

# Mulch—Your Tree's Best Friend

Mulching is one of the most valuable things a homeowner can do for a tree's health. Mulch is any material placed on the soil to conserve moisture and improve growing conditions. Common materials include wood chips, bark, pine needles and compost.

However, if mulch is applied too deeply or the wrong material is used, it actually can harm trees and other plants. Take a few minutes to read this flyer, and you'll be well on your way to improving your tree's health and appearance.

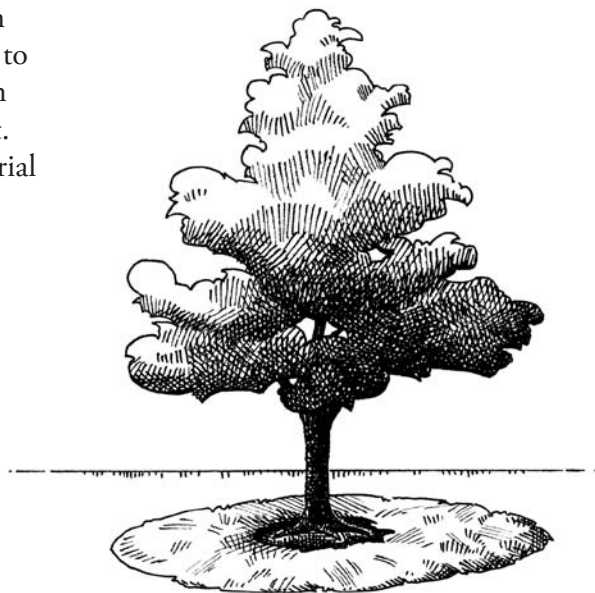
## Proper mulching

- Check soil drainage in the area to be mulched. Determine if there are trees or plants that may be affected by the type of mulch. Most organic mulches work well in most landscape situations. Some plants may benefit from mulches such as pine needles or bark that acidify the soil.
- Apply a 2- to 4-inch layer of mulch over well-drained soils. Use a thinner layer on poorly drained soils. The wider the mulch ring, the greater the benefit. Mulch out to the tree's drip line, if possible.
- Do not pile mulch against the tree trunk. Pull mulch back several inches from the trunk so the base of the trunk and root crown are exposed. The mulch-ring shape should resemble a "doughnut," not a "volcano."
- If mulch is already present, check the depth. Do not add more if a sufficient layer is already in place. Rake old mulch to break up matted layers and improve its appearance.
- Organic mulches are preferred to inorganic materials. Organic mulches should be well-aerated and composted. Avoid sour-smelling mulch.

## If a little is good, then ...

Over-mulching your tree or piling mulch against the trunk can create the following problems:

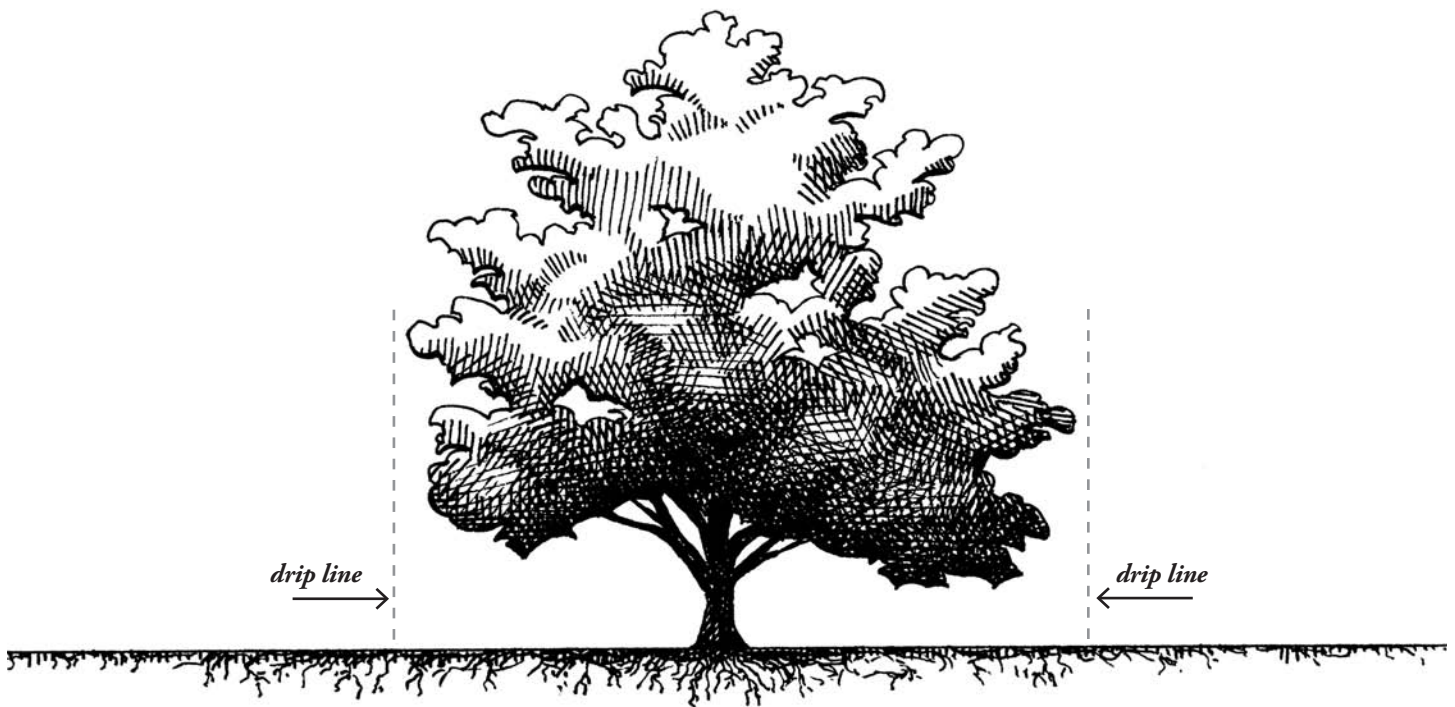
- Promote excessive soil moisture and root rots
- Cause inner bark tissue to die
- Lead to insect and disease problems
- Create habitat for rodents that chew the bark and girdle the stem
- Lead to anaerobic conditions that produce alcohols and organic acids toxic to young plants
- Cause imbalances in soil pH
- Become a matted barrier that prevents the penetration of water and air



*A properly mulched tree will have a 2- to 4-inch layer of mulch in a doughnut-shaped ring. The ring should extend out to the tree's drip line, if possible.*



*A mulch "volcano" sets the stage for insect and disease problems, root rot and tree decline.*



*A tree's roots extend well beyond the drip line of the crown. Mulch out to the tree's drip line if possible.*

## Types of mulch

- Organic mulches include wood chips, pine needles, shredded bark, nut shells, compost mixes and leaves. Organic mulches decompose at different rates, depending on the material, and periodically must be replenished.
- Composted wood chips make good mulch, especially when the leaves, bark and wood are included in the composition. Fresh wood chips also may be used around established trees and shrubs. Avoid using uncomposted wood chips that have been piled without exposure to oxygen. Sawdust, grass clippings and straw are not recommended.
- Inorganic mulches include decorative stone, lava rock, pulverized tires and geotextile fabrics. Inorganic mulches are useful in xeriscaping and for soil protection in high traffic areas, but are not recommended for mulching around trees. Heat reflected from inorganic mulches may be high enough to kill thin-barked trees.

## Benefits of mulching

- Helps maintain soil moisture—evaporation and the need for watering are reduced
- Protects the trunk and surface roots from mowers and string trimmers
- Helps control weeds and grass
- Insulates the soil surface, keeping it warmer in winter and cooler in summer
- Improves soil structure, aeration and drainage
- Increases soil fertility as organic matter decomposes
- Makes lawn maintenance easier
- Creates well-cared-for appearance



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