Planting and establishing trees is about managing air and moisture in the soil. Manage these correctly and trees will grow quickly following planting. Three of the most common causes of poor plant establishment or tree death are planting too deep, under watering, and over watering. If appropriate species are planted at the right depth and irrigated properly, the tree has a good chance of thriving.

**Dig Shallow and Wide Planting Hole**
Plant the tree with the surface of the root ball at the same level as the surface of the ground or one to two inches higher, if the soil is poorly drained. Make the hole at least 1.5 times the diameter of the root ball. Wider holes should be used for compacted soil and wet sites. This helps roots from becoming deformed by hitting the edge of the planting hole as they grow. Breaking up compacted soil in a larger area around the tree provides the newly emerging roots room to expand into loose soil. This will hasten root growth translating into quicker establishment. Do not underestimate the positive effect this technique has on tree establishment in hard soils.

**Check the Root Ball**
To check for root defects such as circling and kinked roots in containers or field-grown trees, you may have to displace or remove soil and media from the top of the root ball. Cut or spread out any circling or kinked roots growing up above the topmost root or any circling around the lower root ball. This will prevent these roots from strangling the trunk in the future.

**Place the Tree, Backfill and Water In**
Lift the tree only by its root ball and not by the trunk. Place it into the hole and straighten it. Fill in with a small amount of backfill soil to secure the tree in the upright position. Slice a shovel down into the backfill 20 to 30 times all around the tree as you add backfill soil to break up large soil clumps as much as possible. Add sufficient water to the root ball and soil while you are backfilling. Fill in any holes or depressions with additional backfill soil. Do not firmly pack backfill soil in an attempt to eliminate air pockets because this could cause too much soil compaction, instead step firmly on the backfill soil to help stabilize the root ball.

**Final Steps**
Provide a 2-3-inch-deep layer of mulch around the tree. Mulch reduces soil temperature fluctuations, prevent packing and crusting, conserve moisture, help control weeds, add organic matter to the soil, and improve the appearance of the landscape. Generally, a 2 to 3 foot diameter circle of mulch per inch of tree trunk caliper will give adequate mulch area for newly planted trees. Keep mulch away from the trunk and never pile it in a volcano-like manner against the trunk.