specific destination. A stream, ridgeline, and even the tree line itself can all be guides to use along the way. Think of a landscape handrail as you would one on a staircase, keeping it to your side and following it along.

- Follow the sun. The sun rises in the east and sets in the west. Using it to gain basic directional information is an effective way to keep tabs on where you're going. Once you notice the sun's position, it will become an automatic part of your innate navigation.
- Unfold the map. Getting to know basic map features, such as the colors and contour lines, is a great start to orienteering. In general, the green areas of maps are places in which the vegetation is thick enough that the ground is not visible from an aerial perspective. Contour lines are at set intervals, 40 and 80 feet being the most common. When the lines are stacked on top of one another, the terrain is steep; when they are spaced apart, the terrain is flatter. A map's legend indicates its specific scale, intervals, and other features.
- Read your compass. At its simplest a compass can give you valuable directional information. After realizing I'd gone in a circle on Mills Lake last November, I came to grips with the fact that I was completely disoriented. I knew that going east would get me home, so I pulled out my compass to find out which direction that was. For times like that, a compass is indispensable.



## now, get lost

Honing your navigation skills takes time, and the best place to start is on a hike when there are few consequences. Pick a short (2- to 4-mile) hike along a trail and pack a map and a compass. At 20-minute intervals, stop, sit down, and identify three different features, such as streams, knolls, or valleys. On your way back, challenge yourself by hiking off the trail (treading lightly as you go) and finding the same features from a slightly different vantage point. The trail will be your fallback handrail, should you need it.

### learn more

- Colorado Mountain School's Map and Compass: Essential Navigation is a one-day course that covers maps, compasses, altimeters, and GPSs. Costs range from \$145 to \$180; www.cmschool.com, 888 267 7783.
- If you're looking for a navigation course on either coast, both the Sierra Club in the west (www.angeles.sierraclub.org) and the Appalachian Mountain Club in the east (www.outdoors.org) have offerings.

### or check out

- Being Expert with Map and Compass by Björn Kjellström (John Wiley & Sons, 1994)
- Route Finding: Navigating with Map and Compass by Gregory Crouch (Falcon, 1999)

#### the electronic revolution

Gadgets are the name of the game in modern-day navigation. The idea behind most of them is to make life simpler, and in that vein there are a few that can really make a difference. If you're curious about taking your skills to the next level, consider bringing along some of the following technical toys on your next hike.



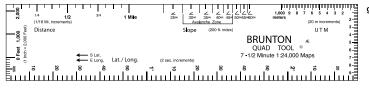
GPS stands for global positioning system, an international navigation system based on radio/satellite communication. It measures your position by triangulation with satellites to give you a specific coordinate reading unique to the exact spot where you're standing. At a basic level, it can be used to chart a course on your way out that you can follow on your way back. But be advised: The GPS unit will always direct you as the crow flies—the shortest distance back to a point—so you should mark multiple places along your hike. Otherwise, you might find yourself at the edge of a deep canyon with the GPS telling you to jump across.

An **altimeter** is a device used to measure elevation based on atmospheric pressure. These are great when paired with a map to pinpoint where you are. Elevation is given in feet or meters and adapts as you go higher or lower for accurate readings. Altimeters use barometric pressure to measure elevation, so the readings will change if the pressure changes due to weather or altitude. Because of this be sure to set your elevation each time you hike.



A **grid reader** is a rulerlike measuring device for taking coordinates

off a map to enter into a GPS or vice versa. This small, flexible tool is an integral communication device between your map and your GPS; think of it as a translator from the numbers on a map to their electronic counterparts in the GPS. Be sure that the one you buy works with your map; they come in different increments to match up with the specific scale of the map.



grid reader