What happens if a tree is planted too deep?

- Recent research has shown that most trees are accidentally planted too deep.

Planting too deep can cause:

- Premature death of trees from Stem Girdling Roots.
- Soil girdling of the trunk.
- Poor root growth or root death.

How to plant Containerized Trees.

- Remove the tree from the container by holding the trunk of the tree with one hand and pushing down on the container with the other hand. If the container does not come off easily cut it down two sides.
- The tree may be planted too deep in the pot. Remove the soil down to the first roots.
- If there are encircling roots, slice through them with a sharp knife. Make 3-4 vertical cuts in the root ball. After cutting, pull the roots apart.
- Dig the hole just deep enough so the first roots will be just below finished grade. Do not loosen soil under the root ball below this depth.
- Planting site should be prepared 3-5 times the width of the soil ball.

How to care for a new tree.

- Water the tree after planting. Make sure to soak the soil close to the trunk and the entire planting area. Water the tree when soil feels dry at a 2-4 inch depth during the first year.
- Mulch the planting site with wood chips to a depth of approximately four inches.
  
  **Do not place mulch next to the trunk of the tree. Do not use plastic or weed barriers below the mulch.**
- Staking is not necessary unless trees cannot stand by themselves. If staking is needed use wide burlap, rubber or nylon straps looped loosely around the tree and tied back to stakes allowing for some movement.
- Pruning newly planted trees is not necessary except to remove dead, rubbing, or weakly attached branches and to remove multiple leaders.
- Do not fertilize or use slow release fertilizers the year the tree is planted.
**What are Stem Girdling Roots (SGR’s)?**

- SGR’s form because the tree was planted too deep and the roots encircled the buried trunk.
- As the trunk and roots grow in diameter, they eventually contact each other causing the trunk to compress and cut off the supply of water and nutrients.
- SGR’s will cause the tree to die prematurely or blow over in a storm.
- SGR’s are a problem that can be easily avoided if the tree is planted at the correct depth.

**How to determine the correct planting depth.**

- The first or uppermost roots should be just below the finished soil line.
- Some trees may be accidentally planted too deep at the nursery so soil may need to be removed to find the first roots. A probe can also be used to determine depth to the first roots.
- Before you begin to dig, measure the height from the bottom of the root ball to the first roots to determine hole depth.

**How to pick a quality tree.**

- Trees with deformities should be avoided.
- A tree should have a straight trunk with no wounding, disease or decay.
- Leaves should be of normal size and color and distributed uniformly.
- A root system should contain many fibrous roots or smaller, white roots.

**How to prepare the site to plant a tree.**

1. Prepare a planting site 3-5 times the width of the container or soil ball by removing or killing the sod and loosening the soil.
2. Dig the primary hole in the center of the planting site wide enough to accommodate the root ball. Do not dig deeper than the depth required to have the first roots at the finished grade.

**How to plant Balled and Burlapped Trees.**

- Do not remove any of the basket and burlap until the tree is positioned in the hole.
- Use a probe or loosen the burlap and remove soil from the top of the root ball to determine where the first roots are located.
- Dig a hole to a depth so the first roots will be just below the finished soil grade. Do not loosen soil below the soil ball.
- Lift the tree by the basket and set it into the hole. Backfill the hole half way up the root ball and check that it is standing straight. Remove the visible portion of the wire basket and burlap without disturbing the soil ball.
- Leave the remaining burlap and wire buried. Finish back-filling the hole up to the uppermost roots. Water to settle the soil around the root ball.