## Why is knowing your hiking pace important and what can affect your pace?

Knowing your average hiking pace lets you choose a trail that's appropriate for your fitness level so you don't overextend yourself. It will also help you to estimate the time required to cover different stages of your trip.

Your pace can vary depending on several factors, including incline, trail conditions, and pack weight.

Your pace will drop by roughly a third for every 5.5 degrees of incline. This is equivalent to 290 feet of gain over one mile. This means that if your average hiking speed on flat terrain is 3 mph , on a 5.5 degree incline you can expect to slow down to 2 mph . And if the incline increases to an 11-degree angle, then your speed will drop to around 1 mile per hour.

The difficulty of the terrain will affect your pace. Flat, well-maintained trails are, naturally, the most conducive to progressing at your max natural speed. Hiking off-trail or on more rugged trails that are rocky, muddy, snowy, or icy, on the other hand, is likely to slow you down significantly.

Carrying a pack heavily loaded with extra gear is one surefire way to slow your rate of progress. For every $1 \%$ of your bodyweight that you carry in your pack it will slow you down by around 10 seconds per mile. For example, if you weigh 200 pounds and your pack weighs 20 pounds, then you will be roughly 100 seconds slower per mile.

Your cardiovascular endurance, muscle strength, and overall fitness level play a large part in determining your average pace. If you're relatively new to hiking or are aware that your fitness levels are low, then maintaining your max speed over the duration of a longer hike is unlikely.

## How can you figure out what your pace is?

You can manually figure out your pace using a watch, a pen, and a pocket-sized notepad to measure the time taken between two points out on the trail. You can get an estimate of timing by dividing the time taken to hike the trail by the trail's overall mileage. By breaking the trip down into smaller sections with similar gradients (flat, incline, decline), however, you'll get a more accurate picture of how you'll perform on different gradients (i.e. slope angle) and at different stages of your hike (beginning, middle, and end) in future.

There are several apps that you can download for running and hiking that can help provide a more detailed look at your hiking speed. Some examples are Gaia, All Trails and Strava.

GPS watches are the most accurate measuring instrument in this list. In addition to recording distances, times for stages of your journey, and providing your location, they also display temperature, elevation, barometric pressure, maps, and an approximation of how many calories you've burned.

With any of these methods make sure to use the correct data point for your pace. The average speed is the pace you want to know, this is the average pace for the entire trip, including breaks. Your moving
speed is your average moving pace, this is calculated only on moving speed and will not include breaks. The max speed is the fastest pace you went through out the trip and will likely be on a downhill or flat section of the trail.

Verula, E.K. (2020, November 16). Average Hiking Speed—How To Calculate It \& Why It's Important. MyOpenCountry. https://www.myopencountry.com/average-hiking-speed/

