

Wildfire Preparedness Month Part 2: Defensible Space and Firewise Landscaping

May is Wildfire Preparedness Month. Last week, the City shared information about protecting and retrofitting your home's exterior features, such as the roof, eaves, foundation, and decking. In the second article of our series, we focus on defensible space and firewise landscaping.

What is defensible space?

The first 30 feet from your home in all directions is called your defensible space. Maintaining defensible space is key to improving your home's chance of surviving a wildfire and acts as a buffer zone.

Within the defensible space, the first few feet from the foundation are very important and should be a non-combustible zone. This is the most important zone to take immediate action on as it is the most vulnerable to embers. Fire in this area can increase the chance of damage or destruction of the structure, including the deck, outbuildings and fencing.

Why firewise landscaping matters

Plants placed so that a fire can spread to your home increases the chance of your home receiving direct flame and embers. Your home becomes a continuation of the fuel!

For example, decks and siding can ignite when plants that burn quickly and produce high heat are adjacent to a home. A burning plant near a window can break glass, allowing fire to enter a home. Taller flames can enter through soffits and may reach combustible materials and cause material failure, such as gutter or siding that melts, which exposes the wood.

Fire can reach the crowns of trees if plants are layered in such a way that the fire climbs into the treetops (ladder fuels). When flames burn through the tree canopy, intense heat and embers are given off, which can fall on the roof and surrounding vegetation.

Creating "defensible space" will greatly reduce your home's risk. Firewise landscaping helps keep ground fires low, with less intensity. Fire-resistant plants placed in a specific manner lessens the chance of fire reaching a home, allowing the continuity of fuel to be broken up within the 30 feet of defensible space.

The right plant for the right place

In firewise landscaping, flammable plants and materials are kept away from the side of the house so both vertical and horizontal separation of fuels is maintained. Dead vegetation is removed. Highly flammable plants are removed or isolated.

In the vertical space, trees hanging over the roof and those located in the first 10 feet from the home also can cause fire problems. Keep more volatile and larger trees and plants to the outer portions of the defensible space.

In the second zone, 30 to 100 feet from the home, more plants can be present. However, the same principles apply. Firewood, small brush piles or stacks of building materials should be moved to this zone or further away.

While there is no “fireproof” plant, there are plant characteristics to consider when planning a firewise yard or landscape. The characteristics can be separated into the following two groups: fire resistance and growth characteristics.

Fire resistance incorporates how readily a plant will catch fire (ignitability). Plants that do not readily ignite and can withstand high temperatures are best. These include plants with high-moisture content and watery stems (lacking resins, oils and volatiles). Combustibility is how much energy the plant releases. Highly combustible plants produce a lot of heat and long flame lengths. If planted near other vegetation, these plants contribute to fire spread. Plants that produce a large amount of embers also increase risk. Embers can land in leaf litter or enter the home through vents and other openings.

Growth rate and pattern describe the amount of vegetation that is present. A plant with a fast growth rate produces more fuel. Slower-growing plants reduce trimming and maintenance time and are recommended for defensible space. Growth pattern relates to a plant’s natural growth characteristics. Low-growing, less dense plants help maintain the vertical separation of fuels and produce less material to burn. A dense (compacted) plant contains more fuel than light-structured and open-branched species.

The following are examples of acceptable fire-resistant plants that could be used in your defensible space. There are many more to choose from with fire-resistant characteristics. Check with a local plant nursery.

- **First 10 feet:** (Low growing/moist) Columbine, Primrose, Violet, Phlox
- **10 feet to 30 feet:** (Taller plants) Bluebells, Aster, Bluebonnet, Gay feather
- **30 feet and beyond:** (Shrubs) Lantana, Butterfly bush, Beauty berry, Turks cap

Below are recommendations for spacing ideas and maintenance to help make your landscape firewise.

0-5 feet from home

Keep vegetation away from the first 5 feet of the home. Remove combustibles (woody plants, mulch, leaves, needles, firewood piles, and stored items) surrounding any structure and under and around attached decks. Cut grass or install hardscaping.

5-10 feet from home

Plants that are low to the ground, green and healthy are best. Use moist plants around the foundation. Keep them properly watered and avoid large clumps of plants that can generate high heat. Use rock or stone instead of mulch to create a buffer between grass

and foundation. Keep shrubs small, prune properly, clean under plants, and maintain a mowed lawn.

10-30 feet from home

This area can have trees, shrubs, and grass that is cut short. Remove ladder fuels that allow fire to climb from lower to higher vegetation. Deciduous tree species with wide, broad leaves are best. Shrubbery and bushes should be placed away from trees and planted in islands or groupings. Use brick or stone along the edges of islands to slow flame spread. Single plants or groups within islands provide a separation of fuels and are decorative. Small to medium deciduous trees are preferable to evergreens in this zone.

Horseshoe Bay is fortunate to have a community of caring people who help during disasters who serve as wonderful ambassadors. The Citizen Emergency Response Team (CERT) is trained to assist emergency services before, during and after disasters. Wildfire risk reduction is included in their training. If you wish to have your home evaluated for wildfire risk, contact the Fire Department at (830) 598-6953 or stop by the closest fire station. To learn more about CERT, email Fire Chief Doug Fowler at dfowler@horseshoe-bay-tx.gov. To see more resources, including a home assessment form and photos of a local home with good defensible space, visit www.horseshoe-bay-tx.gov/wildfire.



A good example of firewise landscaping.



Trees are several feet from structures and there are no "ladder fuels" near them.