THE ANDERSON CREEK FIRE

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Photo by ©Jennifer Browning

As part of its permanent masthead *The Gyp Hill Premier*, Medicine Lodge's weekly newspaper, has a photo that says it all: steep red hills, deep canyons and thousands of mature cedars all over the landscape.

The Anderson Creek wildfire in late March this year consumed 400,000 acres of this landscape, the largest fire in Kansas history. It caused terrible damage to buildings, fences, and livestock, but simultaneously put a big hit on the area's number one ecosystem threat - Eastern Red Cedars. It is now up to local ranchers to build on this progress. If they do not, the same scenario will play out over and over. Indeed, the last two large fires—100,000 acres in 1966 and again in 2008—were poorly capitalized on, and the landscape had mostly reverted to its previous appearance.

The Anderson Creek fire began March 22 in Oklahoma. Its origin is still unknown, but it quickly spread to Comanche and then Barber Counties in Kansas. Control took five days. The fire took out infrastructure, burning out cell-tower huts and degrading communications so important to the fire fighters; it also destroyed wooden bridges, miles of hedge-post fences, barns, outbuildings and two occupied homes. The county jail, hospital, and many Medicine Lodge citizens evacuated. A wind shift when the fire had approached to within a mile of the city providentially saved Medicine Lodge.

The fire was driven by winds of 40 to 50 miles per hour, very low humidity and arid ground conditions. But it was greatly intensified by the cedars. Flames soaring 40 feet in dense cedar stands carried burning embers that witnesses reported travelling hundreds of yards, setting numerous fire metastases out in front of a thirty-mile-wide headfire. At one point after the fire breeched their line, an entire fleet of fire trucks and men raced 12 miles to get ahead of it, but while they were en route, the fire had already burned six miles and gotten ahead of them again. Many fire crews went from one homestead to another, simply trying to save structures. It was reported that at one point part of the headfire traveled a mile in four minutes.

One fireman spoke of the terror he experienced when visibility fell to near zero while the cab of his truck began to heat up as the fire approached and of crossing a wooden bridge that was gone three hours later, forcing a cross-country retreat.

As many as 500 cattle died, many apparently trapped against fences as the fire raced toward them. More that had suffered severe burns externally or to their lungs were sent to slaughter. The heat caused melting of some cows' eyeballs, singed udders and melted plastic ear tags. All these casualties were from cow-calf herds; although the area also does major grazing for yearling cattle, in March none of these were yet on site.

Simultaneously something mind boggling occurred on a ranch where Bison were being grazed. The Bison all went to prairie-dog towns, standing in the short-cropped vegetation as the fire swept past, except for three trapped in a pen, they all survived! (An atavistic behavior inherited from the days when fires set by lightning strikes threatened the giant herds that ranged the prairies, but prairie-dog towns were a common landscape feature?)

Other wildlife impacts included dead coyotes and deer, and a large number of porcupines and squirrels that climbed trees to get out of the fire. Bad strategy. Possums, skunks, and raccoons were gone. Deer and turkeys wandered about looking for some kind of forage. At least one rancher put out feed for wildlife.

The following days after the fire it was eerily quiet: no birds. Dust devils were black. Soot and red dust from exposed ground covered everything in the remaining homes. Hundreds of miles of barbed wire lay on the ground. There was no forage for the cattle. Stored individual large, round bales reportedly had burned in less than two minutes.

But in the midst of all this destruction was opportunity. For generations stigma has been attached to cutting down trees in this part of Kansas where trees were once scarce and mostly grew only along perennial streams. Government agencies once preached tree conservation, and settlers advised their descendants "not to cut down a tree for any reason." Added to this mindset is the difficulty of burning in the Red Hills versus the Flint Hills. Ranchers who plan to burn in Barber County must buy insurance that might cost 250 dollars. Each burn requires a large team: four tank-truck drivers, four hose handlers, one to set the fire and a burn captain. The wind needs to be at least five mph or the fire won't carry in the more sparsely vegetated gyp hills, and local regulations dictate that more than 15 mph is too risky. Humidity is a significant parameter as well. If it is less than 15%, the fire could escape. If it is more than 40%, the fire won't be hot enough to kill small cedars.

With all these conditions to meet, it is striking that there are any prescribed burns in the Red Hills. But several progressive ranchers are pursuing this tactic. Imagine how thrilling it was for these few to have their homes saved, but also to have thousands of acres of cedars destroyed.

Why are cedars so bad? Their population explosion in the last 50 years has been compared to a "green glacier" slowly crushing everything in its path. Fifty years ago, an area native related, it was a project to find an appropriate cedar for a Christmas tree. At that time cedars in Kansas numbered in the tens of thousands. Today the estimate is 100 million. Oklahoma might have 500 million. *The Wichita Eagle* reported:

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> "They say it's not just how many of them there are, but it's the oily explosive insides, the greedy roots that suck up gallons of water a day and leave streams dry and the dark shadow its pine limbs cast on the ground, not letting sunlight or water through, leaving a largely deadened area underneath… [Cedars] have pushed out native grasses and reduced pastureland by thousands of acres."

All this is why one rancher was excited that the fire had taken care of ten years of prescribed burns. And even with prescribed burns, conditions of low wind and excessive humidity prevent the eradication of the larger cedars. This fire killed them as well. A Natural Resources Conservation Services technician reported another encouraging likelihood. The fires of 1966 and 2008 burned hot enough to destroy the seed bank of cedar berries. This fire should prove their equal.

So what finally are the opportunities and risks presented by the Anderson Creek fire? The risk is failing to learn the lesson of the problems presented by the proliferation of cedars. The opportunity is the chance to mop up the remaining cedar seed sources. A drive through the burned area in mid-June revealed a beautiful resurgent prairie over vast areas but also numerous pockets of various sizes-from one isolated surviving cedar to hundreds skipped by the fire, mostly in canyons and on hilltops. So the most important thing, and time is of the essence, is to go after these last trees. Perhaps the best time and method would have been using fire last spring when the surviving pockets were surrounded by blackened acres. But I doubt there was much appetite for more fire then. However, there is still time – through assiduous application of prescribed burns and the chain saw – to restore to the Gyp Hills their original balanced ecosystem as it existed fifty-years-ago and more.

Resources used to prepare for this article included interviews with Barber county NRCS employees, an interview with *Premiere* reporter Doris Sory, *The Kansas City Star* articles March 28 and May 28, *The Wichita Eagle* April 17, *The Gyp Hills Premiere* article March 28, Steve Clubine article in the summer 2016 edition of *The Missouri Prairie Journal*, and a drive through the burned Gyp Hills on June 16, 2016.

About the contributors: Bill and Jennifer Browning recently retired from their medical practice of 37 years in Madison, Kansas. They operate a family ranch in the Flint Hills west of Madison. Both have been very active in conservation for many years. Bill is a Chair Emeritus of AOK.