

## PROPER MULCHING TECHNIQUES

Mulching with organic materials can improve soil conditions in many ways. Mulching conserves moisture, cools the soil, reduces pH, reduces turf competition, increases organic matter and encourages soil biodiversity. In short, mulching brings the forest back to the trees.

As with all cultural practices, however, there are proper and improper methods. When trees are mulched, the proper method is to spread a two to three inch layer of wood chips under the tree canopy. Mulching out to the drip line and beyond will make the greatest impact on soil conditions. Even small rings, however, can help reduce the likelihood of mower or string weed trimmer injury.

We are seeing an increase in mulching in the Chicagoland area. This is a good thing. Still we are also seeing something that is not a good thing: "volcano mulching". Volcano mulching can be described as piling the mulch material around the trunk of the tree to a depth of two to eight inches. Simply stated, mulching materials should not be piled up against the trunk of tree. The mulch should be pulled back from the trunk for several inches before deepening to the recommended depth. This is especially true for young trees with thin bark.

Why is volcano mulching so bad for trees? Roots are located below the ground and should be kept moist. The trunk is above the ground and should be kept dry. Allowing the roots to get too dry for too long can lead to trouble. Allowing the trunk to become too wet for too long can also lead to trouble. If the basal root flare and/or lower trunk are covered with wood chips, the bark is more likely to remain wet for long periods. Many species of trees do not tolerate this situation, and the cambium beneath the bark can simply die. In addition, wood decay fungi love moisture. Keeping the root collar area wet greatly increases the likelihood of basal decay.

In summary, mulching is a great cultural practice. When done properly, it can provide one of the best long-term benefits to tree health that we can provide. Improper mulching, however, can provide just the opposite.