

53 Bushwhacking Tips for Off-Trail Navigation

[Philip Werner Advanced Backpacking Skills](#), [Navigation and Trip Planning](#)



*Keep your compass attached to your body at all times
– My friend Kris in his element!*

Bushwhacking is a form of off-trail navigation through forested areas, so-called because the trees and ground vegetation whack back when you try to push through them. While expertise with a map and compass is a prerequisite skill to become an expert bushwhacker, many other skills are required including an ability to navigate by terrain and how to conserve energy when walking through thick brush, in addition to hiking and backpacking skills. Call me old-school,

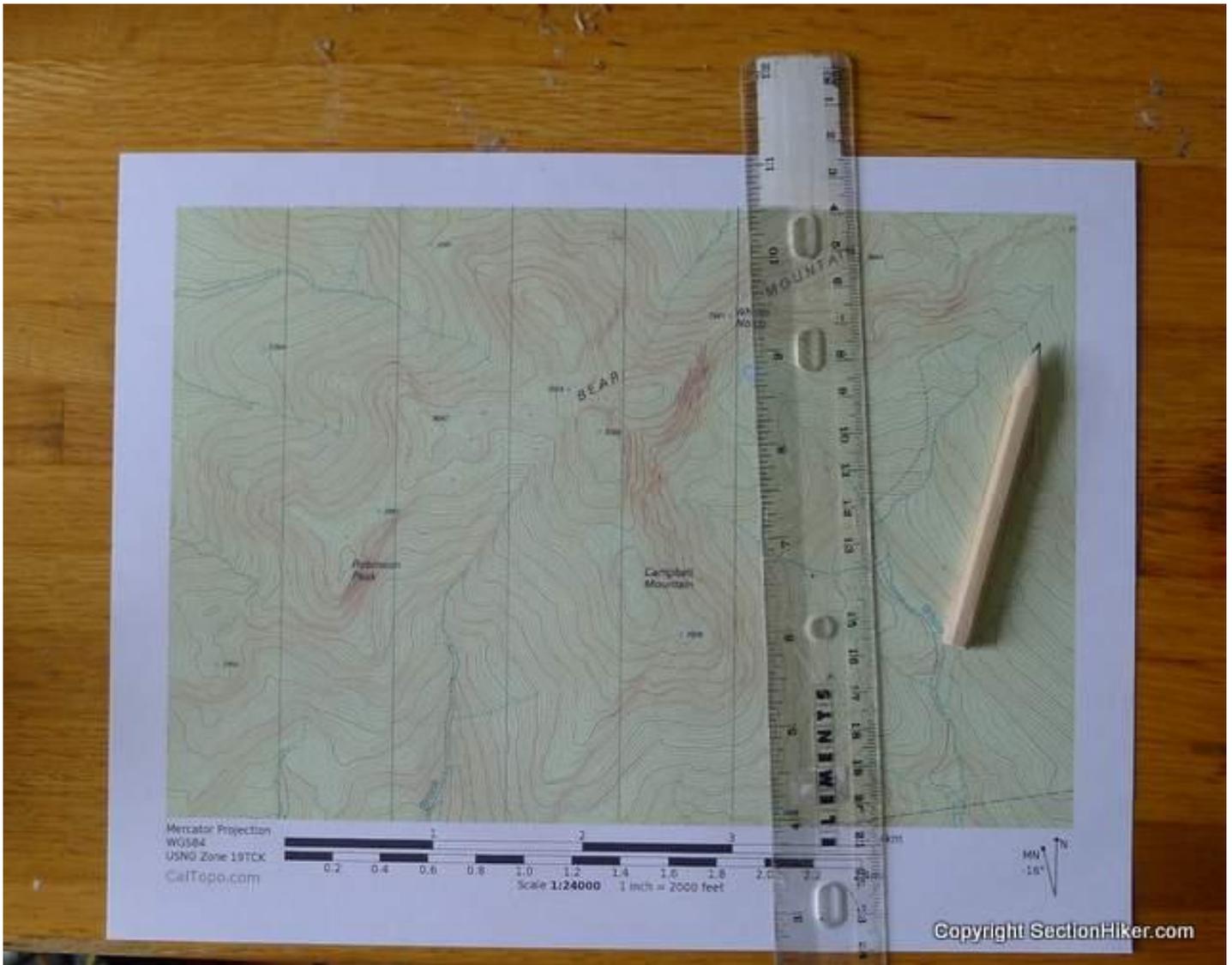
but I shun using GPS-enabled tools on bushwhacks, if only because they can lose power for a myriad of reasons and leave you stranded if you're not an expert with traditional navigation techniques.

Bushwhacking Gear Tips

1. Wear a long sleeve shirt and long pants on bushwhacks to avoid getting scratched up. Safety glasses are good if you don't wear glasses and so are lightweight work gloves. A billed hat is also useful for keeping branches from scratching your face and forehead.
2. Trekking poles are often not worth the hassle on bushwhacks unless you have a long approach hike on a road or trail. Best to stow them once you start so your hands are free.
3. Keep your compass attached to your body (with a non-elastic cord) at all times.
4. Always carry two copies of your map on a hike (one in your pack) in case you lose or destroy one.
5. Bring enough gear so you can spend an unplanned night out if you're overtaken by darkness on a bushwhack.
6. Always wear blaze orange when hiking off-trail during hunting season, even in areas with known hiking trails.
7. Always bring some way to communicate with the outside world in an emergency such as a cell phone or personal locator beacon.
8. Don't attach gear to the outside of your backpack because it's likely to get torn or ripped off, and can be lost.
9. Don't wear a backpack with external mesh pockets on a bushwhack because it's likely to get ripped up.
10. Don't bring your best rain gear or clothing because it's likely to get ripped up.
11. If you're bushwhacking solo, make sure you have a second compass with you in case you lose your first.
12. If you're bushwhacking in a group, bring at least three compasses with you, so you have a third to break a tie if the first two disagree.
13. Always bring a pencil with you, so you can draw grid lines on your map or record data about your hike such as segment times or bearing changes.
14. Avoid using your compass near large metal objects, magnets, or electronic devices because they can throw off your bearing.
15. Always hold your compass level when taking a reading.
16. Protect your map with some kind of waterproof case, even if it's just a zip-lock bag.

Route Planning Tips

17. Always start a bushwhack from a well-defined location such as a road, trail, or landmark and a known elevation.



Draw vertical grid lines on your maps before your hike to make it easier to get true north compass bearings in the field

18. Use as many different maps as possible when planning a bushwhack including local hiking maps, cross-country ski and snowmobile trails, and a Delorme gazetteer. Even historical USGS quads which can have useful information about old abandoned trails or logging roads.
19. Get as close to your destination as possible by following roads, trails, cross-country ski tracks or logging roads before starting a bushwhack.
20. Make sure you know when sunset is before your hike.
21. Define a turnaround time before your hike that will get you to a marked trail or road before dark.
22. Draw grid lines on your map (*Caltopo.com is excellent for printing out paper maps on a 1:24:000 scale*)



23. A good estimating speed when planning a bushwhack is 1/2 mile per hour, although this can vary between 1/4 mile per hour to 1 mile per hour depending on the density of vegetation and slope angle.

It can be easier to walk on the rocks along the edge of a river than in the vegetation running besides it.

24. Break your planned route down into segments with known endpoints, even if these are just altimeter readings on a bearing.
25. Respect private property. Don't bushwhack without landowner permission.
26. Bushwhacking takes a lot more energy than hiking on trails, so bring extra food and snacks.
27. Bring plenty of water and a way to purify or filter more if you run out.

Compass Navigation and Route-Finding Tips

28. Try to get everyone in your group to standardize on true north or magnetic bearings before your hike starts.
29. When reading out bearings to a group, make sure to tell your partners if the bearing is magnetic or based on true north.
30. Make a habit to constantly check your map and know your position, looking around to verify it by terrain-to-map association, altimeter, or visible landmarks.
31. Always record the time that you start a bushwhack so you can approximate the distance you've travelled and estimate your future speed.
32. Check and reset your altimeter at every known elevation since air pressure can change throughout the day.
33. Always validate what you see with your map and compass. You'll probably be wrong more often than you'd expect.
34. Avoid bushwhacking in the dark. It's very disorienting and dangerous.
35. You can increase your speed by hiking beside various landscape handrails – streams or ridgelines – rather than constantly referring to your compass for a bearing.
36. Try to conserve as much energy as possible by finding the easiest route through dense vegetation or marshy ground, even if that means walking around it.
37. It's easier to walk perpendicular to contour lines than across them (on a slope) where one foot is always lower than another.
38. Walking in a stream can take more effort than it's worth because the rocks in flowing stream beds are slippery and the vegetation growing along streams can be very thick.
39. It can be easier to walk on the rocks along the edge of a river than in the vegetation running besides it.
40. Be careful when navigating through wide saddles between mountains, because it's hard to determine whether you're still descending a peak or you're fallen off the saddle's sides prematurely.
41. Bushwhacking downhill is a lot easier than bushwhacking uphill.
42. Don't get suckered into following an old road or trail that you come across unless you know exactly where it takes you.
43. Don't put your leg down in between two rocks or trees where unexpected forward momentum can lead to broken leg.
44. Bushwhacking through deciduous trees (like maples and oaks) is easier than conifer (like spruce) because the area between the trees is more open. (Stay under 3000' as long as possible in the White Mountains because that's the elevation where spruce trees start.)
45. It's often easier to swing yourself underneath a fallen tree than crawl under one, since the gear on the outside of your backpack is less likely to get hung up in the blowdown's branches.
46. Pay as much attention to your compass and route for the hike back as you did on the hike in. It's very easy to get lazy and assume you can rely on your sense of direction (even though you know it sucks).
47. Don't assume that fallen logs are solid – chances are good that they're rotten and you'll plunge through them.
48. Don't put flagging tape on a bushwhack route except in an emergency situation to lead rescuers to a victim. Otherwise you'll create a herd path which will lead to unsightly human impacts in a wild area.
49. Don't let the members of your group get separated on a bushwhack. Stay within easy speaking distance of one another, even if you can't see them.
50. Always aim off to the right or left when hiking up a hill so you don't walk past it. You can simply follow the local contour (up) when you get close.

51. Leapfrogging. Sending one bushwhacker forward and then giving them directions to move right or left to stay on the bearing can help improve the accuracy of your route.
52. Following animal herd paths can help reduce the energy required to move through the woods.
53. Practice bushwhacking and off-trail navigation. It takes experience to become an expert off-trail navigator and it is a perishable skill if you don't use it.
54. As with any trek whether on foot or a float, leave a Trip plan with a trusted friend stating when and where you're going and appropriate time you'll be back. Then check in with them when you do get back!

Off Trail Navigation

July 29, 2010 By Jason

What is the best way to accomplish off trail navigation, whether you're a beginner or an expert. The answer for both is essentially the same. A map and compass.

These two things are the duet of essentials that are necessary for getting around when you are navigating off trail. In this day and age of GPS and high tech, you're still not going to get anything as reliable when you want to navigate off trail than a map and compass. They don't require batteries or powering, they rely on your abilities and nothing else. Believe me when I say that in the wilderness, when anything can happen, and you're not going to find a charger every few miles, depending on something that requires power isn't in your best interests.

A simple paper map and a good compass, as well as the basic know-how to use both is going to serve you far better in the long run than your mini laptop and a global GPS.

Bear in mind that reading this article and a few others like it isn't going to make you a skilled navigator. Get some outside help. Mountaineering classes, navigation classes and other types of instruction are going to be advantageous to take. You can find them online as well as offline from outdoor societies and hiking groups.

The basic tools that you're going to need to get around in the outdoors are a map and a compass, but not just any map is going to serve to get you where you want to be when your off trail.

Maps and Map Reading

A simple map for trail use (also called a planimetric map) will work if you're staying on the trail, but once you get off of it it's not going to do a thing for you when it comes to navigating your way around in the wild. To get to your destination in safety you will need a topo map.

Topo maps are made specifically for navigating your way off the trail.

A Topo, or topographic map is easily recognized by its many and varied colors and the odd appearance that it will present to you if you're accustomed to road map type things.

The Topo map shows you areas of diverse color which has been overlaid with unevenly edged lines. They give you a mental picture of the elevations in a given area.

For example, if the lines you see are spaced tightly together, this will tell a trained eye that they are looking at a very steep terrain.

The Topo map affords you a look at the actual physical characteristics of the area that you will be hiking, showing you the highs, the lows and any natural features such as mountains and valleys. They will also however feature the other things that you are accustomed to, such as roads, villages and towns, and other structures which are man-made, as opposed to natural.

A topo map will always be your wisest choice to use, whether you are planning a simple trail hike, a one-day trip, or a five-day excursion into the wilderness.

In fact, even if you are hiking on a well-marked and "only an idiot could get lost here" type trail, it's a great place to practice your map reading skills. Having a topo map with you when you take those kinds of hikes will give you experience at reading the topo map and trying to identify the landmarks, the peaks and valleys that you see on the topo map.

Your compass.

It doesn't matter where you are hiking, woods, desert, or mountains, everyone who wants to do any level of exploration needs a compass. A compass is little more than a needle which has been magnetized and floats in a housing that is full of liquid.

Compasses can be more intricate, offering you features like a sighting field or mirror, as well as adjustments for declination but even the most simple, well-built compass gives you all that you need to navigate. Make sure that the compass that you purchase is a good one. You don't need the state of the art surveyors compass but you also don't want to rely on the one that came in your child's dollar toy set.

There are numerous ways to learn to use a compass, but the best way will be to take a class in orienteering such as you might find online or with any good hiking or mountaineering group.