My wife and I took a Wilderness First Responder (WFR) course through SOLO Schools this past spring break. The course was promoted through Bucknell University in Pennsylvania. I have wanted to learn more about wilderness medicine for a while, and WFR is a good credential for those like myself interested in outdoor education. In taking this course, some things I found particularly interesting were its unique dynamic, and how my personal outlook has changed on wilderness travel.

## The course dynamic

We were surprised to find that about three-fourths of the students in the course were part of "Buckwild," Bucknell's multiday, outdoor orientation program. The students were instructors for Buckwild and the WFR certification was being paid for by Bucknell. Bucknell is a private college and tuition runs about \$30,000 a year. This created a unique dynamic for the class – instead of being surrounded by outdoor professionals who lead trips in the remote wilderness, we were surrounded by young undergraduate students with little backcountry experience.

Our two instructors, Chris and Andrea, were very experienced. Both had been EMTs and had worked on ambulances for years, and Chris had also worked as a fireman, on search and rescue teams, and with disaster relief operations like post-Hurricane Katrina. They had a wealth of knowledge to share, but because their outdoor experience was limited to the East Coast, their techniques centered around stabilizing the patient and then mobilizing search and rescue to evacuate the patient. This is simply not an option in more remote areas like Alaska, where rescue will either come from a helicopter or, if that's not possible, not at all. And in the absence or failure of remote communication, self-evacuation is the only option.

Many of the endings to scenarios and discussions thus weren't as relevant to me. The splints, for instance, were encouraged to be BUFF ("big, ugly, fat, and fluffy"). BUFF splints felt great, but I wouldn't

want to have a bunch of fluffy, heavy material weighing down my leg as I crutched out on trekking poles or between two partners' shoulders. Chris and Andrea stressed always taking patient's shoes off in the event of a leg injury; the patients would be hypo-wrapped and kept warm "while we go and get help." Again, this would be a bad idea in a remote setting, where a shoe would protect feet against the elements. Still, Chris and Andrea did mention improvisation was key, and most of what I learned could be adapted to fit whatever environment I happened to be in.

More negative was that the class environment (about 40 happy-go-lucky undergraduates who often reveled in asking absolutely absurd questions) discouraged real discourse. I often wanted to know more about a subject, and what I considered important points to clarify were often brushed off by the instructors. For instance, Andrea covered "shock" and mentioned that shock can kill; yet, from what I understand, shock is only the body countering problems such as low blood volume. In the case of a severe blood loss, I asked, is it shock (super elevated heart rate) that kills, or simply hypovolemic blood levels? Despite asking it a couple of times, she never really answered my question. Part of this might be that she herself didn't really know, and part might have been she was pressured to cover a large amount of material and deal with, as I mentioned earlier, many truly ridiculous questions.

I did learn much from the course, and I am interested in regularly researching what might not have been covered, or that I don't remember.

## How taking a WFR course has changed my attitude toward outdoor travel

I find it very interesting noticing how my outlook toward traveling outdoors has changed. I have never broken a bone in my entire life, and the worst sprain I've received was on the front of my foot (still a walkable injury). I've never had any health complications more serious than having the flu. But I've done a wide variety of outdoor activities involving inherent risks, and can think of many times I could have hurt myself. So it's easy to go through life thinking that severe injuries are outside of the realm of probability, at least for people like me – a generalization I often pass on to my traveling companions.

Taking training in wilderness medicine, especially WFR, takes the mind down a very different path. For eight days we talk about nothing other than mechanisms of injury, treating injuries, and dealing with patients who might be in severe pain. Every day we usually did two or three scenarios, and many of the students were fantastic actors. It was always fun playing the patient because, aside from not having the stress of doing a proper patient exam and stabilization, we were encouraged to scream in pain, especially when our fellow WFRs (all too uncommonly) mishandled our "injury." While I'm sure this doesn't compare to an actual situation in which someone has a severe injury, it was great mental training.

No longer is whitewater with big boulders merely a fun spectacle; it is an "MOI" for various head, neck and back injuries, in addition to being drowned and getting hypothermic. A crack between two rocks on the trail becomes an MOI for a broken ankle, and that rock below the bouldering wall is a perfect way to get a TBI. Noticing these potentials, of course, encourages prevention – being a little more careful or avoiding certain things altogether. In general, I think that I am a very cautious adventurer, and the far majority of the accidents I've been in have resulted from not realizing a situation is dangerous, or not paying attention when I already know it is. Taking the WFR course made me more aware of injury potential and I think it will help me realize where danger exists, and pay more attention when I know it's there.

I definitely became more confident in my ability to diagnose and treat injuries. Mysteries like broken bones and sprains became easy to distinguish. Even more complicated problems like traumatic brain injury (TBI) showed various clues. Most of the time, between myself and a partner, I felt we generally knew what the problem was after a few questions, and even the harder cases we were able to puzzle out. I feel comfortable knowing what is an immediate life-threat (broken femur; sharp, sudden abdominal pain in the lower right quadrant) and what is not (broken arm or shin, abdominal pain after dehydration). Further, I feel comfortable knowing why. On those issues I don't remember as well or weren't explained in detail, I feel a desire to learn more.

Along with diagnosis and treatment comes having adequate equipment. Our WFR instructors stressed improvisation, but that you'd have to have a minimum amount of gear. On a day hike, bringing a bit of string and an extra sweater could make the difference between a functional and non-functional splint. An Ace

Bandage, I realized, can work both as an ankle wrap and a tie for a splint, or even to hang up a sling. I'll always keep one in my first aid kit. Aspirin can mean life or death for someone having a heart attack, so I'll always carry some if I'm on a populated trail. Another interesting thing I learned was a "hypo-wrap," using a tarp or tent fly along with a sleeping pad and sleeping bag (if available) to bundle up a patient. A pad is placed over the tarp, and a patient is rolled or moves themselves onto it. The tarp can then be folded and tucked underneath them, making a burrito-like wrap. These are amazingly snug. If it's raining and the patient doesn't need to lie down, just getting them onto a pad and throwing a tent fly everyone, tucked underneath the WFR's knees or boots, creates a workable if not warm environment in less than a minute. I'll always bring my tent fly with me on my day hikes from now on.

Knowing how my outlook has changed, I definitely understand why outdoor programs require WRF certification and I would do the same if I ever started an outdoor camp with extended backcountry travel.

## **Next Steps from WFR Certification**

As I mentioned, I plan on keeping my WFR certification current through recertification. It seems essential that every two years I take an actual WFR re-certification, not just a Wilderness First Aid, so that all material is refreshed. Taking the course has also spurred my interest in emergency medicine, but while I would love to become EMT certified and work on the street, I don't know if this is a realistic option. For my own knowledge, I might take an EMT or Wilderness EMT certification course sometime in the future. I would also like to join a search and rescue team (which WFR qualifies me to do) or assist with disaster relief where I can. So far as I know, employers must make allowances for search and rescue volunteers to take off work if they are notified of a rescue operation, so this might be a viable option in Alaska or elsewhere.