

## Should you purchase a large tree or start small

When shopping for plants your choices are not just what type of plant but also what size. Sometimes price will drive your decision, but not always. The instant gratification of purchasing a large plant that looks like it has been in the landscape a while can also play into your decision. Let's look at the pro-cons of purchasing a small potted or a large balled and burlaped plant. We will use a red maple tree for or example.

We need to understand terminology first. When the nursery staff refers to the 'tree caliper' they mean the trunk diameter. So a 2" maple doesn't mean the tree is two inches high, it means the trunk diameter is 2". I realize this seems silly to mention but when reviewing a landscape blueprint with a client years ago we were discussing tree locations. Each tree on the design was labeled with the trunk diameter – in this case it was 2". The homeowner was floored that we would be starting with trees that were so small. I had to carefully explain that the 2" was not the height of the trees but the diameter of the trunk. Just remember, no questions are stupid ones! Other terms to be familiar with are potted, balled & burlaped, wire basket, and tree spade, (meaning a spade mounted on a truck). These are the four most common ways that a red maple can be purchased.

- Pots have different sizes and are referred to as gallons. The smallest trees are in a #5 gallon container, the largest sizes are in a #25 gallon container. The trunk diameter, or tree caliper, for a #5 gallon will be about ¾" up to maybe a 1" and the weight about 50 lbs. A #25 gallon container can have a tree up to a 3" trunk diameter and can weight about 150 lbs. These trees start their lives in containers and don't leave them until they are planted in the ground. This means very little transplant shock.
- Balled & burlap trees start their life in the ground, and when ready for market are dug out of the ground, have the root mass shaped into a ball – or something resembling a ball - and wrapped in burlap. This is usually done by hand and the size is limited by the amount that can be lifted without the ball falling apart. This method is not used much for trees (mostly large shrubs). The size will go up to about 2" and can weight up to 200 lbs.
- A wire basket tree starts the same way as balled & burlaped, but when made ready for market it is dug with a machine and set into a wire basket that corresponds with the size of the machine. Wire basket trees can range in size from 2" up to 6" trunk diameter. These can weigh from 300 up to 3000 lbs.
- Spaded trees using a truck mounted machine that can plant trees from 4" up to 10" in trunk diameter. For the most part these trees are dug from farmland or open forest, what we call native stock. Some of these trees are dug from nurseries that have grown the trees from seedlings and spaced them far enough apart so the tree spade can get to them once ready for digging.

There are many factors that can either encourage or hinder the growth of any plant, including trees. Those factors are placement of the tree, and care of the tree (fertility, water and safety from mechanical injury). There has been recent research done on the planting of urban trees. They started with 4" and 10" trees and found that the smaller trees rooted more quickly and eventually caught up to larger ones. These trials were run over a 10-year period. The urban trees come under much more stress than trees planted in your yard and given proper care. Proper care is critical.

Now that we have broken down the sizes and approximate weights you can see what some of the limiting factors might be for you when deciding. Budget will be a part of the decision. Location of the tree and the accessibility with equipment will also be a factor. The limiting factor for the do-it-yourself homeowner will be what you can physically handle yourself.

Remember what I mentioned earlier about potted trees never leaving the pot until they are planted in your yard. This means the tree suffers very little shock from seedling to your yard. When a tree is balled & burlaped, wire basket or moved with a truck spade they suffer a lot of transplant shock. Many of the feeding roots get severed when the tree is dug. This is not necessarily a bad thing. Root pruning will encourage many new roots, quickly if the tree is handled correctly. The transplant shock will slow

the growth for the first few years but with proper care it will recuperate. Any large tree that has been transplanted by these methods I usually give it two - three years to gain the root mass needed for good growth. The larger the tree, the more time it will take.

Am I saying don't buy that wire basket red maple, but stick to potted ones? No. The biggest factor in larger trees & shrubs is how they are handled in the nursery. When we receive a truckload of trees we place a premium on getting the trees off the truck, placed in the nursery, mulched to cover the root ball and watered in. We have trickle irrigation to insure the plants get watered every day. When the trees are handled in this way we have had great success getting new roots to start very quickly, and they are the lifeblood for the health of the plant. If any part of this process breaks down the plant will suffer. When handling a potted tree our only real concern is keeping the soil moist in the pot. When you are purchasing a balled & burlaped or wire basket tree, check the root ball. If you see many fine, white colored roots poking through the burlap that is very good sign, they are the roots that will feed the tree. You want to take the entire root mass home with you. If the root ball is dry and there are no hair roots ask the nursery staff if the tree is a new one, this will explain the lack of roots. But if it has been in the nursery for a few months with no new roots showing you should find another tree to purchase.

Remember that purchasing a plant it is an investment, an investment that grows when cared for. You have no control over the care of the tree before you make the purchase but knowing what to look for in the nursery and what questions to ask can help in making the right chose.