

# 10 TREE MAINTENANCE LESSONS: WHAT TO LOOK FOR AND WHY



Do you know what makes a good tree go bad? Often many common mistakes and preventable errors go unnoticed or ignored in our landscapes. The key is to catch the problem before it becomes a serious issue. Early detection can often lead to a more favorable outcome. The following ten points outline some of these problems. These photos were candidly taken, mostly with our camera phones.

**1. Don't over-mulch.** Mulch is good for plants but too much can lead to several problems including developing poor root structure and promoting decay.



The mulch around this tree is piled way too high on the trunk. This is known as 'volcano mulching' and will lead to root and crown rot as well as cause girdling roots to form. Usually 2 to 3 inches of mulch is plenty. If you want to add more mulch make wider mulch rings or planting beds.

**2. Avoid grade changes around existing trees.** Root systems can be extensive; both large and small roots are vital to the trees ability to secure water, nutrients, and support for itself. If a grade change is necessary there may be solutions to augment this in a reasonable way.



The above trees had re-grading work done over their root systems. The original grade can be found as the bottom of the root flares. The effects of root damage often takes years to show in the crown.

**3. Avoid soil compaction.** A good soil is 50% solids, 25% water, 25% air; if compacted a soil can become 100% solid with no room for water or air, both of which a tree needs to survive.



While some attempt was made to protect this tree during construction the tree preservation zone barrier was poorly constructed and ignored. The storage of materials and the trailer on the right with heavy traffic will cause a great deal of soil compaction around this tree.

**4. Recognize girdling roots.** These can choke out the flow of water and nutrients just above or below ground.



The girdling roots on this tree are obvious as they protrude from the ground, others are less obvious to identify. In many instances this can be corrected.

**5. Avoid lion-tail trimming.** Removing all the foliage except that on the ends is lion-tailing. This interferes with the trees ability to transpire, especially during the heat of the summer when the outer layer of leaves close their stomata to conserve water. At this point it is up to the interior leaves to take over. If they are removed it puts the tree under tremendous stress and dramatically reduces growth. In many cases the tree never recovers.



This tree has been 'lion tailed'. Its foliage was completely stripped from the interior of the canopy. This issue is as much a mis-education of the tree trimmer as it is for the home owner.

**6. Never use spikes to climb a tree.** No matter what size or type a professional arborist will never use climbing spikes for trimming operations. They are acceptable for tree removals where the health of the tree is not an issue.



This tree had been 'spiked' many years ago. The numerous wounds caused by this careless action will never heal over. The spike wounds serve as entry points for fungi, pathogens, and insects to enter the tree.

**7. Recognize the presence of fungi.** Certain fungi can be more destructive to the integrity of a tree than others. Look for fungi everywhere, from the upper branches to the trunk and base of the tree to the soil underneath the canopy.



The numerous cankers and bract fungi should have given the homeowner an indication that this tree was slowly rotting away, and soon becoming a hazard.

**8. Know who else has been in your yard.**



These trees were courteously trimmed by the deer that frequently browse upon the delicate foliage of palatable plants during the winter time. Unfortunately the trimming was not wanted and the desired screening effect will never be gained.

**9. Practice proper tree planting techniques.** How a tree will live will ultimately depend on the condition in which it was planted.



Unfortunately the tree above was planted only to fail. During installation the landscape crew never removed the twine that held the root ball together. This in effect constricted the flow of water and nutrients from the roots to the leaves, as soon as dry weather came in mid-summer this tree dried out and perished.

**10. Make a good cut.** This may be one of the most fundamental of tree trimming techniques. Trimming that leaves behind too much, or not enough, wood will not compartmentalize and leave an open door for fungi, pathogens, and insects to enter the tree.



These cuts were made on limbs that cut into trunk wood; this is known as a 'flush cut.'

While there are many tree care lessons to learn this list remains a good starting point to be able to identify quality work and professionalism in the tree care industry.

Tree care is a combination of proper planting and pruning techniques followed by nutrient management, insect and disease management, mulching, and watering.

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