

Firewise Gardening

Photo “OSU Firewise Landscaping”:

This Oregon State University Extension Service diagram illustrates the “recommended” and “not-recommended” principles of firewise landscaping for Flagstaff area homes.

(photo credit: Oregon State University)

After receiving less than ten inches of snow for the entire winter period of December through February, it was such a blessing to have larger snow storms the first few weeks of March. Unfortunately, though, this year’s snow totals are nowhere near the over one hundred inches we usually receive in an average winter. Although we may receive some additional moisture in April and May, this dry winter is setting us up for a potentially extreme fire season ahead.

In order to reduce the likelihood of property loss due to wildfire, we need to address potential hazards of the vegetation around our homes. While the principles of firewise landscaping can be expensive and laborious in application, they can make a huge impact in minimizing the risk of wildfire damage to your property. The primary goal is to create defensible space by dividing your land into a series of zones, determined by distance from your home, in which you reduce flammable materials.. Below, I review some of the key practices related to firewise gardening, however, for a complete description of the zonal concept and other topics related to wildfire preparation, please see the Flagstaff Fire Department’s “Ready, Set, Go, Action Guide” accessible on their website

(https://www.flagstaff.az.gov/DocumentCenter/View/84519/NEW_Flagstaff_NAG_InDesign_7224).

To begin, when selecting plants, focus on fire-resistant species. In general, fire-resistant species have open and loose branching patterns, create little dead wood and tend not to accumulate dry, dead material in their interiors. Their sap is water like and does not have a strong odor which is a sign of low resin content. Leaves are wide, flat, moist and supple. Good examples include succulents (i.e. hardy ice plant or agave), flowering herbaceous perennials (i.e. rudbeckia, gaillardia, or columbine) and deciduous shrubs like serviceberry and French lilacs. These features can be contrasted with plants that are highly flammable and should be avoided. These plants contain fine, dry or dead material, such as twigs, needles and leaves and/or loose or papery bark. Signs of high flammability also include leaves, twigs and stems that are aromatic when crushed indicating high volatile waxes, terpenes or oils or sap that is gummy, resinous and has a strong odor. Good examples of highly flammable plants are species that continue to be used in Flagstaff gardens including arborvitae and ornamental junipers. If you have these plants take a moment and look inside their interiors to see all the dead material that make these shrubs highly combustible. Consider removing and replacing them this spring, especially if they are closer than 5 feet to your house .

Once you have selected fire-resistant plants, your design and layout is key to stopping creation of ladder fuels--vegetation such as shrubs and lower branches on trees-- that allow a fire to climb from the ground into tree canopies and structures. In this way, place plants in groupings with enough space between to break up continuous fuels around your home. This strategic placement

will also allow for adequate air circulation which will help keep plants healthy and less fire prone.

As part of your landscape design, be sure to incorporate as many non-combustible materials or ignition-resistant materials as possible, such as metals for decks, fences, roofs, and other structures. This means my ugly chain link fence I have been considering replacing should stay after all. Also, when appropriate, opt for inorganic mulch such as gravel or river rock as well as landscape boulders for accents to reduce plant density.

When it comes to maintaining your garden, correct pruning is essential to preventing ladder fuels. Regularly prune trees and shrubs to remove dead or diseased branches while trimming touching or over-hanging branches to a distance of at least ten feet from your roof. Be sure to maintain separation between low-level vegetation and tree canopies/trunks and keep lawns, native grasses, and wildflowers trimmed to several inches in height.

Finally, a tidy garden is a firewise garden. This means regularly removing debris and dead leaves from your yard, roof and gutters. Although these materials can be composted, pine needles present a special case in that they don't compost easily or that they burn readily. Ponderosa forests are naturally a fire dependent ecosystem whereby the annual pine needle drop plays an important role in creating fuels for low intensity fires. Studies also demonstrate that pine needles provide important habitat and overwinter sites for wildlife. However, dense carpets of pine needles around our homes now present significant fire threat to our properties and thus they need to be removed. This means pine needle pick up is a year round activity for Flagstaff gardeners! What to do with all the volume? Fill the extra space in your dumpster each week with a load of pine needles.

Luckily, laboring away in our gardens is what gardening is all about! While hoping for more precipitation this spring, we can have fun making our yards more firewise.

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