AN ESSAY ABOUT PETRIFIED FOREST NATIONAL PARK **BY CRAIG CHILDS**

THE SOUND OF FALLEN TREES

"As the earth erodes, the fossilized trees cannot hold their weight and they break into pieces. Calling it a forest is not quite correct. Nothing is standing. This is what became of a forest, each tree resting, continuing to fall, the energy of its life given up."

A petrified tree, hundreds of millions of years old, lies along the Crystal Forest Loop at Petrified Forest National Park. The trail is named for the crystals found in petrified logs. *Larry Lindahl*

FREIGHT TRAINS THUNDER through Holbrook, windowsills rattling day and night. They come through without slowing, and when you stand nearby, their wind screams and buffets you.

What I enjoy is the silence that follows, the Dopplering *whoosh* of the last car as it disappears down the tracks. The sound of the desert closes back in, the quiet grumblings of a population-5,000 town in a windswept corner of Arizona. A couple miles away from the interstate, cars and trucks become less audible and soon nothing can be heard but the country beneath your feet, the rails clicking and tapping before they finally fall silent. This is the sound of time slowing, and sometimes stopping altogether, under a crystal-blue sky.

A ranger at Petrified Forest National Park said to be careful about what you find in the ground out here, that time is mercurial. Her kids found a Puebloan burial jar in their backyard and she got that thing re-buried as fast as she could. Hopis told her where to put ash to settle the ghosts, to put death back to rest. With time slowing and stopping as it does in this part of the desert, the passage of a thousand years is nothing. The ancient dead lie here as if it were yesterday, their burial ornaments ringed around and laid across their skeletons just beneath the dry, cracked surface.

The park where the ranger worked lies across either side of Interstate 40 east of Holbrook. When she gave us permits, she said there were three other backpackers out there somewhere in the 147 square miles of the park, doubtful we would see each other. With no trails, designated camping areas, comfort stations, drinking fountains, protective railings, trash cans or scenic overlooks, the backcountry is the emptiness it's supposed to be. Hiking out from the paved road that runs through the middle of the park, a friend and I eyeballed the direction we wanted to go, no marker or sign to point one way or another. A car or two passed by every half-hour or 45 minutes, until we could no longer hear them, badland washes carrying us into a noise-free void. Even our footsteps were softly spoken, both of us barefoot, carrying our boots in our hands.

My traveling companion was a 50-year-old hummingbird of a woman seeking a week off from work. Here she could unravel. I was on the same mission, buried for months in a computer, my eyes fizzling from the weird light. You start running on cellphone time, available at anyone's fingertips. Everything buzzes or dings, on-screen check marks letting the other end know when you've read it, when you've sent it, how many words it contains, how many symbols, characters. News rushes in at light speed, calls answered in the order they are received. I interviewed Kirk Johnson, head of the Smithsonian National Museum of Natural History in Washington, D.C., and he said, "Time seems like it's going faster. You can measure it in minutes and hours. It seems like history is always moving out ahead of us. But now we might be catching up with it."

The silence we were looking for had something to do with time. We needed a place where quiet has been dwelling for millions of years. We entered this desert to let history unspool, letting time trail away, giving the present a fair head start. When we came upon the first piece of a petrified tree, a zinc-white round of a Triassic conifer trunk in the middle of the wash, the well of eons opened wide. What time was it now? This crystallized piece of a tree, as big as a footlocker, was between 209 million and 213 million years old.

THE PARK IS DIVIDED INTO FORESTS. Black Forest in the north, Rainbow Forest in the south, and the dazzling jasper fields of the Middle Forest between the two. Hardly a standing, living tree exists out here, yet this landscape was once rich in forests, dominated by columnar *Araucarioxylon arizonicum* evergreen trees standing up to 200 feet tall. They fell on the western edge of the supercontinent Pangaea when what is now Arizona was about 16 degrees above the equator, as opposed to 35 degrees north, where it now sits. This was a landscape of deltas, marshes and floodplains where the trees fell and came to rest along river bends.

Within an hour, we'd lost count of pieces of trees each big enough for a flatbed. By the time we camped that evening, a little cookstove unfolded, a pair of sleeping bags dusted onto the ground, we were surrounded by whole, toppled trees, an entire forest laid flat. The biggest were too wide to reach around with our arms, and some were a hundred feet long in the same position where they first came to rest, unmoved for more than 200 million years. Root burls the size of cars lay half-buried in fine, brindled sediments, the remains of a bend in a big Triassic river where fallen trees once piled like jackstraws. Volcanoes in present-day Nevada and California dropped layers of silica-heavy ash across this part of the Southwest, adding what was essentially powdered glass to the mix. Packed tight under countless tons of earth that gradually covered the place, these trees were buried in glass and mud as rivers and seas flowed high above them. Their cells filled with silica and colored minerals, forming perfect molds down to bark and eye-like knots in the wood.

At dusk, we strolled 50 yards apart, ducking and touching what we found, disk upon disk of fallen, broken trees, their hearts turned to fire, blood-red yellows and greens swirled together, different minerals taking up residence in each fossil.

We were in the Rainbow Forest, named for its outlandish coloration, on the south end of the park. We walked in big circles in the last light. Hundreds of trees had been downed, not snapped off by a windstorm or a meteorite, but undermined and uprooted, fallen over. It is believed that these were riverbank forests. Many still have roots intact, indicating that they fell into a river from eroding banks rather than being snapped off in some violent event. Trees fell in and floated away. Where petrified forests now lie was the place in this broad, shallow river where flood-tumbled trees came to rest. Finer roots and branches were broken off, bark often stripped. The trees would have lain naked and bright in mud and gravel, waiting to turn to stone.

I looked up and saw my friend silhouetted against the indigo horizon. She was the last sundial of the day, the last thing standing. With a big moon coming up on the other side of the sky, one day from full, the heavens were now our clock, our calendar. Stars began to show, and the silence that deepened around us was like that of a train departing, the flurry of our lives leaving us.

THESE TREES WERE AN EARLY FORM of conifer. Each with a single, deep pike of a root ringed with smaller, lateral roots, they grew in soft, deep alluvial soils. Because there would have been no distinct seasons at 16 degrees latitude, the trees have no growth rings, hard to tell how long they may have lived. The fossilized bones of phytosaurs, crocodile-like reptiles, have been found here, too. These semi-aquatic predators would have climbed atop the fallen trees, warming themselves under the Triassic sun. When the trees fell and floated away, they grounded on the downstream faces of channel bars and were buried as the bars migrated.

No river exists here now. The only plants seem like urchins, shadscales and snakeweed, the thinnest skim of life. We walked between Rubenesque horizons of rounded badlands, morning sun warming our path. The fallen, solidified trees told us where sandbars once gathered, bringing back lost landscapes.

She sang as she walked, her shadow rolling across rounds of petrified wood and caramel-colored stone. The trees, of which there were hundreds, were as big around as tractor tires. Some were as pink and translucent as country ham. We walked through reds and agate-yellows, and the ligneous mazes of thin bark turned into stone. As the earth erodes, the fossilized trees cannot hold their weight and they break into pieces. Calling it a forest is not quite correct. Nothing is standing. This is what became of a forest, each tree resting, continuing to fall, the energy of its life given up.

Today was not silent. A dry gale blew in from the north, hissing across hard knots of trees. We switched to the Black Forest in the north, where a higher concentration of manganese in the ground resulted in darker, less luminescent fossils. Some were coal-black and made of onyx, some a woody gray-brown. In steeply walled arroyos, they tumbled around each other like oil barrels.

We put up our camp in the lee of a juniper, the fourth actual tree we'd seen in two days. That night, after the bald white moon cleared the horizon of the Painted Desert, the wind fell away. Its last bushy tails could be heard sweeping through arroyos and across hilltops. The quiet returned, the same kind as behind a train, only much deeper. This silence is what you hear when 200 million years slip away, leaving you in the motionless void of now. AH

Long shadows form on the weathered buttes of Petrified Forest National Park at sunset. *George H.H. Huey*