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Winter/Spring 2023

Appalachia

▲ Est. 1876

America's Longest-Running Journal of Mountaineering & Conservation

Encounters with Animals



Glimpsing the soul of nature



Accidents · Alpina · Poetry · In Memoriam
News and Notes · Books and Media

Volume LXXIV No. 1, Magazine No. 255

Winter/Spring 2023

Appalachia

▲ Est. 1876 America's Longest-Running Journal of Mountaineering & Conservation



Appalachian Mountain Club
Boston, Massachusetts

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Since 1876, we've made it our mission to protect the mountains, forests, waters, and trails you love in the Northeast and Mid-Atlantic regions. We envision a world where our natural resources are healthy, loved, and always protected, and where the outdoors occupies a place of central importance in every person's life. We encourage you to experience, learn more, and appreciate the outdoors knowing that your participation supports the conservation and stewardship of the natural world around you.

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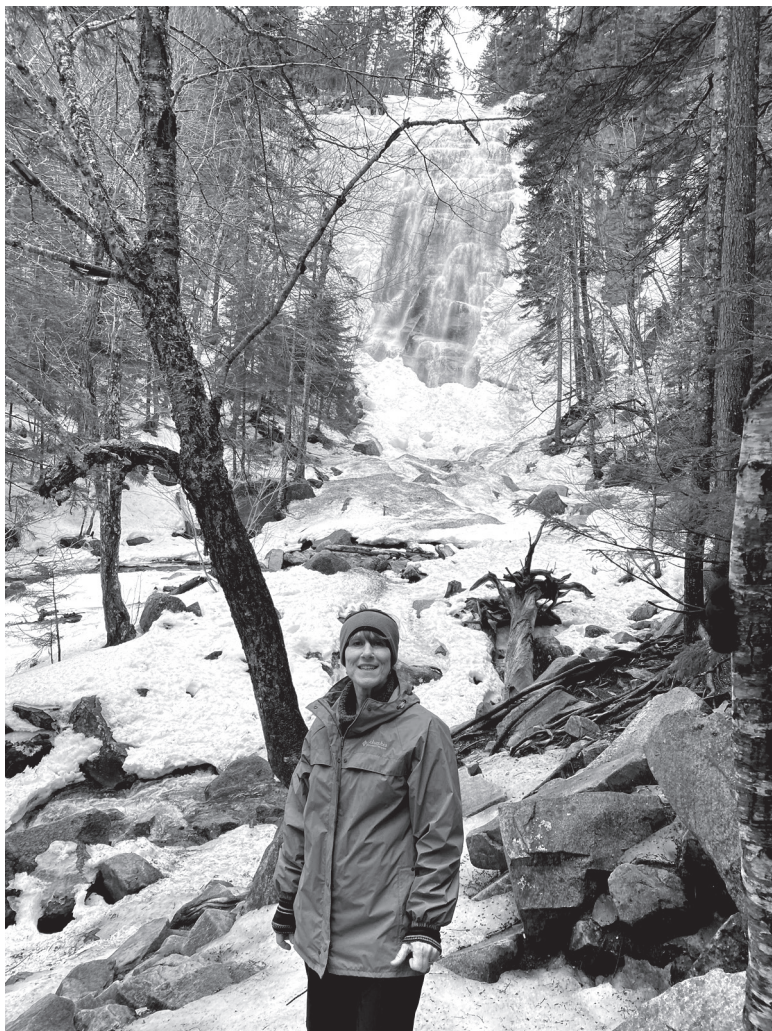
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Tammy Pike, a member of the New Hampshire-based Denmark Mountain Hikers, stops at Arethusa Falls on a winter day. ALLEN CRABTREE

Appalachia

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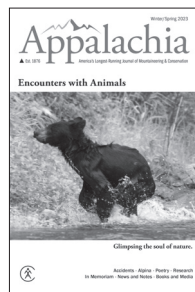
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Title page photo: *An American badger in the desert. See Stacy Allana Clark's story in Valley and Skyline Sketches on page 135.* U.S. FISH AND WILDLIFE SERVICE

Front cover photo: *A bear cub, surprised when a canoe goes by, gallops through shallow water in the upper Connecticut River near Stratford, New Hampshire.* LISA BALLARD

Back cover photo: *A harpy eagle chick caught through a spotting scope in Peru's Amazon rainforest.* See page 32.

CHRISTINA DEVIN VOJTA



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Danger defines the meaning of safety

BUMPUS BROOK DRAINS SNOW AND RAIN BELOW MOUNT MADISON IN New Hampshire's White Mountains. The brook rolls south through a remote ravine called Bumpus Basin, rushes over boulders just west of Howker Ridge Trail, and soon drops 30 feet over a cliff known as Hitchcock Fall. Below that waterfall, Bumpus Brook rushes over the trail to which it was, moments before, flowing parallel.

At the trail crossing, the brook drops fast between rocks. Hikers must jump across them. Some of the rocks look round, old, and slimy. Others appear dry but very smooth and pointy. Bumpus Brook resembles hundreds of others bigger and smaller in the White Mountain National Forest. Rock-hopping is the way over most streams in the Whites.

On June 15, 2022, at about 3 P.M., I headed up Howker Ridge Trail intending to veer off to an overlook called Dome Rock. I wandered alone along the lower mile of Howker Ridge Trail, not paying close attention, lost in a literary problem. Warm sun moved in patterns on the ferns. I swatted at a few black flies and mosquitoes. At one point I crouched low, watching a toad hop through leaf duff. "It's OK, little one," I said out loud. I doubt the toad felt comforted. Minutes later, the brook's rushing sound came into my hearing—and I don't hear well, so I know it must have been loud.

Howker Ridge Trail hairpinned left and slightly uphill, halting below a painted wooden sign marking Hitchcock Fall just above it. This was not a very wet spring, but the waterfall crashed dramatically, and I stood to admire it.

Suddenly, I thought I was standing at a different intersection. I was in my mind standing just west of here, where Snyder Brook rushes fast over Inlook Trail. Similar situation, different brook. That trail goes up to Dome Rock too. One time I'd gotten most of the way across Snyder Brook, stood in up to my thighs, and beckoned to my little poodle, Talley, who stood on the bank refusing to budge. The dog would not go. So that day we retraced our steps.

A decade had passed. I stood alone at Bumpus Brook but thinking I was at Snyder. It looked tame enough to cross, but as I studied it, it seemed

impassable. I had left my hiking pole in the car, thinking I wouldn't need it. I tried to guess the distance from the bank to the first rock—a long thing sticking out of the water with a narrow ridge atop. I envisioned jumping from that rock to the next one, which was a peaked boulder standing firm in rushing water, with not much space for a foot.

I stood on that bank for many minutes—it felt like an hour—watching Bumpus Brook pour around the rocks. I walked the bank upstream seeking some other way. I returned to stare at the first, long rock.

THE PREVIOUS WEEK I'D BEEN RUNNING ON A PATH NOT FAR AWAY CALLED Sylvan Way, pausing to admire other waterfalls. A pleasant older woman and man were standing looking at one of them. She asked me if there were more waterfalls down Brookbank Trail. I wasn't going that way but said yes. The next day, I read news reports of a woman in her 70s who'd fallen and injured her leg on that trail, requiring rescuers who—the paper said—she'd thanked graciously. I was sure I'd met her. I had witnessed her joy in exploring—before her slip.

Now I teetered on the bank of Bumpus Brook imagining tumbling off the boulders with no one to hear me. This was a barricade in my life, an obstruction of the sort I'd gotten past a thousand times. I knew what I must do. I would not cross today. Something wasn't right. A small sob rose out of my throat, and I ignored it.

A short while later, heading back the way I'd come, I came to the intersection with Kelton Trail. I looked at the turnoff and remembered that I had meant to go up that trail. Kelton Trail was the way to Dome Rock from this area; I had never intended to cross any brook. I was running out of time but decided to turn up Kelton Trail for a while. I climbed to Kelton Crag. I admired the rough bark of the red spruce trees and the small opening in them that revealed wispy clouds above a distant hill. And then I walked down.

—Christine Woodside
Editor-in-Chief

Interviews with Bears

Trailside, near New York City

Margaret Redmond Whitehead



THE FIRST TIME I SAW A WILD BLACK BEAR, IN 2015, I WAS SO CLOSE TO Manhattan that I could glimpse its skyline in a dreamy pink haze. I was living in Brooklyn. That day I was out with two friends and my brother on a bite-sized section of the Appalachian Trail north of the city. We stomped along in a row—four bipedal, backpacked figures wending our way through a region of glacial rocks and bright green early summer ferns. We were somewhere near Pawling, one of those parts of the AT where the trail feels thin, just a buffered corridor linking together small state parks and skinny nature reserves, these bits of wilderness like cushioning on either side of a clandestine footpath. Suddenly, my brother said, “Bear right!”

We all stopped, expecting to turn right, assuming we had missed a white blaze. Instead we saw a black bear. I cannot accurately describe the magnificence of this animal. It was huge, larger than any other bear I had ever seen. It was larger than I could have imagined a bear to be. I couldn’t look away from its sheer mass and its thick, glossy fur. This bear had fur that touted its vitality: a luxuriously black, smooth, long coat. It must have been 30 feet away.

We stood still and stared at the bear, its nearness and its raw bulk. I remember my breath as soft, the air around us the perfect temperature, and that none of us spoke or moved.

It is possible to hike the entire AT and never see a bear. I had been hiking my whole life, mostly in the White Mountains and Shenandoah National Park, and had never seen one. It seemed incredible to me that the place I finally encountered a bear, so close that I could gawk at its coat and shape, was within easy reach of a behemoth human settlement. The AT crosses New York as if it is slipping past a sleeping dragon. It glides along the southeastern corner of the state, bringing hikers within 50 miles of Manhattan. Trains leave from Grand Central station to spit out city-dwellers at the AT stop along the Metro North, the ShortLine Coach carts busloads of people from the Port Authority to Bear Mountain, and New Jersey Transit runs rural public buses that crisscross the trail like piped icing.

And it’s more than mere distance: The human world permeates this ribbon of wild. Pausing on the trail to listen, I could hear leaves rustling to the ground, shimmying into place between twigs and dry papery foliage, the murmurs of a stream I crossed a hundred yards back, and the hissing wind

Pal, formerly known as Clarence, a 17-year-old cinnamon-phase black bear in his enclosure at the Trailside Museums & Zoo at Bear Mountain, New York, in May 2022.

MARGARET REDMOND WHITEHEAD

between the trees, but I could also hear something more familiar. I could hear the unbroken hum of engines on the highway.

Although spaces such as the AT take pains to delineate themselves as wild and separate from human habitat, they are rarely truly closed off. Sounds, views, access points, and animals—including humans—prove the porousness of such barriers. People enter bear spaces, and bears enter human spaces. I have to wonder, which space is whose? When I encountered a bear in a tiny strip of green, had I encountered the bear in its own territory? Or did it live its days in mine?

It felt like long minutes, but it must have just been seconds that the four of us looked on at the bear. We never got to see it standing still. We perceived one another at the same time, it seemed, and so as soon as we saw it, it slowly turned around, away from us, and began to lumber off. Again I was amazed by the thickness of its haunches, its hips and hind legs, and the loping kind of motion it made as it meandered away.

SOMETIMES THE TRAIL IN THIS AREA FEELS WHOLLY WILD. HILLS CLIMAX IN breathtaking views, small nubs of rocks poking their way out of the trees to let me stand, aloft, over quilted forests and hills in every direction. Silvery-green lichens colonize giant boulders, dwarfing any sense of human history. We tumbled down a set of stone steps and met the Dover Oak, its trunk more than twenty feet around, a force of a tree. It has a powerful and threatening air, branches like biceps and soft, worn-down bark that flakes away at the touch. Its base is whorled like giant thick rope. Its limbs stretch upward. It looks like it is contemplating ripping open the sky.

At other times, the protective nature corridor insulating the trail cannot fool its visitors that the trail itself is an alien, snaking through the state of New York, trying to duck past the skyscrapers unnoticed. Reminders riddle this path of its proximity to an 8.8 million-person metropolis. The year I passed through, there was such a glut of free food and water set out on this stint that some hikers complained that the goods were starting to lose their serendipitous magic.

When we reached Bear Mountain, a tourist hot spot with a parking lot designed for buses, the trail shifted jarringly into civilization. We came down a steep, wooded rocky slope to walk precariously along a highway, crossed the Hudson River on Bear Mountain Bridge, and got lost in the paved maze of a public area known as the Trailside Museums & Zoo. We lost our way again at a swimming pool and eventually emerged alongside a lake. As we trekked up along a paved section of trail, toward the inn, we were soon walking through the strong, warm smell of summer garbage.



The sheer mass and raw bulk of a wild black bear are magnificent. LISA BALLARD

Mostly, though, the paths we traversed in this area straddle the human and natural worlds. We passed old stone walls and abandoned stone settlements so sunken into the landscape that it took imagination to name what they might have once been. We strode through fields of tall grasses, and climbed stiles over electric fences. We pushed slowly through a herd of cows and past an old water tower from 1920. We passed a prison that had once housed New York State's electric chair. We sunbathed and swam at a lake, which is ostensibly cleaned up enough after a nuclear accident to have a public beach. In the old and abandoned scraps of human habitation along the trail, we saw that some element of nature had come to reclaim the land. Mines that once produced iron for the Revolutionary War were sunken in, filled with water, or both.

In a 2020 essay in *Orion*, Amitav Ghosh speculates that even though humans view "their ability to destroy trees" as the central fact that gives them agency over trees, trees—with longer life spans than humans and a much longer history of earthly existence—might operate "to a completely different time-scale." Perhaps they are waiting for humans to be wiped out, Ghosh suggests. Perhaps their agency is not like ours, in action, but in patience, and time.

I wonder if, in a reversal of environmental concern, these forests are silently biding their time before they invade and seize back our settled lands.

THE LOWEST POINT ON THE AT IS 124 MILES ABOVE SEA LEVEL, WITHIN THE Trailside Museums & Zoo. Specifically, I like to imagine, it is within the sunken and gated confines of the Trailside Museums & Zoo's exhibit on black bears.

According to Trailside lore, the museum and zoo was founded not as a zoo but as an educational nature trail, with the initial idea that one such educational trail would be situated at every major river crossing along the AT. The others, the story goes, were never built.

That day in 2015, we stood for some time with our packs on in front of the bear exhibit. It is a large cement crater with boulders around the edges, filled with a few rocks and a lean-to, some large balls, and a circular pool—some natural habitat objects, some not. Black vultures are everywhere within the enclosure. Also inside are two mature cinnamon-phase black bears. I only saw one when I came through, and I thought it looked vulnerable in the open, rocky space. It seemed lean, its fur patchy and scraggly. I couldn't look at it without getting flickers of the bear I'd seen just three days before, that great animal whose thick, black coat I'd itched to reach out and touch, whose muscles I could see ripple beneath its fur. I recalled that bear and how slowly, how indifferently, it had turned away from us and sloped off back into the woods. Here, now, was the inverse of our previous bear encounter. Here was a captive bear in a definitively human space.

The bears at the Trailside Museums & Zoo are siblings who were illegally raised as cubs in South Dakota, then confiscated. They arrived at Trailside in 2005 when they were just seven months old, each weighing as much as a hiker's backpack, and so acclimated to humans that their only chance at survival was in captivity. They have never really known the wild. They were called Clarence and Josephine—Fee for short. (Later, after a zoo naming contest, the bears were called Pal and Sadie.) Clarence, the bear I saw in 2015, has arthritis and Andean bear alopecia, an autoimmune condition specific to captive Andean bears that can cause a bear to become fully bald.

In some ways, these bears are not so *bearish*, not so *wild*. Zookeepers prepare the bears' food and monitor their body condition and mobility. They sit up and stand for food. On special occasions, the zoo dresses up their enclosure with treats so visitors can watch them at work: slashing open wrapped boxes on Christmas and nuzzling spooky decorations on Halloween. Videos of these events show the bears lumbering lazily through paper décor to sniff out peanut butter. In one video, a child's delighted cackle cracks off-camera. In the fall, zookeepers scoop up falling acorns and drop them into the bears' cage. When I returned to visit them in May 2022, I was permitted to

hand-feed the bears; their dexterous tongues plucked carrots and marshmallows from my fingertips.

Melissa Gillmer, the head zookeeper at Trailside and someone who has known the bears since they arrived as cubs, told me that, sometimes, wild bears will wander into the zoo. Clarence and Fee are often the first to notice. They begin sniffing the air and hanging around the fence. They are territorial over their enclosure.

One Mother's Day, a young male bear, big for his age, made his way into the zoo. He took great interest in Fee and Clarence and got past the fences through a gap under one of the gates. In this way, the young bear was able to come so close to the zoo bears that they were only separated by bars. The zoo staff tried to shout him off, but they couldn't deter him—the bear was curious and persistent. He refused to leave, sticking his nose through the bars, until Fee took one of her great paws and swatted him, hard. Then he took off, back into the wild.

When a wild bear wanders into the zoo, something interesting happens: Human zoo visitors stop treating it like a wild bear. Staff scramble, doing their best to shout the wild bear off and get it back out of the zoo where it came from. They alert visitors that there is a wild bear in the museum, perhaps wandering the same paths that visitors might be walking down, perhaps unseen, behind the rocks and trees. Once, the zookeepers' shouting-off tactics accidentally caused a bear to climb up a tree. Sensing that it would be up there a while, they decided to keep the zoo open and station someone beneath the tree to warn passersby. But the zoo visitors didn't seem to mind that there was a bear in a tree. They walked right past it. They came up to the tree and stood beneath it, looking up at the bear. People stopped taking any caution, as though they didn't perceive the bear as wild—that is, something out of their control.

Bears are among animals that we tend to see as "charismatic," a term describing animals that compel humans to connect with them and sympathize with their plights. They have human-like qualities, sitting upright like humans, standing and walking like humans, and spending longer with their young—sixteen to eighteen months—than most other animals. We see ourselves in bears. Clarence and Fee are the most popular animals in the zoo; even though bears can be "nuisance" animals in some of their interactions with human environments, they still garner respect and awe.

But even as we know, most of the time, to respect their strength and size, there are places where our existences still precariously overlap. The western Hudson Highlands of New York State, which includes Harriman State Park and Bear Mountain State Park, and therein a large chunk of the AT in New



Sadie, formerly called Josephine or Fee, a cinnamon-phase black bear, came to the Trailside Museums & Zoo in 2005. MARGARET REDMOND WHITEHEAD

York, and its surrounds, is a landscape that faces tremendous public pressure. Along with the Trailside Museums & Zoo, and Bear Mountain with its tour bus-sized parking lot, is a beach with a more than 9,000-person capacity and 32 summer camps clustered around lake complexes. These hubs of human activity create bear attractants, such as wafts of barbecue and the garbage I smelled coming through Bear Mountain.

For a long time, there was not such a visible bear presence in this region. In 1898, in *A Study of the Vertebrate Fauna of the Hudson Highlands*, naturalist Edgar Mearns listed black bears under “Recently Extirpated Mammals” between the Canada beaver and northern fox squirrel. “The Bear disappeared from the Highlands many years ago,” Mearns wrote, “though my father’s mother saw them there.” Until recently, only young male bears would occasionally roam through, wandering after leaving their mothers. But over the past twenty years, as I learned from museum and zoo director Dr. Edwin McGowan, a population of female bears arrived and decided to stay. In 2013, a study by amateur observer Jim Conlon put the black bear population in Harriman at fifteen bears. Conlon estimates that today there might be more than 100 bears in the park. McGowan believes that the bear population now is at saturation.

In response to the influx of black bears, the parks have been installing cables at shelters, adding requirements for food storage at campgrounds, and shelling out money for bear-resistant dumpsters throughout the park.

McGowan recently hired three new people as a frontline wildlife response team to support the short-staffed, busy rangers.

The human population is also a key factor in increased bear-human encounters. The area's close proximity to urban areas puts the bears at higher likelihood of encountering novice hikers—people with ready access to nature and a lack of awareness of what that means. There's a mirroring happening in the area's human and bear populations. As they both have grown, so have interactions between the two. Compounding and affecting bear-human encounters are factors we might not instinctively consider: the highs and lows of resource availability to bears, the years of plenty and those of dearth.

Even visible, even at saturation, the bears around the New York State section of the AT are not as conspicuous as they could be. These are megafauna. They are half-ton bodies of bone and muscle and fur, and yet—although they are completely aware of us—their appearances are relatively rare. They wait in the wings. They fill in the cracks around humans and human activity like sand around stones, simultaneously ubiquitous and furtive.

I think of the traffic I could hear on the trail, and how I was fully aware of its presence. But I didn't, in fact, meet too many cars. Sometimes I had to cross a road and, then, I saw a car or two, but more often than not, I slipped across the road and no car was present to document my migration. I wonder whether, to bears, humans are something like the white noise of traffic sounds: as ever-present and as tedious as pollution.

After speculating that trees might be biding their time until the end of the Anthropocene, Amitav Ghosh pauses: "But perhaps this is all wrong? After all, trees and humans are not—or not just—adversaries competing for space. They are also linked by innumerable forms of cooperation. Perhaps what is at fault here is the very idea of a single species."

Maybe it isn't that we are stepping into bears' spaces, or that bears are coming into ours. Maybe space is more fluid than we envision it, with our lines and demarcations of order, our designations of wild from tame. The only certainty is that, in the blurring of these lines, we will encounter nature and its inhabitants in an ambivalent terrain.

MARGARET REDMOND WHITEHEAD's writing has appeared in the *Boston Globe*, *The Atavist Magazine*, and *The Millions*. She earned a master's degree in literary reportage from New York University in 2016, was a literary journalism fellow at the Banff Centre for Arts and Creativity in 2017, and was a Lambda Literary fellow in 2018.

Mama Bear and Me

Sharing inner knowing in a few glances

Katie Baptist



IN SEPTEMBER 2010, I CAMPED ALONE FOR FOUR DAYS AND NIGHTS IN THE Yolla Bolly Wilderness of Northern California. I did this for the wilderness rite of passage program that was part of my field research for my dissertation, the only thing still standing between me and a PhD in philosophy and religion. Getting to this point had been the second hardest, second most important thing I'd ever done, topped only by the challenge of simultaneously parenting my two young children. I was splitting time between home and graduate school, driving two hours through traffic to San Francisco from my home in Sacramento almost every week. I was vainly striving to work hard enough to be approved of—by the gods of parenting and the gods of academia. My dissertation topic was born out of this pain of being split. It was titled, “Wilderness Vision Questing as a Pathway to Authentically Felt and Lived Women’s Spirituality.” I sought to describe how women learn to trust their inner knowing. My theory was that inner knowing comes in many cases from an intimate relationship to the natural world.

I'd selected my wilderness guides carefully. They'd led a lot of people on the quest of discovering or deepening their purpose through experiences in nature. The program started with three days of preparation, during which they taught us survival skills and assisted us in clarifying the rite of passage we were trying to enact. The night before we set out to our solo spots, the leaders asked us, “What’s your favorite fear?” The answers ranged from falling and breaking a bone, to getting sick, to wild animals, to having nothing happen. What I feared the most were wild animals. We were far from town, and even though the guides knew the general spot where I'd be camping, I'd be alone. We'd been taught to stand still and look large if we met a lion and to play dead if we met a bear. I steeled myself and tried to both honor the fears and not be undone by them. We promised we would sound our whistles if we needed to and take care of ourselves with as much compassion as we'd take care of any of the other people there. We were reminded to be aware of our surroundings, know our abilities, respect our limitations, and come back safely at the appointed time.

I stepped across the threshold the next morning with a comically heavy backpack filled with craft materials, warm clothing, a sleeping bag, a couple tarps, some rope, my journal, and a Clif bar for emergencies. (The plan was not to eat unless I had to, but to stay carefully hydrated.) I hiked down the dirt

California's Yolla Bolly Wilderness was the site of the author's surprise encounter at dusk with a ginger black bear. WILDERNESS CONNECT/UNIVERSITY OF MONTANA/MARK NADEMUS

road for a little way, then left it to descend into a patch of birch trees I'd identified the day before as a likely place to camp. That first day was the longest day I'd ever lived through other than the days I'd given birth. Each moment unfolded into hours, and soon the hours meant nothing. I had deliberately left my watch in my backpack pocket, and I was determined not to look at it unless absolutely necessary. The only indication of time's passage was the slow progression of the sun across the sky. I had four gallons of water with me that I'd packed in the day before. I arrived a little after dawn and spread the tarp out where I'd sleep. Right away, the land laid claim to me by attaching hundreds of tiny burs to my new wool socks. Ouch! At least this gave me something to do for a while. It took half the morning to pick the burs out.

The day wore on for what I'd swear was several weeks. I napped, had serious conversations with myself, and ambled around surveying the landscape. I sang songs and tried to teach myself how to play the little harmonica I'd brought. I planned ceremonies that I'd conduct on the days that followed. Finally, the sun that I'd been tracking as it inched its way across the sky was touching up against the tree line to the west of me. Darkness was coming. Something I was clocking with anticipation but also dreading. The shadow of my shelter had grown long against the grasses of the meadow. The sky was vast and starting to turn pink. I knew that once it got dark, I'd only have my little headlamp if I needed light. I had extra batteries, but they had to last four nights. Who knew what might happen in that time? I pulled out the little notebook I had brought with me to make fieldnotes and began to scratch some notes about the day while I still had some light. I hadn't been writing for a minute before my eye caught sight of movement in the meadow to my left.

I raised my gaze to see a fuzzy, ginger bear cub (a black bear in a lighter-color phase) pick its way between the knee-high grasses 30 feet from where I sat. Was it possible that time could move more slowly than it already had been?

MY BRAIN CALCULATED THE MISSING ELEMENT IN A FRACTION OF A SECOND. A cub usually means that somewhere very nearby there's . . . hairs on the back of my neck tingled and my writing hand froze on the page. Then I saw her. Mama bear stepped out behind her child from the brush into the meadow. Her brown fur was thicker and darker than her cub's. She was bigger than I was. Heavier and stronger too. Black bears. I'd been told that they were in the area. They were completely unaware of me.

I was afraid to breathe. In case of a bear attack, the guides had said it's best to play dead. *Don't move*, I thought. *Don't move!* They were getting closer



Katie Baptist stands next to a Riparian Valley Oak along the American River Parkway, near her home in Fair Oaks, California. COURTESY OF KATIE BAPTIST

every moment. *Should I run? Don't move.* The bears didn't know I was there apparently. Maybe they were going to pass on by. *I am here though*, my brain said urgently. *I'm here for four more nights. I don't know if I can do this.* I realized that they needed to know I was there. If they didn't see me until they were standing right beside me, things could get bad.

I had a little knife. *Where is it now?* I wondered. I remembered that I had left it in the backpack with my watch. I didn't think I could get to it in time without turning my back, and it probably wouldn't be much good anyway. Besides, that wasn't what I wanted. I wouldn't have even brought a knife if a worried relative hadn't thrust one into my hand before I left home, "just in case." *This visitation is actually a gift*, I tried to remind myself. I had wanted an intimate relationship with the natural world.

They still didn't see me. They were on their twilight walk, a walk they must have taken every day. As I watched, for just a second, I imagined *being* Mama Bear, and seeing *me*. A dangerous intruder of the species "human." The sort of creature she has learned to fear. *What is that human doing here?* But still, she didn't see me and before I knew it, I was back in my reality of being a human woman sitting in a makeshift shelter. Feeling scared.

It's time to make a move.

I said, "Hello."

It was a panicked whisper of a sound. I tried to make it calm, congenial. The mother and her child stopped mid-step and stared. I was eye-to-eye with Mama Bear and in that instant, I could see we were the same. We were here with all sincerity, and we were frightened. And we were crystal clear on our priorities: *Protect our children.*

The cub looked back at her, waiting for a sign. She shooed it up the hill, around the brush, and out of sight. Once it was safely hidden from my view, and only then, she disappeared into the brush as well. The meadow lit by twilight was empty suddenly, as if they were never here.

Once they'd gone, I breathed again.

Oh my god, oh my god, oh my god!

I tried to memorize the fuzzy ginger cub, the knowing mother. *Oh, thank the gods they've gone!* I thought of my two children back at home. My cubs, who need their mother.

My pen still hovered on my journal page, but I couldn't write. Four nights out here. Four nights. *How would I know if they came back after dark?* I tried but couldn't remember any telltale sounds. I checked my bear bag with the toothpaste, lotion, and Clif bar. *I hope these bear bags work.* I was grateful that one of the guides had loaned me a rattle. I shook it until my arm was numb as night deepened around me.

I woke up on the second morning feeling famished. I kept my sleeping bag wrapped tight around me as I watched the eastern skyline, waiting for a dawn I'd half imagined wouldn't come. The night had been cold and ominous. The moon was just a sliver and the dark had pressed in tight. I wouldn't have known it even if Mama Bear had come back. What I had seen every time I got up to pee were large dark beetles crawling near my sleeping bag.

I pulled off my outer layers and let the sun kiss my bare shoulders. Twenty-four hours since I'd stepped across the threshold, but time moved different here. I yawned. I stretched. I lay back down. I watched the shadows changing on the mountains, how the light crept at a snail's pace until the moment when it cleared the tallest point and sun filled the valley all at once like switching on electric lights. I sat up again and changed into my day clothes: hiking pants, boots, and my wool plaid Pendleton shirt. I rummaged through my backpack, got my teapot, poured some water, and disproved the adage that a watched pot never boils.

Loose leaf tea was an outrageous luxury I'd carried in to make the fasting bearable. It was a blend of mint leaves, stevia, chamomile, and pink rose

petals. The scent alone felt like a feast. I held my hands above the pot to warm them on the steam and sipped the tea when it had steeped with a devotion I could never match at home.

After an hour, or two or three, had passed, I gathered up my things and walked a short way to the spot I'd designated for my ceremony. I'd decided to hold a funeral for my former self. The day before, I'd gathered rocks the size of loaves of bread and heaved them into place—a head, a body, and some smaller rocks to represent the arms and legs. “That’s me” I told the sky. The pine tree guardians around me seemed to nod agreement. I'd begun to talk aloud, partly to keep myself company and partly to make sure that no other animals stumbled on me unawares. I looked around, wondering what else I might make use of for the ceremony. When I looked down, I saw the ants. There were whole processions of them lined up; a hundred thousand tiny mourners would attend my symbolic funeral.

I leaned down to get a better look. What were they doing, actually? There was time and I was curious, so I squatted and put the funeral on hold for several hours to watch. The ants were moving tiny shards of rock. I watched, fascinated at their process of selection. They tested and rejected many, continuing until they found by some minute geometry the piece of the precise dimensions that they needed. This sorting work went on all day.

The next day, I continued with my ceremony. A rite of passage calls for the end of being one way to make room for claiming something new. I had some sorting of my own to do. I asked myself, if these were my final days, who would I want to thank? Apologize to? Make peace with? I called each of these people to mind—my mom, my dad, my spouse, my kids, my friends, and loved ones. I spoke aloud to them and said what needed saying.

On the final night I packed my things and went to finish my ceremony. As the sun was setting, I revisited the ants and was amazed to see that they had built such a neat stone wall to close their door that if I hadn't already known where it was, I would never have been able to see it. After asking for the ants' permission, I scooped up a teaspoon-size handful of the rock shards, being careful to collect them far from where the ants had been working. It was time for me to sort. I laid the pile of tiny stones onto a flat rock and began. *This is something I am ready to release. This is something I will keep.* With each declaration, I moved a shard into one pile or the other. I took my time. Finally satisfied, I slid the things I was releasing into the palm of my hand, said some words of gratitude for having once had them in my life, and opened my hand to let them go. I went back and picked up the other pile—the things I wanted

to keep. I tucked those shards into a pouch and put them in my backpack. The sorting was complete.

All that time on the land I kept watching for the bears, both hoping and fearing I might catch a glimpse of them again. I never saw them after that first night, though. On the final morning, I woke up feeling anxious to return home. The bear and her cub still had not returned, and I no longer feared that they would. Still, there was no question in my mind they knew exactly where I was and what I was up to. I felt relieved for them that I would soon be out of their meadow. I felt relieved for the ants as well. They had all become a vision in my mind that had been working on me like a mirror. I knew that they were very physically real and that I was the one who didn't really belong here. I admired the way Mama Bear followed instinct when it came to caring for her young, and the way the ants knew exactly what pieces fit for them and which ones didn't.

My priorities changed after I got home. I still tried to keep doing that driving back and forth from Sacramento to San Francisco thing I was doing for a while, but it wasn't working. I wish there had been mentoring in academia to help moms navigate the impossible life split they attempt, but there just wasn't. My choice wouldn't have been right for everyone, but I knew that, given the options, it was right for me. I chose my kids. I followed my instincts and left the program, never to achieve a PhD. The irony was that my dissertation topic had proven true for me. I'd discovered an inner knowing through that brief connection with Mama Bear. For years after, when I told the story, I would swear there'd been two bear cubs. That's just the way that I remembered it, no doubt in my mind. Recently though, I found my old field notebook in a box in my garage and read the words I'd written seconds after the encounter. It was clear. Only one bear cub. Why had my mind remembered differently? The reason was obvious. She had one cub, but I have two. When I left Yolla Bolly I was carrying both our stories, and they got mixed up somehow. And that's what happens, if we let it. And that's what I come back to. We're the same. I'm grateful to that mother for her visitation and her gift. She made the world a better place for my children by her presence. I'd like to someday find a way to do the same for her.

KATIE BAPTIST is a psychotherapist and writer based in Northern California who lives with her partner and two grown children. She returns to wilderness areas four times a year with the women she met in the Yolla Bolly Wilderness.

Snappers

Heart-shaped house,
bunker of self,
raisin head welded
to black lake rock
below the waterline
in sunglass glint,
like gabbro stone
or clinker ballast.

A night and sleeping cygnets,
no more swan-boating,
like Lohengrin, but tugged down
to Hades like Virgil's navigator,
Palinurus, the cost of adventure.

Next day, the reduced troop
careers on, trolling blind waters,
feathering the gentle arbitrary
winds toward swan song
and black shoals, sometimes
surmounting shadows that
must lie in wait.

Francis Blessington

FRANCIS BLESSINGTON teaches English at Northeastern University. His latest book is *Poems from Underground* (Deerbrook Editions, 2017).

The Thrush Sings Me Home

What is killing the birds of my heart?

Amy Boyd



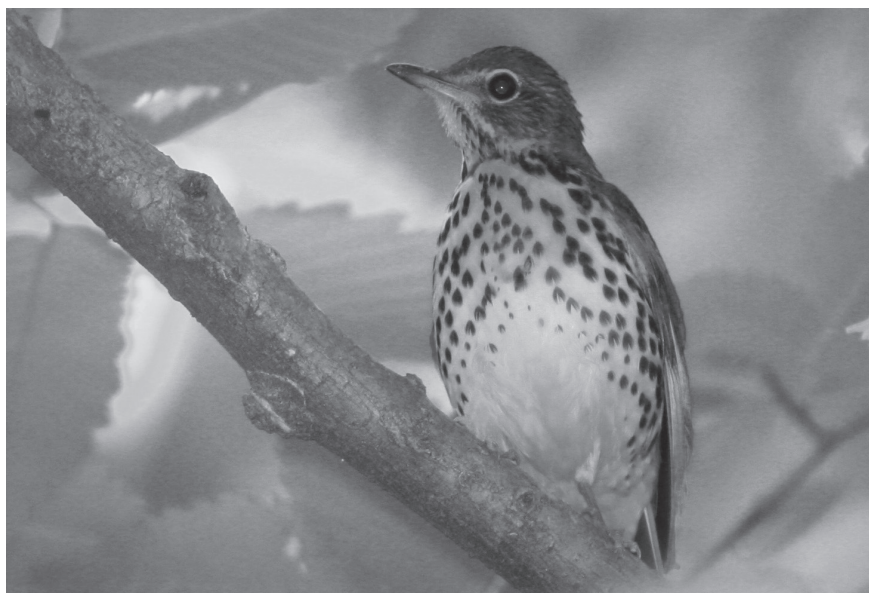
THERE'S A MOMENT EACH SPRING WHEN MY HEART FLIES INTO THE trees. It comes unexpectedly, when my mind is on the laundry that still needs to be hung in the sun or the check-engine light that just came on in my car or the email from my brother that I haven't answered. I'm usually rushing out the door in the morning, moving forward into a day of constantly moving forward. And then it happens, this voice calling to me from the trees, and I stop in my tracks. The chatter in my brain suddenly muted, my heart lifts up into the canopy. My friend is back again, something I can't be sure of, something I fear may not happen one day. Wood thrush has returned from the tropics and sings out to me, a song I receive as hope and memory, home and longing and joy.

I'm not sure when I first heard a wood thrush, but its trilling reaches such a deep part of me. As a child, I lived in a city; the bird songs that take me back to where I grew up are cardinals, robins, mourning doves. Not thrushes, which need actual forest, something much different from even the big old oak trees that lined our neighborhood streets. But somehow, it's this bird, this song, that makes me feel like I'm home. Is it from Camp Shantituck, my first summer escape into the woods to which I tied my heart? Did the wood thrushes sing to me as I woke in the orange canvas platform tents, as I searched for crayfish in the creeks, as I sang grace in the lodge before breakfast? Or did it come later, when I worked on Kentucky Lake, raising the sails on a little butterfly sailboat or building a fire for girls to cook foil-wrapped dinners?

I don't know, but I know it sang to me in the hemlock forests of New Hampshire and the rainforests of Costa Rica, the oak woodlands of Pennsylvania, and the mountains of Oaxaca. I also know that I can't assume it will always come back to me in the spring. Habitat destruction in the tropics, in North Carolina, and all across its range, reduces the vigor of the population year by year. Other threats are out there, too. I want to save them, keep the wood thrushes coming back, hear that song until my dying day, but I don't know how, just like I don't know how to make my country take care of its people and its land. The thrush's voice seems so delicate and vulnerable; it communicates the joy that is intrinsic in my heart, connects me to the beauty I resound with, but also expresses fragility in the face of all that threatens us.

One morning recently, I came out of my house and onto my front porch, carrying my mug of coffee and a bowl of oatmeal and pears, to sit in the sun and welcome the day. And there, by my chair, was a dead wood thrush. I had

The wood thrush sings with a delicate voice that radiates joy. U.S. FISH AND WILDLIFE SERVICE



Climate change is expected to reduce wood thrush habitat by 80 percent over the next 60 years. BILL HUBICK/U.S. GEOLOGICAL SURVEY

never seen a dead wood thrush before. I've seen so many dead birds in my day, but never one of these. In college I worked in a small natural history museum, and one of my tasks was looking under all the windows on campus for birds that had hit the glass and fallen dead beneath. I tallied them up, hash marks on a data sheet, and then slipped them into plastic bags to bring back to the museum. They'd be stacked into the big white chest freezer in the hallway until one of us would thaw one out and skin it and prepare it to lie, eye sockets bulging with cotton, lined up in a drawer with a little tag tied to its leg.

A few years ago, I saw a Cooper's hawk hit our window at home and fall to the porch. My young son saw it, too, and we went outside and gently cradled it in our hands, feeling its heart fluttering for a few moments before it died on our laps. We talked quietly, stroking its blue-gray flight feathers and cinnamon-flecked breast, and then put it in a bag to take to the ornithologist at the college where I work. It now lies in a drawer, too, waiting for students to pay attention.

The hawk taking its last breath in our hands was sad, to be sure, but finding the wood thrush's dead body truly broke my heart. I cried there on my porch, seeing this bird there bleeding and still, unable to sing our song anymore. I was devastated and angry, guilty and gutted, as if it were my own heart there lying still on the painted boards.

Eventually, I scooped it up, dug a hole where the tulip bulbs send up their giant crimson blooms every spring, and laid the bird to rest there, sending up a bit of a prayer to whatever gods might be out there looking over the wood thrushes still alive in our world. I don't usually bury the dead animals I find; I leave them for the detritivores and scavengers, happy to let the natural recycling process have its way with their flesh and gristle. I do the same with my jack-o-lanterns after Halloween, watching them rot away day by day next to my porch, a vigil that reminds me of the flow of matter and energy that keeps the world alive. I want the same to happen to my body: If I had my druthers, I'd like to be composted after my last breath, left to return quickly and easily into the soil and nourish trees and vegetables and people, to keep my molecules flowing through living systems, to give back. With this bird, though, I needed ritual and pause, a vessel for grief, and so I dug the hole and placed it inside.

In the late afternoon, I ordered takeout from my favorite Thai restaurant and then went to pick it up. There on the steps of the restaurant was another dead wood thrush. This one wasn't bleeding, just still and quiet, and so heart-breakingly beautiful with its mottled breast, and indeed my heart did break, even more than before. It seemed impossible, seeing two in one day after never seeing any before, and I felt dizzy, disoriented, disheartened. I envisioned thrushes falling to the ground all over the place, dropping from some mysterious and malevolent force that surely is the fault of my own damn species that can't seem to keep from destroying everything, or even caring.

What is killing the birds of my heart? Habitat destruction, certainly. Fragmentation, too: Smaller bits of forest mean more edge, bringing more dogs, cats, raccoons, and other predators that eat the birds' eggs. Edges are our vulnerable places, where communities come together in an enriching mix of species, ideas, ways of life—and inevitably with that, at times conflict, competition, one potentially trying to dominate another.

Edges bring nest parasitism, too. Brown-headed cowbirds lay their eggs in the nests of other birds, letting other species do the work of child-rearing for them, and although many species of birds will recognize cowbird eggs in their nests and kick them out, wood thrushes tend not to. They nurture the cowbird babies alongside their own, but the cowbird young grow very quickly and dominate the nest, getting more food and having better chances of success than the thrush's own offspring.

Some climate change projections predict that more than 80 percent of the wood thrushes' current summer range will be lost in the next 60 years. Vulnerable hatchlings in their nests are threatened by higher temperatures as

well as heavier rains. More frequent fires can destroy habitat and make it difficult or impossible for the forest to recover the maturity it needs for hosting wood thrushes.

Acid rain is also a culprit. Wood thrushes need about 30 times the calcium in their diet as a similar-sized mammal, and they mostly get it from eating slugs as well as the land snails so diverse in these mountains. Acid rain leaches calcium from the soils, which means less for the snails, which means less for the birds. The result is defective eggshells, leaving the young embryos less likely to survive to hatch and sing their own melodies.

Wood thrushes sing a song unlike any other bird song I know. It varies each time it's repeated, the bird hitting different notes with a clear ringing voice, and ends with a distinctive trill, sounding a little like what I might imagine would come out when a fairy waves her wand. The trill is described as an *internal duet* because the bird creates two notes at once, a chord, and so is accompanying itself, in a way, something no human can replicate with our clumsy vocal folds. We can sing, though, we humans, and I believe everyone should sing, should have song as part of daily life, a way of responding to what comes. In my culture, we've been taught that only some people can sing and everyone else should be quiet, just like we've been taught that only some people can be artists, or athletes, or dancers. But all these things are our birthright: Almost every child can create art, can run and jump and dance and sing, and do so instinctively once their bodies are ready. And then, someone tells them that they're not the best or not good enough, and they stop, leaving us with a country full of adults who think only the elite in any field should be the ones practicing these birthrights.

The thrush's voice is instead free and glorious, with no one to tell it not to sing, or that its song isn't good enough. Birds play around with their music all the time, too. Mockingbirds and other mimics will pick up other bird songs, other animal sounds, even the beeping of trucks backing up or an alarm clock they hear from a window every morning, or a baby crying, and integrate these into their own repertoires. Wood thrushes don't do that, but they do elaborate on the common practice of song matching. Males of many bird species will answer their neighbor's song by repeating it, in a battle of music to see who can sing it best and win the girl. Wood thrushes go one step further, answering their neighbor's song but with a *different* melody, a kind of one-upmanship.

I worry that wood thrushes will be silenced, not by cultural shaming or being told they can't or shouldn't, but by being *dead*. Which raises an interesting idea: What if the only way a person would cease to ever sing again is

if they were dead? It turns out it's pretty difficult to silence people when they really want to sing. In a prison camp in Japan during World War II, a group of women created a vocal orchestra, led by Norah Chambers, a musician who remembered the music so well she could teach each of the instrument parts to the women in the camp. The women learned and performed Beethoven and Mozart and whatever other classics Chambers could remember, using their voices as instruments, no words, just a simple syllable so that the focus was the resonating of their voice boxes and the way they wove them together. During the COVID-19 pandemic, people around the world sang on their balconies, haunting moments shared on the internet of people joining in song from their homes on an Italian street when they were not allowed to go outside or be with each other. Their voices came together, a kind of communion, holy as any I know. In a stadium in Chile that was being used to torture and kill those who rebelled against the totalitarian government in the 1970s, Victor Jara sang to his people even after his hands were turned into unrecognizable bloody mush by the torturers so that he could not play his guitar. An unkind word might silence someone when that person is vulnerable, but when the human spirit rises up, we keep singing. We need to sing more, in more places and times, together and alone, against hate and for the things we love. We need to sing for the thrush, who is up against increasingly insurmountable odds in both places it calls home.

Home for the thrush is not one place but two, much like retirees who summer in cool Vermont but winter in balmy Florida. The thrush doesn't do it so much for comfort as for food: It's much more likely to find its meals of slugs and snails and insects where things are warm and moving around. My thrush finds its home here in my North Carolina woods in May and then, when the leaves turn, flies all the way to Central America for the winter months. Does it miss the howler monkeys at dawn when it is up here in the Appalachians? Or miss the great horned owl singing it to sleep when it is in Guatemala? I would, I do, and so the question: If you've lived in a bunch of different places, how do you have a clear view of what home is?

Home must mean finding those of your kind, other thrushes, other kindred souls. It must mean finding the foods that are familiar and delicious and nourishing, and hearing music that sings us our place in the world. It means feeling rooted, even when you've been rooted in other places. The thrush can feel at home with tropical monkeys and northern owls, can find morsels of tasty goodness and reminiscence in rainforest and Appalachian cove forest. Does the thrush feel nostalgia? Does it have moments in the rainforest when

it finds itself longing for tulip poplars and mayapples and the company of flying squirrels? I've lived rooted in desert soil, and though I love the Blue Ridge Mountains where I live now, occasionally I feel like I am ripped apart by a longing for the very different, gentler feel of the air there and the smell of creosote after rain and the yodeling of coyotes at dusk. And then I hear coyotes here—just three nights ago, right outside my bedroom window—and my heart wonders for a moment which home I am in, and whether it matters.

When I was a little girl visiting our hometown zoo, my favorite animals were the howler monkeys. I would stand listening to them for as long as my mother's patience held out. The first time I heard howlers in their native home, deep in the forests of Costa Rica, that sound grabbed my soul and held on. It felt like coming home somehow, even in this completely new and unfamiliar place, a sound so low I feel it more than hear it, deep in my chest, where my heart resides. Howler monkeys call me home just like wood thrushes do, and the great horned owl outside my bedroom window, and the coyotes in the desert. Home is, in fact, where my heart is, but my heart is strewn across landscapes, and so I need to migrate now and then, like the thrush, to find my disparate parts and feel connected and whole.

Sometimes I wonder if it would have been better to stay in one place than to scatter my heart about like seeds planted in diverging habitats. Hearing stories of people firmly rooted in one place, I feel a little tug of jealousy at that depth of connection and history. But my story, like the wood thrush's, is different, and I would not excise those parts of my history: the diverse meanings of home for me make my life a rich patchwork, colors and textures combining to make something unique. The cost is that my heart is at risk in many places, too: It's out there with the howler monkeys in shrinking rainforest threatened by habitat loss. It's out there with the desert coyotes, facing climate change in a place where water is life in an acutely desperate way and where rains that used to be reliable are now much less so. It's out there with the wood thrush, searching for enough snails to make eggs to carry on its genes and its song. And sometimes, it drops dead on my porch, there at my feet, stilled and broken.

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Kintsugi Trail

Yesterday, in deep cracks
through old layers of tar,
snow still unmelted there
shone: each tiny canyon
crossing our dark path
brimful with light.

Today we bend and peer
into emptiness. Overnight,
those last snow lines
sublimed into dry
cold air. But
while they remained

we felt our way
healed as if by kintsugi—
veins of tree sap lacquer
dusted with gold,
to mend a pot,
deepen history.

Like rivers, like the age
on a loved face,
lift up, the snow
lines said—*lift up*
this crumbling path.
This broken time.

Polly Brown

POLLY BROWN, author of *Pebble Leaf Feather Knife* (Cherry Grove Collections, 2019), has resettled a family place uphill from the Sandy River in western Maine. Other recent poems have appeared at quartetjournal.com and canarylitmag.org, and in the *Atlanta Review* and *Naugatuck River Review*.

The Harpy Eaglet

Real encounters with a feathered phantasma

Christina Devin Vojta



AS A CHILD, I THOUGHT THE WORD *MAGIC* MEANT “NOT REAL.” THEN, one day, I thumbed through the pages of a picture book and discovered an eagle whose piercing eyes seared right through me. From that moment, magic was not a word, but a feeling. The eagle’s eyes were deep and all-knowing, like those of a villain in a superhero magazine, and I was captivated in the root sense of the word—captured. I knew the eagle had to be an actual species, yet the ghost-gray face and crown of dark feathers seemed entirely drawn from the realm of fantasy.

I learned that the bird was a harpy eagle, the largest raptor in South America, and that it survived in the Amazon by killing monkeys and sloths. The wings, when fully open, would easily cover the breadth of my family’s couch. The talons were as large as grizzly paws. Hardly anyone had ever seen one, which, in my opinion, made it a feathered version of Bigfoot.

I paged onward and saw photos of caimans, jaguars, and toucans, all of which held my interest in a more predictable way. When I returned to the photo of the harpy, another shiver of excitement radiated down my skinny limbs. The harpy eagle must be supernatural, I concluded; otherwise, how could it have such an effect on me?

I TOLD THIS STORY A HALF-CENTURY LATER TO MY HUSBAND, SCOTT, AS WE traveled by river boat into the Manu Biosphere Reserve of Peru. We were on an ecological tour of the Amazon rainforest that I hoped would fulfill my lifelong desire to see a harpy eagle in its natural environment. Though we saw scores of birds and other tropical creatures on that trip, I never saw a harpy eagle. The species seemed more elusive than ever.

Three years later, Scott saw a job announcement on the internet: “Field assistant needed for research on monkeys and harpy eagles in Peru.” His words seemed unbelievable, so I rose from my chair to look at the website myself. It wasn’t a joke: The ad was posted by Dara Adams, a PhD candidate at Ohio State University. Applicants had to have previous field experience and were required to commit to a six-week stay. My career as a wildlife biologist qualified me for the position, and Scott encouraged me to apply. Three months later, I was on my way to the Amazon with a suitcase of field clothes, still stunned that my application had risen to the top of the stack. It seemed like I’d found magic again.

This harpy chick, captured through the author’s spotting scope, was the size of a bald eagle. CHRISTINA DEVIN VOJTA

My initial sighting of a harpy was, I confess, anticlimactic. I had been hired to observe a harpy nest in the “heart” of the Amazon, yet it was a 40-minute walk from an upscale ecotourism lodge. Moreover, the nest was a well-known highlight of that area, and anyone with a guide could see it. When I peered through the spotting scope across a distance of about 40 yards, the fabulous harpy occupied less than half of the scope’s field of vision. The bird seemed scarcely bigger than a bald eagle, and its size was further dwarfed by the humongous limb that served as its perch. Unlike the harpy in my childhood picture book, this was a nestling, approximately four months old, adorned in pure white feathers. It looked small in comparison to its nest that was the size of a banquet table.

Yet after a more prolonged squint through the scope, I discovered a creature more dazzling than the one from my childhood. Because of its white plumage, the black eyes and beak were strikingly dark, and those eyes were focused directly on me. Moreover, it was not frozen in time, but very much alive. As I watched, the eaglet became aware of me and elevated its feathered crest—a splendid décor that apparently served as a facial expression on top of its head. The entire universe seemed to fade as the harpy and I regarded each other. No longer did I notice the sweltering heat that pressed against me, the streams of sweat that drizzled down my face, the horde of mosquitos that dined on my blood. While I sat there transfixed, the chick stretched its neck upward like a periscope, then shifted its head from side to side with obvious curiosity. I knew that the sideways motions added three-dimensionality to both sight and sound, yet the movements seemed like a performance of some kind—like the trained gestures of a Hindu temple dancer with a similar, mesmerizing effect.

Eventually, the nestling lost interest in me and lowered its crest. I drew away from the scope and rubbed my eyes, thinking that the show was over. But no—it had just begun. At that moment, a bigger, more impressive harpy arrived: the chick’s audacious mom. She soared in for a landing on outstretched wings that indeed would have spanned the length of my childhood couch. Whereas the nestling was “only” a bit larger than a bald eagle, this bird was nearly twice that size. When she pulled her wings inward, they still hung away from her body like the arms of a thick-muscled wrestler. My eye returned to the scope, and the magnificent creature swiveled her head and gave me a scrutinous look. Her eyes held the calloused curiosity of a predator, and for a moment, I felt I was being evaluated as potential prey.

The chick lifted its beak straight up and began to cry. After regarding the open mouth, the mother waddled into the deep nest and came up with a furry



The gigantic adult harpy eagle looks fierce and can see objects about 218 yards away.

FERNANDO CCOA QUISPE

arm, which I identified as having belonged to a two-toed sloth from the two visible claws. She propped the arm against the rim of the nest, ripped away a piece of flesh, and neatly stuffed it into the open mouth of her offspring.

For several minutes, the female ripped and stuffed chunks of meat, while the nestling screamed as if each morsel would be its last. Though the sloth carcass was right under its beak, the chick apparently could not eat without its mother's aid. Later, I learned that the chick would remain dependent on its parents for ten months or longer. Because of this slow rate of maturity, harpy eagles usually raise only one chick every two to three years.

Eventually, the female crouched, sprang from the nest, and took to the sky. Neither she nor the male would return for three days. In contrast, my gig as nest observer had just begun, and I would be spending more time with the chick than would its own parents. Without parental guardianship or the comradery of siblings, the harpy eaglet had to figure out the rules of life on its own—and I had a front-row seat to witness its learning process.

One of the first lessons I witnessed seemed related to gravity, an important concept for a young bird when it finally hops out of its lofty nest onto the nearest limb. For hawks and eagles, this life stage is called branching,

because youngsters are still growing feathers and are incapable of flight. The harpy eaglet branched within a week of my arrival, and shortly thereafter I witnessed its self-paced lessons about the fate of anything that falls. The eaglet ripped a short twiglet off the limb where it perched, let it fall from its beak, and watched it hit the ground 60 feet below. It repeated this action several times, and the twiglet always fell in the same direction—straight down. The eaglet was quite absorbed in this little game and seemed fascinated with the consistent outcome. I observed its innate curiosity and its ability to learn from experimentation and recognized these traits as crucial for becoming a successful adult.

As the eaglet grew more competent, it began to explore the vast expanse of limbs that served as its personal jungle gym. I watched how it moved upward through the tree by hop-flapping from one limb to the next. Then, after great deliberation, it experimented with short, awkward glides that carried it down to lower branches. In other aspects of home schooling, the chick learned to preen its feathers, catch flies in the nest, and nibble on carcasses. It often pulled sticks out of the nest and reinserted them in new locations, an activity that seemed both playful and instructive.

I never tired of the eaglet's animated gestures and poses. Sometimes, it bounced in the nest like a kid on a trampoline, or waddled sideways on a branch, parrot-style. To my amazement, the eaglet could not only elevate its neck and shift its head when facing forward, but it could also perform this feat with its head facing backward. When it napped, it often drooped its head like an old man asleep on a bus. This human-like posture intrigued me because most hawks and owls sleep with their heads erect.

When awake, the fledgling raised its crest at the slightest sound. If I coughed or moved my chair, I became a curious object that required the chick's undivided attention. I loved those brief moments of being part of its world. Despite our taxonomic differences, I knew we shared similar sequences of DNA that granted us eyes and ears and the ability to discern each other. Together (it seemed), we watched noisy flocks of macaws and parrots wing overhead and musky herds of peccaries snort below. We both sweltered in the heat, got wet when it rained.

On my final visit to the nest, I stared into those coal black eyes for the last time and knew I was under the harpy's spell more than ever. When I was a child, the eagle had enthralled me with its shamanic face and its aura of mystery, whereas now I was captivated with the movements of its body and the skills it had learned through experimentation. Magic, I realized, doesn't need

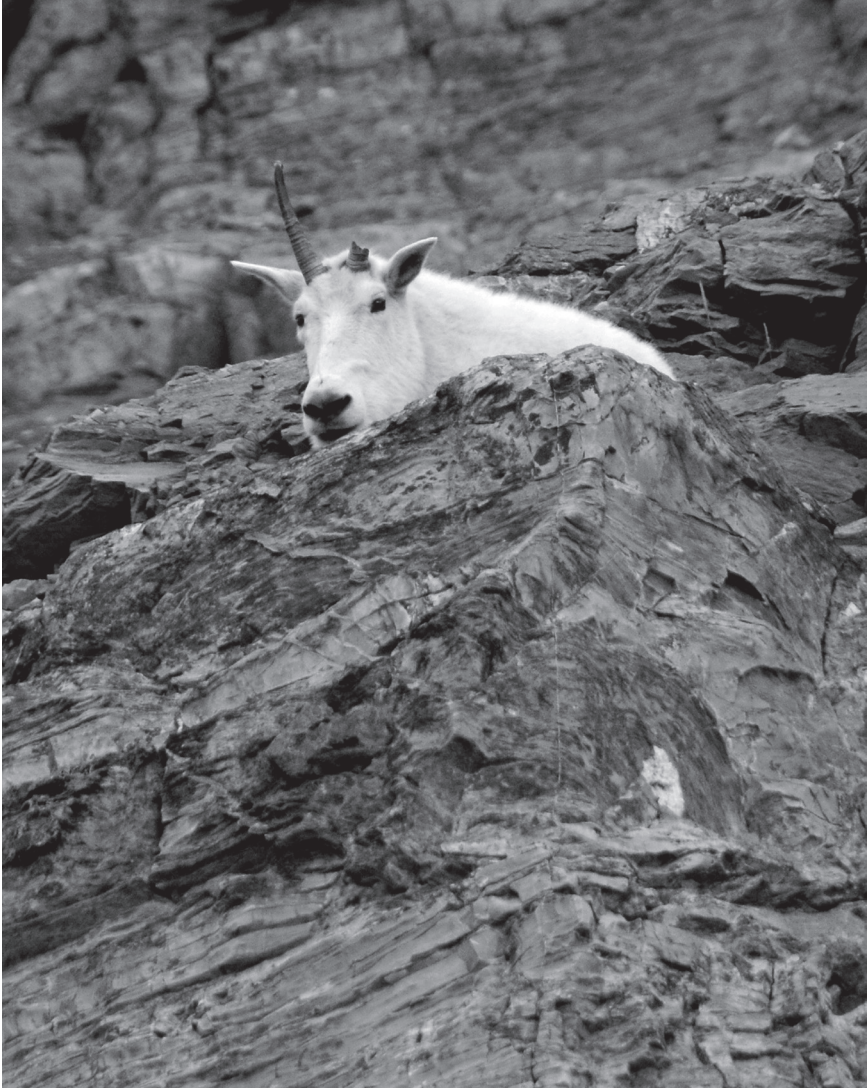
to rely on mystery; it can be based on intimate understanding. It can happen whenever a person takes the time to learn about another species. I still marvel at those powerful eyes, the ghost-like face, and the crown of feathers radiating skyward. But now, after witnessing the harpy's intelligence and adaptability, after watching a young harpy grow, I'm charmed by the spirit behind that magical face and by the presence of a curiosity as great as my own.

CHRISTINA DEVIN VOJTA is a writer and wildlife ecologist who lives in Flagstaff, Arizona. Her creative nonfiction essays have appeared in *Flyway*, *Hawk and Handsaw*, *Belle Ombre*, and *Newfound*, and other works have been semi-finalists in *River Teeth*, *Creative Nonfiction*, and *Tahoma Literary Review*. Her contributions to science have been published in the *Journal of Wildlife Management*, *Journal of Applied Ecology*, and *Landscape Ecology*. She is working on a novel that draws on her experiences in the Amazon.

Photographing Wildlife

How to capture an image without forsaking a wild animal

Lisa Ballard



WHEN I FIRST GLIMPSED THE MOUNTAIN GOAT, A NANNY WITH A BROKEN horn, peering down at me from a ledgy perch in Glacier National Park, I figured I had a fifty-fifty chance at getting a shot of her. I was seven miles into the backcountry, climbing an unstable wall of scree. This would be the closest I could get to the goat, just in range with a 500 mm zoom lens. My camera, with its long lens, was heavy, awkward, and required a hand to carry it that would have otherwise helped stabilize me, but I needed to be ready. I might get only a frame before the skittish goat disappeared into the boulders behind her.

Cautiously, I tested the crumbly cobbles with my left boot, then my right boot. Slowly, carefully, I inched upward, hoping I wouldn't spook her. I stared at the rubble, pretending to ignore her as I climbed. Animals sense when they are watched, though, in the case of mountain goats, scent is the more likely giveaway that an intruder approaches. You can tell by their body language if they suspect trouble. They pause and stiffen, heads raised, trying to determine if the threat is real.

Survival in the wild is a constant cost analysis. In this case, the mountain goat had to decide whether to spend valuable energy escaping across the rugged landscape and risking a lethal fall, or saving energy for other life functions. That said, eye contact with a predator sets off a "bolt now!" alarm. Predators stare at their victims, assessing the best way to attack, and Ms. Goat is not about to wait around to find out. If I didn't look at her, perhaps the nanny, who watched my progress with alert curiosity, would think I don't see her or care about her.

Of course, I care deeply about her and the other wildlife I've photographed over the last two decades, which is why I lug heavy camera gear into the mountains. Photographing wildlife is both my passion and my profession. The rewards of my occupation are opportunities to trek into remote places to document birds and animals in their natural habitats that perhaps few others have seen and create photographs that evoke emotional connections to those creatures.

Perhaps you've driven through Yellowstone National Park and taken pictures with your cell phone of bison standing by the road. How wonderful that this iconic North American mammal has rebounded from the brink of extinction. I've taken many photos of bison in Yellowstone, too. Professional

Crouching in unstable rubble, Lisa Ballard photographed this mountain goat without disturbing it. LISA BALLARD

wildlife photographers consider these easy images. The hard ones are of birds or animals that emerge suddenly by chance or that photographers purposely seek in remote places.

I once had an assignment to photograph walia ibex in Africa. Only about 400 walia ibex are left in the world, and they live only in the Simien Mountains in north-central Ethiopia. These chestnut-colored ungulates with their majestic, back-sweeping horns roam the cliffs and mountainside meadows of a vertical landscape formed by ancient volcanoes. Taking pictures of them involved summiting three 14,000-footers with a local scout and ranger. On the third day of the trek, we spotted one from the top of a 1,000-foot cliff. It napped below us on a broad rock shelf. Excited, I belly-crawled to the edge of the cliff but only managed to get a couple of distant frames after hanging dangerously over the abyss.

Disappointed, we kept searching. Finally, a week into the trek, we came upon a bachelor herd of three ibex grazing among a stand of giant lobelia about a quarter-mile away. Heavy fog drifted in and out, sometimes obscuring our view of them and their view of us, too.

Leaving my guide and the ranger behind a rock outcropping, I slowly approached the small herd at an angle, rather than directly at it, staying low. The gap gradually closed. Twenty minutes later, I raised my camera. Click. Click. Click. And they were gone, engulfed in the heavy mist that shrouded the hillside. I still treasure those images a dozen years later. Getting them took endurance, patience, skills in the backcountry and with a camera, and luck.

That said, I know that I make my luck as a wildlife photographer. To be successful takes physical fitness and homework. I must know the animal I seek, including its habitat, what it eats, its life cycle, and what preys on it. With that knowledge, I can understand how the animal will likely react if it sees or smells me. Knowing how it will react will also keep me safe.

Take bison in Yellowstone National Park. Even though a big bull seems placid, grazing beside the road, it's still a *wild* animal. This two-ton beast won't eat you, but it can kill you if you annoy it or if it's protecting a calf. It can move surprisingly fast, up to 35 miles per hour. Three to four unwitting tourists get gored each year by bison. Responsible wildlife photographers keep an appropriate distance—which is different for a bison than say, a grizzly bear—and use the right equipment (a long enough lens) to take pictures of an animal without crowding it.

It's worth the effort. Every image, particularly those of threatened or endangered species, makes those animals accessible to others who might



Keeping distance and using a long lens leads to photos like this, which can teach the public about wild bison in Yellowstone National Park. LISA BALLARD

never see them in the wild. Maybe, if someone develops an affinity for a creature through photos of it, the person will support conservation efforts to help the species.

I once took a seaplane 70 miles up an inlet along the British Columbia coast to photograph grizzly bears gorging on salmon in preparation for hibernation. Those images later helped Vital Ground, a bear conservation organization, raise money and educate the public about the importance of connecting viable habitats for grizzly bears in the northwestern United States. Its goals are to give bears room to expand as their populations increase and to reduce bear-human conflicts. To take those photos, I was in a locked, fenced, elevated blind and a *lot* farther from the grizzlies than from the bison.

Which brings up questions that have dogged photographers for several years. Is it ethical to photograph animals that are baited to lure them to a photographer or captive but presented in the photo as wild? Many magazines and websites won't publish images taken these ways. Baiting animals gets them used to food provided by humans. Once an animal learns to seek sustenance from people, it might become a "problem," leading to euthanizing or displacing to a new location where it might or might not survive.

I've shot photos of hundreds of species, including soaring Andean condors in Chile and Arctic grayling, underwater, in Alaska. The opportunity to capture those images appeals to my sense of adventure. I love learning about each animal, the challenge of finding them and getting the shot, but I constantly remind myself that what I do with my camera is not just about me, it's about the animals, first and foremost.

LISA BALLARD of Red Lodge, Montana, is a prolific photographer and author of articles and books on the outdoors and adventure. She is also a champion skier and coach who's frequently written about skiing well. She has often written for *Appalachia* in the past decade and a half. She won an excellence in craft award from the Outdoor Writers Association for her Summer/Fall 2020 article, "The Disappearing Rainbow Mountain." Visit her at lisaballardoutdoors.com.

Living in the Wilderness: Another Year

October, and the river runs slow, the spring speed
of seven miles an hour reduced to two. This journey's
a question of power paddling and finding the channel
in low water, of scaling ten-foot muddy banks to tie
canoes to tamarisk or willow roots. Wild country,
I called it in springtime four years ago, first seeing,
our honeymoon. Today I remember the shapes
of the rocks—Anvil and Sphinx and Turks Cap;
remember to hide the food from the mice who live
in the ledge by the Water Canyon, to look for
the cliff swallows' nests in Stillwater Canyon,
to name the strata we're cutting through, wonder
if the heron at Tent Bottom campsite is the same one
who watched us leave back then, flying downriver
ahead of us; and if he's handed us off at the bend
to the same raven that waited there; if that could
even be the same canyon wren Gary Snyder saw.

Robin Chapman

ROBIN CHAPMAN is the author of ten prize-winning collections of poetry, including the Wisconsin Library Association's Outstanding Achievement Award for *The Only Home We Know* (Tebot Bach, 2019). She is recipient of *Appalachia's* Helen Howe Poetry Prize. Recent work has appeared in the *Alaska Quarterly Review*, the *Hudson Review*, and *Valparaiso Poetry Review*. *Panic Season* (Tebot Bach, 2022) is her latest book.

Laughter at High Altitude

Encounter with a pair of elands

Daniel Hudon



WHEN I REACHED THE TOP OF THE GULLY AND SAW WHAT LAY AHEAD, I burst out laughing. I had made a series of miscues to begin the day—I started too late to complete the twelve-mile hike before nightfall, got conflicting advice, bought an expensive map that I never used, thought about turning back twice for an easier hike and even turned off the trail once while thinking about a guide’s recommendation. Here, finally, was a sign that my half-baked plans were the right ones. I laughed both in surprise and delight.

I was in South Africa’s central Drakensberg mountains, also known as the Great Escarpment, which run for 600 miles along the uplifted edge of the central plateau that much of the country sits on. From afar, the mountains look like a wall of rock that shoots straight up from the grasslands, echoing a continental collision some 200 million years earlier. The range features abundant caves, waterfalls, springs, and many routes to climb the escarpment. One could wander among the trails for days—even weeks—without exhausting the views. I chose the central section of “the Berg” mostly for convenience—it was closer than the northern section, and I thought I might see part of the southern section when I ventured into Lesotho in a few days.

Internet sites recommended Cathedral Peak as among the best of the Berg, promising an elevation gain of 5,000 feet, to the peak at 9,858 feet. So my hopeful idea was simply to hike as far up as I could—if it was so good there had to be good views along the way—and then turn around to make it home before dark. In late May, approaching winter in the Southern Hemisphere, daytime temperatures were pleasantly in the low 70s, and there were no crowds, but one drawback of traveling at this time of year was the short days. Sunset was around 5 P.M., and factoring an hour drive to return to my lodging, I had to complete the hike by 4 P.M. At breakfast, some French tourists told me they thought I could do the hike, but on my way out, the hostess recommended Rainbow Gorge as an easier, shorter hike. I weighed the options as I drove to the trailhead at the Cathedral Peak Hotel. There, in front of a three-dimensional scale model of the mountains, a guide recommended that I forgo Cathedral Peak entirely and instead hike up to Baboon Rock, further down the escarpment from Cathedral Peak, which would give me a view of the series of corrugated valleys that led up to the mountains. Though he persuaded me at the time, I had a lingering feeling I’d get a similar view from Cathedral Peak. I bought a map at the shop and set off.

The elands seem to be wondering, without too much worry, what the human is doing up there. LISA BALLARD

As I began the hike, I wondered if my plan was a little too hopeful and the other options gnawed at me. If I aborted now and hiked Rainbow Gorge instead, I'd have to re-park the car another three miles up the road. Decisions, decisions. I crossed a river and was soon at the junction for Baboon Rock. Even though I only had a few words from the hotel guide to go on, I took it and veered off to the right. But somehow it didn't feel right, as if I was copping out. Cathedral Peak was one of the reasons I wanted to explore the central Berg, and it had been on my mind since I checked into my room two nights earlier. Ten minutes later I decided my initial plan was adequate, and I turned back to the junction to finish what I started. Half-baked, hopeful, or just plain silly, I was finally committed to a plan.

The path zigzagged up to an imposing sandstone cliff and skirted around the bottom of it. The sky was sunny and clear, and I got into the rhythm of the trail as it climbed the parched side of a gully before dropping into the lush, shaded side. After a few switchbacks through the bushes, I found a spring at the top.

I climbed over the ridge and couldn't believe my eyes. I was welcomed by a grassy wonderland that made me think I could have been in the steppes of Mongolia or even in the foothills of the prairies of my home province of Alberta, Canada. The familiarity struck me, and I had to catch my breath, I was so delighted. I took a few more steps, and this is when I burst out laughing. Not only did Cathedral Peak and its neighboring peaks, like the Bell Tower, loom in the rock wall beyond the chest-high grasses, two elands were staring at me as if I were an alien.

I WAS THINKING ABOUT HOW LUCKY I WAS TO BE ALONE AND HAVE ALL THIS TO myself, and wondering if there might be any antelope up here. Here was my answer, in the flesh, as if on cue, barely more than a stone's throw away. It was a terrific coincidence made all the more comical by the deadpan expressions on their long faces. I imagined the thought bubbles above their heads: Eland 1: *What is that?* Eland 2: *What does it want?* Eland 1: *Will it just go away or will it make us move first?* Eland 2: *Dunno. Let's keep an eye on it.* And they kept staring as if they wanted in on the joke. If only they knew how much I wanted to share it with them. "No," I wanted to shout, "I'm harmless . . . See? I'm just slipping through this lovely tall grass!" They were nonplussed, exuding a stoic calm that came from knowing they could bolt over the ridge in a flash. I passed through the grass and felt I'd passed an entrance exam because though they stared intently at me, they never moved.

Common elands can be found eating grass and leaves in both savannahs and mountainous regions all over southern Africa, but until now I had only seen them in reserves. Their name is Dutch for “elk” or “moose,” and they are roughly the same size as those animals but with spiral horns that can grow longer than two feet. The eland population is generally considered stable at about 136,000 but is losing habitat to expanding human settlements. Not surprisingly, their docile nature (and superior meat) makes them an easy poaching target. One can also see elands on the abundant and historic San rock paintings in the area where they are often shown in great detail. Though they are the slowest antelope, with maximum bursts of speed to 25 MPH, less than half of the top speed of gazelles and impalas, elands can maintain a more casual trot of 14 MPH indefinitely. With their air of mild disinterest, the two in front of me looked like trotting anywhere was the last thing on their mind.

The laughter encouraged me. I was in the second week of my solo road trip—I drove alone, ate alone, hiked alone (something I never do at home in Boston)—and though there were times when I would have liked some company, I took earnestly to my task of seeing what the country had to offer. The laughter gave me an explicit reminder that I was having an adventure, that truly, I was enjoying my own company and having a good time.

The ridge welled up into a big toe that jutted away from the rock face, and when I climbed atop it, I got the views I was expecting. It was like seeing half of the Grand Canyon with steep, rumpled valleys on either side of me and wrinkled peaks as far as I could see. I looked down on the grassy section of the ridge and the eland were still there, like toy models situated in the quiet landscape. I couldn’t believe I had the entire view to myself.

I ate my lunch on a grassy knoll at the tip of the “big toe” and marveled at the view. It was so open and rambling that I was tempted to simply recline where I was until it was time to return to the car. But I pressed on up the ridge and was not disappointed.

Soon, the ridge narrowed so that it was like walking along a knife edge as steep slopes fell away on both sides. With the incline, I quickly gained altitude, and my mind veered between wondering where I should turn around and how far could I go. Closer to the rock face, the path dipped into a lush gully before ascending to a notch called Orange Peel Gap; though it was a steep climb, I quickened my steps. It seemed to be a place that let the clouds pass through, where the vegetation could flourish in the shade. Up at the gap, ridges and valleys rolled away from the rock face as far as I could see, like waves on the ocean.

I lingered at the gap, still tempted to push on further and squeeze more out of the views, but I decided to stick to my rule about not driving after dark and reluctantly chose that as my turnaround. On both the ascent and descent, I was struck by the quiet, as if the whole landscape was sleeping, and it was remarkable that the loudest sound I heard, apart from a few bird calls or salamanders that swished off the trail into the grass, was my own laughter. The elands were still there on my way back, but they had migrated farther up the slope, perhaps now deciding that whatever I was, they didn't want to be too close to me. I didn't laugh this second time, but I still loved them for their taciturn, straight-faced company.

DANIEL HUDON is a writer and lecturer in Boston. His most recent book is *Brief Eulogies for Lost Animals: An Extinction Reader* (Pen & Anvil Press, 2017). Visit him at danielhudon.com.

Winter Morning

Crow call in the canyon echoes
in the chill morning air—

yellow-rumped warblers everywhere—
towhee in the toyon—his freckles—

a tree charred by fire two years back.
And mushrooms, white on black,

their fluted gills entire, thrusting
through eucalypt leaves and duff.

It's never enough—not the thrasher's
garbled song, not the phoebe's

crisp chip along the stream bed—
never, never enough.

18 December 1996

Marcyn Del Clements

MARCYN DEL CLEMENTS is a regular contributor to *Appalachia*. Her first book, *Shin-rin-Yoku* (Parkman Press), was published last year. It features her work included in *Appalachia* since 1994.

Waterman Fund Essay Winner

What Climate Models Don't Show

A scientist's work on a future forest model can feel personal

Olivia Box



WOOSH, WOOSH, THUD. THE SILENCE OF THE WOODS IS BROKEN BY MY clumsiness. In an instant, I'm belly-down on the ground, my arms in a defensive shield in front of my face and my knees taking the brunt of the fall. I am no stranger to abrupt spills when I run. I shuffle my feet, and these New England forests are all roots with just a little bit of flat ground mixed in. I sit up, brushing the duff layer of burnt orange pine needles off my knees. Just a little blood, not bad. I get up and keep going, shaking out my arms and legs. I've got miles to go before I resign myself to another day glued to my computer.

Each morning is the same, whether I fall or not. Before the heat becomes too muggy, a new phenomenon for a lifelong New Englander, I slide on my running shoes and leave my phone at home. No directions needed, no need to know my pace.

My first mile is slow as my pores open to the humid air, sweat begins to pool across my eyebrows, neck, and back. Weaving alongside the riverbank, my heavy steps awaken birds and alert the forest that there is an intruder in its midst.

As my runs grew longer, I became more invested in route planning and was enamored with this carefully constructed trail network. Take away the cul-de-sacs, the boxy developments, and the busy roads and beneath the trees lies a tangled yarn ball of trails, enabling me to escape my computer. I needed these trails.

I won't wax poetic and say I am a member of the forest. But in these brief moments, through the pain of sore feet and a tired body, I am invigorated by the sun streaming through these southern hardwood species. This is the forest type where I feel most at home.

LIKE MANY OTHER MILLENNIALS, I GRUDGINGLY MOVED BACK IN WITH MY parents during the beginning of the novel coronavirus pandemic. For me, home is Groton, Massachusetts, a forested town about 40 miles northwest of Boston. Moving home after years away has been tough, but it has also been an opportunity to explore the area more deeply where I grew up.

I spend the mornings running and the afternoons building a climate-landscape model seeking to predict the long-term management impacts of Asian longhorned beetle (*Anoplophora glabripennis*) on eastern forests. The

The trunk of a dying hardwood tree, mottled with the exit holes made by the Asian longhorned beetle (Anoplophora glabripennis). USDA

beetle is an invasive pest that tore through Worcester in 2008, forcing U.S. Department of Agriculture and other managers to cut every host tree species, primarily maple, to starve out the insect. It largely worked—and took out more than 30,000 trees in the process.

But the future is far less certain for these forests. As climate change intensifies, the conditions will create a dream environment for invasive pests such as the Asian longhorned beetle. From heavy, frequent rains to mild winters, pests are likely to wreak havoc on the landscape.

My model's landscape is the forests of southeastern New England, primarily comprising maple, oak, and white pine. The soils are sandy and acidic, the growth rates well defined. The seasons are predictable: warm summers, mild falls, harsh winters. But when I add climate change to the mix, everything goes awry.

With my model, I want to see what the composition of these forests will be in 100 years under various climate and pest management scenarios. Since starting my master's degree in 2018, I have already had to throw out the lowest climate change scenario—emissions have surpassed it. I had to readjust again when the Intergovernmental Panel on Climate Change Sixth Assessment Report came out, as ominous as ever. It's not news that the apocalypse is here, I think to myself, as my model spins and my computer's fan whirs to keep up. It's news that years later, we're running out time. Climate change isn't coming—it has been here all along, lurking in the shadows and chipping away at the future we thought we had.

Graduate school dominates most parts of my life. Not just because coding is hard, but because my research hits so close to home. I can't escape the grief and stress that my model creates. I can't go on a run without picturing what these forests might look like in 10 years, in 50 years, or in 100 years. The further I get into constructing my model, the more I watch the ecosystem—my backyard—collapse under warming temperatures, invasive pests, and increased rainfall.

The model landscape is where I first became interested in the outdoors. As I build my model, I can see—in glimpses—what the woods will look like. Iconic species such as fir and paper birch will disappear and migrate northward. The woods will get more rain and less snow. Climate change has the inertia of a falling tree: Once it starts, it will inevitably slam into the ground, taking down trees, branches, and habitats with it.

The more work I put into my thesis, the more personal it becomes. Models work in time steps. For mine, I've chosen 10-year-increments for 100 years.

With each time step, a corresponding personal question arises. In 10 years, I will be 35. Should I have kids? In 20 years, my dad will be 75. He's asthmatic. Will the air be breathable? And in 100 years, I'll be long gone. What will the world look like?

When I'm working on my computer, I don't just see pixels. I see Mount Monadnock, the mountain I've faithfully climbed in every season. I see the towering pines by the Nashua River, scattering their needles in the lazy currents. I see the resident bobcat disappearing into the hemlocks that line my backyard and hear the barred owl asking *Who cooks for you? Who cooks for*

you? late at night. I see the house I grew up in, surrounded by a hemlock stand that transitions to a classic New England forest: maples and pines in the understory and a thick blanket of leaves on the forest floor.

These forests have been managed for centuries, full of evidence of clear-cuts, new growth, and invasive species—and they will continue to be managed. They are hardly wild.

But still, here is where I first discovered wildness itself. My friends, brothers, and I would build haphazard forts with fallen logs, bark, old tires, and other findings. The accessibility of these forests enabled them to be wild to us. I would call my friends on the landline, and they would bike on over. We would wander through my backyard and into the sliver of woods that separated us from the bordering development. You could see the suburban pastel houses through the trees in the distance, but that didn't matter.

With each scenario I create, from business-as-usual climate emissions to extreme emissions, I see the forest types change and shift and my backyard change. With severe pest management, we have a chance to preserve certain species from destruction, but at long time scales that are hard to conceptualize and feel counterintuitive. Cut down the trees, save the forest. These



Olivia Box on Mount Etna in Sicily. KELT WILSKA

scenarios require patience. But when I close my eyes, all I see are the trails that I love disappearing.

GEORGE BOX (NO RELATION), A BRITISH STATISTICIAN, ONCE SAID, “ALL MODELS are wrong, but some are useful.” I used to think he meant models sputter out our results but need humans to sort through them. It gives us a role in the chaos to intervene and decide what is accurate or how to use these results to our advantage.

I think maybe he meant something else, too. Models can be illuminating and reassure our experimental methodology, but they miss the intricacies of the human experience. They miss the way the forest feels after rain and the damp air and the waterlogged soil, the sweet, pattering sound of treedrip. They miss the joys and pains of trail running, weaving over roots, swatting away bugs, catching the light through the understory.

This is what I want to preserve, what I wish my model could show. These forests—though managed beyond their natural state—are wild, if we take *wild* to mean unpredictable and worthy of exploration.

My model will churn out facts about how many trees will inhabit these forests and which species will survive. As I see the ecosystem crumble, older people tell me to have hope, but I can’t put hope into a model.

“LET YOUR HANDS BE LOOSE, LIKE YOU’RE HOLDING A POTATO CHIP,” MY HIGH school cross-country coach would call to us as we ran loops around the manicured soccer field. I’ve always struggled with tensing my shoulders when I run, my fists tight. But when I remembered to open my hands, I felt lighter and faster even if I wasn’t.

I’m trying to run less tense these days, to keep my hands open and loose. Hope is something we must take into our own hands and cradle with care. Models, though helpful for discovering problems or suggesting pathways, don’t include all the elements that affect the environment: activism, conservation, and good old-fashioned hope.

Recently, the local volunteer-driven land trust preserved hundreds of acres around my childhood home as a conservation easement. These acres can never be developed and will remain a wildlife corridor that stretches from the banks of the Nashua River all the way to New Hampshire. When I build a model, I know that there’s more happening beneath the pixels.

Is it perfect? Of course not. But conservation—like models—is not meant to be perfect. Instead, it tells us stories of what the world could look like.

Having hope can give us the agency to choose which story we want to tell the next generation. Will it be a story of species loss, or growth? I hope it will be a story of stewardship in our own backyards, of curbing emissions, of long trail runs, of hope.

In a well-timed letter from a friend, she casually wrote, “Things are good here. Today was 40 degrees so I ran outside and had one of those spring-weather runs where I couldn’t help but smile and hold my arms out and feel grateful for my lungs. I mean 40 in January days after a historic blizzard isn’t great, but at least there will be moments of joy in the apocalypse.”

THIS MORNING IS NO DIFFERENT FROM THE REST. I SLIP ON MY MUDDY SNEAKERS and set out on the dirt road where I start each morning. At the trail intersection, I veer right this time. It’s September and the riverbank grasses are lush and long.

Sweat begins to pool in those familiar places, my face, neck, and back. My pulse quickens and my breathing starts to even out. I open up my stride, relax my shoulders, and let the river grass tickle my hips. The wetness on my legs from the morning dew and the stickiness on my face from the spiderwebs spun overnight indicate that I’m the first one here this morning.

But I know that’s not true—many have been awake before me. There are chickadees flirting with one another in the trees, insects bustling in a fury, squirrels and chipmunks meticulously checking their caches. Nothing special, but thankfully familiar. I am just passing through, carrying my joy through the apocalypse.

OLIVIA BOX explores the areas where climate change, ecology, and storytelling meet. An ecologist and writer, she has a degree in forest ecology from the University of Vermont and an undergraduate degree from Hamilton College. Last year, she was a Fulbright student scholar based in Viterbo, Italy, studying UNESCO World Heritage old-growth forests, science communication, and the Italian language.

Since 2008, Appalachia and the Waterman Fund have partnered to sponsor an annual essay contest for emerging writers. The fund provides generous prize money and works with the journal to choose winners. For details about how to enter next year’s contest, see page 160.

White Mountain Mysteries

A bushwhacker and his brother decode remote place names

William Geller



AT AGE 19, I BUSHWHACKED FOR THE FIRST TIME USING A COMPASS AND map in the Pemigewasset Wilderness of New Hampshire's White Mountain National Forest. I am still doing it, five and a half decades later. I still explore by looking at an unusual place name or examining contour lines on the map, wondering what is in there.

What follows are stories of some of the mysterious places I explored with my brother, Jim, in recent years, along with a few notes on how we conducted those journeys.

Our excursions were three-day treks with full packs taken in the fall after the leaves had fallen, clearing visibility. We were self-contained, could camp any place, and had no place we needed to be. We set our compasses as our spirits moved us. We explored: plants, plant beds, large trees, tree groves, waterfalls, subterranean streams, bogs, ponds, vernal pools, large solitary boulders, rock caves, rock dumps, ledges, ravines, and signs of long-ago logging.

Hellgate Brook

Hellgate Brook flows deep in the Pemigewasset Wilderness, from below Bondcliff down to Franconia Brook. Jim and I set out to find the brook on October 30, 1998. Dark gray clouds hid the sun, and an ominous wind blew on that Friday afternoon. We were looking for the narrow entry to the 2,000-foot-deep ravine between West Bond and Bondcliff. I was excited; I'd wanted to come here since the year I was 19 and saw Bondcliff from the southwest as I stood on Mount Moosilauke. Now we were finally here. In a predominantly birch forest, all we saw as we hiked along was a looming black mountainside, but suddenly, it seemed we were standing below a narrow opening. The only way in was to climb the waterway's rocks to pass through the elongated S-shaped opening. The black cloud cover dropped to nearly the base of Bondcliff. The route moderated, but we had to weave slowly through rocks of all sizes. As the daylight nearly extinguished, Jim found a tiny spot where we could sleep, not far below the 1,000-foot headwall. Hellgate Brook was well named. We had passed through hell's gate.

Hellgate ravine severely challenged our motto, "We can camp any place." Since our youth, we had never thought about not finding a spot. The key to a

Sitting in an area off trail below Thoreau Falls, Jim Geller experiences the full drop of the falls. WILLIAM GELLER

sleeping spot was a large tarp with numerous pitching options; a tent did not offer the needed flexibility.

The 1907 forest fire had not touched Hellgate Brook valley, and loggers using Camp 10 outside the gate cut trees in the valley during the winters of 1909 and 1910. It would have been hellish work indeed to cut among the boulders and skid the logs out through the gate. Perhaps the loggers had named it. We exited the next day via the headwall.

Green's Cliff

Early on October 21, 2006, we bushwhacked in the Carrigain region, past Sawyer Pond and up to Green's Cliff. We wondered, "Is there a view?" As we reached the northern end of the cliff ridge, Jim found a U.S. Forest Service sign with nothing on it: a rectangular brown painted, beveled-edge piece of wood nailed to a downed tree. What was once posted on it and why? We weren't close to anything of note. Back home we would confirm no old trail, and some months later it occurred to us that the sign might have been related to the boundary line of the federal Sawyer Ponds Scenic Area, first designated in October 1961.

We hiked along Green's Cliff well beyond the sign and found some nice views looking southeasterly to part of the Sandwich Range. Beyond Green's Cliff was a delightfully open oak forest. We wandered through it, arcing down to get back to the cliff's base, where we looked for boulders and caves. We found nothing but a nice forest floor and headed back to camp on a compass bearing.

"My compass isn't working right," said Jim. "What about yours?" Mine wasn't, either. We wondered if it had to do with the cliff, which was now masked by fog. We moved carefully away from the invisible-seeming cliff, hoping that would fix it; our compasses' erratic needle fluctuations soon ceased, and we got back on a compass line. We later discovered other such "dead" spots but also learned that an erratic compass needle might be a broken compass. We each carried a spare and we each ran our own compass line. Sometimes we could tell a compass was malfunctioning if we were not walking parallel lines.

Lincoln Woods

Fires burned this area in 1886 and 1903, and loggers never returned. I caught my first view of the Lincoln Woods Scenic Area—land between Zealand



The “sliver of a pond” in its fold on the west side of Zealand Notch. WILLIAM GELLER

Notch and the Willey Range and so designated in January 1969—in August 1965 from Zeacliff. For our exploration of October 26–28, 2012, we entered this area from its eastern edge, a low point of the Willey Range between Mounts Willey and Field. The first day we plowed through dense growth at about a quarter-mile per hour visiting a few bogs, two unnamed ponds, and the unnamed peaks known by their elevations of 3,691 and 3,526. The ledgeless peaks offered peek-a-boo views; the ponds had no rock outcrops and were surrounded by waist-high brush, and the bogs looked typical to us.

Surprise! The following morning, after moving no more than 100 yards, we burst into open birches, and the rest of the day was a delightful walk in a park of birch and ferns, open granite ledges, or both. The birches rolled up onto the open Whitewall Mountain, where we looked nearly straight down onto the old railbed in Zealand Notch. From Whitewall’s summit, we barely detected the sliver of a pond folded into a narrow crease on the west sidewall of Zealand Notch. This is the only view of the pond we know. From the south end of Whitewall ridge, we meandered north from open ledge to open ledge through the endless birches. Staying in the birches, we eventually swung east and then south to get back to camp. The map’s contour lines suggested we might find a small ravine in the brook below our camp, but we did not discover anything amazing.

In dense woods my external frame pack passed between any trees I pushed apart, but tree branches stole things I was carrying. They stripped off items attached to the outside; I learned to pack everything inside. The branches

opened pack zippers, so after a few trips I stopped using the outside pouches. The branches also reached into my pants pockets, so I stopped putting anything in them. The branches even once stole my compass, leaving only its base hanging around my neck; I learned to carry a spare. The vegetation opened my hiking pole clamps; I had no solution for that.

Pemigewasset River's North Fork

I wondered what I might find in the trailless expanse between the North Fork of the Pemigewasset River and the ridges of the Bonds, Guyot, and Zealand. So, on the first day of our October 2012 expedition, Jim and I headed for the west sidewall of Zealand Notch to find that sliver of a pond we had first seen from Whitewall Mountain. We crossed Whitewall Brook on the Zealand Notch floor, climbed to a wooded shelf, oriented the map, got a bearing on the pond, and angled south, up the trailless west sidewall of Zealand Notch. The forest was relatively open hardwoods with some softwood. On a second shelf above the brook, we came to an extensive vernal pool not on the map. Soon we reached what we were seeking: another shelf with water in a long narrow slit. This was that sliver of a pond.

The mountainside dropped precipitously into it. The other side had a forested moraine-like ridge above it with its bank also falling steeply to the water. At the south end was the nearly dry, tiny outlet with a beaver dam, where we saw old cuttings.

We reset our compasses, then headed to the foot of Thoreau Falls; most people, like us, had never seen the falls because the trail crosses the falls' top edge where one cannot see the totality of it. When I had walked in here in 1966, I found no herd path to a viewpoint, and that was true also in 2012. We intersected an old logging dugway curling up the steep sidewall below the pond. Being curious we followed it on its gradual descent northerly to the notch floor. At Whitewall Brook we turned south for the North Fork, avoiding the brook because the debris from Hurricane Irene (in August 2011) had filled the woods beyond its banks. Raging water scoured clean every rock in the middle of the brook and left a few scattered islands of wood debris.

Several small waterfalls made for a picturesque scramble along the rocky edge of the North Fork to the foot of Thoreau Falls, a grand site. We retreated by climbing to the top of the ridgeline on the west side of the falls. We followed it through open woods that didn't attack our packs back to the mouth of Whitewall Brook.

In stark contrast with Whitewall Brook was the no-name brook whose headwater is Zealand Pond. We reached this brook by moving down the west side of the North Fork. The stream's rocks were not scoured; it had no signs of water overflowing its banks; large and small standing trees lined the brook; mosses padded its long sloping granite ledges.

The havoc-play of water on Jumping Brook, which we reached the morning after our Thoreau Falls visit, made that on Whitewall Brook look like child's play. The old logging railroad bed we were following ended abruptly at an eight-foot-high wall of gleaming, yellowish, angular basketball-size rocks that we climbed, hearing the brook buried beneath. A hundred steep feet below us was the North Fork, a gray line of rock and water.

Looking up a yellow rock alley barricaded on either side with trees ripped out by the roots, we climbed the gleaming rocks upward, sensing from the contour lines we might find waterfalls. About half a mile up we came to our first ledge swept of its rocks and scoured clean by the water of Hurricane Irene leaving boulder fields on either side. Another 400 yards above that was a much longer scoured ledge cascade with a great view southeast to Mount Carrigain. Not far above the falls the brook from Guyot Shelter entered, also looking like a newly scrubbed barren boulder rockslide 50 to 100 feet wide. Out of time, we could only wonder how far up the mountain that went.

Dark came early in late fall, so to help ensure that we got back to camp before dark, at lunch we set a "head back to camp time." From our map, we knew how far we were from our camp, but we had to guess how long it would take based on the brush's density. In the densest brush, where we must push the trees apart to get through, we estimated we could cover a quarter-mile per hour. Generally when bushwhacking we figured our speed at a half-mile per hour. As we moved slowly along, sometimes we'd fall into camouflaged holes, trip over branches, or step on a rolling rock. Our slow forward momentum helped lessen the chance of injury.

We stumbled into a campsite marked Camp 23 on the map. The site lay east of Jumping Brook on the old logging railroad line we'd picked up near the North Fork below the no-name brook from Zealand Pond. The maps in C. Francis Belcher's book *Logging Railroads of the White Mountains* (Appalachian Mountain Club Books, 1980) used labels such as *Camp 23*, *Camp 23A*, *New Camp 22*, *Camp 22A*, *footbridge*, and the symbol of an abandoned logging railroad line; these were some of the landmarks that had inspired us to explore this area along the North Fork. The lumber company, whether headed by the Henrys or the Parker-Youngs, used a sequential numbering system for camp names.

At Camp 23 I exclaimed, “Look at this cooking pot! Can you imagine cooking 45 gallons of anything?” We found a bunch of its pieces and tried to put it together to get a visual sense of its size: huge. Other metal remains were plentiful throughout the area.

We found New Camp 22 but did not look for 22A and did not find the old site of 23A nor any old tote road leading to it; blame it on dense spruce growth, blowdowns, and that the loggers burned these two log camps so that hikers would not accidentally set them on fire. A massive number of peavey heads and sled runners marked the horse hovel and blacksmith’s workshop at New Camp 22, west of Jumping Brook on the rail line. The clearing, pierced by scattered birch, was still evident, but metal remains were scarce compared with Camp 23. We saw no building foundation remains; this had been a camp of prefabricated buildings disassembled once the camp was no longer in use. What years crews logged in the area remains undiscovered, but the company camped in this area in the mid- to late-1930s, perhaps into the early 1940s.

We named this water-rich area “Little Thoreau Falls.” Nothing on the U.S. Geological Survey map below Thoreau Falls stimulated our imaginations



The Geller brothers named this waterfall Little Thoreau Falls. Its smooth granite was very different from the rough rock of Thoreau Falls upstream. WILLIAM GELLER

about the river course, but we were still curious because it is unseen from the Thoreau Falls Trail on the other side. East of the mouth of Jumping Brook, the footbridge's old log crib abutment remains were visible on the bank and below the water's surface. Below New Camp 22 the old railbed's river crossing site was obvious. About 150 yards downriver, something looked different about the rock, so we went to investigate. The rock was smooth and the river dropped over and effortlessly slid through polished ledges. The falls we were calling Little Thoreau Falls looked quite different from Thoreau Falls, where the water spilled over rough ledges.

Of all the mystery explorations we've done, this one in October 2012 offered the most unexpected discovery. Something small, like a portion of the shiny end of a soda can and barely visible in the leaves and brush, perhaps no more than 100 yards west of Jumping Brook on the north side of the old rail bed, caused us to stop. We cleared away the leaves and branches and found a plaque:

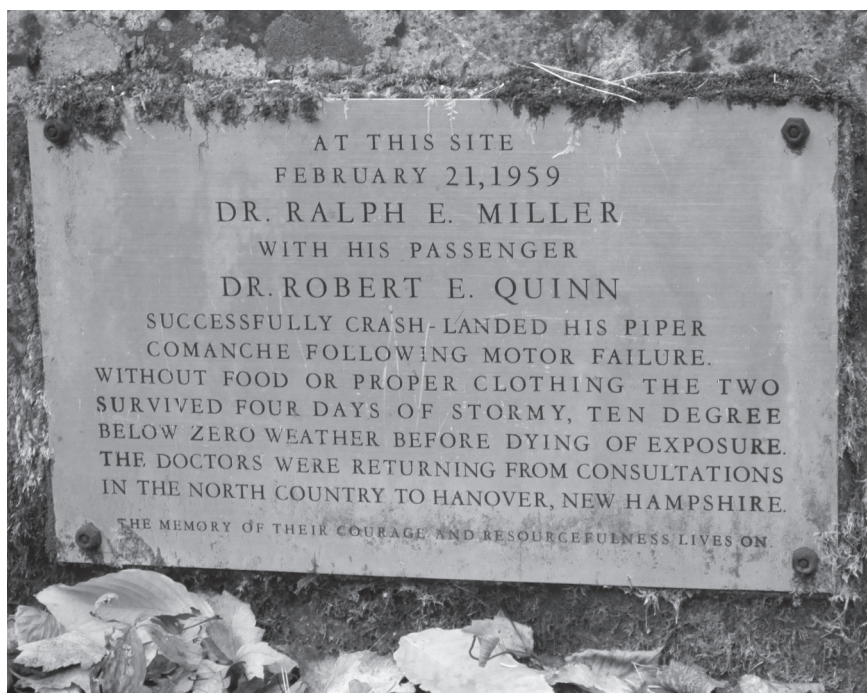
At this site [on] February 21, 1959, Dr. Ralph E. Miller with his passenger Dr. Robert E. Quinn successfully crash landed his Piper Comanche following motor failure. Without food or proper clothing the two survived four days of stormy, 10 degree below zero weather before dying of exposure.

As a 12-year-old boy, I had riveted myself to news of that event and followed the accounts of days of searching, and then the discovery of the missing doctors and the plane months later. I already appreciated how wild and seemingly impenetrable the Pemi was; this event cemented it in my mind. At the time I wanted to know the exact crash site in the Pemi, but the papers my parents read did not say the specific location. Here I was, 50-plus years later, stumbling upon it.*

When I got home from that trip, I wrote Ralph Miller's son and in subsequent exchanges helped him plot a course to the site; he and other family members made the journey the following year. The original Thoreau Falls Trail passed by the site, but sometime between 1972 and 1976, the Appalachian Mountain Club relocated the trail to the other side of the North Fork.

Our exit on this journey was via the no-name pond one can look down upon from the southwest corner of Zeacliff. The pond called to me the first

*For more about the 1959 crash, see John Morton's article, "Unforgiving Forests," *Dartmouth Medicine* (Winter 2000). dartmed.dartmouth.edu/winter00/html/plane_crash.shtml



This plaque marking the site of a famous plane crash in 1959 is affixed to a rock below Jumping Brook on the west side of the North Fork of the Pemigewasset River. WILLIAM GELLER

time I saw it back in August 1965. To reach the pond we followed the Zeacliff Pond outlet stream from the North Branch. Its long sloping walkable granite ledges made for easy walking. We eventually turned easterly in thick spruce to the open meadows surrounding the remaining tiny body of water. Beaver once had a dam at the meadow's outlet, perhaps attracted by the white birch of an old burn area on the east side of the meadow. We exited to the northeast through the open birch to the Zeacliff outlook for another view.

The name *Jumping Brook* remains a mystery for us. Based on what we saw, we made up a nice folk tale about how loggers built a sluice for the spring ice and water to jump over the railway into the North Branch. The earliest map we could find with this name was Henry Francis Walling's *Map of Grafton County New Hampshire 1877*. In 1870 and 1871 Charles Hitchcock performed a geological study of this area and perhaps used this name; to follow the brook might have been a jumping-off point for Hitchcock to study the rock formations between the North Fork floor and the Guyot-Zeland ridgeline. The 1877 map also used New Zealand Notch and Pond.

More Than Thirteen Falls, and Four Other Bushwhacks

Five other trips in the Pemi provided equally interesting discoveries. I will list them briefly here but won't give away everything. Go explore yourself!

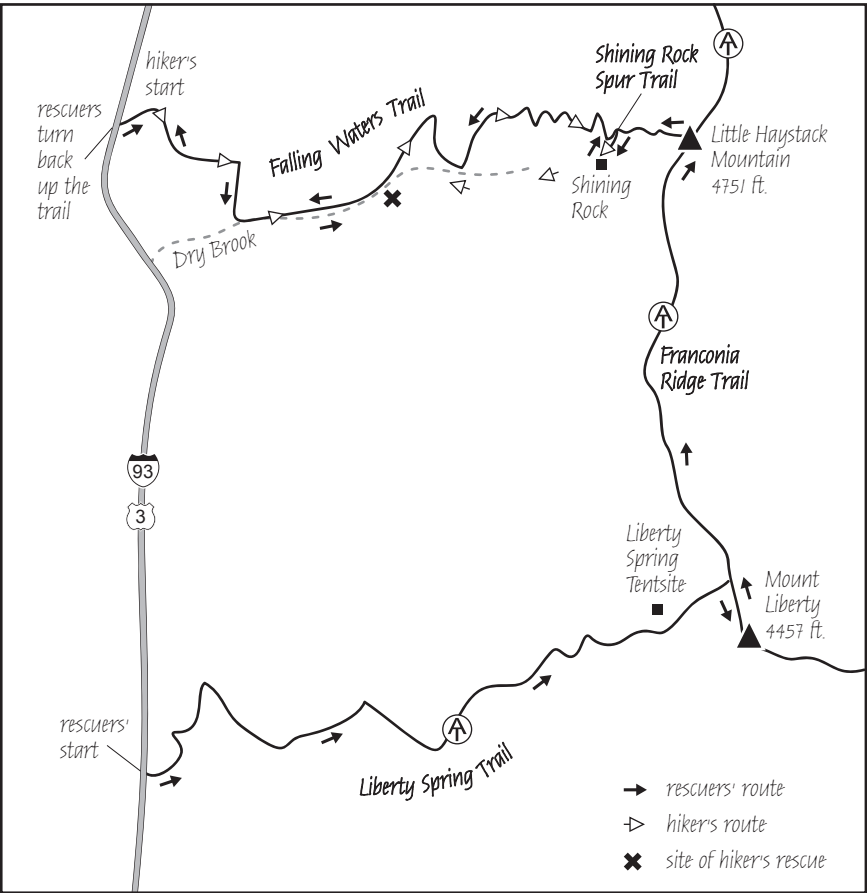
- The trailless ridge of Mounts Bemis, Nancy, Anderson, and Lowell northeast of Mount Carrigain was a thick forest in some places, an easy walk in others. In one area we walked on top of the krummholz, enjoying magnificent views down the East Branch before we descended into Carrigain Notch—so steeply it felt like an incredible dive.
- East of Carrigain Notch, we entered Whiteface Brook valley, where we could see Mount Whiteface. We forced our way north through dense growth to Duck Pond in a bowl surrounded by more thick growth with few signs of any rock promontories for a view.
- Our circumnavigation of Carrigain was via The Captain, Carrigain Pond, down Carrigain Brook valley to the junction of the Desolation and Carrigain Notch Trails, up the north side of Vose Spur through a stunning spruce forest, and down through the south side's hardwoods.
- Redrock Brook, which had red rocks in one spot, had underground streams and a stream that flowed out of its West Bond sidewall.
- We never reached the top edge of Mount Garfield's south ridge, a magnificent cliff overlooking Lincoln Brook valley. But as we explored above 13 Falls Tentsite, we counted how many falls flowed above it. I can't remember the number now, but we were sure it was more than thirteen.
- My spookiest and most shocking find was in the Mahoosuc Range, which is immediately north of the White Mountains' Northern Presidential Range. For this one I won't reveal anything of what I found or a precise location, but consider wandering the area within 1.25 miles of the summit of Mount Success's south side. Perhaps I'll write about that someday.

WILLIAM GELLER, a retiree who explores in the outdoors in every season, lives in Farmington, Maine. His research and writing are available at his website Mountain Explorations, sites.google.com/a/maine.edu/mountain-explorations, and the Raymond Fogler Library Special Collections Digital Commons.

Day Four

A rescuer's account of a hiker's baffling survival

James Mason



ON A CHILLY NIGHT IN EARLY MAY 2009, THE PAGER SOUNDED. NEW Hampshire Fish and Game (NHFG) summoned our Upper Valley Wilderness Response Team (UVWRT) to assist with a search. A man in his 60s was missing on or around Franconia Ridge in the White Mountains. NHFG officers and two other rescue teams had already searched the steep area without finding him or identifying any clues that might lead to refining their search strategy.

We were asked to stage at the trailhead to Falling Waters Trail by 8 the next morning. It would be day four. The hiker had already been out three freezing nights in knee-high snow with little extra clothing or gear. According to his family, this was his first mountain hike in more than 20 years.

While we geared up at the trailhead, Scott Carpenter, our team leader, approached me with map in hand to detail my assigned task. I continued to tighten my boots and attach my gaiters as he spoke. He requested that I take our new team member, my longtime friend, Tom Frawley, to conduct a “hasty search” of several major trails on the western flank of the north–south ridge. We were to ascend the Liberty Spring Trail for 2.9 miles to Franconia Ridge, then proceed north 1.9 miles along the exposed Franconia Ridge Trail before descending 3 miles on the Falling Waters Trail back to Route 3. I thought, *Wow—this is a long and involved search request— but just the challenge I was hoping for, considering others were searching areas along the highway.*

Tom and I anxiously reviewed our mental checklists. We added gear we’d need above treeline to our packs. Lieutenant Todd Bogardus of NHFG called us to his pickup truck for a briefing. Twenty-five searchers, mostly geared up and ready to go, gathered in a semicircle around the open tailgate waiting to hear a search update and description of the missing man. I pulled a small notepad from my radio harness and began writing—subject’s name, age (63), height (5 feet, 8 inches), and weight (250 pounds), no known trip itinerary. When a teammate questioned the lieutenant about any medical conditions, we learned that he was diabetic, on medication for high blood pressure, and had arthritis in his knees. This certainly did not fit our typical missing hiker profile. Yet, his car was right here, 30 feet away, and he was out there, somewhere in the vast wilderness, likely desperate for help.

The route of two Upper Valley Wilderness Response Team members as they searched New Hampshire’s Franconia Ridge area for a missing 63-year-old hiker in early May 2009.

ABIGAIL COYLE/APPALACHIAN MOUNTAIN CLUB

Bogardus had also just deployed 30 other searchers and 6 air-scent dog teams to comb river drainages, trails, and low-lying areas, suspecting that our subject had traveled downhill. Clearly, our search assignment was just one piece of many that were attempting to solve the master search puzzle.

Only a few snowbanks remained in the warming valley, but we expected snow and ice higher on the mountain. Eager to get going, Tom and I quizzed each other—did we have a stove, shelter, crampons, bivouac sacks, headlamps, and so on—before shouldering our 30-pound backpacks and heading up the trail. We were prepared, equipped with enough food and gear to spend the freezing night out if necessary.

This was my chance to break Tom in right, putting into action the best-practice search tactics and strategies that I had been teaching as training officer for UVWRT. As we approached the trail, I emphasized that we were on duty now, and our mission required total focus; there would be no chatting about last night's ball game, work, or the kids. We had an important job to do. Tom and I had hiked and climbed together for many years and volunteered as emergency medical technicians on our small-town rescue squad. This was Tom's first UVWRT callout, and we were absolutely committed to following search protocol, knowing a man's life could hang in the balance.

We reset our GPS units to record our tracks and set a waypoint marking our coordinates, before heading up Liberty Spring Trail. We had nearly ten miles of challenging terrain to search before dark. At first, we made quick progress, scouring the trail's flanks, one focused on the left side, and the other searching the right, looking for a track or clue, something out of place—a man who had already been out three cold nights without proper clothing, gear, or shelter. Since the deciduous leaves had not yet emerged, we had good visibility, allowing us to scan broadly into the open hardwood forest. This would change as we gained elevation and entered dense coniferous stands of spruce and fir, which would make visual detection more difficult. Of course, lots of possibilities ran through my mind. Given our subject's medical condition, lack of experience and fitness, combined with three frigid nights out in the elements, we knew this could become a body-recovery operation. We also knew all search situations require an absolute positive "I will find him" attitude.

THE "HASTY SEARCH" IS SOMETIMES REFERRED TO AS "RUNNING TRAILS," BUT that's certainly not the reality. If you've run trails before, you know that it's hard enough to just place your feet, avoiding slippery roots and rocks. At a jogging pace, it would be impossible to visually inspect both sides of the trail

and to look for clues, all at the same time. Finding a credible clue, like an article of clothing, a gum wrapper, or a footprint veering off the trail into the woods can be critical to closing in on a “find.” The hasty search is a means of quickly, but methodically, checking highest probability areas first—established trails, campsites, structures, and other points of interest.

Searchers use sound attraction as an effective way to locate a conscious and responsive victim. Frequent whistle blasts along the trail can penetrate the darkness, fog, or the thickest stand of evergreens, to quickly capture the attention of a disoriented subject. Typically, we blow the whistle one long loud blast, followed by yelling the missing person’s name. We then listen intently for a response. This requires a real whistle, not the little toy toot-toot built into the sternum strap of many packs. In my experience, this “whistle blast” strategy has often resulted in a jubilant cry—“Over here! Help! Over here!”

Tom and I steadily climbed the long steep section of the trail, which here coincides with the heavily tracked Appalachian Trail, to the Liberty Spring Tentsite, where the mud- and branch-littered snow measured well over a foot deep. We spent about fifteen minutes there—just enough time to snack, hydrate, and check the maze of side paths to various tent platforms—but found no evidence. I recall noticing a Canada jay perched only six feet above on a spruce branch, ready to snag any crumb we might leave behind.

We continued up to the 4,200-foot north-south Franconia Ridge Trail, finding that the uphill walking was tricky, requiring balancing precariously on a narrow monorail of hard-packed ice and snow. Sometimes, teetering under our pack load, we would slip off the frozen consolidated middle and posthole into the loose granular snow on one side or the other. From the ridge trail junction, I radioed to search command, “Would you like us to detour to check the trail south to the summit of Mount Liberty?” After a short pause, the lieutenant’s voice crackled over the radio, “Affirmative.” So, we headed south, less than half a mile, down into the wooded col and then scrambled up to the boulder-strewn peak for a look around, finding no sign of anyone. This extra leg south added considerable time to our already arduous assignment, but we felt that “clearing” that area was worth the time and effort. I wondered if the missing hiker had any hiking essentials with him: map, compass, matches, or a whistle. Maybe he knew that three blasts of a whistle signal a distress call for help. We continued to scan the trail for any suspicious track veering off.

Soon we were back at the junction, heading north up the exposed ridge toward the Falling Waters Trail almost two miles away. Aside from a few

drifts, little snow had accumulated on the windswept ridge, but thick passing clouds and gusting squalls of snow and sleet hampered our progress. We appreciated our previous stop below treeline to put on a windproof shell layer of protection. Forging ahead, we continued our northern trek along the slender curving spine of ice-glazed rock, often venturing off the trail to look behind rock outcrops and in sheltered crevices, hoping to find our subject taking refuge, calling his name—still no response.

As we neared the 4,751-foot summit of Little Haystack, two faint figures emerged from the swirling whiteout, walking slowly toward us. We waited a minute, wanting to engage the pair of southbound hikers. Huddling close enough to be heard over the raging wind, we told them about our search. “Have you seen anyone?” Answering in a deep French accent, the two Canadian men assured us they had not seen our missing hiker. They asked for directions, unsure of their exact location. We took a minute to orient them. Then we parted ways, heading west, down our last three-mile leg, the Falling Waters Trail. Descending the steep spruce-lined path sheltered us from the 18-degree Fahrenheit windchill. Grateful for our crampons underfoot, we confidently navigated the slick path of snow and ice down to the Shining Rock Spur Trail. We stopped to shed our wind gear, take in some calories and drink water. Again, we radioed NHFG command to update our progress, and to request a short side jaunt to check the popular hiking destination, Shining Rock, an impressive ice-covered granite face. We got the go-ahead.

Tom waited at the trail junction, while I scooted down the short side path to Shining Rock, which was not glistening in the sun that day but obscured by dense cloud cover. I surveyed the small heavily tracked area, which was bordered by the ice-covered rock face on the high side and a thick hedge-row of evergreens on the low side. Corralled inside I found a hodgepodge of indistinguishable tracks and postholes penetrating the old snow. There was no obvious clue leading to our subject, but I took a quick look around, and called out his name before heading back to Tom. Together, we continued down the Falling Waters Trail, systematically looking, whistling and calling out—in vain, it seemed by now.

Finally, after a long traverse in thinning snow, we arrived at Dry Brook, a crystal-clear shallow mountain stream, which was not dry, but flowing swiftly over rocky falls and around moss-covered boulders. The noise of this rushing spring runoff overpowered our blasts and shouts, which we continued more often now to compensate for the river’s rivalry. From there, the trail dropped steadily down the steep drainage. We crossed the swollen brook

several times, hopping from rock to rock, before finally arriving at the trail-head around 5 p.m.

It had been a long and taxing day. We were the last team to return—relieved to remove our heavy backpacks and grab some food. Our lengthy search assignment had been completed, but sadly, there was still no sign of our subject, and darkness was closing in. Another 30-degree night was in the forecast. I couldn't stop thinking about our cold missing 63-year-old and his family; the weight of this difficult loss exhausted me even more.

Dutifully, we reported to search command, where Lt. Bogardus downloaded our GPS tracks onto the master laptop. As he did, we could clearly see a myriad of red squiggly lines crisscrossing brooks, trails, roads, and contour lines, delineating the hundreds of total miles searched in the last 32 hours. As expected, we learned that the search effort would be ended for the day.

At that very moment, to our amazement, a hiker came running down the trail, bursting into the parking lot—shouting, “We found him, we found him!” Right away I realized that it was one of the Canadians Tom and I had helped orient high on the inclement Franconia Ridge, 3,000 vertical feet above. They must have followed us down and—somehow—*they* had found our subject.

THEY TOLD US THAT OUR HIKER WAS ALIVE. THE PAIR OF CANADIANS HAD split up after they encountered him. One was with him now. They had found him creeping up the snow-splotched slope from the brook toward the Falling Waters Trail, the very trail we just descended. How could we have missed him? We needed to get back up the trail quickly; it would be dark soon. Within minutes, I had strapped our two-piece titanium litter onto my pack, while Tom and about eight teammates divvied up the remaining gear. Along with a dozen NHFG officers, we all headed back up the mountain with a renewed sense of urgency—and for me, a huge feeling of relief.

Nearly 1.6 miles up the Falling Waters Trail, not far from Dry Brook, we found a wet, cold, and lethargic man with bare, freezing feet. He was conscious, but not alert. I took a minute to catch my breath and remove my pack. Arriving teammates assembled the litter, while I assisted the NHFG medic, who was assessing our patient and checking his vital signs. Using trauma shears, I snipped away his water-soaked cotton sweatshirt. His dank skin, now exposed to the air, allowed the moisture, like rising steam, to evaporate from his hefty torso. We placed heat packs inside a sleeping bag, then hypo-wrapped him in a tarp like a burrito to retain heat and secured him to the

litter for the long, rough carryout. Without delay, we needed to get this helpless, hypothermic, and frostbitten man safely down the mountain.

We knew the first half-mile of trail along the brook drainage was steep, wet, and slippery, making the descent risky. Tom and I went down ahead of the litter, equipped with a rope, slings, and carabiners to set up a safety belay line, which we anchored to trees above the first long exposed section where a slip or fall could be disastrous. We clipped the rope into the litter as the carry team squeezed by us, and right away I felt the load tension our belay. We fed out the rope as they progressed, prepared to lock off the static line, should there be a sudden mishap. By radio, we warned the litter team when only 30 feet of rope remained, giving them time to find a safe spot to stop, set the litter down, and rotate out to a fresh team of six carriers, three on each side. Other times, all twenty rescuers flanked the trail and passed hand-over-hand, person-to-person, the 250-plus pound litter down the less precipitous rocky sections. Running mainly on adrenaline, I was reminded how strenuous and demanding rescue operations can be. We were all eager to get our victim down, warmed up, and transported to the hospital by the waiting ambulance. Guided by headlamps, we still had to navigate two frigid brook crossings.

At 8:20 P.M., as our patient was being moved from the litter onto the stretcher and loaded into the ambulance, I asked him, "What happened?" He whispered, "I heard a whistle and went toward it." Obviously, motivated by hearing our calls, he had mustered enough strength to crawl on hands and knees through patches of snow and across the narrow, freezing stream to get to the trail where, just by luck, the two Canadian hikers were descending, not far behind Tom and me.

We later learned at an incident debriefing that on the day following the rescue, Lt. Bogardus and Conservation Officer James Kneeland had gone back up the trail to the location where the man had been found. They backtracked his footsteps to find where he had constructed nests of insulating evergreen bows and burrowed in for three cold lonely days and nights. Strewn around his improvised life-saving den they found remnants of snack food, a small day pack, and a few articles of discarded soaking-wet clothing.

Continuing up the slope, Lt. Bogardus and CO Kneeland followed his barefooted tracks in the snow right to Shining Rock. Remember the corral of tracks and postholes I had observed below the icy face? He had been there! His tracks were proof that he had been there—evidently, he had forced his way through the thick spruce border on the low side, then gravity helped to pull him down into the steep, snow-filled gully below.

I asked myself, *How did I miss his tracks?* If I only had taken more time to “sign cut” that area—search outside the dense evergreen thicket—I would have found his lone track of desperation heading down the gully. At the bottom of one posthole in thigh-deep snow, the officers found his black Velcro-strapped sneaker still wedged deep in place. What a struggle this man must have endured as his predicament unraveled! My failure to thoroughly inspect the area below Shining Rock could have cost this man his life. Checking the outside perimeter of such highly tracked areas can lead to a footprint or a clue, which in this case would have led us right to his isolated dens of survival—and beyond, to our subject, a man in desperate need of help. Surely, he hadn’t intended for his short day hike to become a four-day ordeal—a struggle to stay alive.

In the end, you could say our subject was saved by the whistle, his own determination, and good luck. Sound attraction worked. Our persistent whistle blasts and calling out paid off—attracting him to the trail, where he was found—wet, cold, and unable to walk—by the last passersby of the day.

JAMES MASON, a custom furniture builder, skier, hiker, and Appalachian Trail maintainer, lives in Lyme, New Hampshire, with his wife, Dayle. Jim has served on the Dartmouth Outing Club’s Safety/Risk Management Advisory Committee since it was formed in 1980 and is currently the safety officer of the UVWRT. Learn more at uvwrt.org.

Slowing Down

*A young naturalist lagging behind a group
pulls a stranger into her world*

Elissa Ely



IT HAD BEEN DECADES SINCE I VISITED MOUNT MONADNOCK, THAT forget-me-not of a first mountain for so many New Englanders. Deep thoughts often arise on a leisurely hike in a quiet place. I was looking forward to them.

A little before 9 A.M., the parking lot ranger handed over the trail map. He looked tired, as if he, too, could have used a leisurely hike in a quiet place.

"I ought to let you know," he said, "400 students are coming."

"Good god," I said. "When?"

He looked at his watch.

"Fifteen minutes," he said.

Mount Monadnock: second most-climbed mountain in the world. It would be futile to expect the quiet that led to deep thoughts. There would be no leisurely hike. Instead, there would be a race against time.

In the summer of 2001, Elijah Barrett of New Ipswich, New Hampshire, set a record ascent time up the White Dot Trail in 24 minutes and 44 seconds, timed by a Monadnock Patrol member. Not a service they regularly offer. Monadnock is a small mountain. The White Dot Trail covers slightly less than two miles until it reaches the summit at 3,165 feet, but it's no pushover and, after a certain age (which differs for each of us), the White Dot Trail is no 24-minute-44-second route.

About an hour later, scrambling around corners I had forgotten long ago, I reached the summit. A few travelers sat on boulders, chatting. Hawks circled. Sun shone. The air was indeed quiet. Up here, there was nothing but time. It almost felt leisurely.

But I knew the storm was coming.

It hit as I was hurrying down, near where the White Dot and White Cross Trails converge. A crush of adolescents carrying cell phones, with chaperones carrying Nalgene bottles, rose from below. I receded to a rock slightly off the trail; there was nothing to do except wait them out. Fragments of conversation passed in waves. It was like tuning a CB radio.

"Hey, there's a birch tree. I think it's a birch. I know how to make a fire from a tree. But only if it's a birch tree."

"Anyone got one of those hiking poles? I need four."

"So I couldn't believe what she said to me, and so I said to her . . ."

"Are we there yet?"

What we have to offer each other—maybe all we have—is endless curiosity. Fomes excavatus on a tree. CHRISTINE WOODSIDE

“Are we there yet?”

The radio channels began to grow farther apart. At last, I took up my poles (just two) and started down again. The hurrying was over, but much of the pleasure was, too. Noise and hustle had carried pleasure away. Where was the quiet leisure? Where were the deep thoughts?

Below me, one final student was bringing up the rear. Her head was down and she planted each sneaker with deliberation. It looked like she didn't care at all whether she was there yet.

I gestured her to pass me coming up. She gestured me to pass her going down, and after a lot of gesturing, we met in the middle. It surprised me when she spoke.

“I love mushrooms,” she said. “There are a ton of mushrooms here.”

“Lot of rain this summer,” I said. I hadn't given it any thought until she brought it up, but between the rain and the humidity of the season, this was an excellent time to be a mushroom.

She took a few more deliberate steps.

Then she stopped.

“That's a fake mushroom,” she said. I followed her finger to a large white cap, growing out of a fallen branch on the side of the main path. I bent down. Sure enough. It *seemed* like a mushroom but was in fact some kind of fungus on the bark. It had fooled me. But it hadn't fooled a potential botanist.

“A fake,” she said triumphantly.

“A fake mushroom,” I said. “Amazing.”

We looked at it together. To be accurate, she looked at it with intense interest, and I looked at her the same way. At a certain age—in this case, at *my* age—one has these moments of odd feeling, strangely moved. We were maybe half a century apart in years. The largest part of her life was in front of her, the largest part of mine was behind. Yet here we were, a young teacher and an old student, peering down at a sham in nature, caught briefly together on a forget-me-not of a mountain.

I wondered why she was walking alone, whether she had friends who were similarly mushroom-minded (unlikely), and if it was hard to be an adolescent mycologist bringing up the rear in a solitary way. I suspected she was always bringing up the rear.

A psychiatrist once said that what we have to offer each other—maybe all we have—is endless curiosity. Mine had grown. But she was headed up and I was headed down . . . not just on the trail but, let's face it, in life . . . and she sensibly had no interest in my deep thoughts. Hers were about mushrooms.

Whatever endless curiosity she felt was focused on the ground. With the same deliberation, she turned back to the trail. At a slow pace, one from age and one from interest, we passed each other. It seemed like there should be some end to mark this one-time encounter, but I didn't have quite the words. She did.

"See ya," she said over her shoulder, moving on.

ELISSA ELY is a community psychiatrist from Belmont, Massachusetts.

Quickwater

New England's whitewater canoeing heritage

Rick Spedden



NEW ENGLAND HAS BEEN A REGION OF EARLY ADOPTION AND SIGNIFICANT development in several areas of outdoor recreation, and although skiing is probably the best known and most prominent today, whitewater canoeing is arguably the oldest. The Appalachian Mountain Club has been the focal point for this activity for more than a century. Here I will look at a single era in the long history of an elegant sport. Although technology continues to evolve, current practitioners feel a bond with those who paddled the same rivers at an earlier time. The feelings of the warmth of the sun, the freshness of the cold air, and the excitement of standing on the shore viewing the dancing, dangerous water of a good drop have not changed. Welcome to spring in New England.

IN THE BASEMENT OF MY PARENTS' HOUSE WAS A BOX OF KODACHROME SLIDES.¹ These were photos my late father, H. Rush Spedden, had taken of whitewater canoeing with AMC in New England in 1948. These would have been taken with the same folding Kodak Retina II camera, a model 142 manufactured in the late 1930s, that he had carried as a serviceman in Europe a few years earlier. With a good quality lens and reliable mechanics, this rugged pocket camera produced excellent quality 35 mm photos. These images brought tales of whitewater that I had heard growing up into the clarity and color of a present time. They also happen to capture the rich history of whitewater in New England, the prominence of AMC in the development of the sport, and the transition of the sport as equipment evolved.

My parents met on one of these AMC whitewater trips. Three years later they would marry and follow career opportunities out of the Boston area and away from their whitewater friends. I came to Boston to do graduate work in 1976, took up whitewater canoeing with the Massachusetts Institute of Technology Outing Club, and got involved with AMC the following year. I too had my years paddling with AMC before life took me on paths out of the region. But I left with a view that AMC whitewater heritage is part of the grand flow of history and that the current participants should know that they are an integral part of something classic.

¹ Kodachrome is a Kodak technology for color positive film (slides) developed in 1935.

A paddler in 1948 navigating the Rapid River in New Hampshire in a canvas-covered wood canoe, with a wood paddle to brace against the rock. COURTESY OF RICK SPEDDEN

The tales of Native Americans' skill with canoes on flat water and whitewater are numerous, and although specific acts are preserved in the domain of oral history, the important and lasting contribution of a wide range of canoe styles is well documented. European settlers adopted the practical native designs and joined in the developing legacy. By the late 1800s numerous canoe manufacturers were catering to the recreational boating public in New England.

In the June 1929 issue of *Appalachia*, J. W. Worthington gave a detailed guide to boats, hazards, and techniques in the article, "Quick-Water Canoeing." Canoeing the rapids of New England rivers was by then a well-established sport, and the adventurous members of AMC were at the heart of it. Worthington wrote of kicking the boat at an angle to big waves, bracing the knees against the interior of the canoe, and using the hips to control the lean of the boat. These skills in whitewater are as old as the sport. He called out the greatest hazard of flipping as the eddy line. (No one today with such advanced equipment would fall victim to such an old hazard. That would be embarrassing.)

An eddy is a whirlpool created on the downstream side of a rock or obstruction, often at the shoreline. The "eddy line" is the point where currents going in two different directions meet. In a whitewater boat, you want to lean downstream when cross (perpendicular) to the current or else you will quickly change from a boater to a swimmer. What constitutes downstream changes as you cross the eddy line. Most paddlers then used open boats (canoes). But some had started to adopt the closed boat (kayak) of the day, the faltboat (or fold-boat). The faltboat had a canvas cover over a wood skeleton frame, which could be folded up and put in the trunk of a car. As with a kayak, the faltboat used a double-bladed paddle and sometimes a spray skirt.

One canoeing technique in extensive use at the time that has fallen by the wayside is poling. A long pole carried in the boat is used against the bottom of the river to hold the boat in position and maneuver it down steep drops; the advent of more indestructible boats eliminated the need for poling, though in each generation someone inevitably revives the old style if only for a drop or two.

The first published guide to New England whitewater came out in 1935: *Quick-Water and Smooth: A Canoeist's Guide to New England Rivers*.² This book was the bible for New England boaters for the next 30 years, until the

² John C. Phillips and Tomas C. Cabot, *Quick-Water and Smooth, A Canoeist's Guide to New England Rivers* (Brattleboro: Stephen Daye Press, 1935).

publication of the *A.M.C. New England Canoeing Guide* in 1965,³ which credited and followed much of the model of the earlier work. The publisher of *Quick-Water and Smooth* was Stephen Daye Press of Brattleboro, which operated from 1932 until 1942. After 1942, you had to know someone who had a copy or be lucky in a used bookstore. The 1935 guide included history, gear, technique, river descriptions, and a foldout map in the back. My mother presented me with her well-worn copy of *Quick-Water and Smooth* when I started to paddle in New England, and it remains the most cherished part of my paddling library.

The 1935 guide's foldout map is significant, first because of its scope: It covers 164 rivers and streams in New England. But more important, on the map the authors rate the rivers of New England from 1 to 4.

If you look at the generally accepted ratings of the various New England rivers today, those early Phillips and Cabot ratings still hold, though the description of what constitutes a given class has gotten a lot more verbose. It is apparent that Phillips and Cabot may have done their "rating system" simply as an abbreviation to fit on their map of New England because these numbers do not show up anywhere in the book other than on the map. The American White Water Affiliation (AWWA, later AW) founded almost two decades later (in 1954) is credited with creating the American River Difficulty Rating that became the basis for the International River Difficulty Rating. What the AWWA did was codify a standard, extend the upper range, add helpful detail and get it into use in other regions. The 1965 AMC guide included the 1956 AWWA River Rating table, but ratings do not appear in the text, and the 1965 foldout maps almost exclusively follow the 1935 *Quick-Water and Smooth* designations. Whether Phillips and Cabot had the first published use of a river rating system stands as a possibility until someone comes forward with an earlier system, though any earlier system would need to achieve the standard of being published and in broad use. Those who developed the AWWA rating system included New England boaters who would have certainly used *Quick-Water and Smooth* extensively.

The 1965 AMC guide was a much-needed update. The 1935 guide had one foldout map; the 1965 guide divided it into three, but that seems to be more to aid in ease of reading than need to add detail. Phillips and Cabot laid important groundwork in their 1935 map that did not change much in the 1965 guide.

³ Appalachian Mountain Club Books, *A.M.C. New England Canoeing Guide: A Guide to the Canoeable Waterways of New England* (Boston: Appalachian Mountain Club, 1965).

In their 1935 book, Phillips and Cabot expressed views that could easily be mistaken for more recent thinking: “A great many of our best rivers have long ago been ruined by dams; and the latest types of power dams have created larger and uglier backwaters than the old mill-dams. Let us hope that the development of hydroelectric power has nearly run its course.”

The much-improved state of New England rivers today results partly from the early vocalization of these issues by these recreational boaters. In the late 1970s there was still an outhouse overhanging the bank of the Quaboag River that obviously afforded any user a clear view of the river about eight feet below. Fortunately from a boater’s point of view, it may no longer have been in use. Around that same time climbers spending the night in the high hut on the Matterhorn were afforded a spectacular view down a steep couloir on the north face through the holes of the outbuilding there. Times change.

For those familiar with the New England rivers, *Quick-Water and Smooth* is a fun read because the authors were knowledgeable about the history of the area, described the current status of roads and developments in the area, and were prescient in their views of the future. Here is just part of the description



Top, the map from the 1935 book *Quick-Water and Smooth*. Bottom, the map from the 1965 A.M.C. *New England Canoeing Guide*. The 1965 guide held to the river class designations first presented in the 1935 guide. RICK SPEDDEN

from the book of one well-known river, the Pemigewasset River in New Hampshire:

The upper part of the East Branch can only be reached by the logging railroad of the Parker Young Company. This is a very steep river and remains, as far as we know, as a stunt yet to be attempted. Much of it might be done by experts just after the spring flood has subsided, but it must be both difficult and dangerous.

Around North Woodstock the banks of the main river are very attractive and greatly ruined by roadside camps and other so-called improvements. The river itself is badly polluted below the mouth of the northeast branch from the pulp mills at Lincoln and this pollution is continuous all the way to Livermore Falls. The valley, however, is very beautiful and if the pollution is ever corrected, this river could resume its former status as a fine trout stream.

As those familiar with the area know, this section runs by the Loon Mountain ski area along the Kancamagus Highway. The “Kanc” was completed as a dirt road in 1959, facilitating access to the East Branch. Since the 1935 map only shows the rivers and main towns, it could easily be mistaken for a current map.

The pulp mill in Lincoln shut down in 1980, and the river returned to “its former status as a fine trout stream.” The logging railroad running along the East Branch shut down in 1947, but the rail grade is familiar to many hikers and some boaters today as the wide flat path running up the North Fork of the East Branch into the Pemigewasset Wilderness. I led a canoe and kayak



The author's parents, Betty Howard and H. Rush Spedden, navigate the Quaboag River in the late 1940s. COURTESY OF RICK SPEDDEN

trip up the North Fork in the early 1980s, and at that point the wood rail ties of the old railroad facilitated dragging in the open boats over the first mile.

Quick-Water and Smooth and the subsequent early AMC guides are interesting from a history of whitewater perspective because they document the evolution of equipment and technique, which had a direct impact on what was considered “boatable.” In the 1935 guide, the Swift River in New Hampshire was listed as “Not Recommended,” “Mostly Rapid,” and had a unique one-liner in the description section in the table summary of rivers: “Too steep.” In the 1965 guide the Swift River was handled as a more reasonable endeavor, but the staircase section was deemed “un-runnable.”

On specific drops, sometimes allowance must be made for the fact that the character of the river itself may have changed. In the early 1980s a section of the Swift River in New Hampshire, popularly referred to as the Gorge, dramatically changed as a result of a high-water event. The boulders in the river shifted, providing a straightforward channel and altering the level of risk of



Canoeists pack up camp for another day of whitewater exploration in 1948. The post-World War II economic expansion gave them time and money for this kind of activity.

COURTESY OF RICK SPEDDEN

one of the classic hazards (charms) of the drop: a large swept-over ledge dropping into a hole immediately above a huge stopper boulder. This unique combination created a space just large enough to drop a canoe in broadside with predictable results.

This history sets the stage for the box of photos from the 1948 AMC whitewater season, which is at a point almost halfway between the 1935 and the 1965 guidebooks. The country was in the post–World War II economic expansion. Many of the AMC boaters were raised during the Great Depression and came to adulthood during the war years. This generation had seen difficult years (my father’s family was hit hard by the Depression and my mother lost her brother, a night fighter pilot in the Pacific, during the war). But now the sun was shining and the future was theirs to invent.

In 1948, many of the secondary roads winding through New England would look familiar to boaters of today. At that time a lot of various types of mills were still operating along the rivers. By then the mills had evolved to relying on electric power rather than the hydraulic/mechanical power that drew them to the river locations initially.

Between 1948 and now, the cars, attire, hairstyles, and equipment have evolved, though in the photos my mother and others can be clearly seen wearing denim jeans. The people were an eclectic mix of staid and steady contributors to society during the week and skilled outdoor adventurers on the weekend.

In the early 1980s I was with an AMC Boston Chapter trip of mostly open boaters waiting for the dam release on the Indian River in the Adirondacks, which would flush us down a remote and Class IV section of the Hudson River. The group included a friend of mine who was the principal of a school in the Boston area. Also waiting were the clientele of one of the area’s rafting companies. The inexperienced, nervous rafters were staring at our group of fringe element adrenalin junkies of dubious judgment who were getting ready to run these rapids in canoes. One of the rafters looked at my friend the principal and exclaimed in shock, “Dr. Griffith!” It was the parent of one of his students.

The spirit of adventure seems to be a timeless trait, and I have to believe that someone today would be very comfortable socializing on the riverbank with the very dynamic people on the 1948 trip.

The latest and greatest in equipment was the Grumman aluminum canoe. In early 1945 Grumman aircraft company started producing canoes as a post-war business opportunity for its aluminum fabrication skills—now that the demand for Hellcat carrier-based fighter aircraft had suddenly ended.

Grumman offered canoe models from 13 feet to 22 feet. In addition to the standard flatwater keel, the company offered a shallow draft or “shoe keel” (bang plate). The standard tracking type keel would not last long in whitewater, and the diminished tracking of a shoe keel increased the turning ability in whitewater. The hull shape of the Grumman developed a broad fan base in the boating community—the bow just seemed to float in waves and a skilled draw⁴ by the bow-person could “lift the bow up and move it over by two feet” (as my father used to describe the effectiveness of my mother’s draw when she was in the bow).

The Grumman boats have enough flotation in compartments fore and aft to float a swamped boat gunwales-awash in flat water, similar to a canvas-covered wood canoe. Grumman also offered the boats in a lightweight aluminum, great for portaging but too thin for the rock-banging duty of whitewater.

The Grumman canoes were a significant advancement over the wood and canvas boats; rock dents can be banged out with a hammer or a rock and log. The drawback of aluminum is that it tends to be bit “sticky”: The boats don’t slide off or over granite rocks well. In fast-moving water this can be problematic when one point on the hull anchors itself to the upstream side of a stationary object and the rest of the boat rapidly swings with the current, usually dipping the upstream gunwale in the process. If a Grumman canoe partially wraps around a rock, a downed limb can be used to pry it off (or a more prepared group uses some form of block and tackle or winch system); when the boat more completely “wraps” around the river boulder, it can be retrieved in a flattened form in the summer after the water level has dropped.

The Grumman canoes tend to be a bit loud. The hull produces a resounding boom when struck with or striking a solid object. Everyone knows when you tag a rock on a river. On a quiet paddle on a still early morning lake, any misstep in paddling style where the paddle hits the boat is announced across the breadth and length of the lake. The perennial appeal of the Grumman boats is that they last forever with little or no maintenance.

In the late 1940s and into the 1950s, canvas-covered wood canoes remained in use since they were relatively cheap, and AMC had a legacy supply. Canvas-covered wood canoes were developed in the 1880s, displacing the earlier birch bark canoes.⁵ Tears of canvas and broken canoe ribs can be repaired in camp

⁴A draw is reaching the paddle straight out on either side and pulling it in toward the boat firmly. It’s used to steer boats from the bow in whitewater conditions.

⁵The Wooden Canoe Heritage Association is an excellent resource on the subject.

with marine glue, canvas, a reinforcing strip of wood or metal, and some nails. But if a wood canoe wraps around a rock, the hull splinters, the canvas tears, and the boat breaks in two (useful as part of a good boating story but not much else).

Just as aluminum boats come in different weights of aluminum, canvas-covered wood canoes were available in different weights of canvas. The trade-off was the same: strength versus weight. No extra floatation, no wet suits (much less dry suits), no life jackets, and no helmets; these were adventurous people.

The 1965 guide gave credit to the AMC Boating Committee, which had prepared the new guide. That group included some of my parents' boating friends from the late 1940s: Marjorie Hurd and Fred and Mary Jane Sawyer.

Marjorie Hurd was a legend. She was an avid mountaineer and a skilled boater. Born in 1886, she went to Radcliffe College and then on to do graduate work, eventually becoming a lawyer. She was a member of the Massachusetts bar and spent many years working with the Legal Aid Society. Her brother, John C. Hurd, was one of the credited contributors to the original 1935 *Quick-Water and Smooth* guide. Both he and Marjorie climbed in the White Mountains, the Alps, and the Rockies. Extremely active in AMC, Marjorie Hurd served on numerous committees, was conservation chair, and served as vice president in 1947, and was editor of *Appalachia* from 1941 to 1946 and from 1962 to 1965. Each generation of AMC boaters includes a few personalities that define that era. Marjorie Hurd was one of those legendary figures.

The nature of the adventurous souls who seek out the New England whitewater today is no different than the nature of those from 100 years ago. It is always important to remember that these are the good old days, and the people you boat or climb with today are classics of this time, as are you.

RICK SPEDDEN led many trips on many rivers for AMC in the late 1970s and early 1980s, along with his wife, Janet. When the rivers aren't running, you can find them hiking, climbing, biking, sailing, skiing, skating, and flying.

from Mōnadenok

The living mountain that is Mount Monadnock has a long history of people and artists who have engaged with it. Poet and editor David Crews is currently at work on an extended lyric poem that responds to and in a manner revises Emerson's 1847 poem Monadnoc, updating the poem with current themes, form, and focus. Like Emerson's poem, Crews's poem will have exactly 427 lines. What follows is an excerpt from the introduction to his project, and then part of the poem's opening.

It is not the tallest mountain. It does not record the coldest temperatures, nor windspeeds of the highest degree. For those are the oft-talked-of mountains—mountains climbed, summited, ones that give allure. Mountains that become songs, mountain songs. Monadnock's peak was burned by colonial settlers, multiple times. The trails, it has been said, have been carved by more bootsteps than mountains around the world. From an ecological standpoint some might call it somewhat of a modern catastrophe. What remains: spruce, mountain ash, cotton sedge, sheep laurel, rhodora, mountain sandwort, and cranberry. Monadnock sits nestled between the Connecticut and Merrimack River watersheds, in the heart of western Abenaki ancestral lands. Its bedrock holds a history. The schist and quartzite have aged some four-hundred million years and extend the Devonian Littleton Formation of the Appalachian range south. *Aden*, mountain. *Kajigapskw*, steep rock. Rock that stands alone. *Mōnadenok*—Silver mountain, 3,165 feet above the sea.

The three italicized words are from *New Familiar Abenakis and English Dialogues* written and translated by Chief Sozap Lolô, Abenakis, alias Jos. Laurent (St. Francis, Québec, 1884).

Δ

Ice crystals form
on shrubs above treeline
and the laurel
look like bleached sea
sponge
under an ocean
of dense gray cloud
one might think
the frozen mountain sleeps

Δ

Trees, they say
grow from thin air
filter molecules
of carbon, oxygen

usnea, like hair

the bedrock split
clefted, once a crucible
under an ancient sea

in crevice and jag
bog and tarn

dormant root below
yellow, gold
lingering snow

David Crews

DAVID CREWS is a writer and editor currently residing in southern Vermont, the ancestral land of Mohican and Abenaki peoples. He cares for work that engages a reconnection to land and place, wilderness, preservation, and nonviolence.

Letters

Cell Phones

I have hiked all of the 4,000-footers. I am a trailhead steward for the White Mountain National Forest and spend most of my time on the Champney Falls Trail. I volunteer as an information volunteer for the Appalachian Mountain Club at the Highland Center and in the huts. I talk to hikers about cell phone usage almost as frequently as about gear and trail choices.

The idea of self-reliant adventure, solitude, and being in the wild was something I looked forward to each year as I embarked on that year's section of the Appalachian Trail. Nothing was more upsetting to me than to hear other hikers listening to loud music or making noisy phone calls. The jolt of these moments ruined my walk in the woods for many minutes and really hit my soul. As a steward, I am well aware of the increasing dependency that especially younger or novice hikers have on cell phones. The quick fix or assistance mentality takes away from the whole reason for heading into the forest. As a longtime educator, I have observed that the characteristics of grit, overcoming challenges, learning from mistakes, and perseverance have been waning over the past 30 years.

However: I know how to change a tire on my car, but I still join AAA each year to counter that unforeseen circumstance that I can't solve on my own. I recently turned 70, and I take a cell phone with me on every hike or bike ride. As Sandy Stott has noted, I am in the shoulder season of my life, and the unexpected can happen at any time. Some situations do not fall into the self-reliant or self-rescue category. As many note every hike is a different hike with different trails, weather conditions, or times. Ty Gagne has written that because Kate Matrosova was an experienced hiker, that may have actually contributed to her poor decision making and overconfidence. Just because you have climbed tougher mountains doesn't mean you can climb less challenging ones.

My point here relates to Stephen Kurczy's wonderful experience with his son, Manny ("Do Cell Phones Belong in the Mountains?" Summer/Fall 2022). What a special moment for both of them. They obviously went on these treks well-prepared and were successful. But previous results don't guarantee future results. It may be a 1 percent occurrence, but what would they have done if, with no cell phone, an unexpected severe accident happened? Having a cell phone may not have helped because of lack of service.

Yet service might have been available, and they would have benefited from this.

Taking a cell phone on hikes is a form of insurance. Having it doesn't mean you have to use it. The key, as Kurczy stated well, is educating the public about the proper and respectful usage of this technology. I store my cell phone deep inside my pack, below my ten essentials.

—Chris Elliot
Center Ossipee, New Hampshire

Thanks to Stephen Kurczy for writing about his travels with Manny and postulating on the need for cell phones in the wilderness. I found the topic thought provoking and meaningful, with societies' overreliance on tech ubiquitous no matter where you go.

I enjoy cycling and hiking in Connecticut's northwest corner, and admittedly I typically have my phone on me. In a couple of weeks my two sons and I (a little older than Manny: 21 and 25 years old) will be hiking the Presidential Traverse from Appalachia [a trailhead on Route 2 in Randolph] south. This will be my seventh year of the past eight heading to the White Mountains, and third traverse. You've convinced me to leave the device behind and to truly become untethered. The challenge will be if the boys will agree to the idea as well.

Regardless of their decision, I look forward to intentionally turning off more often and enjoying nature for nature's sake, without the reliance on this little rectangular device that consumes too much of my attention already.

—Richard M. Portelance
New Milford, Connecticut

Most people are lazy and as trends waver, so shall the cell, whether it be enough apps misguiding them and the digital social backlash shutting them down, or hiking just becomes too much work.

There are trails here in Massachusetts that have signs stating, "Pass at own risk," and, "No cell service beyond this point." There was one sign on a trail near the New Hampshire–Vermont line that read something to the effect of, *If you go beyond this sign, please note you are past the trail's halfway point and a long way from your car. 911 will not rescue you, don't bother trying to call because there's no cell service anyway.* The sign took up a good five feet of vertical tree.

Our party chuckled at the sign, but in truth, on our day section hike we all had phones.

So in conclusion, I suggest the wonderful people like [New Hampshire Fish and Game Lieutenant] Jim Kneeland and [U.S. Forest Service Wilderness Manager] John Marunowski need to post some signs and stop answering the phone.

—*Karissa Moore*
Phillipston, Massachusetts

Hikers with ALS Found Connection and Support

Shortly after the Summer/Fall 2021 issue arrived, I was reading it one morning while I waited for my wife to get me out of bed, washed, and dressed, all activities for which I need a caregiver because I was diagnosed with amyotrophic lateral sclerosis (ALS) in August 2017. Upon reaching page 34, I found an article written by Rachel Curtis (“Preparing: A Wrong Turn, a Dangerous River, and an Absent Partner”).

“Gee, I know a Rachel Curtis, but I’m sure it can’t be the same person,” I thought to myself. But then I read the first paragraph and I flinched.

I knew Scott.

Scott was the first person I ever met with ALS. I was introduced to him by someone who thought that we would connect beyond our ALS diagnoses. He was right; Scott and I shared many interests, including hiking, and we both had trekked in Nepal, so we met regularly for walks in fall 2018, while we were both still ambulatory. Our meetings were less frequent in 2019 as I became consumed with my own ALS challenges, but we maintained contact until he died that November. And as with the guidance he provided Rachel, he provided guidance to many others, including me, on how to navigate life with ALS.

Finding one’s way through ALS means learning to adjust every day. It also helps to learn acceptance of the things one can no longer do. We spent the winter holidays of 2018 with family in New Hampshire. I could no longer cross-country ski with the rest of the family, but my brother-in-law insisted that we find a hike one morning that I might be able to do. We stopped by Pinkham Notch Visitor Center, and the staff suggested the Nineteen-Mile Brook Trail. We drove up the road to the trailhead, and a dozen of us slowly started up the trail, my two youngest nephews constantly spotting me against slips and falls as I navigated with my hiking poles. I made it about one

quarter-mile up the trail before I decided that I had to turn back to be within my margin of safety. I knew at that moment that this was my last hike. As a lifelong hiker, this was a profound sense of loss, but I had to accept it, just as I have had to accept every loss for the last five years.

I miss Scott. And Rachel's piece was a reminder of how special he was to those who knew him. Rachel kindly continues to stay in touch, occasionally meeting up with my wife to provide her the same kind of guidance that Scott once provided to Rachel.

—Bruce Rosenblum
Somerville, Massachusetts

Misinformation in Apps and Online

You are to be commended in reviewing AllTrails and the other apps used by hikers (Books and Media, Winter/Spring 2022). These discussions bring into focus the almost frightening amount of hiking misinformation now prevalent on the internet and in apps used by hikers.

I ran into the misinformation problem when I was maintaining the Metacomet-Monadnock Trail in New Hampshire. The description of how to climb Gap Mountain in Troy, New Hampshire, provided in a popular hiking app had serious errors. The app provided a map that showed a public road running through private property where the road was not public and the property owner adamantly did not want hikers crossing his property. In addition, the app gave the suggested starting point for a climb of the mountain at a point that required crossing posted land and, if used, would have added well over a mile to a climb of the mountain. I had to post a warning sign at that entry point pointing to the correct access point to the mountain.

Thus the misinformation provided by trail apps might not only increase the number of unnecessary rescues of stranded hikers, but also put a burden on trail stewards who must spend significant time and effort trying to correct casually created errors in hiking apps.

The discussions of trail apps did not mention the large number of rogue web pages and blogs created by hikers that describe their hiking experiences on various trails. Although most of these descriptions are well meaning, there are many discrepancies in the information they provide. As an example, each hiker has his or her own idea of the difficulty of a particular hike.

Although it is difficult to see how to combat the promulgation and use of erroneous or incomplete trail information, I would suggest that some

organization such as the Appalachian Mountain Club bring together the creators of commercial trail use apps and individuals responsible for the stewardship of actual trails. One hopes the result of such a meeting would be a mutually acceptable plan for reducing the trail misinformation on the internet and related services.

—*Frank Bequaert*
Keene, New Hampshire

ANNOUNCING THE NEXT WATERMAN FUND ESSAY CONTEST

Since 2008, the journal has teamed with the Waterman Fund in our mutual mission to encourage thoughtful writing about wilderness themes by emerging writers.

Essays this year should be about a writer's experience with the tangible effects of climate change in the wilderness. How are melting glaciers, loose rocks, mush-like avalanches, heavy rains, or devastating heat waves affecting wilderness trips and how people understand wild areas? How about our relation to flora and fauna and our human need for wildness?

We define emerging writers as those who have not been published in a national outlet or written a book or self-published one on the topic of their submission. Essays are due March 1, 2023. See watermanfund.org for details or email *Appalachia* Editor-in-Chief Christine Woodside at chris@chriswoodside.com.

Pileated Woodpecker, Audubon Plate CXI

There can be joy after the first frost,
like the drunk sent by raccoon grapes
and the air now thinner

so our calls lift out of this hollow

and into the next,
which could be a metaphor for death,

yet,

because of all the trees we've burrowed,
slept in the chests we've drilled,

we know this death will come to us
on a south-facing slope
with all the shadows
we've ever sent

now dried
on grape vines.

Noah Davis

NOAH DAVIS's poetry collection *Of This River* was selected by George Ella Lyon for the 2019 Wheelbarrow Emerging Poet Book Prize from Michigan State University's Center for Poetry. Davis's poems and prose have appeared in *The Sun*, *Southern Humanities Review*, *Best New Poets*, *Orion*, *The Year's Best Sports Writing*, *North American Review*, and *River Teeth*. Davis earned an MFA from Indiana University and now lives with his wife, Nikea, in Missoula, Montana.

Accidents

*Analysis from the White Mountains of
New Hampshire and occasionally elsewhere*

Hiking with Yourselfs

Last November, while getting ready for some time on Mount Cardigan's Skyland ridge, I got to thinking about which self I was packing for. Like many of us, I leave a trailhead with varied possibilities and hopes, and those aims are often evident in what I carry. On this day, I was stuffing trail bars, layers, my headlamp (doubled), and so forth into my trail-running vest. I'd taken a few minutes to glass the mountain's ledges with my binoculars, and I'd caught some winking from ice in spots; in went the microspikes. When strapped on, the vest gave me a grizzly-like hump between my shoulder blades, but it rode easily, lightly. Like nothing at all . . . almost . . . I thought to myself as I set out.

That self was complicated, however, by a second self. He had read the trail map, packed as I had, and was already a mile in, nearing the junction of Woodland Trail and Clark Trail that would determine how much ridge I would travel that day. We—he and I—wouldn't have looked much different to a casual observer had we been standing side by side, but I was acutely aware of what separated us. The me out in front—let's call him me-1—was five years younger and moving at pace (it might, with imagination, even be called running); the me setting out from the trailhead—logically, me-2—settled now into a stride that only a boulder would call speedy. Both of us were broadly happy. Mountains will do that. But which of us would determine the hike?

In this introduction to thinking about incidents and accidents, I am not trying to be difficult. I am suggesting focusing again on the seat of many accidents—the mind. My concern here is how clearly we recognize who we are on a given day. In my example, the slightly younger me-1 had put in the same 20 to 30 miles per week of foot-time as me-2, but those miles had been largely run. Me-2 had walked the bulk of his last week's 25. Through whose eyes was I seeing my mountain day?

A cold front bearing possible snow squalls was forecast to move in later in the day. Going left on the Woodland Trail at the Clark junction would stretch

the day by four-plus miles and lengthen its ridgetop time by an hour-plus. There's a lot to like about both prospects. But me-2 couldn't run uphill for long, even if necessary; recent workouts said that the physical chops for that just weren't there. So, with a weather-shift nearing, the only right call for the day was the shorter walk, which also featured a bailout if needed. Not a tough call, it turned out.

But now, I'm lying. It was a tough call, because me-1 was (and is) alive in my mind and even, for short bursts, in my engine and legs. *C'mon*, he might (did) say, *we can still do this*. And that prod, plus the familiar excitement of ridge-racing weather, might have sent me left and long at the fork.

In this instance, I behaved as if I've matured; me-2's mountain day was very fine, and both of me reveled in the mild windburn I brought home.

This multiplicity of selves is no surprise to the fit and active. And I've simplified the dilemma by citing only two selves close in age and capability. But sometimes, when all our selves get together to consider the uphill before them, the crowd noise rises to rumble; memory-selves can drown out the small voice of me-now. How we respond in this moment can often determine what happens with and to us as a mountain day unfolds.

—Sandy Stott
Accidents Editor

Abbreviations in the Accidents Report

The full name of these organizations and titles is introduced the first time each appears, but because this department includes many stories in which the abbreviations appear, this list can help keep the acronyms straight.

Androscoggin Valley Search and Rescue: AVSAR

Conservation Officer: CO

Dartmouth-Hitchcock Advanced Response Team: DHART

Mountain Rescue Service: MRS

New Hampshire Army National Guard: NHANG

New Hampshire Fish and Game: NHFG

Pemigewasset Valley Search and Rescue: PVSAR

Inside Out

We've paired the two typical rescues that follow as a reminder of the ways in which our mountains can elicit trouble in the inexperienced. And, for those with many years and miles of experience in the White Mountains, as further reminder that either of these two emergencies could be right around the bend in the trail ahead. These rescues serve then as reminders of rescuers' usual work and mild prods for each of us, who, sooner or later, is likely to be one of the four Samaritans who appear in the second story.

A few weeks before my mountain day described earlier, on November 6, Christina P., age 23, and her friend Stephen Z. set out to climb to the Franconia Ridge via the Falling Waters Trail. On nearby and taller Mount Washington, the temperature averaged a little cooler than normal at 21 degrees Fahrenheit, with (for the mountain) light winds around 30 MPH; the sun shone all day.

Around 2:30 P.M. New Hampshire Fish and Game Lt. Jim Kneeland got a call from New Hampshire State Police asking that he contact Stephen. Kneeland's call went through, and he learned that Christina's legs had given out after the pair reached the summit of Little Haystack Mountain. At that point, they'd hydrated and eaten to try to regain energy, but Christina was now shaking and felt unable to move. Kneeland tried to coach them toward a gradual descent of the Falling Waters Trail, but the pair felt that was beyond them; Kneeland then called fellow conservation officers and Pemigewasset Valley Search and Rescue for assistance.

A little before 3 P.M., Stephen called again to say that they would begin to work their way down. Kneeland began checking in with them every 15 minutes. During one call, he learned that Christina was also feeling chest pains, an ongoing complication they'd not mentioned before. By 4 P.M., the pair had reached Shining Rock, less than half a mile from the summit. The first rescuers arrived at 4:45 P.M., and their assessment was that Christina could keep walking down with assistance. As the group worked its way down, Christina regained some of her strength, and at 6:40 P.M. the whole party reached the trailhead.

Comment: This straightforward incident offers a simple reminder of two weathers that each of us needs consider in the mountains. On that November day, the external weather promised an excellent, late fall day. But Christina carried within her a chronic condition that makes the long, heavy work of climbing difficult. The Falling Waters Trail is also one of the more difficult climbs in the Whites. Her exhaustion atop Little Haystack, which she and

Stephen tried to address by rehydrating and refueling, made the return trip look impossible.

At that point her body was also sending other worrisome signals: chest pains, shaking, and deep fatigue. At such a time, worry can overwhelm. What began to shift the balance back to where Christina could function was first the voice and then the arrival of trained rescuers, who could assess her situation and then assist her descent. That Christina gained some momentum as her assisted descent went on is one of search and rescue's common stories.

—Sandy Stott, *Accidents Editor*, and
Scott Berkley, *Assistant Accidents Editor*

Getting Down

Around 4:30 P.M. on February 20, NHFG got a call about a hiker having problems on her descent of the Liberty Spring Trail. NHFG CO Jonathan Demler was nearby in Woodstock wrapping up his day, and he responded to the call. On his way there, Demler heard from Lt. Kneeland that the hiker felt dizzy and unable to continue her descent. Demler rode his snowmobile to the trailhead and started hiking up a little before 5:30 P.M.

A half-hour later, Demler came upon a group of six hikers descending; one was the caller, Aleeza S., age 26. Aleeza was accompanied by her boyfriend, Suryanarayan S., and four good Samaritans, who said they had found Aleeza prone on the trail a little earlier. Aleeza and her friend were moving steadily at this point. Demler was soon joined by two more COs and several rescuers from PVSAR.

After ascertaining that Aleeza felt she could continue, Demler told the Samaritans that they could continue their hike and leave the rest to the rescuers. After providing the pair with headlamps, the rescue party descended, reaching the parking area around 7 P.M. There, Demler interviewed Aleeza and Suryanarayan and two other friends who had begun the day with them but split away during the hike.

The group had begun at 10 A.M. with the aim of climbing Mount Liberty but found the going slow. Somewhere short of the summit, the hikers, now split into pairs, turned around. A mile or so from the base, Aleeza felt dizzy and unable to go on, which was when she and Suryanarayan called. Demler learned that Aleeza had no hiking experience and that she had not eaten that day until the Samaritans gave her some electrolytes and encouragement. Nor were she and Suryanarayan carrying extra clothing or the usual

hiking essentials. In his report, Demler found the pair unprepared and recommended that they be billed for the rescue.

Comment: The 20th was a usual winter day in the Whites with some sunshine and clouds; up high on Washington's summit, trace amounts of snow fell, and the temperature averaged 1 degree, with the air hurried along by winds in the mid-60s. So, even at 3,000 feet above sea level on the Liberty Spring Trail, it would have felt like . . . winter. To set out to climb above treeline, with little equipment or experience, is a spectacular, albeit common, misreading of both place and self. The hikers' only genuflection to terrain and season lay in the microspikes they used. To make such an attempt without understanding the basic work of fueling, hydrating, and thereby staying warm and functional on the trail redoubles the jeopardy.

Not long ago, in a conversation about rescues in the Whites, a NHFG CO said, "There's no counting the number of unofficial rescues that happen up there. As a group, hikers are helpful, often eager to share what they know, and, if necessary, what they carry. Without this general attitude, we'd have hundreds more rescues to perform."

—SS and SB

Slippage

On February 21, Laura C., age 52, met four other hikers for a Presidents' Day hike on the Kinsman Range. The five had made contact via Facebook. The day was wintry, with the Mount Washington Observatory recording an average temperature of 1 and winds in the 30-MPH range. In the late morning, as the group reached the 3,300-foot level, more than a mile beyond Carter Notch Hut on the Fishin' Jimmy Trail, they started up a steep, icy section. As she navigated this ground, Laura slipped and fell ten to fifteen feet. The fall wedged her left leg under her awkwardly, and when she stopped she felt immediate, severe pain. Her four companions rallied to her, trying to assess her injury, and secure her against a farther fall. They got a pad under her for insulation and used ropes to keep her in place.

The group also used this time to see if Laura's pain would diminish and they might begin to self-rescue, but her pain kept on. A little before noon, they called for help. NHFG Lt. Kneeland returned their call, and after learning that Laura's pain was still strong and her leg muscles were spasming, he began organizing a rescue, summoning NHFG COs and volunteers from PVSAR. The rescuers got underway between 1 and 1:30 P.M., with first rescuers arriving at 2:40 P.M.

Laura's pain was still significant, and rescuers had to cut several trees to fashion a flat spot where she could be assessed and, finally, placed in a Sked litter (which is made of plastic), whose flexibility allows it to be worked and roped down and around obstacles in steep, narrow trails. The group started down at 4 P.M., using belays to lower the Sked through steep sections, and finally reached the trailhead parking area and ambulance at 6:20 P.M. There, Kneeland learned the story of Laura's fall and noted that she was well-equipped for her hike and had been wearing microspikes when she fell. In a follow-up call two days later, Kneeland learned that Laura had broken her leg during her fall.

Comment: Laura's group was well prepared for their day on the Kinsmans, and they responded well to her fall, first coming to her aid and securing her against another fall, then, waiting through the initial surge of injury pain and the group adrenaline that comes with an accident. When it was clear Laura's accident was serious, they called for help.

What draws the eye and mind, when we look at slips and falls, is the footwear. Kneeland points out that Laura was wearing boots with microspikes attached and that her accident happened on a "steep, icy section of the trail." That Laura needed to be secured by her group to avoid farther falling points to a tough stretch; that the rescuers had to cut away some trees to fashion a platform to help Laura underlines that assessment. Which brings us to a consideration of traction on slippery slopes.

Microspikes, like any good invention, arrived to fulfill a need in 2007: hardpacked or icy slopes ask for traction beyond boot soles. Crampons, of course, have offered that traction pretty much since climbing encountered winter. But crampons, with the prominent sharp points and rigidity, often feel like overkill on 15-degree slopes, and putting on and taking off crampons takes time and care, both sometimes in short supply on a frigid day. Enter the microspike—stubby traction provided by the spikes and chains that are attached to a rubberized footprint that pulls on fairly easily. Prepared hikers and climbers could still carry crampons, but now those could be reserved for the steep stuff. All good.

Enter the Whites (and many other ranges): Marquee locations such as Tuckerman Ravine make your choosing of traction relatively easy. On lower-angled approaches, use microspikes; on higher-angled terrain such as headwalls, use crampons. All good. But the Whites have wrinkles to toss at us in shape of sudden, sharp ups or downs on generally moderate climbs. The Kinsmans and many other peaks offer just that. Kneeland's description and



Microspikes, right, are short spikes attached to a flexible material that wraps around the boot. Crampons provide traction on steeper, icy slopes. They are sharper, bigger, and longer and attach to boots by various systems. SANDY STOTT

my experiences on the Fishin' Jimmy Trail point to just such a sharp “up” where Laura fell. Whether she had crampons and didn't switch to them isn't apparent in the official report, but the useful point remains either way: Pitches where the slope rises over 25 degrees are risky in microspikes.

As we climb, we lean into the slope and our weight concentrates toward the front of the foot; also, our foot's force begins to stretch the rubberized harness that keeps the spikes attached to our boots. Fewer spikes bite into the slippery surface; those that do are stubby and don't penetrate; slipping, especially on hard ice, becomes easy. Once we fall, the collision is what stops us.

All in all, microspikes and other such traction devices have made winter hiking safer and more convenient. Portable and relatively easy to put on, they help us avoid slippage on moderate slopes. But, when the slope's angle rises and the ice grows hard, we still need crampons and training in their use for better safety, even if the stretch of trail ahead is only 50 yards long.

—SS

Too Early in the Sun

A sporadic winter of snow and thaw left many Northeastern skiers hoping that April would bring late-season snow showers in the high elevations. Others, with eyes trained on the steep descents in the Presidential Range, hoped for the warm direct-sun days and below-freezing nights that make skiing steep lines possible. Morning sun thawing a frozen slope creates a top layer of so-called corn snow that a ski edge can dig into and find purchase, even on improbably steep angles. But those hoping for a longer winter got their wish before the spring sun came. Continual snow showers and mixed precipitation in early April meant that the traditional opening month of spring skiing in the Presidentials was a fickle meeting of seasons.

April 15 brought warming temperatures after a stretch of snow followed by rain. Temperatures dipped to 20 degrees Fahrenheit overnight, with the Mount Washington Avalanche Center advisory forecasting stable snow and calling for partial sun and highs in the 40s. Patrick M., age 31, set off from the base of the Cog Railway at 8 A.M., intending to descend some of the steep lines that descend off the northeast aspect of Mount Clay in the Great Gulf Wilderness. Patrick had visited Tuckerman Ravine on previous outings but was going to the Great Gulf for the first time. Patrick, a lifelong skier, was in his fourth season using a splitboard, a modular snowboard that splits into two for ascending like a pair of touring skis, then buckles together as a solid unit to descend.

Patrick began the long climb alongside the Cog Railway, often used by skiers as a route for ascent or descent to or from the higher reaches of Mount Washington, shortly after 8 A.M. Descending steep snow in the spring-time involves an early start to evade the issue of wet snow avalanches later in the day. During clear days in the spring, midday sun and solar gain can cause large sections of snowfields to warm quickly and avalanche in loose, wet formations during the afternoon. High-elevation skiers can arrive at their intended descent neither too early, risking a long sliding fall on hard snow, nor too late, risking wet snow that can easily slide.

Patrick likely reached the ridge between Washington and Clay, after climbing the Cog, sometime in the midmorning, between 10 and 11 A.M. The steep couloirs that drop from the crags ringing the Great Gulf on the northeast aspect below the summit of Clay form a spate of popular steep ski descents. Each couloir, or chute, involves mandatory sections of descending on 40-degree and steeper snow, which demands strength and technique as well as precise awareness of conditions. Unlike on lower-angle snow, where a

skier can quickly react to a change in conditions without falling, steep snow provides little time to react. Even a small patch of hard snow where skis—or a splitboard—fail to find purchase can spell disaster.

While on the ridge above the Great Gulf, Patrick talked to another skier who was selecting a descent, John D., who had also ascended the Cog to access the Great Gulf descents and was waiting on the ridge for the sun to warm and soften the snow enough to ski. Following his conversation with John, Patrick chose to descend Turkey Chute, which drops north off the ridge into the cleft between Washington and Clay, intersecting after about 700 vertical feet at the base of an often-skied, larger couloir called Airplane Gully. Turkey Chute has a sheer top section and a relatively narrow “choke” point in lower-snow conditions.

John, who had skied down Airplane Gully and was stopped on a snowfield below, witnessed Patrick begin descending Turkey Chute, then lose control and start to fall down the couloir, tumbling all the way to the base. John sprang into action, skiing over to where Patrick was lying unconscious, then activating the SOS function on a GPS device he was carrying. John, who had basic wilderness first-aid training, also worked to get Patrick, who was bleeding from his head and had broken his helmet, situated on a small snow platform with clothing and an emergency blanket to insulate him. Patrick regained disoriented semi-consciousness as John worked, asking where they were and what had happened to him.

Two skiers appeared on the ridge above Turkey Chute and, seeing John waving in distress, quickly descended to meet them. The first skier to arrive was Ryan Driscoll, a guide and member of the Mountain Rescue Service, which specializes in technical rescues. He was guiding a skier in the Presidentials that day. Driscoll, well trained in dealing with trauma victims, assessed Patrick's condition and became increasingly concerned seeing that Patrick's breathing was labored: “I figured something was really wrong,” he later commented.

Driscoll realized that a prolonged carryout through the base of the Great Gulf, involving multiple rescue teams over a dozen or more hours, would not get Patrick to medical care quickly enough.

Fortunately, John's SOS, sent just after 11 A.M., had set into action a quicker rescue protocol. NHFG Lt. Mark Ober, alerted to the SOS signal by a dispatcher, contacted John via his GPS; after John described the extent of Patrick's injuries, texting Ober via his own GPS device, Ober contacted the New Hampshire Army National Guard in Concord to request helicopter

assistance to extract Patrick. The Black Hawk helicopter, activated with crew just after 12 P.M., flew into the Great Gulf at 1:15 P.M., lowering a National Guard medic to assess Patrick's condition. Driscoll, John, and the medic loaded Patrick into a litter and hoisted him to the helicopter, which departed for Dartmouth-Hitchcock Hospital in Lebanon just before 2 P.M. Patrick remained hospitalized for about two weeks recovering from his head trauma, four chipped vertebrae, and a collapsed lung.

Comment: Skiers exploring the Presidentials for steep descents have traditionally focused on the major east-facing ravines: Tuckerman, famous for its springtime throngs of skiers, and Huntington, sought more by climbers but with skiable snow. With more visitation following the pandemic-induced backcountry ski boom, however, those well-known ravines just an hour's approach hike from Pinkham Notch have started to seem less attractive and increasingly crowded and mundane. More and more skiers with mountaineering skills and the willingness to go farther have been setting their sights on ski descents in Oakes Gulf, Ammonoosuc Ravine, King Ravine, and, like Patrick, the Great Gulf. Such descents have also been better publicized following the release of Kurt Nailer's *Presidential Skiing* (Locke Mountain Press) in 2020. Skiers must make longer approaches into these "other" ravines. Often they ascend the Presidential ridge via the Ammonoosuc Ravine Trail or, as Patrick did, along the Cog Railway, before traversing to the top of the ravine and descending the desired route.

Experienced skiers traveling to the less accessible ravines know to vet their objectives carefully. Unlike in Tuckerman Ravine, where Mount Washington Avalanche Center snow rangers and the Mount Washington Volunteer Ski Patrol provide conditions and safety advice—and, at times, rescue assistance—to skiers, descending into the Great Gulf requires more self-sufficiency in the event that something goes wrong. It also means taking a guess at conditions before seeing the ski descent firsthand, because—unlike in Tuckerman, where skiers typically ascend the bowl before skiing down and therefore get a close look at conditions before they ski—skiers on these more remote routes enter from the top. Skiers can thus only guess or make an educated assessment of conditions on what they are about to descend, not having the benefit of kicking a boot or swinging an axe into the snow surface in the middle of the chute or couloir to check conditions. And, unlike in east-facing Tuckerman, where the morning sun hits the snow early and warms the surface to a skiable condition, descents in the north- and west-facing ravines tend not to soften until much later in the day; sometimes north-facing lines do not come into

condition at all, even on a day when the Tuckerman descents are in prime shape.

Such were the perils that Patrick had to manage. He had ascended on the Cog Railway route and intended to drop down Turkey Chute into the Great Gulf on that April morning. Whether he chose the challenges or simply hoped for skiable snow, we don't know. With an early start from the base of the Cog, Patrick arrived at the top of the route he intended to descend before the north-facing Turkey Chute had received enough sun needed to soften the snow and make it a more manageable descent. "Avalanche danger is heavy on timing," as Driscoll put it. Patrick had the right inclination to ask another skier who was in the area at the time—John—about which run would be safest or most manageable at that hour. But without the firsthand information gleaned by climbing up the route he was about to descend on his splitboard, there was little Patrick could do to assess conditions.

Conditions in a north-facing Presidential couloir on an April morning can often be presumed deadly until proven safe. Skiers (and climbers) sometimes have to wait for hours until the sun has softened the snow before making an attempt on the line. The best way to go up or down on hard snow, or snow that is suspect, is with ice axe and crampons. Hence, some skiers will choose to attempt only ski descents that they have just ascended, so that they know the conditions exactly. As the popularity of the many brilliant farther-afield Presidential ski descents grows, so too will the need for sound assessment of when it is safe to descend these routes in fickle spring conditions.

Finally, John's GPS was immensely effective in communicating with NHFG. Without the GPS device—a Garmin inReach—that John used to alert rescuers to Patrick's situation, and then to communicate with Ober as the helicopter was dispatched, it would have been almost impossible to set a rescue in motion with such precision and detail. The rescue overall would have proceeded at a much slower pace had the SOS alert not gone out; given the nature of Patrick's injuries, those additional elapsed hours could have meant a different outcome to the rescue. In a stroke of good fortune for all involved, John had purchased and set up the inReach just before this eventful day on Washington, motivated by what he had heard in an avalanche safety course about the importance of setting a rescue in motion as early as possible if a victim is severely injured. And—a fitting final coincidence—John's instructor in that informative avalanche course was none other than Driscoll.

—SB

Sliding Falls—Long and Otherwise

The Mount Washington Avalanche Center website (mountwashingtonavalanchecenter.org/, a must-read for anyone heading out and up in the winter and its shoulder seasons), is unequivocal about the danger of long sliding falls: “Long sliding falls kill more people in the Presidential Range than hypothermia or avalanches” (from a post on March 15, 2022).

Such falls are the maxi version of winter’s primary accident generator, slipping. To be true to the “long” part of “long, sliding falls,” they must take place in open spaces on angled ground. The usual suspects in the Whites are the ravines—Tuckerman, Huntington, King—and their Gulf neighbors—Gulf of Slides, Great Gulf, Oakes Gulf.

Tuckerman Ravine, with its sunny-day multitudes, can offer a sometimes-cartoonish series of such falls. Here’s an MWAC description of one such fall on the route known as the Chute in the winter of 2022:

On Saturday March 26, 2022, a 25-year-old male took a 500-foot fall while attempting to ski the skier’s left side of Chute. The skier reported that the cause of the fall was due to one of his ski bindings releasing in the upper part of the run. The videos of the event showed that the skier became airborne for over 50 vertical feet after he hit the rocks to the side of Chute and then continued to tomahawk down the slope to the ravine floor.

It takes zero imagination to figure the mayhem such a fall can unleash in one’s body. One of MWAC’s takeaways from this fall follows:

Even if this skier had an ice axe in hand, it’s unlikely that any attempt to self-arrest would have changed the outcome. The practiced ability to self-arrest is important for mountain travel; however, effective use of this skill is limited to softer surfaces at lower angles. Often the best way to protect yourself is to simply not fall. In practice this means recognizing the icy, hard, snow conditions, and dialing back terrain choices to match abilities and for a wider margin of error.

Just so in evidently high-risk terrain. My wider purpose in this excerpt is to make us all think a little more about medium and short sliding falls. Most of us won’t risk a 500-foot fall in one of the glacial gouges on Washington, but we will cross the top of a ledge that drops 50 or 100 feet. Perhaps that ledge is also a summer familiar that we sidle across on a vein of quartz running

diagonally up. (I have in mind here a 50-foot, 30-degree ledge on the north flank of Gilman Mountain.) Winter passage is an entirely different proposition—the quartz vein is often an icy bulge; the spruce at the top hard to get into; the possible fall, long enough. It is, on the loop I often take, the only gotta-have-crampons stretch. On this short section . . . I gotta have crampons. —SS

Body Signals

During the afternoon of March 18, 2022, a guest at Carter Notch Hut began to feel worrisome symptoms. Stephane S., age 49, had climbed Nineteen-Mile Brook Trail earlier that day with a friend, and, during a stroll near the hut, he had complained of chest pains, nausea, and tingling in his hands. He also felt cold, and so they went inside and sat by the fire, hoping the feelings would dissipate.

They did not, and Stephane's friend Clark C. made a series of calls that set in motion a rescue. Clark, a Vermonter, first called his daughter, a surgeon at the University of Vermont Medical Center, and explained the symptoms to her; she, in turn, brought a cardiologist into the conversation, who, after listening, said it could be a heart attack and recommended getting Stephane out and to a hospital immediately. Clark then set off his Garmin alarm.

A little after 7:30 P.M. NHFG Lt. Ober got a call from Sgt. Alex Lopashanski, who had been in touch with Carter Notch Hut caretaker Emily Sherman, who was monitoring Stephane. Lopashanski and Ober began the flurry of calls usual for an urgent rescue.

Among those calls were two asking about the possibility of helicopter rescue. NHANG didn't have a crew available, but the Dartmouth Hitchcock Advanced Response Team (DHART) helicopter, on site 24 hours a day, offered to try and soon arrived overhead at Carter Notch. But DHART's helicopter needs to land because it is too small to have the winching that can haul someone aboard via a dropped line, and those on the ground and the pilot couldn't find a place to land. The DHART helicopter returned to its base.

Ober kept making calls and arrived at the Nineteen-Mile Brook Trail trailhead at 9 P.M., where he met with the four initial responders from Androscoggin Valley Search and Rescue (AVSAR); they then took to the trail. During the next two hours more rescuers kept arriving, and first Ober briefed them and then they began the climb to Carter; the number of rescuers soon swelled to 29.

AVSAR's Mike Pelchat reached the hut at 10:53 P.M. By 11:30 he had done a medical assessment and found Stephane's vital signs stable, even as he still felt some chest pressure. Stephane was willing to begin a walk out. At 11:42 the AVSAR crew and NHFG CO Levi Frye began walking Stephane out. A half-hour later the group had walked down the first mile. At 1:30 A.M. the growing rescue group (rescuers had continued to ascend to meet those descending) reached the aqueduct and dam that crosses over Nineteen-Mile Brook. There, a group from MRS had fixed safety lines for the crossing.

Here, Stephane "ran out of steam," and once over the crossing, the rescuers switched to carrying him in a litter, arriving at Route 16 at 2 A.M., where they were met by an ambulance.

Comment: Even a quick read of this incident's details points out how "in touch" parts of the backcountry are with the front—when there's a signal. A constant feed of information into and out from the hut gave rescuers a clear sense of the moment's urgency and how events were unfolding. The speed of response is also eye-catching: A little more than three and a half hours went by from NHFG's being called to AVSAR's four-person team's arrival, with Emergency Medical Technician Pelchat then able to give trained assessment. Nineteen-Mile Brook Trail is, by the way, 3.8 miles long, and it rises nearly 2,000 feet to reach Carter Notch.

As often happens with medical emergencies that end well, this one offered a bit of mystery. Doctors at Androscoggin Valley Hospital determined Stephane hadn't had a heart attack. Some other set of factors had conspired to make him feel unwell, and his condition, when explained to others, suggested cardiac trouble. In each of this column's stories, we hope readers will imagine themselves in the various roles the people play. In this one, I would hope that whether I were Stephane, Clark, Carter's caretaker Emily, Ober, AVSAR's first responders, or the 24 other rescuers at various points along the way, I would respond as this story's people did.

—SS

Looking Out

On April 3, Matthew K., age 25, and Ryan C. set out to climb Mount Kearsarge North. At the top the pair paused to take in the renowned views. Matt wanted photos from the added elevation of the fire tower, and so he climbed to the top. While setting himself to take a photo, Matt backed up and missed a step, which sent him falling to the base of the tower. His companion, Ryan, was

there immediately; a nurse, Ryan looked at Matt's significant wounds and had a bystander call for help at 1 P.M.

NHFG Lt. Brad Morse called Ryan, who told him she had witnessed the fall. Matt had hit his head several times. She said that he had several gashes on his head and was vomiting; blood was also flowing from his ears. Morse told Ryan that rescuers from Fryeburg Fire Rescue, Saco Valley Fire Association, and North Conway Fire Department were on their way, and that he would summon more help. Morse then called NHFG's Colonel Kevin Jordan and got the OK to request a helicopter rescue from NHANG.

A little before 2 P.M. NHANG's Dan Jacques called Morse to let him know that they should be at the scene by 3:30 P.M. At the same time, Morse was mobilizing a ground rescue in case the helicopter was unable to retrieve Matt. Morse's next call to Ryan found that Matt was still bleeding from his ears and unable to stand; she had been able to stop the bleeding from his head wounds. Morse told her the helicopter would be there in roughly 1.5 hours.

The helicopter and a team of NHFG COs reached the summit at nearly the same time, and they coordinated to make the airlift. Matt was in the helicopter and on the way to Memorial Hospital in North Conway at 3:45 P.M. The ground rescuers and Ryan reached the trailhead at 5:45 P.M.

Comment: The efficiency of response, on the ground and in the air, is no surprise to regular readers of White Mountain search-and-rescue stories. Lt. Morse, a veteran incident commander, managed to get both ground and air rescue to the scene in less than three hours. Kearsarge North is a 3.2-mile climb that rises 2,660 feet; that speed is an accomplishment. And yes, the weather, which can always complicate, allowed for the air rescue.

Morse's report also contains a witness statement from Brad W., who was at the summit when Matt fell. "I was finishing up lunch," Brad wrote, "when I saw Matt snapping pictures. He took a step back to adjust camera and missed his step and fell down the stairs. His girlfriend, who is a nurse, tended to him, and I called 911."

A moment of self- and broad-reflection: Photographing what we see, and what we want others to see, is so common now as to seem reflexive. There! There is beauty, or mystery, or thrill. See, there it was; here it is. O, and I was there.

But the act of photographing something or someone is also an act of transference: Your focus transfers to the place or person being shot, and you, in an odd way, become a sort of floating eye, watching, shooting. Except that your body is still there, wherever it was when you focused on what's to be photographed. It's easy then to take "a step back," to miss your step.

So often in these summaries, an accident happens when we transfer our attention from where we are to what we see or where we hope to be “out there.” Vistas and waterfalls draw us to them with exclamation points; then, where our feet are and what’s beneath them are easy to lose sight of. Perhaps then this new hiking mantra: When in the presence of beauty, watch your feet.

—SS

Taking the Lead

As readers of this column and rescue articles elsewhere know, NHFG’s Law Enforcement Division is responsible for search and rescue statewide. Wherever in New Hampshire’s 9,000-plus square miles someone goes missing, a NHFG conservation officer will arrive and take legal leadership of the SAR effort, signing in and coordinating volunteers, seeing the whole episode through, and finally filing an official report of the incident and its outcomes.

Once upon a while ago, this work constituted a significant but still small percentage of a CO’s work; now that work, especially for those in the prime mountain districts, threatens to become majority work. At the same time two things remain unchanged: The workforce of COs ranges from 40 to 45, and the funding provided by New Hampshire’s legislature doesn’t come close to meeting the annual costs of their SAR work.

I asked the Law Enforcement Division’s Colonel Jordan for some recent stats on NHFG’s SAR work, and he, a leader with decades of SAR-work in his résumé, offered me some of the records he keeps. Here are some key excerpts from that compilation:

- During the 10-year period from 2009 to 2019, NHFG averaged 189 SAR missions per year, which added up to an annual average cost of \$308,952. The highest cost year occurred during the 2018–2019 fiscal year; it totaled \$387,841.
- Support for NHFG’s SAR budget comes from a dollar for each boat, all-terrain vehicle, or snow machine that gets registered in New Hampshire, yielding an average of \$180,000; occasional small infusions from the General Fund have shrunk the funding gap but never eliminated it.
- Since 1989, NHFG has sponsored thirteen legislative bills for the \$200,000 needed to fully fund its SAR operations. None has succeeded.

- To close the annual budget gap, in 2016 NHFG began issuing hikeSafe cards, bought voluntarily by the public for \$25 (individual) or \$35 (family), which had the added benefit of making it unlikely that you would be billed if you called for a rescue. *Unlikely* is a key word here, in that people who call for rescue resulting from negligent behavior (getting benighted without a light, for example) can and are likely to be billed whether carrying the hikeSafe card or not.
- Of the SAR missions NHFG conducts, an annual average of 62 percent are for hikers and climbers. That far outstrips the category in second place, runaways or walkaways, at 14 percent.

So, in essence, a public safety service of a tourist-dependent state relies on voluntary funding from that public.

A few recommendations from this seat: New Hampshire's legislature should fund fully this efficient, cost-effective work that serves the whole state, a state that spends millions of dollars persuading tourists that New Hampshire is the place to be and recreate, and a place that responds quickly when they, or you, need help.

The joint NHFG hikeSafe card program and its voluntary rescue card purchases should continue, but instead of these support funds going to the basic operations budget, they should instead go to update SAR equipment, both for NHFG and for the many volunteer groups that make New Hampshire SAR work, and work well. Even tax-phobic New Hampshire should be able to conjure the will to fully fund a SAR composite that works so well.

I wrote fully about SAR financing in my 2018 book *Critical Hours—Search and Rescue in the White Mountains* (University Press of New England). Those wishing a full treatment of this issue can find it in the chapter, “Who Pays (and What That Says).” Little has changed in the few years since I wrote that.

—SS

Because the World Hasn't Ended Yet

Bitter cold, the old man of the creek / weeps . . .

—*Meng Chiao*

After the ice storm, in the deepest crease
of the hollow, fourteen deer skate
the creek bed, struggle to climb steep sides

they slid down when freezing rain coated
the night. A hooved-leap before gravity
realizes the captives might escape, and they slip

back, still caught two days later in cold's snare.
They stamp holes in the ice, lick at water
that flows freely downhill. It would be too much

to watch them starve. We cart hay, toss it
to the prisoners, careful not to stumble
and become imprisoned ourselves.

We wake to coyote screams and wonder
how many might be killed. In the chilled moonlight
we dress. Headlamps brighten our steps.

By the end of the week warm rain will arrive
and melt these prison bars. Until then
we'll chase away whatever we can.

Todd Davis

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Alpina

A semiannual review of mountaineering in the greater ranges

Denali

Last issue Alpina mentioned a climber who in May 2021 called for a helicopter rescue he did not need. Here are more details. Dr. Jason Lance, who called for the unnecessary rescue using a satellite communication device, has been banned from the mountain for five years and fined \$10,000. The U.S. Justice Department reported that Lance pleaded guilty in spring 2022 to three federal misdemeanors: interfering with a rescue operation, violating a lawful order, and making a false report. The fines included \$5,000 for the misdemeanors, and the court also ordered Dr. Lance to donate \$5,000 to the Denali Rescue Volunteers. The 48-year-old radiologist from Mountain Green, Utah, was trying to climb Denali via the West Buttress route with a partner who became ill and fell from the top of Denali Pass, the court reported. Lance left his partner, whom the court identified only as A. R., with others and “proceeded to make a solo summit attempt, taking A. R.’s Garmin inReach satellite communication device with him,” the court said. Denali National Park’s helicopter team evacuated A. R. to a hospital. Lance called for rescue, claiming he and other climbers could not descend, although other climbers said they could—and they did.

Alaska

On their fourth attempt, Clint Helander and Andres Marin completed the first ascent of the extremely difficult Shaft of the Abyss on **Golgotha** (8,940 feet) in the Revelation Range. Their “dream route,” on the East Face, gains about 3,700 feet. The climbers were on the mountain three days before they summited on March 25, 2022, making only the third ascent of this peak. (The first was a route from a couloir at the bottom of the East Face up the Southwest Face by Helander and Ben Trocki in 2012.)



Andres Marin exits the East Face onto the narrow summit ridge during his ascent with Clint Helander of Shaft of the Abyss on Golgotha in Alaska's Revelation Mountains.

CLINT HELANDER

Nepal Himalaya

On **Everest** (8,849 meters), the greatest hazard of the standard Nepal route is the treacherous Khumbu Icefall on the lower part of the climb. The *Himalayan Database* has recorded 44 deaths here from 1953 to 2016. Helicopters have ferried supplies and occasionally people over this obstacle. The French alpinist Marc Batard had an appealing idea: establish a line far to the right. It would be much safer than the traditional route, but more difficult technically. It might not be suited for heavily loaded porters or climbers of limited experience. It includes a 25-meter rappel. We won't know whether he can succeed at this, at least for a while, because Batard was ill in autumn 2021 and spring 2022 and left his efforts incomplete.

According to Alan Arnette, spring 2022 “brought even more stable weather windows than during the great Everest [season of] 2018. This May, a stalled high-pressure system made for horrendous temperatures in northern India while paradoxically creating nearly ideal climbing conditions across much, but not all, of the Himalaya.” There were many firsts on the list of those who summited:

- Youngest American woman, Lucy Westlake, 18
- First Qatari woman, royal family member Sheikha Asma Al Thani, 32
- First Vietnamese woman, Nguyễn Thị Thanh Nhã, also known as Céline Nhã Nguyen, a lawyer from Ho Chi Minh City
- Kenton Cool of the United Kingdom, who turned 49 in July, made his sixteenth ascent, a record for non-Nepali climbers
- First Uruguayan, Vanessa Estol, 36
- First woman from the United Arab Emirates, Nayla Nasir A. Albaloushi
- First Egyptian woman, Manal Rostom, 42

As usual, almost all ascents were by one of the two standard routes from Nepal (650 ascents) and Tibet (50). But the winter of 2021–2022 saw German climber Jost Kobusch, who was 29 at the time, undertake an Everest expedition with long odds and high historic value: the West Ridge, solo. Kobusch didn't make it to the summit, but that was unsurprising given the magnitude of the challenge. This was his second trip in pursuit of his goal. The first was during the winter of 2019–2020. From the beginning, he has said he believes it will take three trips to achieve the summit.

For Kobusch, climbing without bottled oxygen in winter, with its 200-MPH winds and minus 80-degree Fahrenheit temperatures, wasn't enough. To the weather he added the challenge of solitude. And to all of that he added the monumental challenge of the West Ridge, first climbed by the Americans Tom Hornbein and Willi Unsoeld in 1963, via the Hornbein Couloir.

"My curiosity is a driver. It's why I'm doing this," Kobusch told Assistant Alpina Editor Michael Levy last winter. "I'm curious about what I'm capable of as an athlete."

Though Kobusch did not match his high point from 2020, when he reached 7,366 meters, he always thought of this year as a fact-finding mission for a planned final attempt next winter. "This attempt is about learning as much as possible," Kobusch said during the expedition. Of the Hornbein Couloir he noted, "Nobody has even had a look at the couloir in winter. Maybe it will be impossible to climb it. Maybe it's filled with powder snow. It's a journey into the unknown."

Among the numerous ascents, several stand out. On May 12, seven Black mountaineers, including two women, were the first all-Black group to reach the top. The summit party included Manoah Ainuu of Bozeman, Montana; James Kagambi of Naromoru, Kenya; Rosemary Saal of Seattle, Washington; Desmond "Dom" Mullins of New York City; Abby Dione of Fort Lauderdale,

Florida; Eddie Taylor of Boulder, Colorado; and Thomas Moore of Denver, Colorado. Ten Nepalis guided the summit push.

On **Dhaulagiri** (8,167 meters), bad weather ended the effort of the Spaniard Carlos Soria. He vows to return next year, when he will be 84 years old. If he succeeds, he will need only Shishapangma (8,013 meters) to complete his fourteen 8,000ers. His first was Nanga Parbat (8,125 meters) in 1990.

Makalu (8,481 meters) was the scene of two major achievements in 2022. On May 11, Adrian Ballinger made an especially rapid descent. Except for 50 feet at the top and a rappel of 200 feet, he was on skis the whole way.

On May 27, Norwegian climber Kristin Harila, 36, reached the summit, less than one week after she had climbed Mount Everest and **Lhotse** (8,516 meters) in one push. Between April 28 and September 27, 2022, she had climbed twelve of the world's highest peaks in record time and was aiming for all fourteen.

Baffin Island

This remote Canadian island above the Arctic Circle has many very steep, long faces. Between April 17 and May 21, 2022, Polish mountaineer Marek Raganowicz climbed a new route solo on the North Face of Polar Sun Arm, a large buttress feature of the larger Polar Sun Spire. After fifteen pitches, the new route, called MikroKozmik Variations, joins another route Raganowicz climbed on the main Polar Sun Spire face in 2012 called Superbalance. Raganowicz has an outstanding record of hard solo climbs, including at least twelve on El Capitan.

Patagonia

Like the Eigerwand, **Cerro Torre** (3,102 meters) was often thought unclimbable, and like the Eiger, it is now studded with routes. That number increased in January 2022, when David Bacci, Matteo Della Bordella, and Matteo De Zaiacompleted a significantly new line up the gigantic dihedral on the East Face. This feature is dramatically visible above the triangular snowfield the climbers passed on the way to the Col of Conquest (which lies between Cerro Torre and Torre Egger). Phil Burke and Tom Proctor first climbed the dihedral in 1981, but they turned around short of the summit.

After climbing the dihedral, Bacci, Della Bordella, and De Zaiacompleted turned right onto the north side, where they encountered fellow Italians Tomás



CERRO TORRE
Brothers in arms
 D. Bacci, M. Della Bordella, M. De
 Zaiacomo 25-27/01/2022
 7a, A2, 90°, 1200 meters

This labeled photo shows the route David Bacci, Matteo Della Bordella, and Matteo De Zaiacomo climbed in January 2022 up the dihedral on the East Face of Cerro Torre. MATTEO DELLA BORDELLA

Aguiló and Corrado Pesce, who were on the way to finishing another new route. All five reached the summit on January 28. Bacci, Della Bordella, and De Zaiacomo spent the night on the summit and next day descended the southeast ridge without incident. The other two were less fortunate. They went down the way they had come up and, in the middle of the night, were struck by falling ice and rock that badly injured them both. Aguiló managed to rappel to the prominent triangular snowfield, where he was rescued by a team led by Della Bordella immediately after his own descent. Pesce could not be saved. He was one of the greatest alpinists of his time, credited with many extreme routes in the Alps and Himalaya, as well as in Patagonia.

The Bacci, Della Bordella, and De Zaiacomo team named their route Brothers in Arms, in honor of climbers missing in the mountains.

Eight Mountaineering Films

None of these films approached the popularity of Elizabeth Chai Vasarhelyi and Jimmy Chin's 2018 film about Alex Honnold, *Free Solo*, which won an Oscar for best documentary and grossed almost \$30 million. But all of these are worth seeing.

Augmented by STAT for NOVA, directed by Matthew Orr, 2022.

Many *Appalachia* readers are familiar with the tragic yet inspiring saga of Hugh Herr. In January 1982, Herr, 17, and a friend had been ice climbing below Mount Washington and became lost for three days in a terrible storm.

One of their aspiring rescuers, Albert Dow, was killed in an avalanche. Herr lost both legs below the knee. (See *Appalachia*, vol. 44 no. 3, June 1983, 193–200.) Herr returned to challenging climbing, became a physicist, and eventually joined the Massachusetts Institute of Technology faculty as an expert in rehabilitation science. He directs the MIT Media Lab's biomechanics group.

His work has benefited countless otherwise disabled people—not only climbers. This film details the work Herr and his team have done on bionic limbs that respond to signals from the brain.

***An Accidental Life*, Henna Taylor Films with Cut Anchor Films, directed by Henna Taylor, 2022.**

Usually very steep routes are the safest to fall on because there is little to hit, but Quinn Brett was paralyzed from the waist down after falling on the Nose route of El Capitan in October 2017. She and her partner were speed climbing, placing few pieces of protective gear, which led to a gigantic fall.

This film emphasizes her long and difficult rehabilitation. Although more devastating than Herr's (see previous film description), her injuries are harder to dramatize. (We do see an X-ray of the spinal fracture.) Brett is on screen a lot—mostly cheerful, but sometimes understandably grief-stricken. She has speculated on how she fell in what was for her a familiar place: "My relationship was on the rocks, and I had come to even question my love for climbing." A lot of climbing lies in the head. Brett has worked on accessibility in national parks and been a strong advocate for research into spinal injuries.

***The Last Mountain*, Universal Pictures/BBC, directed by Chris Terrill, 2021.**

This film examines the deaths of two climbers in one family: Alison Hargreaves on K2 in 1995 and her son, Tom Ballard, on Nanga Parbat in 2019 (see *Alpina*, Winter/Spring 2020). The first half is more about grief than climbing. Ballard became a major climber—he climbed all six Alpine North Faces in a single calendar winter—although he had not been to the highest mountains. The second part describes his winter attempt of the Mummery Spur of Nanga Parbat (8,125 meters). The movie skimps history but does mention that the great British alpinist A. F. Mummery first tried the route in 1895. No one has made the route in any season, least of all in winter. (The mountain saw its first winter ascent by a different route only in 2016.)

The Mummery Spur is a direct and dangerous line, menaced by seracs. Ballard was accompanied by two Pakistani porters and Italian climber Daniele Nardi, who had made several previous ventures to the Mummery and was determined to succeed this time. After some attempts in very cold weather, the Pakistanis left the expedition, but Ballard and Nardi made one last try. They were last heard from on February 24, 2019. After more than a week's search, their bodies were spotted, roped together. The film's credits suggest that they may have made the summit, but the chances of that are certainly zero, and the Mummery Spur remains unclimbed.

***Infinite Storm*, Bleecker Street Films, directed by Malgorzata Szumowska and Michal Englert, 2022.**

This film reenacts a story first published in *Appalachia* by Ty Gagne, "Emotional Rescue" (vol. 69 no. 2, Summer/Fall 2018). In 2010, Pam Bales rescued a hypothermic man who was trying to take his own life in an autumn storm on Mount Washington. The film was shot in Slovenia, which anyone who knows the White Mountains of New Hampshire will recognize as a different range. Naomi Watts gives a heroic performance as Pam Bales, whose life is depicted true to her real life, but the best feature is the storm that nearly proves fatal. It is simulated with punishing realism.

***The Alpinist*, Red Bull Media House, directed by Peter Mortimer and Nick Rosen, 2021.**

Released to great acclaim, this film grossed more than a million dollars and won an Emmy for outstanding long documentary. The title subject is Marc-André Leclerc, a young Canadian climber who specialized in daring solo ascents, especially in Patagonia. He climbed mixed routes—snow, ice, and rock—alone, and often without previous roped rehearsals. These ventures were even more daring—some would say reckless—than those of Alex Honnold, who appears in the film, along with other well-known climbers, to praise Leclerc.

Before they were finished making the documentary, the filmmakers had to change the ending. Leclerc was killed in 2018 while descending from the North Face of the main tower in the Mendenhall Towers, outside Juneau, Alaska. He was not soloing. He and his partner, Ryan Johnson, were presumably caught in an avalanche. This meant that the filmmakers ended up making a full story of a climber whose life seemed to have been just starting.

Torn, National Geographic Films, directed by Max Lowe, 2022.

Despite favorable reviews and a five-star rating from Rotten Tomatoes, this movie vanished soon after opening in New York City. It did become available for streaming in February 2022. It is about the famed climber Alex Lowe, killed in an avalanche in the Himalaya in 1999, and the subsequent marriage of his widow, Jenni, to Conrad Anker, the lone survivor of the avalanche. The film was made by Max Lowe, one of Alex's three sons; Max Lowe looks honestly into the way his father's death rippled out into his family and beyond.

The Sanctity of Space, Expedition Studios, directed by Renan Ozturk and Freddie Wilkinson, 2021.

A thoroughly admirable documentary, once you get past the title. Inspired by Brad Washburn's photographs of the Central Alaska Range, Renan Ozturk and Freddie Wilkinson make many attempts on, and finally complete, the beautiful, difficult Tooth Traverse, a five-mile alpine route across the skyline of the Moose's Tooth massif. Some of it had never been climbed. The photography is spectacular, although the drones or helicopters that made it must have interrupted the sanctity of space.

The Summit of the Gods, Julianne Films, directed by Patrick Imbert, 2021.

A French-language animated film about an obsessive search for traces of doomed climbers George Mallory and Andrew Irvine, who disappeared on Mount Everest in 1924. The characters are in jeopardy, but have the advantage of being animated, as is the entire film. The animation is extremely well done. The stormy mountains look all too real, with detail down to pitons and knots. The plot is conventional, but it's still worth your time.

—Steven Jervis, with Michael Levy

Sources consulted include *Alpinist* magazine, Alan Arnette's blog, pataclimb.com, gearjunkie.com, *Outside Online*, and the *Himalayan Times*.

In Memoriam

David K. Leff

David K. Leff, a poet, essayist, and novelist who wrote essays, reviews, and poetry for *Appalachia*, died on May 29, 2022, in Collinsville, Connecticut, where he had lived for 38 years. He was 67.

Leff was born in Albany, New York, on April 9, 1955, and grew up in Fairfield, Connecticut. He earned a bachelor's degree in history from the University of Massachusetts, Amherst, where his papers and journals are being archived. After receiving his law degree from the University of Connecticut in 1978, he worked as a researcher and legal advisor for the Connecticut General Assembly's Environmental Committee. In 1994 he became deputy commissioner of the state's environmental agency, which was then called the Connecticut Department of Environmental Protection. He was the primary writer of the state's first green space plan and negotiator of Connecticut's largest land acquisition, more than 15,000 acres known as Centennial Watershed State Forest.

He retired from his state job early in 2006 because of the debilitating effects of spinal stenosis. He then turned his efforts to writing and volunteer work. For the town of Canton, Connecticut, he was historian, town meeting moderator, and poet laureate. He served as a volunteer firefighter for 26 years. He was also poet in residence for the New England Trail. His family and friends remembered him for his intelligence and generous heart, quick wit, infectious laugh, and endless puns. Shortly before his death, he and I met for lunch, when he outlined his research on a former Episcopal bishop who had studied birds in Connecticut's Great Mountain Forest. He enjoyed spending time with his family and friends. He leaves behind his beloved wife Mary C. Fletcher, his daughter Tiki Leff Diliberto, his son Joshua F. Leff, his stepdaughter Ariel Precht, and his sisters Elizabeth Leff and Suzanne Ordesky.

—Christine Woodside

News and Notes

Trail Work Will Improve Heavily Used Franconia Ridge Trails

A \$1.1 million federal budget appropriation will fund a project to repair and realign the heavily used hiking trails in the Franconia Ridge area of New Hampshire's White Mountains. The work on the 11.4-mile-long "Franconia loop," as hikers call it, is expected to take five years.

The route can see up to 1,000 hikers per day in peak season.

The appropriation was secured by Senator Jeanne Shaheen of New Hampshire and signed in mid-March 2022 by President Joe Biden. The Appalachian Mountain Club will oversee and lead the work under the direction of the United States Forest Service.

The trails that constitute this loop were built between 1826 and 1958—before the advent of current knowledge and practices of building trails for resiliency. The Appalachian National Scenic Trail has followed this portion of the Franconia Ridge Trail for nearly a century.

"The Franconia Ridge Trail loop has offered some of the best hiking in New England for more than a century, and this funding will ensure that these heavily traveled trails can be enjoyed safely by hikers for years to come," said Susan Arnold, interim CEO for AMC. "Beyond the positive impact on recreation, we know that well-maintained trails also serve as one of our most effective conservation tools, protecting fragile ecosystems by limiting foot traffic to a narrow area. This is a win-win for conservation and recreation."

The Franconia Ridge Trail loop is composed of four trails that are some of the busiest in the region: Franconia Ridge Trail, Falling Waters Trail, Greenleaf Trail, and Old Bridle Path, from which hikers can access AMC's Greenleaf Hut. Most of the loop, 8.6 miles' worth, goes through the White Mountain National Forest.

"Decades and centuries of use leave these trails in need of significant repair to ensure they can be enjoyed by future visitors and to protect the fragile environments they traverse," Arnold said.

The Franconia Ridge and Greenleaf Trails traverse fragile alpine habitat, and portions of the Falling Waters Trail with its numerous river crossings have been heavily damaged by recent storms. All of the trails need significant repair—and in some locations realignment—to ensure a resilient future for both the trail loop and the surrounding natural areas.

The trail loop spans both state and federal lands and is maintained by AMC, underscoring long-standing partnerships for the benefit of outdoor enthusiasts.

AMC's Trails Department—which will lead the work in close partnership with the White Mountain National Forest as public land manager—is nationally recognized for its expertise in trail management and supports land managers across the Northeast. For more than 100 years AMC has provided professional trail crews that maintain and construct trails. AMC's trail construction teams comprise professional trail crews, youth corps, and staff-led volunteers.

—Nina Paus-Weiler

Mount Washington Master Plan Emerges as Cog Railway Proposes Hotel

Editor's note: What follows is an excerpt from the July 2022 draft of the Mount Washington Master Plan, required by law every decade. This document is intended to guide development high on New Hampshire's Mount Washington, at 6,288 feet the highest peak in the Northeast. Much of the summit area is a New Hampshire state park.

The authors of the master plan represent the government, citizens, businesses including the Mount Washington Cog Railway and the Mount Washington Summit Road Company (operators of the Mount Washington Auto Road), the nonprofit Mount Washington Observatory, and the nonprofit Appalachian Mountain Club, which operates the Lakes of the Clouds Hut a mile below the summit by permit.

Mount Washington Cog Railway President Wayne Presby, one of the authors of this plan, previously sought to build a hotel building near the summit but withdrew the application in 2018. In 2022 Presby's Cog Railway proposed a seasonal hotel, to be called Lizzie's Station, near the summit on Cog Railway land, in the area where 23-year-old Lizzie Bourne died of exposure in 1855. Presby has signed a memorandum of understanding with the state of New Hampshire to create this hotel using eighteen railway cars in a fixed position, to be open from the spring to the fall. Opponents to the hotel, citing rare alpine vegetation and birds, have signed a petition at change.org—more than 30,000 had signed by late summer 2022.

The first section excerpted is from the master plan's opening, "Mission."

The summit of Mount Washington is iconic and emblematic of the Granite State. Visitors to the summit should have the opportunity to observe and experience its unique environment. The purpose of this Master Plan is to provide for this experience while enabling the success of all Summit Partners by ensuring that the summit of Mount Washington, featuring the Mount Washington State Park, continues to be a must-see destination for visitors to the region while also ensuring that resource values are protected. This will be achieved by: maintaining a high quality mountain experience that respects

Mount Washington's uniqueness; recognizing the mountain's flora and fauna, its facilities, and its history; and, using a coordinated approach to address the capacities of the summit environment, buildings, sewage, waste, energy, and water systems, and transportation modes that must accommodate the full number of people expected or permitted to visit the summit each year.

The next passage comes from section IV, "Operation and Maintenance."

Environment, Summit Assessment, and Aesthetics: Summit management by N.H. State Parks in cooperation with summit partners should aspire to minimize harm by ensuring that human presence is consistent with the environmental goals and protections established in this master plan.

As an initial step, a summit assessment should be completed. The assessment should examine damage to and deterioration of the environment including, but not limited to, an analysis of contaminated groundwater and soils around the summit, the impact of climate change, and other environmental considerations. Assistance from the New Hampshire Department of Environmental Services and the New Hampshire Fish and Game Department should be requested to help determine a scope of work. The assessment should also include a building survey and an infrastructure survey; however, such surveys shall not impinge on the confidentiality or privacy interests of state park tenants. . . .

With respect to structures, the Commission, through this Master Plan, hereby adopts a high standard for planning and performance aimed at avoiding unnecessary additional structures.

Operation of the Summit Generally: The summit should be managed to promote desirable experiences including the enjoyment of iconic views and unique visitor experiences. Operations should ensure a good experience for hikers, understanding that hikers appreciate the services offered at the summit because they know that they will soon return to the rugged above-tree-line experience of the Presidentials.

The Mount Washington Cog Railway and the Mount Washington Auto Road each bring well over 100,000 visitors to the summit each year. The number of hikers each year is currently unknown but likely rivals that of other transportation modes. Consideration must be given to management techniques and objectives for the summit that take into account the number of current and expected visitors.

In general, N.H. State Parks should evaluate limiting the number of visitors, using reservation systems, or changing operating hours with respect to

structures while recognizing the requirements of relevant deeds and the commission's charge [in state statutes] relative to the "[p]romotion of the use of the summit by the public as a recreational, historic or scientific attraction." Recognizing that there will always be a physical limit to the number of people on the summit at any given time, the Auto Road and the Cog Railway should investigate ways to limit their visitors in order to contribute to the long range success of the Mount Washington experience. Similarly, the AMC [Appalachian Mountain Club], N.H. State Parks, and the U.S. Forest Service should investigate ways to limit the number of hikers or associated impacts. The commission may update this recommendation as it deems necessary.

This document does not just offer clues to how officials view the Lizzie's Station project, which will need permits to go forward. The master plan underscores the state of New Hampshire's long-standing approach to encouraging tourism while managing natural resources on Mount Washington. The New Hampshire Union Leader reported that on August 22, Governor Chris Sununu met with the Mount Washington Commission, making note of the large numbers of environmentalists opposed to the hotel. Although the commission seemed poised to vote its approval in October, when this journal was at the printer, it is an advisory commission. Barbara Tetreault of the Berlin Sun reported that the hotel would need approval from Coos County Zoning and Planning Boards and that state agencies must do field studies on plants and animals in the area. The U.S. Forest Service also must approve the project.

More Visitors to New England National Forests Stress Landscape

A lot more people have visited New England's national forests throughout the COVID-19 pandemic than in years past, and researchers at the University of New Hampshire say that's created issues for the trails and for the hikers.

Michael Ferguson, a professor of recreation management and policy at the University of New Hampshire, says visitors to New England's national forests increased by more than 60 percent throughout the summer of 2020. He's also seen a 400 percent increase in visitation to congressionally designated wilderness areas throughout the pandemic.

The increase in visitors has brought new stresses to such national forests as the White Mountain National Forest.

"Things like crowding, and visitors experiencing conflict," he said. "We see ecological impacts; for instance, impacts to the physical resource trail, resource degradation, trampling of the flora and fauna."

There have also been such impacts as more traffic, more litter, and more limited access to facilities.

The new stresses have disproportionately affected women and lower-income visitors, Ferguson's research shows. "When an individual visitor is confronted with an impact, they have to cope or deal with it," Ferguson said. He said that usually means "they're going somewhere else, or they're coming back at a different time of the day." That kind of "substitution," as Ferguson termed it, is harder on lower-income recreators. Women in the outdoors were significantly more likely, in Ferguson's study, to experience conflict during their visits.

Climate change is creating new stresses, too. During mud season, trails can come under a lot of pressure.

"You now have increased visitors because weather is warmer in the spring, and now more and more folks are recreating on these trails, thus this cycle begins of more and more trail-related impacts," Ferguson said.

The decrease in days when downhill ski areas are open has led recreators to go further into the backcountry to find snow, which can put people in dangerous situations if they don't have the training or gear to stay safe. And hikers are at increased risk of exposure to ticks.

Ferguson says those who manage recreation areas are working on solutions. National forests, which have many points of entry and often see visitors driving through, have different considerations than do national parks, which often have more limited entrance and exit points.

Parks in other parts of the country, such as Colorado, have started to implement registration systems and other ways to manage the increase in visitors, which has led to questions about accessibility and equity. Ferguson said more research is needed to see what would work in New England.

"We are at this crux, this tipping point, if you will," he said. "How many visitors are too many visitors?"

—Mara Hoplamazian, *New Hampshire Public Radio*
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Editor's note: For further reading, see an article by Michael Ferguson and colleagues, "Seeing the Forest for the Trees: A Social-Ecological Systems Approach to Managing Outdoor Recreation Visitation in Parks and Protected Areas" in the Journal of Outdoor Recreation and Tourism 38 (June 2022) at doi.org/10.1016/j.jort.2021.100473. See also their article, "The nature of the pandemic: Exploring the negative impacts of the COVID-19 pandemic upon recreation visitor behaviors and experiences in parks and protected areas," Journal of Outdoor Recreation and Tourism (February 28, 2022).

Valley and Skyline Sketches

And in the Morning, We Fished: Memories of Franconia, New Hampshire

I like to imagine my father Gayton, or “Gayt,” as everybody called him, taking in his first impression of Franconia, New Hampshire, from the windshield of the Cadillac automobile he had driven off the showroom floor of the Cadillac Oldsmobile dealership where he was a salesman.

A motor car was a rare sight in that little town. He toolled down its main street, the pavement still a new feature in a post–World War I world just beginning to feel the effects of what would be the Great Depression. He came in his fedora and camel-hair coat to claim his sweetheart, Kathleen. He had fallen in love with this North Country girl at first sight, just as he loved at first sight the New Hampshire soil that had nurtured her.

The wedding took place in the family home on Academy Street in Franconia some months later, a few days before Christmas during the first big snowstorm of the coming year. Because of the dangerous mountain weather conditions in treacherous mountain terrain, they couldn’t manage the drive to Pecketts, the much loved ski lodge in Franconia Notch where “guests from ‘ahll ovah, don’t you know’ would stay. They honeymooned instead at Lovett’s by Lafayette Brook, an inn right in town.

After World War II, when gasoline was plentiful, my father ferried me, my two sisters, and our mother to Nana’s house on Academy Street for the summer. We arrived in Franconia the day after school closed for the summer and stayed until just after Labor Day. Having driven for four hours, he would pause long enough on the big front veranda to drink a tall julip flavored with the sauce my grandmother had made from the mint that bordered the house. He’d light a Lucky Strike cigarette and gaze out at the land he loved before making the long drive back to Brookline, Massachusetts. We would not see him again until the first weekend he felt he could get away.

When we knew he was coming for a weekend, we’d wait most of that day, looking for the Plymouth coming down Academy Street. He would turn it into the circular driveway and stop parallel to the back porch. “Daddy’s here! Daddy’s here!” we’d scream.

Mumma would come out onto the porch and down the steps in her cork-soled summer wedgies, and Nana came out in her apron waving a dish towel,

potholder, spatula, or slotted spoon, warbling, “I declare! I declare! I’m tickled pink!”

These memories shared with my sisters took on, with the passage of time, the sanctity of Holy Scripture. When my father came to Franconia, he became a different person. In Brookline, at home, he could be so often a remote, unsmiling, angry tyrant. I was afraid of him there and tried to stay out of his way.

The Daddy that got out of the car—as our dog Dukie, in a paroxysm of whining delight, held him around the waist with her paws—was my true Daddy, who I always hoped for. After greeting our mother, holding her close as they swayed back and forth in a kind of standing dance, he would hug each one of his girls and tell us things like, “You’re as brown as a berry!” Or, “I bet you’ve grown at least an inch, but you’ll always be my baby!”

Nana would throw her arms around his neck, and he would pat-pat her on the back, as if he were burping her. Nana had slaved over the midday dinner. We might have garden peas warmed in sweet cream and fresh buttered corn on the cob. My grandmother had shelled the peas and husked the corn on the back porch in the benign presence of Mount Lafayette in the distance. There would be pot roast or chicken fricassee, scalloped potatoes, a huge “just picked from the garden, don’t you know” lettuce, tomato, and cucumber salad swathed in Nana’s sour cream dressing, her famous blueberry muffins hot and ready to be drowned in butter. All this washed down with iced mint tea.

After supper, as the last meal of the day was called in that town, we three sisters squeezed next to our father on the glider that sat on the veranda facing the sunset, while Mumma and Nana fretted over a just-baked apple pie served up with cheddar cheese.

That was the evening of the first day. And in the morning, we fished!

We didn’t have to wait for Daddy to get us up. We were awake and almost dressed in our shorts and T-shirts and sneakers when Daddy, making a great show of it, part of the ritual we loved, came tiptoeing, finger to his lips, into the bedroom Linda and I shared; Valerie would wait with us on the big double bed. He’d whisper, “We don’t want to wake Mumma and Nana from their beauty sleep. Shshsh!”

“No, Daddy,” we’d whisper back. All of us tiptoed down the front stairs, then stood in the middle of the kitchen chugging glasses of milk and stuffing as much of last night’s blueberry muffins as we could cram into our mouths at one bite, while Daddy finished his coffee and took the last drag on a Lucky, and then out the back door we went, into the car, Valerie always in the front seat next to him.

Our destination that morning was Coppermine Brook, which meandered down along a mountain trail, a short climb from where we parked. He unpacked our gear: fishing poles not much fancier than long sticks with a line and hook on one end. There was a tin bucket of night crawlers, in a wriggling mass, both disgusting and fascinating to poke and look at. Daddy dug one out and put it on a hook for each of us. Linda, who was so impatient to start, was first and went ahead to capture the best spot brookside such as a flat rock or a hospitable outcropping of New Hampshire granite.

Daddy stayed with Valerie, finding the best spot for her. That was OK because I always found something I liked, but Linda was never able to locate something comfortable enough to sit on while she fished: too pointy, too damp, too far away.

"Daddy, Daddy! I can't find anything to sit on!"

Daddy got Valerie set with her worm, and her pole in the water, and found a perch Linda had somehow missed, nice and warm in the early sun.

Wearing waders, Dad fished too, in the deeper water near the center of the stream. He cast a grown-up fishing rod and reel further upstream, and almost instantaneously the line dipped hard and fast. A fish! "It's a trout, girls!" He yelled. "It's a big one!" In a minute the fish was out of the water, on the bank. With one motion, our father twisted a large brown brook trout, flapping furiously for its freedom, off the fly-topped hook, and laid it still flapping into a moss-lined basket, where after a few more jerks of its tail, it was still. Linda and I came over to where Valerie was squatting. We three peered into this container to view the unfathomable mystery and beauty that was the life of one of God's small miracles, with its glistening brown speckled skin and an eye, roundish with its dark pupil, completely deprived of motion and sight in the stillness of death.

"That's not fair," Linda shouted, as if Daddy was somewhere else. "We can't catch anything with these stupid things," as she threw the pole down.

"Of course, you can. I caught plenty with just such a pole when I was your age. You just need to put it out in the water, just there where the current makes it flow fast, and cast it up and down, in and out, like this."

As he was showing her what to do, the tip of the pole dipped deep and hard.

"It's taken the bait," he yelled, and we screamed, "It's got the worm, it's got the worm!"

In a blink, Daddy had the pole out of the water with a small fish flapping on the line.

Just then, I saw a burly man in a uniform come out from the woody trail. I felt scared. Did Daddy have a fishing license? Was the fish he just caught big enough to keep? “Daddy, Daddy,” I whispered, “hide the fish!”

“Mornin,’ Gayt! I see you got your girls with you. You catch anything worth keepin’?” And the man laughed, showing big tobacco-stained teeth.

“Landed a brown trout, a big one, maybe ten inches.”

“That one you got in your hand? Don’t think so!”

“No. The one in the basket there. But this one’s a keeper, too, right?”

The burly man laughed again.

Just about every angler has experienced the small phenomenon of having multitudes of fish suddenly appear. And so it was on that day. Each of us got a fish every time the worm-laden hooks sank into the water. We shrieked and laughed and danced with the joy of it.

“Get the frying pan ready, Minnie,” called Daddy as we three sisters tumbled up the back steps. “We’re having trout for breakfast!”

—Gayle Greene

Gayle Greene is a writer, playwright, and actor who grew up in Franconia, formerly lived in New York City, and now lives in Berlin, New Hampshire, with her husband, Larry Watkins.

Editor’s note: Fishing rules are ever changing with the times. We recommend everyone check local regulations for dates they may fish, for the minimum size and maximum number of fish one can keep, and the dates and methods of catch-and-release seasons.

A College Student Connects with His Father, with Few Words

My pulse pounded in my head as I looked out of the driver’s side window. To my left was an infinite blue sky and a line of gray and white mountain peaks that ran at a 45-degree angle to my vision. On my right, was a drop-off into nothing.

“Turn slightly left, easy now,” advised the voice of my unseen father in the shotgun seat. The tires of our rental Jeep slid around on the switchback’s loose rock.

It was December in Lone Pine, California, and my dad and I were in way over our heads.

“Just a little farther now, bump over that rock there.”

I braced myself as both passenger side wheels left the ground, spinning aimlessly in the air. Suddenly, I was at mercy of the wind. Cantilevered on the edge of a mule trail, some few hundred feet in the air, I wondered if our decision to drive to the top of an abandoned mineshaft wasn't one of our smartest. An unsettling amount of blue invaded the windshield. Panic began to take hold.

“That's perfect, just a slow, steady crawl from there,” my dad, beside me, advised.

My tires returned to the ground, and I shot forward.

The sky righted itself, unfurling into the snowcapped peaks of the Sierra Nevada's rigid spine. I glanced at my dad, a wide grin across his face. His figure was almost a novel sight, for the previous night had been the first time I'd seen him in four months.

I'd flown out to Los Angeles that August, for the first semester of my senior year of college. For a matter of months, I traded my college town in upstate New York for an internship in Beverly Hills. It was new, and different and exciting—everything I had expected a semester in Hollywood would be. Most of all, however, it was hard. Long hours spent at my internship and working on my thesis were followed by sleepless nights and weekends locked in empty classrooms.

It's ironic how I thought a move to a place known for uninhibited behavior would leave my demons behind. It didn't. Instead, the anxiety and depressive episodes that'd plagued me in months prior remained, like a slowly tightening noose. I wasn't happy with myself and because of that, I felt angrier than ever before.

If anything, the bright lights of this big city illuminated an even harder truth: that growing up was a terrifying prospect.

I took to the desert for solitude. From others, sure, but mainly from myself. From the confines of my mind. At Thanksgiving, I didn't fly home. Instead, I drove to Palm Springs, seeking refuge in the San Jacinto Mountains. Storm clouds greeted me as soon as I ascended past the desert floor—nature's echo to my turbulent thoughts. I lost the trail as it disappeared into the mountains and spent much of the next ten miles frantically trying to find it, bouldering up dried-up waterfalls and bushwhacking across sagebrush-strewn slopes in search of the next blue marker. Grasping at something I couldn't find.

A few weeks later, I greeted my father in the back of a dimly lit car-rental parking lot. It was an oddly clandestine scene for a moment that was anything

but—for I had missed him, perhaps more than I realized. I wondered how I looked to him. It had only been a matter of months, but it might as well have been a year. We'd never been apart for this long.

We left Los Angeles the next morning and headed north to Lone Pine, home to Mount Whitney and the Alabama Hills. The plan was to explore the area for a couple of days, both on foot and by Jeep, before making the drive to Death Valley, our final stop before returning to the Los Angeles airport for the flight home.

Road trips had become a staple of our relationship. During my high school summers, we had driven up and down the East Coast for baseball tournaments. In college I'd visited him on his work trips to Arizona and Colorado, hiking with him around the West.

Everything about this trip, though, felt new: from the Jeep he'd rented (with plans of four-wheeling despite our extremely limited experience), to the destination, to the space between us that had widened from time apart. I was no longer a teenager but an adult, preoccupied with how and where I was going to start the rest of my life.

Daylight pitched its last embers over Mount Whitney as we pulled into Lone Pine. We turned onto a dirt path and unconsciously rolled to a stop, taken with the majestic scene. Behind us sat the one-traffic-light town of Lone Pine with miles of flat plane high desert behind it. Before us lay the Alabama Hills, foothills of the eastern Sierra Nevada range, a series of bizarre, bulbous rock formations bathed in the orange and purple glow of the sunset. It was as if the desert had decided to grow legs and walk, only to stumble and fall under the intense glare of Mount Whitney.

Over the next two days, we grew to appreciate and understand the area. Abandoned mineshafts removed some of the mystique, rooting us in history.

The road from Lone Pine to Death Valley was long and flat. Unassuming. It was early, so we didn't talk much. Death Valley didn't feel to my father and me like a place meant for understanding, despite how fascinating the geology behind its formation is. So we traveled to see something that was indisputably bigger than us.

Bizarre as the scenery was, each stop we made felt right at home in the canon of our adventures together. We scrambled through slot canyons in Furnace Creek, just as we had in Sedona, Arizona, a few years prior. We careened into the dried-out riverbed from atop the undulating foothills in front of Zabriskie Point—a standard practice dating back from childhood trips to Maine. The borax mounds of Twenty Mule Team Canyon reminded me of the snowdrifts in upstate New York.

We spent what felt like hours wading through the alien terrain, knee deep in borax, tripods in tow and cameras around our neck, just as we would on any other exploration. The time on foot rooted us in a way that the Jeep couldn't. As fun as off-roading was, there wasn't any replacement for actually feeling the dirt beneath our feet.

At day's end, we watched the sun slip behind the mountains from Echo Canyon. It set the clouds ablaze, like a natural flare, calling us home.

We began to talk as darkness swallowed the switchback roads leading out of the park. Until then, we'd kept our conversations light. Perhaps this was my doing. My battle with my mind was no secret to him, but still, those conversations were still tough.

Sometimes it takes events outside of our normal perspective to reflect on the moments that garner further introspection. Moments such as this trip, in which we experienced a world entirely alien to our own, brought us closer to our present situation. He told me that he was worried about my older brother. He'd graduated a couple of years back and had a steady job but had seen his social life evaporate upon coming home from college. I feared that upon graduation, mine would as well.

"He's lonely without anybody around," he said. "I'm worried that he's getting depressed and . . ." He paused. "I'm not sure that he likes himself very much."

We drove in silence for a couple of minutes.

"I think that's something we both struggle with," I responded, my eyes staring a hole through the windshield. "Liking ourselves."

"Why don't you?" he asked.

I wished he didn't have to ask that. I'm sure he wished that too.

"I'm not sure," I lied. Inwardly, I knew. I was ashamed—of my fear of the world, the volatility of my emotions. Of not being the man that I wanted to be. But that was too difficult to say.

"I wish that you guys would."

"Yeah, I do too."

We smiled painfully at each other as we traced our way through the night, out of the basin and into the range above.

—Dylan Campbell

DYLAN CAMPBELL writes for *SRQ Magazine*, which covers life in the Sarasota, Florida area. He is from Philadelphia and graduated from Ithaca College in 2020.

What the Badger Taught Us

For Amik, 1948–2020

Around the time that my Uncle Amik decided to lie down one last time on his favorite rock, my partner Derek and I were at 9,900 feet, biking through wildflowers and stands of aspen and pine. As we rode along the crest of Utah's Wasatch Mountains, I came around a turn in the trail to see something I had never seen before: hurtling up the trail toward me, a badger.

This stately fellow had someplace to be, and he was not going to be slowed down. He charged up the path, his body moving like a seesaw as he ran. After a long moment in which the badger continued to run toward me and I tried to decide whether or not I should back away, the badger veered off through the wildflowers, his coat flashing white and gold.

Derek started to follow after him, but I told Derek to let the badger go. I told him that the badger was off on his own badger adventure, and that a badger should do what a badger wants to do. I couldn't believe my luck to have met a badger at all. I couldn't help but believe that meeting such an elusive and notorious ornery being was an omen of sorts.

I have to believe that this was Amik's way of saying goodbye to me. Like the badger, Amik has always been utterly determined to stay true to his own course. Amik's way is the only way, and this is the way of being fearless and unafraid of diving into new adventures. He jumped from cliffs to trees, tree to tree, and tree to roof. He was an artist and a teller of tall tales. He believed in his own inventions. Being full of a million questions and asking them relentlessly and often, to the point that we all raised our eyebrows, Amik might have known it was time to stop, but of course he never would. Being a father and a grandfather and a husband and a brother and a friend, and my uncle. Bursting with creativity and mischief and half-baked theories about the meaning of everything. Amik's way means being braver and more stubborn than even the badger himself.

I am certain Amik left this world on his own terms; I have never known my uncle to do anything that didn't suit him. What I think happened is that Amik found himself in a moment in which he had absolutely everything he wanted, and he decided that this was enough. It was midsummer, the forest swarming with life. Seventy-two summers Amik had enjoyed in our world, and this one was as beautiful as every other. Lying down on his favorite rock in his beloved river, deep in the Adirondacks, with his grandchildren playing and his son nearby, and all of his children charging through life with their own beautiful, mischievous children—I think that moment was just so full of joy, Amik decided it was time to dance right out of his body.

I wish he hadn't. Amik was supposed to get old and kind of crazy and turn even more into Gollum. He was supposed to finish writing his stories and essays and read some of mine and be around for his grandkids to show them more of those beautiful moments he was always finding. He wasn't supposed to go now, but a badger always does what a badger wants to do.

I WAS ABOUT 11 YEARS OLD, AND IT WAS LATE SPRING IN THE ADIRONDACKS. We had camped the night before on Amik's property, a large field sloping down to an overflowing creek. The beavers had claimed the land, and through their tremendous landscaping and building techniques, the creek had started to transform into a swamp. Mosquitos swarmed across the surface of the water in the evening air, finding their way into every warm corner of our bodies. The air was sharp and brisk, and while we bundled ourselves in flannels and pants, Amik decided to go for a dip in the water. He waded in like a swamp creature, and he grinned with pride as we teased him from the bank. Still, even he did not last long in the frigid water, retreating to dry land after just a few minutes. We swatted and damned the mosquitos to a fiery hell, cursed the beavers whose landscaping had attracted such clouds of insects, and crawled into our tents at sunset to hide from their itching bites.

In the morning, we set out on a hike to Pharoah Lake, walking down a rocky, overgrown path through the wilderness area. I pushed my 11-year-old legs as fast as they would go, racing to keep up with Amik and his youngest teenage son, Dennis. My mom carried a loaded backpack with all of our gear, and I left her to walk alone, smiling in the rear, as I chased my male family members. I worshipped my cousin Dennis and wanted to prove myself to Amik; I was just as tough as any man, no matter how old I was.

Amik scampered up cliffs and convinced us to eat leaves and berries that he collected, enthusiastically chewing on bits of plants as he held them out to us. I would stall until my mom caught up and nodded her approval. Dennis called him a crazy old geezer, and Amik smiled and disappeared back into the brush. The miles passed and I didn't mention the blisters forming on my heels, saving my breath for the trail. (Later, Amik convinced me to hike barefoot and was very displeased when my mother opted for Band-Aids. When the sun set and we were still walking, wondering if we were actually lost instead of just disoriented, I thanked her.)

When we arrived at the lake, I sat down on the rock shore, dipping my fingers in the frigid spring melt. It was too cold to swim so early in the season, and my mom passed me snacks and bug spray. The sun kept us warm as we

rested, and the lake glittered blue-green mysteries. Amik crouched next to me, nodding. Yes, he said. This is it. A good rock. Good spot.

Yes, I said, and Amik sat down next to me. This is good, he said to no one in particular. This is what it's all about. He kicked off his shoes, closed his eyes and lay back on the sunbaked rock for a quick nap, and after a little while, so did I. We lay there with the lake kissing our toes, and when we roused ourselves a while later, the sun had left us with pink brushstrokes on our cheeks and grins that lasted well past sunset.

WHEN AMIK TOOK HIS FINAL NAP, WE WERE DEEP IN THE CLUTCHES OF A pandemic-stricken world, so I wasn't able to travel to the funeral and say goodbye the way that humans like to do. Instead, Derek and I drove up to Colorado, to the town where we were living when Amik came out to visit a few years ago.

We biked up a hill where Amik had taken Derek mushroom hunting that summer. Derek told me that Amik had buoyantly led the charge in a barefoot bushwhack through the aspens with armfuls of mushrooms. They had collected piles of chanterelles, eating as they went—only for everyone to end up with a serious case of the runs the next day. Afterward, Amik mentioned that it's usually better to cook them first, but that a little diarrhea cleans out the system. Like always, that wasn't quite the point, but he also wasn't wrong. It's impossible to disagree with someone who is telling their own story.

Sitting on top of that hill in the forest and imagining a joyful Amik charging barefoot through the trees, he didn't feel so far away. At the bottom of the hill, a rainbow bowed over the mountains, and I remembered a lesson from the badger himself: spin some yarns, get lost in the forest, and find a sunny spot to watch it all unfold.

—Stacy Allana Clark

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Tuckerman Family Values

The snow had melted on the lower Sherburne Trail, so I strapped skis to the pack for the remaining descent to Pinkham Notch on foot. It was my third 2022 spring trip to Tuckerman Ravine below New Hampshire's Mount Washington—a remarkable turnaround after missing the prior two years recovering from knee replacements and a broken patella. Hiking down the Tuckerman Ravine Trail with that heavy, awkward load was so much less painful than in 2019, a cause for celebration, but I was focused more on being disgruntled by my declining skiing skills.

Even though I had limited my three 2022 visits to the less steep Hillman's Highway ski route, rather than the steeper routes in the "Bowl" of Tuckerman Ravine, I struggled to put together many quality turns. On top of that, I had taken some long falls and was disappointed by my inability to quickly arrest my descents.

I was thus in a glass-half-empty mood when I encountered two men hiking up the Tuck Trail just above the second switchback. They didn't have packs and weren't dressed for much of a hike, so I made an erroneous assumption that they were likely inexperienced tourists up here for the first time. When they asked, "How was the skiing?" I answered, "Humbling."

The pair, clearly a bit younger than my 72 years, said that their Swiss father had taken them skiing here many times in their youths. Now they both lived far away, one in California and the other in Colorado. It was their first time back on Mount Washington in years. Their father was up ahead, one of them said. This confused me until they clarified that they meant his ashes. Their hike was clearly a kind of pilgrimage. They laughed when I joked that their father would be disappointed that they had not brought their skis.

The pair asked about the Tuck Shelter (the buildings at Hermit Lake Campsite), and I replied that things hadn't changed much up there in the past fifteen years. We reminisced about the previous shelter affectionately called HoJos after the restaurant chain Howard Johnson's; HoJos had burned down in 1972. It had an indoor space that served meals and a basement where you could store skis for a small fee. The brothers, grinning, told me they were glad they hadn't left their skis up there that season.

I told them about taking my own two sons to the ravine when they were younger. They smiled and congratulated me. I asked them to use my camera to take a picture of me with my heavy pack. Then we departed in our respective directions.

That encounter had “given my heart a change of mood” (as Robert Frost said in his poem “Dust of Snow”). I got to thinking about the immense beauty of the ravine and the power of sharing it with others. I recalled details of long-ago visits with sons Ben and Luke. I remembered that my wife had pushed back when I insisted on spending far too much money on a Christmas gift for one of them—a beautiful framed print of the ravine I had fallen in love with when I spotted it in a Concord shop window.

Maybe my sons would spread my ashes up there. The thought suddenly occurred to me. I had previously thought more about Zealand Falls, Moosilauke, or Franconia Notch, but the Ravine would be pretty sweet, too. Wherever would be best to create future family memories and gatherings would do just fine.

—*Douglass Teschner*

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Editor's note: The scattering of ashes in White Mountain National Forest is legal, but the federal government discourages it and urges care.

Books and Media

In the Land of the White Death: Writing on avalanches and other sudden demises

The only certainty for those trapped in its realm is that “white death” lies in wait for them.

—From Valerian Albanov’s journal *In the Land of the White Death*, describing a two-year odyssey in the Arctic after his ship the *Saint Anne* was trapped in pack ice. Only Albanov and one companion survived.

THE FIRST TIME I ENCOUNTERED THE TERM *BAADER MEINHOF* WAS AS THE title of Don DeLillo’s short story from 2002. In the story the title refers to the title of an art installation. The installation refers to the Baader Meinhof movement in West Germany during the 1960s, also, perhaps better, known as the Red Army Faction. The RAF carried out various bombings and kidnappings accounting for the deaths of some 40 people. The key leaders committed suicide in prison. I was mildly surprised this had never crossed my radar before. And indeed, after the DeLillo story I began seeing Baader Meinhof mentioned in articles and stories seemingly everywhere, about three times in two weeks. Coincidentally, the name for this phenomenon is the Baader Meinhof syndrome: Once you are aware of something, you begin to see it everywhere.

A recent example: I paused on a popular hiking trail to pick up a baby sock. I had never before seen a lost baby sock on the trail. Within a year and a half, I collected more than a dozen of them. Presumably, baby socks have been lost since time immemorial, but I have only been aware of this recently. Baader Meinhof.

White death is a term that seems to present itself to my consciousness with a conspicuous frequency. I suppose it’s not surprising given my interests in mountaineering and literature. It has been pointed out to me that I have a death obsession as well. After my friend Dave Bean read my first short fiction collection, *Letters from Chamonix* (Imaginary Mountain Surveyors, 2014), he remarked, “So, I guess you’re kind of obsessed with death.” My response was surprise and denial. “It’s in every story,” he said. So much for denial. As Toni Morrison observed, “We die. That may be the meaning of life. But we do language.”

The white death foremost in my mind is Bettembourg's. Georges Bettembourg was a French alpinist who forged some of the most daring climbs of the 1970s in the Alps, Himalaya, and Andes. He was an extreme skier making first descents from high on Makalu II and other Himalayan giants. These were accomplished long before the word *extreme* became the ubiquitous adjective in mountain sport lexicon that it has become since. His memoir, *The White Death* (Reynard House), was published the year he died, 1981. He first uses the term the *White Death* (always capitalized) to describe a hypoxia-driven hallucination high on Broad Peak during his solo descent. It appears to him as beckoning woman who has materialized out of a cloud, inviting him to simply let go.

"Something that is not me shunts my eyes from her gaze and I shrink from the White Death, the beautiful, peaceful, sensuous white death . . . I somehow pull my bones up out of my grave of ice."

Death may be anthropomorphized in Bettembourg's oxygen-starved cosmology but it is not romanticized; it is simply there, an acknowledged matter-of-fact. Later in the book he'll refer to Ray Genet, famous for the first winter ascent of Denali in Alaska, found mysteriously dead high on Everest: "He had departed in the company of the White Death for a world I had only glimpses of, but a real world nonetheless."

In any case, Bettembourg *did* meet an early death but not while attempting any wildly conceived feat of alpinism. He was gathering crystals with his brother and two friends on the Aiguille Verte above his home in Chamonix when rocks—*stonefall*—came loose above the party. He said to his mates, two of whom survived, "It comes for us, gentlemen." He was 32 years old. It's the equanimity of these last words that has stayed with me, more so even than the title *The White Death*. I cannot uncouple them in my mind.

Before I found a copy of Bettembourg's book, I read McKay Jenkins's book, *The White Death: Tragedy and Heroism in an Avalanche Zone* (Random House, 2000), the story of five young climbers who were lost in an avalanche on Mount Cleveland, the highest peak in Glacier National Park. They were trying for a first winter ascent of the West Face. The search for them was one of the most extensive in North American search-and-rescue history and their bodies were not recovered until seven months after the fact.

Jenkins named his book for an avalanche called the White Death that occurred in 1910 outside of Leavenworth, Washington. The avalanche rolled a

train 150 meters down a river valley and 96 lives were lost. To this day, hikers find rusted train wreckage debris off the hiking trail.

I took a training course called Avalanche I a couple years ago. I was by far the oldest person in the three-day class. On the first morning the instructors asked everyone what their avalanche strategy is. I said I just check the daily avalanche report and if it looks questionable I stay home on the couch. Which, if you follow it, renders the “avy” course unnecessary. Instructors agreed this was the best strategy. So I guess the course is for those who go out anyway. Over the last ten years an average of 27 persons a year have died in avalanches in the United States, a surprisingly high percentage of whom were “avalanche professionals.”

Gabriel Urza’s novella, *The White Death: An Illusion* (Nouvella, 2019), describes the brief fictional life of the illusionist Benjamin Vaughn, who drowned at the age of 14 in what was for him a practice routine in which he repeatedly handcuffed himself to a grate at the bottom of a swimming pool and freed himself, except for the last time in which he was, mysteriously, unable to free himself. The White Death, within the text, is the last illusion young Vaughn, “the Great Bendini,” is working on at the time of his death. Outside the text this is the name Urza has given to a fictional magic trick. We never learn the nature of the trick as Vaughn, a meticulous keeper of journals since the age of eight, had mysteriously stopped writing a week before his death.

Within the story there is much speculation among members of the magic community regarding his death, including that he had not really died at all, that “his death at the bottom of the pool *was* the *White Death* illusion.” Conspiracy theorists report sightings of the boy in Denver and San Francisco.

The novella is heavily footnoted, providing meta-textual “Author’s Notes” that we are to presume are somehow “closer” to the author than the relatively straightforward telling of Benjamin Vaughn’s story. This is a fun illusion because the title itself is footnoted, thus suggesting that the footnotes are actually primary; it is also clear that the same speaker narrates both what *appears to be* the text proper and the footnotes.

The final footnote in the novella covers almost two full pages and speculates on the Great Bendini’s death without drawing any conclusions: Was it “suicide, simply a slip-up, a matter of failed execution? Or perhaps his death was an attempt at the enigmatic White Death, something that falls in between accident and suicide.”

Any reader should find Urza’s tale beautifully told, but it resonates personally in me as its arc parallels our son’s short life with a terrible synchronicity.

Our son died mysteriously in a river, officially attributed to “accidental drowning.” There’s no reason to call it a suicide, but little reason not to. Whiteness was a factor as well: white water and snow-covered ground.

Urza observes, “Boys are capable of error and unfounded conception of invincibility.” Here too, he could accurately be describing our son. Invincibility can be a killer. Our son surely believed himself invincible, not without reason. He was strong and mostly indifferent to not only risk, but pain. Urza concludes that Vaughn’s story “hovers elusively around the mysterious character of a boy whose capacity for love and for suffering could not be contained by the small vessel of his body.” This capacity, for both love and suffering, but particularly for suffering, was also evident in our son, though his body was no small vessel, except in the way that all of ours are.

I wrote to Urza, a stranger, to express gratitude for his story and briefly explain my interest in his title. He referred me to his colleague, the writer Justin Hocking.

In his memoir *The Great Floodgates of the Wonderworld* (Graywolf, 2014), Hocking credits the poet Charles Olson with naming the obsession with *Moby-Dick* and all things Herman Melville-related the White Death. Hocking himself is obsessed with it. In one chapter he lists 29 of those known to him who are similarly obsessed, highlighting famous literary suicides—David Foster Wallace and Hart Crane among them. To be obsessed with *Moby-Dick* is to be obsessed with obsession, Ahab’s obsession with the great white whale being absolutely central to the book, though more accurately I think *Moby-Dick* is a book in which the peripheral *is* what’s central.

Who knows what Olson meant exactly? To be truly obsessed is to let everything but the obsession wither away. I have only read *Moby-Dick* three times, the last occasion decades ago. The first time I was on a long mountaineering expedition. We had supplies, including books, flown to a base camp on a glacier in Canada’s vast St. Elias Mountains, where we endured two weeks of whiteout conditions during our attempts to climb Mount Kennedy. During the time we were tent-bound I read *Moby-Dick*. I suppose the trip involved many white death scenarios in the forms of potential crevasse falls and avalanches, but we would have denied it back then. Back then we carried one little canister of sugar that we labeled with a skull and crossbones. This was our sense of white death: death by sugar consumption. When the sugar was all used up in our tea, we used the bottle to pee into without having to leave the tent.

Mark Fielding, a legendary Seattle climber in the mid-1970s, was said to be obsessed with *Moby-Dick*. Fielding also was known to solo free-climbing

testpieces, including the notorious Crack of Doom on Castle Rock in the Cascades, following a breakup with a girlfriend. Like us on Kennedy, he survived his early flirtations with danger.

Melville himself wrote a chapter, “The Whiteness of the Whale,” which critics have discussed seemingly without end to this day. We would know the whale is symbolic, even if Melville hadn’t explicitly told us so. We also know the whale is a plot device, the object of Ahab’s mad vendetta, the cause of the deaths of everyone aboard the *Pequod*, except for Ishmael. But, of course, it is not the white whale that is the cause, it is Ahab himself. The whale is also white because how else to distinguish it from all other whales?

“The Whiteness of the Whale” is a ruminative, digressive list enumerating the ways whiteness may symbolically reverberate. I say “may” because, in fact, one of Melville’s stylistic tics in *Moby-Dick* is the rhetorical question:

Is it that by its indefiniteness it shadows forth the heartless voids and immensities of the universe, and thus stabs us from behind with the thought of annihilation, when beholding the white depths of the milky way?

Why yes, we say, you’ve nailed it, Herman. But these many questions can’t all be *rhetorical* exactly because to follow where they take us excludes nothing: “And of all these things the Albino whale was the symbol.” Ah, the mid-nineteenth century, when persons and concepts contained multitudes!

It’s not possible to say what Melville “really meant” whiteness to symbolize, other than everything he has illuminated, and, probably, more. In the chapter’s final paragraph he discusses “all earthly hues” as “subtle deceits” that hide “the charnel-house within.” By which he means death, or nothingness. In other words, color is illusory and whiteness is the death that we pretend does not exist.

The final words/question of the chapter are, “Wonder ye then at the fiery hunt?” We do wonder, of course, and that may be the point of the book. Ahab’s mad obsession is directed at the white death itself, from which none of us, particularly one who pursues it so single-mindedly, can escape.

IN SARAH PERRY’S *THE ESSEX SERPENT* (CUSTOM HOUSE, 2018), SET IN THE nineteenth century, she refers to tuberculosis as the White Death. This is due, apparently, to the pale complexions of the victims as their lives slowly ebbed away. Curiously, the disease was somewhat popular during the early part of the century. Those suffering from it were thought to acquire heightened

sensitivity and the disease's relatively slow "progress" allowed patients to make "a good death," that is, they had time to put their earthly affairs in order. Somehow this became associated with a kind of desirable spiritual purity resulting in young upper-class women purposely paling their complexions to achieve a consumptive appearance.

In America the disease became associated with a kind of vampirism, attributed to the first in a family to die. As the other family members began to weaken and die, it was thought that they were infected by the first. Which actually is somewhat accurate, but because of a highly communicable bacteria, not vampirism. One remedy for this was to disinter the original "vampire" and burn that person's internal organs. Of this practice, Thoreau noted in his diary on September 26, 1859, "The savage in man is never quite eradicated. I had just read of a family in Vermont—who several of its members having died of consumption, just burned the lungs & heart & liver of the last deceased in order to prevent any more from having it too." Three years later Thoreau died of tuberculosis at age 44. In 1900 tuberculosis was the leading cause of death in the United States.

One of the towering literary works of the twentieth century, Thomas Mann's *The Magic Mountain* (Knopf, 2005), features both tuberculosis and, obviously mountains. Neither are exactly central to the story, in my opinion. Tuberculosis is a plot device, a reason to gather all the characters together; the mountain is the physical location for this gathering, the location of the Berghof Sanitarium above Davos, Switzerland, an idyll outside of the concerns of typical daily early century European life. In fact, the hero, Hans Catsorp, first arrives at the sanitarium as a visitor and shows only very mild symptoms. At some point, he is convinced to stay; yet it's never entirely clear he has actually contracted tuberculosis. Other patients clearly have and some die. In the end Catsorp, after seven years, is discharged, only to enter World War I from which it is unlikely, though not explicitly stated, he will survive. In fact, he is closer to death when caught in a blizzard:

. . . the dazzling effect of all that whiteness, and the veiling of his field of vision, so that his sense of sight was almost put out of action. It was nothingness, white, whirling nothingness, into which he looked when he forced himself to do so. Only at intervals did ghostly-seeming forms from the world of reality loom up before him . . .

Finally, he stumbles into a mountain hut, escaping this more literal white death, and finding his way back to the Berghof.

This calls to mind our stumbling into Lakes of the Clouds Hut in the White Mountains of New Hampshire. We were on our third day of a mid-winter traverse of the White Mountains. The wind had blown us down to all fours and whiteout conditions prevailed. The clouds lifted for no more than a moment and the stone refuge revealed itself to us. We hunkered in for two nights before continuing on our way. In our youth we called this traverse a triumph, conveniently ignoring how deeply lucky we were.

Mann ends his text with an afterword, “Notes on the Making of the Magic Mountain.” (*Here dear reader, let me tell you how to read my book.* At least Melville trusts us to take up the fiery hunt on our own.) He describes Catsorp as overcoming “his inborn attraction to death and arrives at an understanding of humanity that does not, indeed, rationalistically ignore death, nor scorn the dark, mysterious side of life, but takes account of it, without letting it get control over his mind.” Mann directs us specifically to the chapter, “Snow,” where he tells us, we find that “All interest of [disease and] death, is only an expression of interest in life.”

My father’s parents both suffered from tuberculosis. They were in and out of sanitariums all their adult lives. The “san,” they called it. When my father was 19 both parents were in the san at the same time, and he left college to care for his younger sister and much younger brother. His father died about that time. When I asked my father the actual cause of death, he said his father was “just worn out.” By which I understood that no more would be said about it.

THE WHITE DEATH WAS ALSO THE NICKNAME THE RED ARMY GAVE THE FINNISH sniper Simo Häyä during the Winter War of 1939–1940 between Finland and the Soviet Union. (Note: This is the only fact concerning my subject here that I discovered through Google.) Haya wore white camouflage and kept snow in his mouth so condensation from his breath would not render him visible to the enemy. He was credited with more than 500 kills. He tallied his kills in a “book of sins,” lived his life out as village farmer, and died at the age of 96. Though he never spoke of his war experiences he was shunned by many who questioned the morality of his actions.

Death caused by this particular White Death thus most likely occurred in a split second. But then, the victim would have been a soldier, in combat. Death lurking behind every corner, every building, every tree. If you had a

moment to be surprised, how surprised could you be? Not a good death by Victorian standards, but opinions on this may vary.

In her essay “Transit of Venus,” collected in *Index Cards* (New Directions, 2020), Moyra Davey cites Hervé Guibert: “Hervé Guibert calls the clear film ‘white death.’” What the “clear film” is exactly is not clear. No real context is provided, though Guibert is referred to throughout the essays. Because Davey’s writing is collage-like, quotations like this are often simply *placed* in the text, neither commented upon nor necessarily explicitly tied into the subject matter. The reader may do with it what he or she wishes.

I would love to find this reference in Guibert’s own work, but this will be perhaps an impossible task. Even if I could find it in context, I wouldn’t expect clarification from Guibert himself as he often wrote the same way as Davey. Guibert wrote 36 books, only 16 of which have been translated into English. To date I have read only one: *Ghost Image* (University of Chicago Press, 2014). The title essay, I had hoped, would lead to elucidation of his reference to the white death. It does not, at least not in this translation (by Robert Bonanno). But a ghost image *could be* a kind of clear film. In “Ghost Image” Herbert tell the story of his 18-year-old photographer self who conducts an elaborate photo session of his mother at the age of 45, when she was “still quite beautiful, but a desperate age, when I felt she was at the threshold of old age, of sadness.” The film turns out to have been misloaded into the camera and was blank:

That blank moment (that blank death? Since one can shoot “blanks”) remained between my mother and me with the secret power of incest.

I plan to press on with my reading of Herbert, with no expectation of illumination, even if I should I stumble across a more precise reference.

That Guibert was interested in death (whiteness aside) is inarguable. His most famous work, the novel *To My Friend Who Did Not Save My Life* (Gallimard, 1990; a new edition from Penguin Random House, 2020), is about the death of his friend, the philosopher Michel Foucault, of AIDS. His next most famous work is about his own death, of AIDS, a mere four years later.

In Hocking’s “The White Death” chapter he lists, without citation, the second meaning of the *white death* as “a slang term used to describe incurable diseases such as tuberculosis or AIDS.” In fact, the cause of death for persons infected with the AIDS virus *is* tuberculosis.

I SURVIVED MY OWN NEAR WHITE DEATH. THE FIRST RESCUE PARTY TO REACH us assumed that we were dead inside our tomb-like snow cave. A number of factors had aligned to pin us down there, most significantly, my untimely heart condition and then the three feet of new snow. We had been staying at a well-provisioned mountain hut, thus traveling lightly, and were unprepared to be caught out on an Alaskan winter night. Our body temperatures were dropping, and our margins were thin. One more snowstorm and they wouldn't find us until June. The second rescue party arrived by helicopter and from that point, our ordeal was over very quickly. I was granted a reprieve from my own white death.

More than one person asked, "Was that the closest you have come to dying in the mountains?" The answer to that, which I was aware of even the first time it was asked of me, was, "Maybe, but probably not." In the mountains, we might be closer to the white death than we ever know. The avalanche that rips loose hours after our passing, the snowfields riddled with hidden crevasses unseen as we pass over, loose rock above us, seen or unseen, that may break free at any time; not to mention the human foibles: the underestimation of the difficulties, the distances, the hours of daylight, the overestimation of our own abilities. We strive to minimize risk (but not eliminate it). The danger is real and also necessary.

So, what I say, when they ask if that was the closest I've come to dying in the mountains, is that I had probably been closer on other occasions, but never even knew. Moreover, my first cardiologist upon reading my chart blurted out in his heavily German-accented English, like some mad Teutonic astrologer, "Do not worry about your heart! You will die of cancer!"

DENISE RILEY IS A PHILOSOPHER AND POET WHOSE ADULT SON PASSED AWAY unexpectedly from an undiagnosed heart condition. Her short book *Time Lived, Without Its Flow* (Picador, 2019) has been called a work of "literature of consolation in the wake of grief." Pretty much the exact kind of book I have avoided since we lost our son. I am more likely to be consoled by literature than "literature of consolation." Of course, there is no consolation. Riley's theory is that time appears to "freeze" upon the unexpected loss of a loved one. This seems accurate to me. Though this is a prose essay, Riley's poetic voice sometimes takes over the narrative:

At the death of your child, you see how the edge of the living world gives onto burning whiteness. This edge is clean as a strip of guillotined celluloid film.

First came the intact negative full of blackened life in shaded patches, then abruptly, this milkiness. This candid whiteness, where a life stopped. Nothing “poetic,” not the white radiance of eternity—but sheer non-being, which is brilliantly plain.

Despite her repeated mentions of whiteness here—“burning whiteness,” “milkiness,” “candid whiteness,” “the white radiance of eternity”—I don’t think she means it in any literal way.

The more operative words here are “The edge of the living world,” and “the sheer nonbeing.” Her whiteness is here for contrast, and nothingness.

In writing about dealing with this worst of losses Riley invokes Samuel Beckett’s famous line: “I can’t go on, I’ll go on.”

“You are returned after your brush with another’s death,” Riley says, “a brush that seemed to have stopped you, too—and you’ve been returned differently. You return, knowing more.” Mmm, maybe.

I imagine Bettembourg stopped in his tracks on the descent from Broad Peak, alone, his breathing loud and ragged, his temples pounding, his legs wobbly, out of oxygen, energy, strength, the White Death so near, so enticing, “I can’t go on,” he thinks. And a moment later, inexplicably, “I’ll go on.” Like Beckett, perhaps, channeling a particular chord from the collective unconsciousness.

The fact of our son’s absence overwhelms our desire for answers about his death, answers that we can never know. But I imagine him in Bettembourg’s boots, high on his own private Broad Peak. I imagine his own private conversation with the White Death and somehow, just . . . letting go. “I can’t go on.” My grandfather: worn out.

Consider that here I have been in conversation with these writers and they also in conversation with one another. Bettembourg: “It comes for us, gentlemen.” To which Melville replies: “Wonder ye then at the fiery hunt?”

—David Stevenson

DAVID STEVENSON directed the MFA program in creative writing at the University of Alaska Anchorage from 2008 to 2022 and is the book review editor of the *American Alpine Journal*.

**The Naturalist's Companion:
A Field Guide to Observing and Understanding Wildlife**

By Dave Hall

Mountaineers Books, 2022, 208 pages.

ISBN: 978-1-68051-576-3. Price: \$19.95 (paperback)

MOST HUMANS AREN'T BORN WITH INSTINCTS FOR WATCHING AND UNDERSTANDING wildlife. They must learn how to get close without harming them. Wildlife observer Dave Hall teaches the attitudes and skills that will help people begin to imagine the world as animals do.

Hall describes how to be “invisible” to an animal, how not to interrupt it during such vulnerable times as feeding and raising young. He offers safety suggestions and tells people what gear to take and wear. He urges people to use their senses and to study the patterns of movement in everything from birds to reptiles to mammals.

One chapter teaches tracking, or looking at footprints, odors, markings, shelter, hair, scat, bones, and more. “Tracking is a process that forces you to look beyond the surface and ask questions,” Hall writes.

He devotes a chapter to attracting animals, using calls and other tricks to make them move closer. These tactics can be practiced ethically, he says, if done at times when they won't stress or harm them. He also writes that hunting is ethical when practiced with respect: A hunter should plan to kill just for necessary food and following all laws and regulations.

Hall lives in upstate New York. He started a program for young people with Cornell Cooperative Extension called Primitive Pursuits. He has been practicing and teaching thoughtful approaches to watching wildlife for three decades.

This book is full of practical tips, stories from the field, and photographs. It is an excellent resource for a wide range of people interested in animals—from those who have already watched creatures to those who have not yet tried.

—Christine Woodside

This Wild Land

By Andrew Vietze

Appalachian Mountain Club, 2021, 288 pages.

ISBN: 1-62842-132-0. Price: \$18.95 (paperback)

ANDREW VIETZE MOVED ONLY ABOUT 100 MILES AS THE CROW FIES WHEN HE left his office job in coastal Maine to begin work as a ranger in Baxter State Park. In many ways, however, the new setting was light years away.

Vietze had long been unhappy with his job as managing editor of *Down East: The Magazine of Maine*, even though he had “a private corner office in a beautiful, old Victorian cottage just a short walk from Penobscot Bay.”

In this memoir Vietze recalls, “I had everything an aspiring writer should want: a high-profile position at a beloved institution; an audience that numbered in the hundreds of thousands; a group of talented colleagues whom I admired. I got to interview the most interesting people in the state, stay at the finest inns, and eat at the best restaurants. But I was miserable. I felt confined in a box.”

Vietze’s book does more than chronicle “two decades of adventure as a park ranger in the shadow of Katahdin.” While it does describe harrowing mountain rescues in harsh conditions, along with the rigors of traipsing through remote, rugged terrain, it also incorporates abundant information about the park’s history, geology, and penchant for attracting colorful characters who wind up, like Vietze, working as rangers.

Vietze is an award-winning, bestselling author of more than a dozen books, and *This Wild Land* showcases his keen eye, attention to detail, and appreciation for Baxter’s majestic natural attributes that have attracted such notable visitors as Henry David Thoreau and Teddy Roosevelt.

Vietze’s wilderness cabin, which he helped build, may have been less sumptuous than his magazine office, but it provided ample rewards:

My camp is a log cabin in a 3-acre field. A narrow strip of conifers screens it from Daicey Pond Road on one side and wide Nesowadnehunk Stream on the other. On the far side of the field, perhaps 100 yards away, the Appalachian Trail emerges from the woods . . .

Big and Little Niagara, a series of granite twists and chutes and cascades about a mile away, shush constantly if you listen closely. At night, stars stare down so intently it’s astonishing.

Working as a park ranger, however, was not all beautiful views, and Vietze was far from a happy camper. *This Wild Land* sometimes bogs down with his gripes about less-rewarding aspects of the job: lugging picnic tables, cutting firewood, cleaning toilets, and dealing with undesirable people. “We’ve had people drive stolen cars into the park, bring firearms into their cabins, kick in outhouse walls, carve up cabins, launch motorboats on Daicey Pond, fly prohibited drones, smash the thwarts of canoes to unlock them and use them illegally, and pack twenty people into a cabin that fits six,” he writes. Dwelling on these unpleasant acts is perhaps unavoidable. After all, Vietze was not vacationing in Baxter; he was working in a demanding job.

He also paints a sobering picture of how the park has evolved because of climate change: “I’ve hunkered through ever more violent storms, each one trying to fell more trees than the last. It seems every year for the past several we’ve witnessed dramatic weather events. . . . We’ve been thrashed by successive October nor’easters, leaving piles of downed trees almost as tall as the young trees left standing. And now drought. There is no normal anymore.”

Vietze may have abandoned his magazine office, but readers should be grateful that he hasn’t forsaken writing. This warts-and-all account could serve either purpose: Inspire some to pursue new career paths, or lead others to think long and hard before following in his footsteps.

—Steve Fagin

Tangled Roots: The Appalachian Trail and American Environmental Politics

By Sarah Mittlefehldt

University of Washington Press, 2014, 280 pages.

ISBN: 978-0-295-99430-7. Price: \$24.95 (softcover).

Editor’s note: Although this book was first published in 2014, it came on our radar recently, and we feel it deserves attention even now.

ON THE APPALACHIAN TRAIL, SURROUNDED BY TALL TREES AND DENSE FOREST, it’s easy to think we’re traversing an ancient footpath through old woods. I’ve thought, “Thank goodness we preserved this sliver of nature before it was chopped down, mowed over, paved, and developed.”

That way of thinking about the AT is almost completely wrong, as I learned from Sarah Mittlefehldt’s *Tangled Roots: The Appalachian Trail and*

American Environmental Politics (University of Washington Press, 2014), a research-heavy dive into the environmental ideals, political compromises, setbacks, and breakthroughs that established and protected the footpath from Georgia to Maine (currently 2,194 miles long).

The AT is not ancient; some sections were blazed only in the past few decades. It was not preserved from old woods but rather carved through private farms and logging tracts, including properties that have been purposefully cleared of their human history so as to create a more “natural” experience for hikers. Only 1 percent of today’s trail has not been relocated or rebuilt.

That hidden history of the AT is an essential part of understanding how the trail was tediously cobbled together through a mix of community negotiations and strong-arm government tactics in what Mittlefehldt argues is a distinctly “American” version of environmental politics that blends federalism and grassroots organizing. Unlike Philip D’Anieri’s more recent *The Appalachian Trail: A Biography* (Mariner Books, 2021), which focused on such eccentric characters as Grandma Gatewood and Bill Bryson who built up the mythology around the AT, Mittlefehldt’s book is more of a study in trail-building realpolitik.

“Over the course of nearly a century, the AT project has combined the horizontal, dendritic roots of grassroots social action with the strong central taproot of federal authority,” writes Mittlefehldt, a professor of environmental history and policy at Northern Michigan University. “These two sources of political power evolved in dynamic interaction with one another, tipping at times toward one side or the other, but never fully separate.”

Known formally as the Appalachian National Scenic Trail, it was proposed in 1921 by Connecticut native Benton Mackaye, a U.S. Forest Service worker who was in the first Harvard class to graduate with a forestry degree. In a 1921 issue of the *Journal of the American Institute of Architects*, Mackaye noted how a trail following “the skyline along the top of the main divides and ridges of the Appalachians would overlook a mighty part of the nation’s activities” and might help address the unemployment, class antagonisms, and mental health problems that all appeared on the rise in a society “infected by a kind of spiritual malaise that came from being disconnected from nature.” (Mackaye’s wife had died by suicide that year.)

The essay led to a 1925 gathering in Washington, D.C., of the inaugural Appalachian Trail Conference, which would evolve into a nonprofit organization known today as the Appalachian Trail Conservancy responsible for managing the footpath. A loose-knit group of advocates began investigating potential trail locations, to varying levels of local support.

Moonshiners in Georgia tangled with trailblazers stumbling upon backwoods distilleries. An angry mob in Virginia, in what would become Shenandoah National Park, threw stones at trail volunteers and stole their shelter construction materials. Such resentment bubbled up over the decades. In the 1980s, thru-hikers in Tennessee encountered fishhooks dangling from a fishing line at eye level, presumably strung there by landowners unhappy about being pressured to sell their land. In the same area, arsonists torched an AT shelter and a posse of locals smashed a USFS vehicle with rocks and clubs.

The AT needed government support. In the 1930s, the Maine lawyer and trail enthusiast Myron Avery—who chaired the Appalachian Trail Conference from 1931 to his death in 1952—recruited the Civilian Conservation Corps to help blaze the trail, and in 1937 a CCC team marked the last remaining link of the AT between Spaulding and Sugarloaf Mountains in Maine. The following year, the Appalachian Trail Conference’s annual meeting was attended for the first time by the National Park Service, underscoring the government’s growing role following Congress’s 1936 passage of legislation to promote cooperative agreements between states in planning recreational areas.

By the late 1960s, however, the AT remained a largely ad-hoc string of public and private trails. Many sections had no more than a handshake agreement to allow hikers to pass. The Appalachian Trail Conference still needed to acquire 630,500 acres to create a publicly protected, 2,000-mile-long corridor 200 feet wide. (Later, trail advocates realized that the AT needed more than just a “skinny right of way” between housing developments, so in a 1978 federal bill, the corridor was widened to 1,000 feet.)

In 1968, Congress passed the National Trails System Act, with the AT and Pacific Crest Trail named the country’s first national scenic trails, thus inducting the AT into the national park system while deferring management and land acquisition to the ATC. Whereas volunteers had previously followed whatever “path of least resistance” could be negotiated with landowners and townships, according to Mittlefehldt, the AT now had federal money and the federal power of eminent domain to pursue the most scenic path, which is how spots like McAfee Knob in Virginia became part of the trail.

McAfee Knob was not along the original AT, which for its first four decades traversed the nearby Jefferson National Forest. Today, McAfee Knob is considered one of the most scenic spots on the fourteen-state footpath, and it only became a reality because of “a combination of grassroots support and the expanded power of eminent domain” from the 1968 Trails Act and a 1978 amendment expanding federal authority over trail creation, according

to Mittlefehldt. (The late Bob Proudman, the former Appalachian Mountain Club trail worker who built the Garfield Ridge Campsite in the White Mountains and went on to direct trail projects on the AT, played a key leadership role in acquiring McAfee Knob.)

In these ways, the creation of the AT can be interpreted as both federalist *and* confederalist, liberal *and* conservative; liberal in its focus on the environment and public good, conservative in its decentralized development and deference to landholder rights; federalist in its usage of eminent domain and government money, while antifederalist in its reliance on grassroots organizers, community-based groups, and volunteerism. (AMC, for example, maintains nearly 350 miles of the AT in five states.)

I learned a lot from *Tangled Roots*, and yet I wanted more from this book. Mittlefehldt conducted field research while thru-hiking the AT in 2007 on her honeymoon, which she briefly mentions. She and her husband hiked and hitchhiked into libraries and archives during the trek. I was left asking, How did librarians respond to Mittlefehldt showing up covered in mud, her grimy hands touching their archival documents? How did Mittlefehldt safeguard her research when back on the waterlogged trail?

Mittlefehldt strongly endorses the AT approach to environmental politics. I can't help but wish there was a better way. A century after Mackaye first proposed the world's longest hiker-only footpath, seven miles of the AT remain privately owned (and thus unprotected), and the trail corridor still doesn't routinely reach the targeted 1,000-foot width.

—Stephen Kurczy

Imaginary Peaks

By Katie Ives

Mountaineers Books, 2021, 304 pages.

ISBN: 978-1-68051-541-1. Price: \$26.95 (hardcover).

ON AN EXPEDITION TO PERU IN 2021, A FRIEND AND I CLIMBED A NEW ROUTE of ice, snow, and rock on a 5,765-meter peak called Jangyaraja. Afterward, when I began looking into prior ascents of the mountain, things got weird. There were various spellings of its name. On Google Maps the mountain was labeled as Jatuncunca. Another trip report from the 1970s described three separate summits—though my partner and I only saw one obvious high point. By the end of my research, I wasn't even sure what mountain we had climbed.

My experience navigating a spider's web of conflicting information about a single point on the map, unsure what might be true, is the kind of territory Katie Ives, the longtime editor-in-chief of *Alpinist* magazine, deals with in her new book *Imaginary Peaks*. She takes an expansive view of the topic of "imaginary cartographies," considering ideas such as how misplaced islands, ranges, and peaks became enshrined on maps over the centuries by human error; the hunt for fully invented secret lands, from Eden to Shangri-La; how geographic names change over the centuries; and even how once-real places are no more because of climate change.

"By exploring how fantasies have shaped and misshaped human visions of geography, we might see the world more honestly as it was, as it is, and as it could become," writes Ives. And this is the throughline that underpins her wide-ranging meditations—the very real ideas and effects, both positive and nefarious, that fictitious geographies have on people and on the planet.

The conjured mountain at the heart of *Imaginary Peaks* was the result of a prank, dreamed up by the late writer and conservationist Harvey Manning. The Riesenstein Hoax, as the prank became known, is a deep cut in climbing history, unknown to most modern climbers: In 1962, Manning teamed up with Austin Post and Ed LaChapelle to compose and submit an article to the preeminent climbing publication of the day, *Summit* magazine, about an Austrian expedition to a heretofore unexplored pocket of mountains in British Columbia. Accompanying the piece was a photograph taken by Post of imposing granite walls with several climbing routes inked in—some finished, others stopping mid-face. The highest peak was named the Riesenstein, according to the Austrians—er, Manning—and it was still unclimbed. Manning ended the piece with a challenge: "Who will be the first to climb it?"

The rub? The mountain wasn't in British Columbia. And it wasn't called the Riesenstein. And no Austrian expedition had ever taken place. But the picture was real—it was of the Kichatnas, a small range in Alaska that no climbers had ever visited. Manning and company had simply *moved* the mountains on the map and invented a backstory.

On its surface, the Riesenstein Hoax seems inconsequential lighthearted fun. But as Ives digs into the tale, she shows it to be much more.

On the one hand, writes Ives, as the hoax's masterminds realized, "if modern maps and guidebooks detract from their users' imaginations, you can always shift the peaks around, mix in a few errors and fables, and then see what happens to the people you fool." The results can be wonderful: Getting lost or wandering the hills without every bit of information at our disposal in

this contemporary world can lead one to see old lands through fresh eyes, to find adventure and brilliance in the smallest of things.

More important, as Manning did with the Riesenstein Hoax and several previous ruses, imaginary peaks and cartographies can lay bare “the absurdity and inappropriateness of climbing mountains for personal glory in the first place,” writes Ives.

Directly related to this—and the most powerful theme throughout *Imaginary Peaks*—is Ives’s focus on *terra misincognita*, a reframing of how we look at “untrodden” lands. The clever phrase emphasizes “the failures of explorers to acknowledge the realities of the traces, paths, and homes of local residents,” she explains. In every historical episode she touches upon—from the early forays into the American West by colonial settlers to Frederick Cook’s faked first ascent of Denali in 1906—Ives addresses the human cost and cultural erasure of indigenous groups.

If there is a strike against the book, it is that it is so jam-packed full of references and allusions and quotes that any reader who hopes to take it all in will need to give it a second read. But the book earns the close attention it demands, and it occupies a liminal space between two ideas that reveal Ives at her best: celebrating the possibilities that imaginary cartographies offer us to see the world anew, and how they pull back the veil on what has been unjustly hidden from view.

—Michael Levy

Don’t Sing to Me of Electric Fences

Poems by Dave Seter

Cherry Grove Collections, 2021, 117 pages.

ISBN: 978-1-62549-383-5. Price: \$20 (paperback).

POETRY OFTEN CHALLENGES A READER BECAUSE IT SKIPS THE LINEARITY OF prose and asks the reader to take leaps and follow. This in turn asks a question about compatibility of mind and direction—yours and the poet’s. No small ask, I think.

Still, the promise offered is not unlike that of new terrain, or terrain new to you—what is around the bend, or the next line-break? And can you, from an angle you’ve not experienced before, name that peak, or spur? Or hear it renamed?

Such was my experience as I read David Seter’s new volume. Seter is a westward-tending poet, where the fences truly are electric, and where the

song, “Don’t Fence Me In,” still floats in the air. This book of poems, like their poet, migrates from east to west, and, in this movement lies his and their freedom.

Seter’s poems are not fenced in. He and they go out, and then out again . . . to woods, fields, trees, and more trees. And wherever the poems go, they take you along. Once you are out there, Seter’s poems like to question you: “Do you think we’d know joy if it attacked us?/ Who else watches this stand-off? Mountain lion? Bald eagle?/ . . . what else could this be but heliolatry?” You are part of this too, the questions say. They are both prod and invitation.

I accepted these invitations and was happy to go to the worlds Seter visited. And I enjoyed meeting also the characters who lived there. A favorite poem, “Golden Delicious,” cast back to the poet’s youth and noted, “What a pair we made, bookish boy and punk rock girl . . .” Such pairings often lie at the heart of poetry.

I also accepted the volume’s final command—“Go to the Blue Oak,” which an afternote points out is derived from Basho’s “to know the pine you must go to the pine.” Just so, and since we have no blue oaks in Maine, I went to a neighborhood white oak to see its lichen tats and run my fingers over its furrowed bark.

—Sandy Stott

Dammed if You Don’t

By Chris Kalman

Self-published, 2021, 170 pages.

ISBN: 978-0-578-84097-0. Price: \$24.99 (hardcover).

IN 2010, WHEN CHRIS KALMAN FIRST VISITED COCHAMÓ, A CHILEAN VALLEY of granite walls that has earned the reputation as the Yosemite of South America, it was a quiet little place. There was a single campground. Only the most motivated trekkers and climbers visited. Today, there are five campgrounds in Cochamó, and thousands descend on the valley each austral summer (November to March).

Dammed If You Don’t is fiction—it won the Mountain Fiction and Poetry award at the 2021 Banff Mountain Film and Book Festival—but is informed by the evolution Kalman has witnessed in Cochamó. The limited-edition book is a meditation on what might happen to such a place in a worst-case development scenario. It asks in no uncertain terms: Can you love a place to death?

The novella follows John Mercer, an American dirtbag climber who in 2011, with his friend Gary, “discovers” Lahuenco—the stand-in for Cochamó. Several years after climbers establish the first routes up the valley’s walls, Lahuenco is seeing more and more traffic. Mercer’s concerns are not just over-use by climbers and trekkers; a hydroelectric company may dam the Lahuenco river, thereby turning the valley into a South American Hetch Hetchy* and wiping out a rare, endangered salamander endemic to the area. The story follows Mercer as he navigates these competing threats to the place he loves.

Kalman uses a heavier hand with some themes than others—Mercer’s internal dialogues about “necessary evils,” “greater goods,” and the “democratization of wilderness” can feel overwrought—but he never forces dogma on us. The animating question, how to protect the purest places but also reap their benefits, remains just that. For those who have read Edward Abbey’s classic *Desert Solitaire* (first published by McGraw Hill in 1968), the question won’t be new, but Kalman’s delicate handling of the subject, his willingness to consider the issue’s complexity, will be.

Craig Muderlak’s black-and-white illustrations interspersed throughout the novella help bring Lahuenco to life. By the end of *Dammed If You Don’t*, with its brilliant and unexpected turn, readers will be itching to make a pilgrimage to Cochamó for themselves but also wondering if that would make them part of a bigger problem.

Kalman does argue—rightly so—that in the quest to protect natural places, we should look to indigenous models of conservation. At one point, Mercer reflects on how the Mapuche, the indigenous inhabitants of Lahuenco, “had managed to live here for thousands of years without disturbing or destroying the place at all. The model for true conservation was there. It was simply that modern man couldn’t seem to relegate his desires to his common sense.”

—Michael Levy

*Hetch Hetchy is a reservoir in the northwestern corner of Yosemite National Park. It serves the city of San Francisco. The work to build a railroad and dam in the valley took place between 1915 and 1923. A movement to dismantle the dam has gained traction this century.

Risks, decisions, and adventure

STORIES IN THE SUMMER/FALL 2023 ISSUE OF *APPALACHIA* EXPLORE HOW dealing with risk molds backcountry trips.

Jeannie Oliver talked with a hiker on New Hampshire's Mount Moosilauke who was on his way up the Glenclyff Trail as she was on her way down to avoid the dangerous conditions. Two days later, rescuers found his body. Oliver will write about that encounter and her feelings about what happened.

Anna Hager Loome, a teacher in Millinocket, Maine, will write about risk on backcountry rivers. She will examine how young people can experience the joy of adventure without putting themselves into grave danger, using her own Swiftwater Rescue training as a framework.

Shilletha Curtis—trail name Dragonsky—discovered long-distance hiking a few years ago as a mental and physical healing exercise. Curtis aspires to be the first Black lesbian to achieve the “triple crown”—completing the Appalachian Trail, Continental Divide Trail, and Pacific Crest Trail. Partway through that challenge, she writes about her journeys and her life. The New Jersey native has become an inspiration on her own and also by joining up occasionally with the group Black People Who Hike.

Connecticut teacher and adventurer Tom Fagin will again inspire us with a unique low-carbon journey from his back door. This one covered 700 miles by bicycle and paddling from Mystic, Connecticut, into Maine, New Hampshire, waterways of the Northern Forest Canoe Trail, the Connecticut River, Long Island Sound, and back home.

Literary and science writer Katy Dycus will take us on a hike through Glencoe, Scotland, “an area where there is constant mist and chill, forest and mountainous peaks, a truly mythical place.” She will take readers through this sublime landscape by examining the literary connections it brings up.

These and more essays will appear in June.

Until next time, explore, create, and stay in touch.

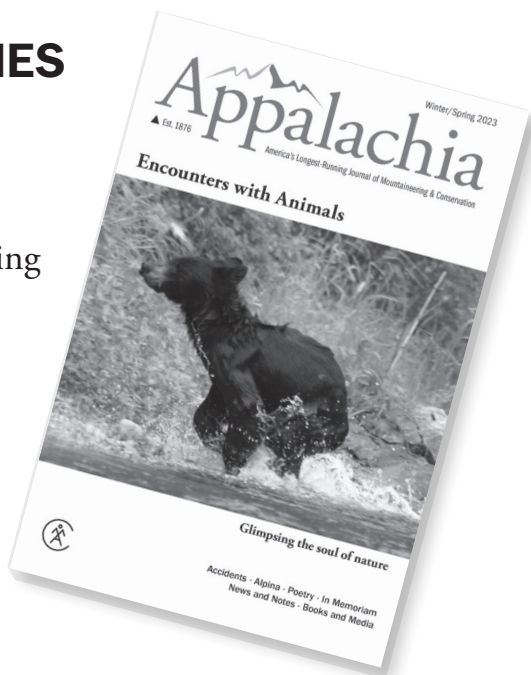
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