



The Bonepile

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His feet were on fire.*

Brian Irwin

Essay and Photography

On a hot September day in 2013 wildfire raced across the hills of the Sierra Nevada. The Rim Fire, set by a bowhunter's illegal campfire which oozed out of control, was the third largest wildfire in California history. As it chewed through broad stands of conifers in merely minutes over 5,000 "Hotshot" firefighters scrambled with axes, chainsaws and courage to stop the beast before it reached the shores of Hetch Hetchy Reservoir, the main water supply for the city of San Francisco. It was a race against time, one that if lost would cost millions of dollars. Those dollars were the pricetags on the lives of men and women who wrangled the raging flames.

One-hundred years ago the Hetch Hetchy Valley was a strikingly beautiful place. Towering monoliths of granite and ribbons of mountain water coursing over their lips made it one of Yosemite National Parks most impressive zones. Verdant meadows sprawled across its floor, through which flowed the Tuolumne River. This river teemed with trout. Deer lapped from its shores. It was the perfect place to which the ever-popular Yosemite Valley was compared. And it was the perfect place to harness hydroelectric power. In 1919 the city of San Francisco began construction on the O'Shaughnessy Dam, forever changing the landscape of the valley.

There weren't always trout in the upper Tuolumne River like there are today. It was a sterile stream, gin-clear and an excellent habitat to introduce the sturdy Eastern Brook Trout. And so, like so many of the waterbodies in the Western United States, it fell victim to the introduction of non-native species. Cattlemen and herders from the eastern side of Yosemite would bring their stock to Tuolumne Meadows. To ensure a viable food supply for themselves, the cattlemen toted milkjugs full of frye, juvenile trout, to the river, placing them there. They would soon thrive and establish the upper T as their home. Today, the rivers in that valley are thronged with greenbacks.

Downstream from the meadows the reservoir leaks controllable flows. Commercial rafting operations rely on these, and the roiling haystacks of whitewater in the canyon, for their lifeblood. The river is a sustainable

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fishery, drawing people of all stripes to its rock gardens. As idyllic as it may sound, this canyon has always run wild, and has always held fish. The only difference now is that the water that flows through their gills doesn't do so without producing a kilowatt or two before they strip it of air. And sometimes the air is the same air for which the Hotshots gasp. Sometimes their last.

I was in Yosemite when the Rim Fire was alive, covering the battle from the safety of an escorted convoy of journalists. Contracted firemen and women from across the country had traveled to the Sierra on a moment's notice to stop the destruction. The Rim Fire was huge and destructive, and thankfully it finally fell tame without the loss of a single life.

Forest fires are a natural wedge in the pie of nature's grand plan. They're necessary for the regeneration of the soil. To cleanse the forest of dead timber. To allow the seed cones of giant pines to open, allowing them to proliferate. But as one Smokejumper told me, "...the Rim Fire is different. This forest wasn't ready. Its time hadn't come."

No one can deny that the big business' directives about the environment come into deep play when there are dollars at risk. If that perception was untrue, the O'Shaughnessy Dam at the toe of Hetch Hetchy Reservoir would never have been built. The valley, whose ecosystem was effectively drowned to death by the dam's construction, could have grown into one of Yosemite's most wondrous sights. Instead, the valley is under water, tucked away in arguably the least visited part of the park.

Nomex is hot stuff. Not literally, but it doesn't breathe well. It's the fabric that makes up the stuffy outfits donned by Hotshots as they battle the blazes. I festered in my Nomex suit only a dozen feet from some of these heroes as they fought the Rim Fire. My camera's button was warm to the touch. A mirage of vapor rose from the road, from my lens, from the hardhats of the soldiers at war, on their own turf, as they tried to kill this perceived enemy.

The technique for putting out a forest fire is easy to comprehend on paper, unfathomable to see in person. You can't put out a fire the size of the Rim incident, nor fires much smaller. Instead, you char a border around it by setting backfires. By corralling the fire in a ring of ash, you stop its ability to spread. Indeed embers float into surrounding forest, but these are detected by infrared cameras mounted on helicopters. Troops on foot or those wearing parachutes respond and put out these smaller blazes before they can get out of control.

But the main fire still blazes, captive by a lasso of towering, smoldering trees. The backfire chars the ground cover and smaller fuel, but the larger trees can burn for days. Or months. So as they gradually remit to the fire, turning to white-hot ash in the process, they also call victim to the Hotshots'

blades.

The trees are felled by forest fire fighters, sometimes by axe, sometimes by chainsaw. As I watched this process, a young man, nineteen years old, muscled a chainsaw through a burning tree twice the length of my driveway. Smoke poured toward his face as he cut, his gas refill can only feet from burning embers. In a flash, two puffs of smoke bellowed, one from each foot. His feet were on fire.

He ran off, stripped his boots on the road and soothed his feet. His colleagues didn't stop working; there was no time, they were in a race against the clock. After a few minutes, he slid his boots back on his feet, limped back to his work station, and started sawing.

The Smokejumper leading my photography convoy explained. "He's hurting. He's burned. But we all get burned. If that stopped us, we'd never contain a blaze. It's part of the job."

After finishing his job, he and his crew used crowbars and axes to roll smoldering logs into piles, effectively compressing the fire into small, more controllable portions. As the trees burn to a light grey they lie, dead and eroding, into what the Hotshots refer to as Bonepiles.

Today the O'Shaughnessy Dam faces opposition. Numerous environmental groups have advocated for its removal, which could, according to a 1987 assessment of the project by the National Park Service, restore Hetch Hetchy Valley to its pre-dam state within 50 years. And although it's a lucrative project, the fact remains that the river and the valley as they were and over 400 square miles of burned forest are, for the time being, destroyed by the hand of man. Perhaps someday someone will look beneath the surface of Hetch Hetchy Reservoir, see the bones that lay there and bring the surface to them.

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