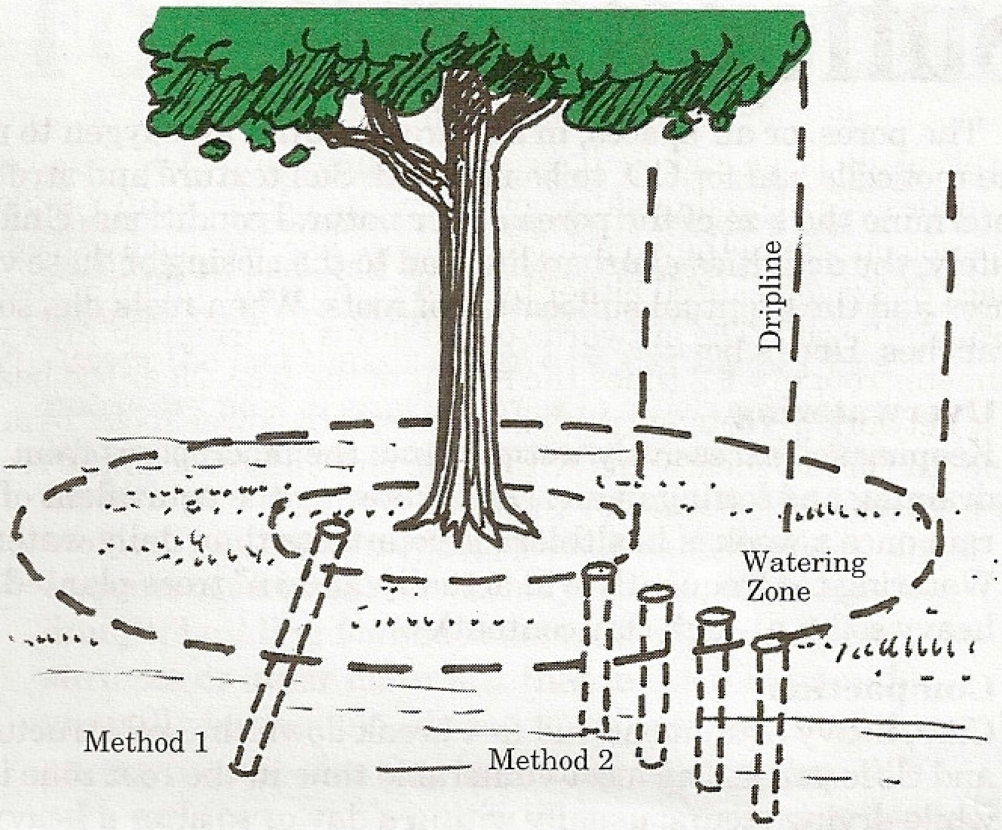
Archive for February, 2012

Water Is A Trees Wonder Drug!
Tuesday, February 7th, 2012

Not necessarily, the old guy cautions. Too much of a good thing can kill a yard tree just as effectively as an axe girdle; and much more insidiously. Even during dry spells, over enthusiastic watering can actually provide the tree roots with more water than they can handle, and they effectively get smothered due to lack of oxygen. In the average planting situation, a large, newly planted tree (say 6-8 footer, 1-2″ caliper) only needs about 10 gallons of water a week in dry weather; the equivalent of about two flushes of a toilet!

Over watering can easily occur, especially if there is an automatic sprinkler system nearby to water grass. If mother nature was more orderly, she would provide about one half inch of rain per week, which falls gently over a four hour period; on Friday afternoon. With a schedule like that, all plants (including trees) would do quite well in our part of the world, without any supplemental watering. Unfortunately nature isn't orderly, and it seems that we either have too much rain all at once, or none at all for weeks on end. So, occasionally, we can help our plants by watering appropriately.

Since watering usually provides more benefit to trees than fertilization, it is important to do it properly. The key to success is to match your watering schedule with the amount of local rainfall. Watering should be done only during long dry spells, especially if windy and/or hot, and in dry climates. In these cases, water is the wonder drug that carries the tree through the stressful period. To be effective, deep watering is important; just sprinkling water on top of the ground does not get enough water to the tree roots and only provides relief to grasses and weeds with shallow root systems. Make sure that half inch per week soaks in.



Deep Watering Methods

Method 1

Drill 3 or 4 holes approx. 18" deep and 1"-2" in diameter at an angle and outward from near the base of the tree. Inserting perforated plastic pipe and/or gravel will prolong the use of the holes before new ones need to be drilled.

Method 2

Drill 18"-deep holes, $\frac{3}{4}$"-$1\frac{1}{2}$" in diameter, at 12" intervals around the drip line. Repeat at 12"-24" intervals within the watering zone. Fill holes with coarse sand and peat, fine gravel, or insert perforated pipes. Gravel surrounding a pipe, with less frequent holes, may also be used. Drill new holes when the old ones no longer accept water easily.

Stake A Newly Planted Tree?
Tuesday, February 14th, 2012

Many people feel that a newly planted tree *must* be staked with guy lines of some sort, or it won't become established properly. In general, this is not true. If a tree is able to stand upright on it's own after it is planted, there is usually no reason to try to further stabilize it by attaching guy lines to the stem. Even in those few situations where guys may be helpful, they must be done carefully, and could actually be harmful if not managed correctly.

The only time stakes might be needed is when winds may be expected to be strong and occur regularly, or when evergreens are planted. Larger bareroot stock may also require staking/guying for the first growing season, but, in most cases, staking is not necessary. When staking is indicated, there are a few guidelines that need to be followed:

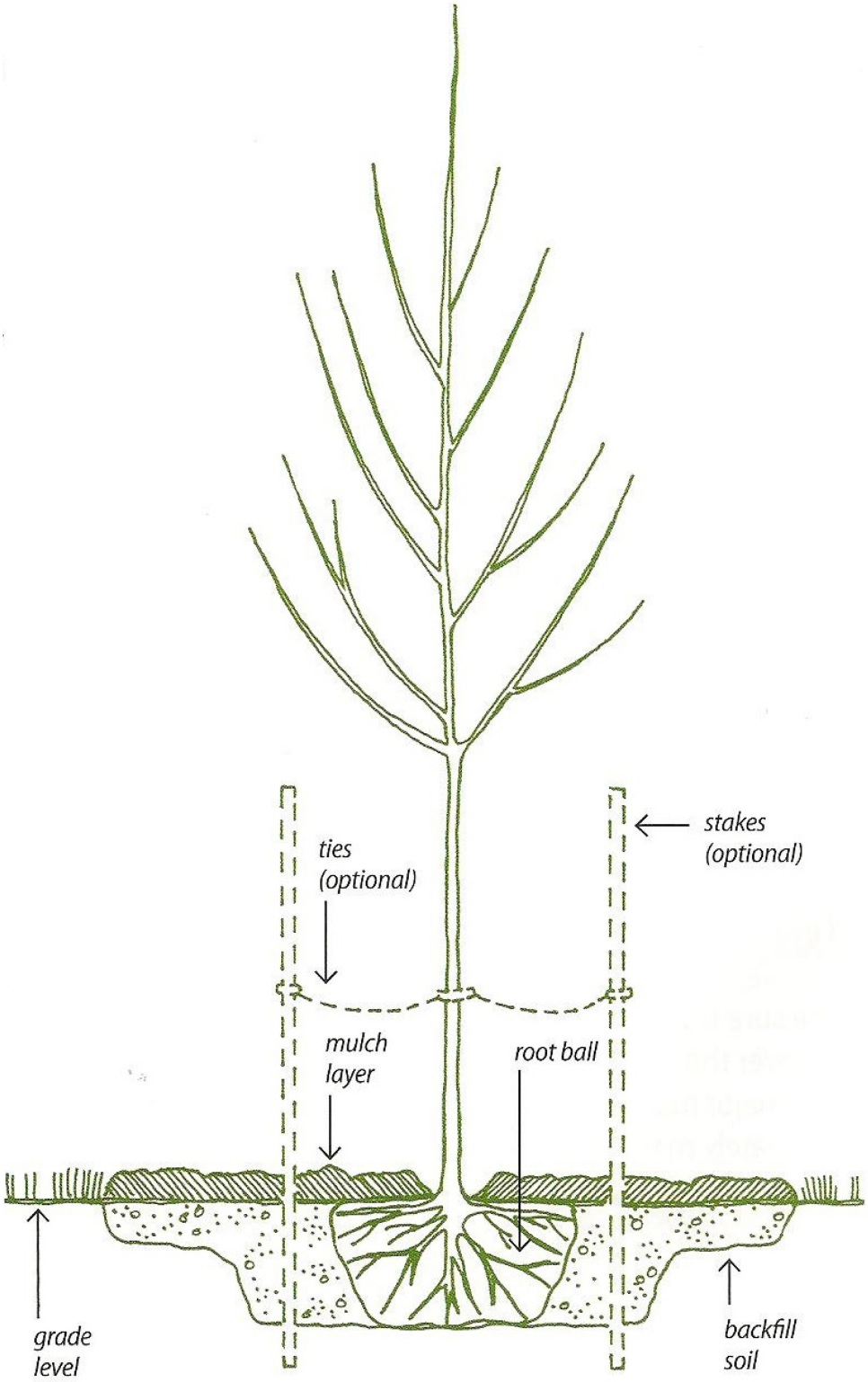
1. Stake when the root ball might shift before the roots begin growth, or to prevent mower damage.

2. Guy the stem strongly enough to provide support, but loosely enough to allow 6-8 " of sway. Allowing the tree to sway naturally will promote strong wood, good taper development, and proper root development.

3. Drive stakes outside the root ball, where the ground is more firm and will hold the stakes better.

4. Remove the stakes and guys after about three months (or one growing season). This is critical. Failure to remove the guys and stakes can lead to girdling of the tree and early death.

The best guying materials are wide and flexible, such as plastic horticultural tape or canvas webbing. If guy wires are used, place them through tubing or hose sections to prevent them from cutting through the trees bark and girdling the tree. Place guys low on the trunk. Research has shown that trunk wraps provide little, if any, benefit to trees. In fact, they can encourage damaging insects and disease-causing fungi. Shown below is a stylized drawing of proper staking technique for a larger tree that might need staking/guying (From Missouri Dept. Conservation).



Planting in uncompacted soils

Les Fortenberry illustrations

Tree Protection In Communities
Monday, February 20th, 2012

Ordinances are the primary way a community has to provide protections for individual citizens and their property, as well as protection of those community resources and/or property held on behalf of the citizens. For example, ordinances prescribe speed limits on city streets, standards for trash and sewage removal, what types of property development can occur in what locations (zoning), and a host of other prescriptions that are meant to make the community a better place to live for all. Ordinances are also the strongest means available to protect trees in a community.

Ordinances can safeguard street trees, assure proper landscaping in commercial areas, and prevent natural woodlands from disappearing completely as shopping malls and housing developments spread across the landscape. Used correctly, ordinances can help provide a high quality environment – without imposing undue hardships on developers or interfering with basic property rights of homeowners and other citizens.

I recently came across a stylized drawing from the National Arbor Day Foundation, which illustrates how properly developed and applied tree ordinances can benefit a community from both a practical and aesthetic point of view. You can click on the image to enlarge. It provides a better summary than I can write on this subject. Enjoy!