



## KAT NURSERIES

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### DOES SIZE REALLY MATTER??

When buying nursery stock to be installed into a new or existing landscape, what size is the best for your investment? In this age of “instant landscapes” many times the choice is “the bigger the better.” But is this always the best? Smaller stock is certainly cheaper, but do you really get what you pay for?

Several other questions should also be considered before making this decision such as who would be charged with the maintenance especially during the 2-3 year establishment period? Is automatic irrigation available or are they going to be watered manually? Is there loading and installation equipment available that is adequate in size to handle the material safely and efficiently? Is there adequate soil space to dig the appropriate sized hole (we’re mainly talking width here)? What is the tolerance of the property owner to initial size? What is the tolerance of the property owner to success or failure? Does your company or the nursery offer a warranty? Are you planting shade, ornamental or evergreen trees and for what purpose besides aesthetics?

I must first say that over the years as a city forester, I’ve developed a preference for smaller stock. Plus this attitude is common by other city and governmental foresters across the nation, where the trend has been to purchase and plant smaller trees. Tighter budgets, labor constraints, limited time and hostile planting sites demand stricter controls to maximize survivability.



But why smaller stock? Here are a couple reasons that I would use when volleying for a budget.

- 1) Initial Cost
- 2) Easier to handle
- 3) Easier to dig the appropriate sized hole for the rootball
- 4) Less shock to the tree
- 5) Most of the time the tree will start recovering quicker and will ‘catch up’ to larger stock within a couple of years
- 6) Less watering until establishment

Okay, now the other side of the coin. Indeed there are several advantages to larger nursery stock, especially when you are considering purchasing and planting **shade trees**. But, before we go any further, it might be wise to define just what is big and what is small. For shade trees, 1” to 1 ¾” cal. would be on the small side in the nursery trade. For evergreens, anything under 6’ would most likely be considered small. Note: we are not talking seedlings, whips or saplings. And for purposes of this article, I am not going to get into bare-root, container or B & B. That’s a whole different *Soapbox*. Let’s assume these trees are all B & B.

The first obvious disadvantage to the “smaller the better, we try harder” theory is **availability**. Many local nurseries just do not offer the smaller sizes especially in shade trees. Do you risk going out of state or region to buy mail order trees just to get a smaller size? I’m sure that if you look hard enough, you could find them somewhere. But is there a reason for this? Yes, and now we come to what I consider the best reason for going large when planting shade trees. I was recently reminded of this reason, which is probably obvious to many nurserymen, but maybe not so much your customers. Nurserymen can actually provide the first couple of years of maintenance while the tree is still in the nursery!

Reputable nurseries of course, strive to produce the best quality product that the market will bear. A large part of this qualitative component lies in the root ball. Is it the right size in relation to the tree size and variety? It is solid, securely bound, freshly dug and full of roots? Was the tree properly dug with the root collar visible at the surface? These are very important factors, but not the only ones.

Another key component of quality nursery stock and one that is more visible to our ‘trained’ eyes is the branching habit and existence of a strong central leader especially on a tree destined to provide shade at maturity. Nurseries that produce the highest quality nursery stock start this important process in the nursery the last couple of years before harvesting.

The key here is that smaller stock does not yet have the branching available to start this training process. There is a huge difference in the nursery in just one year’s growth. The development of a central leader is crucial on shade trees. Smart and conscientious nurserymen will encourage this leader and select the appropriate side branching, as far as spacing, size and health for pruning. In most cases, all of the limbs on smaller trees, except the central leader, are temporary anyway. Many times the tree is still suffering from transplant shock also, from when it was planted into the nursery.

It is well documented that pruning trees (correctly) when young can greatly reduce problems down the road. This is usually the one maintenance detail that end-users ultimately ignore and wish that they hadn’t after the tree reaches maturity and starts to have problems involving structure. Several species of trees labeled as ‘trouble-makers’ Green Ash, Siberian Elm and Silver Maple can be twice the mature tree and develop half of the problems, if they had only had the training pruning early in their lives. By purchasing and planting stock that is larger and “trained” in the nursery, you may be reducing or eliminating important pruning needs in its early life.

In conclusion, the answer to the question, which is better, smaller vs. larger nursery stock? Well “it depends” (as is usually the case). If dependable irrigation is guaranteed, you might opt for the larger size. If you don’t have adequate equipment and staff able to handle larger stock without damaging the root ball or rest of the tree and without hurting your crew, the smaller trees might be the best option. In an established turf area, are the property owners agreeable to you excavating a 6’ wide hole in order to accommodate a 40” rootball? Does your customer want that “instant landscape” look and is aware of the extra care and expense involved? Are you offering a warranty and/or responsible for the maintenance during this period? And finally, are you installing a quality landscape that will stand the test of time and provide the maximum benefits both aesthetically and functionally? I’m thinking that is what we’re all striving for.

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KAT Nurseries

