

## WILDERNESS ESSAY

## From Away

Climbers from the western United States are incredulous when hearing a description of Mount Katahdin. They know of it as the northern terminus of the Appalachian Trail, but certainly few Washington or Colorado residents, who have 14 000-foot peaks in their backyards, would agree that this 5267-foot bump could be a worthy or formidable mountaineering objective. Mount Katahdin is a loose, primarily basalt and granite peak that Mainers—and Maine transplants, euphemistically referred to as “from away”—hold proudly as the crown jewel of Baxter State Park.

The enormous park is pure wilderness and much more perfectly preserved than any national park I have ever visited. It is roughly 200 000 acres of thick pine forests, trout-filled alpine tarns, and lichen-covered granite boulders left behind from when the glaciers that covered this entire area receded millions of years ago. Most of the huge boulder fields have filled their clefts with many forests of stunted trees near the timber lines, termed *Krummholtz*, and are unrecognizable as glacial ridges or moraines. Nevertheless, from the air you can still see the moraines fan out from the striking peak that punches skyward from the middle of the park. Mount Katahdin looks transplanted from the Rockies; it has a few predominant summits, linked by more than 2000 feet of sheer cliffs and crumbly gorge-like couloirs. The faces of the cliff climb steeply to a 6-inch wide, 1-mile long “Knife Edge” that must be crossed to climb from the south peak to the true summit. Especially with a little snow or ice, usually found on the mountain until July, it becomes a committing and thrilling traverse.

The cliffs below the Knife Edge are home to some of the best and longest alpine mountaineering routes in the East. Fifteen-pitch climbs of sustained moderate to difficult climbing are quite a draw for anyone without a week of vacation or the plane fare to head out and climb Keiner's Route or the Exum Ridge. Harsh winter weather and rapid freeze-thaw cycles have provided abundant cracks and good protection opportunities; however, they have also created a lot of loose rock. The rockfall hazard aside, it is a wonderful place to climb. It is very alpine and very committing—classic grade IV climbs are rare, if not absent, ratings in the East.

I was on call Sunday night, spending 24 hours on the labor and delivery floor. One woman in labor and another

woman with serious complications that led to a 3:00 AM cesarean section kept me busy all night. On Monday morning the action was over and I was heading out, looking forward to 2 days with my wife. We thought about climbing Mount Katahdin, but a stormy forecast led us to consider kayaking instead. Stuffing my stethoscope into my bag as I entered the stairwell, I heard “Dr Irwin, my water broke!” I turned to see my young patient in a wheelchair with an ear-to-ear smile and outstretched arms. She had previously tried to elicit the promise of induction if she had not delivered by the time I left for a summer climbing trip to Washington. Because her primiparous cervix was dilated 4 to 5 cm, she would surely deliver by 3:00 PM, and my day off was certainly saved.

When I finally arrived home at 7:30 PM, my wife, Carolyn, heard the pager. “Do you have any other patients due?” she asked. “No,” I said as I checked the number. “It's a rescue. Katahdin. The code says it's medical and technical. Let's pack.”

I had intended to “blow off steam” during my residency by joining the state Wilderness Rescue Team and the ski patrol and volunteering to teach wilderness medicine and ski instructing. Now the intelligence of this decision was in doubt because there was no steam left to blow off. Carolyn is technically not on the “team,” and it was not until midnight, after we had both driven for 3 hours to the park gate, that it dawned on me she had been conscripted. We picked up our instructions and radio at the gate and hiked the 4 miles using headlamps under threatening skies.

At 2:30 AM we met the other rescuers at the back-country ranger cabin. The floor was cluttered with ropes, carabiners, and pulleys piled among a sked, folding litter, and splints. The ranger briefed us: 2 experienced local climbers were on the last pitch of “The Armadillo,” a difficult alpine rock route that tops out on the Knife Edge. Apparently, they had fallen and were severely injured, stuck on a ledge high on the mountain. They had hauled a couple hiking across the Knife Edge very late that afternoon. We later learned that the leader had attempted a rappel to retrieve some gear. Fatigued, he had failed to clip his rope through his anchor. He had leaned back and fallen, with his rope, 200 feet into some boulders. The pair had rappelled 2 more pitches before, with

rope stuck, and they were stranded on an exposed ledge above a 600-foot drop.

The rescue leader said that all the rescuers would scramble 1200 feet to the base of the cliffs. From there, 3 rope teams would lead up to the victims, administer first aid, and lower them in litters 600 feet onto the scree on the steep mountainside below. There, an Army National Guard helicopter would extricate them to the closest trauma center. Because the climb was technical and the victims were injured, I (partially by default) was designated a rope-team lead climber. With the support of the 10 other rescuers, we spent an hour and a half approaching the cliffs from the cabin. The rock face looms over Chimney Pond, a shallow tarn in the glacial cirque. The cabin and a few lean-tos are cluttered on the eastern shore of the pond. We carefully hopped across rocks along the dark, rippling shore to the far side, where we followed the streambed that fed the pond. The boulders were slick with wet lichen. More than 1 rescuer plunged his or her foot into the cold, bubbling pools after either slipping or losing balance because of the awkward weight of a backpack full of rescue gear.

Climbing the last few hundred yards before the cliff band was an eerie, almost surreal experience. No one was talking. The only sounds I heard through the wind were my own deep breathing and the bounding thump of my pulse in my temples. My headlamp cast a cone-shaped beam through the steam of my breath onto a huge clearing of leveled trees, all dead, all pointing downhill. They were weathered, much like the driftwood you would find on the wild coast of Olympic National Park. Some were still loosely connected to their intact stumps by stringy bands of wood that had been liberated by the avalanche that had run through this area, which had caused their trunks to explode and splinter in all directions.

We organized gear at the bottom of the cliff band. I was climbing with my pack, which was heavy with medications, airways, splints, fluids, and intravenous gear. On the back of my pack was lashed a 20-pound folding litter. No matter how I arranged this 4-foot tube it was difficult to manage. Either it swung down and hit my calves or it stuck out wide like a huge log resting on my shoulders. Swinging down was not an ideal way to lead climb a challenging face, but this was preferable to the 300 feet of 12-mm static rope my ropemate had to contend with.

Up we climbed, first on a friction slab, then working left onto a ledge for a horrendous 400-foot traverse through gnarled, sharp, and stunted shrubbery. Dawn was not far off; while climbing this ledge I could make out the silhouettes of the thick, angry branches in the dense thicket we penetrated. The winds were picking up

considerably and had shifted to the east during the past hour. Low-lying clouds heaved up and over the Knife Edge, pouring onto us and occasionally robbing our view of the lantern in the ranger cabin's window far below us. As the sky brightened a little, one could make out the bubbling cauldron-like underside of the enormous cumulonimbus cloud that was overhead.

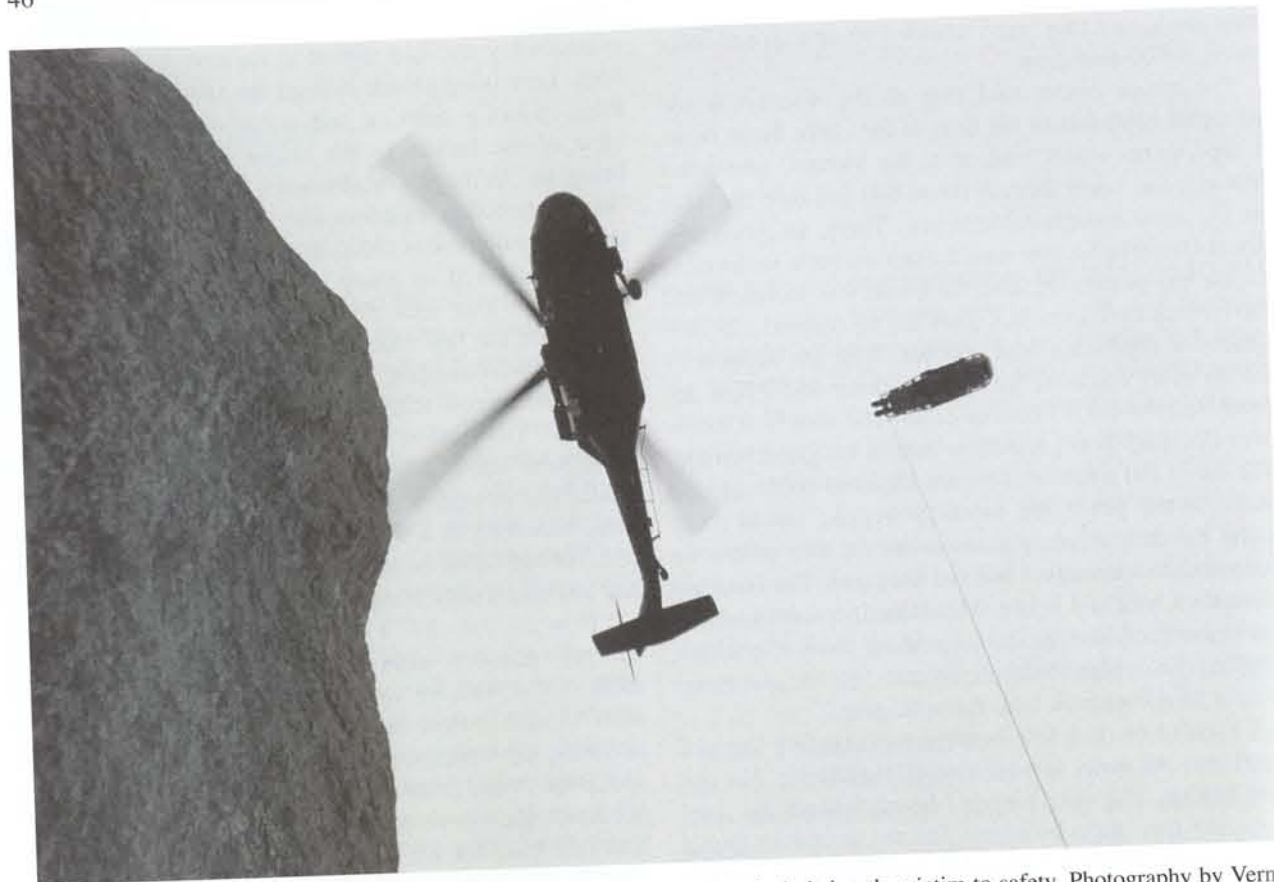
We clambered up many more terraced faces and, finally, up a long rock rib to the victims' ledge. The 2 rangers on the first rope team, who were climbing light and fast, were tending to the victims. We gingerly traversed the narrow ledge, crossing slick rock and 2 small cascades. The victims, a man and a woman, were shaken. They were huddled behind a short windbreak they had made. The woman, Emily, was crouching; the man, Lincoln, was lying in a Mylar bivy sack on top of a foam pad. He had fallen on his leg and shoulder before his ear and jaw had finally brought him to a halt against a rock.

“How are you sir?” I asked first. Painfully, he spoke. “I got summer teeth. Some are here, some are there . . .” “At least you're keeping your sense of humor!” I said. “How did I get to the beach?” he said, revealing jaw disarticulation. His partner (and fiancé) spoke up. “He's been saying weird stuff all night. He's confused. He's been passing out on and off. His ear's hurt real bad, but it's not bleeding. It does have some clear fluid coming out of it, though.”

The patient's ear was crushed, as was his mastoid area. Considering this, I gave him an initial dose of a broad-spectrum antibiotic for meningitis prophylaxis. We also immobilized him for a fibular fracture, scapular fracture, and jaw fracture.

Judging from the height of the fall and severity of injuries, aeromedical evacuation was indicated. Unfortunately, to get the patient to the basin he would have to be lowered almost 600 feet—a technical, risky, and time-consuming rescue. This information was relayed to the crew aboard the Black Hawk helicopter that had been dispatched from the Army National Guard and had been circling the basin for the past hour.

The crew decided to attempt a pick-off from the ledge we were on. This was clearly dangerous, as the wind was blowing into the basin at 30 mph (with stronger gusts) and would be pushing the chopper into the mountain. The helicopter rose, very slowly, constantly making fine adjustments to counter the wind. The helicopter was below us but rose to our level within minutes, at one point hovering just a few hundred feet off the cliff but level enough that we could see eye to eye with the pilot. The pilot inched toward and over us, fitting the rotor swing neatly between the 2 buttresses that flanked our ledge, allowing for no margin of error. At this point, rain drops were passing through the helicopter blades and



The National Guard helicopter hovers close to the mountain while gingerly hoisting the victim to safety. Photography by Verne McMoran.

being accelerated into our parkas. The rotor wash was tremendous, annihilating the Mylar bivy sack and actually flipping my helmet back between my occiput and pack. Like a kite, tethered to the chin strap across my neck, the visual provided comic relief to Lincoln and the other rescuers.

A medic was lowered and Lincoln was neatly packaged. "Dis ith cool!" he screamed over the noise of the helicopter. "Wait until you get the bill!" I yelled back. The cable was clipped, the safety line was attached, and Lincoln was promptly hoisted inside the chopper. I rappelled down with his climbing partner, slowly and not so eloquently. At the bottom, scores of rescuers took our bags and the unopened litter. Alone, I slogged through the streambed down to Chimney Pond to meet my wife. We shared a sandwich and began the hike out at 11:00 AM.

Upon arriving at the trailhead, thunder clapped once and the sky opened up. Just then, as I was stopping to reflect on the events of the past 3 days, a well-dressed woman in high heels slid out from behind a big oak and thrust an oversized, foam-covered microphone into my face. I answered a few of the reporter's questions. The edited film clip of a filthy sleep-deprived guy who is

babbling incessantly about "rocks wet, things hard, fast wind . . ." provided good-natured fodder for my friends.

Yesterday, I went to get a haircut in my small Maine town. It is a tiny, Norman Rockwell-esque shop. Dusty bottles of yellow elixirs and tarnished brass-handled shaving mugs rest on a shallow crooked shelf just behind the door. The barber started to cut my hair and then stopped. He pushed his narrow, black plastic-rimmed glasses up from the end of his nose, pulled his head back, and stared me in the face. Quickly he directed his eyes down at his maroon nylon overshirt and started brushing off hair clippings. Without looking up he asked, "Aren't you that guy?" "Which guy?" I asked. He stopped brushing and looked up at me. "You know, that guy up there." "You mean Baxter?" "Yea, that guy." He started brushing his shirt again. "I think so." I answered, still not sure I understood him. He pulled his glasses back down to the end of his nose and started to cut again. "Don't matta any. You mighta done good, son, but you're still from away."

Brian R. Irwin, DO  
Belgrade, ME, USA

## THE WILDERNESS INSTRUCTOR

### Teaching Wound Care and Bandaging: An Historical Perspective

Steve Donelan

#### Introduction

For many years, first-aid courses included a great variety of bandaging and splinting techniques. In the second edition of the American Red Cross textbook, *Advanced First Aid & Emergency Care* (1979),<sup>1</sup> for example, 22 bandaging techniques are described and illustrated. Many of these bandages were also included in Standard First Aid when it was a lecture/demonstration course about 20 hours long. Yet in *Emergency Response*,<sup>2</sup> the American Red Cross textbook for a first responder course that supplanted *Advanced First Aid* in 1993, only 1 bandage is described and shown—a simple gauze roller or elastic pressure bandage to control bleeding.

Until the last decade of the 20th century, American Red Cross courses were widely accepted as the standard for first-aid training, and they are still among the most popular. The content and objectives of their courses are fairly representative of what was taught in first-aid courses, including both the Standard First Aid course designed for lay people and the Advanced First Aid course (about 50 hours long) designed for professionals. Starting in the 1980s, Standard First Aid was reduced to a 1-day course, including Adult CPR, and the first-aid content was reduced to a few hours. Most of the bandaging and splinting techniques were dropped. And whereas *Advanced First Aid* remained in the course catalog until 1993, the textbook was not revised after 1979.

This dramatic change in the content and apparent objectives of first aid courses raises several questions:

- Who developed the sophisticated bandaging and splinting techniques that were taught for so many years in first-aid courses?
- Why did lay people need to know all these techniques?

Photos courtesy of the American Red Cross Museum. All rights reserved in all countries.

Corresponding author: Steve Donelan, P.O. Box 1227, Berkeley, CA 94701 (web: [www.wildernessemergencycare.com](http://www.wildernessemergencycare.com); e-mail: [donelan@mindspring.com](mailto:donelan@mindspring.com)).

- Why were almost all of these techniques dropped in the 1980s and 1990s, even from the advanced (first responder) courses?
- Are these traditional first-aid techniques still being taught in wilderness courses?
- Are the traditional techniques in the old books still potentially useful for wilderness situations?

#### History of first aid training

Let us begin by looking at the history of first-aid training for lay people in the United States. It probably began in 1880, when The Society for First Aid Instruction to the Injured was formed in New York City. Medical doctors volunteered their time to teach the public, who paid a small fee to the Society. In 1889, Dr Matthew J. Shields began teaching first aid to Pennsylvania coal miners for the Jermyn Coal Company, using a textbook that he wrote. The first sentence began "What to do before the arrival of the doctor." In 1903 and again in 1908,<sup>3</sup> the American Red Cross produced a first-aid manual, but the program did not really get started until they hired Dr Shields as Staff Physician in 1910. He and other physicians toured the United States in railroad cars fitted out as classrooms, teaching first-aid to the public as well as to railroad and mining employees. First-aid contests, with medals to the winning teams, brought a lot of publicity to the program.<sup>4</sup>

By 1922, there was a *Teacher's Handbook of First Aid Instruction* for teaching it in schools, and first-aid stations (staffed by volunteers) were common at large events such as fairs, track and field meets, and parades. Then in 1927, physicians began to train lay people as first-aid instructors, which was the key to the expansion of the program. By 1933, the American Red Cross had issued 1 000 000 first-aid certificates to course graduates and published its first standardized first-aid textbook, which was revised in 1937.<sup>5</sup>