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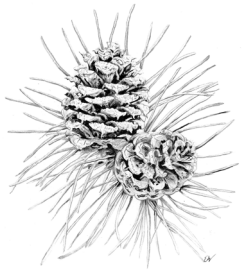

Chapter One

I'm in the great wild open of southern Utah, standing on a slab of rock the size of a school bus, swooning over a view to the south stretching on for hundreds of square miles, clean into Arizona. A perfect garble of red rock turrets and trees and scoured canyons—startling in the best sense of the word. A landscape that seems conjured by wizards.

I've been on the road for three days now, drifting south from Montana on a loose toss of quiet highways—past the Tobacco Roots and the Ruby Range, the Tetons and the Wasatch, nudging my way toward New Mexico—the starting point for what will be a monthlong trip. I was hoping yesterday to get farther down the road. But the sky was so clean, the mesas so full of shimmer, that getting to this slice of canyon country seemed plenty far enough. Last night I slept outside, under a sky as black as Raven's feathers, shot full of stars.

This morning I'm back to a game I often play in this part of the Southwest. It involves looking out across the red rock hoodoos and twisted canyons from some high place like this one, picking a point twenty or thirty miles distant, and then trying to imagine a walking route to get there. It's ridiculously complicated. Yet no matter which

maze of arroyos and canyons I pick, my instinct is to choose a path that, whenever possible, hopscotches between clusters of ponderosa— trees that show themselves easily, what with their soft green canopies shimmering in the sun. I know well how beautiful those open groves would be, their tall, clean cinnamon-colored trunks offering up an almost motherly comfort to the hardscrabble traveler. Especially on searing hot days like this one promises to be, when the ponderosa forest might well be what keeps that sun from eating you alive.

I've come on this trip to witness a vanishing. A human-caused disappearance of these very ponderosa trees—and hundreds of millions more, from New Mexico to California. Starved of water and then taken down by insects and disease, or burned into oblivion by repeated, abnormally intense wildfires, much of what is now ponderosa forest is turning into permanent grasslands and shrublands. Even before the devastating droughts of the early 2000s, fire ecologists declared that the speed at which forests were disappearing in the region to be nearly unprecedented; and, at the same time, that the size of high-severity burns in Southwestern ponderosa pine forests were the worst since the start of the modern climate era, some nine thousand years ago. "Even under the most optimistic estimates of natural regeneration," wrote researchers in *Fire Ecology*, "large high-severity fire patches are likely to remain without forest cover for many decades to centuries."

One study in the prestigious journal *Nature Climate Change* predicted that 72 percent of *all* evergreen forests in the Southwest could die off by 2050, with many more likely to disappear by the end of the century. Here, then, could well be the first post–climate change landscape in America. In 2003, about the time droughts and wildfires were beginning to pile up in the West, Australian philosopher Glenn Albrecht coined the word *solastalgia*. Melding the Latin for "comfort" with the word for "pain," it speaks to what Albrecht saw as a kind of homesickness. A deep unease born out of the sense that one's home landscape is unraveling. This fifteen-hundred-mile journey is an attempt to better understand how such an unraveling came to happen in

the American Southwest. What could we have done differently? What can we do now? Also, given the extraordinary aesthetic appeal of these forests—the love affair they've sparked in millions—what will be the shape of the hole in our hearts when they've gone?

I'll begin the search for answers to those questions in the ponderosa strongholds of northern New Mexico and Arizona. Then I'll head off to the northwest, into this canyon country of Utah—a region where the tree can show up either as part of a sprawling village or as a solitary giant in the bottom of some stony canyon. Finally I'll roll west into the legendary forests of the Sierras where, in just the past twenty years, some two hundred million conifers—a great many of them big ponderosa—have already been lost.

Of course when we talk about the forest, we're never really just talking about trees. Disappearing along with the ponderosa are pairs of goshawks, those extraordinary birds found twisting above the canopy in early summer on their legendary sky dances and, while hunting, spinning low around the tree trunks like jet planes in a Pixar movie. Fading, too, is the fluty drumming of Grace's warblers and the hammering of the white-headed woodpecker. The dusky grouse, as well, along with great horned and flammulated and Mexican spotted owls. And then there's the red-tailed hawk and the eagle, sitting in the tops of the big ponderosa, in their nests made of broken sticks. Ebbing, too, are the midnight yelps of the red fox, the chattering of tassel-eared squirrels, the trills of bobcats, the grumbles of black bears. Even dead standing ponderosa have long been vital to the community, what with the holes and hollows in their trunks being prized by everything from bluebirds to nuthatches, flickers to woodpeckers. The Southwest without ponderosa is like an orchestra stripped down to a pair of violins and a kettle drum.

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"Its dry and spacious groves invite you to camp among them," wrote the great naturalist Donald Culross Peattie about the ponderosa seventy

years ago. "Its shade is never too thin and never too dense. Its great boles and boughs frame many of the grandest views of snow-capped cones, nostalgic mesas, and all that bring the world to the West's wide door." Much like the redwood and sequoia groves of California, mature ponderosa groves sparked awe in both poet and logician. Not just because of the towering stature of individual trees, each wrapped in russet-colored bark and exuding vanilla- or butterscotch-scented perfumes. But also because, in maturity, they form remarkably spacious forests. What's more, big trees rarely wear branches along the first twenty or thirty feet of their trunks; that yields a woodland with sprawling views, the trees fading in the distance into a soft wash of shadows. These aren't the old woods of befuddlement, with waist-deep understories of bugs and brambles—the kind of place Red Riding Hood goes afoul, where the fiends of fairy tales wait for hapless children. Quite the opposite. Here is a forest full of welcome, one that puts its arms around you and lets you breathe. The tree equivalent of a big yellow lab waiting on the front porch, eager to welcome you home at the end of a long day.

Some anthropologists have pointed out that much of the landscape art we've tended to fall for over the centuries tends to mimic qualities of those places where hominins first started walking exclusively on two legs—open, well-lit clusters of trees rising along aprons of grass. The ponderosa is that forest. Maybe the fondness we feel lies deep in the bones.

There are two culprits behind the disappearance of ponderosa in the Southwest. One is climate change. The heat and prolonged drought that have been smothering these lands over the past thirty years can either kill trees outright or, more commonly, weaken them so much they become easy prey for tree-boring insects and mistletoe and blight.

The other culprit, though, has to do with a disastrous choice we made early in the twentieth century—and then leaned into for nearly seventy years—which was to suppress all wildfires. There's much to say about how essential fire is to the forest. For now, though, suffice it to say that in the arid West, fallen trees and branches and other natural

debris are cleared away only by wildfire. Put all those fires out, and the debris—often referred to as the fuel load—gets thicker and deeper, until what would've been a healthy, necessary burn becomes a hellish conflagration. Today there are about three hundred million acres of land in the West with unnaturally heavy fuel loads, which is about three times the size of California.

Even under the most favorable climate conditions, the arid Southwest has for thousands of years been a sparsely decorated landscape, showing little of the tree diversity found in the eastern United States or the Pacific Northwest. In the early twentieth century, back in the woods of the East, it was heartbreaking to watch the mighty chestnut fall to blight and devastating, not long after that, to see the collapse of the American elm. But even with those losses, the birds and bears and bugs—and we humans, too—could, each in our own way, keep feasting, literally and figuratively, on the white oaks and red oaks and sweet birch and black locust and sycamore and beech and white ash and tulip trees and hemlocks and white pines.

These western lands have no such bench. Most large pines—and the West is largely a land of pines—live in places with more moisture. In many drier stretches of the region, only the ponderosa has figured out how to thrive to the point of becoming a towering presence. It has an amazing ability to put down deep tap roots in its first year of life, up to two feet long, touching what little water there may be; later, as an adult, it can reach down thirty feet. Add to that its uncanny ability to conserve water by closing the pores of its needles (the tree is roughly four times more water-efficient than a Douglas-fir), as well as the superpower of seedlings able to withstand temperatures of over 150 degrees, and you end up with a tree—the one tree—able to live the bravura of a truly vertical life.

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For a lot of beings on planet Earth, these are excruciating times. We're increasingly being knocked about in a landslide of drought and fire and

floods and hurricanes and rising sea levels, which even under the best scenario—and at the moment best scenarios have been yanked off the table—will keep us reeling for decades, if not centuries, to come. Like a lot of people, in more anxious moments, I find myself just wanting to escape, forget it all for a while. But sooner or later, I always come back to the urge to pick even one of these thousand doors of loss, pull it open, and walk through. It's not a move without sadness and grief. But embracing the things that are going away also brings riches—the kind of gift that always comes when we stop to honor what we care for most.

This particular doorway is an especially personal one. From the time I was twenty until well into my sixties, the research I did as a conservation writer brought opportunities to spend thousands of miles hiking up remote trails under a backpack—or sometimes, crossing landscapes bereft of any trails at all. It was often the ponderosa that sheltered me when hard weather hit the fan, offering places to hunker down in hurling wind or rain or hail or snow. It offered precious shade, too, on blistering summer afternoons at the bottom of Hells Canyon, or the Chisos Mountains of west Texas, or the sunbaked rocks of Nevada's Spring Mountains.

Yet beyond all that, it was to the ponderosa groves that I went to mourn the biggest losses of my life. My father dying on a construction site when I was twenty-four. My mother, from cancer, when I was thirty-one. My first wife, lost to drowning in a cold Canadian river two weeks past her fiftieth birthday. These were the forests that showed me what it means to have nature hold you. Offering much-needed peace, to be sure. But beyond peace, a feeling of being sheltered—a sense that even when the world is dark, there are places you can go to feel some measure of belonging. Plenty of landscapes have thrilled me over the years: the summits of big mountains; the fast, roiling bellies of Arctic rivers. But when the matter at hand was to salvage myself, nothing suited me like ponderosa.

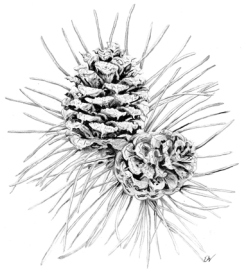
There was a famous writer born in my hometown by the name of Kenneth Rexroth; often he's been referred to as the father of the Beat

poets. Living in the Midwest into his teen years, Rexroth once wrote about waking up one morning and feeling utterly forlorn. For months he'd been out scouring the landscape, hoping to find some kind of inspiration he could use to weave new, more dynamic stories for his generation—something to match "the way of the gods and goddesses and heroes and demigods of the ancient world." But look as he might, out there among the factories and cornfields, he couldn't find it. With the buzz and whim of such myth gone from our lives, Rexroth warned, we'd mostly be left with a gnawing hunger to consume. It was time for Americans to reinvent themselves, he concluded. And that would take reimagining our relationship with nature.

Rexroth eventually packed his bags and headed west, spending his first summer sitting alone in a fire tower above the ponderosa forests of western Montana, writing poetry and watching for smoke. When I was twenty, I went west, too, as I'd told my parents I would when I was nine years old. West to the magnificent mountains, to the whitewater, to the big runs of Douglas-fir and lodgepole pine and ponderosa.

Today when I see the skeletons of the former ponderosa forests—a smattering of bare gray trunks, starved of water or killed by pine beetles, the few remaining green ones standing on point like exhausted soldiers holding vigil for fallen comrades, deep down I feel a kind of primal flinch. It brings to mind a line by poet Jane Hirschfield, written years ago to mark the death of one of her favorite old trees.

"Today, for some, a universe has vanished."



Chapter Two

It's just past dawn, midsummer 12,000 BCE, on land that will one day be called New Mexico. Like a lot of summer mornings in this last gasp of the ice age, this one still pulls with it a restless north wind, tussling the bunchgrasses, sending loud whispers through the dusky five-inch needles of the ponderosa forest. The high temperature on this July day will be just under 50 degrees Fahrenheit—some forty degrees cooler than the average in our own time. These particular trees—combined with a few other scattered groves in the Southwest, and a few near the Pacific Ocean—are the only ponderosa left inside the borders of what will one day become the United States. The offspring of these grandmothers will one day drift up the continent and make homes in much of the West, leading to the ponderosa becoming the most widespread pine of them all. Not quite yet, though. For now, these relatively few trees mostly just hold on. But then holding on is something ponderosa does extremely well.

Every day in this older, colder time, a parade of creatures drifts past the edges of the trees: big dire wolves loping through the grass, pausing now and then to peer into the shadows of the woods. Seven-hundred-pound sabretooth cats. Ten-foot-long, two-thousand-pound giant

sloths. There are mastodons and bison and camels too. And mammoths, nine feet at the shoulder and ten tons—about the weight of an army tank—juddering the ground as they pass.

And another animal, too—one that arrived more recently. Sometimes you can find them among these very trees, while at other times they move across the landscape in groups of twenty or thirty, out in the windblown open. They're neither as strong nor as fast as most other mammals. But they're curious. They're clever. And much to their benefit, as omnivores, there's a long list of foods that can keep them going. Now and then they manage to take fish from nearby streams and lakes. Other days they form small clutches of four or five, each carrying a six-foot-long spear tipped with an astonishingly sharp blade fashioned from chert or obsidian. They have what can only be described as a stunning ability to cooperate with each other. And in much the same way as their neighbors the wolves, living with that kind of cooperation is what allows them to now and then take animals way bigger than they are.

But fishing can be spotty, hunting fickle. Even those faster, stronger wolves nearby only manage at best to take large prey about once in every five attempts. So the humans fortify themselves with gifts of the ground, gathering lamb's-quarter and amaranth and purslane. At some point, they also come to prize the inner bark of ponderosa, which as it happens, is packed with carbohydrates, iron, zinc, and vitamin C. Even fats and proteins. The fibrous layers where the cambium cells grow they eat raw, mostly in the spring when the flowing sap turns it sweet. Later they'll figure out how to dry and make flour from that cambium layer, which they'll in turn use to bake bread. Such knowledge will be passed on across hundreds of generations. Today, north of here in Colorado's Great Sand Dunes National Park, fully seventy ponderosa trees in a stand of two hundred bear the marks of Ute people peeling strips of bark in the 1800s.

And then there's the bounty of late summer and autumn. Just like no end of birds and mice and other mammals are doing, the humans head

into the forest to gather up what can only be described as a superfood: the oily seeds held in the ponderosa's cones. They're a veritable gold mine of carbohydrates and fiber and precious fats; also magnesium and vitamin E and zinc and manganese and phosphorous.

The longer the people were here, the deeper their kinship with the ponderosa became, and the more the tree gave them. In time they were crafting cradleboards and prayer sticks, baskets and boats and sometimes even snowshoes. They extracted color pigments from the bark for dying cloth and, eventually, for use in Navajo sand paintings. The tree's sap was used as a disinfectant—something the birds had figured out long before, some lining their nests with needles to minimize the risk of infections in the nest. The humans made root medicines for arthritis and back pain, too, as well as teas for aiding digestion. Many still do today.

Beyond that, though, ponderosa was an essential part of some of the first human architecture on the continent. At first, smaller trees were used to hold the roofs of pit houses and sacred kivas. Then, starting around 750 AD and continuing for centuries, the tree became the literal backbone for the multistoried villages of the Ancestral Pueblo. Ponderosa, in other words, gave rise to the first cities in what would later become the United States.

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In fits and starts, the ice age dwindled, and the region began to dry and warm. Out beyond the edge of the forest, where hickory trees had long grown, the land became increasingly marked by rumples of rolling grasslands dappled with oak and juniper. By then, the ponderosa had started to travel. With every passing year, the years becoming decades and then centuries and then millennia, seeds were plucked from the cones by northbound birds like nuthatches and finches and chickadees. And other birds joined the ponderosa entourage, too, all being especially fond of a tree that produced nuts bigger than those of most other conifers. Some of those seeds dropped from the birds' beaks to

land on friendly soil, where they sprouted into young trees. Still other seeds were picked up by humans who, on occasion, carried them across entire mountain ranges, landing them in places where they might not have ended up on their own. It was a patient business, usually measured out just a few miles at a time. And even that sometimes took years.

The descendants of the ponderosa trees in New Mexico and Arizona ran north along the edges of the Rockies, sprouted here and there along the western edge of the Great Plains, then drifted on into Canada. Meanwhile, sister ponderosa trees in the far west, near the Pacific Ocean, made a similarly slow walk up the Sierras, then continued along the Cascades into British Columbia; some also headed inland, toward the Continental Divide. This more westerly variety of the tree became slightly different from those in the east, fashioning their branches with bundles of three needles instead of two. While those in the drier lands of the east devoted themselves to conserving water, their California kin decided to spend more water for the chance at faster growth. It took more than ten thousand years for the two varieties of ponderosa to meet, old friends with shared ancestors, finding each other at last in the mountains of western Montana.

The ponderosa has shown an amazing knack for fine-tuning itself to changing conditions and new opportunities. It can withstand big droughts and searing temperatures in the south and, at the same time, manage deep snow and 30 below zero in the north. Sometimes it even manages to set up shop in wet soils, including along certain floodplain rivers of the Northwest—not typical behavior for pines. Accommodating these different growing conditions takes sophisticated adjustment, fashioning unique traits that are then passed on to future generations. This is why, following a wildfire, it's always best to replant the forest with seeds from trees close to the burn.

Today ponderosa is the primary anchor for no fewer than three dozen unique plant communities, each with its own mix of residents. Here in the drier, warmer low elevations of the Southwest, the tree keeps company with scrub and white oaks, manzanita, blue grama

grass, sage, and rabbitbrush. Go a little higher up—keeping in mind that going up means adding moisture—and the blue grama grass yields to fescue and mountain muhly and other bunchgrasses and geraniums, as well as copses of shrubs like locust and snowberry, spirea and serviceberry and fire willow. As moisture increases, other trees join in, too, including Douglas-fir and white fir, Southwestern white pine and blue spruce, even aspen. But the constant is ponderosa. Only in the highest, coldest places are they absent, there yielding the stage to Douglas-fir, white fir, blue spruce, and in some places, up on the very top of the world, bristlecone pine.

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Of the roughly five billion organisms likely to have arisen on this planet since life began, well over 90 percent have disappeared. Humans may have been responsible for about two hundred thousand of those disappearances, though today, with climate change and habitat loss, that number is growing fast. Those beings that are with us here and now, the plants and insects and animals and birds, are nothing less than world-class champions at the game of life. And among those champions, few have a longer, stronger track record of thriving than the conifers. There are only about two dozen kinds of terrestrial life with individuals capable of living beyond a thousand years. Most are conifers. And while ponderosa rarely reach that age (though a few do), in the right conditions they can routinely make it to four and five hundred years.

The trees in the Pinus genus, which includes ponderosa, came online about 130 million years ago. For a while these so-called gymnosperms—literally meaning "naked seed," referring to how seeds develop on the exposed scales of cones—were able to lay claim to a big slice of the planet. But then came a botanical tidal wave of flowering plants—angiosperms, which means "vessel," a reference to how the seeds develop within the ovaries of flowers protected by fruit. It was in large part due to the overwhelming success of flowering plants that

the pines, a bit back on their heels, started coming up with new strategies for staking out less crowded places to call home. Trees like the ponderosa made the marginal into the marvelous, adapting to thrive in more stressful habitats than most flower-bearing plants could manage. In particular, the ponderosa did well overcoming two especially challenging landscapes: those with poorer, drier soils and those frequently touched by fire.

For all the clever tricks ponderosa has up its trunk, one essential part of its life here in the Southwest has to me always seemed something of a tightwire act. For each next generation of ponderosa to get their best chance in the sun, in addition to the modest seed crops it produces in most years, some years it goes all in to produce way more than that—a so-called mast crop. How often the trees manage to do this depends on climate conditions, but on average it's about every four years. The first thing that needs to happen is a warm, wet spring, which—two and a half years later—will lead to a massive crop of seeds in the fall. But that's just the beginning. In addition, when those seeds drop from the cones and hit the ground to germinate, they ideally need to land in moist soil. And that holds true as well for their growth as saplings the following spring: There needs to be an above average amount of moisture. Many of the Southwest's ponderosa live in very dry places—lands with precipitation levels barely above an actual desert. Asking for a wet spring, and then a wet autumn two and a half years later, and then another wet period the following spring seems like a lot. Then again, I'm writing from a somewhat parched perspective, given that I'm living today in the thirty-first consecutive year of a Southwestern drought. In earlier times, when the ponderosa was setting up these kinds of alignments, it was doing so amid far friendlier climate patterns.

While in a smaller seed production year a ponderosa may lose up to 90 percent of its seeds to hungry birds and other animals, with the overwhelming number produced in mast years, those losses drop to about 10 percent. Note that it isn't just one or two trees in a grove that will go about making these bumper crops. Those efforts usually involve

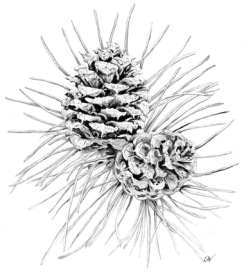
an entire grove, the trees coordinating with one another to all produce their pollen at the same time, sharing it with one another, thereby promoting genetic mixing. And that genetic mixing increases the overall strength and resilience of the forest.

Pines tend to have waxy coatings on their needles to help retain moisture, which of course comes in handy in the arid West. What's more, those needles are thin and more or less flat, which means big winds can roar through without breaking branches. Pines in colder climates have also figured out a way to concoct what amounts to antifreeze. This amazing chemical brew causes ice to form in hexagon-shaped crystals instead of the usual sharp needle shapes, which keeps the cells from being pierced and damaged. And then there's the blessing of being evergreen. When deciduous trees drop their leaves in the fall, they lose access not just to photosynthesis, which pines can conduct to an extent even in winter, but to the nitrogen, potassium, calcium, and phosphorus stored in their leaves. Be a pine tree, though, and by hanging on to your needles, you'll also be able to hold on to essential nutrients.

For all these brilliant strategies, the one that really speaks to me on this particular journey is the fact that ponderosa have figured out how to make friends with fire. The signs of that relationship are everywhere, from the base of the trees' trunks to the tips of their highest branches. The whimsical orange-and-rust-colored jigsaw pieces of the bark, for example, are designed in part to slough off if they catch fire, shedding flames to the ground rather than letting them run up the tree and burn the crown. Also, as mentioned earlier, the reason we get such a deliciously spacious feeling in a mature ponderosa forest is partly thanks to there being no branches on the lower trunks. As the trees drop their bottom branches—the ones that get less sun—it has the effect of keeping flames from climbing branch to branch into the crown. What's more, ponderosa needles, long and moist, form a kind of protective feathering around the buds, shielding them from the heat of flames. And if they do happen to get burned off, the tree will get busy making more, and do so in surprisingly little time. A ponderosa tree can lose

more than 90 percent of its needles and be back in business with a new set the following year.

In short, this most widely distributed pine in North America achieved that status by figuring out how to thrive in a challenging world. And yet humans, over the last century especially, have pushed the environment past where even a super survivor like this one is struggling.



Chapter Three

There's an extra measure of poignancy to the wreckage of climate change when the casualties are trees. Any kind of tree. The ones wrapped in gravitas, like the white oaks of New England and the tulip trees of Tennessee, the California redwoods of Mill Creek and Bull Creek Flats, the big maples of Indiana and Illinois. And those more modest in stature, too: the red alder of Alaska and the Pacific Northwest, or the aspen groves in the southern Wasatch Mountains of Utah and southwest Colorado, where the trees look like ballerinas in pirouette.

Part of our affection for trees arose from a long list of practical gifts they've given us: providing shelter, offering us quick escape from hungry predators, feeding us with fruit and nuts and holding no end of honeycomb, giving us the fire that cooked our food and kept us warm. In more recent times, here in the West it was often the ponderosa we cut down and sawed into coarse planks, nailing them together into jails and rooming houses and long plank bars in shoddy saloons. We used the tree to make the ties that held the railroad tracks and then used still more of them to fire the steam locomotives that ran on them. Ponderosa built the ranchers' homes and barns and irrigation gates, the corrals

and the windmills and the pasture fences. They shored up the mines and made our boats—including the ponderosa that Lewis and Clark, guided by the Nez Perce, made into five large canoes they then paddled down the Columbia River to the Pacific. During the Civil War, when the Union Navy ran out of pitch and turpentine to tend their ships and could no longer get it from southern pines, they drove their taps into California's ponderosa trees. Some lone ponderosa, standing tall on the northwestern edge of the Great Plains, became signposts for west-bound settlers in wagon trains—offering not just direction but flashing the hugely welcome news that the open, treeless plains were finally coming to an end.

But our long arboreal love affair goes way beyond the practical. You can see it in the way the ancient Greeks bestowed sacred honors on the oak and the cayuga—much as people living in the British Isles did for the yew. Or the Arikara people of the Great Plains bringing reverence to the cedar, or the Conibo of the Amazon to the catahua. For the Norse it was the ash tree, for the Chumash the pinyon, for the Germans the linden. For others it was pine. Or banyan. Or sycamore. Or fig. For any culture living in or near trees, those trees were sources of the sacred.

Some of the oldest myths in the world say that humans were once trees—or, conversely, that trees were once humans. The Norse creation story describes how the first two people were fashioned from two tree trunks the gods found lying on the beach: From one trunk, that of an elm tree, they created a woman named Embla, and from the other, an ash tree, they created a man named Ask. Meanwhile, two thousand miles away, a creation story from Persia emerged to tell how a tree grew out of the decaying body of the first human. When the trunk of that growing tree split into two forks, one became man and the other woman; from the fruits of the tree came the different races of humans.

German folktales speak of babies starting out as spirits in the underworld and then passing through trees to become human. In similar fashion, people in the British Isles said each of us had a parallel soul,

a double, which lived in a nearby tree. In early America, farmers from the Atlantic Seaboard to the Midwest planted trees on the arrival of a newborn, believing that as the tree grew strong, so would the child.

On perhaps an even more ethereal note, cultures around the world have also treated trees as a link between Earth and the heavens, allowing us to communicate with the divine. The Bible mentions trees over five hundred times—more than any other topic besides humans. The ancient Jews lit torches made from the branches of the oil pine—the tree of redemption. The first temples in ancient Gaul were sacred forest groves, while in Japan Shinto shrines are to this day cradled by sacred forests. The Aztec spoke of trees that lifted up the sky.

For Christians olive trees symbolized health and fertility, while for Muslims they meant renewal. In Islam, on Ramadan—a celebration of compassion and generosity—people planted trees, as they still do today; when those planted trees later produce fruit or nuts for a bird or an animal or a human, the action is charted in the heavens as an act of charity. Egyptians sought Osiris in the branches of a sycamore. Buddha was shown the four great truths in the middle of a forest. And it was while standing in a grove of oak trees at Mamre that Abraham rubbed elbows with God.

In colonial America, images of trees were sewn into state flags, stamped into coins, stitched into quilts. When the Civil War broke out, some suggested we confess our moral decline by cutting down the American elm that served as our national tree. One hundred and forty years later, when a modest pear tree growing at the base of the former World Trade Center managed by no small miracle to survive the attacks of September 11, we nursed it back to health and made it sacred. In the years since those attacks, everyone from stockbrokers to dockworkers, lawyers to line cooks, prime ministers to presidents of the United States have placed wreaths against its trunk.

Writer John Fowles speaks eloquently about these more transcendent, more inscrutable relationships we have with trees. "If I cherish trees beyond all personal need and liking of them, it is because of this,

their natural correspondence with the greener, more mysterious processes of mind; and because they also seem to me the best, most revealing messengers to us from all nature, the nearest its heart."

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On one hand, then, the disappearance of the ponderosa will leave us without many of the practical gifts still being gathered today: using the wood of the tree for joists and rafters, siding and decking, cabinets and window frames; boxes and crates, furniture and fence pickets and firewood and toys. And other deeply functional gifts, too, like how the ponderosa forest holds snowpack in place and keeps it from evaporating in the direct sun—incredibly important, considering that snowmelt provides well over half of all flowing fresh water in the West.

But beyond all such "services," if you will, the disappearance of the ponderosa forests will impact as well our myth and story, weakening the kind of natural correspondence we have with trees that Fowles talks about. All this might seem squishy and imprecise, barely worth mentioning in the midst of our ongoing environmental disasters. But squishy and imprecise is the nature of caring about things. And no matter how brilliant our technological prowess may be, our future is going to depend on how deeply we can fall in love.

That sort of love, that kinship, has a lot to do with why this morning I'm fifteen miles north of Taos, New Mexico, roaming on foot across a small slice of rural land owned by the University of New Mexico, known as the Lawrence Ranch. To the west runs a loose toss of ponderosa forest, in five miles yielding to a stretch of sage and pinyon hills tumbling to the edge of a set of sheer cliffs above the Rio Grande. Meanwhile, to the east are the Sangre de Cristo Mountains—a 250-mile-long swell of heartbreaking beauty, running from Poncha Pass in Colorado all the way to Santa Fe. The Lawrence Ranch is the kind of place you might see on television some evening, then later find yourself daydreaming of quitting your job and moving west. For at least a thousand years, this land was home to the residents of Taos Pueblo.

In the early 1800s it was also used intermittently by the Kiowa people, leading to it later becoming known as the Kiowa Ranch. In the 1880s the land was homesteaded by John and Louise Craig; after them came a woman who raised Angora goats. Then, a century ago, in 1920, the Kiowa Ranch came into the hands of a fantastic, fiery force of nature named Mabel Dodge Lujan. And Mabel would have much to do with helping the world fall in love with this landscape, including with its signature tree, the ponderosa pine.

Mabel was a wealthy banking heiress, a prominent New York socialite, and also a popular, outspoken syndicated columnist for the *New York Journal*. In 1917, to the shock of her friends, she abandoned Greenwich Village and headed off to live in New Mexico. She explained her abrupt and to many inconceivable decision simply by saying she needed a change. As a follow-up years later, she added, "And I got it."

Even as a young woman, Mabel was appalled by the "ghastly social structure" of the wealthy, including her own family, not least because of the stifling limits the system put on women. She pushed hard and often for "a world where a woman could choose her own role in life." After a serious romantic partner one day just up and left without warning, breaking things off with a hastily written note, she lamented to the readers of her newspaper column that she was "tired of being a mother to men." Soon afterward she got a letter from the man who'd been her third husband, who at the time happened to be traveling around Santa Fe. He told Mabel of the strong Native cultures he'd found in northern New Mexico, saying there was much to learn from them. "You could let the American people know," he told her, "that there are other forms of civilization besides ours." Mabel thought it was a good idea—one that seemed to be appearing at just the right time.

Once settled in Taos, she wasted no time tapping into her network of luminary friends around the globe—poets and painters, photographers and free thinkers of every conceivable persuasion, inviting them to gatherings at her New Mexico home and salon, which she called Los Gallos (the roosters). Before long she'd created a rustic version of

the salons she'd held in Greenwich Village—and before that, in Paris, with her good friend Gertrude Stein. She gave a bolt of energy to the fledgling Taos Society of Artists, helping to turn it into a major player in the growing avant-garde cultural scene. A scene taking much of its breath from the northern New Mexico landscape—a place that Mabel, on first seeing it, described as "strange and terrible and sweet."

In 1923 she married her fourth husband, a Tewa Indian from Taos Pueblo named Tony Luhan—a man, she said, with "the sun in his heart." Tony, too, would become a key player in the emerging art scene, making it possible, among many other things, for Ansel Adams to create his first book, *Taos Pueblo*. Some disparaged the couple. Some of the criticism came from Tony's own people, who accused him of abandoning the traditional way of life; at the same time, Mabel was admonished by some in her own culture, who frowned on the mixing of races. No matter. Mabel and Tony liked each other. Beyond that, Tony taught Mabel a great deal about his culture—a culture she found considerably kinder and more just than her own.

Mabel would help northern New Mexico become host to one of the most impressive art movements in American history—a renaissance of painting and pottery and photography and writing, courtesy of everyone from D. H. Lawrence to Georgia O'Keeffe, Gustave Baumann to Barbara Latham, Andrew Dasburg to Ansel Adams. The vast majority of it would be shaped in no small part by what they saw in the nature around them: the Sangre de Cristo Mountains, of course, as well as Miranda Canyon and Tent Rocks; the Rio Grande Gorge, the Red River, and the Rio Pueblo. They came here and saw sunlight pouring through some of the cleanest skies imaginable—and on summer afternoons, watched towering cumulous clouds let loose with startling shows of thunder and lightning. They walked in air scented with the clean bitters of sage and pinyon. And on many days they stopped for a moment to relish the ponderosa, the trees standing up and standing out, softening the sun, feathering the distant ridges.

As she had a habit of doing, Mabel became infatuated with D. H. Lawrence before ever meeting him. She admired how he'd been willing to buck the status quo—by railing against the dehumanizing effects of industrialism but also by jolting stale Victorian morals, something he later did in a big way with his often-reviled *Lady Chatterley's Lover*. (That work, which one critic described as "the book that brought good sex writing to the masses," wasn't allowed to be published in the US for thirty years.) But of all Lawrence's talents and persuasions, most important to Mabel was his ability to render place. On reading his travel narrative *Sea and Sardinia,* she became convinced no author would be better able to capture the beauty of the New Mexico landscape and culture. So she sat down and wrote a letter, inviting Lawrence and his wife Frieda to Taos.

They arrived in 1921, staying at first in an old cabin near Mabel's home and salon. But soon Mabel set them up several miles away, in a simple writing cabin on the Kiowa Ranch. The writing cottage was small and humble—just an old homestead cabin from 1891 built out of ponderosa pine, to which Frieda and "Bert," as Mabel called Lawrence, set about adding two small front porches and an adobe brick fireplace. Mabel later gave the place to the Lawrences, asking as her only payment the manuscript to Lawrence's new novel, *Sons and Lovers*.

Towering just outside the door of the cabin, enthralling Lawrence from the very first time he set eyes on it, was an altogether marvelous lone ponderosa.

"Here on this little ranch under the Rocky Mountains," he wrote, "a big pine tree rises like a guardian spirit in front of the cabin where we live . . . Standing still and unconcerned and alive." Lawrence liked to write from a wooden bench and table at the base of the tree, where he crafted several poems and essays, as well as parts of *The Plumed Serpent* and his novella, *St. Mawr.* Sometimes, in the middle of the night, he'd go out and lie on his back on that bench, watching the stars winking through the branches. "The tree has its own aura of life. And in winter

the snow slips off it, and in June it sprinkles down its little catkin like pollen tips, and it hisses in the wind, and it makes a silence within a silence."

Mabel had been right in thinking D. H. Lawrence would be a perfect author to write about this place. "I think New Mexico was the greatest experience from the outside world that I ever had," he later confessed. "It changed me forever." Years after his death, Frieda had his remains cremated; the ashes are interred here at Kiowa Ranch.

The couple was on the ranch for five months in 1924, then returned in 1925, when Lawrence was thirty-nine. And he had every intention of coming back yet again. But his fading health never allowed it. "It grieves me to leave my horses, and my cow Susan, and the cat Timsy Wemyss," he noted before departing in 1925. It grieved him, too, to leave the big ponderosa outside the front door of his cabin. Lawrence found spiritual anchoring in northern New Mexico. He likened Taos to the monasteries that arose in Europe during the dark ages—places that, while vulnerable, were "never overcome in a world flooded with devastation." They alone kept the human spirit from disintegration. A person coming to Taos would sense something similar, he said. Here there was an unmistakable feeling of arrival.

One of Lawrence's American literary critics, writing about the same time the author was hanging out in New Mexico, commented on his uncanny ability to "enter" whatever thing he happened to be looking at. One of the best places to feel that ability is in the passages he wrote about this ponderosa. "In the over branching darkness . . . one suddenly realizes that the tree is asserting itself as much as I am. Our two lives meet and cross one another." The energy of the ponderosa, he said, left him "more bristling and turpentiny." At the same time he imagined the ponderosa took from him "a certain shade and alertness." Lawrence claimed that if he wrote off such thoughts as ridiculous, seeing the tree only in terms of how old it was or how much lumber it held, as so many people would, then he would be forsaking a part of himself. You can

either shut the doors of perception, he argued, or open the doors that have already been shut. "For man, as for flower and beast and bird, the supreme triumph is to be most vividly, most perfectly alive."

Now, on this sunny summer day a century later, here I am cozied right up to Lawrence's beloved tree. It has a kind of unfussed regalness. The thick furrowed trunk runs clean for the first thirty feet and then pops into loose tiers of stout branches. Some of those branches run straight out and others meander, each on its own journey to find the sun. Taken altogether they create a pose that feels nonchalantly happy. I wrap my arms around the trunk. Then, with my head tilted back and my cheek against the bark, I stare up through those whorls of shiny green needles into a flawless New Mexico sky.

When I first arrived at the ranch this morning, eleven high school students from Albuquerque were finishing up a summer class visit. English students, the ranch caretaker informs me. In truth they looked a whole lot more satisfied than I would've thought possible from a visit to the writing retreat of a white guy dead for some hundred years. The secret may have been their teacher: an animated, thirtysomething woman—intense and friendly—helping them map some of D. H. Lawrence's impressions onto their own lives.

"What about that question we talked about earlier?" she asked. "What do you think Lawrence meant when he said that in New Mexico time is different?"

I caught only one answer—from a tall, awkward-looking boy wearing pale blue glasses.

"He always liked whatever nature he found walking in England. You know—flowers, trees, all that. But nature's bigger here. So big it got into his head, busted his whole way of seeing things."

After taking in the tree a while longer, at one point catching a red-tailed hawk float to a rest on one of the upper branches, I walk over to the front window of the writing cottage; on the other side of the old, wavy glass is a spare and colorless little room with a small

writing desk. I can almost see Lawrence sitting there, a tiny smile of satisfaction on his face at some clever line he'd captured. Or maybe he's scowling, having had yet another row with Mabel; this time angry about her constant evangelizing about that new thing called psychoanalysis, which he considered—to use the English vernacular of the day—so much codswallop.

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D. H. Lawrence wasn't the only artist to find himself making friends with this particular ponderosa. Among the others was Georgia O'Keeffe. Like Lawrence, she also found her way to the Kiowa Ranch by way of an invitation from Mabel Dodge Luhan. And as had happened with Lawrence, O'Keeffe fell head over heels for northern New Mexico.

By the time she set foot here, O'Keeffe had been a fan of Lawrence for more than a decade. She loved how his writing elevated the sensuous—not as some kind of cheap sensationalism, but as a means of exploring the edges of his creativity. She was a fan, too, of how he celebrated nature, plumbing relationships in ways that to her seemed deeply spiritual. This quality O'Keeffe was especially drawn to, leaning on it for her own creations, paying homage with brush and canvas to the transcendent qualities of the natural world.

Taking up residence in the Lawrence cabin, she immediately found herself smitten by the old ponderosa. One still and perfect night, she went out to the same carpenter's bench Lawrence had used, lying on her back as he had, looking up at the stars shining through the branches. The result was an extraordinary painting—a lively, poignant modernist joining of space and time, earth and sky, described by one critic as an homage to the wholeness of heaven and earth. Though O'Keeffe wasn't in the habit of naming her paintings, she went from first calling the work *Pine Tree With Stars at Bretts, N.M.*, to, on learning of Lawrence's death, *Lawrence Pine Tree, With Stars,* later still to *The Lawrence Tree, Night*, and finally to the name used today, *The Lawrence Tree*.

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