

Fire-wise Landscaping with California Natives

by Laura Lovett (2019)

After the firestorms of October 2017 in Sonoma and Napa, fire awareness has come to Marin County. While all of us know the necessity to reduce fuels and thin vegetation on our property, a recent guest from San Diego passed along some highly useful knowledge on how to create an attractive, fire resistant landscape—knowledge learned the hard way. The San Diego area was hit by major firestorms in 2003 and 2007, long before those of us in the north were contemplating such disasters.

Greg Rubin is founder of California's Own Native Landscape Design in Escondido, near San Diego—one of the largest native landscape contractors in the state. He established the company after working for many years as an aerospace materials engineer. Greg's career change is to our great benefit: to his logic-based engineering mind it made no sense that native plants were frequently failing to thrive in suburban landscapes, while being completely successful on the hills behind our homes. Greg has made it his life's work to bridge this gap of understanding and share what he has learned.

Of the three dozen landscapes his company had installed that were in fire zones during 2003 and 2007, none of the owners lost their homes, although neighbors did. Greg's years of experience as an aerospace engineer enabled him to understand the thermodynamics of fire in the landscape and to realize that clearing all vegetation around a home actually sets up the perfect conditions for ember-laden winds to blow right against the house. It's also an ecological disaster. We need the beauty, shade and moisture that plants provide. Here are a few of the key steps he takes to create thriving native landscapes that are fire resistant:



A fire-wise garden by California's Own Native Landscape Design. Photo courtesy of Greg Rubin

- Planting plans focus on evergreen native shrubs. These comprise 60–75% of the landscape planting, with showier bulbs and perennials placed closer to walkways and windows. These shrubs stay green year-round, eliminating the dried-up look of summer-dormant plants while providing quality habitat in all months.
- The three or four feet closest to the home is kept free of plants; use this space for walkways, patios and decks. (And avoid the temptation to use this space to store flammable things like firewood and propane for the grill.)
- Don't fertilize. Native plants don't need it and it encourages bacteria, which introduce diseases.
- Thin existing areas with thick chaparral and undergrowth, but don't clear them. Thinning them by half removes 70% of the fuel load. Open naturalistic paths between clumps of plantings, allowing both gardeners and firefighters access.
- Once cleared, immediately cover these areas in several inches of mulch to keep weeds out. Pull the weeds that do show up. If annual grasses are allowed to fill in, an even more flammable situation has been created.
- California native landscapes should then be irrigated with overhead spray heads, not drip lines, at a rate of 4/10ths of an inch per hour using MP Rotators, 2–3 times per month, year-round. This is key, especially in hot, dry climates. It is the equivalent of a summer thunderstorm, but just this small amount of water allows the plants to stay hydrated. Most homes are lost when flying embers lodge in flammable material and catch fire. If they lodge in hydrated plants, more than likely they will burn out before the plant catches fire.
- Plants from non-Californian Mediterranean climates like Chile and South Africa will need about twice this amount of overhead irrigation to achieve the necessary hydration. Non-native plants require at least four times as much.
- This irrigation/hydration regime takes precedence over installing a list of non-flammable plants. Greg has found that some of what have been declared the most flammable native plants simply smolder once they receive this minimum hydration.

We all want to keep our homes safe in the event of fire, while having a lovely green landscape to enjoy in the meantime. These landscaping principles, tested in the southern California wildfires, are equally applicable here in Marin County and should enable us to have both beauty and safety.

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