'We’re light years ahead of where we were': 2 years after devastating Nebraska wildfires, state highlights recovery, preparedness efforts

By Paul Hammel / World-Herald staff writer | Posted: Tuesday, July 15, 2014 1:00 am

NORDEN, Neb. — Will Davis’ retirement home, nestled in a canyon off the scenic Niobrara River, is a testament to the value of preparing for a wildfire.

Taking the advice of state foresters, Davis thinned thick stands of ponderosa pine and red cedar around his house. He spread nonflammable crushed rock next to his house and created a firebreak using a lawn of watered bluegrass. The home’s asphalt shingle roof and concrete siding also deter fire.

When a wildfire came roaring up the canyon two years ago, flames blackened the forest on either side of his acreage, but his only loss was a wooden fencepost alongside his garden.

“The Nebraska Forest Service, the Springview Fire Department and the good Lord saved me, not necessarily in that order,” said Davis, a 67-year-old retired pharmacist. “I was lucky.”

Niobrara wildfires-UNL test plots

The forests in the Pine Ridge and the Niobrara Valley that burned in 2012 will be slow to recover, taking generations in some cases. Here, UNL graduate student Amanda Hefner and her adviser, UNL professor Dave Wedin, check out Hefner’s test plots, part of a post-fire woodland recovery study on the Niobrara Valley Preserve.

Two years after the state’s worst season of wildfires on record, the canyons around his place remain covered with scorched skeletons of trees amid green carpets of grass fed by abundant spring rains. Here and there, a live pine tree survives. But they’re few and far between.

“Firewise” practices, like those employed by Davis, saved some homes from the ravenous flames of 2012, fed by drought, high winds and 100-plus degree temperatures.

But they didn’t save all the homes. And a state forestry expert predicted that Nebraska will experience more of the devastating fires unless landowners get ahead of a rapidly spreading infestation of highly-flammable red cedar that is adding about 38,000 acres of forest to the state each year, including near Lincoln and Omaha.
“We’ll see more fires like this,” said Scott Josiah, the state forester and director of the Nebraska Forest Service. “We have this forest emerging in front of our eyes across the state.”

Josiah and others interested in Nebraska’s forests convened last week in the Niobrara Valley to highlight recovery efforts after the 2012 wildfires and to remind landowners that cost-sharing grants are available to thin trees and remove red cedars.

They also pointed to some progress, such as a bill passed by the Legislature that is intended to speed the attack on forest fires.

2012 was a record-breaker for forest and grassland fires in Nebraska. Nearly 502,000 acres — an area larger than Douglas and Sarpy Counties combined — went up in flames, with the Niobrara Valley of north-central Nebraska and the Pine Ridge region in the northwest corner of the state both severely affected.

Along the Niobrara, more than 75,000 acres were blackened and 31 structures were destroyed, including a handful of rural homes surrounded by trees near Davis’ house south of Norden.

It was a particularly hot fire that burned almost all trees in its path and left soil in some areas “sterilized” of nutrients that promote immediate regrowth.

“It’s like an F5 tornado,” he said, comparing it to the most powerful twisters.

How bad was it? In one 3,000-acre plot of land owned by the Nature Conservancy on the north side of the Niobrara, only about 40 living ponderosa pines remain.

So much forested land burned in the Pine Ridge area that it is no longer the state’s largest coniferous forest. Only about 100,000 acres of forest remain there, compared with about 220,000 acres of pine and cedars remaining in the Niobrara Valley.

The portion of the Niobrara that hosts tens of thousands of visitors on canoes, inner tubes and kayaks was spared, but just downstream, there are scars on the hills that won’t heal for generations.

“We pretty well got wiped out,” said Mike Tuerk, a retiree from the Omaha area whose log home was destroyed and 3,100-acre ranch was blackened by the fire.

Tuerk rebuilt and moved back to the ranch at Christmas. But he said the burnt trees remain a danger. They’re a ready, and dry, fuel source for the next fire. He plans to remove what he can.

But cutting scorched trees and thinning the remaining “green islands” of trees can be expensive, even with government grants that pay 75 percent of the cost.

Tuerk said the cost of removing cedars can be up to $650 an acre, a daunting figure in an area where an acre of land sells for around that amount.
The Forest Service is trying to develop commercial markets for the cedar trees, so they’re seen by landowners as a possible source of profit instead of a nuisance.

At Springview, a lumber mill grinds cedar trees into a fine bedding mulch that is used in stalls at cattle shows. The mill also produces red-streaked 1-by-4s to be used as paneling and square beams of timber to be shipped to China for use in furniture and other products.

But the profit margin is slim, said Tom Newton, foreman at the Sawle Mill, and the burnt trees are past the point that they can be used for lumber.

Forest Service worker Adam Smith tries to find and develop new markets for the trees. He’s looking at expanding the use of cedar chips in hog houses and utilizing chipped wood for energy. Woody biomass powers boilers that provide heat and air conditioning at Chadron State College and at the Lied Lodge & Conference Center in Nebraska City.

For the first time, Smith said grants are available to install biomass boilers in schools. But the users need to be close to the wood source to make it economical, and low prices for natural gas have made it harder for wood to be competitive.

Both Smith and Josiah said that developing a commercial market for the trees is key. It gives landowners an economic incentive to thin their tree stands and reduce the fire risk. Without that, they said, current thinning programs just scratch the surface.

About 15,000 acres of forest in the Pine Ridge and Niobrara areas have been thinned in recent years. Josiah said that work has focused on creating fire breaks and on thinning areas near roads to provide safe passage in the event of a wildfire.

One area of progress has been in preparing to fight the next big wildfire.

In 2013, state lawmakers passed the Wildfire Control Act, introduced by State Sen. Al Davis of Hyannis, who represents parts of the Pine Ridge and Niobrara.

The act provides for the leasing of a single-engine air tanker, or SEAT plane, during the three-month summer fire season. The plane, which will be based at either Chadron or Valentine beginning next week, can dump up to 800 gallons of fire-retardant slurry, about double the load of a typical plane.

Because it will be stationed closer to potential fire zones, Josiah said the state’s initial response to a wildfire will improve dramatically, deploying in less than an hour, instead of officials requesting a plane from another state, which can take hours or days.

“The whole idea is to hit ’em hard and keep them small,” he said. “Once a wildfire is out of control, they really are out of control until nature stops them.”
The act also allowed for increased thinning programs and firefighter training, as well as stepped-up efforts to get federal-surplus military trucks to Nebraska’s volunteer departments to convert into firefighting equipment. Nebraska now has 673 pieces of heavy tanker and firefighting trucks, worth $61 million, on loan across the state.

Beyond that, the state joined the Great Plains Interstate Fire Compact this year, which would speed the arrival of equipment and firefighters from other states during a wildfire. Local fire departments also were granted more flexibility in using crop-dusting planes for initial fire suppression.

“We’re light years ahead of where we were,” Davis said.

Along the Niobrara, some landowners have begun to plant pine seedlings to jump-start the regeneration of the forest — natural reseeding will be slow because so few pine trees survived. But the seedlings’ survival rate can be low if weather doesn’t cooperate. Right now, stands of sunflowers and hemp appear to be winning the race to replenish the hills.

Davis, standing in the lush grass that surrounds his house, estimated that he spent $3,000 out of his own pocket on fire-prevention measures. He said he was spurred into action after watching homes burn near Valentine during wildfires in 2006.

While his efforts don’t guarantee that his home will survive the next wildfire, Davis said his home is less vulnerable than places where no fire-prevention steps have been taken.

“It’s cheap insurance,” he said. “I drive around and still see all these cedars. They’re sitting on a fire keg.”

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