



FIREWISE: WATERING AND MULCHING

When it comes to watering and mulching in our drought-prone areas, you may think that it conflicts with Firewise landscaping. But with careful planning and diligent maintenance, you can have a water-wise and Firewise garden..

Mulching

What is mulch? It is simply a layer of material, commonly organic, covering the soil surface to exclude sunlight. Organic materials frequently used as mulch include wood chips, leaves, grass clippings, straw, and compost. Mulches are beneficial in the garden for reducing the water requirements of plants, cooling soil temperatures, suppressing weeds, reducing erosion and dust, maintaining soil organic matter content, and preventing soil compaction. Maintaining organic matter content is important because it aids in nutrient exchange, increasing or maintaining soil water-holding capacity, and augmenting drainage. However, mulch, compost, and other organic materials can be flammable, and therefore, cause damage to your home if ignited.

A study performed in Carson City, Nev., in 2008 tested the combustibility of several different mulches. The mulch that ignited most easily, and with the fire spreading most rapidly, was shredded Western Red Cedar bark. Composted wood chips spread 2"-3" deep showed the slowest fire-spread rate of the 8 mulches tested. However, the wood chips burned primarily through smoldering combustion, which might not be noticed by firefighters during a wildfire. Nevertheless, wood chips were still considered the best mulch choice for residential landscapes.

Other recommendations:

- Within 5 feet of the home, known as the Home Ignition Zone, use mulches of non-combustible rock or gravel, or use pavers, instead of wood chips.
- Within 5 to 30 feet of the home, separate wood-chip-mulched areas with non-combustible materials: concrete, gravel, rock, and low-growing ground covers.
- In general, fine (less than ¼" particles) or stringy mulches ignite and burn more rapidly than larger chunks.
- When exposed to fire, thick mulch layers (greater than 2" deep) tend to smolder and are difficult to extinguish.

Watering

- Divide your garden into low, moderate, and high water-use areas.
- Keep plants with the same, general water needs together.
- High water-use areas are lawns and other water-loving plants. This zone should be kept as small as possible. Limiting the size of your lawn is probably the biggest, single, water-saving action you can take.
- Moderate water-use areas are the transition zones between high and low water-use areas.

- Low water-use areas contain local “native” plants and Mediterranean-type plants adapted to our environment. Irrigation is needed in the summer while new plants are getting established (the first 2-3 years), but once established they need little, if any, additional watering.
- Water less frequently but more deeply.
- Watering to the root depth of your plants creates a healthier and more efficient garden.
- For lawns in clay soil, this means applying ½” of water to moisten the soil to a depth of 6 inches.
- Lawns in sandy soils will require less than a ½” of water but more frequent applications.
- Shrubs must be watered even more deeply, but less frequently.
- Adjust your irrigation according to the seasons.
- Use drip irrigation whenever possible. Drip irrigation applies water much more accurately and at a lower rate than overhead spray.
- Slow, accurate application to the plant roots prevents spraying unneeded areas such as walks and driveways.

Improve Your Soil

- Add organic matter to improve soil fertility and water-holding capability. This is especially true for high clay composition and sandy soils.
- Compost and redwood soil conditioners are common soil amendments.
- When preparing beds, apply a generous 3”-4” of treated mulch amendment over the soil, and then dig or till it into the top 9”-12” for optimum plant growth. Do not do this with finely ground sawdust, rice or cocoa hulls. This is only advisable with finished composts.

Maintenance Pays

- Routinely check your irrigation system.
- Look for broken sprinkler heads.
- Check for uneven water coverage due to incorrect head placement (water from each sprinkler should reach adjacent sprinkler heads).
- Look for sprinkler heads too high or too low in relation to the level of the ground.
- Mismatched sprinkler heads and nozzles will prevent even spraying.
- Check for spray patterns blocked by new or growing plants (if this occurs, adjust your sprinklers so that they do not water walks, driveways, etc.).

References

- Waterwise Gardening: http://sonomamg.ucanr.edu/projects/Water-wise_Gardening/
- Wildfire Home Assessment & Checklist: http://disastersafety.org/wp-content/uploads/wildfire-checklist_IBHS.pdf
- Homeowner’s Checklist Cal Fire <http://www.readyforwildfire.org/docs/files/File/Checklist.pdf>
- Landscaping for Fire: http://firecenter.berkeley.edu/docs/CE_homelandscaping.pdf

For help with your garden problems, call the Master Gardener hotline at 565-2608, visit the Master Gardener information desk in the University of California Cooperative Extension office (133 Aviation Blvd., #109, Santa Rosa), or ask a Master Gardener at your local farmers market, the Sonoma County Fair or other event. Visit <http://ucanr.edu/sites/scmg/> for additional publications.

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