

Hiking Benton MacKaye's Hike

Expanding the Appalachian Trail Experience

Julia DeGagne

May 2007

Master of Environmental Studies Capstone Project
Department of Earth and Environmental Studies
University of Pennsylvania
Advisor: Sarah Willig
juliadegagne@gmail.com

Introduction: New Steps for the Appalachian Trail.....	3
1. Background.....	5
The Lure of the Appalachian Trail.....	5
Why We Hike	8
The AT Community.....	11
2. The More the Merrier: Why Some Use Reduction Strategies Can't Work.....	14
Use Limits.....	15
The Social AT Hiker.....	18
Fees	20
Conclusion	22
3. Up a Slippery Slope: How To Build a Trail for the Masses	23
Building a Trailway for Heavy Use.....	23
Accommodating Overnight Crowds	25
Lowering Impacts through Education.....	30
Lowering Impacts through Regulation	32
Conclusion	34
4. More Trails for Wilderness and Solitude: The New Eastern Trails System.....	36
Discouraging or Staggering Use.....	36
Expanding Use to Other Trails	39
Conclusion	44
Notes	47

Introduction: New Steps for the Appalachian Trail

This is a paper about preserving the unique experience of a hike on the Appalachian Trail as we hike into a crowded 21st century. Its title derives from a popular backpacking mantra, one I heard nearly every day on my 2006 thru-hike: "Hike Your Own Hike."

HYOH (for short) reminds us to confidently make our own choices about gear, pace, and town visits – and to respect the choices of others. No one is supposed to feel bad about carrying a 50-pound backpack and walking five miles a day, or carrying a 10-pound pack and walking 30 miles a day, or anything in between. No one is supposed to poke fun of anyone else's habit of spending five nights in a hotel for every week on the trail, or goad another hiker into spending more time at the local bar than he intends to. Even if a guy is pirouetting down the trail in a bathrobe, brandishing a six-foot staff made of PVC pipe and carrying a weeks' worth of drinking water in 5-pound tin cans, he's entitled. He might even be respected for it – He's really "hiking his own hike," in the face of all the contrary advice he must have received. By the time I completed my thru-hike, I'd seen enough different hiking styles to get a pretty good sense of what HYOH means (though I must confess there were times I was so tired, I was wishing someone would hike my hike for me for awhile).

As much as individuality is revered and encouraged on the trail, the AT experience is inevitably a shared one. There are practical limits to the HYOH tradition. For example, it's a violation of trail etiquette to make too much noise late at night, to travel in a large group, or to smoke in a shelter. Then there are trail ethics. LNT is another hiker oft-invoked trail acronym: it stands for "Leave No Trace", a philosophy of low-impact wilderness travel practices. So, if your idea of hiking your own hike is to leave trash or food strewn about a campsite, cut down saplings, or allow your dog to bathe in the spring, you might witness other hikers all hiking their own hikes – as far away from yours as possible.

While these socially imposed limits can safeguard the trail experience, sometimes the sociability factor limits a hiker's enjoyment of the trail. How can you HYOH when there are simply so many others hiking it with you? Or when you're sharing a campsite with 50 other people? How can you HYOH on a trail so badly eroded that it's three full feet below the lay of the land? When the trailside is so full of invasive plants they form a two-mile corridor of monoculture?

These questions and others led me to the feeling that I wasn't hiking the hike intended by Benton MacKaye when he first envisioned a long trail up the east coast. In 1921, MacKaye, a land-use planner, dreamed of a wilderness trail that would provide disillusioned city-dwellers with a little rejuvenation. For the most part, the AT still achieves this, but occasionally it falls short. Invasive species threaten the integrity of the forest ecosystem, development along the trail wipes out natural settings, and pollution produces hazy, steamed-glass views from the southern mountains. It is absolutely not my intention to de-emphasize these larger-scale problems, which can all damage the

wilderness value of a hike on the AT (not to mention the value of the ecosystem in general), though they fall outside the scope of this paper.

I am concerned with another issue that can detract from the wilderness experience, one which seems not to have yet penetrated the management plans of those in charge. The following pages are concerned with the amount of use seen by the AT, and whether or not it's too much. If overuse does become a problem, are there any feasible solutions that would be in keeping with the identity of the AT? Can we take advantage of our country's growing interest in wilderness recreation, instead of waiting for it to overwhelm the resources we already have? This paper takes an admittedly optimistic view of the AT and the possibilities for a larger system of long-distance hiking trails in the eastern US. But as someone who's been there lately and experienced the strength of the AT community, I believe a little optimism doesn't seem altogether unwarranted.

1. Background

"In every walk with nature one receives far more than he seeks."

-John Muir

Imagine setting out at dawn for a hike in the serene woods of Georgia. As the sun rises to its early springtime zenith, the breakfast chatter of southern birds winds down and the miles grow between yourself and the world of pavement. Perhaps you pass the occasional hiker and exchange pleasantries. It's a simple, calm, and peaceful world out there, deep in a forest of leafless trees. The surrounding valleys, empty of human influence, send their branches up to the sun in search of nourishment for baby buds, and a crisp grey sky caps off a solitary wilderness experience. After ten miles or so you arrive at camp, exhausted from the constant ups and downs of those rolling Georgia mountains, but proud of what you've accomplished. Your lungs are brimming with fresh air and your mind is full of the sights and sounds of the woods. But that's where the fantasy ends.

Why fantasy? I haven't told you yet that your hike is taking place on the famous Appalachian Trail. And you're not the only one – there are twenty other hikers at the campsite!

Unfortunately for the solitude-seeking backcountry hiker, this isn't an altogether uncommon scenario on some parts of the AT. Early each spring, an influx of long-distance hikers busts the buttons of the most southern sections of the trail. Add in some local folks getting away for a few days and a smattering of vacationers taking their yearly two weeks in the woods, and what do you get? A whole lot of folks all looking to experience some degree of solitude – along the same narrow trail.

The Lure of the Appalachian Trail

Most hikers know the AT is popular, and at times crowded. So why do they come in such droves to hike it? For starters, it *is* a well-known, conveniently located trail. It connects well-known natural landmarks in every state – high mountains like Clingman's Dome, North Carolina, and Mt. Washington, New Hampshire; beautiful vistas like McAfee Knob in Virginia and the Pinnacle in Pennsylvania; special destinations like the grassy, sun-spattered Roan Highlands of Tennessee and Grayson Highlands State Park in Virginia (home to herds of wild, photogenic ponies); not to mention both Great Smoky Mountains and Shenandoah National Parks. All this, within a day's drive of 2/3 of the population of the US.¹ No wonder it's crowded.

There are other factors, too, particularly for long-distance hikers. You can park your car, step out of the parking lot and onto the trail, look first one way and then the other, and think, "That way goes to Maine, and *that* way goes to Georgia!" This experience, the sheer *opportunity* presented by such a long footpath, has made an indelible impression on many a casual hiker. The possibility of "thru-hiking," hiking the whole trail from end to end in one trip, has intrigued. Some thru-hikers are motivated by the prospect of a long, inexpensive vacation from reality, others by the sense of achievement afforded by a

difficult undertaking (though not as difficult as two other long-distance trails in the US, the Pacific Crest Trail and the Continental Divide Trail). To become an official "thru-hiker" brings escape – not to mention bragging rights.

The AT also has a rich history. The many characters who have hiked the trail over its 86 years have contributed to its legendary status. From a display of antique hiking gear at Amicalola Falls, Georgia to the imposing bronze statue of Walt Whitman in Bear Mountain, New York, the AT today oozes with personality. One favorite trail legend is Emma "Grandma" Gatewood, who thru-hiked twice when she was nearly 70 years old, in the 1950's. She wore cheap sneakers and carried what little gear she needed in a homemade denim shoulder bag – including a plastic shower curtain for shelter and a blanket instead of a sleeping bag. Gatewood is revered among hikers today for her courage and simple philosophy, and remembered for her many quotable gems. "Most people are pantywaists," she once said, "Exercise is good for you."² Who (among those familiar with the word "pantywaist", at least) could argue with that?

Bill Irwin is a more recent legend who hiked the whole trail in 1990 with his seeing-eye dog – his hike truly captures the "anything is possible on the AT" attitude.³ And who could fail to mention the first-ever thru-hiker Earl Schaffer, who completed the trail for the third time in 1998 at age 79?⁴ The discussion of "trail legends" could be extended to fill a book, including legions of habitual hikers, hostel owners, and townspeople who've attained a measure of trail-fame over the years. Of course, you'd have to add an appendix detailing the "wacky hikers" – like the guy who thru-hiked with a 30-pound tuba in 2000,⁵ the barefoot hikers, and the possibly mythical "nude hiker" (who, though mentioned in many journals, I have not been able to officially document). The kicker is, if someone did take the time to fill such a book, there would be a community of enthusiastic AT hikers and others ready to buy it.

There are also those characters who change every year – the ones whose fame flickers only briefly along the trail's narrow corridor. In 2006, we had "Minnesota Smith": a round and balding geologist with a heavy backpack, colossal hiking stick, and an extreme, mace-wielding dislike of dogs. His willingness to share his unconventional political views earned him some notoriety on the trail. Smith's huge pack, widely rumored to have held as much as seven rolls of toilet paper at one time and to have contained back-up gear for his back-up gear, was a caricature of the old boy scout motto. The man's reputation always preceded him, and I think he rather enjoyed the reactions he got from new acquaintances when they said, "Oh, Minnesota *Smith*. I've heard all about you..."

We also had our trail jesters, those hikers who could always write something entertaining in a campsite register. We had our own cartoonists, weathermen, and op-ed people (Minnesota Smith, incidentally, was a weatherman). "Able Jack" for example, was our Dave Barry. No matter what, he had always just experienced his "worst day yet," and, even if the trail was beautiful and the weather beyond reproach, was always able to generate a sarcastic rant about how wretched life on the AT really is. He was joking of course – just like "Bemis" and "Southpaw" (cartoonists) were when they filled 500 miles worth of registers with pin-ups of David Hasselhoff.

The AT is truly its own long, skinny village. The trail has its own celebrities, cliques, unspoken rules, customs, and even code names. As former thru-hikers will jump to tell you, it's not just about the woods – It's about Smith and Jack and all the other hikers; it's about the trail crews, the hostel owners, the shuttle drivers; it's about the whole, gigantic AT community. Hiking the AT, as opposed to a lesser-known trail, gives people the feeling of becoming a part of something larger than themselves – be it a physical trail that extends over 2,000 miles, or a social community that extends over 14 states and 85 years.

Yet, in a way, all of the social facets of the AT are simply a fascinating by-product of its *intended* use. The trail was the life-long vision of Benton MacKaye, an idealistic land-use planner short on practical ability but steeped in utopian political ideals. In modern articles on the AT, MacKaye might be a "celebrated dreamer, philosopher, or grand visionary,"⁶ or "an obscure academic with a tendency to get fired,"⁷ depending on the spin you prefer. In the early 1920's, he was just a thinker who got worried when the US urban population surpassed its rural population, and who had a creative answer to rampant development in the east: a long footpath in the woods.⁸

The wilderness pathway, as a cure for urban illnesses both mental and physical, would provide "the breath of a real life for the toilers in the bee-hive cities along the Atlantic seaboard and elsewhere."⁹ And where better to place such a path than along that strip of under-developed land along the crest of the Appalachian Mountains? So near to the urban centers of the east, and so unused, it could easily be protected for recreational use. MacKaye's vision was far-reaching: he imagined not only a long trail, but also a series of "community camps" (complete with housing, farming, and study opportunities) in which the urban dweller would regain his sense of humanity.¹⁰ Some of the more ambitious flowers of MacKaye's vision never did bloom as he intended, but the kernel of his dream remains the basis for the trail we use today. At its heart, the purpose of the AT is still to "‘open up’ a country as an escape from civilization."¹¹

Though his contemporaries referred to him as a "nineteenth century New England reformer strayed into the Jazz Age,"¹² MacKaye was perhaps correct in his diagnosis of the illness of 20th century America. The subsequent rise of the suburbs with their trees and creeks suggests that Americans do indeed want, if not need, a little greenery in their lives. MacKaye had simply hoped to provide it in a more communal, natural setting.

The first few miles of the AT were built in 1923, under the supervision of two hard-working and practical chairmen of the Appalachian Trail Conference, first Arthur Perkins (1928-1931) and then Myron Avery (1931-1954).¹³ By 1936, volunteers had laid out the whole trail, and Avery himself had personally hiked every piece of it.¹⁴

Today the trail is held to its purpose by the Appalachian Trail Conservancy (ATC), which works out of its headquarters in Harpers Ferry, West Virginia. Thru-hikers are generally excited to have made it to Harpers Ferry. It's a small, historical town with little in the way of supplies or services, but it is sometimes viewed as the "psychological" mid-point of a hike from one end of the trail to the other. When I arrived, I knew very little about the ATC and what it does. Hikers passing through may note that the ATC sells bumper-

stickers and overpriced bandanas. Thru-hikers know that they take your picture for all of posterity and put it in the "Thru-hiker Yearbook".

But all users of the AT should know a little more than that. If the hikers are the heart of the trail and the volunteer trail-maintainers are its soul, the ATC is its central nervous system. They're the ones who communicate with agencies, land-owners, trail maintaining clubs, congress, and the public in support of the AT. They also have the final official word on what the AT is, and what it should be.

The definition and purpose of the AT are changing to fit the modern conservation ethic. In 1981, the ATC defined the AT as "a simple footpath, purposeful in direction and concept."¹⁵ Lately the organization has expanded its scope: the trail may now be viewed more scientifically, as a "mega-transect" by which to monitor the environmental health of the Appalachians.¹⁶ Many are beginning to see the AT corridor as more than a path for people. It's also a swath of wildlife habitat that happens to be shaped conveniently for the north-south migration of plants and animals – an attribute that has been made much of in these days of climate change awareness. The organization has also changed the meaning of its last initial from "Conference" to "Conservancy", reflecting the shift it has made from its original role (as coordinator of the groups involved with the AT), to its modern role (as initiator and implementer of important conservation and advocacy projects).¹⁷

The ideal AT experience, however, has not changed much since the days of MacKaye and Avery. According to the ATC, a hike on the trail has included in the past, and should always include, these seven elements: solitude, views, challenge, history, culture, nature, and the opportunity to "live at a walker's deliberate pace ... focus on one simple activity, with time for thought and self-discovery."¹⁸

Why We Hike

Ask a hiker why he hikes and he may look at you a little sadly and shake his head as if to say, "if you have to ask, you'll never know." Hikers like to walk, of course. They like to be in the woods. They believe hiking is good for their bodies and their souls. In fact, the question of "why hike?" confuses them because they honestly can't imagine why anyone would want to be doing anything *else*.

The AT is a versatile trail – it does different things for different people. However, it is still viewed by most in MacKaye's terms: as a cure for the ills brought on by the daily grind. It's a brief escape from dreary urban and suburban environs for day-trippers and vacationers, who take comfort in birdsong and forest greens on a long hike or a picnic in the woods. For long-distance hikers it provides even more time to heal and to think.

For many years, nature writers and philosophers have speculated on the meaning of nature to a human population that has lately grown apart from it. But it was not so long ago that we were primarily hunting, farming people. Conservation writer Sigurd Olsen wrote in the 1930's that we need nature because "it is rather hopeless to believe that in the short space of a generation or two, we can completely root out of our systems the love of the simple life and the primitive."¹⁹

For those who require convincing by scientific method, researchers are beginning to examine the basis of what has in the past been a simple and obvious love of nature. Olsen's sentiments attained more scientific status in the 1980's in the form of E.O. Wilson's "biophilia" concept. Biophilia describes the idea that humans have an innate bond with other living organisms.²⁰ Studies in many different environments have shown actual reductions in stress levels and improved health in people who have been exposed to natural, as opposed to built, environments. This applies to hospital patients, prisoners, and the mentally ill, and has been borne out in both surveys and rigorous controlled experiments.²¹ A review of such literature prompted environmental health researcher Howard Frumkin to suggest that our affinity for the natural environment "reflects ancient learning habits, preferences, and tastes, which may be echoes of our origins as creatures of the wild."²²

In 1989, evolutionary psychologists Rachel and Stephen Kaplan wrote, "Viewed as an amenity, nature may be readily replaced by some greater technological achievement. Viewed as an essential bond between humans and other living things, the natural environment has no substitutes."²³ I wonder if Olsen would be pleased that the empirical researchers quoted above now confidently back up his theory? Or would he be exasperated that hundreds of studies were believed necessary to prove something so obvious as the importance of trees – like a hiker who's just been asked "why?"

Philosophers from Henry David "we need the tonic of wilderness" Thoreau to John "wilderness is necessity" Muir never looked for proof – they had already found it on the lakes and in the mountains. Thoreau wrote famously on wilderness, though he was more of an appreciative outsider: "We can never have enough of nature. We must be refreshed by the sight of vast and titanic features ... We need to witness our own limits transgressed and some life pasturing freely where we never wander."²⁴ Biophilia views wilderness as a natural and necessary extension of the self, while Thoreau saw it as a reminder of gorgeous but inhospitable places humanity will never touch. And every nature lover has his own wilderness philosophy, just as fiercely personal as Thoreau's or Olsen's. For myself, I observed the ability of time in the wilderness to expose our ancient and authentic personalities, bringing out the latent simplicity in modern people. Perhaps someday someone will prove unequivocally that hiking is good for the soul, but why wait?

At least the physical benefits of hiking are more tangible than the psychological benefits, and more clearly documented. Walking and hiking are among the easiest and most pleasurable ways to take exercise – something that Americans should really start doing, according to the Surgeon General, the American Heart Association, and common sense. 65% of US adults are overweight or obese, as are about 16% of the children, and only 15% of adults exercise regularly.²⁵ Since 2001, when the surgeon general first referred to the obesity problem as "epidemic,"²⁶ U.S. governments and businesses have been working hard to encourage better exercise habits in the population that might reduce the ballooning cost of healthcare. Walking improves cholesterol levels and decreases blood pressure. Diabetes, heart disease, osteoporosis, arthritis, back pain – walking can help prevent all of these common ailments.²⁷

Hiking trails not only provide access to pleasant exercise, but to a wilderness experience – and wilderness access is key for generating support for wilderness conservation. No matter how many times John Muir uses the word "glorious," reading about the forest won't give people a personal connection to the natural world if they've never been there. Jim Sullivan, a canoe builder and botanist in Georgia, describes it well: "People ... don't get the connection from watching PBS nature specials. They might develop an interest, but they don't make a connection — until they get out there. People who do care deeply need to do everything they can. Get people out in the woods. Educate them. I've seen awareness grow, but it's a very slow process."²⁸

As someone who can spend days contemplating a waterfall, but could never make it all the way through "Walden," I can attest to the power of experiencing the real thing. The AT, so near to city- and country-folk alike, is the ultimate in publicly accessible wilderness. Once people are connected, conservation becomes a way of life. The AT has itself often provided a focal point and the impetus for conservation efforts in the east: by preserving forest lands around the AT, ostensibly to improve the quality of our recreation experience, hiking enthusiasts have helped to improve air quality and protect watersheds.²⁹

It doesn't matter what philosophical, scientific, or environmental terms we put it in, or whether the effects are direct or indirect: wilderness recreation is good for people. So it's understandable that, when the question of "over-use" is brought up in reference to a popular public hiking trail, as it has been in the case of the AT, it raises hackles. The implication of such a term is that we need less use – when all of the evidence tells us what we need as a society is *more* opportunities for backcountry recreation. So who, exactly, is supposed to stop reaping the benefits of the trail in the name of "overuse"? It's a complicated problem for the AT, and one that has been largely ignored in practical terms (there are currently no permits required, or fees collected, to take a hike on the vast majority of the AT¹). It would certainly seem undemocratic – and possibly even socially irresponsible – to limit the amount of time people are allowed to spend walking in the woods.

Some hikers are out just for the day, picnicking or walking to a scenic spot or landmark, but many AT hikers feel there's some significance to venturing out in the woods at least overnight. Day-hikers are those who are obliged to return to their cars at the end of the day, and as a result are sometimes pitied by the other types of hikers. It's true that, with a backpack, a hiker becomes "self-contained, able to be alone with nature though not subject to her. The backpack is his home, as much a part of him as the shell of the tortoise."³⁰ Part of the lure of the AT is that it goes on practically forever – with just a backpacks' worth of stuff, you could stay out all year. The practical implication of this is that when trail is a hiker's "home," he impacts it by overnight use as well as day-use.

¹ The exceptions include the 101 miles in Shenandoah National Park and the 72 miles in Great Smoky Mountains National Parks, which do charge a fee for entrance to the park by car, or ask that a (free) permit be obtained by hikers walking through. Great Smoky Mountains operates on a limited reservation system for overnights in the backcountry, but there is no limit placed on the number of AT thru-hikers admitted.

Sigurd Olsen believed that some people feel the need for nature more acutely than others. It occurs to me that AT thru-hikers must be among those he was thinking of, that need to disappear onto the woods not for days or weeks, but for months at a time. Before I set out to do it, over 9,000 people already had – and about four times that number had tried.³¹ There are some who do it more than once. For example, Dan "Wingfoot" Bruce and Jack "Baltimore Jack" Tarlin have each thru-hiked the AT seven times.³² Hiking can, apparently, become addictive. But few realize that the phenomenon of thru-hiking represents a significant departure from MacKaye's original plan. The planner himself envisioned a more democratic AT, which would be enjoyed, in his words, "systematically by the people and not spasmodically by the few."³³ Of the three or four million people who used the trail in 2005, about 1600 were spasmodic potential thru-hikers.³⁴ Though their numbers are comparatively small, their usage as a group is significant. Thru-hikers tend to clump up, exaggerating their effect on crowds. And if a thru-hiker is successful, he might spend about 150 days on the trail in a season! I myself "used" the AT in 2006 for about 170 days, personally tamping down 2,174 miles of trail and impacting about a hundred campsites – way more than my fair share, I suspect.

Perhaps those who come closest to exemplifying MacKaye's vision are the life-long section-hikers (a section-hiker is any backpacker who does not do the whole trail at once). Some section hikers use their vacation time every year to hike for 100 miles or so until, after maybe 20 years, they have finally hiked the whole thing.

The AT Community

The most incredible thing about the AT seeing over 3 million users per year – if not the most incredible thing about the entire AT – is how that use is sustained. By and large, it's not through federal, state, or county employees. It's not through a traditional top-down government bureaucracy. On the contrary – the AT is maintained almost entirely by volunteers, and it's run by the National Park Service on a cooperative basis with the non-profit ATC. In 1981, the ATC called the trail "basically a grassroots undertaking."³⁵ Management is largely a collaborative effort between planners, maintainers, government agencies, land-owners, townspeople, and hikers.

The AT is physically built and maintained by volunteers. The trail was first proposed with volunteer work at its base – all kinds of people using their leisure time to improve outdoor recreational opportunities. In this case, MacKaye's vision was spot-on, and volunteerism remains one of the most amazing successes of the AT today. Each of 30 trail sections is run by a local trail club, and management from the ATC and the NPS is basically *laissez-faire*. The larger organizations step in to help with trail-wide issues and land acquisition. MacKaye emphasized the importance of local interest and presence in the upkeep of the trail. ATC Chairman David Field echoed this sentiment in 1995 when he spoke reverently and gratefully of volunteers: "They provide something totally immune from the vagaries of public budgets. For them, it doesn't matter what the Congress or state legislature does. They clear their trail."³⁶

They do, indeed, clear their trail – and in doing so inspire reverence in hikers, as well as ATC Chairmen. One day, just shy of Damascus, VA, I came face to face with the reality

of trail maintenance. We hiked past three trail maintainers, armed with hedge-clippers and chainsaws. Yes, they were volunteers. They did this every year, and they'd be out all day working on this three-mile section. I couldn't thank them enough. I was trying to appreciate them as representatives of the 5000 people who donate 190,000 hours each year to the trail.³⁷ They seemed embarrassed by my exaggerated gratitude, and while I know maintainers appreciate recognition, they don't seem to require it. As habitual maintainer Paul P. Johnson Jr. puts it: "We do it because we take pride in being part of something so much bigger than we are."³⁸

Besides being a part of AT tradition, volunteers are necessary because federal funding for the trail covers only planning, administration, and sometimes land acquisition. It's the responsibility of the ATC and the local trail clubs to fund any construction or maintenance activities. To put the impact in perspective: the US government spent less than \$2.5 million on the AT in FY 2005,² about 1/1000 of the \$2.4 billion budget for the National Park System.³⁹ That year, the ATC privately raised over \$3 million for trail expenditures.⁴⁰ Other maintenance costs were covered by individual trail clubs.

The AT, like all National Parks, belongs to the people: over 99% of the trail is on public land or rights-of-way.⁴¹ Unlike other National Parks, though, the AT is largely free-of-charge. As a result of these oddities, the AT National Scenic Trail Office once called itself "the round peg trying to fit within the square confines of the National Park Service."⁴² I hope the NPS has also noticed that the idiosyncrasies of the AT have made it wildly successful. The volunteer maintenance program and the primitive nature of AT facilities allow it to operate outside the financial restraints of traditional national parks, as David Field noted. The AT provides recreation to as many users as Yosemite National Park does each year, for a fraction of their \$22 million annual budget.⁴³

The other side of this popularity coin, of course, is that the ardent members of the trail community have been accused of "loving the AT to death" through overuse.⁴⁴ And yet, these are the very same people who materialize in great numbers to ferociously defend the trail. Whenever its ecological health is threatened, and whenever its right-of-way or tenuous viewshed are in question (as happens often, since the trail runs through some of the most populous, fast-growing areas of the country), supporters are there.

Witness the outpouring of dissent for the Redington Farms Windmill Project in Maine, whose permit has recently been all but defeated by a 6-1 Land Use Regulation Commission vote. The project called for 30 wind turbines to be placed on Black Nubble Mountain, about one mile from the AT. The ATC and Maine AT Club, with the help of the National Park Service, mobilized a campaign to defeat the project and protect the wilderness views from the AT.⁴⁵ One concerned reader of the *Maine Morning Sentinel* complained in a letter to the editor, "How can a few people hold sway over the whole state?"⁴⁶ All in a days' work for the passionate AT community.

² The FY 2005 operating budget of the AT's federal management branch, the National Scenic Trail Office, was \$1,137,000, and \$1,338,876 of the ATC's budget came from government grants.

In a 1927 speech, the ever-dramatic McKaye likened supporters of the public recreation movement to Barbarians knocking at the gates of over-civilized Rome: "The backbone of our strategy ... lies on the crestline of the Appalachian Range, the hinterland of the modern 'Romes' along the Atlantic coast. This crestline should be captured – and no time lost about it."⁴⁷ To this day, the AT community heeds the old battle cry, defending their crestline even against barbarians bearing renewable energy projects.

No other natural area in the US covers so much ground or has (and depends on) so much public support as the AT. Built, maintained, owned, used, and protected by its community, the AT has a history of being more of a "people's trail" than one administered by the government. It's a serendipitous mix: inexpensive, primitive, and popular. The more I hiked of the crowded and well-loved trail, the more amazed I became at the ingenious management model that made it possible. The challenge the AT faces now is how to address the issue of overuse and protect the integrity of the physical environment of the trail, without detracting from the democratic identity that makes it so well-loved.

2. The More the Merrier: Why Some Use Reduction Strategies Can't Work

"The trail is slowly becoming less about nature and more about people."

– Thru-hiker Trail Journal, March 20, 2007¹

On my first night on the trail, I found myself hunkered atop Springer Mountain with about eight others, drowsily watching the sun sink from its pink tissue-paper sky down into the crinkles of the Georgia hills. We sat there quietly, almost reverently, in awe of our natural surroundings. To break the silence, one hiker officially proclaimed the sunset to be "better than TV!" That broke the spell, and murmurs of assent rolled through the small crowd. We started to chat excitedly about how happy we were. We'd had a great day, and of course we felt lucky to be on the AT – particularly if it was going to be compared to what passes for entertainment on television. But what happens when we stop comparing the AT to an evening of sit-coms and reality shows and evaluate it on its own terms? Is it the wilderness trail it was designed to be?

Generally, the fewer manmade objects and other people on a trail, the more of a "wilderness experience" it provides.² I mentally checked off most of the ATC's elements for an ideal AT adventure: nature, challenge, culture, history, views, opportunity to walk – I found them all there, everyday. But after getting somewhat acclimated to the unspeakable joy of spending each day surrounded by fresh mountain air and huge trees, I began to notice that I was surrounded by other hikers as well. It wasn't just me: according to a 1999 government survey, the trail surpasses everyone's expectations for nature enjoyment, challenge, and friendliness. The only element its users tend to find lacking is sweet, sweet solitude.³

I shouldn't have been surprised to find myself one among many. In 2005, after all, the ATC estimated that over 4 million hiking trips took place on the trail.⁴ The venerable AT has served as the primary outlet for adventurers in the eastern US since the 1960's, when more and more vacationers began forsaking paved roads for backcountry trails.⁵ Backpacking has declined somewhat in popularity since its heyday in the late 1990's.⁶ Some experts believe that the simplicity and solitude of backpacking will continue to fall out of favor with adventure-seeking youths and busy 21st century families,⁷ but no one expects the tumbleweeds to be rolling on the AT any time soon.

The peaks and valleys of the popularity of the trail are sometimes linked to publicity. Ed Garvey's popular book, *Appalachian Hiker: Adventure of a Lifetime*, let the public in on the fun of thru-hiking, and numbers of thru-hikers climbed quickly throughout the 1970's.⁸ In 1996, former ATC Chairman David Field attributed a sudden increase in use to the *Appalachian Adventure* series, which ran in a handful of widely read eastern newspapers in 1995.⁹ And perhaps most famously, Bill Bryson's wildly popular *A Walk in the Woods: Rediscovering America on the Appalachian Trail* was published in 1998, and the numbers of attempted thru-hikes spiked dramatically, peaking in 2001 at 2700.¹⁰ Numbers of thru-hikers have fallen off steadily since then, with only 1650 starting the trail in 2005, and possibly as few as 1500 in 2006.

Bryson's book, more of a comedy than a travelogue, definitely didn't glorify thru-hiking, but it did bring the trail some attention. I can't say for certain that it had any significant influence on the AT's popularity, but there's an undeniable buzz in the community regarding a new project: Robert Redford and Paul Newman reportedly have a feature film in the works, based on *A Walk in the Woods*.¹¹ Some are concerned that such high-profile publicity will bring too many people to the AT, but others are looking forward to having their trail in the public eye once again.

In summary: backpacking is supposedly becoming the new ugly stepchild of outdoor recreation, the AT hasn't seen any major publicity lately, and thru-hiking is at its least popular since 2001. Yet still the trail is crowded, and overuse remains a legitimate issue. Between March and April, the southern end of the trail morphs from sleepy footpath to hiker highway. Most of the years' crop of thru-hikers head north from the southern terminus at Springer Mountain, Georgia, in the early spring. Sometimes, hikers are caught off-guard by the crowds. As one 2003 survey respondent said, "If you are a north-bounder [a thru-hiker hiking from Georgia to Maine] looking for solitude along the Trail, you'll be hard pressed to find it."¹²

Solitude does exist on the AT, but it certainly doesn't come easy. Although hikers spread out during the day and spend time alone while actually walking, they tend to bunch up at shelters and scenic rest stops. On a weekend night in April, you might find forty or more people camped on Springer Mountain.¹³ Just seven miles up the trail at Hawk Mountain Shelter, a hiker taking refuge one night from a rainstorm reported finding thirty people there. "And," he said, "... everyone was fine."¹⁴

It may be a convincing testament to the friendliness of trail culture that its hikers are okay with crowding into a shelter like that. I'll admit it gives the thru-hiker in me a little warm, fuzzy nostalgia to imagine such a typically ridiculous thru-hiking situation – 30 dirty, soggy hikers packed into the trail equivalent of a circus clown car, cracking jokes about ramen and sharing M&Ms. Still, thirty or forty people at one overnight site is far from an ideal situation on a wilderness hike.

Use Limits

Let's just fast-forward a few weeks – to truly experience crowding on the AT, try a spring break overnight in Great Smoky Mountains National Park (GSMNP). Home to seventy of the most scenic miles of the trail, GSMNP is blessed with relatively calm terrain, carpeted in wildflowers, and punctuated with stunning vistas during the day. But sunset brings a change in scenery. If it weren't for all the expensive hiking gear lying around, you might mistake the shelter site at dinnertime for a refugee camp – with tents packed in tight and thirty or more tired, hungry people milling around. Here, too, it's not unusual for individual hikers' trail journals to report between 25 and 40 people at one shelter site during peak season.¹⁵

GSMNP is one of the few areas on the trail to have imposed limits on numbers of overnight hikers – ten people per shelter per night. So why the crowds? Only hikers who begin the trail in the park need a reservation. The overflow consists entirely of long-

distance hikers (who both enter and leave the park on foot). It's not really favoritism on the part of park management, though; it's just a practical impossibility to put a limit on long-distance hikers in the Park when no limit exists elsewhere on the trail.

At times like these, when my hike felt more like a weekend music festival than a wilderness adventure, I fantasized about use limits – a quota on thru-hikers! I'm sure the complete stranger sleeping inches from me in the packed shelter was wishing for them too, every time I hijacked his pillow in my sleep (his being the only pillow for miles, I like to think I wasn't the only one he had trouble with). Thru-hikers make up a small minority of trail users, but they use the trail all summer long and tend to hike *en masse*, descending upon each section of trail like ants on a pop-tart. Still, in my saner moments, I had to admit that there are good reasons why strict use limits have never been applied on the AT.

Like me in early April 2006, many researchers and wilderness managers in the 1970's favored use limits – and fully expected quotas to become the norm for wilderness recreation.¹⁶ Mainly, limits were imposed to protect the ecology of an area. In the 1980's, though, scientific studies began to show that limiting use did not decrease camping impacts appreciably, unless use was restricted to an extremely low level.¹⁷ Use quotas lost support as their scientific basis came unglued, except in particularly fragile or low-use areas.¹⁸

Talk of limits generally subsided in the 1980's, but when the woods became crowded again about ten years ago, managers returned to the idea of use limits – this time for the sake of providing solitude for visitors.¹⁹ It's been done in some Wilderness Areas,²⁰ and theoretically, it *could* be done on the AT. Instead of just throwing some gear in the car and heading out to the nearest trail crossing, you'd have to fill out a permit and itinerary, then hope to secure reservations for overnight use on the trail. The trip might lack spontaneity, but at least when you arrived at your campsite it wouldn't be stuffed to capacity with local teenagers and Outward Bound kids. In addition to the loss of spontaneity, though, there's a loss of opportunity. Managers debating quotas have to ask themselves whether or not it's okay to create an artificially ideal situation for some hikers, at the cost of opportunity for all hikers.

Rationing use is often considered a "last resort" by wilderness managers, because it's so restrictive.²¹ However, sometimes a restriction on the *amount* of use is preferable to a restriction on the *type* of use. In GSMNP, for example, hikers are required to camp in designated areas because of high use levels (hence the refugee-camp feeling), and some do resent being told where they can camp.²² Lower use levels require less restrictions (for example, on where and how to camp) in order to control impacts like trampling and fire ring scars.

Unfortunately, the AT is a poor candidate for total freedom of use. In order to lower numbers enough to achieve solitude and allow for unrestricted use, limits would have to be pretty harsh, displacing huge numbers of hikers. There is rarely any rationale for overall use limits unless they are strict enough to allow a few users to enjoy both solitude and an unfettered wilderness experience.

With use restrictions also comes displacement, begging two questions: Who is displaced? And where will they go? The "who" varies depending on method. A reservation system favors those who plan ahead; a queue system favors those who get there first; a wilderness skills test favors those with experience. But whatever the system chosen, use limits inevitably displace a certain type of hiker who I call the "Lone Wolf". Out of all the hiker clichés on the trail (Gear Heads, Party Kids, Weekend Warriors, etc.), the Lone Wolves were my favorite. Like the old man who grew up on mountain spring water and never filters the stuff but just dunks his head right in to drink. Or the heavily-bearded guy with the canvas rucksack who bushwhacks to his campsites, won't set foot in a shelter, and thinks hikers who stay in hotels are missing the point. Or the woman who keeps backpacking gear in the trunk of her car, just in case she feels like driving out to the trail on a Friday after work. These are people who just belong in the woods – all experienced backpackers and ardent lovers of the AT in particular.

For the Lone Wolves, who prize the AT for the sense of opportunity and freedom it provides, restrictions like use limits would (at best) change their relationship with the trail, or (more likely) run them off altogether.²³ When the Three Sisters Wilderness implemented quotas for some areas in 1995, researchers tracked a distinct change in demographics – first-time users were more likely to turn up in the regulated areas, while experienced users began to seek out unregulated portions of the Wilderness.²⁴ Unless some complicated merit-based program were implemented, we'd run the risk of reserving the AT for the casual vacationer, at the expense of the core volunteers and active supporters who love it most.²⁵ When use is restricted forcefully, a trail can lose the support of the very demographic that is most loyal to it – a situation that could spell disaster for a trail that leans on public support as the AT does.

Of course, the point of quotas is to restrict use, and naturally people will seek out other trails to use. Managers have to answer the question of "where?" and ensure that nearby trails can handle the overflow without themselves becoming overused.²⁶ In the 1980's, dispersal to less crowded wilderness areas and trails was considered a good thing,²⁷ but more recently, managers and researchers are leaning towards use limits only in low-use areas, where they preserve a solitary experience that already exists. Generally, it's far easier to implement proactive limits than to reduce current use levels.²⁸ Direct limits on use on the AT would change recreation dynamics suddenly throughout the eastern US, while lowering use more gradually would allow a period of adjustment for other trails.

There are other practical considerations as well. Permits would require management, overhead, and enforcement – these are all legitimate administrative and financial concerns that could preclude the possibility of use limits all together. Thru-hiking poses a particular problem: even if 2000 people start a thru-hike, less than 500 will finish. A hiker requesting a permit for the entire trail has only a 25% chance of actually using it the whole way. A reservation system would require a limit on the length of a permit, and thru-hiking would become a logistical nightmare. The entire culture of AT thru-hiking would hypothetically die a sudden and painful death. Thru-hikers are extremely vocal, though: opposition from the hiking community would probably be enough to defeat any such proposal.

Fundamentally, the AT has to be able to accommodate as many users as desire to use it, as the ATC's Comprehensive Management Plan suggests: "Access to the Appalachian Trail has traditionally been unrestricted for hikers, and freedom of use will continue along most of the Trail."²⁹ This was written in 1981, when use was rising and expected to continue to do so. User quotas are contrary to the democratic spirit of the AT and the mission of the ATC, which rightly promotes more subtle ways of limiting use.

Use limits do work on the AT on a small scale. Baxter State Park in Maine requires reservations for all hikers, protecting a fragile resource and keeping use to a low level. Also, caretakers at Annapolis Rocks campsite in Maryland send campers up the trail to another site once a quota is reached, to reduce impacts in an area that's been overused and abused. But for all the above reasons, direct use limits won't work for most of the AT.

The Social AT Hiker

On some high-use trails, it's more practical to simply give up the quest for solitude and let the crowds take over. On Mt. Hood in Oregon, for example, managers recognized that solitude is not expected by hikers on such a popular trail, even though the mountain is in a designated Wilderness Area. Deciding against a use limit for day-hiking up to the summit would keep other trails relatively quiet for those hikers who were looking to be alone.³⁰ Managers of the AT find themselves in a similar situation. I'm not surprised that few hikers *expect* solitude on some parts of the AT, at certain times. But I was a little chagrined to even have to consider this possibility: does anyone (besides me) *want* solitude on the AT?

Hikers have often demonstrated anecdotally in their journals that the trail is a little crowded. Near the beginning of my own journal I wrote: "... I'm kind of glad our pace doesn't seem to match the shelter spacing at all -- there seem to be 12-15 people at each shelter at night." Some survey results concur: In 1999, the average number of people seen per day by non-thru hikers was 22; for thru-hikers it was 17.³¹ 54% of thru-hikers and 43% of non-thru-hikers said they saw more people than they would have preferred to see.³²

But there is also evidence that hikers actually find the crowding to be *enjoyable*.

The quote that begins this section, in context, describes one hiker's feeling about the progress of her particular 2007 hike – but it could just as easily be applied to the philosophy of the trail over the past 20 years. In his journal, "Trudge" recalls how he tried specifically to avoid crowds on his thru-hike, but later alludes to an interesting ambiguity regarding AT hikers and the desire for solitude: "Having to crowd into a packed shelter on a rainy night, or getting to know tons of people might have been some of their [northbound thru-hikers] favorite experiences. I know that by the time I flipped [began traveling northbound, with the crowd], I was really looking forward to meeting people long enough to get to know them."³³

Examples of the desire to socialize are prevalent in trail journals and on hiking forums. Consider "Mr. Happy", who began the trail at Springer Mountain on January 16, 2007:

"Doing the trail in winter was cold and lonely, and an amazing growth experience, but it isn't what I was looking for in this hike...When I go back there will be more people, and even if it isn't much warmer, at least I will have company, and feel as if I am part of a community instead of feeling like the only person on earth."³⁴ And Socrates, who left very early in the season for his thru-hike, explains that he was only seeing between one and five other people at camp each night: "... there weren't many hikers around me ... I like hiking alone, but I like to be social at the end of a day so in that aspect, I was disappointed. Some would simply make dinner, read from a book, and go to bed. I'm more of a social animal than that. If I had stayed out longer, I'm sure the scene would have improved eventually."³⁵ Socrates ended up quitting his thru-hike, partly due to the lack of sociability.

I personally "enjoy feeling like the only person on earth" where Mr. Happy did not. I also would not consider sharing a shelter with five people to be an "improvement" over sharing it with one or two. However, I can see where Trudge, Mr. Happy, and Socrates are coming from. One of my personal favorite nights on the trail was one spent at Watauga Lake, Tennessee, with about 30 other hikers. We had a tremendous feast and burned an unclaimed five dollar bill in the fire in a communal show of hiker anti-materialism. Later I wrote in my journal, "... there has *never* been a day more fun than today."³⁶

All of this anecdotal ambiguity is echoed in a 2003 thru-hiker survey. When asked to name the best parts of the trail, the top answers were: "People, friendships, and local community," followed closely by "Peace, quiet, and simplicity." Some of the worst parts (after bad weather and bugs) were the crowds and the stiff competition for shelter spots. But flip the survey over, and you'll find that hikers also didn't like "being alone for too long".³⁷

Empirical wilderness studies have generally concluded that seeing lots of people on the trail changes the nature of the experience; however, people usually do not detract from the *quality* of the experience – people still enjoy themselves just as much in a crowd.^{38,39} Generally, wilderness users are more likely to accept use limits for ecological reasons than for social reasons,⁴⁰ and those who perceive a trail as being crowded or physically impacted tend to be the ones who support use limits.⁴¹ AT hikers, though, don't believe that the trail is crowded or overused enough to warrant limiting use: the majority of respondents to a 1999 user survey (72.5%) stated that "public use of the Appalachian Trail should not be limited."⁴²

Well, which is it? Do the people detract from the experience, or are they the most important part of it? Maybe today's hikers want it all, or maybe we're seeing two distinct groups: those who come to the trail for the solitude, and those who come for the camaraderie. Those who desire solitude may be underrepresented, having already gone elsewhere. As recreation researcher David Cole points out in a review of the many papers on visitor opinions, "the rationale for use limits is more likely to come from some careful evaluation of legislative and administrative mandates or the unique value and purpose of any given area than from a survey of current visitors."⁴³

Even with direct use limits unlikely, the rationale for limiting use on the AT is still sound. As far as "administrative mandates," the AT was created specifically in order to provide a wilderness experience – not like the trail up Mt. Hood, for example, which is viewed as more of a means to an end than a wilderness experience.

Because of its unusual length and history, this trail is a special case. Essentially a wilderness trail built for solitude, it also happens to pass through some popular, high-use attractions. There are certain spots that will never be wild or lonely, like road crossings, National Parks, and picnic areas. Parts of the AT run through towns, after all, and even I enjoyed the novelty of following white blazes down a sidewalk past a hardware store. But the majority of the AT is far from roads and civilization, and it is here that solitude is necessary. While there is no denying the role of sociability on the trail, there is also little doubt that crowds shift the experience away from the peace and quiet it was intended to provide.

Fees

I always had mixed feelings about emerging from the trees after a five- or ten-mile trek up and down mountains into a macadam parking lot and scenic overlook. Partly, I was proud, feeling like I'd truly *earned* the view. Along with this came pity for those who couldn't possibly appreciate the view properly, having *not* earned it. Mostly, though, I'd be annoyed (despite having taken the easy way up to many an overlook myself, and despite the fact that I will no doubt do so again). In North Carolina, we trudged up Wayah Bald looking forward to a spectacular view of the Smokies to find a parking lot and a paved trail bordered by grass. I saw a white blaze painted on a trash can and a guy in a dress shirt talking on his cell phone. What, I thought, is this man doing in my wilderness hike?

Technically, the entire AT is free to walk – provided you aren't parking in a fee area or driving into a national park for which an entrance fee is required. In 1996, the federal government introduced the "Fee Demonstration Program," now authorized more permanently as the Federal Lands Recreation Enhancement Act (FLREA).⁴⁴ The Act allows agencies like the US Forest Service (USFS) to charge fees for the use of public lands that they hadn't been authorized to charge before, including parking fees for some AT trailheads.

Day use can crowd some popular overlooks and picnic areas, and has been rising nationwide even more quickly than overnight use.⁴⁵ Charging fees to park at AT trailheads might curtail some use. Studies have suggested that visitors will decrease use of sites that charge even a \$3 fee.⁴⁶ Theoretically, fees sort out "high-value" users (those willing to pay) from "low-value" users (hopefully, the man on the cell phone).⁴⁷ Ideally, high-value users are more likely to be those who are properly respectful of wilderness values and less likely to be yapping on cell phones or littering.

Usually the decrease is most notable in areas where demand is elastic, such as locally-used or less-famous sites. McAfee Knob in Virginia, for example, is a locally well-used site that might benefit from parking fees for day-use. With only those who value the site

most paying, crowding will be less, impacts will be less, and the experience will be heightened for those who pay.

However, the NLREA has specific guidelines for which public facilities can charge a fee. A parking area must include certain amenities, such as trashcans and toilets, to qualify. The AT, as a primitive trail, is probably better off forgoing fees in order to avoid a proliferation of such amenities – especially when fees might encourage people to expect them elsewhere on the trail.⁴⁸ When charging for day-use parking, trail managers must be very careful to avoid the slippery slope of developed facilities.

What about charging for a thru-hike permit? Fees might work on day-users or those on short trips, but all thru- and distance-hikers are generally "high-value". It is unlikely that such a fee could cost enough to deter those who may have dreamed of the hike for years, and who are already planning to spend between \$2,000 and \$6,000 on a thru-hike. Yearly fees don't reduce use among high-value users: when Yellowstone introduced higher seasonal permit costs for angling, the anglers were only encouraged to spend *more* time there.⁴⁹

As a thru-hiker, I never paid to walk the trail. There are, however, some areas that charge users to camp, such as throughout Baxter State Park in Maine and certain sites in New Hampshire's White Mountains and Vermont's Green Mountains. Such fees were instated to cover the costs of operating high-volume sites, such as caretakers and maintenance.⁵⁰

The fun of a wilderness trip seems to be unaffected by the fee, once it's paid.⁵¹ However, it appears that we run into the same problem with fees as with use limits: a certain type of person will avoid them at all costs. A survey in Desolation Wilderness, California, found that even among those who paid the fee, 22% of wilderness users found it unacceptable to pay for wilderness camping.⁵² And, as with use limits, experienced users and those who are most attached to the area in question are less likely to find fees justified, even though they're the ones who are most likely to notice impacts in the woods.⁵³

There are a number of philosophical arguments against fees for recreation on public lands. To pay for access to public land simply strikes some people as slightly insane – the land, after all, belongs to them.⁵⁴ Generally, wilderness has been viewed as a benefit to all of society, and wilderness recreation has been supported by general taxes. Way back in 1963, as wilderness recreation was just getting started, the Outdoor Recreation Resources Review Commission emphasized that: "...user charges are not meant to hinder the use and enjoyment of basic outdoor recreational opportunities for people who desire merely to commune with nature and wildlife".⁵⁵

Some argue, a bit more emotionally, that fees for access are a challenge to the wildness of a wilderness experience:⁵⁶ "It is the lack of clumsy conventions, such as user fees, which makes some parks valuable as a source of spiritual nourishment and emotional health."⁵⁷

Then there is the practical argument that fees are not conducive to stewardship. When public lands are free, they more clearly belong to the public. As Watson and Herath put it, fees can undo some of the work already done:

"In the public sector, we have worked for decades to foster the development of a land ethic among the public. Stewardship implies personal acceptance of responsibility. Public land stewardship denotes a commitment to the resource, a commitment to other users who share that commitment, and to future generations who will benefit from our actions. How does charging a fee alter that relationship?... Are we willing to accept the risk of losing good stewards through achievement of good customers?"⁵⁸

Charging a fee changes the user from owner to customer, and the management agency from partner to business owner.⁵⁹ In other words, no one who has ever paid for a meal in a restaurant has offered to help with the dishes.

Those who argue for fees point out that the costs of recreation should be borne by those who are using the resources, rather than the taxpayers.⁶⁰ This argument is less relevant to the AT than other public trails, since its maintenance is largely performed by volunteers and its overhead largely provided by charitable contributions. For this reason, fees on the AT could have a devastating effect on volunteerism and donations – how can users be expected to freely give labor and money *and* pay a fee to use the trail?⁶¹

One argument in favor of new recreation fees on Forest Service land compares the USFS to the National Park Service (NPS): NPS has been providing recreation since its inception, and has always been able to charge for it; therefore, because the main business of the USFS is increasingly recreational, they should now be allowed to charge as well.⁶² The AT is beautifully free of this logical argument, having been conceived as a recreational facility *and* a free service. These qualities mark the beauty and uniqueness of the trail, and are the ultimate reason that fees should be charged on the AT only when they are absolutely necessary to protect the resource.

Conclusion

Currently, AT hikers are in no danger of having to queue up for a hike or cough up any dough for the privilege of walking in the woods. This is as it should be – anything else would undermine trail culture and destroy the democratic experience of hiking the AT. However, there are other techniques, totally voluntary in nature, that could help dissipate the crowds without impinging on the hard-won freedom of the AT hiker.

3. Up a Slippery Slope: How To Build a Trail for the Masses

"Remote for detachment, narrow for chosen company, winding for leisure, lonely for contemplation, it beckons not merely north and south, but upward to the body, mind, and soul of man."

-Harold Allen on the AT

It's not only the people we see that interfere with our "wilderness experience" on the AT. All summer, every time I frowned at a stream-bank cleared of vegetation or puffed my way up a severely eroded mountain path, I was looking at the ghostly footprints of hiking seasons past. Many of the sights that make a trail less enjoyable are evidence of past, rather than present, overuse. A checklist of these (erosion, exposed roots, trampled vegetation, entrenched trail, and muddiness¹) could double as a caption list of some of the photos from my thru-hike.

Building a Trailway for Heavy Use

Imagine Roan Mountain, Tennessee: an area that draws thousands of wildflower lovers to its natural mountaintop garden every summer. In mid-June, Catawba rhododendron bushes send 1200 acres of amazingly, dazzlingly, unnaturally pink buds into a sudden, unequivocal burst of springtime. Or so I hear – I ended up there in late April. What I noticed about Roan Mountain, instead of the flowers, was this: "... it's a well-used area, and the trail was in bad shape on the way up. The roots just can't hold that soil up anymore, but they're trying. In some spots, a single valiant root appears to be supporting the entire trail."²

This trail is vintage AT. When the section was originally routed in 1954,³ use of the path was limited – so the trail club built a steep, challenging path (straight up the mountain, it feels like). Today, the soil on such an incline simply crumbles under the pressure of high traffic and is washed away.

Roan Mountain is far from an isolated case. Trail clubs first noticed in the 1980's that heavier use was turning the path into an "impassable ditch".⁴ Today, erosion control is the number one concern for many trail maintenance clubs. Water bars, rock steps, and checkdams keep erosion at bay on many sections of the AT⁵ (as a lowly hiker, even I could contribute a little by clearing leaves out of the water bars – which operate as cross-trail rain gutters – with the heel of my boot).

When maintenance is not enough, a club might change the trail's layout to make it less steep. In the last twenty years, many sections throughout the trail have been rerouted or newly switchbacked in order to prevent excessive erosion.⁶ The Bear Mountain Relocation Project is a current mega-project, the "graduate-level course" in trail-hardening.⁷ Four miles of widened, eroded trail are being re-routed over the course of seven years, as volunteers engineer the heck out of the new trail with rock steps and cribbing in an effort to keep hikers corralled in.⁸ By 2011, the completed trail will be 5

feet wide (so much for "narrow for chosen company") and its grade will max out at 10% (so much for "challenge").

Still, with this part of the trail used by 200,000 people every year, most of them day-hikers,⁹ trail-hardening is necessary. As the amount of use increases, the maximum acceptable slope decreases, so an ideal maximum grade on the AT, depending on soil type, ranges from 8 to 10%, with steeper sections (up to 20%) reinforced by rock or log steps.¹⁰ As much as hikers enjoy the challenge of a good, stiff climb (well, some do), a steep AT is impractical with so many feet pounding the trail.

Much of the erosion on the trail is the result of grandfathered sections like the south side of Roan Mountain, which haven't yet been remade to conform to new standards. However, the north face side of Roan Mountain *has* been brought up to modern standards. After mourning the dearth of pretty flowers at the top, I zig-zagged down a smooth, switch-backed path, skipping along a covering of stones set into a synthetic runner. The hike up the next hill, Round Bald, continued in the same vein – with the added decoration of a barbed-wire fence to keep me from venturing out of bounds.

Where the pebbles and barbed-wire end, unfortunately, the condition of the trail again deteriorates. My journal specifies: "Sometimes it's a trench two feet deep, sometimes it's three separate trails (each made by hikers attempting to bypass one of the others in mud or rain), other times it's just one trail – six feet wide." I suggested to the trail club, only half-joking, that they run a white-blazed shuttle between the two nearest roads and call it the official AT, just while they fill in those horrible trenches.

Roan Mountain and Bear Mountain serve as reminders that it's not only the numbers of people and the condition of the trail that make for a rewarding, solitary wilderness experience. Too much evidence of human tampering with the landscape, such as an overly-developed or overly-maintained trail, can destroy the wilderness feel of a hike.¹¹ Even if you're the only hiker for twenty miles, it's hard to retain a sense of freedom as you travel along a barbed wire-enclosed path.

A different type of erosion becomes a problem on the northern AT where bogs are prevalent. Instead of trudging up steep slopes, hikers maneuver around mud-pits – and sometimes they would rather widen the trail and trample vegetation than muddy their L.L. Beans. It is particularly important in the fragile alpine environments of New Hampshire and Maine that hikers stay on the trail, and that the trail remain narrow.¹² As a result, northern trail clubs are adept at split-log bridge construction, and in the wettest areas we strolled comfortably along wooden planks. However, the more use a mud-prone trail sees, particularly during the wettest seasons, the more it erodes – and the more bridges are required.

Barbed-wire isn't free and bridges aren't wild, but without these construction materials, the AT hiker could only feel wild and free while wallowing in a giant, muddy ditch.

The ATC rightly decrees that the trail treadway should be constructed in a way that protects the footpath, above all other considerations.¹³ In fact, in its management plan,

the ATC is quite confident of its ability to do so: "... if preservation of the resource with only minimal erosion is the management objective, trail construction can be carried to a degree which allows this objective to be met, even with high use levels. The physical carrying capacity is thus not fixed, but can be increased almost indefinitely by trail hardening techniques."¹⁴

When level of use dictates that the trail require as much maintenance as Roan and Bear Mountains do, it ceases to be what the AT is intended to be, at least in the sense of offering wilderness and challenge. Where the condition of the trail is improved, it feels as though it were on the verge of being paved.

Certainly, by re-routing the trail away from ridges, slopes, and valley bottoms where erosion and muddiness are most likely, a trail can stand up to heavier use.¹⁵ But the AT has traditionally emphasized a feeling of "being on the height of the land" and has been routed through the most exciting places (the beautiful, diverse, and also mud-prone southern cove forests, for example). Who, having seen these amazing places, would want to see the trail re-routed extensively along sturdy but monotonous valley walls? The only way to preserve the AT as it was intended to be is to reduce the amount of use it sees.

Accommodating Overnight Crowds

During the day, we generally kept to that well-used trail. But what happens when the day-hikers head back to their cars and all the backpackers spread out under the moon to bed down for the night? Besides sleeping, we inevitably destroy some vegetation, expose a bit of dirt, and evict billions of soil microbes from their homes.¹⁶ Some disturbance is unavoidable, but trail managers minimize impact as best they can. Despite such efforts, though, the high number of campers on the AT at peak times sometimes exceeds system's capacity.

Shelters are a part of the AT tradition. Generally located no more than a days' hike apart, these three-sided wooden structures were originally intended to provide "... shelter from inclement weather and an opportunity for sociability which many hikers enjoy."¹⁷ These days, they are also seen as tools that help to concentrate use and reduce overnight impacts on the trail. Twelve hikers sleeping in a shelter equals between six and ten tents not being pitched that night, and a far smaller footprint on the trailside environment. As Jack "Baltimore Jack" Tarlin notes on a popular hiker forum, without shelters on the AT, "... they'd be tenting all over the place, and not always responsibly... instead of having one fire pit, hundreds of new campsites would result in hundreds of new fires."¹⁸

So what happens when shelters are full (or just plain unappealing)? On most of the AT, hikers are permitted to tent in any existing campsite, or even to make a new one. Some find their solitude, even hiking with a crowd, by seeking out unofficial, off-trail campsites. On some hiker forums,¹⁹ a few experienced backpackers advocate "dispersed impact camping" as a means of gaining solitude and avoiding unsanitary (read: rodent-infested) shelter conditions. On many backcountry trails, this is standard practice: a hiker creates a new site for one night's use, then covers it up again the next day so it won't be

used again. In less-traveled areas, this technique spreads out use, limits the impact on trailside vegetation,²⁰ and provides the hiker with a sense of wildness and freedom.

Though not actually discouraged in most areas, this practice does undermine the efforts of trail managers to concentrate usage impacts on the AT. Because just one night of use reduces vegetation to 66% of the original cover, the site must be left alone for an extended period in order for it to regenerate.²¹ Some AT hikers can camp properly this way, particularly those who sleep in hammocks (which leave far less impact than tents). Jeff Marion, for example, is a recreation ecology scientist. It is his job to design low-impact campsites on the AT, yet when he hikes, he prefers the solitude of dispersed camping with his hammock.²² But not every hiker is an expert. Considering the numbers of campers on the AT, it is likely that any new campsite or path, once impacted even slightly, will be used by others until it is well-established.

There will always be some solitude-seeking hikers who prefer to camp in a private site no matter what. But when shelters fill up, the numbers of hikers seeking undesignated campsites increases – and so do trailside impacts. In fact, on only the second day of my thru-hike, I camped at an undesignated site: "...At Horse Gap ... in not much of a campsite ... And we're not the only ones, either -- there's about 8 of us here! You can imagine how crowded the shelters are."²³

Too many undesignated sites make a trail unsightly and can ruin the natural atmosphere of the trailway.²⁴ When there are one or two campsite-sized dirt-pits alongside every mile of trail (as is the case along the AT in Georgia), it becomes obvious that hikers don't always choose the best places for a new campsite. An exhausted, hungry, thirsty hiker, driven by convenience, often pulls off the trail and sets up camp right next to it.²⁵ These sites diminish solitude, as well – I couldn't count the number of times I hiked by an occupied trailside campsite and felt a little like I was tramping through a stranger's Sunday dinner.

Unregulated camping can also be damaging to the ecosystem. It's extremely convenient, for example, to camp dangerously close to a water source.²⁶ One 2004 hiker admits: "The shelter [Stover Creek, GA] was a bit tight so I camped in the clearing by the creek. Marvellous [sic] spot about a minute off the trail."²⁷ A marvelous spot, perhaps, but camping next to a stream or spring jeopardizes water quality and increases the likelihood of streamside erosion and sedimentation. If the shelter hadn't been full, would this hiker have been tempted to set up his camp there?

User-made sites are also subject to expansion. In Virginia's Jefferson National Forest, most are situated on flat, herbaceous areas – easy to set up a tent on, but also extremely susceptible to expansion by larger groups of hikers.²⁸ I noticed the same situation myself just north of Pen-Mar Park, where thru-hikers often stop to eat and socialize (the local pizza shop happens to deliver). Since it's illegal to camp there, hikers continue on in search of a home for the night – and spread out in a flat, herbaceous area near the Mason-Dixon line. The soil there has been exposed and the vegetation trampled more than would have been necessary for a shelter or designated campsite.

Undesignated sites come not only with vegetation loss and soil compaction, but often with their very own personal fire ring, sometimes barely more than a few rocks around a charred circle on the ground. The ecological impacts of campfires are most obvious at the campsite (tree damage and fire scars, sterilized soils, built-up campsite seating, trash), but also extend to wood collection (and trampling of vegetation) and the occasional wildfire.²⁹ Undesignated fires are particularly significant because the fire ring of a temporary campsite is the last area to recover.³⁰ 1995 and 1997, an organized hunt turned up 216 undesignated (and in this case illegal) fire sites in Shenandoah National Park's backcountry and 563 in the Great Smoky Mountains.³¹

Designing Campsites for Low-Impact and Solitude

As managers struggle to concentrate growing camping impacts, AT shelters are getting bigger. Newer shelters, particularly near Springer Mountain, are being built to hold twelve or sixteen hikers, where they used to accommodate only six or eight. Much as trail carrying capacity can always be increased with trail-hardening techniques, campsite capacity can always be expanded with clever design.

Behind the engineering problem of carrying capacity lies another question of trail identity: do larger shelters interfere with a primitive, wilderness experience? According to the ATC, "... shelter density and design should be consistent with the sense of the natural."³² Large shelters, which may actually encourage larger groups of hikers, feel less natural than small ones, and also interfere with the ATC's imperative to encourage solitude.

Concentrating designated tentsites provides an alternative to larger shelters, and many trail clubs have even advocated the removal of shelters in favor of tentsites.³³ These sites are more primitive than shelters, can accommodate many tents, and are designed to be as low-impact as possible. To prevent erosion and expansion, managers use a process called "side-hilling," building tent platforms on sturdy soils where they are bordered by slopes, dense vegetation, or even posts.³⁴ A strategy as simple as choosing a site under oak trees instead of hemlocks reduces the likelihood that hikers will expand the campsite to fit more tents in.³⁵

Cosmo Catalano of the Massachusetts AT Committee says side-hilling has been successful at Laurel Ridge Campsite, in most ways. The site is experiencing much less expansion and damage than Bear Rock Falls Campsite, which it replaced. Catalano warns, though, that "social paths" have been forming, through the thick rhododendron, to connect the sites. "What we're finding is that most thru-hikers, particularly, like to camp together," he noted. "If we do something like this again, we might consider providing a gathering place."³⁶

Concentrating fires in one official fire ring can provide that place and also help shrink the total area of the site by encouraging camping nearer to the fire. Additionally, unfixed fire sites tend to migrate, creating more than one area of impact.³⁷ In areas where only designated fires are allowed, the vast majority of sites (92%) retain only one fire site, or none at all. These designated fire sites need not be large, obvious, or unprimitive. Smaller

fire sites encourage use of less wood and reduce the risk of wildfire. Instead of using iron fire grates or building with bricks, wilderness managers can make the ring appear both primitive and permanent using a technique called "iceberging": implanting large oblong rocks from nearby in the ground to make a ring.³⁸ Wilderness campers actually prefer that the ring itself be small and primitive.³⁹

Placing sites off the trail and separating them from one another by vegetation increases opportunities for solitude, where shelters tend to reduce that opportunity. Permanent, communal fire sites can help concentrate use. Personally, I enjoyed camping most in sites that combined these features – they provide the solitude of personal space without the guilt of camping in an undesignated site, plus the pleasant sociability of a communal dinner area and fire ring without the unwanted sociability of strangers' snoring in the night.

Some designated overnight sites, though designed for heavy use, have been clobbered to the point of being almost unpleasant. Blood Mountain Shelter in Georgia is a prime example. The mountain's thin and rocky soil supports a cover of rhododendron and azalea. Unofficial social trails wind all over the top, sometimes five existing where one would do. Graffiti mars the stone shelter and wooden signs, and toilet paper litters the ground. The Blood Mountain shelter is old (1930's), decrepit (giant holes in the floorboards), smelly (specifically, reeks of mildew and death) and infested (reportedly, by a family of skunks). Instead of staying there, we opted to pitch our tent in a large clearing that had once been vegetated but now held only roots. In my journal I wrote, "Our 'tent site' I'm sure was not really intended for this purpose, but the ground is totally bare, so I guess it's alright to pitch."⁴⁰

Blood Mountain, I learned later from one of the volunteer caretakers, is simply one of those areas that is so popular with locals and so accessible (2.5 miles from the road), that it's a significant battle even to keep it free of trash. To solve the problem of an individual site that's been abused, the trail club might hope to render the area less appealing to partying teens and disrespectful visitors by removing the shelter, installing fences around re-vegetation areas, and constructing small, low-impact campsites. In extreme cases, the seasonal presence of a caretaker and possibly a use fee can serve the same purpose.

Annapolis Rocks, Maryland, is a good example of the use of a caretaker. Prior to the 2003 season, the area was known as a local party spot and, according to Charles Graf of the Maryland AT Management Committee, had come to resemble a "giant outdoor bathroom". The site saw as many as 280 people every night. All these visitors flattened the grass, burned all the downed wood, cut saplings, and left their trash behind. Last summer the results of all of this unregulated use were still obvious: much of the flat area near the popular rocky vista sits forlornly behind some plastic barriers, mostly bare of vegetation but slowly re-vegetating. Instead of allowing users to camp here near the viewpoint, AT managers constructed new sidehill campsites along their own access trail in 2003.⁴¹

Even if a site isn't seeing abuse like Blood Mountain or Annapolis Rocks, when use reaches a certain level it may require a caretaker or special maintenance. Fees at these

sites are used to defray costs and to lower impacts by dispersing use. Fee sites tend to be a little nicer, and usually have bigger and better facilities (privies and shelters). Often they are situated on a popular attraction, like a lake (or "pond" as they are quaintly referred to in New England). Some wilderness users are happy to pay the occasional fee to camp, and some will forgo the fee and find another site.⁴² A \$5 fee, such as the one the Green Mountain Club charges for some lakeside sites in Vermont, seems appropriate to most wilderness users.⁴³ Fee sites are a good solution in extreme cases, but to have a fee and a caretaker at every shelter on the AT would ruin the free and primitive nature of the hike, as well as making hiking absurdly expensive.

While keeping designated sites sanitary and crowd-free is commendable, one problem with campsite fees is that they can increase use of undesignated sites. I found myself guilty of bad behavior on this point when I reached the White Mountains of New Hampshire. Here, matters are further complicated by the Appalachian Mountain Club (AMC) "huts" that dot 62 miles of the trail.

Huts are like primitive hotels, designed for the use of vacationers who want to "experience the rewards of a backcountry trek without the worry of carrying all of [their] food and gear on your back."⁴⁴ Huts cost between \$79 and \$94 per night (including breakfast and dinner) and have full-time staff during the hiking season. Since the free-of-charge shelter system does not operate on this part of the AT, hikers without hut reservations must choose between vying for limited "work-for-stay" spots at the huts, paying \$8 to use a campsite (with caretaker), or "stealth" camping off the trail. Stealth camping refers sometimes to camping illegally, but more often to camping off the trail in an undesignated area – otherwise known as dispersed-impact camping.

Motivated by either frugality or dedication to the principle of free wilderness recreation, hikers have created a number of unauthorized trails and obviously impacted "stealth" sites in the White Mountains. Proper dispersed sites shouldn't be obvious or used twice, but then, dispersed camping is only effective in low-use areas – certainly not on a trail as popular as the AT in the Whites. Stealth camping is discouraged, though not expressly prohibited, by the AMC.

Even knowing all of this, one night I went ahead and did it anyway. I trampled elegant ferns and delicate mosses in a totally irresponsible effort to camp for free (I don't have a hammock). I hid behind the law, taking care to camp below treeline, at least 200 feet from the trail, and at least 1/4 mile from water sources and huts. The official rules didn't actually say what I did was wrong, but I knew that, unofficially, it wasn't right.

Maybe allowing stealth camping is a concession to those who are accustomed to the free shelter system of the rest of the AT. In the context of trail life, where a long-distance hiker often finds a bed and shower in town for as little as \$10 (and sometimes, even for free), \$8 does seem a little steep for camping. I'm not opposed to the AMC charging fees to defray the incredible cost of maintaining composting privies for the huge numbers of people (they have to helicopter in the composting bark, after all). But more wilderness users are willing to pay \$5 to camp than \$8.⁴⁵

The AMC's section is one of the most strikingly beautiful, difficult, and remote sections of the AT. It's also very different from the rest of the trail in other ways. The expensive full-service huts make the White Mountains the only place on the AT where there is any hint of social stratification. They also bring civilization to the wilderness – on one occasion we reached the crest of Mt. Adams to find a helicopter delivering food to Madison Spring Hut. The large capacities of the huts (between 36 and 90 beds) help make the Whites one of the most crowded sections of trail. For all these reasons, not to mention the lack of free shelters, some hikers (particularly long-distance hikers) do resent the hut system and the AMC.

However, the huts have more of a claim to tradition than the AT does (the first was built in 1888, when Benton MacKaye was still in short pants), and they are here to stay. But the AMC should take a hard look at their entire overnight camping system and make some concessions to the spirit of the AT. The trail environment, both physical and social, could benefit from more free campsites, or lowered fees, even if the AMC's pocketbook would not.

Campsite design that encourages concentrated use without forcing it are good for both users and managers, and the AT boasts some major success stories in this regard. One of the first major efforts took place in Delaware Water Gap National Recreation Area between 1986 and 1991. Designating campsites and provisioning fire grates helped to reduce camping impacts by 50%.⁴⁶ When I walked through in July of 2006, I enjoyed a natural-looking trail with more trailside rattlesnakes than unofficial campsites.

The Annapolis Rocks experiment yielded impressive social results, too. Visitors who answered a before and after questionnaire agreed that the campsites were improved in many ways. They enjoyed increased privacy, less people, less noise from other sites, and increased naturalness of the campsite and vegetation.⁴⁷

The same model is being applied in various degrees elsewhere. In 2004, for example, a Georgia section between Slaughter Gap and Slaughter Creek was rerouted when the original section was overcome by camping impacts. The new section contains 8 new tentsites, accommodating three tents each, specifically designed to be low-impact.⁴⁸

These solutions are preferable to large shelters or fee sites because they better preserve the wilderness experience and are more likely to be used by campers seeking solitude. One maintenance job that goes hand-in-hand with building better campsites is getting rid of the old, ugly, inefficient sites. Local trail clubs have to start focusing on covering undesignated sites in a convincing way and allowing them to regenerate. Branches and vegetation would be the most aesthetically pleasing way, but in some cases a fence might be required.

Lowering Impacts through Education

If thoughtful management can create low-impact campsites and trails, what about low-impact people? Unwise campsite choices, eroded streambanks, litter in fire pits, trampled

vegetation, and many of the other user impacts that make a hiker say, "I walked 20 miles into the woods to look at this?" are, sadly, the result of users behaving badly.

Why? Either they don't know any better, or they don't care. Leave No Trace, Incorporated (LNT) is a national non-profit program that gives wilderness hikers the benefit of the doubt and assumes the former. With support from federal land agencies, volunteers, and equipment companies, LNT has reached millions with its message of low-impact outdoor skills and ethics.⁴⁹

I myself had only fuzzy notions of wilderness rules before last year. "Pack it in, pack it out" and "Take only pictures, leave only footprints" were the mantras I'd internalized in my youth, largely from posters in state park bathroom stalls. Early in my hike, I read LNT's six short and punchy guidelines on the back of a fellow hiker's water bottle on the AT in Georgia, and my wilderness ethics suddenly got a lot more cut and dry. It's a simple, effective system slightly reminiscent of a roach trap – LNT lures hikers in with free gear (which we cannot resist), hikers carry it back to their nests along the trail, and voila – education spreads.

Many organizations and parks are making concerted efforts to teach LNT ethics that run the whole environmental education gamut from publication in newsletters, to interpretive exhibits, to classroom outreach programs.⁵⁰ The jury is still out on whether or not such techniques work.⁵¹ If you were taking a little hike on the AT, could you guess which of these statements are true?

- Hikers should always walk single-file.
- Hikers shouldn't remove plants and rocks from the trailside.
- Bicycles and ATV's aren't allowed on the AT.
- It's a good idea to camp on already-impacted surfaces .

Actually, they're all true. Over 90% of AT hikers ace this little quiz, showing that AT hikers are somewhat well-versed in wilderness ethics. Some issues do cause confusion, though. Only 66% of AT users know they shouldn't camp right next to a stream, and only 63% know that they should camp at least 100 feet from the trail. And no – temporary fire rings aren't an accepted low-impact behavior (only 83% of AT hikers know that).⁵²

I wasn't surprised that hikers in the south scored worse on the fire ring question (72% correct) than those in the north (87% correct), since I had seen so many more temporary fire rings there. But I wondered: do hikers build fire rings because they are confused about best wilderness practices? Or are they confused about what the rules are for fire rings because they see that so many others have built them?

Hikers are undoubtedly receiving some mixed signals: the water bottle may say, "camp away from the trail", but many established campsites (both officially designated and undesignated) *are* right next to the trail. Trail design is moving away from on-the-trail shelters and campsites, but it will take time for these to become the norm on the AT.

Lowering Impacts through Regulation

Consistency of message throughout the trail could also be improved in other ways. The AT may be one trail, but each section has its own "house rules" for campsite selection and campfires. In the south, there is a sense of extreme freedom – we camped anywhere we wanted and built fires anywhere we wanted. In Shenandoah National Park, fires are permitted only in designated areas and dispersed camping is permitted as a last resort only. Some states, like Maryland, allow camping only in designated areas. Every time we'd cross a trail club or state line, the question of the moment would be, "What are the rules here?"

Connecticut has a ban on campfires and undesignated camping altogether. Aesthetically, the strict rules work. Instead of dusty trailside tentsites, the AT in Connecticut is lush with blueberries, jewelweed, and wild rose-bushes. There are few charred rings designating the sites of past campfires.

But these inconsistencies in rules and enforcement may contribute to hikers' lack of understanding about the rules – if they're just going to change again in fifty miles, why bother memorizing them? Also, a rule defined by state lines may seem arbitrary.⁵³ We wondered if campfires could really be so much more damaging in Connecticut than in Massachusetts. This arbitrariness undermines the whole system, as hikers start picking and choosing which rules they feel obligated to follow.

Even if the rules are followed, inconsistency can cause displacement problems. The now-defunct Bear Rocks Campsite suffered overuse, in part, because it was the first campsite for northbounders after Connecticut – the first in fifty miles to permit campfires.⁵⁴

The rules in place in the National Parks, Connecticut, and Maryland seem strict by southern trail standards. As we moved further north, or into a National Park or another area where camping was restricted, we felt suffocated by the "new" regulations. If rules were the same throughout the trail, users would be more likely to understand and follow them.⁵⁵

Encouraging Compliance

Even strict and consistent rules do little good without strict enforcement. Even where rules are well-established, compliance is sometimes lacking. Whether due to confusion or insubordination, rules get broken. In 1994, for example, a whopping 68% of campsites violated Shenandoah National Park's rules for campsite selection.⁵⁶ Campfire bans, while they reduce the numbers of fire sites, are not very successful in eliminating them altogether. One study found about one fire site for every two campsites in areas where fires are supposedly banned.⁵⁷ Remember that 90% of us hikers knew it was unethical to remove rocks and plants from the trailside? I'd bet that a lot more than 10% at some point stop trailside for a snack during the blueberry season.

You might think thru-hikers would be more well-behaved, but they are not. Nearly every tree within 40 feet of Sunfish Pond, New Jersey carries a sign that says, quite simply,

"NO SWIMMING". Yet, when I asked a fellow thru-hiker if he intended to swim there, he said "Of course, I've got my thru-hiker card!" and swiped an imaginary membership card through an imaginary membership card-reader. It is also not uncommon for thru-hikers to talk about stealth camping in areas where it is expressly prohibited. Why do we swim where it says "No Swimming" and camp where it says "No Camping"? Unfortunately, there's a tendency among some thru-hikers to feel the rules do not apply to them. Because they have been living on the trail for an extended period, they begin to view it as their home, and some begin to make their own rules.

So what makes hikers follow rules? Personal contact with a ranger is most effective, coupled with the threat of punishment.⁵⁸ In Great Smoky Mountains National Park, park rangers and the threat of a fine largely keeps hikers camping in designated shelter sites. In Connecticut and Maryland, AT organizations employ "ridgerunners," who provide a more user-friendly alternative to federal park rangers wielding fines. These friendly rent-a-cop types gently enforce the rules (though when pressed, they'll admit that if you ignore their pleas to follow regulations, there isn't really much they can do about it).

Perhaps part of the reason for lenient rules on most of the AT is that not every trail club can afford to employ ridgerunners to encourage compliance. Luckily, there's evidence that in some cases, "a good interpretive sign can be as effective as an on-site uniformed volunteer."⁵⁹ To start, a list of LNT rules should be posted at every trailhead to ensure that everyone does know the rules. When possible, each post should have the same rules, in the same wording. And the wording should make clear that these *are* rules, not simply "ethics" or "best practices."

Sign writers should keep in mind that visitors like to know the reasons behind regulations. The Sunfish Pond "No Swimming" sign and others like it would be more effective if they told visitors *why* they shouldn't swim.⁶⁰ Also, wilderness users will respond more positively to an appeal to ecological ethics than social values.⁶¹ If the reason given were to protect the habitat of a threatened plant or animal, that would be more effective than if it were to spare picnickers the sight of thru-hikers skinny-dipping. But if no reason is given at all, it seems a little like the state of New Jersey simply doesn't want anyone to have any fun.

Rules v. Freedom

However, if the ATC made regulation consistency and enforcement a priority, it would have to expand the most restrictive regulations: designated camping and fires only. Ideally, such a solution would concentrate use, limit impacts, and alleviate some of the confusion caused by the mixed-message.

But being policed while hiking the AT dulls some of the joy of living unfettered in the backcountry, as hikers will tell you. Users of the new Annapolis Rocks Campsite, while enjoying the improvements, missed the freedom to choose a campsite and build a fire.⁶² It is the same tradeoff for hikers in Connecticut, Maryland, and the National Parks. My journal reminds me that even I didn't entirely disapprove of the anarchy in Georgia: "...

you have to appreciate the freedom of just plopping your house down wherever you happen to get tired."⁶³

Freedom is part of the reason for taking a hike, and it can be undermined by too many rules and regulations. According to recreation ecologists, the dilemma is a central one in the field: "Use restrictions, permits, and even trail/campsite construction constrain (trammel) the use patterns of wilderness users. Unrestricted, uninfluenced and unmanipulated use often results in lost opportunities for solitude and other important attributes of the wilderness experience."⁶⁴

Campfires, for example, are considered part of the camping experience, although these days their use is more nostalgic than constructive and their impacts outweigh their practical applications. Most hikers now cook on stoves, which are faster, easier, and more ecologically sound. In six months on the AT, I only saw five people use a campfire to boil water for dinner, but I saw more than a few campfires burning for the sake for warmth or sociability. Most campers still enjoy a fire on a camping trip even if it's just for fun.⁶⁵ Three-quarters of Annapolis Rocks campers considered a fire to be an important part of their experience,⁶⁶ and 72% of AT users overall oppose a ban on campfires.⁶⁷

Yet, Connecticut has implemented a successful ban on fires that decreases impacts there. Would it make sense to expand the ban to the whole trail for the sake of consistency? Considering their importance to hikers, banning fires outright is an unnecessary restriction of the fun of a wilderness experience, unless there is a compelling reason to do so. Dispersed-impact camping is also very important to some hikers, and to ban it would displace some of the AT's most experienced and loyal supporters. Total consistency is unlikely to be achieved. The trail is long and varied, and some of the more fragile and impacted areas will always require more stringent regulations than others.⁶⁸

Conclusion

Being out on the trail, I first noticed the aesthetic problems caused by too much unregulated use. Later, I noticed that some of the solutions – widening of the trail, large shelters, rules, and ridgerunners – made hiking a little less of an adventure. As AT managers have already demonstrated, good design can make the best of a crowded trail. Campsites that allow for both socialization and privacy concentrate use in a way that users find pleasant. Covering up ugly, undesignated sites and allowing them to return to a natural state can encourage use of the new sites. Solutions like these are ideal because they don't require explicit rules.

Also, basic rules based on LNT principles should be consistently worded and posted throughout the trail. North or south, on federal or state land, some rules should never change (e.g. don't camp next to streams, camp on impacted sites when possible, don't build new fire rings).

The catch-22 of the AT is that the magic of the trail draws crowds, but some of the management techniques used to accommodate crowds inevitably cause the AT to lose some of its magic. More restrictions on camping and fires (and more enforcement personnel) may become necessary if use of the AT continues to grow and impacts can't be controlled through other means. Such restrictions on freedom would change the experience of an AT hike and might have adverse effects on public support. Even under the best management, more use brings bigger campsites, less natural trailways, and more regulations.

The real question isn't whether or not the AT *can* be managed to accommodate large numbers of hikers, but whether or not we really *want* it to be managed that way. Ultimately, if we don't want to sleep in motel-sized shelters and hike on tar-paper trail liners, we also have to find ways to limit use. Ideally, use should be kept to a level that allows hikers the freedom to choose a campsite, have a fire, and swim in a lake. That level of use should also allow the trail itself to remain wild, narrow, and challenging without suffering unacceptable levels of erosion damage.

4. More Trails for Wilderness and Solitude: The New Eastern Trails System

"A great professor once said that "optimism is oxygen." Are we getting all the "oxygen" we might for the big tasks before us?"

-Benton MacKaye, from "The Appalachian Trail: A Project in Regional Planning"

When the demand for solitary wilderness recreation exceeds its supply, managers face a familiar catch-22. Recreation researchers David Cole and William Hammitt describe it this way:

"Use restrictions, permits, and even trail/campsite construction constrain (trammel) the use patterns of wilderness users. Unrestricted, uninfluenced and unmanipulated use often results in lost opportunities for solitude and other important attributes of the wilderness experience. Manipulation of wilderness to keep experiences solitary takes away the wildness of wilderness experiences as it does the wildness of wilderness environments."¹

Along most of its impressive length, the AT honors its philosophical roots by providing freedom and imposing few regulations. The recreation free-for-all has led to both social crowding and physical overuse. Though these unhappy consequences of mass use have been dulled through creative design techniques, the calculated manipulation of the footpath can be just as contrary to the AT's intended purpose as explicit restrictions.

To reduce use without imposing regulations is no simple task, but, unlike restrictive methods, there is little risk involved in trying. Whenever use is reduced on a trail, though, managers have to cope with the displacement of hikers, either to other trails or to activities other than hiking. Reduced use on busy sections of the AT shouldn't lead to overuse of other trails in the region, but shouldn't keep people from hiking, either.

Discouraging or Staggering Use

Ease and Access

About ten years ago, there was talk of discouraging use by making the AT less accessible. ATC director of public affairs Brian King said in 1996, "There is a swing toward making the trail a little more primitive. The idea is to make it less easy." He also spoke of painting over some blazes to "discourage trail use by novices," putting a moratorium on most types of trail construction, and eliminating some bridges.² Trail management hasn't made any of these major leaps (painting over blazes seems a little sneaky – more like something Wile E. Coyote would do to discourage the roadrunner than a fair use reduction tactic for the AT), but altering a trail's accessibility is a proven and widely-used way to manage use.³

One of King's suggestions back in 1996, the replacement of shelters with campsites, actually is happening slowly on the trail. Shelters, which provide the home-like comfort

of a roof over one's head, may increase use somewhat by attracting campers to the AT who wouldn't otherwise use the trail overnight. It's the difference between dreading the setting up of a tent in the rain and being comforted by the expectation of hunkering under the sturdy, graffiti-stained beams of the nearest shelter. I don't know for sure how many camels' backs would be broken by that straw, but I'd speculate that overnight use and the thru-hiker completion rate would both drop if shelters suddenly ceased to exist.

Some shelters (e.g. Blood Mountain Shelter in Georgia, Apple House Shelter in Virginia, and Governor Clement Shelter in Vermont) are close enough to roads to attract local partying, litter, and even ATV use. These particular shelters, at least, should be removed immediately. Considering the amount of use the AT sees in general, doing away with all shelters to make the trail more primitive is not a viable solution – yet. But, as more designated campsites are built, and as use is reduced to a comfortable level through redistribution, more and more shelters can be removed.

Day-use crowds can also be manipulated by ease of access. Trailhead parking largely determines the amount and locations of day-use. According to the 1997 ATC Local Planning Guide, "location of trailheads is a powerful tool for controlling where and how much use the Trail receives."⁴ The huge parking lots at the Bear Mountain, New York trailheads are partly to blame for the major reconstructive surgery this section now requires. Alternatively, the parking lot at McAfee Knob holds fewer cars, which protects the trailway from erosion and the summit from unpleasant crowding. Before allowing popular sections of trail to become Bear Mountain-scale problems, managers should limit parking.

Managing Group Hiking

For the record, I love Scouts. It's nice to see young people enjoying the outdoors instead of playing video games, and anyone who doesn't find the little ones adorable in their neckerchiefs and knee-socks has a heart at least three sizes too small. And for entertainment on the trail, these kids can't be beat. I wiled away a good half-hour one night on top of Catfish Firetower in New Jersey just watching four Cubs try (and try, and try, and try again) to pitch a tent that wouldn't collapse in on them. More importantly, scouting organizations provide a great service to their charges by sharing a wilderness experience these children might not get elsewhere. Too many groups at one time, though, can stretch trail facilities to the breaking point.

Since the AT is such a popular trail for a group hike, we met our share of Boy Scouts, Girl Scouts, Outward Bound groups, and teenagers in behavioral rehabilitation programs. Group limits (usually ten per group) are already in place on the AT,⁵ though they are not always respected. One well-meaning but confused pack of teens obediently hiked in groups of less than ten all day, only to meet up later at the shelter area. The resulting tent city was probably not quite large enough to be seen from space.

A similar situation arises in the White Mountains of New Hampshire in late August, when the trail is inundated with college freshmen orientation groups. A wilderness orientation is certainly a commendable northeastern collegiate tradition, but when two

such groups chance to collide near dusk at a shelter, along with a handful of thru-hikers, it can be a struggle to find a place for everyone to lay his weary head for the night.

Better communication could go a long way toward creating a more pleasant experience for groups and those around them. The Maine Appalachian Trail Club, for example, has a voluntary program that allows groups to send in an itinerary and find out if other groups are planning a hike at the same time.⁶ Since the same local groups often do an annual hike in the same area, trail clubs might be able to make contact with them for planning purposes. This is the rare, perfect solution: it doesn't infringe on anyone's freedom or require a great deal of effort or money to get started. At the very least, each trail club (and the ATC) should list on their website a contact for group hike information.

Off-Peak Hiking

Some crowding and overuse issues can be solved without displacing any hikers by simply having them hike at different times.⁷ Consider two hikers, "Kerosene" and "Hammer", who both stayed at Blue Mountain Shelter, Georgia. Kerosene reports seeing over 30 other hikers there in April, while Hammer's group had the place all to themselves on a "wicked cold" night in January.⁸ When use is staggered, both peak and off-peak hikers benefit from greater solitude and less crowding. Because fewer hikers at a time require fewer campsites overall, off-peak use lowers physical impacts as well.⁹

Some AT hikers, like Hammer, already avoid the crowds by simply planning their hikes around them. Section-hikers, weekenders, and day-hikers have their pick of what times of year and sections they hike. If looking to be alone, they have only to avoid the northbound rush, as well as certain very popular sections (such as McAfee Knob in Virginia, the National Parks, and the White Mountains in New Hampshire) on weekends and during summer vacation.

Both the ATC and thru-hikers themselves have made efforts to flatten the infamous southern-spring thru-hiking bubble. Northbounders have been leaving earlier and earlier each year, in hopes of avoiding the common "April 1" rush. Common start-dates now are March 15 or even March 1.

The ATC, for its part, suggests alternative itineraries on its website. Thru-hikers sometimes do as the ATC suggests and hike southbound, or hike in the fall and winter, or "flip-flop" (hike the trail in two halves, e.g. Georgia to Pennsylvania in late spring and Maine to Pennsylvania in summer/fall). The number of southbounders in recent years has been rising while the total number of thru-hikers falls.¹⁰

Southbounders and off-season hikers will enjoy more solitude. Though the southbounders will inevitably end up passing the mob of northbounders at some point, and sharing their shelter space and other trail facilities, many northbounders will have left the trail by then. Mainly, these alternative thru-hikers relieve some of the crowding on the AT's southern end in the spring.

According to the ATC, the thru-hiker bubble bursts near the Virginia border, about 450 miles north of Springer Mountain,¹¹ but I found that crowding is not only a problem in

the south. Hiking at peak time, I saw full shelters and campsites all the way to Maine – though there were certainly less thru-hikers up north. As far north as Glastenbury Mountain, Massachusetts, I wrote, "The shelter up here was beyond full, as were all the campsites, so we had to venture on and ended up in a creepy, probably illegal, spot that appears to be the intersection of a few logging roads. At least it's private."¹² This situation couldn't be blamed on thru-hikers (many of whom had dropped out by that point) or large groups (there weren't any) or even weekenders (it was Monday). It was simply summer vacation on the AT in New England.

In fine weather, many of the most scenic parts of the trail are simply always crowded. Hikers like Hammer, who love spending "wicked cold" nights in the mountains in January, have all of my respect and appreciation. But most people have the time and inclination to hike in the summer and on weekends. No amount of suggesting, encouraging, or pleading by AT management is going to change this.

Still, there is hope. Alternatives to the AT are growing like spider webs in the night, creating ample room even for those who want to hike on summer weekends.

Expanding Use to Other Trails

Early recreation ecologists warned of the "trap of studying one area at a time" and stressed the importance of a regional perspective on recreation.¹³ It's been demonstrated (on Mount Hood, for example) that allowing mass-use on some trails keeps crowds from damaging other nearby trails.¹⁴ The AT is too long and valuable a resource to abandon it to the crowds, but displacement remains a valid concern.

What if hiker redistribution is a success, but ends up destroying solitude and wilderness on previously little-used trails? What if the use reduction still isn't great enough to improve social conditions significantly on the AT?¹⁵ From a regional perspective, the wilderness hiker would actually be worse off in such a situation. But the current explosion of long-distance hiking opportunities in the eastern US has put AT management in a unique position: there has never been a better time to actively reduce use.

Long, Green Tunnel Vision

Life on the AT can be insular. Writers often refer to the trail as "the long green tunnel," though the name of the hiker who originally coined this apt nickname has seemingly been lost to posterity. Official AT maps commonly depict about two miles to either side of the trail, which can definitely give a hiker tunnel-vision. Trails shoot off occasionally, but beyond a casual, "Hmm, wonder where that one goes?" I rarely saw hikers pay them any mind. Why should they, when they are on the be-all and end-all of great American hiking trails?

The AT's strong sense of identity may hurt as much as it helps, by discouraging people from trying out alternative trails. Other long hiking trails exist in the eastern US, many of

which even connect to the AT. The ATC, seemingly unbothered by crowds on their trail, doesn't particularly encourage their use.

For example, the ATC awards certificates to hikers who complete the AT (whether all at once or in sections). The rules are strict, requiring that applicants hike "every mile of the AT" without not using any of the blue-blazed side trails.¹⁶ Some AT hikers don't want a certificate and have no qualms about "blue-blazing." Others, called "purists," insist on passing every single white blaze. Not all purists are obsessed with getting a certificate, but some hikers aspire to the "2,000 miler" designation for its own sake.³

Thru-hiking itself is somewhat contrary to the spirit of the original AT vision – which encourages a little recreation for all, not a lot of recreation for a few. The ATC, with their 2,000 miler certificates, encourages heavy use of the trail by a few 2,000-milers.

The ATC has reasons to place such artificial boundaries on an AT hike. In all fairness, they are not obligated to care about other trails. They are the *Appalachian Trail* Conservancy, not the *Other Trails* Conservancy, and the ATC is invested in bringing publicity and money to the AT alone. The 2,000 miler is part of their image – exotic and interesting because thru-hiking is a dramatic enterprise that few would undertake. Forsaking a job, house, family and friends to spend six months away from civilization even seems a little romantic (at least until you experience your first three-day rainstorm and realize that nothing you own is dry or comfortable). Section-hiking the AT year after year is a study in perseverance. It's no wonder the ATC would want to play up the 2,000 miler designation.

But it's possible that the ATC is doing the wilderness hiker a disservice by offering official kudos for an AT completion. In a way, they've turned the hike into a contest with regulations, with disqualification as the punishment for hiking outside the lines. Of course, no hiker is forced to take part in the ATC's competition, and many have the presence of mind to ignore it from the start. But others find the designation quite irresistible, and some just get swept up in the excitement of the white blaze culture.

On the summit of Mount Washington in New Hampshire, I realized that I had done just that. Washington is the pinnacle of an AT hiker's White Mountain experience. My companions and I had all spent grueling days heaving ourselves up and over boulders and picking our way down slippery mountainsides. Finally, we turned our jacket hoods to the brutal, above-tree-line winds and climbed triumphantly to the top. There was a breathtaking view and blissful solitude for a few minutes. But when the tourist-laden, coal-smoke-belching cog railway came chugging up the mountainside, everything changed. The mountain no longer belonged to the few whose own legs had brought them there, but to the fossil-fuel powered masses. We just grimaced at one another and bought some nachos, but our rugged hiker idealism was dead for the day.

³ It is time for me to come clean about something – I never really thru-hiked the AT. The three miles that I never walked (I took a gondola, and it was well worth it) may or may not haunt me forever. What is certain is that, despite hiking over 2,169 miles, I am not yet an actual "2,000 miler."

What we had failed to realize, in our AT thru-hiker tunnel-vision, was that the AT is not the only trail in the White Mountains. We could have chosen a different route, a different peak, and a different amazing view – without the tourists and coal-smoke.

What would empower the AT hiker to venture onto other trails? The ATC 2,000-miler certificates don't have to glorify the act of thru-hiking the AT as a "purist." The ATC could encourage re-distribution by changing the 2,000 miler designation to include blue-blaze trails as well as the official AT, and possibly even mileage in the entire burgeoning eastern trails system.

The ATC might also consider expanding the blue blaze system. Creating bypass routes for crowded areas would decrease physical impacts and increase freedom of choice for the hiker, particularly if he isn't denied 2000-miler status for taking them.

Distance hiking the AT is an entrenched tradition which is unlikely ever to be disallowed or limited. Nor, I confess, would I want it to be. Many long-distance trail clubs create sew-on patches signifying that the wearer has completed the trail, and I'm not suggesting discontinuing this tradition on the AT. But when the object of the game is to get from point A to point B on one crowded trail, alternate route options could relieve pressure on some high-use areas. I am only suggesting that one form of recognition, the 2,000-miler designation, be altered to serve this purpose.

Alternative Trails

So, what of these "other trails," that are so vague and shrouded in mystery? They are not entirely unheralded. Online information and maps are available for them, thousands of volunteers build and maintain them, and hikers keep journals describing them. They are growing in length and facilities, becoming increasingly more and more like the AT itself. All they lack is publicity and organization.

Many long eastern trails connect directly to the AT. The Benton MacKaye Trail (BMT) forms a loop with the AT, providing a 290-mile alternate route between Springer Mountain Georgia and Davenport Gap in Tennessee. It was even "designed in the tradition of the Appalachian Trail," (along MacKaye's original route, in fact).¹⁷ The Long Path, 326 miles, intersects with the AT in Harriman State Park, New York and in High Point State Park, New Jersey before continuing north to Albany. The Cohos Trail extends 159 miles from the AT in Crawford Notch, New Hampshire to the Canadian border. And the Mountains to Sea Trail, currently half-complete at 500 miles, will eventually extend from the AT at Clingman's Dome, North Carolina all the way to the Atlantic Ocean.¹⁸

These trails have all been around for many years, but there is a project in the works that will change the face of long-distance hiking in the eastern US. The American Hiking Society and the trail community are working to connect a number of trails in one ambitious project, the Great Eastern Trail (GET). Some of these trails include: the Pinhoti Trail (in Alabama and Georgia), the Cumberland Trail (in Tennessee), the Pine Mountain Trail (in Virginia, Kentucky, and West Virginia), and the Tuscarora Trail (through Virginia, West Virginia, Pennsylvania, and Maryland), and the Mid-State Trail (through

Pennsylvania).¹⁹ The 1600 mile proposed GET stretches from southern Alabama to southern New York. It connects to the Florida National Scenic Trail in the south, the North Country National Scenic Trail in the north, and the AT to the east.²⁰

Alison Bullock of the NPS says of the GET: "We're trying to provide an alternative. We want to disperse the recreation. And there are so many gorgeous and undiscovered locales."²¹ That a 10,000 mile eastern trail system is already well underway bodes well for wilderness and solitude on the AT.

Persuading Hikers to Redistribute

That it is a long trail gives the GET an advantage over the other, shorter alternatives, but to some extent, hikers will have to be persuaded to use it instead of the AT. Currently, few have even heard of it. Informing the public about the crowded conditions they will encounter on the AT, as well as describing to them the attractions of the GET and other regional alternatives, is a first step.

It's important to get to hikers early in their trip-planning process in order to effect a change in their route choice.²² The ATC's website and the websites of individual trail clubs are often the first places hikers go to plan their AT trip. If hikers visiting these sites are exposed to the benefits of choosing an alternate route, before their plans to hike only the AT have solidified, more of them will try out other trails.

Websites and brochures need to provide more descriptive information about crowded conditions.²³ The ATC website's page on alternative routes currently reads: "Starting at Springer in March guarantees ... a crowd of fellow northbounders – in 2005, about 1,400 thru-hikers started from Springer." Later, it says, "... alternative hikes ... even out the flow of hikers and minimize resource damage to the Trail."²⁴ What is a "crowd of fellow northbounders"? Realistic estimates of how many people one can expect to find at the shelters each night, rather than an overall number, might be more effective.

Hiker anecdotes might be even more useful. One hiker writes in his journal that he flip-flopped "... because I didn't want to be in the middle of a mob of people... I didn't want to be competing with my fellow hikers all the time for shelter and tent space, and trying to beat them into town to grab that last motel room or package of ramen."²⁵ Hikers that aren't interested in playing "Survivor: AT" might appreciate some first-person accounts about crowds. No doubt they would be more effective than the ATC's dull line about "even[ing] out the flow of hikers."

Even after the planning stage has passed, some hikers will make spur-of-the-moment decisions about campsites and routes (particularly those on long trips). Trail guides, signs, and rangers have all been somewhat effective in redistributing campsite use by providing some descriptive information.²⁶ The same strategy can work for entire trails, if hikers have the tools. Among Yellowstone backcountry users who were given a guide to lesser-used trails, 37% chose one of them, while only 14% of those who didn't receive a guide tried the alternative trails.²⁷

AT guidebooks currently suffer from the same narrow-mindedness that AT maps do. Blue-blazes and alternative routes are generally noted as intersections and nothing more. This is perfectly understandable, since an AT guide already provides information for over 2000 miles of trail and needs to be compact and lightweight. A few new regional guides each year (for example, a northern AT region guide and a southern AT region guide) would be a useful addition to the current, and somewhat redundant, arsenal of AT guidebooks. Each regional guide would include alternate routes and be comparable in size and weight to a traditional AT guide.

Potential hikers also need to know that alternative trails are not inferior to the AT in terms of views and attractions. The GET, for example, boasts of rugged mountain terrain, biologically diverse southern forests, wildlife-viewing opportunities to view wildlife (including re-introduced elk in Kentucky), and virgin hemlock forests.²⁸ Aside from a handful of newspaper articles and one long piece in the AHS newsletter,²⁹ there is not much information about the GET's attractions.

Official area designations, such as National Park or Wildlife Refuge or Wilderness Area, tend to encourage more use.³⁰ The AT itself is a National Scenic Trail. As the GET nears completion and becomes more popular, a National Scenic Trail designation could help protect it and improve its status as a premier long-distance trail.

The AHS does not have the money, organization, or connections that the ATC does, nor does their trail have the historical cachet of the AT. Rather than starting from scratch with the GET, the AHS would benefit from more cooperation with the ATC and an expansion of the AT model to the GET. The GET was proposed to relieve some of the pressure the AT is feeling from overuse, and the AT stands to benefit very much from its completion (even if it pulls some volunteer hours and monetary donations away from the AT). Currently, a search for "Great Eastern Trail" on the ATC's website yields no results – not even a link. This seems like an egregious omission.

Worries About Expansion

Though the GET is far from complete, one brave woman named Sue Turner ("Hammock Hanger") began her attempted thru-hike of the trail on April 1, 2007.³¹ She will experience some beautiful, established trails like the Alabama Pinhoti Trail and some messy works-in-progress like the half-finished Cumberland Trail.³² I don't know how she intends to navigate the Pine Mountain Trail, of which only 28 of 120 miles are hike-ready,³³ but I assume her trip will include quite a bit of road-walking. Volunteers are rushing to fill the gaps in the GET, but some trail clubs don't expect to be completely finished until 2011.³⁴

Though the GET has a long way to go, it could benefit right now from greater centralized management. As the trail consists of connections between many already existing trails, facilities are far from consistent. The GET doesn't even have a consistent blaze. At various stages of her journey, Hammock Hanger will be following blazes of orange (the Mid-State trail), blue (the Tuscarora trail), and yellow (the Allegheny Trail). On some

parts of the Pinhoti trail, she'll have to keep an eye out for plastic diamonds bearing turkey tracks.³⁵ I hope she can keep it all straight.

AT trail clubs have learned a great deal about managing a long distance trail through trial-and-error, and the central management provided by the ATC has helped to disseminate the lessons learned. Unfortunately, it looks like the GET is setting itself up to experience many of the same problems the AT has recently begun to solve.

GET trail clubs, for example, are constructing shelters at a breakneck pace. The Alabama Pinhoti Trail has seven shelters on its first 133 miles, three of which were built in 2006.³⁶ New shelters on the GET don't tend to be small, either. The Seneca Springs shelter on the Allegheny Trail in West Virginia was completed in 2004, and can hold up to 15 hikers.³⁷ Some GET shelters don't follow even the most basic rules, like the Flamingo Shelter, which was built in 2002 by the Pine Mountain Trail Conference (PMTTC). Flamingo is just .2 miles from a road, a location ripe for local parties and litter.³⁸

The PMTC has also put the cart just a little bit before the horse by constructing its new Adena Spring Shelter before the trail has even been built to reach it.³⁹ It seems that PMTC could learn a thing or two from the Georgia Pinhoti Trail, a GET section that has 100 miles of trail, but currently no shelters.⁴⁰ And all of the GET clubs could take a page from the playbook of the Benton MacKaye Trail Association, which maintains only two shelters and resolves to keep the trail primitive by not building any more.⁴¹ It is commendable that the GET is preparing to handle an influx of thru-hikers, but AT clubs have learned that designated campsites are much more compatible with primitive wilderness hiking. Lessons learned on the AT must be applied to the GET, or some of the same problems the AT sees will crop up unnecessarily.

More central administration also provides consistency. Currently, different trail sections have different multi-use rules. Some allow horseback riding or mountain bikes, while others are foot traffic only. The GET currently lacks the management and support to make rules consistent and to implement a management plan for trail clubs (such as the one the ATC has).

The AHS and the GET trail clubs need more publicity, money, and volunteers to get the eastern trail system off the ground, and to do it the right way. AHS has started a program called the Southern Appalachians Initiative (SAI), whose mission for the entire south-eastern trail network is remarkably similar to what the ATC has done for the AT corridor.⁴² A strong alliance between the ATC and the AHS could bring about a more successful eastern trail system, and do it faster than the AHS could working alone.

Conclusion

As a hiking enthusiast suffering through the daily grind of an eastern "bee-hive city," I'm awfully excited about the new opportunities presented by the GET. After hiking the AT, I worried about a trail battered by overuse, solitude destroyed by crowding, and wilderness undermined by excessive maintenance. But after seeing some of strides AT management has taken in the past ten years, and learning about the recent initiatives taken by the AHS,

it's just as easy for me to imagine the AT as a part of a more primitive, less crowded, re-distributed eastern trails system.

First, though, it's important that alternative trails, both new and old, be equipped to handle the impact of displaced AT hikers. The popularity of the AT currently outshines these other trails, and the eastern trail system is far from complete, but the ATC could take more of a cooperative role in publicizing and encouraging the success of AT alternatives. Why think of the GET, the AT, and all trails in between as separate green tunnels? Rather, the hiking community should take the attitude of the optimistic and ambitious Hammock Hanger, who writes, "it [the AT and the GET] would make a great 3276+ mile loop!!"⁴³

Notes

Chapter 1: Background

¹ National Park Service, "Appalachian National Scenic Trail," US Department of the Interior, <http://www.nps.gov/appa/> (accessed April 7, 2007).

² James Hare, "Grandma Gatewood: A Legend Along the Appalachian Trail," in *The Appalachian Trail Reader*, ed. David Emblidge (1996; repr., New York, NY: Oxford University Press, 1997), 214-223.

³ Bill Irwin and David McCasland, *Blind Courage*, rev. ed. (Harpers Ferry, WV: Appalachian Trail Conference, 1991).

⁴ Earl V. Schaffer, *Walking With Spring: The First Thru-Hike of the Appalachian Trail* (Harpers Ferry, WV: Appalachian Trail Conference, 1983); Earl V. Schaffer, *The Appalachian Trail: Calling Me Back to the Hills*, Photography by Bart Smith. (Englewood, CO: Westcliffe Publishers, 2002).

⁵ Howie Paul Hartnett, "Playing On His Dreams: Boca Man Hikes 2,169-Mile Appalachian Trail – With Tuba," Palm Beach Post, January 13, 2001, <http://www.highbeam.com/doc/1P1-39366559.html> (accessed April 7, 2007)

⁶ Brian B. King, "Trail Years: A History of the Appalachian Trail Conference," *Appalachian Trailway News 75th Anniversary Issue* (July 2000): 4, <http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/TrailYears.pdf> (accessed April 7, 2007).

⁷ Pierre Tristam, "American Impressions: Virginia – Trailing Nature," *The Ledger* (June 21, 1999), http://www.theledger.com/static/americanimp/0621_virginia.html (accessed April 7, 2007).

⁸ Benton MacKaye, "An Appalachian Trail: A Project in Regional Planning," in *The Appalachian Trail Reader*, ed. David Emblidge (1996; repr., New York, NY: Oxford University Press, 1997), 46-56. Previously published in *Journal of the American Institute of Architects* 9 (October 1921): 325-330.

⁹ *Ibid.*, 51.

¹⁰ *Ibid.*, 55.

¹¹ King, "Trail Years," 6.

¹² Guy and Laura Waterman, "On the Trail's Founding Fathers," in *The Appalachian Trail Reader*, ed. David Emblidge (1996; repr., New York, NY: Oxford University Press, 1997), 69. Previously published in *Forest and Crag: A History of Hiking, Trail Blazing, and Adventure in the Northeast Mountains* (Boston: Appalachian Mountain Club Books, 1989).

¹³ *Ibid.*, 71-72.

¹⁴ Leonard Adkins, *The Appalachian Trail: A Visitor's Companion* (2000; repr., Birmingham, AL: Menasha Ridge Press, 1998): 4.

¹⁵ National Park Service, *Comprehensive Plan for the Protection, Management, Development, and Use of the Appalachian National Scenic Trail*, (1981; abr., US Government Printing Office, September 1987): 3, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48EF35C0B0D9F1%7D/CompPlan_web.pdf (accessed April 7, 2007).

- ¹⁶ Appalachian Trail Conservancy, "ATC Expands Environmental Monitoring Efforts," news release, November 22, 2006, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.2264999/k.9C7C/AT_MegaTransect.htm. (accessed April 7, 2007).
- ¹⁷ Brian B. King, "'Conference' to be Renamed 'Conservancy' in July," *Appalachian Trailway News* (January-February 2005): 6-8, <http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/ATN05Jan.pdf>. (accessed April 7, 2007).
- ¹⁸ Appalachian Trail Conservancy, "The Trail Experience," ATC, <http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/ATN05Jan.pdf> (accessed April 7, 2007).
- ¹⁹ Sigurd Olsen, "Search for the Wild," in *The Meaning of Wilderness: Essential Articles and Speeches*, ed. David Backes (Minneapolis, MN: University of Minnesota Press, 2001), 18. Previously published in *Sports Afield* (May-June 1932).
- ²⁰ E.O. Wilson, *Biophilia: The Human Bond with Other Species* (Cambridge: Harvard University Press, 1984).
- ²¹ *Ibid.*, 235-238.
- ²² Howard Frumkin, "Beyond Toxicity: Human Health and the Natural Environment," *American Journal of Preventative Medicine* 20, no. 3 (2001): 238.
- ²³ Rachel Kaplan and Stephen Kaplan, *The Experience of Nature: A Psychological Perspective* (New York, Cambridge University Press, 1989), 203, quoted in Peter H. Kahn, *The Human Relationship with Nature: Development and Culture* (Cambridge, MA: The MIT Press, 1999), 15.
- ²⁴ Henry David Thoreau, *Walden* (New York: Dover Publications Inc, 1995; Boston: Tickner and Fields, 1854), 205. Citation to the Dover edition.
- ²⁵ Center for Disease Control, "Fact Sheet: CDC Efforts to Reduce or Prevent Obesity," news release, April 19, 2005, <http://www.cdc.gov/od/oc/media/pressrel/fs050419.htm> (accessed April 7, 2007).
- ²⁶ US Department of Health and Human Services, *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*, US DHHS, Public Health Service, Office of the Surgeon General, 2001.
- ²⁷ American Hiking Society, "A Step in the Right Direction," <http://www.americantrails.org/pdf/AHShealthben.pdf> (accessed April 7, 2007).
- ²⁸ The Wilderness Society, *Why Wilderness* (Atlanta, GA: The Wilderness Society, 2004), 20, <http://www.wilderness.org/Library/Documents/WhyWildernessAbout.cfm> (accessed April 7, 2007)
- ²⁹ *Ibid.*, 13.
- ³⁰ Miles Jebb, "Backpackers," in *The Appalachian Trail Reader*, ed. David Emblidge (1996; repr., New York, NY: Oxford University Press, 1997), 75. Previously published in Miles Jebb, *Walkers* (London: Constable & Co, 1986).
- ³¹ Appalachian Trail Conservancy, "2,000-milers: Facts and Statistics," ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.851143/k.C36D/2000Milers_Facts_and_Statistics.htm (accessed April 7, 2007).

- ³² Dan Bruce, "About the Webmaster: Meet Wingfoot," http://www.trailplace.com/portal/display.php?page=meet_wf (accessed April 7, 2007); Jack Tarlin, interview by Robert Butler, *Trailcast #13 – Baltimore Jack, Part 1*, Podcast, January 1, 2006. <http://www.trailcast.org/programs/date/2006/01/> (accessed April 7, 2007).
- ³³ MacKaye, 52.
- ³⁴ Appalachian Trail Conservancy, "2,000 Milers."
- ³⁵ National Park Service, *Comprehensive Plan*, 5.
- ³⁶ Lloyd Ferriss, "A Plan to Patch the Holes," *Maine Sunday Telegram*, September 18, 1995.
- ³⁷ Hawk Metheny and Bob Proudman, "Building Volunteer Sustainability," *The Register, The Online Stewardship Newsletter for the Appalachian Trail*, Winter, 2007, http://www.appalachiantrail.org/site/c.jkLXJ8MQKtH/b.1558353/k.9194/The_Register.htm.
- ³⁸ Lloyd Ferriss, "Keepers of the Trail," *Maine Sunday Telegram*, September 18, 1995.
- ³⁹ National Park Service, "Presidents FY 2005 Budget Request Strengthens Commitment to Preserving and Protecting America's Parks and Special Places," news release, February 2, 2004, <http://home.nps.gov/applications/release/Detail.cfm?ID=454> (accessed April 7, 2007).
- ⁴⁰ Appalachian Trail Conservancy, *2005 Annual Report: Celebrating 80 Years* (Harpers Ferry, WV: ATC, 2006), 14-15, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/ATC_2005_annual_report%20reduced%202.pdf (accessed April 8, 2007).
- ⁴¹ Rita Hennessey, "Partnerships: Appalachian Trail Conference," National Park Service, October 21, 2003, http://www.nps.gov/partnerships/appalachian_trail_conference.htm (accessed April 8, 2007).
- ⁴² Ibid.
- ⁴³ National Park Service, "Yosemite National Park Facts," National Park Service, <http://www.nps.gov/archive/yose/pphtml/facts.html> (accessed April 8, 2007).
- ⁴⁴ King, "Trail Years," 38.
- ⁴⁵ Donna M. Perry, "Wind Project Suffers Blow," *Lewiston (ME) Sun Journal*, January 25, 2007, http://www.sunjournal.com/story/196184-3/Franklin/Wind_project_suffers_blow/ (accessed April 8, 2007).
- ⁴⁶ Wayne Mullen, letter to the Editor, *Maine Morning Sentinel*, February 6, 2007, <http://morningsentinel.maintoday.com/view/letters/3570536.html> (accessed April 8, 2007).
- ⁴⁷ King, "Trail Years," 7.

Chapter 2: Traditional Solutions

- ¹ Alice "The Alleycat" Hodgkins, "2007 Appalachian Trail Journal," March 20, 2007, <http://www.trailjournals.com/entry.cfm?id=169917>

² Troy E. Hall, "Hikers' Perspectives on Solitude and Wilderness," *International Journal of Wilderness* 7 (August 2001): 20-24.

³ Robert E. Manning et al., *Use and Users of the Appalachian Trail: A Sourcebook* (National Park Service: Appalachian Trail Park Office, December 2000), 70, http://www.nps.gov/appa/parkmgmt/upload/Main_Report-2.pdf. Among survey respondents, "The only item where the importance exceeded the attainment for thru hikers was to experience solitude." For items such as being close to nature, getting exercise, meeting people, etc., "attainment exceeded motive." "Most of the items' attainment scores were higher than their importance, suggesting fulfillment of these motives. The only item that was attained below its importance score was experiencing solitude."

⁴ Appalachian Trail Conservancy, *2005 Annual Report: Celebrating 80 Years* (Harpers Ferry, WV: ATC, 2006), 3, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/ATC_2005_annual_report%20reduced%202.pdf.

⁵ David N. Cole, *Wilderness Recreation Use Trends, 1965 through 1994*, Res. Pap. INT-RP-488 (Ogden, UT: United States Department of Agriculture, Forest Service, Intermountain Research Station, 1996); H. Ken Cordell et al., "Outdoor Recreation Participation Trends" in *Outdoor Recreation in American Life: a National Assessment of Demand and Supply Trends* (Champagne, IL: Sagamore Publishing, 1999), 220-321.

⁶ Outdoor Industry Foundation, *Outdoor Recreation Participation Study*, 8th ed. (Boulder, CO: Outdoor Industry Foundation, 2006), 53.

⁷ William E. Hammit and Rudy M. Schuster, "Wilderness Use in the Next 100 Years," *International Journal of Wilderness* 6 (August 2000): 12-13.

⁸ Appalachian Trail Conservancy, "2,000-milers: Facts and Statistics," ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.851143/k.C36D/2000Milers_Facts_and_Statistics.htm.

⁹ Associated Press, "The AT is Turning Into an Interstate: Fixes Range From Making it Tougher for Novices to Improving the Amenities," *Virginian-Pilot*, May 13, 1996, <http://scholar.lib.vt.edu/VA-news/VA-Pilot/issues/1996/vp960513/05130027.htm>.

¹⁰ Appalachian Trail Conservancy, "2000-milers."

¹¹ Clint Morris, "Columbus to Direct New Redford/Newman Film," *Moviehole.net*, February 8, 2007, http://www.moviehole.net/news/20070208_columbus_to_direct_newmanredfo.html.

¹² HikeMore, "Appalachian Trail 2003 Hiker Survey," *HikeMore Online Newsletter: Appalachian Trail Edition*, Spring 2004, <http://www.hikemore.com/newsletter/appalachian-trail/survey/hiker-info.html>.

¹³ "Kerosene," "Springer Mountain Shelter, User Comments", April 27, 2004, http://www.thebackpacker.com/trails/at_detail/383.php.

¹⁴ "Zeno," "Hawk Mountain Shelter, User Comments", June 11, 2005, http://www.thebackpacker.com/trails/at_detail/382.php.

¹⁵ Buller, Pat. "2006 Appalachian Trail Journal," April 7 and April 8, 2006, <http://www.trailjournals.com/entry.cfm?id=130936>. Buller's journal records 40 people at Derrick Knob Shelter, and of Icewater Spring he writes, "The shelter holds 12 people and we had it packed to 18 and 4 sleeping on the dirt floor and 5 tenting."

¹⁶ Troy E. Hall, "Use Limits in Wilderness: Assumptions and Gaps in Knowledge," in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 39-40.

¹⁷ Yu-Fai Lueng and Jeffrey L. Marion, "Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review," in David N. Cole et al., *Wilderness Science in a Time of Change Conference – Volume 5: Wilderness Ecosystems, Threats, and Management May 23-27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: US Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 36-37.

¹⁸ Hall, "Use Limits in Wilderness," 40.

¹⁹ *Ibid.*, 40-41.

²⁰ *Ibid.*, 41.

²¹ David N. Cole, "Wilderness Management Principles: Science, Logical Thinking or Personal Opinion?" *Trends in Wilderness Research* 32, no. 1 (1995): 8.

²² *Ibid.*

²³ Troy Hall and David Cole, "An Expanded Perspective on Displacement: A Longitudinal Study of Visitors to Two Wildernesses in the Cascade Mountains of Oregon," in David N. Cole et al, *Wilderness Science in a Time of Change Conference – Volume 5: Wilderness Ecosystems, Threats, and Management May 23-27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: US Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 113-121.

²⁴ *Ibid.*

²⁵ Stephen F. McCool., "Limiting Recreational Use in Wilderness: Research Issues and Management Challenges in Appraising Their Effectiveness," in in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 50.

²⁶ Hall, "Use Limits in Wilderness," 41.

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ National Park Service, *Comprehensive Plan for the Protection, Management, Development, and Use of the Appalachian National Scenic Trail* (1981; abr., US Government Printing Office, September 1987): 29, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48EF35C0B0D9F1%7D/CompPlan_web.pdf (accessed April 7, 2007).

³⁰ United States Department of Agriculture Forest Service, *Overview on the New Alternative for the Wilderness Protection Plan: Mt. Hood National Forest* (USDA Forest Service, Pacific Northwest Region, 2000): 2-3.

³¹ Manning et al., *Use and Users of the Appalachian Trail*, p. 90.

³² *Ibid.*, p. 96.

- ³³ Greg "Trudge" Eriksen, "All Things Trudge: Trudge Unloads Some Advice," <http://home.maine.rr.com/trudge/at/pointers.html>.
- ³⁴ Josh "Mr. Happy" Lee, "2007 Appalachian Trail Journal," February 9, 2007, <http://www.trailjournals.com/entry.cfm?id=166676>.
- ³⁵ "Socrates," "I'm off the trail," online posting, March 19, 2007, General forum, <http://www.whiteblaze.net/forum/showthread.php?t=22811>.
- ³⁶ Julia "Jambalaya" DeGagne, "2006 Appalachian Trail Journal," May 4, 2007, <http://www.trailjournals.com/entry.cfm?id=162372>
- ³⁷ HikeMore, "Appalachian Trail 2003 Hiker Survey."
- ³⁸ David N. Cole, "Visitor Use Density and Wilderness Experiences: A Historical Review of Research," in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 17.
- ³⁹ William P. Stewart and David N. Cole, "Number of Encounters and Experience Quality in Grand Canyon Backcountry: Consistently Negative and Weak Relationships," *Journal of Leisure Research* 33, no. 1 (2001): 106-120.
- ⁴⁰ Hall, "Use Limits in Wilderness," 43.
- ⁴¹ Alan E. Watson and Michael J. Niccolucci, "Conflicting Goals of Wilderness Management: Natural Conditions v. Natural Experiences," in *Proceedings of the Second Symposium on Social Aspects of Recreation Research*, ed. D.J. Chavez (Albany, CA: United States Department of Agriculture, Forest Service, Pacific Southwest Research Station): 15.
- ⁴² Manning et al., *Use and Users of the Appalachian Trail*, 100.
- ⁴³ Cole, "Visitor Use Density and Wilderness Experiences," 17.
- ⁴⁴ *Consolidated Appropriations Act: Title VIII – Federal Lands Recreation Enhancement Act*, Public Law 108-447, 108th Cong., 2d sess., (2004): Sec. 3, <http://www.fs.fed.us/passespermits/fee-legislation-text.shtml>.
- ⁴⁵ Hall, "Use Limits in Wilderness," 42.
- ⁴⁶ Herbert W. Schroeder and Jordan Louviere, "Stated Choice Models for Predicting the Impact of User Fees at Public Recreation Sites," *Journal of Leisure Research* 31, no. 3(1999): 300–324.
- ⁴⁷ Donald H. Rosenthal, John B. Loomis, and George L. Peterson, "Pricing for Efficiency and Revenue in Public Recreation Areas," *Journal of Leisure Research* 16, no. 3 (1984): 197, quoted in Thomas A. More, "A Functionalist Approach to User Fees," *Journal of Leisure Research* 31, no.3 (1999): 235.
- ⁴⁸ Thomas A. More, "A Functionalist Approach to User Fees," *Journal of Leisure Research* 31, no.3 (1999): 229.
- ⁴⁹ Joe Kirkvliet and Clifford Nowell, "Tools for Recreation Management in Parks: The Case of the Greater Yellowstone's Blue-ribbon Fishery," *Ecological Economics* 34 (2000): 99.

⁵⁰ Appalachian Trail Conservancy, "Permits, Fees, and Regulations," ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQKtH/b.795277/k.B993/Permits_Fees_and_Regulations.htm.

⁵¹ N. Queener, "Desolation Wilderness Case Study: Visitor Response to Fees," Aldo Leopold Wilderness Research Institute, 2003, <http://www.leopold.wilderness.net>.

⁵² Daniel R. Williams, Christine A. Vogt, and Joar Vitterso, "Structural Equation Modeling of Users' Response to Wilderness Recreation Fees," *Journal of Leisure Research* 31, no. 3 (1999): 259.

⁵³ *Ibid.*, 260.

⁵⁴ *Ibid.*, 248.

⁵⁵ Shane Miller, "A Walk in the Park: Fee or Free?" *George Wright Forum* 15, no. 1 (1998): 59.

⁵⁶ Williams et al., "Structural Equation Modeling," 248.

⁵⁷ Miller, "A Walk in the Park," 60.

⁵⁸ Alan A. Watson and Gamini Herath, "Research Implications of the Theme Issues 'Recreation Fees and Pricing in the Public Sector' (*Journal of Park and Recreation Administration*) and 'Societal Response to Recreation Fees on Public Lands' (*Journal of Leisure Research*)," *Journal of Leisure Research* 31, no. 3 (1999): 328.

⁵⁹ Williams et al., "Structural Equation Modeling," 265.

⁶⁰ More, "A Functional Approach," 228.

⁶¹ Watson and Harath, "Research Implications," 328.

⁶² J. Bishop Grewell, "Recreation Fees – Four Philosophical Questions," *Property and Environment Research Center Policy Series* 31 (June 2004): 15, <http://www.perc.org/pdf/ps31.pdf>.

Chapter 3: How To Build A Trail for the Masses

¹ Yu-Fai Lueng and Jeffrey L. Marion, "Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 25-26.

² Julia DeGagne, "2006 Appalachian Trail Journal," April 30, 2006, <http://www.trailjournals.com/entry.cfm?id=162070>

³ Collins Chew, "Brief History of the Tennessee Eastman Hiking and Canoeing Club," Tennessee Eastman Hiking and Canoeing Club, <http://www.tehcc.org/history.htm>

⁴ Brian B. King, "Trail Years: A History of the Appalachian Trail Conference," *Appalachian Trailway News 75th Anniversary Issue* (July 2000): 41, <http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/TrailYears.pdf>.

⁵ Thomas Casey, John Schoen, and George Neffinger, eds., *Trail Maintenance Manual*, 7th ed. (New York-New Jersey Trail Conference, 1990), <http://www.nynjtc.org/committees/trailscouncil/maintman/maintman.html>.

⁶ E.g. the Coon Den Ridge re-route, completed in 2006 by the Georgia ATC; Wilder Mine Hollow switchbacking in 1999 by the Tennessee Eastman Hiking Club; the climb up Standing Indian Mountain was switchbacked considerably and its difficulty drastically reduced by the Georgia ATC.

⁷ Appalachian Trail Conservancy, "Moving Mountains: Project Breaks New Ground in Trail Relocation Process " *AT Journeys* (September-October 2006): 23, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/Moving%20Mountains_ATJ%200906.pdf

⁸ Eddie Walsh, "Bear Mountain Trails: Birthplace of an Enduring Partnership," New York-New Jersey Trail Conference, <http://www.nynjtc.org/BearMountainTrails/>.

⁹ Appalachian Trail Conservancy, "Moving Mountains," 23.

¹⁰ King, "Trail Years", 41.

¹¹ Troy E. Hall, "Hiker's Perspectives on Solitude and Wilderness," *International Journal of Wilderness* 7, no. 2 (2001).

¹² Lueng and Marion, "Recreation Impacts and Management in Wilderness," 25.

¹³ Appalachian Trail Conservancy, *Local Management Planning Guide* (Appalachian Trail Conservancy, 1997): 62, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/LMPG_web.pdf

¹⁴ National Park Service, *Comprehensive Plan for the Protection, Management, Development, and Use of the Appalachian National Scenic Trail*, (1981; abr., US Government Printing Office, September 1987): 32, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48EF35C0B0D9F1%7D/CompPlan_web.pdf.

¹⁵ Lueng and Marion, "Recreation Impacts and Management in Wilderness," 31.

¹⁶ *Ibid.*, 24-26.

¹⁷ National Park Service, *Comprehensive Plan*, 30.

¹⁸ "Baltimore" Jack Tarlin, "Abolish Shelters?" Online posting, December 12, 2002, <http://www.whiteblaze.net/forum/showthread.php?t=730>

¹⁹ <http://www.whiteblaze.net>; <http://www.trailplace.com>.

²⁰ Leave No Trace Center for Outdoor Ethics, "Leave No Trace Principles," LNT, Inc., <http://www.lnt.org/programs/lnt7/index.html>.

²¹ Lueng and Marion, "Recreation Impacts and Management in Wilderness," 33.

²² Judy Jenner, "Curbing Campground Chaos," *Appalachian Trailway News* (November-December 2004): 16.

²³ Julia DeGagne, "2006 Appalachian Trail Journal," March 27, 2006, <http://www.trailjournals.com/entry.cfm?id=161581>.

²⁴ Yu-Fai Leung and Jeffrey L. Marion, "Wilderness Campsite Conditions Under an Unregulated Camping Policy: An Eastern Example," in , " in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management* May 23–27, 1999 (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 150-151.

²⁵ Lueng and Marion, "Recreation Impacts and Management in Wilderness," 37.

²⁶ Ibid.

²⁷ "Mike," "Stover Creek Shelter, User Comments," April 21, 2004, http://www.thebackpacker.com/trails/at_detail/382.php.

²⁸ Lueng and Marion, "Recreation Impacts and Management in Wilderness," p. 37.

²⁹ Scott E. Reid and Jeffrey L. Marion, "A Comparison of Campfire Impacts and Policies in Seven Protected Areas," *Environmental Management* 36, no. 1 (2005): 48.

³⁰ Reid and Marion, "A Comparison of Campfire Impacts," 49.

³¹ Ibid.

³² National Park Service, *Comprehensive Plan*, 6.

³³ Jenner, "Curbing Campground Chaos," 14.

³⁴ Ibid.; Lueng and Marion, "Recreation Impacts and Management in Wilderness," p. 38.

³⁵ Lueng and Marion, "Recreation Impacts and Management in Wilderness," 32-33.

³⁶ Jenner, "Curbing Campground Chaos," 20.

³⁷ Reid and Marion, "A Comparison of Campfire Impacts," 52.

³⁸ Ibid., 54.

³⁹ Ibid., 51.

⁴⁰ DeGagne, "2006 Appalachian Trail Journal," March 29, 2006, <http://www.trailjournals.com/entry.cfm?id=161584>.

⁴¹ David Dishneau, "Giving the Rocks a Rest," Associated Press, July 7, 2003, <http://www.aldha.org/anapolis.htm>.

⁴² Daniel R. Williams, Christine A. Vogt, and Joar Vitterso, "Structural Equation Modeling of Users' Response to Wilderness Recreation Fees," *Journal of Leisure Research* 31, no. 3 (1999): 265.

⁴³ Ibid., 252.

- ⁴⁴ Appalachian Mountain Club, "AMC White Mountain Huts," AMC, <http://www.outdoors.org/lodging/huts/index.cfm>.
- ⁴⁵ N. Queener, "Desolation Wilderness Case Study: Visitor Response to Fees," Aldo Leopold Wilderness Research Institute, 2003, <http://www.leopold.wilderness.net>.
- ⁴⁶ Lueng and Marion, "Recreation Impacts and Management in Wilderness," 35.
- ⁴⁷ Melissa L. Daniels and Jeffrey L. Marion, "Visitor Evaluations of Management Actions at a Highly Impacted Appalachian Trail Camping Area," *Environmental Management* 38 (2006): 1006-1019.
- ⁴⁸ Jenner, "Curbing Campground Chaos," 18.
- ⁴⁹ Scott Reid and Jeff Marion, "The Efficacy of Visitor Education Programs," p. 1, <http://www.wilderness.net/toolboxes/documents/education/5-Efficacy%20of%20Visitor%20Education.pdf>.
- ⁵⁰ Shenandoah National Park, "SNP Wilderness Education Plan 2002-2007," <http://www.wilderness.net>; Recreation Staff, *Strategic Plan: Wilderness Education* (United States Department of Agriculture, National Forest Service, 1991); Appalachian Mountain Club, "Education and Leadership Training Programs," AMC, <http://www.outdoors.org/education/index.cfm>.
- ⁵¹ Robert E. Manning and David W. Lime, "Defining and Managing the Quality of Wilderness Recreation Experiences," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 35.
- ⁵² Peter Newman et al., "An Evaluation of Appalachian Trail Hikers' Knowledge of Minimum Impact Skills and Practices," *International Journal of Wilderness* 9, no. 2 (2003): 34-38.
- ⁵³ Reid and Marion, "The Efficacy of Visitor Education Programs," 5.
- ⁵⁴ Jenner, "Curbing Campground Chaos", 20.
- ⁵⁵ Reid and Marion, "The Efficacy of Visitor Education Programs," p. 3
- ⁵⁶ Scott E. Reid and Jeffrey L. Marion, "Effectiveness of a Confinement Strategy for Reducing Campsite Impacts in Shenandoah National Park," *Environmental Conservation* 31, no. 4 (2004): 275-76.
- ⁵⁷ Reid and Marion, "A Comparison of Campfire Impacts and Policies," 53.
- ⁵⁸ Reid and Marion, "The Efficacy of Visitor Education Programs," 4.
- ⁵⁹ Ibid.
- ⁶⁰ Ibid.
- ⁶¹ Neal A. Christensen and David N. Cole, "Leave No Trace Practices: Behaviors and Preferences of Wilderness Visitors Regarding Use of Cookstoves and Camping Away From Lakes," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 77-85.

- ⁶² Daniels and Marion, "Visitor Evaluations of Management Actions," 1006–1019.
- ⁶³ DeGagne, "2006 Appalachian Trail Journal," March 27, 2006, <http://www.trailjournals.com/entry.cfm?id=161581>.
- ⁶⁴ David N. Cole and William E. Hammit, "Wilderness Management Dilemmas: Fertile Ground for Wilderness Management Research," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 59.
- ⁶⁵ Christensen and Cole, "Leave No Trace Practices," 79-81.
- ⁶⁶ Reid and Marion, "A Comparison of Campfire Impacts and Policies," 51.
- ⁶⁷ Robert E. Manning et al., *Use and Users of the Appalachian Trail: A Sourcebook* (National Park Service: Appalachian Trail Park Office, December 2000), 118, http://www.nps.gov/appa/parkmgmt/upload/Main_Report-2.pdf .
- ⁶⁸ David N. Cole, "Wilderness Management Principles: Science, Logical Thinking or Personal Opinion?" *Trends in Wilderness Research* 32, no. 1 (1995): 8.

Chapter 4: The New Eastern Trails System

- ¹ David N. Cole and William E. Hammit, "Wilderness Management Dilemmas: Fertile Ground for Wilderness Management Research," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 59.
- ² Associated Press, "The AT is Turning Into an Interstate: Fixes Range From Making it Tougher for Novices to Improving the Amenities," *Virginian-Pilot*, May 13, 1996, <http://scholar.lib.vt.edu/VA-news/VA-Pilot/issues/1996/vp960513/05130027.htm>.
- ³ Robert E. Manning and David W. Lime, "Defining and Managing the Quality of Wilderness Recreation Experiences," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 31.
- ⁴ Appalachian Trail Conservancy, *Local Management Planning Guide* (Appalachian Trail Conservancy, 1997): 38, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/LMPG_web.pdf.
- ⁵ Appalachian Trail Conservancy, "Groups on the AT" ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.811341/k.A8E6/Groups_on_the_AT.htm
- ⁶ Terry L. Karkos, "Group Registration System," Maine Appalachian Trail Club, <http://www.matc.org/matcgrup.htm>.

⁷ Manning and Lime, "Defining and Managing the Quality of Wilderness Recreation Experiences," 30.

⁸ "Hammer" and "Kerosene, "Blue Mountain Shelter, User Comments", August 9, 2004 and April 27, 2004, http://www.thebackpacker.com/trails/at_detail/374.php.

⁹ Yu-Fai Lueng and Jeffrey L. Marion, "Recreation Impacts and Management in Wilderness: A State-of-Knowledge Review," in David N. Cole et al., *Wilderness science in a time of change conference—Volume 5: Wilderness ecosystems, threats, and management May 23–27, 1999* (Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2000): 36-37.

¹⁰ Appalachian Trail Conservancy, "2,000-milers: Facts and Statistics," ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.851143/k.C36D/2000Milers_Facts_and_Statistics.htm.

¹¹ Ibid.

¹² Julia DeGagne, "2006 Appalachian Trail," August 14, 2006, <http://www.trailjournals.com/entry.cfm?id=162887>.

¹³ David N. Cole, "Visitor Use Density and Wilderness Experiences: A Historical Review of Research," in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 18.

¹⁴ Ibid., 12.

¹⁵ Troy E. Hall, "Use Limits in Wilderness: Assumptions and Gaps in Knowledge," in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 44; Stephen F. McCool., "Limiting Recreational Use in Wilderness: Research Issues and Management Challenges in Appraising Their Effectiveness," in Wayne A. Freimund, and David N. Cole, *Visitor Use Density and Wilderness Experience: Proceedings June 1-3, 2000* (Missoula, MT. Proc. RMRS-P-20. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, 2001): 52.

¹⁶ Appalachian Trail Conservancy, "2,000-Miler Application," ATC, http://www.appalachiantrail.org/atf/cf/%7BD25B4747-42A3-4302-8D48-EF35C0B0D9F1%7D/2000miler_application.pdf.

¹⁷ Benton MacKaye Trail Association, "The Trail," BMTA, <http://www.bmta.org/>.

¹⁸ Friends of the Mountains to Sea Trail, "About the MST," FMST, <http://www.ncmst.org/aboutthemst.htm>.

¹⁹ Ed Talone, "Realizing a Dream: the Great Eastern Trail," *American Hiker* (Spring 2006): 4-7, <http://www.greateasterntail.org/getarticle.pdf>.

²⁰ Ibid.

²¹ Greg Bluestein, "Planned 'Great' Trail Seen as Alternative to Appalachian," *Atlanta Journal-Constitution*, June 18, 2006, http://www.ajc.com/travel/content/travel/southeast/tn_stories/061806trail.html.

- ²² Scott Reid and Jeff Marion, "The Efficacy of Visitor Education Programs," 5, <http://www.wilderness.net/toolboxes/documents/education/5-Efficacy%20of%20Visitor%20Education.pdf>.
- ²³ Manning and Lime, "Defining and Managing," 34
- ²⁴ Appalachian Trail Conservancy, "Alternative Itineraries," ATC, http://www.appalachiantrail.org/site/c.jkLXJ8MQkH/b.848729/k.6FA1/Alternative_Itineraries.htm.
- ²⁵ Greg "Trudge" Eriksen, "All Things Trudge: Trudge Unloads Some Advice," <http://home.maine.rr.com/trudge/at/pointers.html>
- ²⁶ Manning and Lime, "Defining and Managing," 34.
- ²⁷ Ibid.
- ²⁸ Talone, "Realizing a Dream."
- ²⁹ Bluestein, "Planned 'Great' Trail"; Robert Snyder, "Pathway Treats Hikers to Long Walk in the Woods," *Martinsburg (WV) Journal*, March 26, 2007; Pat Sohn, "The Long and Winding Trail", *Chattanooga Free Press*, May 14, 2006; Talone, Ed, "Realizing a Dream."
- ³⁰ Manning and Lime, "Defining and Managing," 34.
- ³¹ Susan Turner, "2007 Great Eastern Trail Journal," <http://www.trailjournals.com/entry.cfm?trailname=4974>.
- ³² Cumberland Trail Conference, <http://www.cumberlandtrail.org/ctc.html>.
- ³³ Pine Mountain Trail Conference, <http://www.pinemountaintrail.com/>.
- ³⁴ Bluestein, "Planned 'Great' Trail."
- ³⁵ Mid-State Trail Association, "Mid-State Trail," <http://hike-mst.org/mst.htm>; Potomac Appalachian Trail Club, "Tuscarora Trail", <http://www.patc.net/hiking/destinations/tuscarora/>; West Virginia Scenic Trails Association, "The Allegheny Trail," <http://www.wvnet.edu/wvsta/a-trail.html>; Alabama Hiking Trail Society, Inc., "The Alabama Pinhoti Trail," <http://www.hikealabama.org/pinhotinew.html>.
- ³⁶ Horn Mountain Trail Club, "The Alabama Pinhoti Trail Section 1," <http://hmtc.org/1.html>.
- ³⁷ West Virginia Scenic Trails Association, "Seneca Spring Shelter," <http://www.wvnet.edu/wvsta/seneca.html>.
- ³⁸ Pine Mountain Trail Conference, "Latest News: 8/1/02, Pine Mountain Trail Has its First Overnight Shelter," <http://www.pinemountaintrail.com/>.
- ³⁹ Pine Mountain Trail Conference, "Home," <http://www.pinemountaintrail.com/>.
- ⁴⁰ Georgia Pinhoti Trail Association, *Guide to the Pinhoti Trail in Georgia*, 5th ed. (October 2005), www.georgiapinhoti.org/docs/GPTA-G-K.doc.
- ⁴¹ Benton MacKaye Trail Association, "Vital Info," <http://www.bmta.org/BMTVitalInfo.htm>.

⁴² American Hiking Society, "Alliance of Hiking Organizations: Southern Appalachians," <http://www.americanhiking.org/alliance/sai/index.html>.

⁴³ Turner, "2007 Great Eastern Trail Journal," December 11, 2006, <http://www.trailjournals.com/entry.cfm?id=163680>.