

Garden Update

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Mulch Volcanos

People in the business of trees have been strong advocates for proper mulching, steering people away from the ill-advised practice of mulch volcanos around trees. Real inroads have been made, though the practice continues, evidenced by new tree plantings with the mulch overkill. When these practices are perpetrated, the assumption this is a good practice is validated and then repeated at residences and other landscapes.

No matter why this practice continues, tree owners should be aware there is significant, evidence-driven information why mulch volcanoes hurt the health of trees. Let's start first with what a mulch volcano is. It is a pile of woodchips or shredded bark placed around trees that exceeds the 2–4-inch recommended depth. Often this mulch is piled high up against the tree trunk itself, tapering lower as the mulch extends away from the tree. In severe cases, mulch will be piled 12 inches high and taller. While this pile of mulch is given the tongue-in-cheek moniker of a “mulch volcano,” there is little hilarity and much to recommend against this practice.

Vole Damage

These hairy little rodents absolutely love making a cozy nest inside piles of mulch. Tree bark is a great source of food too, especially the nice thin bark of newly-planted trees. Eureka, food and shelter for voles!

Depriving Roots of Oxygen

All roots respire to survive, taking in oxygen and releasing carbon dioxide. Heaps of mulch interfere with this gas exchange, inhibiting root growth and tree establishment.

Instigating Decay

The tree trunk has evolved to be in sunlight and air, not in the humid environment of a mulch pile. Mulch volcanos promote decay of tree bark, the protective layer of the tree. Eventually, the decay extends beyond the bark to the tree's conductive tissues, interfering with water transport and tree stability.

It's easy to properly mulch trees. A 2-4-inch layer of woodchips or shredded bark should extend to the tree's dripline. No mulch should come in direct contact of the tree trunk itself, instead giving 2-3-inches of mulch-free breathing space for the trunk. These materials will decay over time, necessitating the application of more mulch to maintain the 2-4-inch depth. This keeps down weeds and promotes a good root-growing environment for tree establishment and health.