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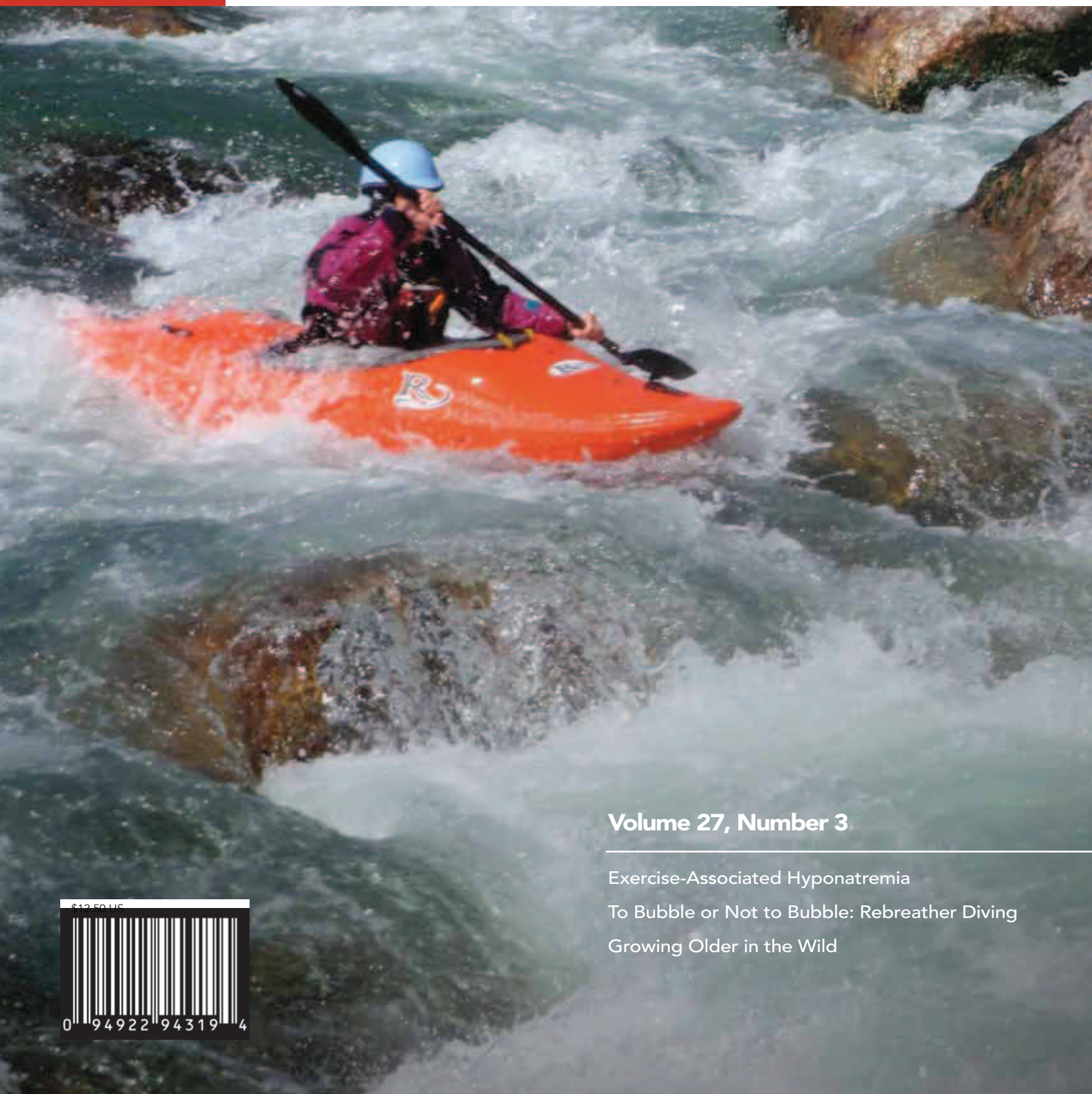

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# Heatstroke on Mount Olympus

Steve Achelis


photo courtesy of Steve Achelis


The following is an abridged excerpt from the book, *Mountain Responder*, by Steve Achelis. Reprinted with permission.

I worked out with weights this morning for the first time in a month. With my scrawny muscles exhausted, I headed to the indoor climbing gym with my daughter. My pager sounded as we were untying from our last climb. I've been on the team for two years and this will be my eighty-eighth callout.

> This is a callout for S&R on a heatstroke victim at Mount Olympus Trail Head..5600 S Wasatch Blvd..respond on Code One Frequency. case#6501..eom 17:39 06/07/03.

Mount Olympus in summer is a textbook setting for heat-related illness. The main trail faces due west, into the hot afternoon sun. And it's steep, rising from the valley, at 4,600 feet, to the summit, at 9,026 feet, over a relatively short 3.5 miles.

"Mount O" is a tempting hike. Rising like a steep volcano, this monolithic feature is visible from just about anywhere in the Salt Lake Valley. The trailhead is impossible to miss—in fact, for many urban dwellers it may be the only trailhead they see.

The high today is expected to be near ninety degrees. On days like this, you simply cannot carry enough water up the mountain. The twelve-ounce bottle clasped in a hiker's hand is nothing in this hot, dry desert air.

My pager reports that the patient is suffering from heatstroke—something very different from heat exhaustion, although people tend to intermix the terms. Heatstroke is serious, a true medical emergency in which the body's ability to dissipate heat is overwhelmed. As a result, the core temperature rises rapidly to the point where tissue is destroyed and survival is in question. Although this call is reported as heatstroke, all we really know is that the patient is showing signs and symptoms of a heat-related illness.

Driving to the trailhead, I learn that it was a doctor who called 911 and reported that the victim is experiencing heatstroke. That adds validity to the diagnosis.

When I arrive at the trailhead, I see Paris Napoli, a paramedic with Station 12. I'm always glad to see him at the trailhead. A firefighter who appreciates the different roles and skill sets of Fire, on one hand and Search and Rescue, on the other, Paris knows that we have strong backcountry medical skills, just as we know that his medical skills dwarf ours. Rather than wait at the trailhead for several hours, Paris decides to take his crew back to the fire station. He asks us to call him when the patient is a half hour from the road.

It takes us about an hour to gain 1,800 vertical feet over a mile and a half and reach the patient. Twenty-year-old Ashlee is lying in the dirt and looks miserable. She reminds me of what it feels like to have the flu and feel so wretched you wish you could be put out of your suffering. It's awful enough when you're at home in your own bed, let alone lying in the dirt several miles up a steep trail, in 90-degree heat.

As I put the stethoscope in my ears, my heart is still pounding hard from the hike, and I can hear it wooh-whooshing away.

After performing an assessment to determine her medical needs, I kneel down to start an IV. Fluids will help her, but she's so dehydrated, her veins have shrunk completely out of view. As if lying in the dirt and being puke sick in the mountains weren't enough, now some guy is going to go fishing with a needle in her arm.

## To Hoist or Not to Hoist

My partner Andy Peterson takes over the medical care as I work on a transportation plan. Since this looks more like heat exhaustion than heatstroke, the situation doesn't really justify using a helicopter. Also, with no landing zone nearby, it would have to be a helicopter with a hoist. [In the United States, short-hauling and winching from helicopters is infrequent and is primarily limited to military-assisted rescues and missions within national parks. In fact, Utah-based Life Flight is the only civilian air ambulance service in the United States certified to hoist patients with a winch.]

A ground evacuation will be tricky, though, because the Mount O trail is too narrow to have rescuers on either side of the litter and the trail is steep enough that the litter will have to be belayed by ropes the whole way down.

Although a fit hiker can get to this location in under an hour, taking a patient down the trail will be slow going, probably taking four or more hours.

Andy comes back to me and says, "Steve, we've got to hoist her." I remind him that this mission doesn't meet our criteria of a life-or-limb threat. Gesturing toward our patient, lying in the dirt some twenty feet away and dry-heaving, Andy brings up the challenge of protecting her airway and making sure she doesn't aspirate vomit. Maybe I'm looking for a way to justify it, but aspirating vomit is a life threat. And having the team available for another call—a fifty-fifty chance on a Saturday in June—may save somebody else. Bring in the helicopter.

Three of the rescuers on this call are newbies, and several others have been on the team for about a year. This is a good opportunity to remind them about helicopter safety and to emphasize our protocols. To make my point, I tell the group, "Let's have only two rescuers in the crash zone when the paramedic is lowered." Then I send two of the newer members up and down the trail to make sure that "no public gets in the crash zone."

*photo © Darren Hunsaker*

I realize that "crash zone" is a bit melodramatic, but instilling a little fear of helicopters now might save their lives someday.

With the trail blocked above and below our patient, paramedic Brian Allred is lowered from the hovering chopper to the trail. After his quick assessment, we package the patient in the vacuum splint and the ship hoists her into the sky. She's in the air, and I am feeling good. The helicopter was the right call—a little borderline, perhaps, on whether she met our risk criteria for a hoist, but I think it was a good decision.
I put the two-piece litter on my back and, despite the earlier workout, decide to jog down the trail. At least, I think of it as jogging, but with the weight on my back and not wanting to accelerate the wear on my aging backcountry knees, I do an old man's jog, making sure one foot doesn't leave the ground until the other has touched.

On the radio, I tell the incident commander that the patient is "inbound to the command post."

Now, part of sounding professional on the radio is to sound a little bit bored. Emotion is amplified by radios, and the calmest voices sound the most professional. Knowing this, I'm surprised to hear Sgt. Thad Moore's voice on the radio, sounding anything but cool or bored: "Life Flight crashed! Life Flight crashed! Life Flight crashed!"

We are on the mountain, with mountain rescue gear, and our rescue helicopter has crashed.

Brian, the paramedic we just handed our patient to, is now a patient himself—if he's alive. I wonder if Ashlee was still on the hoist when the ship crashed. It was my decision to hoist her. Over the coming weeks, I will have feelings of doubt about whether I made the right call.

I see a huge dust cloud come up from a ridge less than a mile from me. It looks like a cloud of smoke, but it's brown—dirt. The cloud rises several hundred feet and hangs in the air.

I consider taking the direct, over-hill-and-dale route to the crash site, but I don't want to get bogged down bushwhacking, so I decide to head down the mountain to the road, taking the normally forbidden shortcuts between switchbacks.

Now I'm running fast, no longer concerned about my knees or the litter on my back. When I reach the parking lot twenty minutes later, I put a Kojak light on the roof of my truck and barrel down the road.

As I reach the crash site, which is only a hundred feet uphill from the road. Fire suppression foam covers the ground. Paris and his crew are carrying Brian on a stretcher. He has almost every extremity splinted and wrapped in bandages. They carry him to the Airmed helicopter while the flight nurse is taken to a ground ambulance. I'm relieved to learn that Ashlee was transferred to a ground ambulance before the ship crashed.

Looking at the crumpled ship, I can see that the pilot, Brent Cowley, is dead. *Aw, shit*! Brent has done countless missions for Utah's search and rescue teams and has saved a lot of lives. It doesn't seem possible—or the least bit fair—that a guy who has rescued so many should die in the process.

I walk up to the helicopter and look at its twisted rotor. It is made from beer-can-thin metal that I can almost dent with my fingers. The cockpit has broken completely away and is facing the rear of the craft. The wreck is sitting in the middle of a horse corral at the base of the mountain. There is agreement that Brent managed to put the crashing bird here and, quite likely, save Brian and Denise.

[A follow-up investigation will determine that the helicopter crashed due to a mechanical failure.]

Steve Achelis is the former commander of the Salt Lake County Search and Rescue team. He is an EMT-I, a ski patroller, and an instructor for the Wilderness Medical Institute. Steve has participated in close to 300 backcountry rescues. For more information please visit MountainResponder.com or contact Steve@RescueRigger.com. Steve's book is published by Dog Ear Publishing and can be purchased at MountainResponder.com.