

A BURNING ISSUE

It's been 10 years since the Rodeo-Chediski Fire burned 468,000 acres along the Mogollon Rim, and just a year since the Wallow Fire became the largest in Arizona history, scorching 538,000 acres of the Apache-Sitgreaves National Forests. Although wildfires are to be expected in a place as arid as Arizona, "megafires" are out of the norm — the result, some say, of a flawed fire-management policy.

BY KELLY KRAMER

The Wallow Fire, which burned in the Apache-Sitgreaves National Forests during the summer of 2011, consumed more than 538,000 acres, making it the largest wildfire in Arizona history.

| RICK DELIA



TOP: June marks the 10th anniversary of the Rodeo-Chediski Fire, which burned along the Mogollon Rim. It was the result of two separate fires that merged. Both fires were human-caused. | REUTERS/CORBIS/JEFF TOPPING

ABOVE: Firefighters line up for a meal before their shift battling the Wallow Fire. | RICK D'ELIA

THE CRIMINAL COMPLAINT against Leonard Gregg was a short one.

“On or about June 18, 2002, in the District of Arizona, defendant did, willfully and without lawful authority, set on fire timber, underbrush or grass or other inflammable material upon the Fort Apache Indian Reservation, near Cibecue, Arizona, in violation of Title 18, United States Code, Section 1855.”

When Daniel Hawkins, a special agent of the Bureau of Indian Affairs, filed the complaint in U.S. District Court, he attached a statement of probable cause that outlined exactly where and how the fire began. And he swore under penalty of perjury that those details were true.

They were. Gregg, an Apache living in Cibecue, had always been “fasci-

nated by wildfires,” according to an Associated Press interview with his brother, Wilson. His family said he was brain-damaged, the result of his mother’s alcohol abuse. Friends said he’d dropped out of school in the eighth grade. Despite his troubles, Gregg made \$8 an hour working as a wildland firefighter. He decided he wanted more work.

So, on June 18, 2002, he set two fires. The first, the Pina Fire, ignited at around 10:45 a.m. just south of the Germantown area of the Fort Apache Reservation. It didn’t spread, thanks to the efforts of the tribal fire department. Gregg then moved 2 miles northeast of Cibecue and started his second blaze, which officials named the Rodeo Fire. First responders couldn’t contain the flames, and by the following morning, they’d spread to more than 600 acres.

Then the wind kicked up.

THERE ARE A HANDFUL OF FACTORS that contribute to a wild-fire’s spread — humidity, fuel, wind, terrain, oxygen. When Leonard Gregg started the Rodeo Fire 10 years ago, he knew that each of those elements was just right.

“Any factor you want to pick was at a maximum,” says Dr. Stephen Pyne, a Regents’ professor at Arizona State University and author of several books on national fire policy, including *America’s Fires: A Historical Context for Policy and Practice* (Forest History Society, 2010). “As a firefighter, [Gregg] knew that. His knowledge of fire factors was like a paramedic knowing to check for breathing, bleeding, that type of thing.”

Indeed, Arizona was in the midst of one of its driest spells on record. From June 2001 through May 2002, measurable precipitation in the state was at its lowest level since 1895, when record-keeping about such things began. The winter snowpack was a dismal 5 percent of normal, making spring runoff only 24 percent of the norm.

The only thing that could breathe life back into the parched earth was the monsoon season, but the long-range forecast called for clear skies and warm temperatures. Making matters worse, “There were prevailing winds out of the southwest, made even more intense by solar heating,” Pyne says. “The fire burned along a southwestern-facing slope, and fuels were at maximum combustibility. By the time the second fire began, Rodeo was already completely out of control.”

Rodeo’s counterpart, Chediski, was ignited on June 20, when lost hiker Valinda Jo Elliot set a signal fire. She’d been wandering aimlessly for three days. Dehydrated and panicked, she heard the hum of a helicopter and decided the only way to survive was to set a signal fire. Though Elliot was rescued, her blaze quickly grew out of control. It was the last act in a series of events that would lead to the single-largest fire in Arizona history.

“It would have been criminally negligent to put crews between the two fires,” Pyne says. “So, they were allowed to merge. Firefighters might have had a pretty good sense of where the fires were going to go, and they might have been able to work the flanks, but there was no way to escape. They also had to take the cost and complexity of running two parallel lines into consideration.”

By June 22, the fires had combined to form what several newspapers dubbed “The Monster,” which burned until July 7. It took 1,900 firefighters to contain the Rodeo-Chediski Fire, along with 23 helicopters, nine air tankers, 237 fire engines, 89 dozers, 95 water trucks and four incident-management teams. More than 30,000 people were evacuated from their homes, and 450 houses were lost to the fire. The Western Forestry Leadership Coalition estimates the total cost of Rodeo-Chediski to be in the \$308 million range, although the fire’s long-term financial impact on the tribe or the forest can’t really be determined.

The aesthetic effects of the fire are far more apparent.

It’s been a decade now since the fire scorched 468,000 acres along the Mogollon Rim, and traveling east on State Route 260 between Payson and Heber-Overgaard, there are places where the fire’s scars still cut deep.

Skeletal trees linger in stands, their black and gray limbs reaching toward light that doesn’t matter — dead plants don’t photosynthesize. Some have fallen, some are trying, others sway in the

softest whisper of a breeze. Fragile.

In some places, seedlings have sprung from the ground, their bright-green needles wispy and thin and reminiscent of their forebears. The landscape is stark in places, but Pyne reminds us that fire can be good for the Earth.

“When Rodeo-Chediski died, it just kind of blew over the rim,” he says. “The density of the forest changed, the land sloped down. The gross geography of the fire shifted enough so that it ended.”

“Fires have been a part of the system for a very long time,” he continues. “Taking fire out of an ecosystem is a big problem. Fire rejuvenates the landscape and acts as a recycling mechanism. Trees, flowers and grasses revive. Certain things only sprout after a fire, then they go back to their seed banks. Fire rearranges a landscape’s structure and promotes grasses and low vegetation over big trees. It rearranges the possibility for future fires.”

Although it’s impossible to forecast fire, policymakers, politicians and environmentalists have long grappled over how best to manage it.



ON ONE SIDE OF THE FIRE-POLICY equation are the foresters and scientists who argue that controlled burns and forest-thinning might be the key to avoiding explosive fires. On the other side are some environmentalists who counter that the forest is better left alone — a tree sanctuary, instead of a tree farm.

In *Prelude to Catastrophe: Recent and Historic Land Management Within the Rodeo-Chediski Fire Area*, a report prepared by the Center for Biological Diversity, the Sierra Club and the Southwest Forest Alliance, the study’s authors contend that timber sales and the development of forest roads had little positive — if any — effect on fire reduction. In fact, the extensive study cites a U.S. Forest Service report to Congress that stated: “Timber harvest, through its effect on forest structure, local microclimate, and fuels accumulation, has increased fire severity more than any other recent human activity.”

The report studied 10 timber sales that took place in the Apache-Sitgreaves National Forests between 1990 and 2002. One of the timber sales, “Jersey Horse,” focused on the logging of large trees — 87 percent of the volume of pines and other species cut from the forest were larger than 16 inches in diameter. Thirty-two percent of the volume came from trees larger than 24 inches in diameter. Additional studies have shown that it’s not the big, old-growth trees that burn most during a fire; it’s the small trees, in addition to grasses and low shrubs.

So, the organizations represented by the report concluded that logging could not have — and did not — prevent the spread of the Rodeo-Chediski Fire, further arguing that “fire hazard was extreme in the cutover areas of the national forests of the Southwest” and that the hazard was five times greater on timber-sale areas along the Mogollon Rim than in unlogged areas.

“Indeed, large fires — ‘megafires’ — are often associated with logging,” Pyne says. “It leaves the little stuff to burn and takes the big, fire-resistant trees. One is not a surrogate for the other.”

Former hotshot and U.S. Forest Service contract writer Paul Keller disagrees. In his 2005 article *Arizona’s Rodeo-Chediski Fire: A Forest Health Problem*, he writes, “There’s no question that the abundance of trees, coupled with a parching drought and fire-conducive weather conditions, fueled the Rodeo-Chediski explosion.”



ABOVE, LEFT: Because of high winds, the Wallow Fire burned in a mosaic pattern, scorching some trees, like these south of Alpine, and barely touching others. | AP PHOTO/SUSAN MONTROYA BRYAN

ABOVE, RIGHT: Young plants emerge amid charred trees in the aftermath of the Wallow Fire. | JACK DYKINGA

And, of course, there’s the issue of wildlife as it relates to the liquidation of old-growth forest. In the late 1980s and early 1990s, extensive logging in the Apache-Sitgreaves National Forests drew the ire of both the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service. In 1993, Fish and Wildlife listed the Mexican spotted owl as a “threatened species,” noting the prevalence of logging in the forests. By 1998, Game and Fish had issued a similar report about the northern goshawk, declaring that the bird species was no longer self-sustaining. That report also lamented the loss of old-growth trees.

Timber sales. Owls. Road density. Prescribed burns. Public lands versus wild lands. Risk to firefighters. All of these and more are cogs in the fire-policy wheel, a slowly turning circle that won’t stop spinning anytime soon.

Prescribed burns became part and parcel of forest-health policies decades ago. Nevertheless, they’re a major sticking point in the debate.

“The American fire community accepted the need to reinstate fire a long time ago,” Pyne says. “Prescribed burns, slashing and burning — those aren’t new controversies. The problem is making things happen on the ground. The whole point of national fire policy on federal lands over the past 40 years has been to increase the amount of burning. We’re getting it, so what’s the problem? People aren’t getting it the way they want.”

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foresters to maintain low levels of needles, dead leaves and other ground debris that provides fuel for a wildfire.

Some groups, such as Citizens Against Polluted Air, advocate mulching over burning as a means of reducing smoke inhalation. They claim that wood smoke is toxic. The groups refer to Environmental Protection Agency studies that indicate an increased risk of cancer, stroke and other serious illnesses in people exposed to the smoke from prescribed burns. Another citizens’ group, Mad Mothers of America, prefers a bolder approach to promoting its message and refers to foresters as “Drip-Torch Baby Killers.” The group’s website features graphic imagery and a warning that reads: “Armed with fully loaded drip torches and a cold-blooded attitude, the U.S. Forest Service is continuing their annual campaign of death against

our innocent children. Using drip torches and fire bombs, they are spreading prescribed fire and toxic smoke across the United States. EPA studies show that wood smoke kills children, but officials don’t seem to care as long as they can burn enough to meet their budgetary goals.”

Those officials are the men and women of the federal government. Both the U.S. Forest Service and the National Park Service have advocated the practice of prescribed burning — in conjunction with canopy-thinning and the removal of small trees in the forest understory — as a “means of restoring a more natural structure and function to ponderosa pine vegetation communities.” Both agencies abide by the 50-page *Interagency Prescribed Fire Planning and Implementation Procedures Guide*.

The idea, according to a report published by the Arizona Cooperative Extension, is to reduce highly inflammable fuels, break up fuel continuity and reduce the intensity of wildland fires. “Contrary to popular opinion, [prescribed burns] are not intended to prevent fire; rather, their purpose is to reduce intensity to the point that structures are at greatly reduced risk and firefighters can safely work in close proximity to the fire when conducting suppression activities,” the report reads.

Of course, the issue of firefighter safety is paramount in the way wildland fires are harnessed, contained and, ultimately, extinguished.



ABOVE: In the months following the Wallow Fire, flooding and erosion were major concerns in the White Mountains.

| JACK DYKINGA

ABOVE, RIGHT: A butterfly is seemingly undisturbed by smoke and flames from burn operations in the Lee Valley area on the western flank of the Wallow Fire.

| RICK D'ELIA

RIGHT: A helicopter drops straw bales onto an area burned by the Wallow Fire. The bales help prevent storm runoff.

| JACK DYKINGA



“Our institutions, our understanding of fire, and our policies and practices of fire create a very strong push not to put firefighters at risk,” Pyne says. “We’re backing off and allowing fires to have more room, and that translates to bigger fires, like Wallow.”

ARIZONA WATCHED the Wallow Fire burn last summer — a showy, top-of-the-newscast, violent manifestation of just how little headway has been made in finding common ground in the fire-policy debate. History, it seems, does repeat itself.

Caleb Joshua Malboeuf and his cousin, David Wayne Malboeuf, trekked into the Bear Wallow Wilderness on May 28, 2011. After cooking dinner over their ringed campfire, according to a federal criminal complaint, they allowed the fire to burn out on its own and went to sleep. The following morning, the cousins lit a new campfire and cooked breakfast. After several hours — and believing that the campfire was out — the Malboeufs went on a hike, leaving their two dogs and all of their camping equipment behind.

“They stated that they believed their campfire was out because David threw a candy wrapper in the fire just prior to their departure and it did not melt,” the criminal complaint reads.

A few hours later, the men returned to a wall of smoke and fire. They couldn’t reach the campsite to cut loose their dogs — both blue heelers. The Malboeufs ran toward the Black River, where they camped again overnight before hiking to a forest road and

meeting an Apache County sheriff’s deputy, who drove them to their car and alerted the Forest Service to the fire.

By May 30, the Wallow Fire had spread to roughly 1,445 acres. Between June 1 and June 2, the fire exploded from 6,699 acres to more than 40,500. Fueled by wind, it threatened Hannagan Meadow as it spread north, blowing across tree crowns in some places and smoldering in others.

June 7 marked the fire’s most expansive day — it grew by more than 77,700 acres, threatening Greer, Eagar and Springerville. Evacuation orders were in place, businesses shut down, and more and more firefighters arrived from across the country.

Amanda Lane was one of them. A 25-year-old hotshot from the Bitterroot Valley in Montana, Lane had been fighting fires for three seasons when she was dispatched to Wallow.

“This fire is particularly challenging because of the wind,” she said during an interview near Tal-Wi-Wi Lodge in Alpine, where she and her crew were taking a break between their eight-hour assignments. “Sometimes, you’re a lookout, trying to spot smoke columns. Sometimes, you’re cutting hot lines. Sometimes, you’re told you’re going to mop up.”

hold the line and stop the fire from spreading to the town, he was clear about his mission.

“This is just what we do,” he said. “And it’s a direct response to the national fire plan. This is what we train for, but there are times when bravado shouldn’t be displayed. Sometimes, we need to leave an area and then come back.”

“LETTING IT BURN” MIGHT BE WHAT happened in places along U.S. Route 191, south of Alpine. There, Wallow cut a vicious swath, leaving blackened toothpicks in place of trees. On June 12 — approximately two weeks into the fire’s run — the sky choked with gray smoke and the wind blew charred leaves across the highway. Bark peeled from aspens the way skin peels after a sunburn.

The scene was post-apocalyptic at best, but there was evidence of where the firefighters had been. They dug holes around tree trunks to stop the fire’s spread. Their boot prints were all over the piles of ash.

That same day, residents of Springerville and Eagar received word that they were allowed to return to their homes. The fire had grown only by 8,000 acres in the past 24 hours, and a herd of elk found a spot to graze along the side of the road, seemingly unfazed by the smoke and the char from nearby backfires.

In all, the Wallow Fire burned 538,049 acres. It overshadowed Rodeo-Chediski as the largest wildfire in Arizona history and required more than 4,000 firefighters to contain it, along with two helicopters, nine bulldozers, 26 fire engines and 10 water tenders. The pilot of a DC-10 dispatched to drop water over the fire referred to it as “massive” and “impressive.”

The fire, whipped by wind, burned in a mosaic, leaving a weird visual tapestry of brown, green and black. It cost an estimated \$109 million to contain.

And it nearly destroyed Escudilla Mountain. “Life in Arizona was bounded under foot by grama grass, overhead by sky, and on the horizon by Escudilla,” wrote Aldo Leopold in *Round River* in 1953. The view of that horizon has been altered dramatically. Ironically, Escudilla’s fire tower survived Wallow, and, as of this writing, it still stood amid a wasteland of trees. Forest officials say that it will be razed sometime this summer.

There were bouts of localized flooding when the monsoon finally arrived in Eastern Arizona, and it’s impossible to say what will happen in terms of erosion and flooding in the years to come.

But the aftermath of Wallow isn’t all bad. Just a few months after the fire, grasses and ferns and the shoots of young aspens emerged from the soot along Forest Road 25. New wildflowers bloomed in meadows that had been kissed by the fire. Recreation areas reopened. The earth, it seemed, was renewed.

There’s a lesson somewhere in the Wallow Fire — in Rodeo-Chediski, too — and maybe the federal agencies and the foresters and the citizens’ groups and the environmentalists will find it. The Malboeufs will face possible prison time and fines, and scientists will long study the fire’s impact on the White Mountains’ ecosystem. In the meantime, Pyne remains certain of one thing: “The question isn’t whether or not we’ll have fire,” he says. “It’s what kind, and at what cost.”

For more photographs from the Wallow Fire, visit www.arizonahighways.com/extras.asp.