

Firewise Landscape Choices

by Ellie Insley, Sonoma Ecology Center



In preparing a firewise landscape there are many questions and choices a homeowner will encounter. Many of us are anxious about protecting our homes and landscapes from devastating fires, but are stumped by sometimes confusing or conflicting information, and challenging requirements. Depending on the location of the property, an assessment of risk, local requirements and many other considerations, each of us will make different decisions. Further, research is ongoing and new information will continue to emerge. Some of the decisions will be based on our capacity to do garden maintenance, and a balance of risk, aesthetic and ecological preferences. Some decisions however are very straightforward. Let's start with some questions and see how the choices unfold.

“I’m hearing that I should remove vegetation from the area 5’ around my home, is that really necessary? Are there any plants I can keep?” This 5’ space reaching from the walls of your house



outwards is called the “ember resistant zone” and is the most critical factor to create, after hardening your home. During a wildfire, houses often ignite from embers that enter through vents in the attic, or land on combustible materials adjacent to or within 5’ of the house. Studies have shown that avoiding flammable materials, including door mats, patio furniture, and dry vegetation, in this zone greatly improves your house’s survival chances. Some localities currently require this ember resistant zone, and the State of California is in the process of requiring it in high fire-hazard areas. So if you’re in a high fire hazard area (most of us are in Sonoma County!) establish a 5’ ember resistant zone, regardless of whether the locality requires it. The 5’ adjacent to your house is a good place for stone, gravel or brick walkways and patios. Avoid any organic mulches, minimize planting, and replace wood fences and gates with non-flammable ones in this zone. Some limited areas of well hydrated, non-woody plants can be considered, especially if your siding is non-flammable such as stucco, stone, brick or cement board. Some homeowners will

decide to retain some well pruned and hydrated woody plants such as a few heritage roses, a lemon or a camellia, if they are willing to accept the risk.

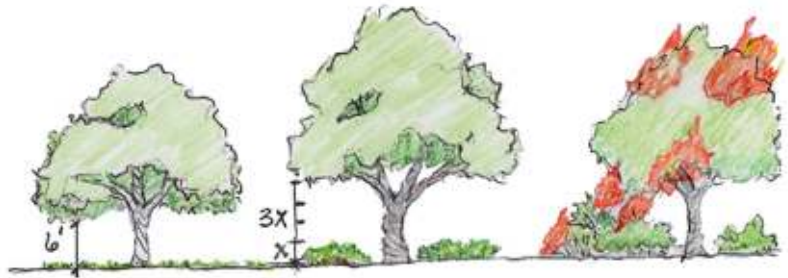
“I have a large tree whose branches overhang my roof. Should I cut off the branches over the roof, or...?” This question leads to a choice with several inputs to consider. Trees increase the aesthetic and monetary value of your property. Besides being beautiful, they provide cooling shade

in summer, lowering air conditioning bills, and even reduce irrigation needs in the garden. Some anecdotal evidence claims that trees can screen embers, preventing them from falling immediately on the roof. Trees are critical in their ability to sequester carbon and provide food and shelter for wildlife. Most state and local laws/ordinances do not require removal of overhanging branches. As Jack Cohen - a fire science researcher with USDA Forest Service likes to say “you can keep your trees, but you’ve got to work for them”. That requires regular maintenance: cleaning up the leaves and debris that fall on the roof and around the house during fire season, limbing up branches at least 10’ away from chimneys and a minimum of 6’ from the roof itself, and removing dead or dying branches. Additionally, some insurance carriers are requiring that tree limbs be removed from the area over the roof. Minor removal of limbs can be beneficial, however removal of significant limbs can damage the tree, leaving it unbalanced and susceptible



to wind. Large pruning cuts take years to heal, inviting insects and disease that can damage and weaken the tree over time. So, many landowners, where possible, choose to keep their overhanging branches, carefully limbing them away from chimneys, lifting them at least 6' from the roof and cleaning the roof and gutters regularly.

“I live in an oak woodland (or redwood forest), do I need to cut down the trees around my house, or keep the limbs from touching each other?” Many fire safe manuals mention the need to keep tree branches at least 10' apart, farther apart on slopes. Often it's mentioned that clusters of trees are acceptable, with spacing between clusters. Establishing that spacing may be desirable in some locations, especially if the targeted trees are small and compete with large healthy trees. In other cases establishing that canopy spacing could require removing large mature trees, at significant cost, with potentially negative environmental consequences. Some of those consequences include increased heat and drying of the landscape, growth of fire prone species in the sunlit openings (grasses and broom), and increased erosion and runoff on steeper slopes. More important, trees are tremendous carbon sinks, and we need them to help combat climate change. Removing significant trees may not be necessary if you have removed fire ladders and created shaded fuel breaks. A “fire ladder” occurs when understory vegetation grows near lower tree branches, creating the potential to move a ground fire up into the canopy. Maintaining the understory vegetation low, with space between the top of the understory and the lower tree branches is essential. Imagine the lower vegetation aflame, and picture that flame growing to 3x its height - will that flame reach the lower branches of your trees? if so, limb up the tree and/or reduce the height of the lower vegetation, while also keeping that lower vegetation away from the base of the tree.



“I’ve seen several plant lists, and some species I’d like to plant show up on the Do Not Plant list, but elsewhere on a Fire Resistant list, is it OK to plant them?” All plants will burn, so the



choice of plant truly depends on the gardener’s ability to choose the best plant for the location and to keep it well hydrated and pruned. Some plants grow in a way that is very challenging to maintain free of flammable materials and have a negative reputation that is justified (juniper, cypress, bamboo). However, some of our local native plant species can be safe to plant but have a reputation for being fire prone. These include manzanita and coyote bush, both very important plants for habitat and pollinators. They grow in the wild, are very drought tolerant, and come in both shrub and ground cover sizes. When we bring them into the garden and provide limited amounts of water (too much will be unhealthy for them) and keep them pruned, they are excellent additions to the garden. Coyote brush can be cut back severely every few years, and will grow back with lush new shoots.

Every site presents a unique combination of conditions, resources, and fire risk. Each gardener will have a different preference for plants and landscapes, as well as individual acceptance of risk. Frequently, efforts to communicate recommended practices will generalize in order to give recommendations that work for most situations. We hope that the questions addressed in this article will help homeowners make the best decisions for their unique situation.

For more information please visit sonomaecologycenter.org and sonomaresilientlandscapes.com.