



The Butte Lightning Complex Fires in Northern California, part of the more than 1.5 million acres burned this year.

JUSTIN SULLIVAN/GETTY IMAGES

# Burning issues



**Name** Tom Bonnicksen

**Age** 67

**Occupation**

Retired forestry scientist

**Spent childhood**

Outdoors sliding down the Indiana Dunes, canoeing the upper Wisconsin River, living at 8,000 feet in the Rocky Mountains.

**On how he gathers data**

"I walk through the woods. I know every inch of these places I study. I'm on the ground all the time. And if I'm not there, I know all about it."

**Most recent book**

*America's Ancient Forests: From the Ice Age to the Age of Discovery*

**Honors**

2002 Bush Excellence in Public Service Award

**L**ate in the afternoon on the first day of summer, black-bottomed thunderheads zapped lightning down onto the parched Northern California landscape, igniting one of the state's worst fire seasons. Four months and 1.5 million scorched acres later, fires were still exploding — now near Los Angeles, forcing thousands of residents to flee.

Tom Bonnicksen is not above saying, "I told you so." A bespectacled, athletic forest research scientist and retired Texas A&M forestry professor, Bonnicksen has been warning of catastrophic wildfire in California and throughout the West for over 30 years. The reasons are simple and everyone knows them, he says: Too much forest fuel and too little logging on public lands.

"Wildfires are bad and getting worse every year because of a misguided public belief that all fires are good and all management is bad," he says.

Far more is at stake than charred landscapes. In March, Bonnicksen published a carbon emissions study that identifies wildfire as one of the primary sparks for a climate doomsday scenario lasting into the next century. He found that four California wildfires, burning in the northern Sierra Nevada and southern Cascades between 1992 and 2007, released carbon dioxide at levels a whopping 19 times greater than previously accepted scientific estimates. Each acre of burned forest emits greenhouse gases equal to the annual exhaust from 48 cars, according to his research. His conclusion? Reducing the size and severity of wildfires may be the single most important action we can take to fight global warming.

His method? More logging.

Thinning crowded thickets and removing undergrowth created by a century of fire suppression will, he says, reduce the threat of what he calls "monster fires." Bonnicksen's model forests would replicate the historic landscape by creating natural firebreaks in a mosaic of openings interspersed among patches of older and younger trees.

A straightforward and uncompromising man, Bonnicksen has authored scores of op-eds — many of them funded by the timber industry — touting chain saws instead of natural fire to maintain giant sequoia stands, and railing against "extremists" who use "hyperbole... and myths" to oppose logging burned forests. Bonnicksen is also an avid outdoorsman who has worked for the National Park Service and championed park and wilderness designations.

But his fiercest advocacy has been for heavier logging.

Bonnicksen's forest-management proposals have so infuriated the research community that in 2006, four of the most prominent forest scientists sent an open letter to the media questioning his academic qualifications and his credibility. That prompted a response from yet another group of forest scientists, decrying the "attack" on their colleague.

Ever the contrarian, in his recent study Bonnicksen challenges the generally accepted view that forests continue to store significant amounts of carbon even after fires. Unlike most forest carbon studies, Bonnicksen's — which was partially funded by the Forest Foundation, a nonprofit organization supported by Sierra Pacific Industries, Georgia Pacific and other timber companies — measures carbon dioxide and other greenhouse gases emitted by the decay of dead, burned trees. Of the 38 million tons of gases released from the four fires, he estimates that two-thirds will come from decomposing forest debris over the next century. Most of the sequestered carbon will be back in the atmosphere within 50 years, Bonnicksen says.

Those findings drew a harsh rebuke from Philip Rundel, a UCLA professor of ecology and evolutionary biology. Bonnicksen ignores post-fire growth, which pulls enough carbon dioxide out of the air to offset increased emissions from decaying trees, Rundel says. Rundel, who signed the open letter to the media, calls Bonnicksen's carbon argument "a red herring" and dismisses his calculations as "naive and dangerously misguided."

Bonnicksen has also caused a stir among U.S. Forest Service scientists who are working on their own carbon-cycle studies. Mark Nechodom, the agency's climate science policy coordinator for the Pacific Southwest region, believes Bonnicksen overestimated the greenhouse gas emissions from the four fires he evaluated. But he also credits him for challenging scientists to find out more about how forests are affecting the carbon cycle. Bonnicksen's work is sure to drive new scientific studies, some of them designed simply to prove him wrong. "We may disagree with Tom's intensive management, but this is a good debate to be having, even if it makes some of us nervous," Nechodom says.

Bonnicksen shrugs off both the compliments and the criticism. "I tend to be conspicuous," he says. "It's not a function of ego. I really believe in what I do. I'd rather be fishing than anything else, but I do this because I care."

BY JANE BRAXTON LITTLE