

# FORESTRY 101

## Steps to Defend Your Home from Wildfire

by Diana Olszowy

Photos courtesy: Kentucky Division of Forestry

**F**or whatever reason you decided to build your home next to or within woodlands, please understand that your home could be in danger from wildfires. Most of Kentucky's wildfires are caused by humans – 99%, as a matter of fact. Some are accidental, such as unmonitored debris burning, campfires, and sparks from farm equipment, but sadly, many are intentionally set.

One of the ways of protecting your home from wildfire is to create defensible space (see Kentucky Woodlands Magazine, Vol. 2, Issue 2, "The Good, the Bad and the Firewise" on page 12). Defensible space is simply defined as the area around a structure where forest fuels and vegetation are treated, cleared, or reduced to slow the spread of wildfire toward the structure. The creation of defensible space also reduces the chance of a structure fire moving from the building to the surrounding forest. Your home is more likely to withstand a wildfire if grasses, brush, trees, and other common forest fuels are managed to reduce the fire's intensity.

Many folks don't view the plants growing on their property as a threat. All vegetation, including native and non-native plants, can serve as potential fuel for a wildfire. If vegetation is properly maintained, a wildfire can be slowed, the length of flame shortened, and the amount of heat reduced. All of these factors can assist firefighters in defending your home.

When creating defensible space around your home, there are three main steps that you will need to follow:

1. **Lean** – prune shrubs and cut back tree branches, especially those within 15 feet of your chimney.
2. **Clean** – remove all dead plant material from around your home; this material includes dead leaves, dry grass, and stacked firewood.
3. **Green** – plant fire-resistant vegetation that is healthy and green for most of the year.



*Wildfire can quickly spread from burning woodlands to your home. Fortunately, there are a number of steps that homeowners can do to make their homes better prepared.*

### How Firewise savvy are you?

Use this checklist to determine if your home and property are adequately protected:

- ☐ Use low-growing, herbaceous (non-woody) plants that stay green during the fire season. Herbaceous plants include grasses, variety of ground covers, bedding plants, bulbs, and perennial flowers.
- ☐ Use mulches, rock, and non-combustible hard surfaces (concrete, sidewalks, brick patios, and asphalt drive ways).
- ☐ Keep deciduous, native, and ornamental trees and shrubs healthy and free of dead branches.
- ☐ Minimize the use of native and ornamental coniferous shrubs and trees (such as juniper, arborvitae, and mugo pine) and tall exotic grasses.
- ☐ Retain small groups of wild shrubs and trees as long as they are kept free of deadwood and pruned to reduce the amount of fuel. Keep vines from crawling up onto the house – they can serve as fuel ladders to your roof.
- ☐ Remove tree limbs that grow within 15 feet of a chimney, encroach on power lines, or touch the house.

By changing the characteristics of the surrounding vegetation, you will reduce the wildfire threat to your home. Please realize that there are NO fireproof plants, but some are more fire resistant than others. Suggested species include:

Basswood	Dogwood	Kentucky	Persimmon
Birch	Elm	coffeetree	Poplar
Blackgum	Hackberry	Locust	Redbud
Buckeye	Hawthorn	Magnolia	Sassafras
Buttonbush	Hazelnut	Maple	Serviceberry
Catalpa	Hickory	Mulberry	Spicebush
Cherry	Hophornbeam	Oak	Sweetgum
Crabapple	Horsechestnut	Pawpaw	Walnut

A landscape is a dynamic system that constantly grows and changes. Plants considered fire resistant with low fuel volumes can lose these characteristics over time. Your landscape and the plants in it must be maintained to retain their "Firewise" properties.

- ☐ Be aware of the growth habits of the plants within your landscape and of the changes that occur throughout the seasons.
- ☐ Remove annuals and prune perennials after they have gone to seed or when the stems become overly dry.
- ☐ Rake up leaves and other litter as it builds up through the season.
- ☐ Mow or trim grasses to a low height within your defensible space (approximately 30 feet).
- ☐ Remove plant parts damaged by snow, wind, frost, or other agents.
- ☐ Prune all plants, trees, and shrubs in a timely manner; this step is critical. Pruning not only reduces fuel volumes but also results in healthier plants by producing more vigorous growth.
- ☐ Maintain your landscaping. This step is an important part of your home's defense system.
- ☐ Maintain your defensible space, or it will be compromised through lack of maintenance.

Maintenance provides fire safety. Over time, plants grow and spread; mulches dry out; leaves and pine needles accumulate. All these factors contribute to the fuels from which a fire grows. Proper maintenance improves the appearance and helps protect your home from wildfire.

- ☐ Adequate defensible space is available. A minimum of 30 feet around the home and each structure is needed.
- ☐ The grass is mowed regularly and leaves and pine needles are cleared within the defensible space area.
- ☐ The firewood is stacked or stored at least 30 feet from the house.
- ☐ A hose that reaches all the way around the house is readily available (a 100-foot hose is recommended).
- ☐ The propane (LPG) tank is located at least 10 feet from the house and weeds, tall grasses, and vines have been cleared.

- ☐ Tree branches overhanging the roof have been pruned within 15-20 feet of the chimney.
- ☐ A mobile home should have underpinning/skirting materials all the way around the structure to prevent the accumulation of flammable debris.
- ☐ The driveway can accommodate local fire department vehicles (it should be 12-feet wide or larger).
- ☐ The house number is highly visible on the home (at least 4 inches tall) and at the entrance of the driveway.
- ☐ The gutters are free of dead leaves, moss, pine needles, and twigs.
- ☐ A ladder, fire extinguisher, and hand tools such as rakes, shovels, and axes are readily available.
- ☐ A spark arrester has been installed on the chimney (a 1/2-inch mesh screen is recommended).
- ☐ An escape plan has been developed and discussed with family members.
- ☐ Your homeowner's insurance policy has adequate coverage for the costs of rebuilding and repairs needed in the case of a catastrophic wildfire.



*Simple tasks such as keeping your gutters free of debris can help make your home more Firewise by reducing the likelihood that a burning ember will start a fire in your gutters.*

For more information about Firewise practices, visit the Division of Forestry's website at <http://forestry.ky.gov/wildlandfiremanagement/Pages/KentuckyFirewiseProgram.aspx> or visit the national Firewise Communities website at [www.firewise.org/](http://www.firewise.org/).

#### About the Author:

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*This diagram depicts a Firewise home. How prepared is your home? Being prepared for wildfire is especially important if your home is near woodlands.*