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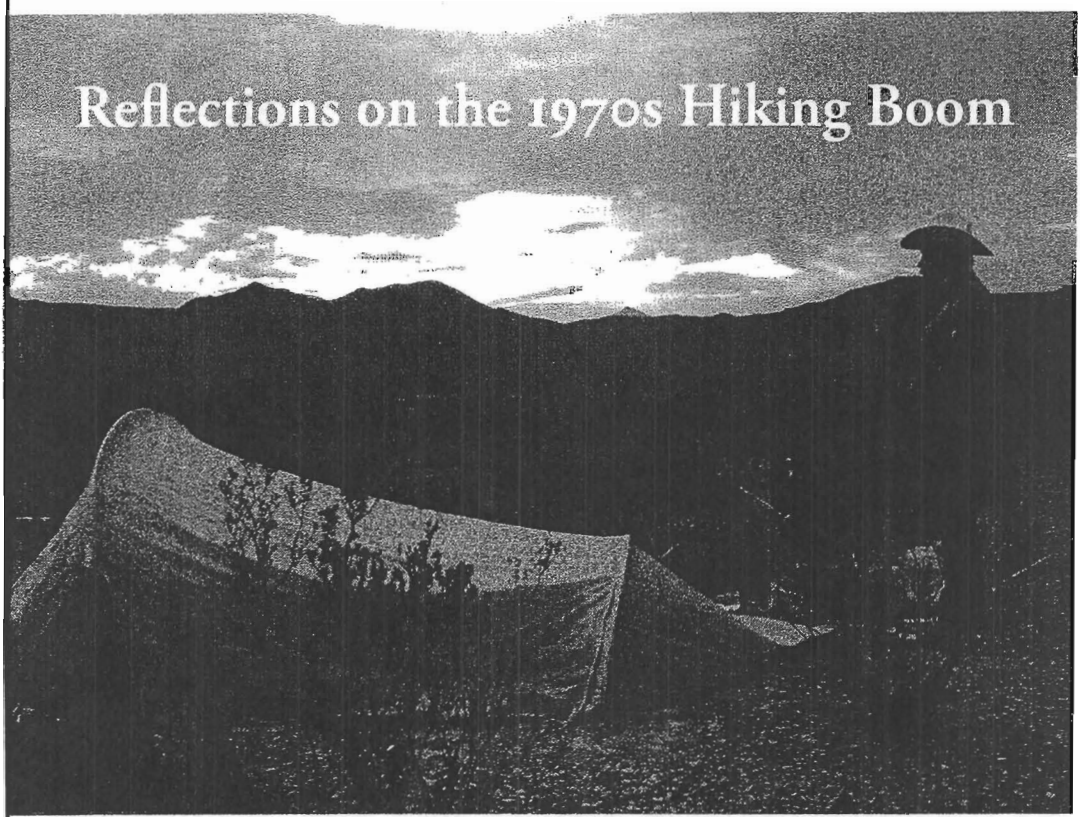

Reflections on the 1970s Hiking Boom

Featuring Stories from the Dawn of the Leave No Trace Movement

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Less Typical Now: A 1970s Retrospective

His love of ultra-light equipment aside, a backcountry researcher finds that he is a product of the 1970s, still seeking solitude in long hikes

Jeffrey L. Marion

Call it a reunion hike, a reunion of both places and people. Fontana Lake came into view as we descended the Appalachian Trail in western North Carolina, and my mind turned backward in time, 32 years ago, to 1973. The last time my eyes and feet had followed the white blazes to this locale, I was only 16. On that trip we had backpacked during our Christmas break from Newfound Gap through the southern half of Great Smoky Mountains National Park. My hiking partners had mostly included older friends from my Louisville Boy Scout troop. That troop, along with my parents, had opened a door to nature that I had never closed. Camping and backpacking led to canoeing, caving, and rock climbing. As we descended to Fontana Dam, I realized that my early outdoor experiences had defined my personal identity and shaped my life.

I had become an avid outdoors person with a deeply rooted lifelong commitment to the preservation of wild places. In college, I majored in biology, to which I was drawn by courses in botany, ecology, and geology. I began a master's program in environmental science at Duke University and finished graduate work five years later with a doctorate from the University of Minnesota. My field of study is recreation ecology, which investigates how people affect protected natural areas. Are we really loving our parks and wilderness to death? This field seeks to answer that question so that recreation can increase with minimal effect on vegetation, soils, wildlife, and water.

I stopped to admire the scenery and was joined by Bob Gordon and Kurt Whitford, my best friends from college. On a college spring break trip, we had hiked 63 miles on the Appalachian Trail (AT), ending in Wesser, North Carolina. After graduation in 1979, we had drifted apart as our professional lives took us down different paths. But at our 25-year reunion, we had agreed to backpack together again, starting where we had ended, in Wesser. We had spent the last several days reminiscing about our years together in college and catching up on news of families and careers.

Though Fontana Dam looked the same, from this closer viewpoint I could see that it had aged in the three decades since my last visit. Indeed, such long-term reunions of places and people can prompt powerful unsolicited reflections about changes that have transpired. I thought about our backpacking trip, comparing it to our college trip. Many differences came to mind, differences in personal motivations, equipment, knowledge, and skills. Backpacking

Jeff Marion, center, and friends prepare to take on the AT. JEFF MARION

had become very popular back in the 1970s, giving rise to a generation of hikers, who, like me, discovered the joys of pristine nature.

As I reflect on what the 1970s gave me as a hiker and a researcher, I find that I have transformed in one way, by embracing today's ultra-light-gear movement, but that in another sense, I am a product of the '70s, still seeking my solitude and refreshment in long section hikes, sleeping in the backcountry for days on end. I find myself to be less typical now. Visitation to parks and protected natural areas has changed substantially since the '70s. National Park Service statistics illustrate the trend. The number of national park visitors has steadily increased over 35 years, from about 200 million visits in the late 1970s to about 275 million currently. However, the number of overnight stays in the parks has declined, from about 16 to 14 million. Overnight stays in the backcountry have also dropped, from about 2.3 million to 1.7 million. Changes in the number of parks and counting methods complicate such comparisons, but data from individual parks mirror the trend. For example, backcountry overnight stays at Shenandoah National Park in Virginia declined from about 100,000 in 1975 to 41,000 in 2005; in Great Smoky Mountains National Park, they declined from 105,000 to 70,000.

What these statistics mean is open for wide interpretation. It's clear that fewer of us are backpacking today, despite the growing park visitation and U.S. population. As a former scoutmaster, current advisor of a venturing crew (which is basically a coed Scout troop), and father of two teenagers, I can attest that today's young people seem far less motivated to explore the outdoors. A recent study for the Nature Conservancy concluded that Americans are less interested in spending time in natural surroundings like national parks because they are spending more time watching television, playing video games, and surfing the Internet. Richard Louv, author of *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder* (Algonquin Books, 2005), writes that our youth live a "denatured childhood," swapping open meadows, woods, and wetlands with manicured lawns and housing developments. I can only conclude that today's youth have made a choice to swap outdoor reality for online reality, sating their need for adventure by exploring online worlds and battling "virtual" monsters. Their tools are not backpacks and tents but computers and video games. They are children of the 21st century, and though the door to nature remains open, many are choosing not to venture through it.

From Adventure to Restoration and Fitness

The thrill of adventure drew me on my first backpacking trip, at age ten, with a Boy Scout troop that I was too young to join. We backpacked the 24-mile Misha Mockwa Trail through Cumberland Gap in eastern Kentucky. I was along only because my father was an assistant scoutmaster and I had perfected the art of pestering. I carried a sleeping bag wrapped around glass jars of jelly and peanut butter somehow rigged with pack straps for carrying. My motivation in those days was an enthusiastic desire for adventure and exploration of distant forests. The Boy Scouts offered me plenty of these when I joined a troop oriented to "high-adventure," trading car-camping "camp-orees" for backpacking, caving, and canoe trips. I suspect that young teenagers usually aren't motivated to learn, but I'd like to think that as the novelty of the trips diminished, my curiosity to learn outdoor skills took over. I also became a budding naturalist, learning the names of spring wildflowers and birds from my mother, and catching and caring for all manner of insects, amphibians, reptiles, and native mammals.

Today, my list of motivations for backpacking is longer and ordered differently than the 1970s list. The craving for adventure remains on the list but resides closer to the bottom. My motivation in this new century has embraced an intriguing new challenge: ultra-light backpacking.

Backpacking became my favorite outdoor activity. A large part of the attraction was the personal challenge of being self-sufficient while traveling through remote and rugged environments. In high school, I joined a group of older scouts who began section hiking the AT. After several 40- to 70-mile hikes, I conceived of a 500-mile adventure covering the AT across Virginia. I convinced my closest friend to join me, and in 1975 we embarked on an epic journey. I also worked for five summers during the '70s at Philmont Scout Ranch, a Boy Scout backpacking base in New Mexico. I first saw the Rocky Mountains as I taught others the skills I had developed. I was in heaven out West, craving the adventures of each new summer, and amending the Boy Scout motto ("Be prepared") with Peter Pan's ("Never grow up").

Jeff Marion backpacking in Grand Canyon National Park. TROY HALL

Today, my list of motivations for backpacking is longer and ordered differently than the 1970s list. The craving for adventure remains on the list but resides closer to the bottom. I also often resist my naturalist tendencies by simply enjoying the sight of new plants, insects, and birds without looking them up in field guides. Although I continue to refine my outdoor skills on backpacking trips, my motivation in this new century has embraced an intriguing new challenge: ultra-light backpacking. No backpacker with a few thousand miles under his feet fails to consider the weight of every packed item. The ultra-light paradigm places greater focus on a new array of lightweight gear, your knowledge and skills, and doing without.

My two most important motivations for backpacking today were not even on my '70s list: restoration and fitness. My work and home life are as overbooked as any doctor's office, including an endless procession of airline flights, deadlines for writing papers and reports, presentations, scout outings,

and home improvement projects. The stresses associated with a busy life build each day, week, and month and I've discovered that a week spent alone on the AT each year is the perfect remedy. Call it mental restoration. John Muir discovered the same restorative power of nature, writing that wilderness can be medicinal to lives "bound by clocks, almanacs . . . and limited to places where Nature is covered and her voice smothered." I experienced a reunion with his words and spirit last summer while hiking some of the same trails he hiked in Yosemite's Tuolumne Meadow area. Muir said,

> Climb the mountains and get their good tidings. Nature's peace will flow into you as the sunshine into the trees. The winds will blow their freshness into you, and the storms their energy, while cares will drop off like autumn leaves.

In the spring, I will turn 50, a milestone somehow more significant than all the other dreaded "0" years. I've made an informal contract with my body, specifying that once each year I will spend a minimum of one month shedding pounds and building muscle in preparation for my annual 100-mile AT section hike. Fitness takes priority in my life, including walks on neighborhood trails, long evening treadmill sessions while watching TV, and jogging. On my section hikes I reap only one of the many benefits of my enhanced fitness, an 18-mile per day average. Together, the enhanced mental restoration and physical fitness associated with my continued devotion to backpacking undoubtedly help keep me out of my overbooked doctor's office, where I would have to exercise an attribute my family informs me that I have little of: patience.

From Cotton to Gore-Tex and Silnylon

Perhaps the most profound changes that have occurred in the backpacking world are those related to the equipment we carry and the clothing we wear. The transition began in the 1960s and early 1970s with aluminum-framed nylon packs replacing wooden-framed canvas packs. External frame packs have evolved to packs sporting internal frames constructed from plastic or high-tech alloy aluminum and titanium struts. Top-of-the-line packs have complex waistbelt systems and form-fitting foam belts. Canvas tents were replaced by polyurethane-coated nylon tents in the 1970s. With advanced software and advanced engineering, tents are morphing into a bewildering array of sturdy wind-shedding featherweight designs featuring silicon-impregnated ripstop

nylon. Cotton and wool clothing have given way to fleece and other synthetic fabrics—Coolmax, Capilene, stretchy Lycra, or low-weight insulating polypropylene—that wick perspiration away from the body. The revolution in rain gear after the invention of waterproof/breathable laminated fabrics like Gore-Tex had begun in the 1970s, but it continues with advancements in microporous coatings. I could go on, but you get the picture.

Several years ago I met Nate Olive, a fascinating young man who also adheres to Peter Pan's motto. Nate has hiked the AT, Colorado Trail, Pacific Crest Trail, and the West Coast from Canada to Mexico (the last four hikes with his partner, Sarah Jane). Nate introduces himself these days as a doctoral student studying recreation ecology. Those of us who know him well believe that to be a sham; he's a professional backpacker (can you detect a hint of jealousy?). I blame Nate for my current fascination with ultra-light backpacking—a new challenge for someone who's been around the mountain more than a few times.

My gear list has changed radically since my first backpacking trip. That sleeping bag I carried on the Misha Mockwa Trail was a rectangular cotton bag that probably weighed more than 4 pounds. That was quite a contrast to the mummy-shaped 2-pound-6-ounce Polarguard 3D sleeping bag I used on my AT reunion hike. More recently, I bought a 1-pound-8-ounce goose down bag that swaps bottom insulation for a sleeve into which I slide a mummy-shaped 6-ounce blue foam pad—a 30-ounce sleep system! That goes into a backpacking Hennessy hammock with a fly made of silnylon (ripstop nylon impregnated with silicon) that weighs 2 pounds 5 ounces, replacing my 4-pound-3-ounce tent. After using Nate's 2-ounce aluminum can stove on a field research trip to Zion National Park, I constructed one of my own, replacing a 1-pound stove that I haven't used since.

My first backpack was an inexpensive Camp Trails hand-me-down from my older brothers. In 1974, I bought the top-rated Kelty Tioga, which served me well for two dozen years and 2,000 trail miles. I converted to an internal frame with my 1998 purchase of a Gregory Palisades pack, which I needed as the designated "pack mule" on family trips with two young children. Because of some of the high-tech innovations I noted earlier, the Gregory comfortably carries 50-pound loads—even my hips don't get sore. However, the Gregory weighs 6 pounds 14 ounces *empty,* and through Nate's influence, I discovered ultra-light packs and bought the GoLite Continuum at 2 pounds 4 ounces. It's among the lightest group of packs that retain a hip belt, a feature I'm yet unwilling to give up. These packs comfortably carry only 30 pounds, so

conversion to ultra-light gear is a mandatory requirement for their use. My current base weight (gear and clothing minus food, fuel, and water) for AT section hikes is now down to 14.7 pounds. My AT section hiking pack weight when starting a six-day trip is about 24 pounds.

Rapid technological development, including the miniaturization of electronic equipment, increasingly permits those who choose to extend their connectivity to civilization into the backcountry. Unfortunately, in the 21st century, only backcountry ethics will limit the inexorable expansion of such technology. With cell phones, MP3 players, GPS units, and Blackberry devices, the backcountry visitor can phone anyone on the planet, read and respond to email messages, check or schedule appointments on calendars, look up addresses and phone numbers, play music, listen to books on tape, watch video clips, take and send digital pictures, determine one's location within yards, surf the Web, check and manage stocks, and play electronic games. Today's AT hiker can search a GPS device for services such as restaurants and hotels in a nearby town, make a hotel reservation, and call for a taxi pickup at a road crossing. Even the weight of batteries does not limit today's hikers. Have you seen backpackers with a sheet of solar cells perched atop their packs? You will.

From Novice to Master of "Leave No Trace"

We all went through it, the steep learning curve from novice greenhorn to competent outdoorsperson. Joseph Sax sums up the contrast brought about by improved outdoor knowledge and skill in his book, *Mountains without Handrails* (University of Michigan Press, 1980):

> To the uninitiated backpacker a day in the woods can be, and often is, an experience of unrelieved misery. The pack is overloaded; tender feet stumble and are blistered. It is alternately too hot or too cold. The backpacker has the wrong gear for the weather or has packed it in the wrong place; the tent attracts every gust of wind and rivulet of water. The fire won't start, or the stove fails just when it's needed. And the turns that seemed so clear on the map have now become utterly confusing.
>
> Such experiences, familiar in one form or another to all beginners, are truly unforgiving; and when things go wrong, they do so in cascading fashion. Yet others camping nearby suffer no such miseries. Though their packs are lighter, they have an endless supply of exactly the things that are needed. Their

tents go up quickly, they have solved the mystery of wet wood, and they sit under a deceptively simple rain shelter, eating their dinner in serene comfort. What is more, they are having a good time.

If we were fortunate, we had mentors—people who knew more and could guide us in avoiding those cold, wet, and even dangerous outings. People to explain why the green or rotten wood we had brought back wouldn't burn, why pitching a tent on uneven ground or in a depression wasn't such a good idea, or why it was bad judgment to have a snowball fight, soaking our gloves, on the first of a three-day winter backpacking trip. The Boy Scouts taught me, and millions of others, the rudiments of camping and backpacking. But what eleven-year-old fully listens to or applies the wisdom of their potential mentors? Nature itself is also our mentor, though an unkind one at times. Some call it "experiential education," whereas more cynical realists call it "learn by your mistakes" or "survival of the fittest." The Boy Scout motto, "Be prepared," admonishes boys to carefully plan their outdoor adventures. Those who don't are the ones wearing socks on their gloveless hands, modeling the latest fashion in trash bag raincoats, and burning wet boots, which they had neglected to waterproof, around smoky campfires.

I recall a Boy Scout trip from the early '70s when we packed in a can of corn and placed it in a campfire. I have no recollection of packing out any of the widely dispersed contents from the can following the explosion.

Fortunately, as Sax so aptly describes, experience and knowledge can substantially improve our comfort, enjoyment, and safety in the outdoors. They also enable backpackers and other outdoor enthusiasts to recognize and reduce the environmental impacts associated with their outdoor visits. However, the current Leave No Trace (LNT) program and associated low-impact ethics and practices did not exist in the '70s. Those years were a high-impact era for campers and backpackers, based on research from that time and my own personal experience. I recall a Boy Scout trip from the early '70s when we packed in a can of corn and placed it in a campfire. I have no recollection of packing out any of the widely dispersed contents from the can following the explosion.

I could divulge additional stories, but I don't want to completely shatter my leave-no-trace image. My personal ethics and research on visitor impacts led to a long involvement with the national LNT program. I was a charter member of its board of directors and served for a decade as chair of a committee that guides development of its practices, courses, and publications. Perhaps as penance for those Scout outings in the '70s, I've worked with many others to infuse low-impact practices throughout the national scouting program. The *Scout Handbook* and *Scout Fieldbook,* along with many other publications and courses, now contains substantial coverage of these techniques that are lighter on the land. Even park and forest managers have commented on seeing improved outdoor practices.

Rest assured that we are considering 21st century challenges. When the Leave No Trace Education Review committee heard that hikers in AT shelters were awakening to ringing cell phones, and that hikers atop Colorado Fourteeners found themselves an unwilling audience to other hikers' cell phone conversations, the group devised rules of etiquette for cell phones in the backcountry. (See www.LNT.org.) Hikers who use such technology in the backcountry around others inappropriately intrude on those who desire a reprieve from the sights and sounds of civilization.

From Hikers and Backpackers to Mountain Bikes and ATVs

We bipeds used to have the trails to ourselves—and the occasional horse and dog—in the 1970s. Today we compete for this precious trail real estate. Many hikers required a decade to accept mountain bikers on the trails. It certainly helped that human-powered bikers have embraced professional trail design and management and increasingly wield trail maintenance tools in addition to their bicycles. Research and experience also reveals that well-designed and well-maintained trails can handle bicycle traffic.

This is not true for motorized vehicles. Following more than a decade of all-terrain vehicles in the woods, our collective judgment of their acceptability continues to deteriorate. As an example, in Maryland, the state legislature required several state forests to permit this growing recreational use. Though motorized vehicles were restricted to designated trails, land managers discovered that riders could not be contained. They ventured onto adjacent trails and created new trails. Other managers, such as National Park Service staff at West Virginia's Gauley River National Recreation Area, have been unsuccessful in keeping them off park land. On a consulting visit, we counted dozens

of trees run over or cut with a chain saw by all-terrain vehicle riders carving out trails in a riparian floodplain containing rare plants.

Reflections of a Scientist

The decade of the 1970s was a high-impact one. Scientific data from visitor impact studies reflected that. Backcountry overnight visitation at Shenandoah National Park climbed from 34,000 in 1967 to 121,000 in 1973. Park records reveal that staff saw unprecedented camping impacts and received substantial numbers of complaints about crowding and conflicts at the park's designated backcountry campsites. In response, the park instituted a new policy to disperse campsites in 1974. Based on the first campsite monitoring surveys in 1981–1983, managers estimated that the park had about 1,300 sites, even though backcountry overnight visitation had declined by half, to 61,000. Use continued to decline in the 1980s to 38,000 in 1990, and a 1992 campsite-monitoring survey found only 725 campsites. Even though campers use fewer sites, a considerable amount of the current camping impact is considered avoidable. For example, camping permit data revealed campsite occupancy rates at about 16 percent—an area with 50 campsites might receive only eight groups a night, but rotating such use among the 50 sites is sufficient to prevent recovery. New camping policies implemented in 2000 focus visitor use on reduced numbers of campsites, and a recent study reveals that they have been effective.

Backcountry overnight visitation at Shenandoah National Park climbed from 34,000 in 1967 to 121,000 in 1973.

Another significant form of avoidable impact is campfire use. In 1974, Shenandoah National Park prohibited campfires to stop campers from damaging and cutting trees. This rule remains in effect. Researchers did not quantify the extent of that damage, so I'll share data from a 1993 campsite monitoring survey at Great Smoky Mountains National Park, where campfires still are allowed. Our survey revealed that 63 percent of trees on a typical Great Smokies campsite were damaged, with a sum of 1,128 damaged trees on 327 sites. In adjacent areas, we found an additional 1,249 damaged trees. We also tallied 724 stumps at campsites, with 2,642 more found in nearby areas. Visi-

tors also build multiple fire pits on campsites; we counted 563 fire pits on 322 campsites.

Visitors are becoming more aware of some of the unintended consequences of their recreational activities. A legacy of the 1970s backpacking boom for today's Shenandoah National Park visitor is a ban on campfires. When I suggest revisiting that decision with Steve Bair, the park's backcountry manager, he politely reminds me to consider my data on campfire damage in the Great Smokies. I smile and concede the argument to Steve. Park and forest managers must protect sensitive resources *and* provide for recreational uses. Their "toolbox" contains site management, visitor regulation, and visitor education tools. We would all prefer primitive trails free of gravel and pavement. We would prefer the freedom to camp wherever we choose and to build campfires. If regulations disappeared to allow such freedoms, managers would be left only to try teaching responsible behavior, and campers would have to be willing to learn.

Perhaps the most significant legacy of the 1970s was the development of low-impact practices.

Perhaps the most significant legacy of the 1970s was the development of low-impact practices that evolved into our current national Leave No Trace program. The environmental impacts of that decade spurred the development of a new ethical relationship to nature, one that challenges visitors to learn more about the natural environments they visit so they can avoid or minimize the impacts associated with their visits. Allow me to offer some heartfelt advice: Keep nature's door open, visit it frequently and find Muir's restoration there, but please, as the LNT motto goes, "Plan ahead and prepare" with the goal of leaving no trace of your passing.

Jeffrey L. Marion is a scientist with the U.S. Geological Survey, Patuxent Wildlife Research Center, and an adjunct professor at Virginia Tech University in Blacksburg, Virginia. His field of study is recreation ecology. His current studies take him to Acadia National Park, the cliffs at Shenandoah National Park, and Great Falls Park in Virginia. He also studies visitor impacts in Zion National Park, Utah, and Haleakala National Park, in Hawaii.