

Adjustments Without Sacrifice

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At this point in time, few people deny the importance of developing a more fibrous root system especially on trees, but other plants as well. Clearly, rate of establishment, water and nutrient efficiency, tolerance to environmental extremes, secure anchorage and other benefits both short term and long term result from a more fibrous root system. Those resisting this important improvement complain mostly about the cost to make a change-over, yet overlook one of the many benefits, that of shortening the time from seed or cutting to market.

But the main restricting factor is the age old bugaboo --- tradition. Daddy did not do it that way, so I am not going to do it. Which I read as, being comfortable / secure in their current practices and to try something new might be uncomfortable and at first, a bit less secure.

There is the old adage about putting lipstick on a pig, but it is still a pig. That would be akin to using a colorful rose-print fabric instead of burlap on trees harvested balled in burlap and placed in wire baskets. Yes, it looks a bit different, but in reality it is the same thing – a balled in burlap tree that will be slow to establish due to the marginal root system. To me the often repeated description of B & B trees; that the first year they sleep, the second year they creep and the third year they finally leap is unacceptable. Too slow, too much stress, too many losses and just not representative of what I want to see.

Another example is the current practice of conventional smooth walled plastic containers made in multiple colors and some even have showy flowers on part or all of the sidewall. That practice also fits the lipstick on a pig corollary. No matter how colorful you make a smooth walled conventional plastic pot, it is still the same root circling, congestion plagued terrible environment for root growth.

Consider the following functional and desirable adjustments to both problems;

Adjustment #1. Landscape contractors like wire baskets on trees because they provide easy access handles. Putting wire baskets on large container grown trees so they can be handled on the job site like field grown balled in burlap trees is easy, ----- but when grown in RootBuilder® or RootTrapper® containers, they have far superior root systems and only about 20% of the weight compared to balled in burlap. This provides a practical solution that looks like the old way (wire basket with handles) , only greatly improved.

The oak trees in Figures, 1-3 were grown in green knit fabric containers in the field. They were harvested with a fork lift in a few minutes, the fabric removed and positioned in RootBuilder® II containers. Only instead of just the RootBuilder® II container alone, a lightweight wire basket was used inside. The myriad of outward projecting cones of the RootBuilder® II container stops all root circling and provides the ultimate in root branching. When the tree is fully rooted out, it looks, feels and can be handled

like a balled in burlap tree in a wire basket. Trees grown with the RootMaker® System have a super, non-circling fibrous root system and will establish quickly and perform the first growing season. No waiting for growth and flowering --- the tree is ready to go, full throttle. In addition, the landscape contractor's crew likes moving trees with 3 to 6 inch diameter stems and root balls weighing 300 pounds versus 1,200 to 1,500 pounds. The finished product looks the same, handles the same, but is much lighter in weight, and establishes more quickly. The ultimate win-win-win situation.



Figure 1. RootBuilder® with wire basket and RootTrapper® base material.



Figure 2. Installing a 5" stem diameter shumard oak that was field grown in a 24" knit fabric container, with fabric removed after harvest. This tree will finish in the 60-gallon RootBuilder® in less than a growing season and be ready for the landscape. No waiting 2 years for good growth.



Figure 3. The finished installation from Figure 2.

White RootTrapper® containers can also be used with wire baskets (Figure 4) The trees in these photos were grown in the field, then when approaching marketable size were transferred to the RootBuilder® or white RootTrapper® containers for finishing.

Both the RootBuilder® and white RootTrapper® can be used to grow similar sized trees entirely in containers. By starting with the RootMaker® propagation trays and stepping up to 3 gallons or the High-5® and so on in sequence, similar trees of excellent quality can be produced.



Figure 4. White RootTrapper® containers also work well.

Adjustment #2. Root circling in smooth walled conventional containers of any size can be stopped by inserting a Pot Licker® liner. The Pot Licker® consists of RootTrapper® fabric cut to fit the sidewall curvature of the container, plus a disk in the bottom. Instead of roots growing out, contacting the smooth container sidewall and circling, with the Pot Licker® roots grow out, contact the fabric wall and stop. When root tips are trapped and can no longer extend, dominance of the root tip is lost and secondary branch roots begin to form from just back of the tip to a point about four inches back on the old root. These new branch roots explore a volume of the container growth medium mostly missed by roots in conventional pots because they become congested in a thin layer against the smooth plastic sidewall.

To prepare to plant into the landscape a plant grown in a conventional container fitted with a Pot Licker®, (Figure 5), simply remove the old plastic pot and save for reuse, pull on the overlapping tab of the Pot Licker®, plus remove the bottom and plant normally. Root tips densely populate the outer surface of the root ball and are ready to extend into the surrounding soil and establish the plant. Inserting a Pot Licker® into a conventional container (Figure 6) is the next best thing to growing in a RootMaker®. It still has the traditional look, yet with a radically enhanced root system. Plus the Pot Licker® is reusable too.



Figure 5. Trees in conventional pots but lined with a Pot Licker® have no circling roots and establish quicker.



Figure 6. The Pot Licker® is a liner of RootTrapper® material cut to fit a conventional container.