

The story today is about trees and how we can get them to stand up better and live longer. Believe it or not, we are finding that production and planting protocol is having a major impact on this story.

Trees planted in the urban and suburban areas can be tough. It is an ecosystem unlike any other; it is fragmented, highly pressured, and constantly under siege with poor soil structure, limited soil volumes, alternating flooding and droughty conditions, salts, chemicals, and temperature extremes... as opposed to a more natural wooded ecosystem which is undisturbed and consistent.

Research reveals that the average lifespan of an urban tree is 7-10 years. Even a best-case scenario of a suburban landscape tree's life is depressing...30-40 years. This information led to some serious questions... Why aren't these trees living longer or why are they failing at such a short lifespan?

Successful tree planting requires us to think backwards or beginning with the end in mind.

- Ultimate size of the tree, height and width.
- Appropriate species for the situation/location.
- Long-term site considerations.

The idea is to reduce the inputs required to sustain the tree outside of its own biological abilities.



For sustainable tree plantings, the goal is to minimize inputs and maximize the benefits trees provide.

<i>Matters</i>	<i>Doesn't Matter</i>
Location: Right Tree, Right Place! Consider pH, Soil type and drainage. Know the realistic height and spread. Identify utility and infrastructure conflicts.	Planting pit size: allow for some root expansion; 1 x size of root ball with minimum of 6" around root ball.
Selection: Choose healthy trees from a reliable source, check for good branch structure, pest free.	Root ball covering on B and B: only top 1/3 of material needs be removed; wire baskets are not an issue with sustainability.
Root system; check for dysfunctional root systems; circling/girdling roots on containers; depth of main order roots on B and B plants. Correct issues prior to planting.	Backfill Materials: only native soils should be used to create a natural environment. No Fertilizer should be applied at planting.
Planting Depth: Do not install the tree too deep! Find the root flare or main order roots to determine proper grade level and depth.	Mulching; doesn't do much for water loss, but does help regulate soil temps, a little.

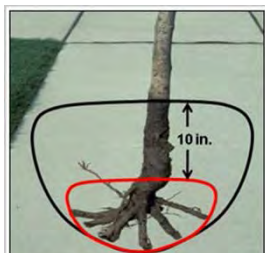


Figure 1. Remove excess soil from top of the ball.

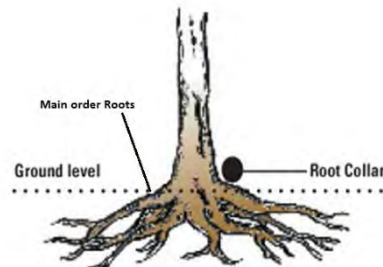


Figure 2. Find the root collar and main order roots to determine proper planting depth.