

Don't Overmulch Your Landscape Plants



Photo by David W. Marshall, UF-IFAS Leon County Extension: Volcano-mulching is a common mistake many gardeners, and even landscape professionals, make when mulching.

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Mulch, when properly used, is a great thing for trees and shrubs. But, as with many things in life, moderation is best. Too much mulch can be bad.

Mulch has various benefits. It helps protect the soil from erosion as well as moderates soil temperatures. Mulch also protects against soil compaction. Believe it or not, when rain drops hit soil, they compact the soil. So mulch helps prevent this compaction. Mulching is also nature's way of recycling tree leaves and converting them into nutrients and organic matter that helps improve soil structure that will facilitate better plant growth.

But over-mulching can have adverse effects. One common error is piling the mulch up deep against the tree trunk in what we often call "volcano mulching". With mature trees, volcano mulching can keep roots from getting enough oxygen, resulting in root death and decay. The mulch also traps moisture around the lower trunk, promoting rot. The excess mulch invites damage from rodents that chew the bark and can girdle the tree.

Too much mulch can also hide decay and dead spots on the lower trunk and major roots. Decay in this portion of the tree can cause the tree to become unstable.

Mulch piled up against a tree trunk can also obscure circling or girdling roots. Circling roots are roots that grow up against the trunk and can cause damage to the trunk and health issues for the tree. They can actually girdle the tree, restricting circulation of water and nutrients. Roots should grow out and away from the tree trunk. This can be easily viewed if you don't have mulch piled against the tree.

If mulch is piled against the tree trunk, pull it back away from the tree about a foot to a foot and a half. Then look for roots that are circling close to the trunk, roots that are embedded in the trunk, or those that have crossed over main roots at the base of the trunk. These can reduce the flow of water, nutrients, and sugars at this point on the trunk. Circling or girdling roots often start when the trees were young and growing in pots at the nursery. If left in a pot too small too long, the roots can't grow outward once they reach the side of the pot. They have nowhere to go except in a circle.

If you discover girdling roots and they are less than about one-third the trunk diameter, they can be removed without damaging the trunk by carefully cutting and removing them. This will allow roots and the trunk under the girdling root to develop properly. If the root is deeply imbedded into the trunk, or is quite large, I recommended that you have an arborist look at the situation to determine if and how best to remove it. Trees, especially young ones, often respond to removing girdling roots with increased vigor. It is best to check young trees in the nursery before you buy them to avoid circling roots altogether. An ounce of prevention is worth a pound of cure in landscape problems.

On recently planted trees, it is especially important to avoid mulching right over the root ball, as this can interfere with water and oxygen reaching the roots. But mulch a little further out can help prevent lawn mower and weed whip injuries to the trunk of the tree and exposed roots. It also keeps competing sod away from the roots of trees. Another bonus of mulch is that well mulched areas catch and absorb more rainwater than bare soil. Try to tie mulched trees together in a bed for ease of maintenance and because trees grow best in groups.

On mature trees, keep all but a thin layer of mulch about twelve to eighteen inches from the trunk. From there outward, maintain mulch beds that are two to four inches deep out as far as you wish to maintain and find aesthetically attractive. Remember that roots can often grow two to three times as far outward as the branch spread of a plant. Any area of a tree's spreading root zone that is covered by mulch is a good thing for the tree.

A natural forest has its own mulching process that recycles nutrients, absorbs rain water and maintains a cooler soil temperature on hot days. Mimic these areas by properly mulching. Just don't over-mulch.

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