

California Native Plant Society

Advice about Landscaping the Fire Zone in San Diego

Homeowners who live adjacent to open space often ask about plants appropriate for landscaping to reduce fire risk. Answering this question is not simple, although some jurisdictions nevertheless provide lists of preferred plant species based on vague, often unsubstantiated criteria. Typically, these lists focus on non-native varieties common in the landscape trade and under-represent natives. Many lists recommend invasive non-native plants that may out-compete native plants.

Many homeowners live near open space with a vigorous native plant community, but don't know the identity of many of the plants they are asked to manage for fire safety. Because of the variety of microclimates in San Diego, it's better to choose plants adapted to your location rather than replace a healthy plant community with a generic list of plants that may not grow well in your location. For this reason, fire-safe criteria should be based on general plant characteristics, instead of particular plant species.

Matthew Etlinger's Master's thesis, "Fire Performance of Landscape Plants" (1997, U.C. Berkeley), examined the peak heat release rate (correlated with flame height and radiant heat output) of six common landscape plants at different moisture contents. Etlinger found that moisture content was the main determinant of the heat released per mass of foliage. He concluded that the two most important characteristics of fire resistant plants are high leaf moisture content throughout the fire season and minimal accumulation of dead material.

High moisture content can be maintained in two ways:

- Choose plants with thick evergreen leaves, such as lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), or scrub oak (*Quercus beberidifolia*) (to name a few – there are many others) that maintain their moisture even when drying winds are present.
- Provide supplemental irrigation as needed to keep the plants healthy. In the City of San Diego, Zone 1 (30 feet from the structure) should be irrigated, but in Zone 2 (30-100 ft. from the structure), permanent irrigation is not allowed since it encourages growth of weeds. Nevertheless, occasional overhead sprinkling is useful during times of prolonged drought to prevent plant mortality. The City recommends that Zone 2 vegetation be thinned and all dead material be removed.



Dedicated to the preservation of California native flora

For more information see:

- City of San Diego Fire Safety and Brush Management Guide
www.sandiego.gov/fireandems/inspections/brush.shtml
- Information for San Diego at our chapter website, including “Fire, Chaparral, and Survival in Southern California” (for sale at our chapter meetings); www.cnpssd.org/fire/index.html,

Please avoid invasive non-native plants in your landscaping. For a guide on how to avoid problem plants, please refer to the Southern California Don't Plant a Pest brochure and the San Diego County Invasive and Ornamental Plant Guide, available at www.cnpssd.org/invasives.html,

Thank you for managing for fire safety while preserving the integrity and beauty of native plant communities.

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