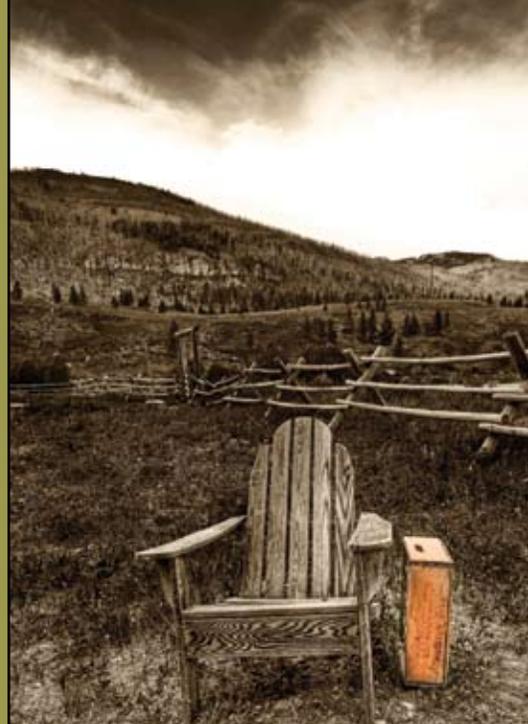


YELLOWSTONE FIRES OF '88

Twenty years of reflection

BY ROCKY BARKER



Courtesy of Trey Ratcliff



The
Yellowstone
fires of '88
took a toll
on the park's
wildlife.

Twenty years ago, fires broke out in Yellowstone National Park that started a public debate about firefighting and public land management that continues today.

I covered those fires as a newspaper reporter and, like all else involved, I couldn't know that the Yellowstone fires were the first in a series of huge fires that by the 21st century had become routine in the American West. Yellowstone's were the signal fires that heralded this new period. The costs of fighting fires keep rising, as does the number of lives and homes lost to fire.

The fires started small in May and June, then blew up into conflagrations that firefighters had not seen the likes of since the summer of 1910. On Black Saturday (Aug. 20, 1988), 165,000 acres burned inside Yellowstone. A friend flying over it in an airplane said the convection clouds rising from the firestorms into the stratosphere made it appear that Yellowstone was under nuclear attack.

I got caught in one of those firestorms on Sept. 7 at Old Faithful, along with more than 1,000 tourists, rangers, concession employees, and firefighters. It was an incredible sight.

At first it looked like a typical fire day with smoke rising to the West. But at 3:30 p.m., just as Old Faithful was completing its famous eruption to the ahs and sighs of visitors, the conflagration came over the hill. Flames rising more than 200 feet put on a show for the concession employees sitting on the roofs of their buses waiting

to evacuate. As the flames rose, the workers were cheering like they were at a ball game. But soon the situation turned scary with firebrands as large as fists blowing by their heads, gale force winds, and a noise like a covey of jets flying overhead.

I was standing just behind the fireline when I felt a hot wind on my back. On the ground I saw leaves blowing toward the fire. Suddenly it turned black as night and the winds whipped into a tempest. I turned and ran through the woods toward the large parking lot behind the historic log-constructed Old Faithful Inn. Once I arrived, I turned and watched the entire forest go up in flames.

A few days later I was sitting beside the road at Mammoth Hot Springs waiting again for the firestorm to arrive. But a slight rain, and even snow in the high country, reduced the humidity just enough to take the fury out of the fires for good, though they didn't go out until snow covered the park in November.

THE AFTERMATH

By the end of the 1988 fire season, up to 2 million tons of particulates, 4.4 million tons of carbon monoxide, 129 tons of nitrogen oxide, and 106 tons of hydrocarbons were released into the air and dropped in the form of air pollution as far away as Boston, Mass., and Amarillo, Texas. Enough commercial timber to build 11,000 homes burned in surrounding national forests. Overall, the fires cost nearly





Fifty fires raged through Yellowstone Park in the summer of 1988, burning 36 percent of its 2.2 million acres.

\$140 million—14 times Yellowstone’s annual budget. Of the 25,000 firefighters who passed through the fires, two died—one in a plane crash and the other when a tree fell on him. Across the West, 6 million acres burned, the most since 1960, when agencies began keeping good records.

CHANGING FACE OF FIRE

In the American West, we live in a new world of fire—a world that appeared in 1988. The 1988 fire season seemed an aberration. It was among the hottest years on record. The drought across North America was the worst since the 1930s. In the former Dust Bowl states—from Montana to Nebraska and Kansas to Texas—farmers reported dark clouds of dust as their topsoil blew away. By June 1, the Soil Conservation Service estimated 12 million acres were damaged by wind erosion. Record temperatures hit cities across the country. American companies sold 4 million air conditioners and could not keep up with demand. Congress held hearings on the greenhouse effect and climate change. Twenty years later, conditions like those of 1988 are the norm. In 2006, 9.5 million acres burned, followed by 9.3 million acres in 2007. With six out of the last eight years among the worst fire seasons since 1960, it is “the indefinitely bad



Military firefighters at the northeast entrance

season,” says Tom Boatner, the Bureau of Land Management’s just retired chief of fire operations and a 30-year firefighting veteran.

The Intergovernmental Panel on Climate Change and its 2,500 scientists from around the world have concluded that the wholesale burning of fossil fuels has contributed to the warming, drying, and longer fire seasons we are experiencing today. If it continues, the forests, which capture 20 to 40 percent of the carbon that scientists say contributes to the climate’s change, will burn and turn from net carbon sinks to net carbon sources, according to scientists from the U.S. Forest Service and University of Washington.

‘LET IT BURN’ REVISITED

The Yellowstone fires signaled that nearly a hundred years of wildland firefighting, begun in Yellowstone by the U.S. Army in 1886, had made the forests more flammable and more dangerous.

Foresters had convinced Americans that putting out all fires—removing fire from the ecosystem—was the best policy. For more than a century, these forests filled with fuel, making them harder to protect.

The 1988 fires actually impeded the use of fire to reduce forest fuels. Since then, and still today, National Park Service managers have been more cautious. It wasn’t until 1994, when 14 firefighters died on Storm King Mountain next to Glenwood Springs, Colo., that the idea of allowing fires to burn gained credence once again, this time for firefighter safety.

In the interest of safety, fire bosses began to routinely pull firefighters off of fires. In some high-elevation forests, managers justified “letting it burn” by saying it wasn’t safe to fight the fires.

Eventually, managers advocated thinning out thickets of younger trees that unnaturally carry a fire from the ground to the crowns. This triggered a debate once again between the timber industry and environmentalists. The timber industry advocated active management; using the tools of logging and the expertise of foresters to thin out forests the way it had done successfully on its private forest lands. Environmentalists didn’t trust the industry’s intentions. They preferred burning. Both sides spun the science to support their own position best.

Randal O’Toole, an Oregon-based economist, helped initiate the third wave of support for burning. With free market economics as his Pulaski (the combination axe and hoe used by firefighters to cut a fireline), he cut through foresters’ ideology. He showed that in the 1980s, the Forest Service was clearing more timber and building more roads than the forest ecosystems could sustain because of its perverse incentive systems: Managers were rewarded when they cut more timber or built more roads, even if they lost money, destroyed wildlife habitat, or silted up streams.

After the 2000 fire season prompted Congress to give the agency \$1.6 billion for firefighting, O’Toole saw a new, major shift in the incentive systems. Even though Congress removed first Forest Service Chief Gifford Pinchot’s 1908 blank check provision for fire funding in 1978, the years of big fires in the 1990s had brought it back in practice.

The Forest Service would simply go to Congress each year after the fire season and request additional firefighting funds. Now, firefighting and pre-suppression funds, money for prescribed burning, and thinning are driving the Forest Service’s budget. The spending is necessary, agency officials say, to protect communities near national forests.

But O’Toole has found that across the West, only 7 million acres have a moderate to high risk of wildfires that threaten structures. Of that, 90 percent are on private property and 8 percent are on federal land.

“It seems the Forest Service can’t lose,” O’Toole told me. “If it puts out fires that might actually produce ecological benefits, it is a hero for saving people’s homes and the public’s forests. If fires get away and burn the forests and homes, Congress writes a blank check for suppression and prevention. The only danger for the Forest Service is that the weather might enter a wet period, dampening Congress’ enthusiasm for spending on fire.”

TAKING RESPONSIBILITY

Forest Service fire behavior researcher Jack Cohen goes even further. His research shows that even in the worst firestorm, a house with a fireproof roof and flammable objects, bushes, and trees kept 100 feet from the walls, won’t burn as a fire passes through. Cohen’s and other’s research questions the logic behind spending hundreds of millions of dollars to fight fires in the wildlands to protect homes, especially when foresters agree that fire is usually beneficial to the ecosystem. For years, the firefighting establishment has been able to put out 98 percent of all fires that start; yet since Yellowstone, more and more acres continue to burn.

If people take responsibility for their own homes, billions of the money spent to fight wildland fires would be unnecessary. But how to pay for managing our national forests to address all of our human needs, including sequestering carbon, remains unresolved.



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