Under the Glacier

Standing under the glacier I decided to call it a career.

It was July 14, 2022, and the glacier was the Eiger in Switzerland. I had started the day in Interlaken, a workaday town on the Aare River strategically located for tourist adventures. I arrived the previous evening after a short but harrowing drive from Lucerne on a two-lane 'highway' clogged with traffic that badly stressed my rusty manual driving skills. After checking into my hotel, I drove the rental car up nearby Lauterbrunnen valley, famous for its beauty and easy access to multiple Swiss Alps highlights. It was high summer, with blue skies overhead and flowers in the meadows. Having never visited Switzerland or the Alps before, I was eager to go 'full tourist.' However, the valley was packed with cars, further fraying my traffic-weary nerves. I found relief - and supper - in Grindelwald, a quiet village in a side valley that barely registered a mention in my guidebook. Grateful for the tranquility, I decided to start my Alps sightseeing adventure there the next morning. I took an early train to a station at Kleine Scheidegg, located on a saddle below the Jungfrau massif, the spectacular trio of mountains that includes the Eiger. After a cappuccino at the restaurant (ah, Europe), I decided to hike up the Eiger Trail to a large gondola station at the base of the famous mountain. I could see a large glacier attached to its steep face. My guidebook said nothing about the Eiger Trail or the glacier, which explains why I hadn't planned to go there - or call it a career when I arrived.

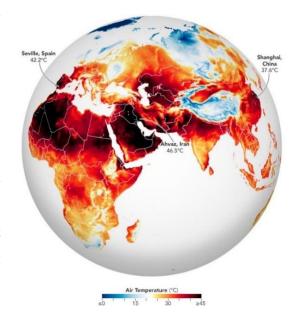
In fact, I was surprised to be in Switzerland at all. The trip originated at a wedding in North Carolina the previous April when my cousin Meg Stuart tied the knot with her musical beau Doug Weiss. Meg is a highly accomplished and much-honored modern dance choreographer. Although I've known her for a long time I never made it to a performance, mostly because she lives in Berlin and her company performs in Europe. It was a dereliction that I kept promising to correct. At the wedding, Meg said she and her troupe would be performing in July at a dance festival in Bolzano, Italy. "Come on out," she urged me. Wheels turned in my head. Italy... fly out early... rent a car... go hiking in the Alps... I talked about it with Gen, whose health was still fragile after last summer's heart surgery. She insisted that I go. Between COVID confinement and everything associated with her surgery and recovery, I needed a vacation she said – which I didn't dispute. Besides, she knew how much I loved Europe. Olivia was very happy to fly out and stay with mom, so I made the arrangements and booked tickets to Milan. The Alps awaited!

I set off on the Eiger trail under a bright, glorious sky. Everything was new to me, from the postcard-perfect mountains, to the merry sounds of tinkling cow bells in the distance, to the tiny purple flowers along the trail. The train ride up from Grindelwald had been spectacular, filled with sweeping vistas in all directions. I craned my neck back-and-forth like a schoolkid trying to see as much as possible. I traced roads downwards and trails upwards as they set off for distant valleys, causing me, as always, to wonder how I might get to those faraway places and what charms they might hold. As I stepped off the train at Kleine Scheidegg, the morning air, the warm sun, and the sweetness of high summer embraced me like an old friend. It brought back memories of July hikes in the High Sierras of California and the northern Rockies as well as heavenly camping trips to Yellowstone with Gen and the kids. I walked to a platform near the restaurant that overlooked the magnificent Lauterbrunnen valley, far below, and breathed deep, letting the light and the warmth and view soak in.

It was a day made to lift spirits – and mine needed lifting. For starters, there was the smoke. As the plane flew over the Alps toward the airport in Milan, I pressed my face to the window eager for a glimpse of the fabled peaks. To my disappointment, they wore a shroud of blue haze. I knew wildfires had broken out recently in Greece, Portugal, Spain, and southwestern France, consuming thousands of acres of forest, but I hadn't processed the possibility that their smoke would smother an entire mountain range. But that's what happened. The culprit was a heat wave. Temperatures had been rising for a week across Europe. In England, they were predicted to reach 40 degrees

Celsius (104° F) for the first time since official record keeping began in the mid-19th century, and possibly for the first time in six thousand years. The highest temperature ever recorded in Britain so far was 38.7° Celsius, which occurred during a heat wave in late July 2019. Paris was also expected to break the 40° Celsius mark. And they did. Five days after my hike up the Eiger Trail, six sites in England, including Heathrow airport and St. James Park, surpassed 40° Celsius, shattering the July 2019 record. It was the same in France where authorities warned of a "heat apocalypse" as parts of the nation soared to 43° Celsius.

It was all too familiar.



Surface air temperatures on July 13, 2022 (NASA)

On July 25, 2019, Gen and I were traveling from Berlin to Prague on a train when the heat wave smashed temperature records across the continent, generating global headlines as well as energetic hand-wringing about the effects of climate change (see my *The Heat Wave* essay). The specter that records would be smashed again merely three years later was depressing, to be frank, even though it wasn't a surprise. According to a study published a few weeks before my trip to the Alps, heat waves in Europe have increased in frequency and intensity over the past forty years and are doing so faster than other parts of the world. This wasn't news. Climate scientists have said for years that global warming will make extreme temperature events more common. What is news is they are happening at shorter intervals than scientists predicted. Another study determined that concurrent global heat waves are affecting larger areas and are more severe, with peak intensities almost one-fifth higher than in the 1980s. But here's the most depressing part: dangerous heat will soon become the *standard* — not the exception. And not only will heat waves be routine they will continue to become more severe. "Days of rage," as one journalist put it, "will become the norm." The heat wave I experienced in 2019 felt exceptional, but in 2022 it felt, well, unexceptional. It troubled my heart.

Then there were the glaciers. Ten days before I arrived in the Aare valley, a huge section of the Marmolada Glacier, located high in Italy's Dolomite Mountains, broke off without warning, triggering a massive avalanche of ice and rock that killed eleven hikers and injured eight more. The immediate cause was the heat wave, but a reduced snowpack over the winter meant the glacier



The shrinking Gorner Glacier near Zermatt, the second largest in the Alps

lacked an insulating layer of snow, making it vulnerable to melting and cracking. Global warming was at work here too. Over the last century, temperatures in the Alps have risen twice as quickly as the global average, according to a European climate modeling

group. It has taken a mammoth toll on the continent's glaciers. The 900 glaciers in Italy occupy 40% less land than they did thirty years ago. Glaciers below 11,000 feet are forecast to disappear within thirty years under current warming trends, including the Marmolada glacier. Summer 2022

was shaping up to be especially brutal. June was the second-warmest on record. By mid-July, the rate of glacial melting was the highest ever recorded, boosted by large amounts of dust that blew from the Sahara on spring winds. By coating glacier surfaces and darkening them, dust causes sunlight to be absorbed, warming the ice, rather than reflected back into the atmosphere.

It adds up to serious, practical trouble for lowland Europe. The Alpine snowpack sustains critical rivers, including the Rhine in Germany, the Rhone in France, the Inn in Austria, and the Po in Italy, supplying nearly 90% of the region's water requirements for drinking, irrigation, and hydropower. The Alps attract more than 120 million people for skiing, hiking, and other outdoor sports. The decline of snows and the loss of glaciers will badly hurt economies and livelihoods. A story I read perfectly captured the dilemma. In 1674, residents of a village at the foot of the Aletsch glacier – the largest in the Alps and a UNESCO World heritage Site – established a religious ritual to ask God to halt the advance of the glacier, which was threatening their safety. The ritual was enacted every July, even as the glacier began to retreat in the mid-1800s. Then in 2009, the local

parish petitioned the Vatican to alter the ritual so they could pray for the glacier to stop melting. Their petition was approved. "Glacier is ice, ice is water, water is life," part of the new prayer says. There are other rituals now. In fall of 2019, a funeral ceremony was held to mark the disappearance of the Pizol, a small glacier in northeastern Switzerland. Hundreds of people congregated to grieve. Scientists removed Pizol from their annual measurements of Alps glaciers, no doubt grieving too.

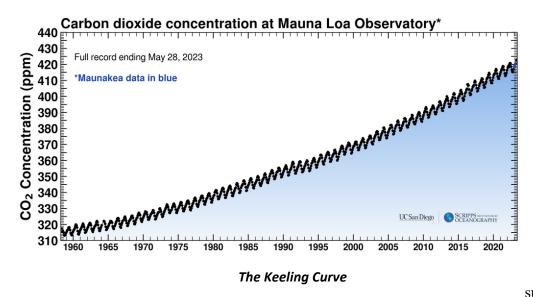


Funeral for the Pizol glacier in 2019

That's why I headed for the Eiger glacier when it caught my eye. I've seen glaciers before, including a bunch on a memorable eight-day backpacking trip through Glacier National Park in Montana when I was sixteen. This was different. It was the Alps, sure, but knowing that something as durable and elemental as a glacier which can carve a valley out of sheer rock could be so quickly endangered evoked a new feeling: grief. I couldn't get the funeral out of my mind. There are roughly 4000 glaciers in the Alps. That's a lot of funerals. It wasn't just glaciers. Four days after my hike, at the peak of the heat wave, the head of the United Nations, António Guterres, warned

ministers from forty nations who had assembled to discuss the climate crisis that "Half of humanity is in the danger zone, from floods, droughts, extreme storms and wildfires. No nation is immune. Yet we continue to feed our fossil fuel addiction." Guterres added: "We have a choice. Collective action or collective suicide. It is in our hands." I've heard this warning over and over, starting with Rajendra Pachauri, Chairman of the Intergovernmental Panel on Climate Change (IPCC) and one of the winners of the Nobel Peace Prize. As the IPCC released the summary of its 4th Assessment on Climate Change, Pachauri said "What we do in the next two to three years will determine our future. This is the defining moment." It was 2007. He went on to say, "If there's no action before 2012, that's too late."

Has there been enough action to stem climate change, then or now? Scientists have been crystal clear that atmospheric carbon dioxide (CO₂) levels must plateau and then fall rapidly for humanity and the rest of life on earth to have a chance at stabilizing the climate. Alas, CO₂ totals as measured at the Mauna Loa observatory in Hawaii – the famous Keeling Curve – continue their steady, relentless rise – from 315 ppm (parts-per-million) in 1958 to 420 ppm in 2022. The rate of CO₂ accumulation, roughly 2.3 ppm per year, has remained unchanged since the early 2000s. Unchanged despite all the reports, research papers, books, lectures, documentaries, conferences, bills, plans, pledges, protests, rallies, headlines, warnings, technological innovations, economic incentives, nature-based solutions, regenerative ideas, and everything else that we've been doing



for years in order to avert a climate crisis. We've been very busy! However, if you just looked at the Keeling Curve you would think there's been "no action" at all, to use Pachuari's words. And you would be correct. Meanwhile, successive heat waves in

2019 and 2022 – and everything else bad on the climate front – are proving his prediction to be true. I know that's a gloomy perspective, but as I said, I hiked with a heavy heart.

Then there was the Supreme Court. On June 24, the six conservatives on the Court voted to overturn the landmark 1974 Roe v. Wade decision guaranteeing a woman's right to an abortion. Although the decision was expected, my shock was deep. I remember when the original decision was announced, and I assumed over the ensuing decades that it was set in stone. I was wrong. In 1974, the vote to uphold a fundamental right of women to an abortion wasn't popular, according to polls. Today, the situation is completely flipped. Young people in particular overwhelmingly support abortion rights. It made me wonder what would be next on the Supreme Court's chopping block. In a concurring opinion to their decision, Justice Clarence Thomas suggested that any right should now be up for reconsideration, including same-sex marriage. That's really depressing. During my lifetime, vast progress has been made on many critical issues, including civil rights, voting rights, women's rights, environmental laws, clean water, clean air, same-sex marriage, and more. The essence of this progress was captured in the election of Barack Obama in 2008 as the nation's first Black man to become President of the United States. He was liberal too! His election felt like the next logical and moral step down a long road that stretched back to the Civil War and beyond. It was good and right. Then Donald Trump happened, and things started to go backward quickly, aided by the three anti-federalist Justices that Trump put on the Supreme Court. This reversal of progress was symbolized by the Court's jaw-dropping nullification of abortion rights.

Two weeks before my trip, the Court struck again. The conservative majority sided with West Virginia in an appeal by the state to block a plan by the Environmental Protection Agency (EPA) to limit CO₂ emissions from power plants. It was a significant blow to President Biden's plans to cut the amount of greenhouse gases that the U.S. produces in half by the end of this decade, a reduction that would send a strong signal to the world that we were (finally) getting serious about global warming. However, the Supreme Court's decision limiting the EPA makes Biden's goal impossible to achieve now. "At this point I don't see any way to hit the kind of targets they laid out," said David Victor, an expert in climate policy at the University of California, San Diego, in an interview. The overarching issue is that Congress had failed to do *anything* about climate change even though the initial hearings on the subject were held in 1988. Biden tried a duel approach – legislative and administrative. However, his legislative proposal to replace coal and natural gasfired power plants with wind, solar and other renewable energy sources was removed from a major domestic spending bill last fall after objections from Senator Joe Manchin, (nominal) Democrat from West Virginia. It was a huge blow. "This is absolutely the most important climate policy in

the package," said Leah Stokes, a researcher and expert on climate policy who had been advising Senate Democrats. "We fundamentally need it to meet our climate goals. That's just the reality. Now we can't. So, this is pretty sad." Not coincidently, Manchin has major financial ties to the coal industry. For Biden, that left the administrative route via the EPA as the only recourse for major climate action – until the Supreme Court's decision on June 30th. The upshot is simple and devastating: the "no action" that Pachauri warned us against will continue. "A lot of the optimism that everyone had a year ago is being replaced by pessimism," said Richard Lazarus, a professor of environmental law at Harvard. Others despaired. According to NASA climate scientist Peter Kalmus, the Court's decision was a crushing blow for humanity. "Without a livable planet, nothing else matters," he wrote in an op-ed a day after the Supreme Court decision. "Earth's capacity to support life continues to degrade, millions, eventually billions of people will be displaced and die, fascism will rise, climate wars will intensify, and the rule of law will break down."

Hyperbole? Maybe, but maybe not. In any case, we're going to find out.

The final stretch of the trail to the gondola station was short and steep. Although I live at 7000 feet back home in Santa Fe, I felt the altitude, requiring frequent breaks to catch my breath. At the station, I took a moment to watch the steady stream of gondolas arrive from Grindelwald, marveling at their efficiency. After being ferried to the station, passengers transferred to trains that carried them to a spectacular view at the summit of Jungfrau mountain via a tunnel built in 1912.

If I wanted, I could have sat in a comfortable seat from Interlaken, elevation 2000 feet, all the way to the top of 11,000-foot Jungfrau. A Swiss marvel. After a quick refreshment at the restaurant, it was time to complete my quest. I followed a trail to the base of the Eiger, stopping at the summit of a small knoll. Surrounding me was grass and broken rocks that had tumbled down the mountain. Above me was the Eiger glacier. It looked tired. Although it impressively filled the gap between Eiger and Jungfrau mountains, its lower edge looked frayed and shrunken, hinting at the glacier's former size and glory. There was more exposed rock than I expected and the rivulets of water that drained the glacier seemed thin and sparse. Still, the glacier was an inspiring sight to behold. I pulled out my phone and snapped a few pictures.



Eiger glacier, July 14, 2022

Standing there under the glacier, surrounded by nature in all its profound beauty, I suddenly decided to call it a career. Heavy thoughts about melting glaciers, heat waves, Joe Manchin, the Supreme Court, immoral inaction by our so-called leaders, and near total indifference by the public to the suffering that lay ahead had worn me out. It was time to stop trying to save things and move on. It wasn't a decision made lightly. I had been busy with save-the-world work for forty years, stretching back to college and my first engagement with the Sierra Club when I helped organize a petition drive to oust anti-environmental extremist James Watt as President Reagan's Secretary of the Interior. More activism followed, with a focus on the Club's effort to protect wilderness areas on public lands. I went to Washington, D.C., to lobby Congress. I led a wilderness-themed outing to Utah. I became a leader in the local chapter of the Club in Santa Fe, organizing workshops and helping to write a hard rock mining manual for activists. Things ramped up when I cofounded the Quivira Coalition in 1997. Despite successes at the grassroots level over the next two decades, I suffered two major low points when my spirits sagged dangerously. I overcame them by shifting gears and pushing on with our work. There were more successes. It was a team effort, and not just at Quivira. Like small streams merging into bigger ones, the regenerative movement gained speed and strength. Compared to 1997, the quantity of activists, nonprofits, start-ups, farmers, scientists, entrepreneurs, agencies, and others working today in diverse regenerative endeavors is large and inspiring. I was honored to have had a small role in getting things started and going. Was anyone's work making a difference though? On one level yes, absolutely; but on another, the answer was clear that it was not. The evidence was right there in the Keeling Curve for all to see. I was proud of my work, but I wanted to apply my energy to new endeavors. Standing under the glacier, I felt a desire to head down the trail to someplace different. Where? I wasn't sure, but I began by hiking back to Kleine Scheidegg and buying a yummy-looking pastry and another cappuccino.

Now what?

I decided to do something hard. On the hike back, I spied the village of Wengen more than three thousand feet below me, sitting on a shelf of land overlooking the Lauterbrunnen valley. A sign for Wengen pointed down a dirt road labelled as 'Ultra' which I assumed meant it was a ski run. A very steep one. When I finished the pastry and the coffee, I decided to walk to Wengen. I had water and food in a knapsack, a hat on my head, sunscreen on my face, and a cell phone in my pocket. Still, it was kinda crazy. I was nearly sixty-two and although I tried to get to the gym as

often as possible, the Covid pandemic had turned me into a blob. I worried about my stamina. And body parts. A downhill hike like this would be hell on my knees and thighs. I fretted about my feet too. In 2020, I developed *plantar fasciitis* in my right foot, probably from inactivity. For a while, it was painful to take a step, much less go on a hike. Adding it all up, prudence (and my guidebook) suggested that I take the train to Wengen instead. That's why I decided to walk. All my life, I've prided myself on doing hard things. But it had been a long while since I had pushed myself. Was I up to it? Could I still do hard things? I decided to find out.

There was another reason to go on a long walk. I wanted to scrutinize my resolve to call it a career. That's because I've been here before. At the end of 2015, feeling totally burned out, I left the Quivira Coalition after eighteen intense, productive, and deeply rewarding years at its helm. I told people that I was weary of boards, budgets, and the bottomless pit of fundraising. I wanted to write books instead. All true. Deeper down, however, I wanted out of saving-the-world work. Part of it was the reality represented by the Keeling Curve, which in late 2015 crossed the 400 ppm threshold for the first time in human history. However, a big part of wanting to move on was my life-long restlessness. The Quivira Coalition was a hard thing I thought up and did. It satisfied my save-the-world desire while allowing me to be creative. As the organization matured, though, a 'been-there-done-that' feeling grew inside me. On my 50th birthday in 2010, I decided to pursue book-writing as my next hard thing. Almost by accident, I had discovered soil carbon's potential as a climate solution. I published a book on the topic in 2014, joining books by two other authors, each of us touting the many virtues of sequestering atmospheric carbon in soil via regenerative agricultural practices. Soon, soil carbon was everywhere – lectures, studies, news stories, articles,

conferences, reports, policies, legislative bills. Soil carbon was even featured at the critical United Nations COP climate summit in Paris in late 2015. I was rather stunned how fast events had moved.

I took a break on my hike for a selfie. The day was just spectacular. I couldn't get over the views. Every turn in the road revealed something new. I was in the Alps! How cool was that? If there was smoke in the air, I couldn't see it. I felt good. Steep roads are often harder to hike than trails because they're designed for vehicles, not people, but so far body parts were holding up tolerably well. Other than two young women who cruised past the geezer with a smile and a wave, I had the road all to myself, which I enjoyed.



I resumed my hike and my reflection. What I wanted to do after leaving Quivira was write fiction. In particular, I wanted to complete a novel I had recently started and then write a murder mystery set on a historic ranch in northern New Mexico, the first book in what I hoped would be a series (see my essay A Novel Experience). Fiction? It wasn't kinda crazy – it was totally crazy. Insane. I had no business writing novels, literally. From an income-making, agent-finding, readerreading perspective, it was essentially an impossibility at my age. And not just age. I had almost no social media presence. That's because I hate social media. There was more. The head of a trade department of a major publishing house warned me not to confuse my nonfiction readers by writing fiction. I decided to try anyway. Not only was it another hard thing to do, it was part of the creative restlessness that had been pushing me around since high school. I knew early I could never settle into a professional lane and stay there. Even my 40-year commitment to conservation, especially my work at the Quivira Coalition, was marked by a steady stream of new endeavors on my part, as the many projects and goals that I steered the organization toward over the years attest. I kept prospecting for new ideas, new solutions, new alliances, new ways of accomplishing our save-theworld work. That the world didn't particularly want to be saved, as I eventually discovered, was another matter. Back then, I had to try.

By the time I reached tree line, about halfway to Wengen, the combined effects of exertion, altitude, and heat had caught up with me. I spied a bench in the shade and threw off my pack and took off my boots when I reached it. I felt overheated and needed to cool down. My knees and feet



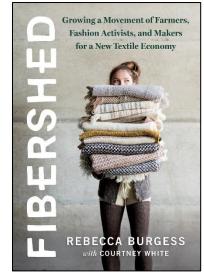
Halfway to Wengen

were holding up, though my thighs had begun to protest. Downhill is hard because gravity pulls you forward, requiring constant braking by knees, thighs, gluts, quads, ankles – everything. It is way different than plodding uphill, which you expect to cause overheating. Downhill, the heat sneaks up on you. It can be tedious too. Thankfully, I had a lot of distractions on the hike besides the incredible vistas. The road often ran parallel to the train track, so I got to see many trestles and old-looking buildings. And this being Europe, there were all kinds of historic and modern things to observe, including ski lifts, homes, walls, and other roads. In the distance I could hear cow bells and I saw electric fencing. Soon, I was certain I'd see cows!

Cooled down, I resumed my hike. I wasn't foolhardy about leaving Quivira. I had contract work, including a contract to organize Quivira's 2016 Annual Conference. Beyond that, however, I didn't have a plan (in retrospect, it was a measure of how badly I wanted out that I leaped without looking financially, a dangerous thing to do). Hopefully, it would work out. And it did, but barely. It began with a chance encounter with Fern Bradley, an editor at Chelsea Green Press, at a speaking engagement in Massachusetts in early 2017. Chelsea Green had published two of my books and Fern was familiar with my work. She told me they were looking for someone to coauthor a book with Gabe Brown, an innovative and respected regenerative farmer in North Dakota. He was stuck on the first chapter of a book about his work and life and needed help. Was I interested? I knew Gabe, so I knew the effort would be worthwhile. However, it meant getting back into save-theworld work, though via book writing. Fern made it very clear there would not be much money. "We expect our writers to have day jobs," was how she put it (don't get me started). Wheels turned in my head. I felt confident I could find support. So, I signed on. The decision was buttressed by the ascendency of Donald Trump to the highest office in the land (still hard to believe). I suspected that a long list of terrible things were about to happen. I couldn't sit on the sidelines writing fiction. I needed to pitch in. Working with Gabe would be a great place to start. Besides, I wasn't ready to give up hope on the climate front, even though our chances looked increasingly dim.

Helping Gabe to write *Dirt to Soil* (Chelsea Green, 2018) set me on a path of coauthorship that carried me right up to the Eiger glacier. Next, I cowrote *Fibershed* with Rebecca Burgess, a

pioneering fiber activist in California (Chelsea Green 2019). Both books were hard, though for different reasons (coauthorship is not for the faint-of-heart, I learned). In early 2020, Paul Hawken hired me to be Senior writer on his beautiful and inspiring sequel to *Drawdown*, his landmark climate action book, titled *Regeneration: Reversing the Climate Crisis in One Generation* (Penguin 2021). Finally, three weeks before heading to Switzerland, I turned in the manuscript for *The Great Regeneration*, coauthored with my friend Dorn Cox, a brilliant farmer from New Hampshire (Chelsea Green 2023). After five years of cowriting, part of it during a global pandemic, I was worn down mentally and physically (from so much sitting). It was alright – it felt like *mission accomplished*. I had done another hard thing for the world.



Likely my last one.

Two hours and two cool-off breaks later, I reached Wengen. Limping. Body parts hurt now, though not as much as I feared. The final few kilometers were mostly level, which gave my knees a chance to stop protesting so much. The previous stretch of road had been very steep, requiring a shuffling, sideways gait to reach the bottom safely. It was easy to imagine the thrill skiers felt after barreling down that hill and then gliding smoothly into Wengen for a well-earned beer. I was happy



Wengen, at last

just to see grass and cows, including a small herd grazing literally on the edge of town. Ah, Europe. I made my way to a park near the train station, where I found a low wall to sit on. After removing my shoes and socks, I munched on cashews and fruit bars while soaking up the sights and sounds of busy Wengen. There was a volleyball game going on to the left of me and picknickers to the right. Behind me, I could hear the clack-clack of luggage being

hauled by tourists to unseen hotels. It was wonderful. I was exhausted, sore, and dehydrated, but I made it to Wengen! I challenged myself with the hike, perhaps a bit recklessly, and succeeded. Amid my fatigue and aching muscles, I felt an elation. I could still do hard things.

The next day I did it again.

What did I accomplish with my work in conservation?

This question dominated my thoughts the next day. I remained resolved to call it a career and move on, but the save-the-world urge still nipped at my heels. I needed to give the matter more thought. I began the day by driving up Lauterbrunnen valley after breakfast and purchasing a ticket for a long gondola ride to the top of Schilthorn Mountain, another Swiss engineering marvel. My guidebook said it was a 'must do' which likely explained the horde of people waiting patiently in line. When it was our turn, my group squeezed into the gondola like sardines. I caught the eye of the already-weary-looking operator and gave her a sympathetic smile. At the top, we spilled out to jaw-dropping views in every direction. My guidebook was correct, the vistas were worth the steep ticket price. Still, there was something canned about the whole experience, beginning with the gift store that greeted us upon arrival (I didn't go into the James Bond exhibit). I made way instead to the small restaurant and purchased a cappuccino before dutifully making the round of overlooks,

taking photos of Alpine peaks. At one overlook, a young woman performed for her camera, striking over-the-top selfie poses repeatedly. TikTok, I assumed (the wifi was strong on the mountaintop). Leaving the hubbub behind, I walked a short distance to a rock outcropping where I had spied a trail sign. Below me, two trails headed into the treeless wilderness in opposite directions. I traced their progress, feeling their tug. I wanted to pick one and go it wherever it led.

Instead, a caught the next gondola down.



View from the top of Schilthorn

I stepped off at the tiny village of Gimmelwald, the next-to-last stop and another 'must see' according to the guidebook. Perched high above the valley floor, it was pretty (as advertised) but too tidy for my tastes. The neat, colorful buildings fairly shouted "Welcome to a Swiss village!" Even the cows looked like they were part of a living diorama. I wondered if there were more rooms for tourists than villagers. After a quick spin, I decided to hike the service road that led to Murren, the main town on this side of the valley. By the time I set out, the day was already warm, reminding me that the historic heat wave still gripped the region. I tried to put it out of my mind, though the trickle of sweat I was already feeling inside my shirt would be hard to ignore.

Plodding up the road, I turned my thoughts to my conservation work. What had succeeded? What did not? And what failed outright? The simplest evaluation would be to compare the goals and actions of the conservation movement in 1995, when I became active with Sierra Club locally, with today. The difference is stark. Two words can sum up the aim of conservationists in the 1990s: wolves and wilderness. Supporting the reintroduction of gray wolves to the northern Rockies and Mexican wolves in the Southwest, as well as protecting other endangered species such as Spotted Owl in the forests of the Northwest, dominated the work of activists. It grabbed headlines too. Less

sexy was an energetic campaign to protect additional wilderness areas on public land. Both efforts were part of a general philosophy to wall off nature from humans as much as possible with national parks, monuments, and wilderness areas, called "fortress conservation." This philosophy stretched back to the roots of the movement in the early 20th century – John Muir et al – but took off during the cultural ferment of the late 1960s and early 1970s, an era that birthed an array of consequential environmental legislation and wilderness area designation. Led by Baby Boom "front-enders" (as I call them) and given voice by writers like Wallace Stegner and Edward Abbey, the conservation movement reveled its popularity and success. Emboldened, a radical wing of the movement went further in the cause of wolves and wilderness, engaging in ecosabotage, theatrics, and demands for 'no compromise in defense of Mother Earth.' Mainstream groups employed a more effective tactic:



Dairy cows near Murren

the lawsuit. While most lawsuits were filed against federal agencies, such as the Fish & Wildlife Service and the Forest Service, the real targets were timber companies, ranchers, and mining corporations. Some activists even tried to shut down all timber sales and end all cattle grazing on public lands. At a public meeting I attended out of curiosity, a prominent author and anti-grazing activist called cattle "irredeemable." I was shocked. How could any animal be called irredeemable, much less one that just ate grass? That's how crazy the culture war – for that's what it was in reality – against livestock had become by the late 1990s. Unsurprisingly, the lawsuits and the demonization generated huge amounts of anger and resentment among residents of rural counties across the West (setting the stage for a political red wave later). The bad blood ran deep, and hope of reconciliation seemed impossible.

Fast forward to today and the situation is dramatically different. Many environmentalists, once dead set against any type of 'working landscape' such as farms and ranches, now support regenerative agriculture in its various forms, including Indigenous ones (traditional knowledge and Indigenous practices were deliberately overlooked by activists in the 1990s). The food movement and its advocacy for organic, grassfed, and local food, was ignored by the conservation movement for decades. Today, food and regenerative farming are cornerstones to many nature-based climate solutions being pitched by environmental groups. "Fortress conservation," as a consequence, has

been demolished. Direct, hands-on management of nature for desired outcomes, such as restoring degraded land or building carbon-rich soil with cattle or sheep, once *verboten* among activists, is now promoted as a requirement for a healthy planet especially as the huge scale of land degradation has become clear in recent years. As a result, cattle have been redeemed. So has Allan Savory, the pioneering advocate for nature-based livestock management. That's big news. Savory was tar-and-feathered by activists, academics, and journalists over and over for years, his ideas mocked, often in personal terms. No longer. His argument that livestock can be managed to benefit land, animals, and people is no longer controversial, and for a simple reason: it works. Ranchers knew that (which was enough for me in 1997), but it took a long time for range scientists and environmental activists to get over their prejudices and see it too.

It's the same with other formerly contentious issues – they are now part of the mainstream. Watershed-scale collaborative conservation, led by local residents including loggers and ranchers, was vehemently opposed by national environmental organizations when it broke out in the 1990s. I experienced the vehemence first hand. The Quivira Coalition was attacked by activists as a "sell-out" for working with ranchers (to be fair, the New Mexico Cattlegrowers Association didn't like us either). A few tried to have me removed from my leadership role in the local Sierra Club group. All that has changed. Working together for common goals, such as healthy food and watersheds, in what we called the 'radical center' has been embraced. Trust was rebuilt in the process and the bad blood faded where it mattered most: on the ground. The Quivira Coalition, along with a dozen or so other nonprofits at the time, led the way. If it was a battlefield – and that's how it felt in the early years – then we were some of the first to climb out of the trenches and press forward. We succeeded in breaking through with help from many people, including scientists, and were gratified that so many followed (for a real-time chronicle of events that took place from 1995 to 2005 see the columns I wrote for the Sierra Club and Quivira Coalition newsletters, *The Uneasy Chair* and *The Far Horizon*, republished in *Grassroots: the Rise of the Radical Center*).

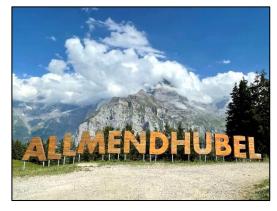
I'm proud to see how far and wide regenerative ideas, practices, and policies have spread. I'm especially pleased to see Indigenous and traditional knowledge finally respected and honored. What started as a trickle has become a flood, evidenced by the wide variety and quantity of farmers, ranchers, scientists, agency people, activists, policy-makers, entrepreneurs, and others working today in the regenerative arena.

In this respect, I'm happy to call it a career and move on.

By the time I reached Murren, I was hot and hungry. Somehow it had become lunchtime. I felt like a sit-down meal at a restaurant, preferably with a beer and a view of the valley below. There were many choices, Murren having given itself over to tourism years ago. Overnight visitors are supplied by a gondola system farther down the valley and a train that brings them to Murren. The restaurants, shops, and hotels do the rest. Judging by the big crowds I saw, the system works efficiently (of course). Randomly selecting a restaurant, I scored a lovely table for two at the edge of its open-air seating section overlooking the Lauterbrunnen valley. I ordered the beer and settled in for a tasty lunch. I kept pinching myself – I was in Europe! It was a gorgeous day and look at those views! The only thing that troubled my heart right now was the empty chair across from me. I missed Gen. It wasn't the same to be in Europe – or traveling anywhere – without her. How many meals did we have together on trips over forty years? A lot. Some of the best were here in Europe. Those days were behind us now, very sadly. Before eating supper in Grindelwald that first night, I sent her and the kids a photo of my meal, a scrumptiously caloric pile of eggs, sausage, cheese, and potatoes. Later, I had a big cry in the parking lot. I hated eating alone. I still do. Sitting there at the table in Murren, looking out over the valley, I felt tears coming again. I took a deep, calming breath and raised my beer to Gen and all the amazing meals we shared in special places.

After lunch, I hopped on a funicular and rode to the top of a hill, eager to get away from the crowds and the memories and go for a long walk under blue skies so I could reflect on my career decision a bit more. I found a dirt road that seemed to fit the bill, so I blithely headed out, not knowing what lay ahead.

The masses of tourists I had witnessed on the trip brought to mind a historical failure of the conservation movement. Years ago, author and farmer Wendell Berry scored a direct hit when he accused environmentalists of not having an economic agenda to

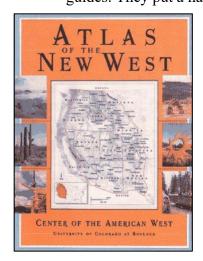


The start of my long hike

go along with their conservation agenda. This pointed barb was aimed at the economic losses that the 'wolves and wilderness' campaigns were causing ranchers, loggers, and other rural residents, but it also had bigger fish to fry. What, Wendell wanted to know, was the conservation movement's economic alternative to industrialism and corporate capitalism, which he believed (correctly) were the real causes of global ecological decline? People had to have an economy, he pointed out. What did conservationists have in mind exactly? It was a rhetorical question. Wendell believed that

conservationists did not actually have an economic alternative in mind, at least not like the one he had, which was a sustainable, land-based economy that operated in cooperation with nature. Since conservationists didn't have room for working landscapes in their vision of healthy ecosystems, Wendell's criticism struck home.

He wasn't entirely correct, however. Conservationists did have an economic model in mind at the time, one they vigorously supported. It was called tourism. In the 1990s, its benefits were widely and loudly touted across the West by civic leaders, chamber of commerces, economists, developers, investors, think tanks, and conservationists. They envisioned a new era of prosperity centered on music festivals, art galleries, micro-breweries, resorts, hotel chains, second homes, retirement communities, lattes, laptops, waiters, skiers, housekeepers, mountain bikers, and fishing guides. They put a name to their vision: *The New West*. In 1997, the Center of the American West

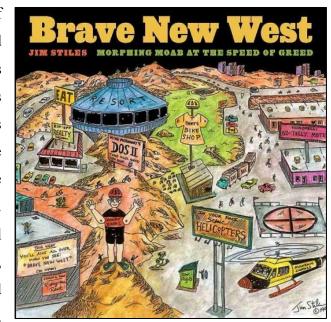


at the University of Colorado, Boulder made it official when it published an *Atlas of the New West*, charting the rise of the recreation economy across the region. The future was here, apparently. On the academic front, the main cheerleader for the New West was Thomas Michael Power, professor of Economics at the University of Montana. His book *Post-Cowboy Economics* made a splash when it was published in 2001. It argued that the land-based economies of the Old West were dead or dying; the future lay in the direction of tourism, medical services, businesses, tech companies, and retiree wealth. No more cowboys.

In the fall of 2004, I was invited to debate Dr. Power at a gathering of Democratic party leaders, foundation types, and others at a small resort near Big Sky, Montana. My participation was organized by Daniel Kemmis, former mayor of Missoula and a leading voice for collaborative conservation in the West, and thus an advocate for ranchers and farmers. Daniel strongly disagreed with the belief that rural residents had to bow down before the recreational economy and give up their culture and history. He wanted his fellow Democrats to hear our alternative. The debate was anti-climactic. Dr. Power conceded cheerfully at the start that there was a role in the region for progressive farming and ranching, especially collaborative efforts to heal degraded watersheds. However, from an economic perspective, he said, the numbers weren't there. Amenities rocked. Medical services too. There would always be more nurses than cowboys now. I conceded his point, though it felt a bit cold-blooded. It reminded me why economics is called 'the dismal science.'

Fast forward, and we know what happened next. Hope for a benign recreational economy blew up and died. Tourism became mass, industrial tourism. In 2019, 1.5 billion people travelled internationally, doubling since 2000, generating \$1 trillion in receipts. Those are great numbers if you are an economist, I suppose, but they're lousy if you're a resident of Venice, or Barcelona, or Amsterdam. They're equally lousy if you are an environmentalist. The litany of damage caused by mass tourism is long and getting longer, from the pollution it dumps in countless waterways to its contribution to accumulating greenhouse gases in the atmosphere, estimated in 2022 to be 8% of total global emissions. That's *not* benign – the exact opposite, in fact. The same thing happened to the 'New West.' Ask Jim Stiles. In 1975, he moved from his native Kentucky to Moab, Utah, a former uranium mining community that seemed destined to become a ghost town. He fell in love with canyon country, started a local newspaper, made friends with Edward Abbey, and threw his

weight behind the 'wolves and wilderness' campaigns of his fellow conservationists. He criticized ranchers and joined the New West chorus. By 2000, however, Stiles realized it was a huge mistake. He watched in horror as industrial tourism destroyed Moab's soul, one tour bus and hotel chain at a time. He watched recreation became an extractive industry, not unlike mining. Or cancer. He railed publicly and fruitlessly against heedless growth. He complained about newcomers failing to respect local customs. He lamented the loss of ranchers. In 2007, Stiles poured his regret and his anger into a book titled *Brave New West: Morphing Moab at the Speed of Greed*. Then he moved away.



Standing under the glacier, I understood how he felt. Wendell Berry tried to warn us about industrialism, whether mining or tourism, and the greed of corporate capitalism, but his words fell on deaf ears.

I needed to turn my attention to my walk. Quietly, the road had turned into a trail. I stopped and pulled out my guidebook. It said I could loop back to Murren on another road. Or I could keep walking. A map in the book showed the trail terminating at the gondola station somewhere up ahead, promising a ride down to the valley floor. The distance was unclear, but it looked easy. I

felt good. I had water and fruit bars. How hard could it be? Hard, it turned out. Really hard. After a while, the trail turned rocky, and then it tipped downhill. Uh-oh. I pushed on, stubbornly telling myself it was shorter to continue on to the gondola station than turn around and go back to Murren. I lied. The trail went on and on. My knees and thighs began to protest. Then they began screaming. Trail signs vanished, replaced by paint slashes on rocks and trees. Friendly cows stood in the way. There was no one on the trail except me. Soon, body parts were in open rebellion, requiring a slow, painful side-stepping shuffle to get down the steepest parts. Early afternoon became late afternoon.



Trail marker

I began to fret about the gondola. When did the last one leave? If I missed it, what would I do? I'd never make it to the valley floor this way. Late afternoon became early evening. My rest breaks became shorter. The trail steepened as it entered a forest. I grasped low branches and exposed roots for support as I shuffled. This was crazy. It's one thing to do hard things, I thought balefully to myself, it's another to do *stupid* things. At one point, I nearly despaired. Then I heard a mechanical whirring sound up ahead. The gondola station. It was still operating! I shuffled faster. I saw a milking shed, then a road through the trees, then the station itself. But no people. All was quiet. I limped inside, where the man at the counter said there was only one more gondola. It would be here in an hour. Whew. Then he asked for my ticket. My heart slumped.

I thought I could buy one here, I said. "No," he replied sternly, "only Murren." I froze, not knowing what to say or do. Then he wave a hand dismissively and let me through.

I found a small table outside close to the cables so I could hear the gondola as it approached. Stripping off my pack, shoes, and socks, I collapsed into a plastic chair. Body parts had stopped screaming, but I saw blisters on my right foot and the big toenail on my left foot had turned black. A goner, I suspected. Everything else seemed intact. I took a deep breath. I made it! I did another hard thing. Foolhardy, yes, but an accomplishment nonetheless. I'd pay for it tomorrow, but for the moment I felt rather exhilarated. I pulled out my fruit bars and I settled in for the wait.

My misadventure turned my thoughts to failure. Wendell's criticism of the conservation movement for not having a sustainable economic agenda reminded me of a big failure on our part, though the odds had been stacked against us from the start. It was another reason I called it a career. At Quivira, we did what Wendell wanted. We developed, beta-tested, and promoted a regenerative economy based on nature and science, whether it was expressed as farming, ranching, agroforestry,

ecological restoration, local food systems, diversified enterprises, or carbon sequestration. In the process, we joined a burgeoning movement of like-minded people, organizations, tribes, and others around the world who were implementing regenerative approaches to our multiplying challenges. As I said, it was exciting and hopeful – for a while. I remember the day my spirits tipped downward on this front. I sat in the audience at an annual eco-farming conference in California in 2012, listening to a young farmer from Long Island, New York, tell us about all the regenerative things he and his family were doing. They ran an organic farm and a CSA, sold food at the local farmer's market, started a farm-to-school program, participated in a young farmer apprenticeship program, and edited a popular foodie magazine called *Edible Long Island*. Then he paused. I looked up. He was gathering himself to say the word "However," I guessed, correctly. Their work wasn't enough, he told the audience, to make a real difference. It wasn't scaling up. Numbers remained miniscule. Nearly every Long Islander still ate from the industrial food system. The Big Ag corporations and their farming partners were not inconvenienced in the slightest by his efforts, he said. He paused again before pushing on to the conclusion of his presentation, cheerfully saying we had to redouble our efforts to make the world more regenerative.

I wished him luck silently. The inability to scale up regenerative agriculture and the other great things going on weighed on me. For years, I described our work as "lighting small bonfires of change" around the region. It was true — many small bonfires were lit. But they stayed small despite efforts by many people and organizations to make them bigger. There was a proliferation of conferences, documentaries, news articles, TED talks, scientific reports, op-eds, social media sites, YouTube videos, books, essays, and other efforts all in support of regeneration and nature-based solutions. They weren't making a difference, however, as the young farmer pointed out, because they weren't scaling up. And without scaling there wouldn't be meaningful change. Partly, it was due to Big Ag's lock on the industrial food system and its supply chain, as well as their lock on politicians who supported it. Partly, it was apathetic consumers who did what Big Ag told them, and the lack of urgency they exhibited for our challenges. Partly, it was the higher (unsubsidized) cost of regenerative food, which put it out of reach of many working-class families. That included a taint of eliteness that came with the food. Although the regenerative movement tried to address these obstacles, including the adoption of smart technology and digital marketing to help get the word out, overall numbers remained stubbornly low. It felt unresolvable.

After twenty-five years, I was out of ideas.

The gondola arrive right on time. I was its only occupant. An hour later, I limped into my snug hotel room and threw myself into bed without showering. It could wait. The next morning, I changed my plans. I had intended to take a train to Zermatt, a touristy town located at the base of the famous Matterhorn mountain, and spend the day hiking leisurely in the foothills. Not a chance. My feet and knees refused to leave the hotel room at the prospect. I tried to reason with them – it was the Matterhorn! – but to no avail. I gave in and told them I had learned my lesson and would yield to prudence (this time). Idling wasn't an option, however, so I cooked up something hard to do that didn't require any sacrifice from body parts. I'd do an all-day loop by train with stops at a famous castle, a walled medieval town, and busy Bern, the capital of Switzerland. The loop would require eight trains and some very tight connections, though not much walking (I hoped). I wasn't worried about the tight connections – this was Switzerland – but I did fret a little bit about hobbling to train platforms in time. I promised my body parts that I'd be kind to them. I tested my promise on the walk to the Interlaken train station. It went alright. Things were sore, but not painfully. With luck, I'd be completing the return walk twelve hours from now!

I settled into my train seat, ready for a comfy ride. The day was bright, the scenery out the big window summery. As the train rolled on, my thoughts drifted to the career decision one more time and where we utterly failed. The pondering was brief. We failed where all of us have utterly failed: stopping the breakdown of the planet's climate systems. The evidence of our failure is right there in the Keeling Curve for all to see. The consequences are now apparent and look severe, as predicted. Irreversible too, probably. Did I waste twenty-five years of conservation work? It felt like it. But I was also tired. A case could be made, I suppose, that regenerative agriculture and the other nature-based management schemes will be useful in *adapting* to climate change, including prolonged droughts. Carbon-rich soils can store more water, for example. That was cold comfort, however. I was reminded of a famous quote by economist Milton Friedman, of all people. "Only a crisis produces real change," he wrote in 1982. "When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable." The crisis has arrived. Regenerative agriculture is lying around, available as an alternative. But do we seriously believe that tackling climate change is politically inevitable? All evidence I see suggests "no." Sorry, Milton.

As I said, my pondering was brief.

My first stop was Chillon Castle, a lovely medieval structure perched on a castle-sized island at the eastern edge of Lake Geneva. It was the fancy summer home of the Counts of Savoy for many years before changing hands in a series of wars. It became a prison. Today, it's a national historical landmark and another 'must-see' in my guidebook. Fortunately, there wasn't a crowd. Actually, once inside it was almost too quiet. The two dozen or so fellow tourists that I saw at the entrance gate were soon swallowed up by the castle. I wandered through most of the rooms alone. It didn't take long to miss my family. It was easy to imagine Gen down in the courtyard, guidebook in hand, scrutinizing the architecture with her archaeologist's eye for detail. The towers and passageways and stone stairs that I climbed would have thrilled Sterling and Olivia in their adolescent years, as they did



Inside Chillon Castle

on our trips to France and Italy. My heart began to ache as I wandered around. I missed raising kids. A lot. It was an incredibly hard thing that brought me nonstop joy, too soon gone. I missed Gen too. It just wasn't the same without her. The ache grew. I decided to head back to the platform and wait for the next train.

Three connections later, I found myself sitting on a park bench in the dense shade of heavy trees outside the medieval city walls of Murten. The short walk from the station had been hot, and although body parts were holding up, I decided to take a long break on the bench, encouraged by a lovely lake breeze. I closed my eyes, feeling peaceful for the first time all trip. I had come a long way to be here. It wasn't just miles or memories or deeds accomplished. It was all of it, and more — a happy hurricane that had blown without pause for twenty-five-plus years, sometimes hard, sometimes soft. A happy hurricane that had slowed now to become a breeze on my face, fresh and warm and a bit melancholy. I heard voices behind me, and the clink of glasses. Entering the park, I noticed catering staff setting up for a reception. I heard laughter. I opened my eyes and glanced over my shoulder. A group of well-dressed people, mostly young, had gathered under the trees. It was a wedding party. The bride and groom stood at the center of the group, glasses of champagne in hand, beaming. They looked impossibly young. Their happiness washed away my melancholy. I turned back to the breeze, buoyed by the sounds of life and love and the timelessness of things. Life goes on. As it should. My peaceful feeling expanded. My decision to call it a career stood. I

had given myself a chance to reconsider, and nearly crippled myself in the process. I was alright with the decision. Besides, I had saving-the-world work still to do for the next year or so – contracts that I needed to complete before making it official. It was good work, and I was happy to do it. But no more after that. Sitting there, I decided to dial down the daily news too, worn out by gloomy climate headlines. Retirement, however, like idling, wasn't an option. I had other writing projects in mind, including a return to fiction as well as a nonfiction family saga based on the Lacy branch of my family tree that went back thirty-five generations to a famous viking named Rollo. There was plenty to do – but without generating another hurricane, I promised myself. More hard things, yes, but without the blisters, emotionally or physically.

As I studied the lake, from behind me came a big cheer and more clinking of glasses. I felt like an intruder suddenly to their party. I closed my eyes one more time, letting the soft air do its magic, then I rose purposefully on my sore feet, eager for whatever wonderful sights Murten had in store. It was time to go.



The happy hurricane in 2010

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