## Seven Myths about Forest Fires

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The debate over how to protect against wildfires and restore health to our forests, especially in the western United States, is probably the most important ecological debate of our time. Yet like so many important issues, the debate is fraught with misinformation.

Forty years of forestry and fire experience have taught me that such misinformation can do as much damage to forests as any fire. I compiled a list of current myths and their corresponding realities, which should prove helpful for the average citizen.

Myth 1: All fires are good and forest management is bad.

This argument confuses small, naturally occurring fires with large conflagrations, and calls all of them good. It blames forest managers for wanting to thin our incredibly thick forests to prevent their destruction.

Historically, natural fires burned a far different kind of forest than the uniformly thick, overpopulated forests we have today. Many forests of the past were resistant to monster fires, with open understories, and clearings and patches of open forest that acted as mini-fuel breaks. So fires were far smaller and less severe than today. These lighter and naturally contained fires cleared away potentially dangerous fuels.

Fires can't burn that way in modern forests. They sweep through an abundance of fuel, burn super-hot, destroy whole forests, and leave a desolate landscape scarred by erosion and littered with dead animals. Sadly, many of these monster fires also destroy the seed trees needed to restore a forest, and planting young trees often is blocked by people who think it is unnatural. The result is brush fields that gradually replace our forests.

This is why forest management, which involves thinning in order to make our forests more like they used to be, naturally resistant to fire, is so desperately needed.

Myth 2: Wildfires and massive infestations of insects are a natural way for forests to thin and rejuvenate themselves.

On the contrary, "no-cut" policies and total fire suppression have created the overcrowded forest conditions that enable fires and tree destroying insects to spread over vast areas. The resulting devastation is not natural. It is human-caused.

We must accept responsibility for the crisis we created and correct the problem.

**Myth 3**: If management is unavoidable, then deliberately set fires, or prescribed fires, are the best way to solve today's wildfire crisis.

Prescribed fire can be an effective tool in some cases, but it is ineffective and unsafe in the overcrowded forests of today. It is ineffective because any fire that is hot enough to kill trees over a few inches in diameter, which is too small to eliminate the fire hazard in many forests, has a high probability of becoming uncontrollable. Many forests are crowded with trees 12-24 inches in diameter that grew to that size because of over a hundred years of neglect.

Even carefully planned fires can be unsafe, as the 2000 Los Alamos fire amply demonstrated. A chainsaw would do wonders and it is far less dangerous than setting fires to thin forests.

**Myth 4:** Thinning narrow strips of forest around communities, or fuel breaks, is more than adequate as a defense against wildfire.

Anyone who thinks roaring wildfires can't penetrate these narrow barriers could not be more mistaken. Fires often jump over railroad tracks and even divided highways. In strong winds and high temperatures any fuel break less than a quarter to a half mile wide is ineffective.

Fuel breaks are also impractical in many areas because forest communities are spread out, with homes and businesses scattered over the landscape. And fuel breaks only work if firefighters are on the scene to attack the fire when it enters the area. Otherwise, the fire will drop to the ground below the trees and move along the forest floor even faster than in a thick forest.

The 2007 Angora Fire in South Lake Tahoe proves the point. One narrow shaded fuel break built by the Forest Service failed. The widely spaced trees on the fuel break were saved, but that was not the purpose of building it. It was supposed to help save the community, but 254 homes were destroyed.

Myth 5: Defensible space around your home will save it from a wildfire.

Again, the Angora Fire and many others not named here, demonstrate how such an idea can lead to a false sense of security.

It didn't matter whether homeowners thinned trees on their property or took other precautions like raking needles to create defensible space. Everyone was vulnerable because burning debris came from half a mile away and simply fell from the sky on their houses. After the Angora Fire, I saw houses with metal roofs lying on their foundations and houses with few trees on the property that were entirely gone. High winds also blasted flaming pinecones and branches through windows where they set homes on fire from the inside.

Myth 6: Removing dead trees killed by wind, insects or fire will not reduce the fire hazard.

Can you light a fire in an empty fireplace? Of course not. You need fuel and the more fuel the hotter the fire. If dead trees are not removed, they fall into jackstraw piles intermingled with heavy brush and small trees. These extreme fuels become bone dry by late summer, especially during a drought, and will create a savage wildfire if ignited.

Acting quickly to rehabilitate a wind or insect ravaged forest, or a burned forest, is one of the surest ways to prevent wildfires or dampen their spread.

Myth 7: We should use taxpayer money to solve the wildfire crisis rather than involve private enterprise.

The private sector must be involved. A minimum of 73 million acres of federal forest needs immediate thinning and restoration. Another 120 million also need treatment. Subsequent maintenance treatments must be done on a 15-year cycle.

The total cost for initial treatment would be \$60 billion, or about \$4 billion per year for 15 years. Then it would cost about \$31 billion for each of the following 15-year maintenance cycles.

This is far more money than the taxpayers will bear. But if private companies could harvest and thin only the trees required to restore and sustain a healthy, fire-resistant forest, the tax burden would be lessened dramatically. In exchange, companies could sell the wood and minimize public expenditures.

**The obvious conclusion:** There aren't any shortcuts. Human intervention has created forests that are dense, overgrown tinderboxes where unnatural monster fires are inevitable. This means we must manage our forest to prevent and limit wildfires. Leaving forests alone caused the problem and it will lead to even greater destruction if we continue this failed policy.

We have to restore our forests to their natural fire resistant and productive condition. Thinning and restoring forests on a landscape level is the only way to safeguard our natural heritage and protect people and property.

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