



# Navigating Without a GPS

Find your way back to safety using these navigation strategies.

## EMERGENCY SITUATION:

**You're out on a solo, non-Scouting day hike at a local nature preserve when you realize you've wandered off the marked trail. You try backtracking, to no avail. You turn to your GPS for help, but the battery's dead, and there's no replacement. Your cell phone has no signal. Reaching for your paper map and mechanical compass, you're shocked to find them missing. In a few hours, your family will be surprised to find you missing, too. How do you find your way back to civilization?**

## Solution

**ASSUMING YOU'VE TOLD** someone where you're going and when you'll be back, the general rule of thumb when you lose your way is to stay put, not wander without direction. Your Boy Scout training taught you the mnemonic "STOP" or Stay put, Think, Observe and Plan. But before you decide that you're lost, take a deep breath. Often the immediate stress of losing one's way causes a person to make erratic decisions. Stay calm. And before you decide you're officially lost, consider these route-finding methods that will help get you back to safety. With a few simple tricks, you can easily determine your direction of travel and — assuming you at least know where you've come from — hike back to safety.

First, the easy ones. You may have heard that the sun rises in the east and sets in the west. If not, you've at least seen pictures. (And yes, this is true even in Australia.) If the sky is clear, you should be able to determine the compass points by following the path of the sun. This method won't, of course, give you a precise heading, but it will give you a general idea that you're at least not walking in the opposite direction you came from. Because weather generally moves west to east, observing the movement of cloud formations may further help you. In addition, in the northern hemisphere, north-facing slopes tend to be in more shadow, cooler, and thus hold water and snow/ice.

If you've got an analog watch, you can use it to double-check your presumed compass points. (This works only if the sun is visible.) Take the watch off and hold it flat on your palm. Rotate it so the hour hand points toward the sun. Next, picture a line passing through the numeral "12" on the watch face and crossing the hour hand at the pivot point. Finally, imagine a line that bisects the arc between the "12" and the hour hand. This line is north-south, with the continuation of the bisecting line across the arc pointing south. (See illustration.) If your watch is set to daylight saving time, use the line that bisects the hour hand and the "1," not the "12." And be advised that it will be getting darker sooner! One of the great things about this method is that



FRANK STOCKTON



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it will work even if you have a digital watch. As long as you know the time, all you have to do is draw a watch face on a piece of paper, then proceed as above.

Another navigation method is to follow the path of a river. This method is useful (with some caveats, below) because human settlements are typically on or very near rivers. Following a river is more likely to bring you to civilization than, say, wandering aimlessly in the wilderness. It's true that most rivers flow north to south. But that's a bit like saying "most" snakes are not poisonous. Unless you're familiar with specific snakes (or rivers), a mistake can be costly. It's also true that, except on completely flat terrain, rivers flow downhill: from higher elevation to mouth. Of course, rivers may meander in any direction, often for miles. Unless you know, for certain,

where the source of a river is, it's best to rely on one not for true compass points but rather as a method to get you to a populated area. Following a road is probably a better idea, if you can locate one.

There are numerous methods of navigation using the stars, but these require not only an unobstructed view of the night sky but also hiking at night, which is not recommended if you're truly lost — there are too many ways to get injured. Still, another tip: If the moon rises before the sun sets, the illuminated side will face west. If it rises after midnight, the illuminated side will face east.

However, if night has fallen, stay put, make camp and wait for rescue. ✦

**JOSH PIVEN** is the co-author of *The Worst-Case Scenario Survival Handbook* series. Visit [joshuapiven.com](http://joshuapiven.com).

## BEFORE YOU GO

Use this checklist to make sure you're prepared before you head out on a weekend hike.

- ▶ **Know the area.** Research where you plan to go, and talk with someone who's hiked or camped in the same location.
- ▶ **Don't hike alone.** Take a buddy. Better yet, travel in groups of four to 10. That way, if someone gets injured, you can leave a buddy with the injured party while a group of two travels to get help.
- ▶ **Leave an itinerary.** Whether you're hiking with or without Scouts, make sure others know where you're going and when you will return.
- ▶ **Prepare for emergency situations.** This includes weather, injury, dehydration, losing your way and more.
- ▶ **STOP.** Make sure the group members know what to do if they become lost or separated from the group.