

Mulch Is a Many-Splendored Thing

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What is the most important step to take for your landscape? **Mulching!** Mulching is defined as applying material to the soil surface without injuring plants, and at the same time, reducing water loss from the soil and preventing weed growth. **Almost any landscape will benefit from the use of mulch.** The goal is to produce better plant growth than if no mulch were used.

Water availability can be a limiting factor for plant growth. Mulch reduces water loss from the soil and conserves soil moisture in the root zone. This makes more moisture available and results in better growth. As water passes through mulch, it is slowed down, resulting in greater soil infiltration. Soil moisture is then available longer to root systems. More even soil moisture is maintained with mulch. All of this reduces the frequency of watering needed. **Watering thoroughly need only be done every 10 to 14 days.** Always check soil moisture before watering.

Root growth stops or slows when temperatures are too high or low. **Mulch also maintains a more uniform soil temperature, which encourages root growth.** In the heat of the summer, the soil temperatures under mulch can be reduced by as much as 30°F (when surface may be 100°F). During the fall and early spring, when temperatures fluctuate and dip below freezing, soil under mulch remains warmer, freezes more slowly, and stays at a more uniform temperature, effectively lengthening the growing season.

Organic mulches, such as shredded bark or wood chips, are best. These materials will add nutrients and organic matter to the soil as they decompose. Mulching generally aids tilth and soil structure. Beneficial soil microorganisms are present in greater numbers and thrive in mulched areas. Soil biodiversity is also increased, which can have many benefits. One caution is to avoid using chips infected with verticillium wilt or chips of invasive plant species such as buckthorn and honeysuckle that may bring seeds in.

Mulching has additional benefits, as well. It can prevent weeds which would compete with desirable plants for the same water and nutrients. Potentially damaging mowers and trimmers are kept away from the trunk. Materials that are often discarded, such as bark, can be recycled.

The depth of mulch is extremely important and will vary depending on the kind of mulch, type of soil, and the plant material used. Remember that air must be allowed to reach roots in the soil. When all the air spaces are filled with water, oxygen and other gases are not available to the roots and the trees will suffer. Heavy clay soils require a thinner layer of mulch than light, sandy soils. Too much mulch, improper applications, or too frequent applications may very well result in harmful effects.

Two to three inches of mulch is usually plenty. Keep it away from the trunk, maintaining a gap of three inches. Mulch can be applied any time. To do the most good, mulch at planting time, and in advance of summer droughts and before active weed growth starts. Bark and wood chips will last at least two years, sometimes longer. Mulch may be added as needed to maintain the two- to three-inch layer.

Mulching Tips:

- Do not exceed 3" depth.
- Mulch 3' diameter or larger around newly planted trees
- Maintain a gap around tree trunks, no "volcanoes" or "bee hives"
- DO NOT use plastic or fabric under organic mulches
- Mulch should accent the landscape
- Trees and landscape should be the focal point, not mulch
- Avoid crushed limestone and marble chips as mulch.
(These raise pH and produce injurious reflected light.)