



## Proper Mulching = Healthy Safe Trees



All living things need oxygen. One way trees absorb oxygen is through their roots. Too much mulch can smother the tree's ability to take in oxygen through roots and can lead to disease and death. It is important to have the root flare showing at the base of the tree, as this is the point at which tree tissue changes structure. Tissue above the root flare is trunk tissue and not made to be kept wet. Tissue below the root flare should be developing roots and taking in nutrients for the tree through the root system. Mulch should be less than 3 inches deep.



There are small breathing holes (lenticels) in the tree trunk that take in oxygen. If the trunk has mulch piled against it all the time, the trunk will stay wet and the lenticels won't be able to breathe. Similar to getting water in your lungs, the tree will become sick and unable to function. After 10 or 15 years, the tree can rot all the way through and fall over in a storm on your car or house. For a safer tree, keep mulch at least 4-5 inches away from the trunk.



### Other things to know.

- Trees grown in mulch will grow twice as fast and be twice as healthy as trees grown in grass. Grass steals nutrients before tree roots can get to them.
- Mulch to the width of the crown of the tree. Shrubs, grass, flowers, or extra soil placed under the tree all rob the tree of oxygen and nutrients and stress the tree.
- **VERY IMPORTANT!** When planting – place the root flare at or above the soil level.
- Shredded hardwood mulch forms a thick mat and repels water. Use pine bark mini-nuggets or Virginia Fines mulch.
- Trees can easily drown in hard clay. Use a moisture meter to check before watering the tree (available for under \$10 at big box stores). Better to water deeper and less frequently.
- Remove the old mulch first before adding new mulch, too much mulch smothers the tree.

