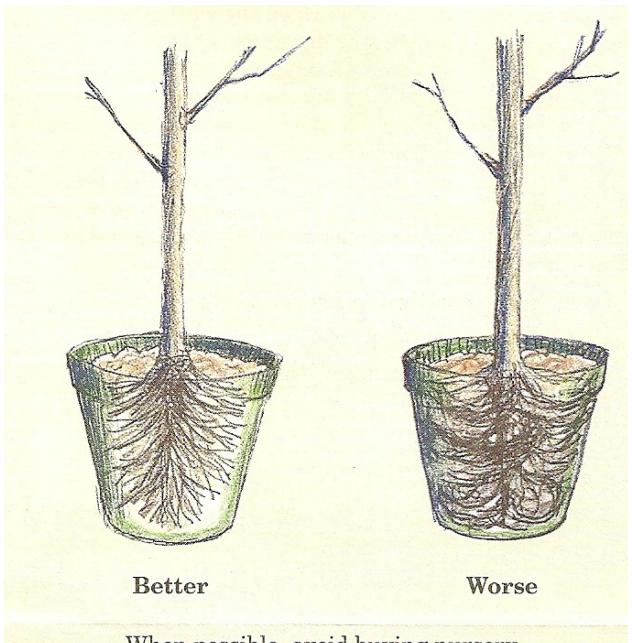
#### Archive for April, 2009

#### **Avoid Stem Girdling Roots**

Saturday, April 4th, 2009

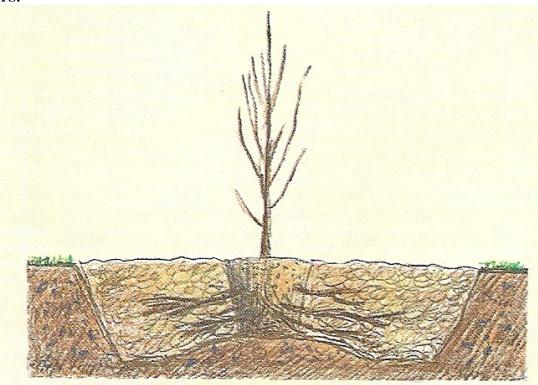
Every year, there are some older, planted trees that become stressed or die for no apparent reason. Upon further inspection, we find that they were effectively strangled to death by roots that had grown around the stem (below ground level of course) and shut down the flow of moisture and nutrients to the above ground portions of the tree. This condition (called circling, or girdling roots) is basically caused by the tree being planted too deeply; first at the nursery, then in the final location; **or** the plant was kept in a container too long before it was outplanted. Containerized seedlings are particularly susceptible to this condition, and, since the average home owner usually buys container plants, they should pay close attention to the tree(s) they buy to see if they have a circling root system.



When possible, avoid buying nursery stock that has been in containers too long (as evidenced by circling roots).

When a tree with circling roots is removed from the container (or burlap wrapping) and planted, unless special care is taken, the roots will continue to grow in a circling fashion, and eventually girdle the stem leading to decline and/or death. Girdling roots also adversely affect the trees stability, making it more prone to windthrow. No matter what kind of planting stock you use (containerized, balled & burlapped, or bareroot) care must be taken to assure that any circling roots present should be spread out in a more natural arrangement before closing the planting hole. **AND BE SURE TO PLANT AT THE PROPER** 

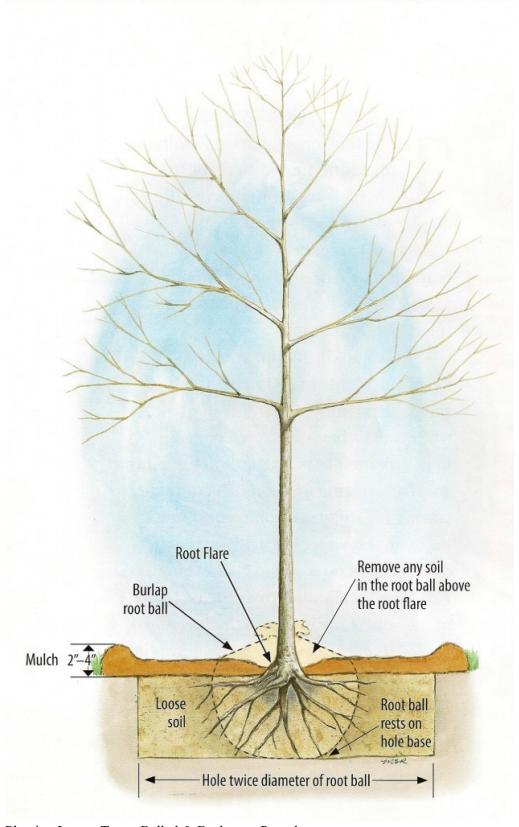
# DEPTH! TREES PLANTED TOO DEEPLY WILL JUST DEVELOP MORE CIRCLING ROOTS.



To correct potted trees with circling roots:

- ✓ Remove container or wrapping material
- ✔ Plant on a firm, raised bottom of the hole
- Carefully spread out the circling roots to as close to a right angle with the trunk as possible
- Cut (smoothly) any roots that are too severely circled to straighten, especially near the top of the soil ball
- Fill hole while holding roots in place
- ✓ Mulch and water

Planting correctly:



Planting Larger Trees, Balled & Burlap, or Potted Good luck, and let's go plant a tree!

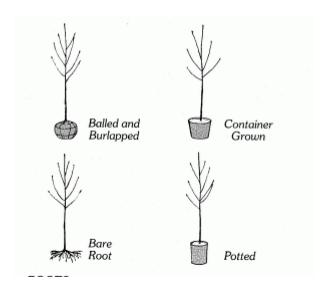
#### **Transporting And Storing Trees**

Tuesday, April 14th, 2009

It is best to plant trees as soon as possible after they are received. However, that is not always possible, for one reason or another, so, if they must be stored for a while, place them away from excessive exposure to sun and wind. Cover balled and burlapped or bare rooted tree roots with wood chips (mulch), sand, or loose earth. Remember, trees are alive and should be treated with respect, if one expects them to live and do well once they are finally planted. Protection from drying is critical. Roots must be kept moist. Foliage, stems, and branches can also dry out. If trees will be transported by truck, be sure to keep them covered for protection from wind.

Trees should be lifted by their container or root ball to avoid breaking fine roots and to protect stems.

Following are some helpful reminders about the various types of planting stock that you are likely to encounter.



### **ROOTS**

Several methods are used to package tree roots, each influenced by tree species, size, or ease of transportation.

- ▲ Balled and burlapped trees are dug from a nursery bed with roots in a ball of earth, then wrapped in burlap. Even though trees may be carefully grown and lifted, many roots are lost. The earth ball must be kept moist to prevent drying.
- ▲ Potted trees are dug from a nursery bed, then placed into a container. Containers may be hard or soft walled, but should be removed before planting. Soil in pots must be kept moist before planting.
- Bare rooted trees are also dug from a nursery bed, but soil is removed. They are easier to transport, but much more susceptible to drying. Roots may be wrapped in sphagnum moss or other packing material to hold moisture. Bare rooted trees are usually less costly, but must be handled and planted carefully.
- ▲ Container grown trees are raised directly in a pot or container. Although the entire root system is maintained, roots may become tightly encircled if left too long in the container. This may cause future problems for the tree.

All containers should be removed prior to planting.

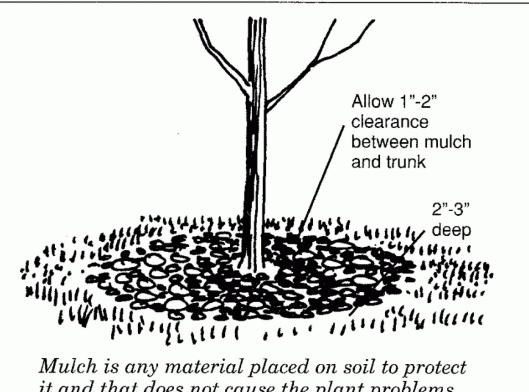
#### Don't Forget The Mulch!

Saturday, April 25th, 2009

In an earlier blog entry, I talked about the value of mulch around newly planted trees and shrubs. Actually, mulch is good in your flower beds and vegetable gardens as well. I'll not re-tell the mulch story here, but will merely remind you, now that the end of the spring planting season is near, to be sure and mulch; it's one of the best actions you can take to assure that your plantings get off to a good start. Some reminders are shown below:

## Mulch

Mulch is a young tree's best friend. It holds down competing weeds or grass, retains soil moisture, prevents soil cracking that can damage new roots, protects the trunk from lawnmower damage, and helps prevent soil compaction. Organic mulches such as wood chips or pine needles also contribute to better soil structure and aeration as they decompose. Avoid limestone rock and allow no mulch to touch the tree's trunk or be piled higher than 3 inches.



Mulch is any material placed on soil to protect it and that does not cause the plant problems. Common mulches include bark, wood chips, decorative gravel and crushed lava.

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