



# MAKE YOUR HOME (AND COMMUNITY) FIRE SAFE



Fire once played its natural role in California, keeping vegetation thinned out and healthy, which in turn kept fires small and beneficial. As humans moved into wildland areas and began suppressing all fires, vegetation increased to the dangerously overgrown levels we see now, resulting in extremely destructive wildfires. To maintain the safety of our homes, families, firefighters, community, and natural resources, we must replicate fire's traditional role by removing the excess vegetation around our homes and neighborhoods.

## CLEAR 100 FEET FOR FIRE SAFETY



(or to your property line, whichever is nearest – as required by California Public Resources Code 4291)

1. Remove dead vegetation.
2. Thin out live vegetation.
3. Prune up your trees.

### 1. Remove Dead Vegetation:

- **The First 30 Feet:** Remove *everything that is DEAD*: dead trees, branches, brush, all dry grass, leaves, and pine needles within 30 feet of all buildings and on roofs, gutters, decks, porches, and ground - including spaces under decks, porches, buildings on pier blocks, RV's, vehicle parking areas, etc.
  - **Chimneys:** Remove *all* limbs within 10 feet of chimney. Install ½" screening on chimney outlets.
  - **Propane Tanks:** Provide 10' horizontal and vertical clearance. Very low, well-irrigated groundcover and lattice fencing within 10' is permissible. **No smoking or burn piles within 25 feet!**
- **The Next 70 Feet:** Remove *all* dead trees, dead brush, and dead branches within 15' of the ground. Dry, cut grass, leaves, and pine needles *may stay* on the ground, 3-4" deep. Clearing beyond 100 feet will increase the safety of your home and property.

### 2. Thin and Separate Live Vegetation:

- **Separate** trees and bushes from each other and from dry, dead ground fuels such as dry grass (cut short as possible), pine needles, or live ground covers, according to possible flame heights and lengths on next page.
- **Surround** clumps of vegetation with cleared areas, according to possible flame heights/lengths on next page.
- **Maintain** a vertical clear space of at least "**3 times the height of the shrub**" between any shrub and overhanging tree branches, or between grass and shrubs or tree branches.
- **Interrupt** fire's path by breaking up continuous shrub masses. Remove "ladder fuels" – the vegetation that lets fire climb from ground level to treetops and roofs.
- **Minimize** the number and size of plants beside your house. Avoid dense 'privacy screens' that could endanger your home. Separate plants using a diamond pattern to maintain privacy and fire safety, like this → 
- **Replace** highly flammable plants with fire resistive ones. not this → 

### 3. Prune Your Trees:

- Prune (remove limbs) at least 6 feet, more on slopes, if there is nothing but leaf litter or short, cut grass under your trees. You should be able to walk freely under your trees. Remove dead limbs within 15' of the ground.
  - For a *single* ornamental tree with branches to the ground, remove *all* dead fuels within, beneath and beside it.
- Prune to ⅓ the tree height, or 15 feet, whichever is less, if there is groundcover vegetation growing under the trees, or to retain a "continuous forest canopy" (limbs of one tree touching those of another).

## The Reasons for the Rules:

(If you don't clear around your home, Mother Nature may do it for you, and with a heavier hand than you might have used.)

**Fire moves just like water** – but in the opposite direction: *The steeper the slope, the faster it moves upward.* Fire does need fuel to continue moving. Remove the fuel, the fire will stop. BUT: fires can “spot” a mile or more ahead of themselves through burning embers carried on the wind. You may not be able to keep fire off your property but you can reduce its effects by reducing the amount of vegetative fuels around your home.

**Flame length and height will be at least 3 times the height of whatever is burning**, becoming even longer in hot weather, still longer when it's windy (tall flames will bend over in the wind, parallel to the ground), and longer yet on slopes (the steeper the slope, the longer the flame). Separate and space your plants with worst-case flame lengths in mind:

- Separate short plants from overhanging limbs by at least 3x the height of the short plant.
- On flat or gentle slopes, separate shrubs by a distance of twice their height, and tree canopies by 10 feet.
  - **Double** these distances on moderate slopes; **triple** them on steep slopes.
  - To retain a continuous tree canopy (branches of one tree touching branches of another), or if there are ground covers such as mountain misery (bear clover) beneath your trees, remove limbs up to  $\frac{1}{3}$  the height of the trees, to a maximum of 15 feet.

**Green plants will burn** – Many green plants are extremely flammable. Drought-tolerant and native plants usually contain large amounts of pitch, resin, and dense, dry, flammable twiggy material or thatch (especially evergreens such as juniper, rosemary, and lavender) – keep these low, and full of fresh green growth with frequent trimming). Remove dead limbs and twigs from manzanita. Prune pine, cedar, oak, and other trees. Thin and separate clumps of brush to reduce their flammability and slow the spread of fire.

**Replace flammable plants with fire-resistive plants:** Fire-resistive plants have watery sap, little flammable material, and open, airy growth. Plants that provide fruit, or flowers for bouquets are usually fire-resistive.

**Overcrowded saplings will never become real trees:** Dozens of seedlings growing in a few square feet harm large trees, and will always remain skinny, unhealthy sticks. Look at normal mature trees, and thin accordingly.

**Eliminate ember-catchers:** Sparks, firebrands, and burning embers may blow miles from a wildfire, and rain down for hours. These will land on, under, and around your house in any place that rain, snow, leaves, and pine needles fall. During fire season, frequently check and clean all nooks and crannies, especially on roofs and gutters; on, under and around decks, porches, stairs, deck furniture, potted plants, storage areas, and vehicles.

**Move woodpiles as far as possible** from buildings, trees and power lines, at least during fire season. Surround with 10' of cleared area, and cover with fire resistive material, securely tied down. Flying embers from wildfires can easily burn through plastic tarps and ignite woodpiles, creating an inferno beside your home.

**Would pets survive if you weren't home? Could your home stand alone without firefighter protection?**

A fast-moving fire may reach your home before firefighters arrive. Intense heat and heavy smoke from vegetation burning near doghouses, kennels, corrals and barns can kill your furred or feathered friends. Clear around your pets' areas the same as you would clear around your own home.

---

---

**For more information** on Public Resources Code (PRC) 4291 and making your home fire safe, visit these websites: [www.fire.ca.gov](http://www.fire.ca.gov); [www.firewise.org](http://www.firewise.org); [www.firecenter.berkeley.edu/toolkit](http://www.firecenter.berkeley.edu/toolkit), or contact your local CAL FIRE Station or the CDF Tuolumne-Calaveras Unit Fire Prevention Bureau at 209-754-3831.

(California Department of Forestry and Fire Protection / CAL FIRE – Tuolumne Calaveras Unit, 1-8-10)