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TRAILING FIRE: WORKING IN THE WOODS AND THE FUTURE OF FORESTS IN A CHAOTIC CLIMATE

By

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Thesis

presented in partial fulfillment of the requirements for the degree of

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ABSTRACT

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Trailing Fire

Chairperson: Mark Sundeen

Our national conversation about wildfire is shifting. As wildland fires become larger, more frequent, more severe, and more expensive—and as climate change and land-use patterns drive the trend toward more fire—we're scrambling to find a different paradigm for engaging with fire. Scientists now call this age of increasingly extreme burning the Pyrocene, and we're just beginning to grapple with its impacts on the way we work, play, and live on the land.

As a longtime trail worker for the U.S. Forest Service, I've spent hundreds of days clearing trails in burned forests. In *Trailing Fire*, I draw on these experiences to show how we have yet to reckon with wildfire's longer-term effects on outdoor recreation, and to explore what that means for how humans connect with wild spaces.

As outdoor recreation surges across the country, putting public lands in the spotlight and prompting important conversations about equity, inclusion, and access in the outdoors, federal recreation budgets keep shrinking, forcing smaller crews to keep up with the impacts of exploding use. Meanwhile, more fire means trail-maintenance workloads are growing, as the effects of severe burns persist for years, if not decades. While approaches to preparing for and fighting wildfire are changing at both a policy and community level, federal land managers have no comprehensive strategy for addressing the impacts of fire on recreation and trails. And that's a problem, because recreation provides a portal through which vast numbers of Americans connect with wild spaces. Extreme fire regimes, by limiting access to the outdoors, threaten opportunities for understanding fire's historic and future role in our shared landscapes.

I illustrate these complexities by sharing vivid stories from my years of restoring burned trails, at the same time tracing my evolving understanding of reciprocity between communities, landscapes, and the fires that shape them. *Trailing Fire* weaves personal narrative with ecological and political context, offering an intimate and original perspective on living and working in the Pyrocene.

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Forest Murmurs

I used to be afraid of the dark.

Beyond childhood, I mean. The summer I was nineteen, I worked at an overnight camp about an hour outside my hometown of Seattle, just past where the outlying suburbs dissolve into the country, all rivers and woods and winding county roads no longer linked to any discernible grid. Easy to get lost if you haven't memorized the turns.

It was a traditional, no-frills summer camp. We slept on narrow cots under canvas roofs on wooden tent platforms. When it rained – as it did more than usual that summer – water ran into the tents whose foundations were slightly off-kilter. We woke to reveille every morning, trumpeted by the camp director's son. A mouse chose someone's pile of clothes as the place to have her babies.

Hidden Valley Camp had its own repertoire of ghost stories and legends, designed to scare campers just enough – but not so much that their fear would drive the counselors crazy. For me, that summer was really about the secret social world of the staff, a daily encore that unfolded in the dark, after hours. There was partying, and there was romantic intrigue (none of which, to my disappointment, directly involved me). And we had our own scary stories, more frightening and more true than the ones we told the kids.

Like many rural areas in the first decade of this century, outer Snohomish County had a well-documented meth epidemic; *Rolling Stone* chose it as the setting for a feature on the drug's prevalence. We warned each other about deranged tweakers haunting our hidden valley, poised to attack anyone who unwittingly stumbled upon a backwoods lab. We told of hearing footsteps circling our tents after we were in bed. The story that scared me the most was about the Girl in White, the ghost of a camper who had died decades ago, supposedly spotted running around the grounds by various staff members, including ones I trusted not to mess with me.

By the middle of summer, a secret terror consumed me every time I found myself alone after dark. I sensed an unseen presence, mysterious and sinister, always just beyond the beam of my flashlight. I hurried the ten paces from the washhouse to my tent, eyes on my flip-flops, not daring to peer past the artificial light. In bed, I'd burrow deep in my sleeping bag, afraid of what I might hear if I left my ears exposed.

Five years later, I had traded the relatively civilized confines of a summer camp for a more rugged and intense form of communal living: work on a trail crew with the Southwest Conservation Corps. I still harbored more fear (of the dark, of the wild in general) than I'd ever admit to my crewmates. I'd always thought of myself as outdoorsy, at least in the context of my city life – I liked hiking and swimming in alpine lakes; I'd done a few short backpacking trips with my family; I took pleasure in the smell of campfire clinging to my clothes – but this new gig for the conservation corps had already pushed me far outside those comfort zones. I spent more nights in a row in the backcountry than I ever had before, learned to use a Pulaski and a McLeod and other tools I never knew existed, woke to snow on my tent in September. But I still felt like the least hardcore person on my crew by a long shot. Every day was an exercise in proving I belonged.

One night, camped in the La Garita Wilderness of southern Colorado, we huddled under a leaky tarp, seeking shelter from a relentless downpour borne of the same storm system causing historic flooding some 200 miles north in Boulder County. After dinner, I scrambled up a hillside a few hundred feet beyond our camp to secure our bear hang for the night. On the way back, I quickly became disoriented in the darkness and heavy rain, the weak light of my headlamp showing indistinguishable dense forest in every direction. Not yet confident in my own instincts, I called out, "Hey, where are you guys?" The shrill panic in my voice made me cringe. I was still within shouting distance of the crew. I followed their reply back to camp.

Like Hidden Valley Camp back in the Northwest, the Southwest Conservation Corps cultivated an internal body of lore. The corps headquarters outside Durango stood on the grounds of an old Indian school, where the spirits of its long-suffering former occupants still lingered; my crew leaders spoke of an irrepressible feeling of sadness that hovered in the place. We worked a lot around the San Luis Valley, infamous for extraterrestrial sightings and unexplained encounters stretching back into Ute legend. My crew leader claimed to have seen the shadows of "the little people" – a small human-like species some tribes believed had been sent from the skies to protect them – scurrying past his tent in the moonlight.

I ended up back in the La Garita the following summer, on another SCC trail crew. Turns out the struggle to prove myself, the daily humbling confrontation with my own backcountry shortcomings, offered a fulfillment that doing what I'd always done – typing words on a computer – didn't. And I was getting more hardcore. Partying at a local campsite on one of my nights off, I tried to find my way back to my tent without my headlamp and stumbled into a cactus patch. Neither the needles nor the dark fazed me. I'd had enough beers for it to feel like progress.

But the scary stories still got to me. That second Colorado season, it was Bigfoot, of all things, that left me lying tense in my sleeping bag, listening and afraid to listen at the same time. This year's crew leader – again, not one to tell tall tales – swore he had successfully summoned Sasquatch in another corner of the San Juan Mountains, via the tried-and-true method of knocking on tree trunks with the blunt side of an axe head, and hearing the local 'squatch knock back. My crewmates clamored to try it. "*No*," I told them, and they relented, taken aback by my unexpected vehemence. For the rest of the hitch (a trail crew's typical eight-ish-day tour in the field), I felt that unseen presence again, something bigger than me but invisible, keeping watch from the trees.

The concrete fears, the inherent real risks of living and working outside, were easier to conquer. I learned to use a chainsaw without cutting off my leg. I listened with fascination to coyotes' evening wails as I drifted off to sleep. I got my Wilderness First Responder certification at the headquarters in Durango, where I was both relieved and disappointed not to encounter any Indian-school spirits.

My third conservation-corps season, when I'd finally moved up to crew leader, I got myself and my charges lost in a lightning storm one evening. We were not in the backcountry this time, and ended up hitching a ride on the maze of logging roads that led back to our camp with a taciturn and possibly drunk couple in their pickup. More confident in my instincts now, I stood by that decision, despite the fact that it violated about five different SCC policies.

But I never got over the feeling of needing to prove myself. Ever since my seasons as a varsity rower in high school, I'd taken pride in strength and toughness, in the things I had to work for physically. I didn't feel comfortable celebrating victory without struggle; grades and test scores – the things that came easy – never brought the same deep satisfaction as out-rowing girls bigger and meaner than me. I liked the way trail work challenged both my body and my brain. I had almost no experience with tools or the kind of practical trade skills no longer taught to college-bound city kids, especially girls. I'd somehow managed a B in calculus but had little intuitive understanding of physics, mechanics, or engineering. Exercising skills that didn't come naturally to me, knowing I couldn't sleepwalk or sweet-talk my way to success, kept me on my toes, kept me humble in a way that felt healthy.

I never questioned this commitment to self-deprecation and struggle until, after three years with the conservation corps, I took a job with the Forest Service back home in Washington State. I suddenly found myself the youngest, least experienced, and only female member of the Leavenworth trail crew. All my hard-won confidence withered under a newly punishing work pace, the worst blisters I'd ever had, a strained back, mistake after stupid mistake I seemed to keep making. I had no energy left for fear.

The things that used to scare me, or at least feed my unease – the darkness pressing in on a moonless night, unexplained rustlings outside my tent, the unshakeable sense of something formless but sentient surrounding me – became almost reassuring in their constancy, their mystery less sinister. If I couldn't hike as fast or move as many logs or wield a chainsaw as deftly as my colleagues, the least I could do was not be afraid.

With the conservation corps, we'd traveled in crews of six or eight, and camp after work could be a raucous, busy place, the evening hours taken up with group chores and planning and silliness, structured and unstructured. But my Forest Service crew usually split into twos or threes for backcountry hitches, and with no obligations to each other – we packed our own food, cooked our own individual meals – the evenings could be long and quiet. We got to know each other at the cautious, halting pace of people who know they're going to be alone together for days on end and don't want to run out of things to say too fast. Trail-crew people tend to get into this line of work because they enjoy wilderness and solitude, and spending time around them has taught me to cherish the gift of comfortable shared silence.

On those quiet evenings deep in the woods of the North Cascades, I listened to the rustles and whispers I used to muffle with my sleeping bag. I turned away from the fire, turned off my headlamp, and tried to see into the darkness. I crouched alone on creek banks to filter water, thinking of all the other forest creatures making their way down through the dusk for a drink.

We worked long, hard days, and my coworkers often crashed early. I came into the habit of using those precious backcountry evenings – no distractions, nothing to do til morning – to write, easily scribbling a half dozen pages every night. As a result, I was often the last to turn in, putting out the fire and brushing my teeth alone, in the dark – a situation I would have avoided at all costs all those years ago at camp. Now, the moments by myself at night felt like a secret ritual, a prayer, something invaluable that belonged just to me. They were my refuge from an outside world that had no time for such reflection, a world lacking in mystery but abundant in menace. More and more, the consciousness of the forest seemed to be not watching but watching over me, like the legendary little people I'd feared even as I tried to believe in their powers of protection.

Even in the more stoic, subdued culture of the Forest Service, storytelling endures. It really is like church: Where two or more are gathered around a campfire (or, at the height of fire season, a ring of cold rocks or a patch of flat dirt), something divine arrives to inspire the stories. Some will always be scary: encounters with cougars and hell-raising hillbillies, murder-haunted mining claims. But my fellow foresters, generally older and more lifehardened than the conservation-corps crowd, mostly impressed me with their tales of rugged adventure: spending one's last dollars on a one-way ticket to Alaska to climb Denali, no cash left for food; paddling the Columbia upstream in a homemade canoe; hiking 17 miles on a torn ACL. I still felt like the least hardcore member of the group, but I began to see my own misadventures as just that: silly, self-deprecating stories for the campfire, no longer weighted by shame and fear. By the end of my second season with the Forest Service, I'd repurposed some of my darkest moments on the trail into my own campfire classics.

I still always felt a tiny relief every morning, waking to see the sun making everything friendly and familiar again. But leaving the wild altogether no longer offered any such reassurance. A predictable anxiety began to gnaw at me every time I returned to the city on my days off, a new form of dread that left me immediately desperate to return to the shadowy uncertainty of the woods. The conditions of the "real world" (as trail people call it, with a wink of irony) suggested that eliminating primal danger, easing physical struggle, and offering app-based alternatives to everything uncomfortable only stoked a collective, self-perpetuating fear, so universal there was no point or pride in conquering it. I didn't know how to prove myself in such a world.

Back at Hidden Valley Camp, we published a newsletter a few times a summer to send home to families, basically the kid version of the campfire-misadventure genre: capture-the-flag winners, memorable talent-show performances, which camper started a food fight in the canteen, who finally triumphed over their terror of the deep end. It was called Forest Murmurs. A cute title, illustrated with drawings of squirrels and deer peeking from behind triangular trees. But I thought of it years later, on those nights when I finally learned to listen to the forest, to parse the voice of that invisible presence I felt surrounding me for so long. You can pick out what might be the wind in the pine needles, the chatter of birds, a deer splashing across the creek. But just as a creek, when you really listen to it, doesn't have a constant, ever-repeating rhythm but an improvisational ramble, full of inconsistencies and surprises, the forest, too, has a communal voice, a chorus without distinct sources. A low-frequency murmur that sounds – if you want it to – human. Like another group of campers swapping stories almost out of earshot, like the footsteps of little people silhouetted by the moon, like a girl calling through the rain, trying to find her way back. It would be my last summer in the city.

I don't remember exactly what I was doing on June 30, 2013. It was a Sunday, so I'd likely slept in after working late at the ice-cream parlor/vintage arcade/beer joint the night before, a weekend job I'd picked up on top of my nine-to-five office gig. I made enough writing and editing blog posts for an environmental-news nonprofit to pay my \$600-amonth rent in Seattle, then still teetering on the cusp of the Amazon boom, but not enough to save any useful amount of money. Two years since graduating from journalism school, I already felt my life stagnating—the weeks and months sliding by, nothing ever changing except the seasons and the rotating cast of roommates with whom I shared a crumbling, hundred-year-old duplex on the edge of the city's rapidly gentrifying Central District. I lived four blocks from my former high school and bought cheap wine from the corner store that had sold my friends and me beer and cigarettes when we were underage. "You're twentyone, right?" the proprietor would ask, just as he had back then.

I told myself the ice-cream job, in addition to the extra cash I'd always hustled babysitting, was a small step toward saving up for my next move. Whatever that might be. The job listings I browsed during my down time at work seemed like lateral leaps: similar positions with similar salaries in cities even more expensive than Seattle.

I don't remember how I passed the final day of June that year, but I do remember my 24th birthday, a couple weeks earlier. I'd gone with a friend to a reggae bar called Waid's a couple miles from my house, in the part of town people used to sometimes call Little Addis Ababa. Waid's, a funky remnant of Seattle's rapidly fading underdog ethos, is long since

9

Exit

gone, razed to make way for yet another block of ticky-tacky overpriced condos. Kat and I stayed til after closing, taking frequent weed breaks on the patio, and at some point I ducked into a back room to do coke with the dreadlocked bartender. I stumbled home in the wee hours and lay in bed trying to sleep through the cacophony of early-summer birds already squawking through the gray-blue predawn darkness. They sounded so close to the windows of my attic room they could have been perched inside.

* * *

I liked to party on weekends; it never took much convincing to get me to stay out too late, drink too much, dabble in various substances. But I also liked to wake up early on weekdays and run before work. I lived a mile from Lake Washington, and in the summer sometimes I'd run down to the water and jump off the fishing pier, swim around for a few minutes, then chug back up the hill in wet shorts and bra, put on a pot of coffee, hop in the shower, hustle to the bus, and make it into the office by 9, satisfied by already having communed with nature before reading a single email. My 20-to-30-mile-a-week running habit was never driven by an obsession with fitness goals or a desire for bragging rights. True, I craved the exercise—mentally as much as physically—in order to bear sitting in an office for eight hours a day. But mostly I liked the time alone with my thoughts, outside, disconnected from devices. I liked exploring Seattle's neighborhoods, with their secret staircases and trails tucked into steep, wooded ravines, at a steady six-mile-an-hour pace. I relished equally the sharp cold of clear winter mornings, the sultry warmth promised by a summer sunrise, or, most often of all, the comforting soupy overcast that could mean any season in Seattle. I just liked the sensation of my body moving through the atmosphere. Running on a treadmill had none of the same appeal.

Maybe, on that first day of July in 2013, I ran to the lake for a swim before work. I wouldn't jump in if anyone was actually fishing off the pier. Plenty of folks in the neighborhood—mostly older Asian immigrants—still fished for food, not fun, in Seattle's waterways, and I didn't want to ruin this rite of subsistence by splashing around in my spandex. That was what I loved most about the lake, anyway, the way this huge body of water in the middle of a major metropolitan area could still sustain so much, mean so much to so many people. I'd learned to swim in Lake Washington, learned to ride a bike along its shores, rowed on the lake all through high school, when my dedication to the crew team likely spared me from deeper delinquency. I saw the same people walking and fishing and practicing tai-chi at the same times day after day, year after year. From the I-90 bridge south to Seward Park, where I grew up, the entire shoreline is public, three miles of beaches and piers and paths, places to barbecue, sunbathe, roller-blade, throw a frisbee. Even as the city changed, it seemed the lake never would.

When I got to work on July 1, I settled into my desk on the eighth floor of the building where I worked downtown, on the opposite side of that skinny city, the saltwater side. To this day I associate the tang of the sea and the baying of gulls with downtown hustle and bustle, screech of bus brakes and bellow of ferry foghorn and white-noise clatter of jackhammer. High above all that, facing the computer all day, what I did felt disembodied and disconnected, although the stories I wrote more often than not centered around physicality, around tangible engagement with one's surroundings: articles about farming and labor, biking and organizing. This dissonance between what I wrote and the experience of writing it gradually grated on me, the longer I held that job. And here, that Monday, the day after June 30, 2013, came a shockingly visceral story to which I was tasked with responding: the deaths of nineteen firefighters, an entire hotshot crew minus one, in a gully outside Yarnell, Arizona. The deadliest day for firefighting in the U.S. since 9/11. As a news outlet focused broadly on the environment and sustainability, we wrote about everything from clean energy to food justice to development, rural and urban. When we covered wildfire, it was typically through one of two lenses: fire's correlative relationship to climate change, and fire as a land-use issue.

The latter is the angle I chose to report on the Yarnell Hill Fire and the death of Prescott, Arizona's Granite Mountain Hotshots who fought it. Although I'd trained in a venerable journalism school that prided itself on instilling rigorous ethical standards, and my editor at the site once described me in a performance review as a "journalist's journalist," much of the daily writing I did was what we called aggregating: reading a bunch of different articles on a topic or breaking-news story, then summarizing and synthesizing them for our readers, adding lots of links and some light analysis or commentary of my own. It always felt uncomfortably unlike real journalism to me. And at 24 years old, my own hot take on any subject was informed less by real-life experience or independent critical thinking than by a daily immersion in Twitter punditry. I absorbed other writers' and critics' perspectives by osmosis, accreting the makings of a worldview piece by recycled piece. Much later, I wondered how many of those pundits hadn't also built their platforms and come to their conclusions on the ephemeral bones of other opinions. Was this online conversation, conducted endlessly with such energy and authority, anchored anywhere to anything tangible?

Almost immediately, news reports of the Yarnell Hill tragedy began to question the role structure protection—the priority placed on keeping homes from burning—had played in decision making on the fire. I read a new phrase and seized on it: the WUI, the wildland-urban interface. The term has come into common casual use, but it does have a specific definition published in the Federal Register, which classifies settled areas as wildland-urban interface based on their proximity (within 1.5 miles) to densely vegetated areas of significant size (at least 5 square kilometers—larger than your average city park). The wildland-urban *intermix*, by contrast, refers to settlements that intermingle with, rather than abut, the wild—less densely populated neighborhoods where over half the land area comprises wild vegetation. Interface might be a cul-de-sac at the base of an undeveloped hill, while intermix could look like a rural road lined with several-acre-plus parcels, where you can see mailboxes at the ends of driveways but only catch glimpses of houses set back in the woods. But generally, WUI is used as a catch-all term for any place where homes and burnable wildlands—forest, scrub, grassland—touch or intertwine.

As of 2013, I'd lived my entire life in cities—Seattle; Chicago; Santiago de Chile; San Juan, Puerto Rico. I didn't own a car. I walked and took the bus everywhere. My favorite high school teacher assigned a book called *Bomb the Suburbs* for senior English. To me, the WUI instantly conjured images of tacky McMansions on winding roads; two-car garages sheltering SUVs; bored teenagers, desperate housewives. The WUI: an easy scapegoat for the deaths of the nineteen Granite Mountain Hotshots, a suitable target for the shock and despair of my employer's urban-dwelling, bike-commuting, reusable-bag-carrying, GMOfearing readers. Why did these firefighters die? Because greedy, ignorant, fat white Americans want huge houses out in the foothills, to enjoy the luxury of privacy without accepting any of the responsibility. My tossed-off post implied as much.

Now, almost ten years later, when I read or listen to or watch reporting about wildfire, I sometimes think I can tell when the reporter is someone like I was then. Someone saying the right things, the things people can understand, that divide complex dynamics into clear-cut cause and effect. I'm sure that any firefighter with more than a season of experience—or any longtime WUI dweller, for that matter—who read my piece on Yarnell Hill could see right through me. And though I didn't think about it this way at the time, I wonder now if maybe that unearned authority, that ease with which I staked a position based on assumptions and associations—maybe that was exactly what I was trying to change about myself, when I left Seattle two months later.

* * *

By the end of August that year, I'd quit my jobs, both of them, and lined up a friend to take over my regular babysitting gig. I found a subletter for my attic room in the duplex, shoved most of my stuff into the crawlspace and the rest in a spare closet at my parents' house, and boarded a plane to Denver. From the Denver airport I caught a bus that wound its way through the WUI, south on U.S. Highway 285 from the Front Range exurbs over the first pass onto the windswept expanse of Park County. Over another pass and into the Arkansas Valley, with its incongruity of place names—the Arkansas River in Colorado, towns with names like bad gringo Spanish. Buena Vista, pronounced like beautiful. Salida, with a first-person "I" sound. Farther south in the San Luis Valley there was Del Norte, with a silent "e" that converted the Latinate cadence of the name into blunt Anglo-Saxon sound, at home with country dialect like "crick" and "acrost." Saying the place names right immediately branded you as an outsider.

The hostel in Salida was full the first night I arrived with a gaggle of other people there for the same reason as me: a two-month stint with the Southwest Conservation Corps, whose fall season began the next day. Everyone was my age or younger, down to a couple eighteen-year-olds fresh out of high school. Everyone except for Anna, the one other woman on my crew: a little older and a lot taller than me, confident, beautiful in a freshfaced, slightly gap-toothed way. She'd come from Virginia, had gone to school for photography, and took me under her wing as a friend and comrade. Her favorite color was teal. I learned this one night later in the season, when we'd gone out drinking together and met a quiet man who by the end of the evening had whisked Anna away on his teal motorcycle: a sure sign of true love. Anna never came back to Colorado after that first season, but we kept in touch for a couple years, and last I heard she was still living with him, the mysterious teal-motorcycle man.

I was in way over my head with the work and the backcountry living, completely unprepared for the high-elevation shoulder-season cold of the southern Rockies. All the backpacking I'd done up to that point had been in Pacific Northwest summers, for just one or two nights at a time. I'd never camped out for a full week. With SCC, as with most types of backcountry work, a standard "hitch" is eight or nine days on, followed by five or six days off. After I spent the first hitch shivering every night in my summer-weight sleeping bag, one of the two Mikes on my crew offered to let me borrow his twenty-degree bag for the rest of the season; he was upgrading to a zero-degree model, mailed by his dad from home in Texas. I hadn't brought a puffy jacket, had never thought to own one; the warmest layer I had was a zip-up fleece from REI, which I'd bought in a boys' size extra-large, because kids' clothes are cheaper. Every night at camp, after work, the temperature would drop thirty degrees as soon as the sun disappeared, and I'd put on all my layers—my rain jacket over my fleece—and huddle in my sleeping bag until dinner. Later, I'd learn tricks to stay warm at night, like doing fifty jumping-jacks right before getting in your tent, or crunches in your sleeping bag, or taking a hot-water bottle to bed with you. Still later, I'd save up and, bit by bit, invest in better gear.

Salida had a population of only about five thousand, but the year-round residents plus the seasonal raft guides and ski bums and trail workers, not to mention the tourists, supported a lively little downtown on the banks of the Arkansas, where live music played at the bars most weekends and some weeknights, too. The town kept in business several killer thrift stores, where I finally stocked up on some proper old-school mountain clothing: a button-down Pendleton shirt, a wool ski sweater, a hunter-orange ball cap from Murdoch's Ranch and Home Supply.

One morning on hitch, we were packing up to move camp, and the process dragged interminably, as it can with a crew of eight people and all their attendant tools and gear and supplies. My feet went from cold to numb and stayed that way. Finally I mentioned to Rosso, my crew leader—a white guy with dreads who didn't take a toothbrush into the backcountry to "save weight"—that I couldn't feel my feet, mostly just in the hopes of hurrying us along. Instead he shifted into wilderness-first-responder mode, asking me to take off my boots and socks so he could poke at my toes with one of his ever-present toothpicks, asking, "Can you feel that? How about that?" I could not. "This is going to sound really weird," he said, "but if you're comfortable with it, the fastest way to warm your feet up would be to put them on my stomach. We retain heat in our core."

I shrugged—weird, but I was willing. I'd gotten used to a million previously weird things over the weeks, not least open discussion of pooping and other bodily functions. Rosso, kneeling, raised his shirt, and I perched on a log and placed my feet on his stomach, which indeed felt hot to the touch, like a pot not long off the stove. The rest of the crew looked on with curiosity. It worked. Feeling flooded back in minutes. Rosso recommended I buy some Darn Tough socks, and on our next days off, I went to Murdoch's and splurged.

* * *

We worked for SCC as Americorps volunteers, which meant we got a stipend of \$275 a week, food stamps, and, on completion of the program, an "education award" which could be put toward tuition or student loans. (After three seasons with SCC, I'd racked up enough education awards to eventually put myself almost all the way through graduate school.) We were not provided housing on our days off, nor personal gear, other than one cotton T-shirt that disintegrated into grime by the end of the season. That first season, without a car, I spent most of my days off at the hostel in town, which during the shoulder season typically housed more SCC workers than any other guests, and by mid-October started to feel almost like a shared house that belonged just to us. Once a touring band stayed at the hostel during our days off, and we dutifully trooped out to the bar to see them play a classic footstomping rendition of "Copperhead Road," then headed back to the hostel and passed the Evan Williams late into the night.

Colorado is home to more than fifty peaks higher than 14,000 feet—more than fifty mountains as tall as Mt. Rainier. One weekend a group of us hiked the local 14er, Mt.

Shavano, and then drank wine from the bottle around a campfire under the harvest moon. Sometimes, instead of staying at the hostel—which was \$15 a night, after all—I'd catch a ride with Anna or someone else with a car and camp outside of town. It was the first time I'd known people who lived out of their vehicles proudly and by choice. It was the first time I'd known people who had done anything besides what I'd done and been trying to do. Not all of my friends back home had gone to college, but we all lived more or less the same kind of life. For the first time, I saw that there were other possibilities.

Before I left Seattle I had felt like I'd hit a dead end, or at least a one-way road over flat terrain. I thought the only way to change anything about my life would be to make more money, or possibly to fall in love—fates which felt out of my control. Later, in cover letters and applications, I'd explain my sudden pivot away from the career I'd prepared for as an attempt to seek hands-on experience in the topics I'd been covering from a desk. And maybe that was true, or became true. I wanted to be a person who knew things by doing. But the truth at the time was that I was just restless, bored, needed to escape. I didn't know what "trail crew" entailed, but it sounded about as opposite of a computer job as you could get. I had a couple of friends who had worked for conservation corps, both of them women significantly more petite and nerdy than me. If they could do it, I told myself, surely I could. As I'd prepared to leave Seattle, I resolved that I wouldn't quit, no matter how hard it was. Just two months, I told myself. You can do anything for two months.

Of all the things I learned that first fall in Colorado—the names and uses for tools I'd never known existed; that toilet paper in the backcountry is more trouble than it's worth; that dozens of aspen trees in a grove are really just one organism, connected by the same root system—the most important lessons were these: how to live light enough to travel, not just in the woods but in the world overall, and that nothing is forever. This new embrace of impermanence, instability, unattachment—it opened up universes.

* * *

I returned to Seattle for one more winter, moving back into my attic room and taking a job scanning groceries and stocking shelves at another neighborhood store that serviced the high-school-fake-ID crowd. I took up with a man my age who had two young kids who lived in a different state, then broke up with him when his past drug problems turned out to not actually be in the past. (I may have dabbled, but I drew the line at certain things.) I consummated a longtime crush with one of my best friends, thought maybe the falling-in-love part was finally happening, then sank into a mood to match the late-winter skies when he stopped calling. I got roofied at a fratty bar the night the Seahawks won the Superbowl, requiring my younger brother to come to my rescue. He was living with our parents at the time, and he took me home and put me to bed on an air mattress in my mom's office, where I found myself the next morning, confused and ashamed. I smoked too much weed and drank too much wine and kept my roommates up late playing my music too loud. In the early days of Tinder, I made a profile and met a guy who liked me a lot more than I liked him, but it helped me get over the ghosting friend.

I'd been thinking about going back to Colorado for another season with SCC. I'd had a taste of what the steep learning curve of skilled labor—that heady combination of physical and mental challenge—felt like, and I wanted more. I wanted to get better. I wanted to escape again.

On the first luxuriously warm Seattle spring day, stuck inside the store for ten hours while a stream of customers bought beer and ice and champagne and cheese trays to take to the park for celebratory picnics, I made up my mind. I had exhausted what little savings I had continuing to pay rent I could no longer really afford working at a grocery store, but my grandma, who lived in a trailer on her Teamsters pension, gave me \$2,000 to buy a 15-year-old Subaru Outback from a kid on Craigslist. I packed it with everything I needed to live and work outside for the summer. I moved out of the duplex for good, and drove away from the city.

Creeping Pine, Crooked Wood, and the Ghosts of Icicle Ridge

It's the end of another long week at the beginning of my first season working on a Forest Service trail crew. I'm exhausted from my first backpacking trip of the summer, carrying a chainsaw, chaps, fuel, bar oil, and a two-night pack up and over a 7,000-foot ridge. It's been just me and my coworker Dan for the past two days, but on this final afternoon, another member of our crew, Ross, has hiked up from the other side to help us finish out the Icicle Ridge trail. Ross joins us as we start to make our way down the steep and soon-to-seem endless descent to the trailhead just outside of town.

For the past couple of days, I've achieved a state of cautious collaboration, even occasional camaraderie, with Dan. He's been the de facto trip leader, calling the shots on where to camp, when to cut brush and dig tread and when to skip it and keep moving. But we've traded off the chainsaw every tank of gas, as is the crew's custom, and at some point this morning, after I'd been running the saw for awhile, he even remarked that the work was going faster than he'd expected, which I interpreted as a sign of approval. I'll take any I can get.

But now Ross is here with more saw gas and bar oil, and suddenly I am outnumbered again by more capable men, and I won't touch a saw for the rest of the day. Ross has brought a chainsaw with him, too, and he and Dan monopolize both saws from here on out, going through several tanks each, I assume. I wouldn't know for sure, because I've fallen so far behind them I can only hear the whine of their saws in the distance, on the switchbacks far below me. They're cutting brush with abandon, leaving me to swamp it all. I dutifully collect the piles of cut brush—leafy branches almost as long as I am tall—and try to toss them as far off the trail as possible, as I've been taught, but the ceanothus extends back from each side of the trail in a dense thicket, and it's hard to find openings where I can put the piles. I have to trek up and down the trail, making several trips back and forth to the only decent dumping spots, while the saws keep screaming away far ahead of me, generating more work.

I can't hike as fast as I'd like to, anyway, because of the new-boot blisters that make every step painful, and some lingering stiffness in my right ankle from when I slipped on a sleet-soaked rock last week and twisted it. It had been snowing up high, on June 15, my twenty-seventh birthday.

I keep an ear out for my radio, which is clipped to the outside of my pack, expecting Dan or Ross to call, wondering where I am. Nothing. Every time I hear a chainsaw rev again, I despair, knowing it means they're still moving, still working. I debate trying to call them on the radio, see where they are, maybe even ask them to do me a favor and swamp some of the brush themselves, giving me a chance to catch up. But I can picture the look on Ross's face, his disgust with me and my incompetence, my slowness. It deters me from asking for help.

While hiking along a blessedly brush-free section of trail, I step funny on a root and roll my bad ankle again. The sudden pain is no match for my exhaustion, and I feel tears spilling out in spite of myself. I guess I'm glad the boys aren't here to see me cry. But it's enough to make me decide to try to call them, after all. I'll hike even slower now, with my ankle freshly sore. I reach for my radio, but it's dead. *Fuck*. I'm worried I'm hopelessly far behind now. I've never been on this trail before, so I have no idea how much longer it is to the bottom. I can see houses and farms in the river valley below, but they look tiny and

distant, and it's getting on in the afternoon. I pull out my cellphone. There's full bars here. I don't have Dan's or Ross's number, but I do have my crew lead's. Before I have time to rethink it, I call Chris.

He sounds surprised to hear from me. I try to keep a light tone. "Hey, Chris, yeah, sorry to bother you, but I've just gotten pretty far behind Dan and Ross trying to swamp all this brush they're cutting, and my radio died so I don't know if they're trying to get in touch with me. I don't have their numbers, so I was hoping maybe you could just let them know that my radio's dead and I'm a ways behind."

Chris responds with kindness and diplomacy, matching my casual tone, but I can tell he senses what's going on underneath. He says he'll get in touch with Dan and Ross and pass my message along, "and maybe tell them to start taking care of some of their own swamping." I cringe a little at the acknowledgment of my inability to keep up. I hobble on down the trail, feeling a mixture of embarrassment and relief. When I pass more sections of cut ceanothus, it appears Dan and Ross have indeed swamped the brush themselves.

Finally I reach a broad saddle only a couple miles above the trailhead, where the boys rest on a log, waiting for me. I assure them I don't need a break, I'm ready to keep going. It's getting late and starting to rain. We know the trail has been cleared from here on out; all we need to do is hike the last two mellow miles back to the trailhead.

So mellow, in fact, that before long Dan and Ross break into a light jog, like kids so eager to get home for an after-school snack they can't bear the pace of walking. My feet hurt too much, and my ankle still feels too wobbly, for me to even think about jogging. Besides, I have a heavy backpack on, as does Dan; the fact that this doesn't appear to slow him just solidifies my feeling of lameness. I sink into a dark brooding mood with every plodding step, fighting tears again as my weariness turns to anger. What the fuck is the point of running, anyway? We're all taking the same truck back. They have to wait for me no matter what. Running isn't getting them off work any faster.

That's about when I start thinking what would happen if I just quit. It's been a rough season so far, as the only woman on a crew with five men, and the least experienced on top of that. I've gotten my ass kicked on a daily basis by what feels like a pointlessly masochistic work pace, and I haven't made any friends. It hasn't been easy, but this afternoon on Icicle Ridge has crossed a line. It feels like my coworkers are rubbing it in, making a point of leaving me behind, leaving the shit work for me to do and not caring what happens to me. Somehow, this stupid running is the last straw. I start rehearsing my resignation speech in my head: *Clearly, I'm more of a burden to this crew than a help, so I'll stop wasting everyone's time.* I imagine what the rest of my summer would look like if I quit: would I live with my parents in Seattle, go to the ice-cream parlor where I used to work years ago and ask for my job back? Or move back to Colorado, back in with my possessive boyfriend, who I'd subconsciously taken this job to escape, and wait tables all summer at the sports bar where we'd met working together two winters ago?

The bottom two miles of the Icicle Ridge trail, between the saddle and the trailhead, comprise one of the most popular short hikes in town, but in my opinion they're a tedious slog: a serious of endless dry switchbacks through scrubby ponderosa forest, low enough that the good views have disappeared, and all there is to look at are washed-out gullies and glimpses of backyards. My feet ache with every step. When I finally, finally, reach the bottom, Dan and Ross have already pulled the truck around, and sit idling right in front of the trail. Maybe this is supposed to be a courtesy, but it feels like just another passiveaggressive way of telling me I'm too slow. Worse, Ross is at the wheel and Dan in the back—they've left the passenger seat open for me, when all I want to do is sulk in the back where no one can see me.

I throw my backpack into the bed of the truck, climb in, and don't say a word in the short drive back to the ranger station.

After we've put the saws away, turned in our timesheets, and locked up the trails bin, the three of us part ways without saying much. It's the end of our week, and we've just completed a pretty hefty logout project, worthy of a celebratory beer, but it's a grim, drizzly evening, and tension lingers around the way the day has played out. Even Ross and Dan, coconspirators in my misery, seem sick of each other.

I take a shower at the ranger station, then head across the street to the grocery store to buy more moleskine and band-aids and athletic tape to re-dress my blisters. Chris, our crew lead, wasn't around anymore by the time we got back, so my resignation speech could not be served fresh. And instead of refining it over my days off, I go to REI and spend a third of my paycheck on a new down sleeping bag, so my backpack will be lighter on the next trip.

By Monday, my shame has faded into something like determination, a drive to prove myself, but on my own terms. I don't quit. Instead, I return for five more seasons after that first one. I clear that same stretch of Icicle Ridge two more times, and both times, I make it a point to bring a female coworker with me. The last two miles to the trailhead still feel interminable, but I've never had any urge to run.

* * *

The part of Icicle Ridge we clear with chainsaws is, in fact, only a seven-mile section of what is in total a 30-mile trail, most of the rest of it in designated wilderness. The ridge itself is a defining feature of the Leavenworth area, a formidable fortress granting access to the Chiwaukum Mountains, a rugged sub-range that feels much more remote than its proximity to town would suggest. In some places you might be only a handful of miles from civilization as the crow flies, but Icicle Ridge nurtures a bottomless aloneness in some of its high basins, a ghostly feeling smoldering in some meadows like the coals of a forgotten fire—or maybe not forgotten, maybe tended by the ghosts themselves.

A couple of years ago, camped on a high, lonely part of the ridge between the Index and Painter Creek drainages—trails traveled more rarely with every passing season of accumulating deadfall—Xander and I made a small campfire of larch twigs in the rocks. Huddled around its light in the soft silence, watching a pair of ravens swoop and circle high above the Index Creek valley, we were startled suddenly by the percussion of hoofbeats just behind us. We whipped our heads around but saw nothing, and the sound faded as quickly as it had clattered out of the darkness. It had sounded much louder and less dainty than a deer. It was after dark. We had passed no other hikers since we turned off the main route to a popular lake, hours and hours ago, and on our way up from Index Creek we had scrambled over, under, and around enough downed logs to turn back even the most skilled rider or packer of stock. We looked back toward the source of the sound, and then at each other. "Sylvester?" we whispered, only half joking.

Albert Hale "Hal" Sylvester, the first supervisor of the brand-new Wenatchee National Forest in the early 20th century, one of the most prolific and influential of the government-sponsored mountaineers attempting to chart this part of the Cascades, spent a lot of time in the Chiwaukum Range and on Icicle Ridge. It was Sylvester who named the lakes of Ladies Pass (Mary, Margaret, Edna, Alice, etc.—for the wives and sisters of early forest rangers), as well as dozens of other peaks, creeks, and features in the rugged heart of what, decades later, became the Alpine Lakes Wilderness.

The frenzy of naming and mapping of land across the West was a symptom of colonialism, in its implied assumption that no names yet existed for long-inhabited places, and in the sense that maps themselves facilitated land theft. But Sylvester's writings reveal his mountain travels as motivated less by an instinct to conquer and claim than by his own deep love of these places, his personal experience of their sacred power, and his interpretation of his role as Forest Supervisor as a noble one. To men like Sylvester, not to mention Gifford Pinchot himself (more of a social radical than history has given him credit for), the government owning the forests was better than leaving them open to a corporate free-for-all, at the mercy of the timber companies or the consuming maw of the railroads. That these were apparently the only two options—land theft by government, or land theft by industry—is worthy of critique today.

In any case, Sylvester spent some four decades exploring the newly designated National Forests of the northern Cascades, for work and for pleasure, mostly on horseback, and it was there, on Icicle Ridge, not far from the lake he named for his wife Alice, that he met his end. In 1944, in his seventies and more than a decade retired from the Forest Service, he gathered a group of friends for an ambitious trip on horseback through the Chiwaukum Mountains: up Chiwaukum Creek, over the steep and still trailless Deadhorse Pass, south around Snowgrass Mountain, and along Icicle Ridge toward Ladies Pass. Accounts of the details of what happened next vary: either Sylvester's horse stumbled in the rocky scree and tumbled off the edge, dragging Sylvester with it; or the horse spooked and threw Sylvester off into the rocks. Either way, he was badly injured. One of his friends went ahead out of the mountains to find a telephone and summon help, gathering a rescue party of dozens of volunteers who took turns carrying this beloved local figure on a stretcher for miles down the trail, off the ridge, and eventually to the road, where he was transported by car to the hospital in Wenatchee. He died a week later.

Sylvester's friends convinced the Forest Service to name the body of water just south of Lake Alice after him. And so it is that the man who gave names to thousands of features in the Cascades—many of them, from Grindstone Mountain to Dishpan Gap to Dirtyface Peak, considerably more creative than the lady lakes—now has a single place that bears his own name, even though, unlike so many other early white explorers, Sylvester never stooped to naming anything after himself while he was alive. And maybe it's fitting that Lake Sylvester, though clearly marked on maps, is not accessible by any official trail, and thus is likely one of the least-visited of the places he loved—still sacred and a little secret.

When we heard the ghostly hoofsteps behind us that night, we were camped within a few miles of the place where Sylvester had fallen to his eventual death, at a spot he had surely passed countless times in the years of his wandering and mapping. It's easy to imagine him and his horse, still riding this country after all these years, not so much haunting as caretaking, paying his respects to the places that shaped him.

Sylvester's ghost wanders these mountains as an invisible presence. But you'll meet visible ghosts up here, too: the skeletons of the whitebark pines that dominate the highest meadows. If you're ascending a high ridge like Icicle, whitebark pine might be the last tree you see before you stop seeing trees altogether. It thrives best at high elevation, in harsh conditions. It marks the treeline. On Icicle Ridge, it often keeps company with alpine larch. It has a spreading crown and splaying limbs and sometimes multiple trunks joined at the base, all of which give it a sort of chaotic appearance, especially in contrast to the rodstraight and Christmas-tree-perfect subalpine fir on the slopes below it. At particularly cold and windswept locations, whitebark pine—called creeping pine in some circles—may look more like a shrub than a tree. These high-alpine huddles of trees, reduced by snowpack to shrub stature, are called krummholz, a German word which means crooked wood. In fact, although krummholz formations are found at high elevations all over the world (in Newfoundland and Labrador, they're known as tuckamore) the first image on the "krummholz" Wikipedia page is a picture of a mostly-dead whitebark-pine in the Wenatchee Mountains, just outside the Alpine Lakes Wilderness, perhaps ten miles south of Icicle Ridge.

A dead whitebark pine, which many of them are, looks haunting, or haunted, or maybe both. Bark bleached white like bones in the desert, and if it's been through a fire, those bones might be white on one side and charred black on the other. Stephen Arno, in his classic *Northwest Trees*, describes the "large patriarch-like whitebarks" which have been killed as "grotesque snags atop lofty ridges." Cutting a dead whitebark pine that has crashed across a trail will dull your handsaw fast, and its splaying limbs make it unwieldly to drag out of the way. Dead, dense, hardened with age: According to Arno, John Muir once counted the rings of a whitebark pine and found 426 of them, in a trunk only six inches in diameter. (He must have had very good eyes.) The ghosts of the forest that was, and the forest that could have been. Mountain pine beetle outbreaks have decimated the whitebark pines. So has white pine blister rust. Historic fire suppression hasn't helped: without periodic disturbance clearing out sick trees, infestations endure and spread more easily. Shade-tolerant species, like those beautiful ballerina-straight subalpine fir, can slowly encroach on whitebark pine territory in the absence of surface fire, shading and crowding out a species that's used to having all the sun to itself.

The original official impetus for Hal Sylvester's place-naming frenzy was in fact fire suppression. It was much easier for early firefighters to locate and put out fires if they had accurate maps with named features. Sylvester clearly got carried away and had fun with it—in addition to Dirtyface and Dishpan, there was the succession of peaks he called Poe, Bryant, Longfellow, Irving, and Whittier, mountains today known collectively as Poets Ridge. But Sylvester's prolific naming worked all too well. Now that long legacy of fire suppression has altered the ecology of the very places Sylvester loved and thought he was protecting.

A sense of incongruity feels potent on Icicle Ridge. There's the fact of how close you can be to town, but how far away it feels; the fact that some portions of this 30-mile trail see heavy traffic, while others feel so lonely and lost to time. From some parts of Icicle Ridge and its side trails, at night you can see all the way to the lights of Wenatchee in the distance, even from inside the wilderness boundary. On the night after the visit from Sylvester's ghost, we camped below the ridgetop in the Hatchery Creek burn. To the southeast we saw Wenatchee's city lights glowing, and in the other direction, we could see another glow, the actual flames of the Chikamin fire burning in heavy timber some 20 miles to the north, moving and flickering across all that distance.

* * *

On Icicle Ridge, I risk running into ghosts of my former selves. That is the pleasure and peril of traveling, of working, the same trails over and over. It's like entering a house you used to live in, or having occasion to visit your old high school, or ordering a drink in a bar you used to haunt and catching vaguely familiar reflections in the mirror above the dusty bottles. Any place you spend time will retain some whispers of other working versions of yourself, snagged and left lingering like mist around cliffs. In college I had a piece of notebook paper with a handwritten quote from Joan Didion, the one about keeping on nodding terms with people you used to be, taped next to my bed. I wonder who I thought those people were then. The girl who wrote out the quote in a brick apartment building on the outskirts of Chicago, who had long, long hair and knew the names of hardly any trees and thought she'd go live in Chile after graduation, is one of the hardest ones for me to keep in touch with now. One way to make sure to remember the things you thought you could never forget is to go back to the places where they happened, and I haven't been to Chicago since right before Trump was elected. But I go back to Icicle Ridge, some part of it, just about every year.

That first time on Icicle Ridge, when Dan and Ross left me in the dust on the way down, I knew nothing about Hal Sylvester or whitebark pines or even much about fire. I didn't know it then, but that season would mark the beginning of some kind of metamorphosis, some shedding of an outgrown layer as I slithered slowly toward the next phase of who I would become. By Labor Day I would end the serious relationship that had kept me tethered to Colorado, had been the reason I planned to return after my season with the Forest Service in Washington. Adam was six years older than me, and the age gap didn't matter so much as the fact that it straddled thirty, and that he had two school-age kids, and had been with their mother for ten years, and no one else until me. He also had a serious weed habit and a troubled past involving parental abandonment and stints in jail and rehab. Out of the myriad of differences between us, the most consequential had become his lack of desire to be alone, and his inability to understand the strength of that desire in me. He didn't want to be alone at any level: not in life, not on a Saturday night; he didn't even want to go to the grocery store by himself, not if I was there to go with him. He was jealous of my friends, especially the men, and took it personally if I spent so much as a few hours going for a run or a hike or a ski by myself. After over a decade of longing for a real relationship, for someone to love me as intensely as Adam did, two years with him had left me desperate to be on my own.

And was I ever on my own that first summer with the Forest Service. I was going on twenty-seven, which didn't feel young to me anymore, but I was the youngest on the trail crew, and it showed. More importantly, I was the least adept with a chainsaw, the only woman, and, I hate to say, physically the weakest—not because of my size or gender so much as my lack of experience, professional and recreational. Everyone else on the crew was an accomplished skier, climber, mountain biker, through-hiker, and/or former hotshot firefighter. In Seattle, and in college in the Midwest, I'd always been one of the most outdoorsy and active of my group of friends. Suddenly, the benchmarks by which I had always defined myself felt way off. With the conservation corps, we'd worked hard, no doubt about that, but we were also technically service volunteers making well below a living wage, and there's only so far you can push people under those circumstances. The program placed more emphasis on personal development and communal living than on meeting production goals. The Forest Service was different. I was a professional now; I had qualified as a GS-5—which in 2016 meant about \$15 an hour and assumed a certain level of competence—and as professionals we were expected to perform. No one held my hand; no one waited for me if I lagged behind; no one asked if I needed anything. Instead of giving me tips or taking time to teach me what I didn't know, my male colleagues simply took over—sometimes literally snatching the tool out of my hand—if I wasn't up to a given task.

Meanwhile, in the near-nightly phone calls Adam insisted on, our conversations revolved around his sense of abandonment and aggrievance at me having left for the summer. I hadn't left temporarily for a challenging new job in a place I was homesick for, I had left *him*—that was the way he saw it. When I volunteered tales from my world, he had little sympathy for my struggles, nor pride in my occasional successes. Talking to him felt like an emotionally exhausting side job on top of my physically punishing actual job.

So that's where I was when I went up Icicle Ridge with Dan for the first time, about a month into that first season: overworked and overwhelmed and nursing horrible blisters from a new pair of boots I'd driven all over the west side to buy on a day off, because that's what it takes to find fire-rated boots that fit a woman with average-size feet who can't front \$500 for a custom pair. Out of everyone on the crew, I was undoubtedly the worst candidate to head out on a two-night backpacking trip with chainsaws to clear 12 miles of burned trail with some 5,000 feet of elevation gain and loss. But for logistical reasons, I was the only one able to camp out that week. So Dan took me.

Typically we clear our non-wilderness trails on day trips, early in the season, while the high-country wilderness trails are still melting out. The convenience of using chainsaws, as opposed to hand saws, comes with the trade-off of extra weight—not just of the saw itself (about twenty pounds with a full tank of gas), but the canisters of extra fuel and bar oil, the Kevlar chaps which are required to prevent serious injury, the fieldmaintenance kits with files, screnches (a combination screwdriver-wrench essential for adjusting the saw), spare bar nuts and chains and pull-cords. Carrying all that for multiple days, along with all your food and personal gear, almost cancels out the time and labor saved by using a chainsaw. Most of our non-wilderness trails can be cleared in a day, or a long day, anyway. But not Icicle Ridge, not that year.

To reach the non-wilderness portion of Icicle Ridge, which had been gaining underground popularity among masochistic local mountain bikers and thus needed to be cleared, we started by hiking up the Fourth of July trail, which gains close to 5,000 feet in about five miles. We hadn't cleared Fourth of July yet, either, so Dan and I chugged our way up, cutting logs as we went, schlepping our overnight packs with all the chainsaw accessories. That trail is so steep that in some ways it's a relief to stop and work along the way. I was gobbling ibuprofen in an attempt to numb the pain of my intricately dressed blisters, which had broken and peeled off to leave behind a couple inches of raw red underskin on each heel.

Five-thirty p.m. came and went and we were still sawing far below the ridgetop. Dan didn't say anything about calling it quits, and I didn't dare ask. Being the slowest person is

bad enough without also being the laziest, the one to whine *Are we there yet?* Instead I shoved handfuls of trail mix in my mouth every time I took my pack off to cut or move a log, and kept a wary eye on my dwindling water supply.

Finally, with the near-solstice sun low in the sky, Dan declared it was time to stash the saw. There was nowhere to camp below the ridge, so we'd have to hike to the top, make camp, and then hike back down and up again the next morning. Dan pointed out a seasonal trickle, the last water of the day—our camp at the top would be dry—and I filled my water bottles from it directly, as he did. The day before, packing up back at the trail bin, I'd asked about water filters and Dan told me he wouldn't bother to bring one for Icicle Ridge. "The only water up there is snowmelt, and one spring coming right out of the mountain," he explained. "There's literally nothing above you." I tucked this method of risk assessment away for future reference, and did not bring a filter.

Climbing the last few hundred feet to the ridgetop that first evening, I'd started to despair of the switchbacks ever ending. I willed Dan to stop hiking, for a camp to magically appear among the rocks and stunted trees. Because we'd ceased the stop-and-start rhythm of working our way up to steadily hike, and because I dropped further behind Dan with every switchback, I didn't even have an excuse to take off my pack and grab more trail mix. I considered calling up to him that I couldn't make it any farther, that I would find a place to bivouac somewhere in the boulders and heather. I weighed which was worse: the pain of continuing to hike, or the shame of giving up.

I read an opinion piece in *Backpacker* magazine a few years ago called "In Support of the Death March," or something along those lines. The author discussed how, although generally the ethics of hiking dictate that the slowest person in a group should set the overall pace, sometimes there's actually a safety argument for a stronger hiker taking the lead and pushing it: when it's getting dark, for example, or weather is closing in, and it's not safe to stop where you are or turn around. Our minds give up a lot faster than our bodies do (as workout gurus love to tell you), and with practice and careful attunement, you can sense when someone is struggling mentally more than physically—when they're exhausted but not yet at the point of collapse; when they're capable of getting to camp or to the trailhead, but need the tough-love motivation of trying to keep up. Sometimes someone has to be the bad guy, the author argued, the one who institutes the death march. Sometimes you need to pick it the fuck up, or just keep going—for safety reasons, yes, but also to help your friends discover what, on their own, they never would have known they could do.

I thought the dynamics the author was describing could have been a little more clearly teased out, but at the same time I felt, inherently, exactly what she was talking about. The whole first part of that first season was a constructive death march for me. I was sometimes miserable, but I learned to hike fucking fast. Faster than I ever want to under normal circumstances, but I know how to hit that pace, go into that time-warp hypnotic mental space, when I need to. One fall day toward the end of that season, the crew was hiking back to the truck, and one of the guys, the former hotshot/ski racer/long-distance cyclist, stepped aside to let me pass him. I had fallen into my rhythm and started tailgating him without even realizing. I almost felt bad.

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It was dark by the time Dan and I set up our tents on top of the ridge and broke out our camp stoves, which in late June means after nine p.m. Dan offered me a swig of tequila. I hadn't brought anything to take the edge off, not knowing what the protocol was; the conservation corps had strict rules about drinking and drugs on hitch that I'd always dutifully obeyed and enforced. I told Dan as much, and before long our conversation wandered to other substances, so often the most accessible common ground between coworkers. He told me who on the crew did and did not smoke weed. A beat of silence, and then Dan broke it: "So, you want to smoke some pot?"

Our second day was a lot more chill. We hiked down to get the saw, cleared the last few logs on the way to the top, filled up at the trickle again, and then started across the ridge itself, with its gentle ups and downs and blissful flat sections. We hiked past the Icicle Repeater, part of our radio communications infrastructure. We passed through groves of the bleached-pale dead whitebark pine, cut it where it had fallen across the trail. Fire, not bugs, killed the pines up here, back in 2001. On this high ridge—about 7,000 feet—you can also see trees twisted by lightning strikes, the gray bark of their trunks swirling into the sky.

We made camp that night in the heart of the burn on the middle of the ridge, at a flat rock outcropping Dan was pretty sure had been used as a helispot in the fires, staking our tents in the patches of sandy soil supporting whitebark krummholz and heather. We could see town and there was cell service. Dan returned a call from his mom, and I texted my dad, telling him we'd hiked up Fourth of July and were now camping on Icicle Ridge. He texted back: "I looked up Fourth of July trail—one of the steepest in the area!" For the moment, I felt vindicated and proud.

I hadn't brought camp shoes, wanting to save weight any way I could, but I couldn't bear to wear my boots once we stopped hiking. My blisters needed to breathe. I took mincing barefoot steps around the rocks while Dan built a small fire. "It's all burned up here already anyway, right?" he said, more to himself than me. Night fell and we watched the lights of town in the distance. I can't remember exactly what we talked about. Dan, who I've known for years now and consider a friend, can seem stoic and introverted, but once you get him talking he has a lot to say, tells a good campfire story. He's a writer, like me, and a photographer. Maybe that night is when he told me about how he first learned to use a chainsaw, when he got a summer job at the ski area up at Stevens Pass, falling trees to open up new runs on the backside. He received no training, so after his first day of work he went home and typed "how to fall a tree" into YouTube. I have great respect, and no small amount of jealousy, for people who can actually teach themselves complicated things from watching YouTube. I need a live person breathing down my neck for it to sink in.

"We found so much shit under the chairlifts in the summer, after the snow melted," Dan told me. "I didn't have to buy a lighter for years." His crew had a running challenge: anyone who found an unopened beer under the lift, no matter how old and likely skunked, had to chug it after work.

Before we retired to our tents that night, Dan splashed a little water on the fire and stirred the coals. I followed suit. He watched me pouring precious water from my Nalgene onto our dying fire (we were at another dry camp, with only one water source—the spring—ahead of us tomorrow) and stopped me, saying, "I think it's probably good." I thought of all the times I had chided my conservation-corps crews to drown campfires until they were cold to the touch. Our tiny fire on the ridge that night had been kindled on bare rock; most of the trees around us were already burned dead; it would be a cold night. Like Dan's assessment of the safety of our water supply, I filed this lesson in context away for future reference. As in writing, you have to learn the rules before you can break them, maybe: drink untreated water, leave your fire smoldering, skip the bear hang—if these are decisions made not in ignorance, but in deeper understanding and respect.

As I struggled that first year, without the offer of much help and too timid to ask for it, I learned by watching my coworkers and emulating them. I observed what they ate on hitch, how they packed their backpacks, how they spoke on the radio, how they carried a tool. The first morning on Icicle Ridge, I crawled out of my tent to light my stove for coffee and oatmeal, only to hear Dan's stove hissing from under his rain fly. Breakfast in bed: one of my favorite indulgences at home. Why not on hitch? From then on, I always stayed in my tent as long as possible in the morning, drinking my coffee and eating my breakfast sitting up in my sleeping bag. Anything to make a rugged early morning a little cozier, to save a few precious extra minutes for myself, alone.

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I've never spoken to Dan about what happened with Ross on that last afternoon of our Icicle Ridge trip. Maybe I've forgiven him, because later that season and in future years I came to see Dan as something of an ally on the crew. At the end of my second season, he and I were driving back to the station together after a long hitch, discussing various dramas and dynamics that had occurred over the months: the usual egos and weird alliances and, as ever, engrained sexism that detracted from our cohesion and potential as a team. I wasn't the only woman that year, thank God, and not the least experienced anymore, either, but when it comes to being female on a trail crew, every year it's more or less the same shit, just in a slightly different context. It's persisted even after I became a crew lead myself: a constant battle between trying to just do my job, and stand up for myself and other women, of trying to parse where the two efforts are in conflict or collusion. A battle of knowing when to pick your battles. Like those phone calls with Adam way back when, it's a draining emotional burden on top of the physical ones everyone shares.

What I remember during that drive with Dan, though, is that after many miles of venting and rehashing a turbulent season, he concluded: "Out of everyone on the crew, you were the most solid person to work with this year. What I'm trying to say is, good job."

I was so stunned to receive a direct compliment—from Dan, no less, so practical and reserved—that I can't remember the rest of the conversation, or what I said in response. Other than thanks.

Several years later, after Dan left trails for the better career opportunities offered on the fire crew, I found a note filed away in a binder of old trail reports that he had written about Icicle Ridge. "After word got out that we cleared this trail in 2016, it became a local favorite," the note began, before going on to detail the logistics of the trip so a future trail crew could replicate it. Even in his penciled scrawl, the pride in our achievement on that long-ago trip was evident.

And suddenly, reading that note, I wondered if I'd had it all wrong. That trip over Icicle Ridge, with my blisters and too-heavy pack and the infernal brush and Dan and Ross running like vindictive idiots while I rehearsed my resignation speech—I'd always thought of it as my lowest moment, as potent proof of my incompetence, that I couldn't hack it. But clearly that's not how Dan remembered it. What mattered to him was that we did it. Not that I was slower or less handy than Ross or anyone else would have been. That last afternoon notwithstanding, it was Dan and me who had cleared the bulk of the trail. To him, it had been a success, one I had been part of. Maybe, instead of proving that I didn't belong, that trip had been the beginning of proof that I did. I didn't let that afternoon make me quit. Instead I continued to watch, and listen, and work, and learn. I learned to take pride not in pointless suffering, but in working hard and doing good work. There's a fine but firm difference, I think, between hard work and suffering, and I've picked away at it ever since, trying to figure out how to share that pride with future green crew members, how to separate it from the shame and exclusion I felt. I don't want to be like the freshman who is miserably hazed only to become a senior who does the next generation even worse. (Cliché as it sounds, hazing actually did happen at my high school, straight out of *Dazed and Confused*—just ask my brother.) To embrace hard work, to push yourself and feel proud of it, without being completely demoralized—that's what Icicle Ridge taught me to strive for.

So when I sense the ghost of myself in those groves of whitebark-pine skeletons, I give her a nod. I don't want to forget her.

Basalt Ridge

It's always windy on Basalt Ridge.

The ridge burned in 2012, part of the Wenatchee Complex Fires that torched through the swath of rugged, forested foothills running southeast from the flanks of Glacier Peak through progressively drier country to the foot of Lake Chelan. The Basalt Ridge trail runs south along the backbone of its namesake for about six miles, before reaching a junction where it splits off into two short spur trails that switchback down to roads on either side of the ridge. The logout is heaviest on these two access trails, with their steep slopes of dense timber burned and left standing dead. Basalt Ridge is outside the wilderness, but even with chainsaws, it's a few days' worth of work every year just to get the access trails cleared, never mind the ridge itself, where the fire burned hottest and the dust that used to be soil sloughs off with every step.

We'd cleared most of Minnow Creek, the east-side access trail, over a couple of days already that year, 2020. The plan now involved a truck shuttle and two saw teams. We dropped one truck at the Finner Creek trailhead, on the west-side road, and the four of us drove around in the other truck to Minnow Creek and hiked in that way, cutting the last of the logs up to the junction. From there, Rachel and Sam would start clearing down toward Finner Creek. Xander and I would work our way north along the ridge for most of the day, then turn around sometime after lunch and catch up with Sam and Rachel. We hoped that between the four of us—two chainsaws running and two people swamping behind the saws, switching off every time the gas tanks emptied—we could clear the trail all the way

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down to the truck at Finner Creek. At some point we'd send someone back to hike out the way we came in and pick up the other truck.

We ran into more work than expected. Xander and I hoped to have time to clear a short side trail to a viewpoint where, on a clear day, you can see all the way south to Mount Rainier. But we abandoned that mission when Sam and Rachel radioed to report their slow progress. "We're going through a tank of gas on every switchback," Sam told us, defeat heavy in his voice.

As Xander and I started hiking back to help them out, the sky showed signs of a storm the radio weather report had warned of that morning. Heavy clouds condensed around the peaks, and a breeze picked up and gathered into gusts. As we caught up with our crewmates, Xander and I discussed sending someone back earlier than planned to bump the truck around. The most exposed part of the trail, a knob where dead trees swayed wildly in the wind, lay between us and the route back down Minnow Creek. "If anyone's gonna hike down Minnow, they should really get back over the ridge before this storm hits," Xander said.

He often thinks a couple steps ahead of me about safety, more attuned to wind and weather than I ever used to be. Maybe it's from so many seasons of raft guiding, holding the lives of a half-dozen paying customers in his hands while navigating whitewater rapids. Not long before that stormy day on Basalt, Xander had guided a Father's Day trip of dads and their preteen daughters down the Skykomish at high water. On the most notorious rapid of the run, he'd lost an oar, and a little girl fell out of the boat. He plucked her back in immediately, recovered the oar, and the trip ended with happy customers, but the experience had shaken him. He hadn't felt good about the trip ahead of time—the kids were too young to be running rapids like Boulder Drop—and he resolved when it was over to be more vigilant about turning down trips that weren't worth the extra couple hundred bucks.

We decided whoever retrieved the truck should turn back at 3 p.m. I volunteered to go. Sam and Rachel had a good rhythm going, working a couple switchbacks below us. Xander was a stronger sawyer than me—he could boost their progress—and unlike him, I like to run for fun on my days off. I honestly believed that between the two of us, I could make it back to the truck the fastest, though I didn't tell him that.

When the first clap of thunder broke in the sky above us at 2:30, we locked eyes over the idle of the chainsaw. "You should go now," Xander said, and with a sense of urgency I emptied my backpack of unnecessary weight—the remains of my lunch, extra fuel for the saw, a spare liter of water—and left it for him to pack down. I removed my radio from its usual place on the outside of my pack and gripped it in my hand as I started speed-hiking back up the ridge toward the junction.

It started to rain. I heard more thunder—or was it a tree falling? Both. I gained the top of the knob where the wind blew wildest and heard the crash of dead spruce hitting the ground just beyond sight of the trail. Lightning, and the rain was dumping now, but I didn't want to stop to put on my rain jacket. Then I heard Sam's voice, panicked, on the radio: "Hey! Xander!" They must have still been separated by a switchback or two. "Are you guys alright?" Xander shouted back over the wind and rain, now turning to hail. "Some trees just came down right next to us," I heard Sam reply, with a thick undertone that said *This is fucked*. "Just get off the trail," Xander told him. "Bail into that gully to the right; there's some live trees there. I'll come find you guys."

I listened to my colleagues call to each other on the radio, feeling powerless as I huffed my way toward the junction. We'd stashed a small extra chainsaw and a now-empty coffee thermos off the trail along the way. I swooped by to pick them up and then started to run, hearing the crack of dead wood around me. I only had a few hundred feet to cover to reach the junction, and I stayed focused on the live trees huddled there, the ones we'd leaned against to take our morning break, drawing me forward.

I reached the junction and started down the Minnow Creek trail, sheltered for now by the ridge and some strong green trees that had survived the fire five years before. I held down the talk button on the radio: "Hey, just letting you guys know I made it off the ridge," I panted. I strained to keep my composure, to keep the adrenaline out of my voice, knowing that no radio conversations are guaranteed to be private. "Are you okay?"

"Yeah," Xander replied with equally tight measure. "We're okay. We found some green trees and we're picking our way down off the trail."

"Okay, I'll let you know when I make it to the truck." It was only a mile and a half to the trailhead. But the storm was picking up now on this side of the ridge, lightning flashing and gusts of wind rollicking in the canopy, and I felt suddenly a surge of fear at being alone in a burned forest in a thunderstorm. I had eased back to a brisk walk when I reached the junction, but I picked it up to a jog again as lightning lit up the forest around me and thunder cracked in my ears. "I might ditch the saw," I added on the radio.

I knew that I was in an okay position as far as the lightning was concerned—I was below the ridge and far from the tallest thing in this forest, its timber the kind that made the Northwest famous. Still, there's something so primal about the fear that thunder and lightning evokes, the sense of being shrunk to exactly your true size and station in the world, a creature at the complete mercy of the intangible sky. And the wind, which you can never outrun. My middle school math teacher's son was killed by a falling tree in a windstorm in a local park. A few years later, in Seward Park, two blocks from my childhood home and my extended backyard growing up, a tree fell on a parked car and killed the man sitting inside it. It was a shock to find out that what I thought of as freak accidents could happen to people I knew, in places familiar to me. Out here in the middle of the creaking burned woods, luck seemed even less guaranteed.

The empty thermos knocked around in my backpack, and my feet in their heavy work boots felt clumsy and too large, but I was grateful, at least, that we'd finished clearing Minnow Creek that morning, so I could move continuously without having to climb over downed trees. Still, the weight of the chainsaw and the awkwardness of carrying it slowed me down. I was desperate to get out of the woods, out of that storm, make it to the truck and drive around to pick up my crewmates—one of whom I knew I loved, although I was many months from telling him so.

Fuck it, I thought. I stashed the saw behind the base of a big fir a few feet above the trail. We could send someone back for it tomorrow. Right now, I wanted to run.

I pounded down switchback after switchback, passing work we'd done that morning and a few days before, half-consciously appraising our accomplishments underneath my anxiety. The temptation to rehash comes automatically, one of the satisfactory rites of hiking the same trails again. *That's where I got the saw bar stuck; that was stupid. This corner looks way better with the brush cut back. We should really rebench the tread there next time we get a chance.* By the time I reached the trailhead, the wind had quieted and the clouds were already breaking up, stretching and regrouping like the taffy in the candy-shop machine that had mesmerized me as a kid. I radioed Xander again to let him know I'd made it. "We're gonna find the trail again and just start brushing our way down," he told me. "You can start working up towards us from the other side when you get there."

I peeled off my soaked work shirt and draped it over the back of the passenger seat, cranking the heat in the truck. I switched on the FM radio and put the truck in low gear to coast down the washboarded dirt road. "Fat-Bottomed Girls" followed by "Bohemian Rhapsody": two-fer Tuesdays on The Quake, 102.1, Central Washington's Classic Rock. Our second choice in the truck when NPR got too depressing, and a strange connection back to the world beyond Basalt Ridge. The blast of static-fuzzed classic rock jarred me, reminded me of the smalless of the afternoon's reality: one storm on one trail, one chainsaw stashed behind one tree, all of it miles and miles from the opposite reaches of the radio station's range, where other listeners were pouring concrete or running errands or pruning orchards under the sun in Wenatchee, Ellensburg, and Yakima.

The sun came out again as I drove, and by the time I got to the Finner Creek trailhead and pulled in next to our other truck, foliage steamed in the fresh light. My nerves had quieted and already the hour alone in the storm seemed surreal; already I regretted leaving the chainsaw behind. The sun shone, the dead forest stilled, and now in this calm I'd have to tell my coworkers I'd been scared enough to abandon a five-hundred-dollar power tool in the woods.

I put my damp shirt back on, doused myself in a fresh layer of DEET, and started hiking up the trail, halfheartedly cutting brush with my folding handsaw, an activity that seemed impossibly innocuous and banal compared to the previous hour's excitement. I ran into Xander, Sam, and Rachel after twenty minutes or so, all three of them subdued, their own adrenaline long since having crested and subsided. They told me how they'd bailed off the trail to take shelter in a stand of green trees during the worst of the storm, then stayed off trail as they made their way down the slope, out of the worst of the burn. Not only was the trail lined with standing dead trees, it was obscured by deadfall, the downed logs we hadn't yet cleared, dozens on every switchback. Swift travel on an uncleared trail is impossible in any weather.

We called it a day and hiked down together. I paused at the trailhead to update the trail conditions log posted there: "Many trees still down on switchbacks. Minnow Creek clear and offers better access to Basalt Ridge."

Xander waited for me. He took a step forward, put his arm around me and squeezed my shoulder. "Hey," he said. "Are you okay?"

I glanced back toward the trucks, where Sam and Rachel busied themselves tossing tools in the back and rummaging for snacks. It wasn't quite common knowledge that Xander and I, the two crew leads, were sleeping together.

"Yeah," I said, turning to him. As I'd been running down Minnow Creek alone an hour earlier, I'd been thinking how crazy this was, how desperately I wanted to get back to Xander and the rest of the crew and debrief the whole situation. But now I tried to play it cool. "That was one of the more eventful days of my trails career," I told him. "I'm just glad you guys are okay."

When we got back to town a few days later, we found out our district's fire crew had been working near Basalt Ridge that day of the storm, and had overheard all our urgent radio exchanges. "I heard a bunch of trees fell on you guys or something?" one of the firefighters asked Xander, who told him the story. "I heard Claire say something about leaving a saw behind," the fire guy added, to underscore his grasp of how sketchy the situation must have been. Even firefighters running from deadly blowups have carried their saws to the end.

When Xander told me about the exchange I felt silly, and questioned all over again whether I had overreacted to the whole situation. I had volunteered to hike back over the ridge because I thought I'd be the fastest. Maybe it was inevitable, then, that my confidence would be rewarded with a good scare, a demoralizing experience to take me down a notch, remind me how easy it was, with the crack of a thunderstorm, to feel powerless and inadequate again. There would always be a part of me that got scared when I knew I wasn't supposed to be.

After that day I never took chances with wind and burned ridges again. Spending so much time in the woods and the wilderness, I've overcome many fears—of the dark, of black bears—and honed skills and knowledge that have empowered me to meet other fears halfway. But I've also become aware of dangers I never gave much thought to before. On a solo backpacking trip in North Cascades National Park, the summer after the storm on Basalt, I'd navigated around cliffs and across a steep slope to camp alone at an off-trail lake, skinny-dipped in the frigid water at sunset, put up my bear hang, dug a proper poop hole. But the next day, when I stopped for a much-needed afternoon break in the 10-year-old burn above Rainbow Creek, the minute the breeze picked up I felt it: the high-alert zing of fear; the realization that—it being a recreational trip—I didn't even have a hard hat to put

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on for protection. I stuffed my snack away, cut my break short, and got up to hike as fast as I could, feet and heart pounding with purpose, through the sun-baked burn.

Cinerem Cineri

The flyers appeared in the fire shop the same week the heat wave showed up in the ten-day forecast. *They Will Not Be Forgotten*, read the words stretched above four headshots, four faces already familiar to me. I saw them every time I filled my water bottles or furtively replenished my cooler from the ice machine in the conference room. The plaque that hung permanently above the sink there displayed the same four photos, of the four firefighters killed in the Thirtymile Fire in north-central Washington's Methow Valley on July 10, 2001: Karen FitzPatrick, Jessica Johnson, Devin Weaver, and Tom Craven. The flyers announced a Zoom memorial, hosted by the Forest Service, commemorating the 20th anniversary of the tragedy. The date came and went, but all summer, the hottest anyone could remember, the flyers still hung there. I shivered slightly in the heat when I saw them.

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Every year in early June, the Forest Service runs a training on packing and working with stock at a ranch up the Chewuch River in the Methow Valley. (From the Interior Salish word for "creek," it's pronounced Chew-uck or Chee-whack, depending on whom you ask.) This year, my sixth season working trails for the Okanogan-Wenatchee National Forest, it was finally my turn to attend. I liked interacting with the animals, learning to gently build rapport and respect, better than I liked learning to pack loads, struggling to remember the steps to specific knots and hitches, sequences of deft twists and loops of rope I strained to execute without losing tension in the line. But I did my best to pay attention as the sun climbed the valley's steep walls, listening raptly as the experienced packers in the group spoke the language of their time-worn skill.

We camped out for the week—the first real warm one of the season—on Eightmile Creek, which drains into the Chewuch. About 22 miles up the road, just before it dead-ends at a trailhead leading into the remote Pasayten Wilderness, Thirtymile Creek tumbles from the east flank of the canyon to join the Chewuch. It was here, twenty years ago, in a rock scree above the pavement, on this road that some of the firefighters working there didn't even know was a dead end, that the Thirtymile Fire trapped a crew of fourteen, killing four of them in their fire shelters.

Eightmile Creek that week of stock school was a chaotic tumble of early-season runoff, swelling its brushy banks, shallow and swift enough to make afternoon dips awkward. But it was hot enough that we figured out how to get in the creek anyway when the day was done, clutching branches of alder and willow as we lowered our crouched bodies into the current. We'd crack beers, share salsa and Juanita's, and start a campfire once the sun sank low enough. The bugs weren't even bad yet.

That early in the season, I relished the heat, the possibilities it spoke of, the months of work in the woods still stretching before me. June of a summer job is like the pre-game show, when it's all still excitement and anticipation, when the season has yet to find its storyline. There could be a big fire on your district that will take over everyone's lives. It could be a rainy summer, defined by perpetually damp boots and squishy socks. There will be smoke at some point—no question of that anymore—but maybe it won't be as bad as the year before. The Chewuch drainage in spring sparkled green, the bald granite tops of its steep forested flanks standing sharp and shiny gray against the bright blue June sky. It was hot, but the heat had not yet baked the world dry. It had been a record-snowpack winter and water ran, singing, everywhere. Higher-elevation trails still hid, indecipherable, under feet of snow.

It was hard to believe, in that lush late-spring landscape, that twenty years ago the Chewuch had been the site of the fast-moving and fatal Thirtymile fire. That blaze—ignited fewer than 24 hours before it became lethal—burned with such extreme fire behavior, swept the canyon so suddenly and unpredictably, that fire scientists have studied it ever since. Several official reports, and a court case, have documented how a series of human errors, individually innocuous but collectively catastrophic, put the fire crew in the wrong place at the wrong time. But the capricious character of the fire itself, which killed four people while sparing others mere feet away, still defies explanation.

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When the first 100-degree days snuck into the forecast at the end of June in 2021, a few weeks after stock school, we felt ready for the real thing. But the projections grew more ominous by the day as the predicted heat wave, which meteorologists were now calling a "heat dome," sidled closer. Even on the east side of the Cascades, consistent tripledigit temperatures before the Fourth of July are cause for grocery-store small talk. One hundred and five, warned the weather report, before upgrading the prediction to 110, then 115, and I almost gave my phone a shake and a whack, as if its weather app were a malfunctioning vending machine or a cheap, off-kilter Magic 8-Ball. We got an email from the Forest Supervisor's Office warning field-going employees to be on the lookout for signs of heat stroke, but no directive to take a day off.

We'd never canceled work for the weather before. The previous year, when "hazardous"-rated smoke hung over the region for two weeks in September, so thick that cars on the other side of the ranger-station parking lot looked washed-out and blurred and I woke up every morning feeling like I'd smoked a pack of cigarettes the night before, we'd seriously considered it, but opted in the end to work through it anyway.

That summer, 2020, had shaped up to be a hot and dry one, starting with an earlyspring drought from which the region never fully recovered. But by the end of August, there hadn't yet been any major fires in the state, and we'd started commenting on the incongruity of it, all these 90-degree days without rain and the landscape still mostly green and intact. Then on Labor Day a wicked wind blew in, and I drove over Blewett Pass through a wall of smoke on my way to meet friends for a rafting trip. The Pacific Northwest region set a new record for area burned that year (one that would be broken in 2021)—in a fire season that largely unfolded over one horrific week. Entire towns were razed, and down in Oregon, some outlying Portland suburbs were under evacuation notices. Xander and I had been living in a camper van all summer and had nowhere to escape the smoke. After nearly six months of avoiding indoor dining out of pandemic concerns, I broke down in September and found my way into a bar just to breathe some filtered air.

In a strange stroke of luck—although that's not the right word—in the way that the world can still surprise you with beauty that makes no sense, it was on that rafting trip, just as the whole state was exploding, that I saw the most and brightest stars I had all summer.

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We were camped on the Tieton River south of Yakima for a couple nights, running the damreleased flow, and although we'd arrived in an apocalyptic pall, and were not far from one of the biggest fires now burning in the state, somehow on the second day the winds shifted in our favor and we ran lap after lap of the river under a clear September sky. Late that night, I left our campfire-less circle to pee (with a burn ban on, we'd gathered around a Coleman stove), looked up into the darkness, and was so astonished I ran back to the group: "Guys, you *have* to come look at the stars! I swear I'm not just saying this because of the mushrooms. These are the best stars I've seen all year."

It wasn't just me, and it wasn't just the mushrooms. Our whole group, all of us coming off a summer of weeks camped in high-country wilderness, spent the next hour with our necks craned to the sky, everyone as floored as I was by the shock of those stars. We lay down in the middle of the gravel parking lot. We spun on our feet with our arms out. We ran from the road to the river and back again. By the next morning, the smoke had closed in again, but for that night, we were reassured that somewhere, far away, other worlds still existed.

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In 2021, as the heat dome marched closer, paper signs started to appear taped to the doors of businesses across the region: "Closed, no A/C." "Closed Monday due to heat." Seattle and Portland were setting up emergency cooling shelters. (Over half of Seattle homes lack air conditioning.) I wondered if it would be a lot of hype for nothing, like so many prophesied snowstorms in the past that materialized as fast-melting slush. As a crew, we eventually agreed among ourselves to take a couple days off work. No one above our pay grade offered any other solution.

The heat dome turned out to be even more deadly and intense than predicted. On Sunday, June 27, the second of three days in a row that broke all-time temperature records in Seattle, the National Weather Service wrote: "As there is no previous occurrence of the event we're experiencing in the local climatological record, it's somewhat disconcerting to have no analogy to work with."

Cooler air finally blew in from the Pacific on Tuesday, June 29, dropping temperatures back into the 80s and 90s in western Washington, but over on the other side of the mountains, it stayed well above 100 into the weekend. Wenatchee, the nearest city to our ranger station, saw 114 degrees on Tuesday, breaking its previous record high by five degrees. A weather station in Peshastin, the tiny orchard town where I rented a room for the summer, recorded 119 degrees the same day.

Months later, official reports broke the news that the heat dome had directly caused ninety-five deaths in Washington state, ninety-six in Oregon. Public-health experts believe the true numbers could be much higher.

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Until the summer of 2021, the hottest temperature ever recorded in Seattle was 105 degrees Fahrenheit, reached on July 29, 2009. I was living with my parents in south Seattle that summer, between university semesters, interning at the air-conditioned office of an environmental news website downtown. What I remember most about that heat wave is

not the days but the nights. Runs through my childhood neighborhood at midnight, the barrier between my sweaty skin and the sultry air dissolving into darkness. Picking up my two best friends for a beer run, car windows up and AC blasting long after sundown. Converging, along with hundreds of others, on Madison Park Beach, one of Lake Washington's dozens of public swimming areas, late on a weeknight for one of those spontaneous parties of strangers, those collective expressions of solidarity and joy, that unfold uniquely in a city during extreme weather or history-making events.

That night, the beach swarmed with people: hoisting beers, blasting music, passing joints, splashing in and out of the inky warm water. Someone had ferried a case of Rainier out onto the floating dock past the rope that marked the deep end. People clambered up the ladder on the dock to the high dive, stepping over the "CLOSED NO DIVING" sign to launch themselves, twisting, into the dark air.

"The hottest day *ever!*" we exclaimed to each other over and over, in disbelief. It remained true for another twelve years.

* * *

If you lived through the summer of 2021 in the Pacific Northwest, I don't have to tell you what that heat was like. But here's what I remember: after spending all day in and out of the still spring-cold Skykomish River, huddled in the shade of some Japanese knotweed in between dips, trying not to drink too many beers in the afternoon, I was feeling bad. Xander and his friends own property on the South Fork of the Skykomish, on the west side of Stevens Pass, and they'd invited everyone they knew in the area to seek relief on their beach. It was 110 degrees and everyone except me was in a party mood. What else are you supposed to do when it's practically too hot to be alive, besides lay in a cold river all day and drink?

But I didn't want to talk to anyone. I found my own patch of shade and traced patterns around rocks in the sand. I hiked away from the river up to Xander's house, at the top of the property near the highway, where it was easily ten degrees hotter, to check on the cats. They'd been hiding under the house all day, and they slunk out when I called, purring, whining, wanting to be pet. I felt guilty for luring them out of their shade and tried to shoo them back under. The house was a sauna, but I sat there, slimy with sweat, my face feverish, not sure where else to hide.

I know the heat didn't *cause* the fight that happened later, the screaming and crying that led to me driving away to spend the most miserable weather event of our lifetimes alone, but I'm not ruling out the correlation. I felt broiled and stripped bare, as if the work of keeping myself cool physically had drained whatever energy I had to maintain emotional equilibrium. I drove from Xander's stretch of river an hour back over the pass to my little shack at the edge of a pear orchard. It got dark, but my car told me it was still 90-something degrees. I walked through the orchard and along the sidewalk-less streets of that tiny town, the night air no less oppressive than whatever churned inside me.

The next morning, still craving the motion of escape, I packed my car to drive to Seattle, although for once it wouldn't be any cooler over there. At my parents' house (no A/C), the shades were drawn against the daytime, fans whirred in the kitchen and bedrooms, and my brother was soaking dish towels and sticking them in the freezer to use as icy scarves. For a few hours the traffic lights on MLK, the main drag in the neighborhood, were out, the electrical grid no doubt taxed by every precious air conditioner and box fan in the city whirring at once. Cars inched forward, hesitating at every crosswalk and intersection, as if the warmth in the air carried weight, a muddy layer of atmospheric resistance that warped time and speed.

That night my brother and a friend and I went to the lake after dark, to drink beers on the fishing pier and jump in the warm water, hoping the wetness, if nothing else, would bring relief. The shoreline was crowded with fellow nighttime swimmers, but there was none of the giddy exuberance I remember from the heat wave of 2009. Back then, the days of triple-digit temperatures, though draining and dangerous for some, remained a novelty that sparked high spirits and revelry, so long as they didn't last too long. This time something darker lurked beneath the surface. We wore wilted exhaustion like another film of sweat, a slick layer coating a deep and heavy fear.

* * *

I was a kid in Seattle the summer of the Thirtymile Fire. It made national news as the worst wildland firefighting tragedy since 1994's South Canyon Fire in Colorado, which killed fourteen firefighters and spurred a wave of reforms meant to prevent anything like Thirtymile from happening in the future. The news hit particularly hard in our corner of the world, close to home as it was. All four of the firefighters killed, and many of the survivors, had been born and raised in Washington. Half the crew that got entrapped at a bend in the Chewuch River Road worked out of the Wenatchee River Ranger District, just like I do now. Even before Thirtymile, I nursed an outsized fear of fire as a kid. I hated lighting matches, flinched from the sparks of campfires, liked baking cookies but got jumpy around the oven. I think it had something to do with a house that burned down in our neighborhood when I was very young. I didn't actually see the blaze, but the image of the house's charred skeleton, which we drove by often, kept me up at night. I'd also grown up hearing about how, as a child in the 1930s, my Grandma Donna's already dirt-poor family became homeless after a house fire. She told me the fire started because her brothers were throwing lighted matches at each other. I wonder if it was actually that simple.

I was comfortable in the water, learned to swim early, never much feared drowning. But fire, to me, seemed a particularly violent and sinister way to destroy something. The story of those four firefighters, trapped by a blistering heat they could not outrun, haunted me.

* * *

Twenty years later, things have changed. I'm the first one to start building the campfire, the least to leave its heat, and I can't resist poking it, constantly adjusting, seeking a more perfect burn. If you spend a lot of your time living and working outside, as I do, controlled fire—campfires and cook fires and burn piles—quickly becomes not only an inevitable part of the routine, but a vivid element of the scene, illuminating and incubating some of your most potent memories. Besides, I had resolved, since getting into trail work, to let go of my most irrational fears and anxieties, shedding them year by year like non-essential items from an overstuffed backpack.

By now, I've spent enough time in the orbit of the fire-industrial complex to know that hour for hour, wildland firefighting is almost never as mortally dangerous as the Thirtymile Fire suddenly became on that bone-dry July day. I've deployed a defunct fire shelter for training purposes several times (always awkwardly, never fast enough), and taken to heart the message that while fire shelters can and do save lives, if you're in the position of having to use one, something has probably already gone terribly wrong.

And I know now—as does much of the U.S. public—that wildfire is a natural process, a crucial component of the way forest and grassland ecosystems function, and that our decades-long treatment of it as a demonic villain to be vanquished at all costs, like the one of my childhood nightmares, has inarguably made the situation worse today. All that successful suppression has left us with unnaturally high fuel loads just when the changing climate is making forests more primed for ignition than ever before.

It's not quite that simple, of course. Not every ecosystem thrives on frequent, lowintensity surface burns, the kind we caused so much damage by insisting on eliminating. Some forests, like the heavier timber of the subalpine, are meant to burn less often but more severely. And change—in climate, in disturbance, in systems—always seems to happen slower or faster than you can predict. Just when you think you have the patterns figured out, your expectations adjusted, nature will surprise you. A fire takes an unexpected detour. Stars replace smoke. You lose what you never dared to imagine.

By the end of June, 2021 would become a season without campfires.

* * *

On the Wenatchee River Ranger District, a couple hours south of the Methow, trails and fire both work out of a low brown building across the parking lot from the main office, where the scientists, admin team, and the rest of the recreation program operate. This separation feels appropriate: while the trail crew falls under the umbrella of Recreation, I like to think we float in a cultural middle ground between the crunchier, Muir-and-Abbeyinspired idealism of the wilderness rangers, and the bromantic macho militarism of fire. If pushed, we'd surely tilt hippie, but we, too, swing tools all day and take pride in it. And because the fundamental nature of our work involves leaving traces—cut logs, freshly dug tread, native-timber footbridges—we harbor few illusions about some fantasy of an untouched wilderness.

It's trail-crew tradition to make gentle fun of the firefighters, standing around all day in their uniforms and heavy boots, checking the oil on their trucks and waiting for a call to come in, while we roll out early to spend the day cutting logs with chainsaw or crosscut, clearing brush, digging tread, moving boulders; work requiring the same level of fitness and tenacity that fighting fire demands, but with only a fraction of the public visibility. Not to mention the money. As a rookie firefighter, I could make twice as much in a season as I do on a trail crew. If I'd been fighting fire as long as I've been working trails, I might even own property by now.

But we appreciate each other, trails and fire. For all the standing around the fire crews do, there's also the 16- or 24-hour shifts, the three-week tours, the always being on call, never having a real day off. I used to entertain the thought of working fire for a season or two—just long enough to settle my debts and save some real money. But I know I couldn't take it, the dramatic swings between standstill and sprint. I like the predictability of trails, the steady pace. There's always work to do, and no waiting for someone to tell us to do it.

* * *

On trail crew, we spend a lot of time in burned, not burning, forests. Buck Creek is my favorite. The fire swept through that valley just east of Glacier Peak in 2016. Ignited by lightning in late July, the fire lingered well into September, and after nearby roads, trails, and campgrounds had been closed to the public, suppression crews mostly just baby-sat the fire, letting it do its thing. It was burning in the steep, rugged country of the Glacier Peak Wilderness, far from any population centers, and it had been a wet, mild summer.

This approach—letting remote fires burn as they naturally would—is known as "managed fire" in technical parlance, and it's a piece of the new puzzle of fire-management strategy, one that recognizes the unnatural havoc fire suppression has wrought on landscapes, and seeks to restore some kind of balance, fixing what we've broken through intervention of a different kind. Western fire ecologists have known for over half a century, and Indigenous people the world over for millennia, that fire in some form is endemic to most ecosystems—decluttering forests, spurring new growth, pumping nutrients into soil, sculpting habitat. But it's taken longer for a Smokey Bear-indoctrinated U.S. public to accept that not every fire needs to be suppressed, and for the gears of a bureaucratic behemoth like the U.S. Forest Service, which handles the bulk of the country's wildland firefighting efforts, to shift. By the time we can see, or finally accept, that something is happening—by the time we can say look, there, no denying it's different now—often the change is already unfolding faster than we thought it would, and the solutions we worked so hard to create and promote might already belong to an earlier era. Time is compressed; the speed of change increases exponentially; the present we live in is actually already the future, the one we think we're still watching warily on the horizon.

On August 3, 2021, at the height of a fire season breaking records set the previous year, Forest Service Chief Randy Moore ended the practice of "managed fire" for the rest of the season, explaining that with 70 percent of the West in drought and firefighting forces already strapped for personnel, the stakes were simply too high to let any fires burn freely.

The same stakes put the promise of prescribed fire—intentionally igniting blazes when fire danger is low, leaving less fuel in the path of unplanned fire once it gets hot and dry—in jeopardy, too. Most wildland firefighters, all but the overhead, work seasonally, six or seven months at most, and prescribed burning happens at the beginning and end of the season, when things are slow, when it's cold and wet. But as snowpack wanes, as drought around the country starts earlier and endures longer, this model, too, is disrupted.

To light prescribed fires when it's safe to do so would mean keeping more firefighters on year-round, with the benefits and job security that come with a coveted permanent job—a hard sell for an institution that functions by treating its workforce as disposable.

And the public, traumatized from enduring weeks of smoke every summer, recoils from the thought of more, even as leaders plead that a little smoke in the winter will hopefully mean less smoke in the summer. It's a nice idea, logical in theory, but you can't really blame people for not buying it. For doubting whether too little too late is still better than nothing.

* * *

I never saw the Buck Creek trail before it burned, but I've come to know it well in its post-fire state. John MacLean wrote that "you aren't a woodsman unless you have such a feeling for topography that you can look at the earth and see what it would look like without any woods or covering on it." If that's true, then severe fire offers a nice shortcut toward becoming a person of the woods. One of my favorite things about walking and working in burned forests is seeing the shape of the land unveiled from shade and held up to the light, the undulations and interruptions exposed. Buck Creek, before 2016 a dense and damp spruce-fir forest like so many others in this corner of the Cascades, looks through some parts of the burn more like a desert playground, studded with bare boulders and knolls that tempt an aspiring woodsman to scramble. Volcanoes and glaciers, rivers of fire and ice, shaped these mountains, leaving unsubtle signatures until now hidden in the trees: tent- and truck-sized stones scattered like marbles, mounds of rubble piled into hummocks and hills. If anything, a burn turns MacLean's challenge upside-down: can you look at the exposed earth, the snags and dust, and see the ghosts of former and future forests?

In 2017, the year after the Buck Creek fire, our trail crew got some funding for overtime (a rare treat) to clean up the damage. The Forest Service's Burned Area Emergency Response (BAER) program provides funding for post-fire restoration in the interest of public safety and resource protection—the only designated pot of money that exists to support trail work in burned forests. BAER funds are only available for one year after a fire. After that, post-fire maintenance must somehow be absorbed back into a trail crew's regular program of work.

Hundreds of charred logs littered the trail for about three miles, and the soil had turned to what we call moondust. In one place, a couple dozen dead trees had come down in a span of a few hundred feet, jackstrawed in a tangled pile like a giant's game of pick-up sticks. The fire crews that initially assessed the post-burn damage declared that this section would need to be cleared with dynamite. Our trail crew—six strong in 2017, a good year took care of it with crosscuts and hand saws over the course of a morning.

Working in a burn, even long after the fire itself has run its course, is hot: little shade, and in the first years after a fire, little vegetation to help cool the ambient temperature. And dirty: imagine kneeling in dust, handling charcoal all day; you'll come back to camp looking like a central-casting chimney sweep.

And it's also dangerous, hanging out under a bunch of standing dead trees. I've seen trees fall spontaneously without wind. When a breeze picks up in a burned forest, an unspoken tension pulls taut through the air.

Burns in designated wilderness carry a special set of challenges: no mechanized equipment, per wilderness regulations, which means no chainsaws, which means much more time spent in one place at a stretch, pulling a crosscut saw under that precarious canopy. Most of the burned-over trails on our district happen to be in wilderness. We keep an ear to the weather forecast on our two-way radios, try to have a rough backup plan if it calls for strong gusts, and make sure to identify, out loud to each other, the nearest stand of live trees where we might take shelter if necessary. Buck Creek makes all these challenges worth it. From the trailhead, at the dead end of a 23-mile Forest road, it's about nine miles of mostly gentle, contoured climbing to Buck Creek Pass, first along the Chiwawa River and then up the Buck Creek drainage, guarded on the south by Buck Mountain, a rarely climbed 8,500-foot summit of schist and year-round ice. Beneath it, a waterfall tumbles from a hidden lake down the length of the mountain, fanning out towards the bottom before disappearing into brush. When clouds darken the sky, Buck Mountain looks almost sinister, like something out of Mordor. When the sun shines, everything, the rock and ice and streams, glitters.

A hundred years ago, glitter of a different kind drew prospectors to this place to file claims on Red Mountain, above the headwaters of the Chiwawa, into which Buck Creek drains. A local historian wrote that "a colorful prospector, Red Mountain Ole, roamed the ridge for years, bringing in silver-fox skins that fetched more money than any gold dust." I've seen bears on Buck Creek—we've stared at each other as we gobbled huckleberries from the same patch—but never any foxes. The first two miles of the trail, though, follow a road grade that leads up the Chiwawa all the way to Red Mountain, and as it climbs through the Buck Creek drainage, the trail criss-crosses old sheep driveways. The shepherds drove their flocks along the ridges from meadow to meadow, and their routes sketched in the outlines of much of the modern trail system.

In 1905, the Washington state legislature appropriated funds and put out a bid for a wagon road up Buck Creek, which they hoped to build over Buck Creek Pass, down the west side into the Suiattle River Valley, to the logging town of Darrington, and eventually all the way to Seattle. The Cascades in that era inspired no shortage of preposterously foolhardy

schemes to conquer terrain in the name of imperial progress, but not even a single white man had enough ego to bid on the Buck Creek route. Today it's all designated wilderness.

That first year, we made it through the burn after a few days and kept chugging our way up, the work thinning out as the live forest thickened again. After the burn, the trail passes in and out of spruce-fir forests and open meadows, the sunny remnants of old avalanche paths. We were making good progress that day, but we had left camp far below, near the Chiwawa River crossing, and at a certain point realized that it might be worth it to push all the way to the pass, even if it meant working late, to spare ourselves another long round-trip tomorrow.

Two members of the crew decided to call it a day at the appropriate time and head back to camp. The rest of us—Dan, Katie, Xander, and I—pushed on toward Buck Creek Pass, cutting a few logs and some brush along the way, but mostly just hiking. For the final two miles to the pass, the route climbs in earnest past the treeline, crossing creeks streaming from snowfields below the ridge.

Glacier Peak, a volcano called Dahkobed by the area's original inhabitants, doesn't reveal itself until the last moment: you round a corner for the final approach to the pass and all of a sudden it's there, in your face, its 10,500-foot summit just eight miles away as the crow flies. Dahkobed, true to its colonial name, retains more active glaciers than any other mountain in the lower 48, and it last erupted around 1700—more recently than any of the state's other volcanoes (except, of course, St. Helens). The Washington Department of Natural Resources declares Dahkobed "one of the more dangerous of the Cascade volcanoes," though many people in the region never think of it. Tucked deep among other rugged peaks, its slopes accessible only by long walks from one of just a few long, rough forest roads, the mountain can rarely be glimpsed from pavement. Unlike Rainier, visible on any clear day from up and down the I-5 corridor, Dahkobed keeps its distance from the public eye. The mountain looms as a constant presence in this corner of the Cascades, a landmark I'm constantly seeking or surprised to see. And so I love Buck Creek, for bringing me closest to this restless, reclusive volcano.

We reached the pass and declared the trail clear. Someone dug a flask from their pack and passed it around for celebratory swigs. It was already past our normal quitting time, and we had six miles between us and camp. We stared at the mountain and didn't talk much, until Katie said, "This is why we do this, for days like this." I felt a swell of pride to be up there with them, part of the contingent that kept pushing. The previous year, my first on the crew, I'd been the youngest, slowest, least experienced, and for much of the season, the only woman. I'd spent all summer just trying to keep up and not fuck up too badly. I'd come back determined to prove myself, and that day on Buck Creek, it seemed like it might be working.

Hiking back down as the sun slipped away, I fell in at the back of the pack, as I often do. I can find an easier rhythm, lose myself more completely in my thoughts, when there are no footsteps on my heels. Gliding through one of the stretches of green forest between meadows, I almost tripped over a tool in the trail, and paused, puzzled, glancing around. I saw no one.

In that moment of suspense, Dan leaped at me from the hollow of an old tree, his face still covered in ash, like a cartoon raccoon. I let loose the kind of shriek that shocks you when you realize it's your own voice, jumped like Scooby Doo, and then lost it in laughter. The trap had been too perfect. Xander emerged from behind another tree a few yards down the trail, phone out; he'd caught the whole thing on camera. "I scared the *shit* out of Claire," Dan reported when we finally got back to camp after dark, where our crew lead waited up for us with beers and a campfire. The video was passed around. When I finally fell into my sleeping bag, spent, I still managed to scribble a few pages in my journal before passing out. It had been such a good day that I couldn't let it slip away without record.

* * *

People writing about the aftermath of wildfire like to wax romantic about regrowth and renewal, latching onto symbols of resiliency: first the fireweed, that pretty purple flower that thrives in the dust of disturbance; then the seedlings, pushing proudly toward the newly opened canopy, pioneers of the next arboreal generation. What looks like fresh green hope to a hiker can be a headache to a trail crew: the persistent brush that flourishes in the sun-soaked footprint of a fire will swallow a trail whole within years if not doggedly cut back.

Ceanothus is the worst. Individual *ceanothus velutinus* shrubs grow close together, branches spreading widely and freely from a hardy taproot and tangling together. The best way to cut back ceanothus is to plunge face-first into its thicket of waxy green leaves, sucking in the sharp vanilla scent (sickly-sweet in spring) and searching out the base of each splaying, subdivided branch for the place where your saw or loppers can get the most bang for a buck with each cut. Brushing is tedious, especially with hand tools, but oddly hypnotic, as mindless, repetitive tasks can be. Still, brush is the bane of every trail worker's existence. Keeping up with it is a losing battle.

It feels good, though, to see the brush coming back on Buck. Black-green moss covers the moondust, and the black-stemmed former forest runs thick with undergrowth. A charred old-growth Doug fir snag, two feet across, that I remember cutting four years ago looks much more diminutive with the willow and berry bushes overtopping it.

But the trees are still falling. This year, we cut close to two hundred logs on Buck Creek alone, many more of them than we expected outside the original burn. There's more growth on Buck, but more death and decay, too, the aftereffects of the fire slowly seeping outward. "I don't remember the burn going up this far," I remarked this year as we rounded another switchback to see another series of dry logs down across the trail. These trees weren't charred black like the ones lower down. They were just dead, bark graying and branches shriveled and needleless. Had I just forgotten about the reach of this less-intense section of the burn?

Then Xander pointed out a hollow snag. "I think that's where Dan scared you that time," he said.

"No, it can't be," I countered. "That was definitely somewhere in the green, past the burn."

We looked around and it hit us. Other landmarks, the shape and grade of the trail, the distance from the creek—this *had* been live forest four years ago. It had escaped the original fire, only to die in the years since. We speculated as to why. An insect outbreak? Maybe the fire destroyed the underground mycorrhizal network of fungi when it turned the soil to moondust, rendering these trees fatally unable to cooperate. Or had these trees been not burned in the fire, but dried and baked enough by its heat to die slowly afterwards, their defenses down? One study of post-fire tree mortality tracked this, finding that "incomplete crown scorch" could still lead to tree death up to a decade after a fire. That study looked mostly at ponderosa pines, and Buck Creek is a little too cold and wet to make good ponderosa habitat, but the principle seems plausible for any species. As fires increase in size and severity, their fatal effects ripple outward.

Because government institutions love data, I thought that if someone could figure out how to quantify and predict when and how many trees will fall after a fire, the Forest Service might be more inclined to budget for trail work accordingly. But there's not as much research out there about this topic as I expected. "Snag longevity"—the amount of time a dead tree stays upright before falling—is perhaps just too unpredictable, too dependent on a matrix of variables like species, climate, weather, and local topography (is the snag on the windward or leeward slope of a hill?). The best study I found had conveniently been conducted right here on the Okanogan-Wenatchee National Forest. While emphasizing all the variability, it did show that the number of standing snags of all species declined sharply for the first thirty years after a fire, then gradually after that.

Three decades of clearing the downfall from one fire. Our work on Buck Creek, like so many other burned trails on the district, will remain never-ending.

Job security, some joke, except it's not even that. At the exact moment when so many fires are filling our forests with falling dead trees that cover the trails, the trails themselves are filling with hordes of hikers, hunters, bikers, birders, foragers, and gawkers, a wave of outdoor enthusiasm that gathered with the rise of social media, swelled when Trump politicized public lands, and crested as the pandemic fed a universal craving for fresh air and space. It hasn't receded since. Meanwhile, the Forest Service is tightening its budget, cutting positions all over, but especially in recreation. We have fewer and fewer people to do trail work, despite needing it more than ever—to keep up with both the workload fire creates, and the flood of humans frolicking in its wake.

Twenty years ago, those investigating the Thirtymile Fire reported on how disorganized leadership, both on the fire itself and at higher levels in the Forest Service, played a role in the confusion and chaos leading up to the fatalities. In 2000, the Okanogan and Wenatchee National Forests had been merged into one hyphenated unit, as part of an agency-wide push for consolidation meant to boost efficiency. Redundant management positions were eliminated, despite the fact that the Forest they oversaw was now twice as large. At the time of the Thirtymile Fire in 2001, some of the Forest's top fire staff were still working in temporary office space as headquarters were being rearranged.

At the same time it merged the Forests, the agency combined the Lake Wenatchee and Leavenworth Ranger Districts into what is today the Wenatchee River Ranger District, where I work. The merged district encompasses over 700,000 acres and more than 600 miles of trail, but for two years now the trails supervisor position has sat vacant, apparently too low on the Forest's priority list for hiring. Xander and I, as seasonal crew leaders making under \$20 an hour, have essentially been responsible for managing the maintenance of this entire trail system.

The Thirtymile Fire shed light on some of the most extreme, if indirect, consequences of the crusade against government waste and its brutal mandate of efficiency. But the initial internal report released by the Forest Service focused blame for the tragedy on its victims, charging that they ended up in harm's way by ignoring a direct order from a supervisor. Outcry from families and survivors (who maintained that no such order had been issued) forced a review that revised those findings. But the fundamental dynamics did not change. Consolidation has only accelerated in the two decades since, and it's the workers at the bottom of the totem pole, those actually out on the land—fighting fires, clearing trails, checking wilderness permits, cleaning pit toilets—who feel the brunt of this abandonment.

* * *

Once burned trees have hit the ground, what will seek the sun they've left behind? The little spruce seedlings pushing through the black moss of Buck Creek might be in for a rude awakening if next summer brings as many triple-digit days as this one did. And what about the summer after that? Disturbance moves in cycles, but the Northwest's signature forest communities—the subalpine spruce-fir in places like Buck Creek, and the cedar and hemlock bending over west-side rivers—have only been around a few thousand years. In terms of generations, they're not much more established than the white newcomers to this neck of the woods. Just twelve thousand years ago, all this land was locked away under ice, and the trees, once they did take over, moved through several phases of identity—several different iterations of species composition—before taking shape as the ecosystems that seem static to us.

Climatologists described this year's heat dome as a once-in-millennia event, when compared against historical records. But—just as hundred-year floods are becoming fiveyear floods on the East and Gulf coasts—scientists cautioned that such extreme heat will likely become much more common in the Pacific Northwest, a region whose residents have always comforted ourselves with the notion that we live in a "climate-resilient" corner of the country. We're blessed with so much water. We don't suffer hurricanes or tornadoes. Topography limits our temptation to sprawl. Temperatures stay temperate. Until now.

What will the forest look like as it endures future heat domes? How long can it remain a forest at all?

As trail workers, we see these slow-motion changes close up. We more than see them—we feel a part of them, returning to the same trails year after year not just to pass through the woods as hikers, but to stop and interact, experiencing the forest's forces through the medium of our labor. I sometimes try to wrap my head around this way of knowing a place: not better or worse than any other, but hard to find a parallel. I respect the deep intimacy farmers have with one patch of the earth, even as I'm grateful my work allows me to roam, trading the deep for the broad. Yet at the same time I'm always shocked by the speed of hiking for its own sake, how swiftly you can travel when traveling is your only purpose. It's an irony central to the identity of this vocation: how few miles you really cover, compared to the hours you spend on a trail.

Logs to cut, brush to subdue, erosion to chase. And unlike the fire managers and policymakers strategizing to undo Smokey's success, our interaction with the land doesn't aim to influence any larger forces, to nudge the ecosystem toward some ideal state. We react to what we find, whatever the cause. In this present future, our work follows the forest's lead.

* * *

As the heat dome settled in over the region, campfires everywhere were banned. The fire danger went up to Extreme, and the Industrial Fire Protection Levels—which dictate when and where chainsaws and other internal-combustion machinery can be used—shot to Level 3, a total ban. I'd never seen such intense fire restrictions so early in the season. The tone for the summer had been set, the storyline taking shape.

Our first week back to work after the heat dome, we camped on Indian Creek, working on replacing a bridge that had buckled under snow two winters before. The multiseason project had involved felling an old-growth Doug fir with a crosscut saw (the bridge collapsed in designated wilderness), peeling away its bark with axes and adzes to prevent rot, and using rigging equipment (griphoists and cables anchored in other trees) to move the log one hundred feet or so from the place where it fell to the place where the trail crossed the creek. Just moving the log had taken four days. The next tasks were to harvest small cedars for handrails and posts, peel those, attach them to the log, dig shallow graves on either side of the creek for logs called sills that will support each end of the bridge, and finally, to set up more rigging to fly the bridge across the creek to its final resting place. All of this with hand tools, because of the wilderness.

We had occasional visitors while we worked on the project. The Indian Creek trail, which Hal Sylvester named for its use by the local Wenatchi people as a route over the mountains, climbs ten miles to the Pacific Crest Trail, and some committed hikers still use it as an access route, even though it's suffered from neglected maintenance over the years, and many of the upper miles make for rough and brushy going. Since the bridge went out, most hikers enjoy an easy two-mile stroll through the impressive old growth and then turn around once they reach the bridgeless creek.

One day, a white-haired man showed up and told us about how he'd helped build a bridge here himself, many decades ago when he was on the trail crew. Likely there had been at least a couple bridges between his and ours. When he worked here, the man said, the wilderness boundary was at the creek, so they could build the bridge with power tools on the near side. I don't know why or when the wilderness boundary was expanded to where it is today, nearly at the trailhead. On the hike in, you can look up and see the insulators up in the trees, where telephone wires once connected backcountry ranger cabins to the outside world. A hundred yards or so from the bridge site sit the remains of one such cabin.

One day we took a break from the arduous bridge project to hike farther up the Indian Creek trail and get some logout done. Setting out from camp shortly after seven, we climbed gentle switchbacks through blessedly cool, shady forest, as the sun slept in behind the surrounding steep rock walls. The pleasantness of the weather and the breezy hike filled me with zinging dopamine. The crazed intensity of working and trying to make decisions in the heat had fallen away like a heavy blanket. I felt like I could hike and saw forever.

And I still felt that way, even as the sun cracked the ridgeline and the heat of the day rose. We took lunch at a place where the creek pooled around some boulders and I stripped to my underwear and plunged in. We soaked our hats and bandannas in the water before getting back to work. My wet clothes dried too fast. On the hike back to camp hours later, lagging behind my crew, I still took the time to stop and strip and dip again at the same spot, not sure I could make it the last two miles without getting wet again.

* * *

We emerged from that eight-day hitch to learn that the Methow Valley was on fire, a major highway closed as a result. In high summer we return from the woods anticipating news like this. Sometimes the smoke starts to seep into the valleys where we work, cut off from the world, before we know its source. Sometimes we can piece together information from the snatches of smoke reports we hear over our radios. I was working on the Pacific Crest Trail, somewhere south of Cady Pass, when the Buck Creek fire was first called in back in 2016. I remember the way Chris Clark's face fell as he turned up the volume on his radio to hear the size-up. "That's one of the only trails we've actually *finished* this year," he lamented.

Trail work is like those art installations people do on beaches, those spirals of sand and shell and rock designed to be washed away by the tide. The work is never permanent and never finished. Creeks flood and eat away at trails too close to the bank. Avalanches and mudslides scour the slopes and leave behind piles of impassable rubble. Always, the trees keep falling and the brush keeps growing, and if nothing else, the simple fact of so many human footsteps (not to mention bike tires or horseshoes) takes its toll on the tread. Even that bridge on Indian Creek will buckle eventually, no match for the Cascades' volatile combination of deep snows and steep slopes and the tumbling torrents that give the range its name. But the pace and scale of fire activity in the West these days has changed the tenor of that impermanence, and even of the ever-shifting cycles of the woods themselves. It's harder to be philosophical and artistic about the sweep of nature's reclaiming when you're working like the sorcerer's apprentice to clear burned logs that seem to multiply and accumulate like so many broomsticks. There's a franticness to it. And after you've cut log after log after log and you're dehydrated and crusted in sweat and ash with fireweed fluff up your nose, the flip side of that frenzy is a stone-heavy exhaustion, a sense that you're running an unwinnable race.

Few things satisfy me like fully logging out a burned and beautiful trail like Buck Creek. But behind that satisfaction is the knowledge that we'll have to do it all over again next year—and if we don't, probably no one will. There are sections of some burned trails we haven't cleared in years now. Every season we surrender more miles to the rising tide of fire and the wrack it leaves behind.

* * *

With the way that summer started off, that terrifying streak of otherworldly heat, we braced for a bad fire year, and the Methow blazes confirmed everyone's fears. August and September are usually the busiest months of fire season in the Pacific Northwest, but the Methow kicked things up to full throttle by mid-July.

The entire Forest buzzed with tension. All anyone talked about at the bars in town was the heat and the fires. Over the next couple of weeks, as temperatures stayed steady in the high 90s, topping 100 several more times, the Washington Department of Natural Resources closed all state lands to public use, and whispers spread that Forest lands would be next. We joked that if the Indian Creek drainage caught on fire, we'd hike in and defend our new bridge ourselves.

Part of the tension in the Wenatchee River valley came from the sense that it could have been—could still be—us. The landscape and climate here are not unlike that of the Methow, a couple hours to the north. Dry-grass slopes studded with ponderosa pines. Proximity to dense forests with plenty of fuel to burn, high ridges where lightning strikes. Years of drought. Not unlike so many idyllic valleys across the West.

Every year the feeling intensifies that any community, any drainage, any trail that hasn't burned in recent memory is simply waiting its turn. And its turn is coming soon.

It was too hot to do much on my days off. I was grateful for the AC unit in the wall of my little orchard shack, but the numbing effects of its constant cool hum made going outside even more of a shock. I felt like the Wicked Witch of the West every time I stepped out the door, which only drove me back indoors faster. I spent too many days off that summer sitting in my one-room air-conditioned box, staring at a screen, thoughts whirring in my overheated head, waiting for the sun to go down so I could stand to sit outside and read.

The situation in the Methow went from bad to worse. Two fires—the Cedar Creek and the Cub Creek—flanked the valley from both sides and triggered evacuation notices across the area. We canceled our yearly family trip. For a week in late July, Winthrop, that little tourist town with its board sidewalks and famous ice-cream shop and old-time photo parlor, had the worst air quality in the world. Cub Creek, namesake of one of the Methow fires, is another tributary of the Chewuch. That embattled drainage, so idyllic back in the green days of early June before the heat dome closed around us, had been transformed again, recalling its dark legacy. Fire maps on InciWeb showed the site of the Forest Service ranch as one little green strip surrounded by swaths of shaded red that signified where the fire burned most intensely. All the horses and mules, we heard, had been evacuated safely.

I zoomed in on the fire map. The Eightmile drainage, where we'd camped during stock school, was right in the red.

It struck me that every burned-over trail I know so well from work had been unfamiliar to me before its fire. I love many of those burned trails, Buck Creek especially. But I had never cherished a place *before* its transformation. With the Methow, now, that was different. I'd look at places there with a memory of what they were like before. Will I love them still the same?

Ponderosa pines had shaded our campsite that week up the Eightmile, one in particular that was impossible not to notice. One of the biggest ponderosas I've ever seen: solid, serene, the puzzle pieces of its bark stretched pale and wide, its trunk careening a hundred feet to the crown, emanating some kind of beauty that matched the glow of the long-evening light.

There were a couple other ponderosas in the vicinity that could have drawn awe on their own, had the mother tree not stolen the show. I took a moment to pause in its presence every morning and every night. Later, when I saw the map of the Cub Creek fire, I thought of all the lovely trees I remembered from that drainage, wondered what would become of them. But especially I thought of the mother tree. Ponderosas are fire-resistant, after all. Their thick bark and high-up limbs protect them from low-intensity surface fires. A severe fire like Cub Creek, the kind that can make an entire county's air hazardous to breathe, might be different.

Trees that have lived as long as that mother tree—perhaps 500 years, the upper end of a ponderosa's lifespan—have done so by surviving countless fires, windstorms, and other threats. Like any elder, they bear the scars and wisdom of a long life in tumultuous times. Even as their own days wane, they gather the strength of their experience and prepare to pass it on.

* * *

As of early October, the Cub Creek Fire, which started on July 16 from still-unknown causes, had burned 70,000 acres and was 90 percent contained. The horses and mules returned to their ranch, which was likely saved by its irrigated fields. The stock will head to winter pasture soon, and snow will settle in the Chewuch. Next summer there will be a hundred more logs to cut on Buck Creek and so many other burns. As I sink the teeth of my saw into each one, I'll wonder about all the things it's been through. I'll wonder what will come after to take its place.