

The Denver Post

Longtime forestry feud shows signs of healing

2 eco-groups endorse clear-cutting as way to create healthy forests

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Environmentalists and the U.S. Forest Service can agree on one thing: Clear-cutting is good.

And that's no small thing, considering that the two are often at odds over logging projects and that for decades clear-cuts have been almost universally derided.

But now, thanks to science coming out of Colorado, scientists are agreeing that clear-cutting in certain types of trees is needed to open the path to a healthier forest and better wildfire management. For many, that means supporting a practice that in the past has represented all that was wrong in forestry.

"I've certainly had to change my idea of what a 'healthy forest' is," said Greg Aplet, a forest ecologist with the Wilderness Society. "This is not something we would have discussed even a few years ago."

Although he has come to accept clear-cuts as part of good forest management, Aplet still has reservations, as do some forest residents.

"I understand thinning, but to me that means marking certain trees for removal and doing it delicately," said Faith White, who lives near national forest land outside Nederland. The Forest Service has made several small openings in the forest behind her house, which is a mix of ponderosa and lodgepole pine and aspen.

"But this was just using big, heavy machines to mow over lots of trees.

"It used to be so beautiful up here," White said. "When I first saw what they were doing, I just cried."

The new type of clear-cut, which has already been used on some federal land on a small scale, is not the logging practice demonized by environmentalists in which hundreds of acres are reduced to stumps pocking a desolate landscape. The new style is a smaller and, environmentalists hope, more calculated practice.

The patches of clear-cut are as small as a tenth of an acre or as large as 50 acres. In some cases, individual trees or small stands are left to dot the clearings.

Merrill Kaufmann of the Forest Service is one of the scientists whose research is prompting this new thinking. He and a group of researchers believe they found part of the explanation for Colorado's wildfire trends in a stand of ponderosa pine around Cheesman Reservoir.

He and researchers found that nature had thinned the ponderosa stands much differently than humans had.

The stand of trees seemed largely without pattern. Patches of old growth were intermixed with

patches of younger trees, and - most important - broad open meadows.

Kaufmann, who took an interest in fire ecology after almost losing a cabin to wildfire, saw a lesson to be learned from the pines about how fires act in nature.

"What you had was fires that would burn, sometimes for months straight," Kaufmann said. "But it wouldn't crown and run through the tops of trees like they do now."

Instead, he says, the flames would nibble their way through grasses and duff, but leave trees undamaged and able to mature into old growth. This matches the research that scientists have generally used to design thinning programs.

But Kaufmann and his fellow researchers found still more in younger stands of trees. In those areas, Kaufmann said, the fire had become more active and completely burned an individual tree or a handful of trees. Those openings provided a foothold for what are now relatively younger trees.

But it is the open spaces that provide the most controversial part of the forestry theory. In these places, he said, a blaze became highly active and turned into full-blown crown fires. Sometimes those blow-ups would consume a tenth of an acre, sometimes dozens of acres. Those blazes denuded the landscape, leaving behind dead, blackened sticks.

And in this erratic manner a fire would march across the landscape for an entire season, leaving a patchy and uneven forest.

"If we're going to return the forest to its natural condition, we're going to have to mimic that," Kaufmann concluded. "And that means in some places we open the canopy."

Kaufmann became a convert to the idea of canopy openings through the research of scientists such as Bill Baker of the University of Wyoming, Bill Romme of Colorado State University and Thomas Veblen of the University of Colorado at Boulder.

"I've said before that I thought the environmental community has been one of the biggest obstructions to a healthy forest," Kaufmann said. "But in the last year, they have really turned around, and now they're doing some great things."

The Wilderness Society's Aplet said that research by local scientists has caused him to rethink what it means to have a healthy forest.

"No doubt it's been a change for me," he said.

And the research from Colorado and Wyoming begs much deeper and broader questions about forestry across the nation: Forest ecologists may need to rethink their approach to research.

Extensive research has been done with ponderosa pine in Arizona and New Mexico, so it is somewhat surprising that the new clear-cutting ideas came from ponderosa studies. But Kaufmann and other researchers suggest that the same stand of trees will burn differently depending on where it is. Fire and forest do not mix in Colorado the same way they do in New Mexico.

"What it tells us is we need more local science," Kaufmann said.

It would be virtually impossible to open up spaces with controlled burns because that would require a crown fire, the most dangerous and erratic kind of wildfire. So, land managers are left with logging: removing all the trees in an area with chain saws and heavy equipment.

"We've got to use a tool to create canopy openings," said Chris Pague, senior conservation ecologist with the Colorado chapter of the Nature Conservancy. "And that tool almost has to be going in there and cutting."

Chuck Dennis, a project forester with the Colorado State Forest Service, said his agency has been incorporating canopy openings into its fire mitigation in recent years. The challenge, he said, has been finding ways to do it on the agency's parcels of land, which tend to be smaller than federal forests.

"I try to look at where we have existing openings," Dennis said. "By sometimes removing just a handful of trees, we can maybe connect a few openings or expand a natural existing opening. We don't have to remove a lot of trees."

Often, he said, they look for areas where openings once existed naturally.

"Those openings were there before, and they were there for a reason," Dennis said.

The logging is largely done by private contractors. What to do with the trees that are cut is a sticky issue. Leaving them in the forest creates a potential fire risk, but much of the timber that is removed is too small to be of much commercial value.

But Dennis reports that in a few short years, state foresters have seen improvements across the forest ecosystem. The Pawnee montane skipper is a butterfly that is threatened. It lives only along small stretches of the South Platte River, and 50 percent of its habitat has been destroyed by fire since 1996, according to Dennis. Last year, the State Forest Service measured a tenfold increase in the butterfly and its favorite plant, the prairie gayfeather, in areas of the new clear-cuts.

President Bush's Healthy Forest Initiative, and the Healthy Forest Act subsequently passed by Congress, have made this aggressive thinning and fire mitigation easier, according to Terry McCann of the U.S. Forest Service. On some fire-related projects of less than 1,000 acres, the Forest Service no longer has to complete an environmental impact statement, and the bar for appealing thinning projects has been raised, McCann said.

Whether this faster pace is good depends on whom you ask. McCann said the new rules have proven invaluable in protecting forests. Environmentalists such as Lisa Dale, a policy fellow with the Wilderness Society, say the relaxed process leaves the forests more vulnerable to bad decisions.

And others in the environmental community still have concerns about the clear-cuts.

"I don't have any problem with the science," Aplet said. "It's the application that I'm concerned about."

The Nature Conservancy's Pague, who endorses the idea of opening up the canopy, has some of the same reservations as Aplet about how this science will be turned into practice.

"I'd like to see them taking into account things like slope and aspect, and let's figure out how this would happen naturally and build the program around that," Pague said. "We shouldn't just say, 'We need openings, so let's start cutting.' "

Clear Creek County

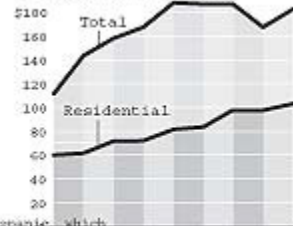


Top 10 employers

- Henderson Mine: 300
- Clear Creek School District: 125
- Clear Creek County: 125
- RMX Global Logistics: 65
- Tommyknocker Brewery: 60
- Beau Jo's: 60
- Tallgrass Spa: 50
- Safeway: 50
- Al Frei Sand and Gravel Quar: 30
- McDonald's: 30
- Public Service Company: 20

Assessed valuation

In thousands of dollars



Population: 9,100
 White: 96.4%
 Hispanic: 3.9%*
 American Indian and Alaska native: 0.7%
 Asian: 0.4%
 Black: 0.3%

Median annual household income: \$50,997

* 3.9 percent of the population is Hispanic, which is classified as an ethnic group, not a race.

Sources: U.S. Census, Clear Creek County Assessor's Office, The Denver Post