The Verdict: Hikers Done Ruin Trails

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From publications such as the *Lake Placid News* and *Peeks*, and from agencies such at the Department of Environmental Conservation and the Adirondack Council, a dark narrative has been presented during the past few years, one that communicates the Adirondack Park's High Peaks Region is facing grave peril due to increased hiker use. This popular crisis narrative has us envision this region plummeting into a post-apocalyptic dystopia that rivals any scene from *Mad Max*. It will be a grim future, this total annihilation of the mountains, and at the end of it the purveyors of the crisis narrative will have but one smug question left for us. "Are you happy now?" This is all nonsense, of course, for there is no crisis. As Pete Nelson points out in this issue of *Adirondack Explorer*, the High Peaks Region is in much better shape than it was decades ago.

As a former trail builder who specialized in sustainable design and construction, I take particular issue with one component of the crisis narrative. This is the presupposition that hikers are damaging trails. You see, trails are damaged by three forces – *erosion*, *displacement*, and *compaction* – and hikers cannot apply these forces with serious effect.

Erosion can only be caused by water running down a trail, this water being snowmelt or a direct deposit of rainfall. An example of a high *displacement* force is an ATV flinging loose soil off the trail. Hikers' boots don't have enough bite nor force to displace soil, and this force is further reduced by hikers commonly wearing innocuous trail runners. Hikers can't *compact* trails either, at least when the tread consists of durable mineral soil. When it comes to this third force, crisis narrative fans unwittingly demonstrate their shortcomings regarding comprehension. When twenty 150-pound hikers walk down a trail, the compaction force isn't 3,000 pounds, as some think. It's twenty separate applications of 150 pounds.

It's not use that's causing trail damage. It's design, which encourages erosion. During the past century, Adirondack trails were built without consideration for sustainability. But you don't have to go back 100 years to find instances of poor judgment. Even within the decade trails have been designed and built by people with no training in sustainable design. They wouldn't know what a clinometer was even if you even dropped one in their salad; they can't communicate the differences between the terms grade, grade reversal, slope, inslope, and outslope; and there's little

chance they have dog-eared copies of the International Mountain Bike Association's *Trail Solutions*, the bible of sustainable design, on their bookshelves. Despite sustainable design information being readily available to any Adirondack agency, ignorance of how trails are damaged is present in professional circles. For example, Dave Gibson, managing partner of Adirondack Wild, commented that "trails suffer from overuse." The Department of Environmental Conservation warned that "the large number of visitors has resulted in trail erosion." The Adirondack Council asked in a recent High Peaks survey if "trails should be temporarily closed when they are most susceptible to erosion from overuse."

Ignorance leaves us with the most wretched trail system in the United States, and this is no exaggeration. Trails in the Adirondacks are eroded, steep, rocky, rooty, and muddy and provide for poor user experiences. Our trails are money pits, not just mud pits. Unsustainable trails are incredibly costly since they require constant maintenance or need to be relocated altogether. Outside of wilderness areas, poor trail design eliminates potential multiple-use economic stimulation because, by their very nature, sustainable hiking trails beautifully accommodate runners, bikers, walkers, and skiers, too. Such trails invite an array of year-round users who in turn spend their money in Adirondack communities. Sustainable trails make money. Unsustainable trails cost money.

What's just as bad as not knowing how trails are damaged is not knowing how to stop erosion. Trail hardening, the most common type of trail work in the Northeast, is the practice of replacing soil with stone since stone can't erode, but in nearly every case hardening is a waste of time and money and doesn't stop erosion. After all, when Northeast trail maintainers clean out water bars every year, what do you think they're cleaning out of them? That's right: the eroded trail itself. On the other hand, sustainable design, which rarely incorporates hardening, calls for five elements that prevent damage: all spongy organic material is removed to expose durable mineral soil, average grade may not exceed ten percent, grade may not exceed half the steepness of the slope it's built into, an outslope (an outward and downward tilting of the trail) of ten percent must be present, and no water bars are constructed (use grade reversals instead).

The next time you read an article in which an Adirondack agency states that hikers are damaging trails, you have the right to feel good about yourself. Why? Because you'll realize that just by reading this article, you know more about trail design and construction than just about anyone who didn't read this article. Now that you have this knowledge, the only things left to do

are to demand that state and private agencies stop wasting money on unsustainable trail projects and to stop blaming hikers innocently trying navigate the most wretched trail system in the United States.