The 2000 Wildfires: What can we learn for future management of wildlands?

William A. Patterson III, Professor
Forestry Program
University of Massachusetts, Amherst

As a professional forester, forestry educator, fire ecologist, and qualified "burn boss," I am fascinated by the debate that has developed around this past summer's wildfires. The press seems anxious to blame someone for the loss of firefighters' lives, homes, and seven million acres of forest and rangeland. Others are ready to condemn fire professionals for not preventing the tragedy. Proposals to solve the problem of increasing damage are appearing on the editorial pages of major newspapers, but many that I have seen ignore lessons we should have learned from past efforts.

Problems associated with preventing and controlling wildland fires have challenged conservation-minded people for more than a century. After nearly three decades of involvement with fire management issues, I've concluded that we are going to have to resign ourselves to a certain level of wildland fire. Even if we use all the tools we have available to prevent and stop forest fires, we will fall far short of complete success. And even if we were to succeed, we would, at the same time, adversely impact the habitats of many of our most endangered plant and animal species.

But, we should not blame early conservationists for trying to extinguish wildfires. Many who today call wildfire suppression a "failed practice" ignore the history behind this important public policy. The threat that wildfires posed to people in rural areas in the late 19th and early 20th centuries was very real. In 1871, an enormous conflagration burned through cutover lands and engulfed the town of Peshtigo, Wisc., leaving 1,500 of its citizens dead. The Hinckley, Minn., fire of 1894 killed 418; and the Great Idaho fire of 1910 burned 3 million acres of uncut timber and left 85 dead.

How would we react to such a threat today? What if a fatal, mosquito-borne disease threatened the lives of people living in towns in New York, Massachusetts, or Virginia? Who would argue with a call to eradicate mosquitoes, at any cost?

Until recently, wildfires represented a comparable threat to many people in rural America. So it is not surprising that, when they were organized in the first half of the twentieth century, fledgling forestry agencies – both state and federal - were charged, first and foremost, with controlling wildfires. Today's professional foresters did not invent fire suppression. The need to suppress wildfires all but invented forestry.

Although modern fire control has largely succeeded preventing the loss of life among the public, the wildfire seasons of 1988, 1994, and 2000 have demonstrated that suppression is not enough. Foresters have, for years, advocated controlled burning and mechanical removal of trees to reduce fuel accumulations. Both strategies have merit, but neither will, alone or in combination solve the underlying problem.

I have lit as many prescribed burns in New England as anyone and am acutely aware of the limitations of that practice, especially when we burn close to where people live and work. Those who advocate increasing the one million acres per year we now burn by two or three fold, fail to consider the limitations of increased burning. The risk of fire escapes will increase, as will air pollution near population centers. Weather already limits our opportunities to burn, as well a critical shortage of skilled fire managers to implement controlled burns.

Imagine three million acres of western woodlands burning and ask yourself, will neighboring homeowners really put up with the smoke and temporarily blackened forests, even if they are told that burning today might prevent the loss of their homes tomorrow? Will local governments be willing to accept the risk of fire singeing parklands, or threatening roadway safety? I have to deal with these questions every time that I burn in Massachusetts. Too often, the answer is “No!” I suspect that as populated areas encroach on wild areas and people build more deeply in the forest, there will be fewer, not more, opportunities to use controlled burning to prevent wildfires.

Some have advocated increased logging, yet logging or even thinning young, dense stands, is not likely to reduce fire hazard on a large scale. I am unconvinced that thinning would have prevented the start or spread of fires in many of the forest types that burned this past summer.

Civilian Conservation Crews worked all through the 1930s to "clean up" underbrush in the spruce-fir forests of Acadia National Park in Maine. But in 1947, after the driest fall on record, an 18,000-acre wildfire on Mt. Desert Island burned nearly 30 percent of the Park and a third of the town of Bar Harbor. Fires in Maine that year caused an estimated $2.5 billion in damage (in 1997 dollars).

I believe that we are going to have to accept what history has shown us – that there will always be some fires burning on the landscape. Fire predates the evolution of humans, and, in the long run, it will outlive us. We will have to reach some accommodation with fire, and an accommodation must start with our placing reasonable limits on our efforts to alter the course of natural events. We can't let all fires burn, but we can't put all of them out, either. Instead, we must focus our efforts – which should include a combination of fire suppression, controlled burning, and mechanical treatments – on those areas where human lives and resources are at greatest risk.

We can not eliminate a force that has shaped the landscape and the evolution of species for millions of years. When a region has as many fires burning as the northern Rockies in August, the public will have to accept that some fires will burn until nature puts them out. Seasoned firefighters will tell you that, despite “complete fire suppression”, that has been happening for years.