

# Protect Your Property From **Wildfire**

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## *Prepare before wildfire strikes*

Every year many families lose their homes and possessions to the ravages of wildfire; however, losses can be minimized. As a backyard woods owner, you play a key role in wildfire protection. How you maintain your woods can reduce the occurrence, size, and intensity of a wildfire.

### **Understanding wildfire**

#### ***Fire requirements***

Fire needs oxygen, fuel, and heat to burn. To prevent fire, you need to eliminate or reduce the availability of these ingredients. Since oxygen is always present in the air, the focus of fire prevention is on fuel and heat sources.

Fuel can be living or dead material that will ignite, carry fire, and burn. In your backyard woods, fuel includes standing and fallen trees, shrubs, and ground cover. Your home and outbuildings are also fuel. Fuels on the ground allow fire to spread more easily along the ground. Fuels above the ground allow fire to spread upwards and even climb into the crowns (tops) of trees, where it can spread rapidly from tree to tree.

Heat can be generated naturally by lightning or by people through sources such as chimneys, barbecue grills, and incinerators. Heat from a fire radiates in all directions, particularly upward. Sparks and embers can be carried aloft by air currents and deposited up to 1 mile away from a fire.

#### ***Fire behavior***

When the essential ingredients for fire are present, weather and topography affect how fire will behave. Weather is the more important factor because it affects the moisture content of fuels. High temperatures dry and preheat fuels. Low relative humidity and wind also dry fuels out. Dry preheated fuels require less added heat to start a fire. Wind also affects how large a fire will become, by affecting the direction and speed at which the fire will move.

Topography or slope of the land also affects how fast a fire will spread. Fires tend to spread much faster uphill. In general, fire can spread 1½ to 2 times faster up a 45 percent slope than it does over flat terrain. Fires spread fastest on hillsides facing west or south because they are exposed to more direct sunlight, which causes the fuels to be drier.

#### **Protecting your home and property**

An untreated wood shake roof is the number one cause of home loss from wildfires. Wind blown sparks easily ignite these roofs, and roof sprinklers do not provide adequate protection. Consider class-A asphalt shingles, slate or clay tile, metal, concrete products, or terra-cotta tiles when constructing or replacing the roof on your home.

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