

Forest Service Ranger Joe Halm in the aftermath of the Big Blowup of 1910 on the Coeur d'Alene National Forest near the mouth of Champion Creek in the drainage of Little North Fork St. Joe River, Photo: USDA Forest Service.



Reenactor at a 2010 event in Missoula, MT, commemorating the centennial of the Big Blowup and the role of the Buffalo Soldiers in fighting the fires. Thousands of Black troops from the 25th Infantry Regiment stationed at Fort Missoula mobilized to fight fires during the Big Blowup. Photo: USDA Forest Service.

Wildfire Debacle*

Stephen F. Arno

n August 1910, wildfires swept through 3 million acres (1.6 million ha) of heavily forested mountain country in northern Idaho and adjacent Montana. About 85 people perished in the flames, and the Forest Service's fire protection program was caught short.

DISASTER AND HEROISM

In 1910, the fledgling Forest Service—established in 1905—had few experienced firefighters. To fill crews, Forest Service fire bosses hired day laborers from towns like Coeur d'Alene.

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ID, and Missoula, MT, sometimes rounding them up from saloons. Inexperienced and ill-equipped men were pressed into service on the firelines, including many who had inadequate clothing and no boots or gloves. Scores

died in the mountains, trapped by the firestorm.

The civilian death toll would have been higher except for the Buffalo Soldiers, thousands of Black soldiers from the 25th Infantry Regiment stationed at Fort Missoula who helped fight fires during the Big Blowup. Troops lit a backburn that saved the isolated town of Avery,

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* The article, adapted from Arno, n.d., is partly based on Egan (2009).

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ID (USDA Forest Service, n.d.). From Avery and other towns, engineers ran trains through the flaming forest to carry trapped Idaho residents eastward into Montana using the trestles and tunnels of the Milwaukee Railroad.

Another hero of the 1910 fires was Forest Ranger Ed Pulaski, who herded 45 firefighters into an abandoned mine shaft near the town of Wallace, ID. About 30 percent of this mining town burned to the ground. Pulaski eventually had to force the terrified firefighters at gunpoint to stay put until it was safe to leave the tunnel (Pyne 2001). Only five firefighters died, along with two horses. Visitors can see the historic Pulaski Tunnel by hiking the 2-mile (3.2-km) Pulaski Trail, which starts near Wallace.

In 1911, Pulaski invented the pulaski tool, widely used for digging and chopping firelines. The pulaski has a small mattock or hoe at one and an axe at the other. Many of us family forest control burns.

BURNING CONDITIONS

The "perfect firestorm" was produced by a rare convergence of factors:

- During the firestorm, Pulaski stationed himself at the mine's entrance and covered it with wet blankets. He damaged his lungs and eyes, injuries he bore for the rest of his life. Although he petitioned the Forest Service multiple times, the agency never compensated him for his injuries and heroics; firefighters today are treated far better.
- landowners have one or two on hand to

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Contemporary newspaper reports about the Big Blowup on August 20, 1910. Photo: K.D. Swan, USDA Forest Service (1930).

- Severe drought:
- Large masses of logging slash;
- Ignitions along the Northern Pacific and Milwaukee Railroad train tracks from cinders shot out from the stacks of steam engines; and
- Fires set by loggers and settlers.

Key to the conflagration in August 1910 was a gigantic dry-lightning storm packing hurricane-force winds. The nearest modern analog is probably the repeated dry-lightning storms accompanied by sustained 50-mile-perhour (80-km/h) winds every 6 to 7 days that produced the widely publicized 1988 wildfires in Yellowstone National Park and the Northern Rockies. But even those conditions don't match the burning conditions for the 1910 fires.

Pundits sometimes equate the 1910 fires to 21st-century conflagrations. From about 1935 until 1970, however, western wildfires were mostly in drier forest types (like ponderosa pine and Douglasfir) that historically experienced frequent surface fires. In ponderosa pine forests, the oldest needles, typically 4 to 5 years old, turn brown and drop off in late summer and autumn. They accumulate in prodigious quantities, an adaptation that virtually ensures frequent fire and sustains open-grown pine forests.

By contrast, the 1910 blowup burned mostly through forests of western white pine, western redcedar, and western hemlock. These forests historically burned infrequently—and when they did, it was often in patchy crown fires. In the 21st century, wildfires have been sweeping through entire landscapes due to continuous fuel buildups, longer droughts, and the millions of wildland-urban interface homes that divert firefighters from controlling the fires themselves.

The 1910 fires are sometimes called the largest ever known in western forests. In 1889, however, the New York Times repeatedly (on August 14, 15, and 20) covered fires burning from the outskirts of Portland, OR, to Miles City in southeastern Montana. Other literature reported massive 1889 fires extending from Boise, ID, through much of

western Montana and northward into Jasper National Park in Alberta, Canada (Tande 1979; Taylor 1989).

In 1889, however, the General Land Office (GLO) was responsible for Federal forest lands, and its primary mission was to transfer land to homesteaders and timber companies. The GLO had no wildland fire suppression campaign and no ability to control forest fires. Perhaps that's why the 1889 fires are overlooked by nearly all historians.

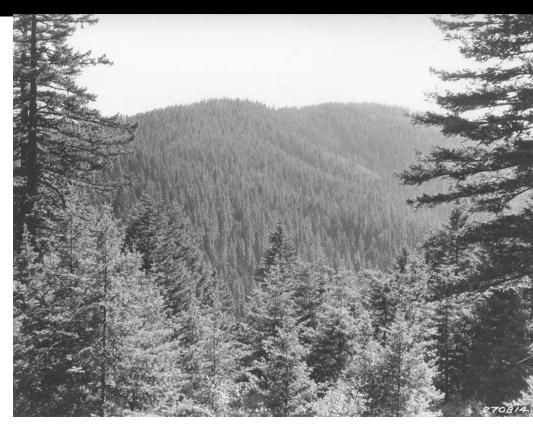
LEGACY OF FIRE EXCLUSION

The underfunded Forest Service used the 1910 catastrophe to gain more funding from Congress for fighting fires. That was quite a feat because a parsimonious Congress was ruled by "Uncle Joe" Cannon at the time, also known as "Czar Cannon." Joseph G. Cannon (R–IL) was a leader of the Republican Party and Speaker of the House from 1903 to 1911.

In his best-selling book *Teddy Roosevelt* and the Fire That Saved America,
Timothy Egan described how Cannon, joined by powerful congressional representatives from Idaho, wanted to get rid of the Forest Service (Egan 2010). Many ranchers in the West resented Forest Service control of publicly owned forests because they wanted to log them at will for firewood, fencing, log structures, and lumber.

Fire That Saved America refers to the switch that western congressional representatives made after the 1910 fires to support the agency that tried to control the fires. Many Idaho residents also changed their tune. The Forest Service promised that it could prevent catastrophic wildfires in the future if Congress granted the funds needed to greatly expand its wildland fire suppression program. Congress did, essentially granting an open checkbook for fighting wildfires.

Unfortunately, the 1910 fires and the ensuing fire exclusion policy have brought increasingly destructive megafires. At the turn of the 20th



Mixed-conifer forest codominated by western white pine and Douglas-fir on the Coeur d'Alene National Forest in Idaho. The forests that burned in the 1910 Big Blowup looked much like this. Photo: K.D. Swan, USDA Forest Service (1932).

century, many timberland owners in the West were advocating "light burning"—the use of frequent low-severity fires to sustain ponderosa pine and mixed-conifer forests for timber production. One California timberland owner, George Hoxie, published an article in *Sunset* magazine in 1910. "We must count on fire to help in practical forestry," he argued, "... as a servant ... [otherwise] it will surely be master in a short time." Light burning was also practiced by ponderosa pine timberland owners in central Oregon, northwestern Montana, and South Dakota's Black Hills.

However, Hoxie's article coincided with the Big Blowup of 1910. That same year, a light burn in California blew up and burned across 33,000 acres (13,300 ha) before it was stopped at the edge of a national forest. Then as now, few people discerned the difference between burning a layer of dead pine needles and other litter beneath an open-grown forest and a wildfire burning dense forest augmented by heavy slash. The 1910 fires came to stand for all wildland fire in the public mind, and the Forest

Service's policy of fire exclusion won the day.

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