Safety in Numbers: How Fast and How Far? *Jon Bentley* 

Every range has a great test piece, a one-day walk that bestows unbeatable bragging rights. In the White Mountains, it is the Presidential Range Traverse. In the Adirondacks, it is the Great Range Traverse. In the Catskills, the Devil's Path has long been known as about 24 brutal miles with about 9,000 feet of elevation gain. Around the turn of the millennium, *Backpacker Magazine* described it as "the toughest dayhike in the Northeast – and possibly the Lower 48", and the crowds descended. Some of those hikers found adventure and satisfaction in completing their goal; others courted disaster by going where they should never have gone.

Are you tough enough to hike it in a day? In this essay we'll consider some tools that you can use to plan your trips to keep them safe and fun.

# **Walking Speeds**

A pleasant after-lunch "stroll" with a few friends will carry me along at a leisurely 2mph. In a "walk", we'll average about 3mph. Kick that up to a "brisk walk", and we're moving at about 4mph. How do I know these numbers? I drove our favorite route in my car a few times, and found that one circuit is almost exactly two-tenths of a mile. A stroll finishes five laps in half an hour, a walk does those in 20 minutes, and a brisk walk does those in fifteen minutes. A few times, I have cheated by bringing along my GPS and peeking at the indicated speed. Both methods give me the same results, so I trust them.

How does adding people to a group change the speed? In *The Art of Teaching*, Gilbert Highet talks about different ways of sending a group of men on a walk. If you command them to do it, they'll straggle along as individuals and come in scattered and tired. If you form them into groups, they'll come in fresher and sooner. But if you turn it into a competition, and each group sings as it walks, they will be faster, fresher and probably have genuine fun.

The next time you are getting in shape for hiking, try timing your own speeds: set up a course and measure your rates on it, with and without friends. (If you don't want to bother making your own, try the quarter-mile track at a high school.) The speeds that you measure might even be relevant for some fun outdoor walks, like walking a canal towpath or hiking in New Jersey's Pine Barrens. But they won't be of much use in planning your hikes in the Catskills.

### The Ups and Downs of Hiking

It doesn't take long to observe that the Catskills aren't flat, and that the resulting elevation gain really slows down walking. When I'm in decent shape, I use the rule of thumb of adding one hour of time for every thousand feet of elevation gain. If I'm heading up Balsam Mountain from Rider Hollow Road, for instance, I know that the trail is about 3 miles each way. But the parking area is at 2100 feet, and the top is at 3600 feet, for 1500 feet of elevation gain. I therefore estimate that a walk up should take about 1 hour for the 3 miles and add about 1.5 hours for the elevation gain, or a total of about

2.5 hours. I've timed myself more than a few times, and I typically get to the top in around that time.

Before I start on a trail, I set my altimeter to the altitude shown on the map and note my starting time. As I'm heading up, I try to stay on a good pace, in terms of both mileage and elevation gain. A few times I have started a day full of vigor, and have had to hold myself back to conserve energy for later. (Yikes! I'm headed up at 2000 feet / hour – time to slow down.) More frequently, though, I have to remind myself to keep fast enough.

One thousand vertical feet per hour isn't right for everyone. Some people charge up hills, while others mosey up them. If you enjoy playing with numbers in your head, you can compare your mileage and your elevation gain as you are walking. The other ninety-nine percent of you can do the job when you get home by the simple expedient of taking digital photographs of the key events along your trip. In addition to taking photographs for their own sake, I start (and finish) by taking a photograph of my car, and I snap every trail sign along the way. I capture every key landmark that I might recognize, such as both lookouts below the summit of West Kill Mountain. Then when I get home and long for the hills, I can retrace my path, along with miles, heights and the time stamps on the photos, and see how accurate my rules are. If I estimated 2.5 hours to get to the top of Balsam and it in fact took me just 1.75 hours, then I should stretch my estimate to 2000 vertical feet per hour. If it was instead 4 hours, then 500 feet per hour is closer to my mark.

How does downhill come into the formula? On ideal trails, like coming off the west side of Hunter Mountain back to Spruceton Road in the summer, I find that I might speed up a little. Going down the treacherous east side of Hunter towards Notch Lake, though, I slow down to avoid a slip on that nasty trail. My formula therefore ignores downhill, and things tend to even out in the wash. I usually get back to my car about 3.5 hours after I start up Balsam. I bet that if you measure your own pace, and then check the times of your hikes, you'll be surprised by how accurate they can be.

### **Other Issues**

So far we've considered judging a hike by the distance (3mph is a good starting place for me) and the elevation gain (one hour for every thousand feet up, and downhill is free). But every hiker knows that many more issues come into consideration. These are all important, but I find them harder to quantify.

*Breaks*. Some people allocate fixed times: 50 minutes of walking followed by 10 minutes of break, and repeat that like clockwork. Most walkers are a bit more flexible: they walk a while, rest a little, and continue. At the other extreme are people who prefer to walk for many hours before taking a five-minute break, standing up, of course. Experiment to find a rhythm that works for you. And as you start a day with a group, ensure that you and your partners are all on the same page.

*Trail Conditions*. A great trail can feel like a sidewalk. Interesting trails are slower, and the Devil's Path sometimes gets downright fascinating. Walking from the Fisherman's Path up the northwest spur to the summit of Lone is a cruise, but bushwhacking the northeast spur of that same peak is a beast. Through most of the conifer patches south of Slide, I plan on making at most 1mph before considering elevation, and I have at times fought for half an hour to get through a quarter mile of evergreens – a rate of less than half a mile per hour.

*Pack Weight.* The heavier my pack, the slower I walk. We'll dive into this topic in depth in a later essay.

*Group Size*. Big numbers can sometimes speed up groups, but I've seen big groups that go way slower than their slowest member. The speedsters dash ahead, then frump as they wait for Tail-End Charlie. When Chuck staggers in, the frustrated speedsters dash off again, and poor Charles plods on with no rest, exhausted and equally frustrated. Other groups pull together to experience the joy that Gilbert Highet promised. Make sure that your group works as a team.

Fatigue. Beginners run out early in the day and stumble home late; experienced hikers keep to a healthy pace throughout the day: the tortoise can beat the hare in the hills, too. A steady pace conserves energy for the long run. General S. L. A. Marshall writes that "fear equals fatigue" – a lone hiker lost in the dark fleeing the woods might be completely exhausted after only an hour or two. If you are out hiking for many days, don't forget the value of a rest day: General Stonewall Jackson felt that by marching his corps six days and resting one (he was a strict sabbatarian), he could move them further and in better condition.

*Weather*. It is slow to move in rain across slippery flat rocks, especially when they are hidden under a glaze of ice and leaves. Although it is never an issue in the Catskills, on some peaks in the Adirondacks and Whites, winter above treeline has a fury all its own.

## **How Far?**

Before I head to the hills, I have at least one trip in mind (and usually a backup trip or two, just in case conditions change, be that weather, traffic jams, road closings or whatever). I try to make sure that all the numbers are in my favor. If I'm going to head up a sweet little peak like Balsam, with a base estimate of 3.5 hours, I make sure that I start at least 5 hours before sundown, to leave a safety margin. I plan big days much more carefully.

One of my favorite long days in the Catskills is the Wittenberg-Cornell-Slide loop. Let's get out NYNJTC Map 43 and plan our trip. We'll start at Woodland Valley Campground (about 1400 feet) and head up to Wittenberg (call it 3800 feet), for 2400 feet of gain. We drop down to the col, then head up about 300 feet of vertical to Cornell. From the next col to the top of Slide is 900 (interesting!) vertical feet, for a total of 3600 feet. We then finish the Wittenberg-Cornell-Slide trail (about 9 miles total, says the map), and take the Phoenicia-East Branch for 0.7 miles to the Slide parking area on Route 47. Altogether,

we've gone about 10 miles and have gained about 3600 feet. If our pace is strong, we're about 7 hours into our hike. If we have the luxury of two cars, it might make sense to put one here for an early escape.

But if we are going strong, it can be fun to walk back. The map says that the Phoenicia-East Branch trail takes 5.3 miles to get back to the start, with two pieces of uphill: 200 feet up to Winnisook Lake, and 500 feet from the hairpin turn up to the Giant Ledge-Panther turnoff. The numbers add to 2.5 hours, but this far into this day, we may be a little slower. Altogether, the walk is just over 15 miles with 4300 feet of vertical, for a "book value" of just under ten hours.

Now we have to add in the extras. Let's suppose that we're doing this in late June, when we have a whopping 15 hours of daylight. We'll only go if the weather is good, and we'll start right at sunup, around 5:30AM. The views are superb all along the range, so we're going to want to soak them in over time. The trail is pretty reasonable the whole way, if a little interesting going up the east face of Slide. Our summer daypacks won't weigh too much, and we'll walk together just fine (look at how well we plan!). So we'll take the book time of ten hours, add an hour for views, an hour for breaks, and another hour because it is a long day, and get a total of around 13 hours. I think that we'll be back around 6:30PM, well before the 8:30PM sunset.

This is not a day hike for beginners! This is only for experienced hikers in good shape who know that they can keep pushing themselves for that distance, elevation gain, and time. It can, however, make a fine backpacking trip for many people, where the additional weight of the pack adds a few more hours, and the fifteen hours can spread out over two full or three relaxed days.

### On the Trail

The first time I tried the Wittenberg-Cornell-Slide day hike was in mid June of 2001. I did the math above, started from Woodland Valley with the rising sun and just about perfect weather. I monitored my times carefully, and kept to our schedule. I was feeling so strong after crossing the Burroughs Range that when I encountered the Giant Ledge-Panther trail I scurried the extra 2.5 miles (each way) and 1000 vertical feet to the top of Panther; my guess was that that would add another few hours to my walk. When I ascended Giant Ledge on the return (each of those ascents cost me 200 extra vertical feet, for a total of 1400 vertical on my diversion) I "bonked" or "hit the wall". I had been downing lots of water the whole day, but my little lunch on top of Slide wasn't enough to keep up my sugar levels. It came on in under a minute – every trace of energy fled my ancient carcass. I sat down, drank (even more) water, and wolfed down a medicinal Snickers bar and other similar health food. After fifteen minutes of rest, hydration and fueling, I felt strong enough to get up and get on my (downhill) way back to Woodland Valley. It took a tad over an hour for the 3-mile walk home, but the joy seemed to balance the fatigue. Altogether, I had done about 20 miles and 5700 vertical feet in a bit over 12 hours.

That hike was a final test for my attempt two weeks later for a Presidential Range Traverse in New Hampshire. I waited for a sunny day (and so the meteorologist promised) and started from Pinkham Notch an hour before sunup, headed up Mount Madison, and then south across the Northern Presidentials. My times were good at first, and I felt strong into mid morning. I fell off my pace a little in late morning, and then the storm blew in. Mount Washington makes its own weather with little regard to area forecasts, and on top at 1:00PM, the 40mph wind at 40 degrees was driving the rain right through me. The weather, the numbers, and my gut all concurred that my hiking fun bucket was full, so I headed back down to Pinkham Notch, leaving the Southern Presidentials for another day.

I've walked the Devil's Path in bits and pieces, but I've never tried the whole thing in a day. The 24 miles and 9,000 vertical feet add up to about 17 hours at my best pace, and I can't keep that up for that long. That is too much mountain for the likes of me.