

# Trees vs. Monsoons

## *at Verrado*



Heavy rains and strong winds associated with monsoonal weather patterns in the Valley pose a significant test for newly planted trees. A percentage of trees less than a couple years old are found leaning or completely down after a significant storm.



Verrado, similar to all new developments, has been subject to tree damage. Although the majority of trees remain unscathed, a small percentage lean or fall all the way over. The damaged trees are an indication that the trees have trunk damage or have not yet established below the surface at the root level.



Immediately following a storm event DLC tree crews visit each damaged tree and determine the best course of action. In the process of standing the tree back up, the base of the tree is evaluated. This is done by moving the trunk slightly side to side to determine if the roots exhibit some degree of establishment with the adjacent soil. Trees that show any degree of root stability are straightened and restaked. Trees that show no stability, which means they are either broken at the base or root bound (essentially swiveling in the soil), are removed. It is important to note that root bound trees may live if they are restaked and continue to grow above the soil level. They will not, however, grow and establish within the root level to the extent that they will adequately support the ever larger tree.



It has been our experience through the years that root bound trees that have been straightened and restaked will always require stakes and then, at some point when they are much larger and have out grown the capacity of their stakes, fail again and cause significant damage to whatever is in their path, be it houses, walls, vehicles, etc.

In locations where trees are removed, replacement trees are being selected to include the best quality given the availability and variety. Depending on these factors, some replacement trees will be 36" box size and some 24" box size. It is important to note that where 24" box trees are chosen they will grow in size to catch up to the 36" box size within 1 - 1 1/2 years.

## EXAMPLES OF DAMAGED & ROOT BOUND TREES



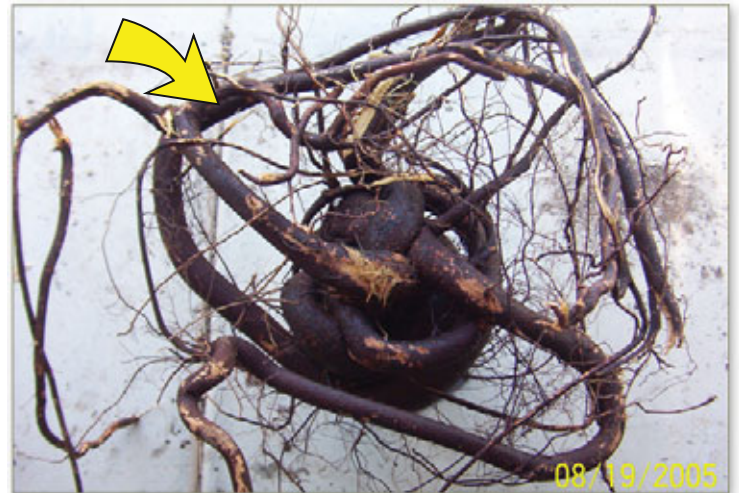
**01** A tree leaning after a storm due to a poorly established root system.



**02** Tree failed at the point of connection either from a girdled root of a poorly established root system.



**03** Roots wound tightly around the trunk are called girdled roots and will eventually kill the tree.



**04** These roots grow in a continuous circle caused by the nursery container.



**05** A DLC crew evaluates each tree to determine the best course of action.



**06** Example of ideal root growth.  
(<http://hort.ifas.ufl.edu/woody/pruning/index.htm>)