

## 25 Tips to Make Your Home Firewise



Two homes were destroyed by wildfire near Brainerd on May 31, 2002. Over 100 more were threatened and evacuated. Eight other homes have been lost to wildfire in Minnesota since 1999. How do you keep your home from burning?

There are four factors you can control that affect whether your home will survive a wildfire. They are access, site, structure and burning practices.

### Access

The access to your home not only affects how easily firefighters can reach and protect your home, but how easily other emergency vehicles can find and reach your home. It starts with signage. Your local fire department may know where your house is, but assisting departments won't easily find your home if your address is not visible from the road.

**TIP 1:** In mid-summer, when vegetation is fully leaved, go to the street and see if you can read your address. If you can't, you may need to move the sign or make it bigger. Remember that at times smoke or darkness may make it harder to see your address.

Once firefighters find your home, they need to be able to get to it. If your driveway is less than 150 feet long, firefighters can reach your home from the street. Your driveway should be at least 12 feet wide and be clear of branches 14 feet up. Longer driveways need to be 20 feet wide. The driveway should also have a firm, all-weather surface and any bridges or culverts should be rated to 10,000 pounds. Curves in long driveways need to be gentle to accommodate large emergency vehicles. Long driveways also need a turnaround near the house. Without a good access, and escape route, firefighters will not endanger themselves to save your home.

**TIP 2:** Widen your driveway to at least 12 feet, and prune overhanging branches to a height of 14 feet. If your driveway is longer than 150 feet, widen it to 20 feet. Also make sure your driveway has a solid driving surface and all culverts and bridges can accommodate heavy fire trucks.

**TIP 3:** If your driveway is over 150 feet long, make sure there is a large turnaround near the house. The turnaround radius should be at least 30 feet.

## Site

The site your home is on is even more critical than the access. In rural areas, fire departments are seriously understaffed for handling large wildfires with hundreds of homes at risk. Your home may need to stand without firefighter protection. How your home is situated on the lot will determine whether it can survive alone and also whether firefighters can defend it. The critical area is the thirty feet directly surrounding your home. This is called the home defensible zone. If there are any outbuildings within these thirty feet, the home defensible zone needs to be extended thirty feet beyond those buildings. Inside the home defensible zone, anything flammable needs to be removed or modified.

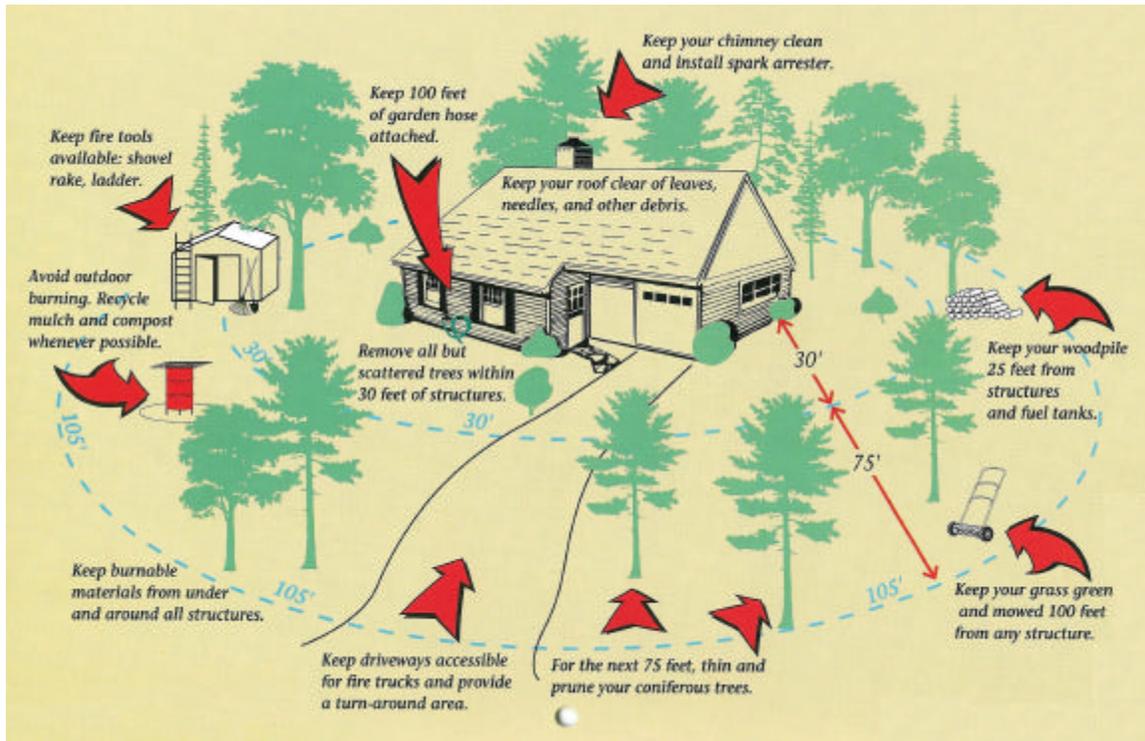


Figure 1: Courtesy Wisconsin DNR

**TIP 4:** Look at the trees. If the trees are predominantly evergreens, which are highly flammable, a ten-foot minimum space between the crowns (branches of adjacent trees) should be maintained. This keeps fire from jumping through the crowns. Also make sure you maintain this distance from tree to house. You may need to remove a few trees.

**TIP 5:** Look at the vertical arrangement of the vegetation. Is there continuous fuel (grass, leaves, branches) reaching from the ground to the crowns of the trees? This is called ladder fuel because it provides a “ladder” for fire to climb from the ground to the crown. Eliminate this ladder fuel by mowing tall grass, trimming shrubs and pruning the lower branches off trees up six to ten feet.

**TIP 6:** That firewood pile so conveniently placed by the back door should be moved outside the home defensible zone by March each year. Sparks from a wildfire can easily catch in firewood piles, and the intense heat of those burning piles next to the house will catch the house on fire.

**TIP 7:** Each spring clean leaf and needle fall that accumulates in foundation plantings, next to buildings and under decks. Take special care to clean out dead leaves from arborvitae next to buildings. Better yet, replace those arborvitae with leafy plants.

**TIP 8:** Use rock and stone landscaping materials next to buildings.

**TIP 9:** Clean up the home defensible zone. Remove old cars, lumber piles, downed trees and other debris. Is there enough space for firefighters to protect the backside of the home? Remove obstructing debris and trees and make sure fences have easily accessible gates.

**TIP 10:** Keep the lawn watered and mowed short (3 inches or less) on all sides of all buildings. A short, green lawn will not carry fire.

**TIP 11:** Clear a 10 foot space around propane tanks. Keep this space in gravel, rock or short, well-watered grass. Propane tanks should be located at least 10 feet from the home.

As we look beyond the thirty-foot home defensible space, the woods one hundred feet beyond our house is another thing to look at. Reducing fuels in this area will reduce the intensity of an approaching wildfire. Trees might need thinning (removal of some) to increase their spacing. This is especially important for evergreens, which typically have been planted or naturally seed at high densities. Pruning the remaining trees up six to ten feet and reducing underbrush can also help reduce wildfire intensity.

**TIP 12:** Remove enough evergreen trees in the 100 feet perimeter of the house, so their branches are at least 10 feet apart. Prune the lower branches of the remaining evergreens up six to ten feet, but no more than 1/3 of the total live crown.

### **Structure**

The next factor to look at is the structure itself. Most of the home modifications needed to further reduce wildfire risk can be expensive. They include residing with brick, stone, stucco or steel, replacing shake roofing with class A shingles or steel, and enclosing foundations with steel or masonry. Some less expensive modifications can be made to other parts of the home.

**TIP 13:** When updating your home, consider less flammable materials such as brick, stone and metal for roofing and siding.

**TIP 14:** Does fireplace chimney have an effective spark arrestor? Inspect your chimney annually for cracks in the brick and liner. Clean fireplace and wood stove chimneys at least twice annually.

**TIP 15:** Clean the roof and gutters of leaves, needles and other debris each spring. Clean accumulations of leaves from windowsills.

**TIP 16:** Make sure the soffits are enclosed with a solid barrier and that vents are screened with a fine mesh to keep out flying embers.

**TIP 17:** Radiant heat from a large wildfire can actually ignite sheer curtains inside of homes through large glass windows. Consider closeable shutters for large windows.

**TIP 18:** Enclose foundations of homes, outbuildings and trailers, plus decks and overhangs with solid flame-resistant sheeting to keep sparks from igniting materials underneath.

**TIP 19:** Make sure you have smoke detectors on each floor of your home and check them each fall to make sure they work.

### **Burning Practices & Other Fire Hazards**

The burning practices of you and your neighbors can contribute to the risk of home loss from wildfire. The number one cause of wildfires in Minnesota is escaped debris burning fires.

**TIP 20:** If you burn leaves and debris, consider alternatives like composting.

**TIP 21:** Make sure recreational fires are made in a fire-safe pit or container and completely extinguished before leaving. Before lighting any outdoor fire, check for local restrictions and permit requirements. Avoid lighting fires when High winds, high temperatures and low humidities are present or predicted.

**TIP 22:** Do not dispose of ashes until they are cold to the touch.

**TIP 23:** Store gasoline, oily rags and other flammable materials in approved safety cans. Keep those safety cans in a fire-resistant metal or brick building or your garage.

**TIP 24:** Are there any branches close to power lines on your property? Ask the power company to clear them.

**TIP 25:** Make sure motorized garden equipment, such as lawnmowers and chainsaws have approved and functioning spark arrestors.

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