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Big Tree Transplanting

With careful planning and care, moving big trees is a piece of cake

Imagine that you have lived in the same place your whole life. You're comfortable there. Now imagine being removed without warning, and being forced to live in a totally foreign setting where - at best - only a very limited number of the things you need to survive are available. Think you'd survive?

With that in mind, it's no wonder that there are so many things to consider when moving a tree, especially a big one. It is no easy feat, but with careful planning and care, its chances for success rise exponentially.

The decision to move a big tree should not be taken lightly. Keith Giertych - now regional technical professional for Growth Products, Ltd. - was the manager of a prestigious 1,200-acre estate for 10 years, where he was part of a team that relocated several 150 year old oak trees.

After being alive for 1-1/2 centuries, many of the trees possessed root balls that measured an astounding 39 feet! According to Giertych, planning for

the move was the single most important element of the process, and he began preparing nearly two whole years before a single tree was moved. Because each tree was unique, he found that not all of them were good candidates for relocation.

The overall health of each individual tree was determined through tissue testing and known strengths and qualities of all the tree species were also taken into effect. Soil testing was done in order to discern the soil's condition and its compatibility with the tree. Tensiometers were used to measure water levels at one, two and three foot levels for each tree. Lighting, exposure to elements, and the availability of nutrients were also taken into stronger consideration.

Once all the initial planning has taken place, preparation must be made in order to make the transition as smooth as possible. Again, the situation of each tree must be considered. Where did it come from? Where is it going? Will its new location allow it to grow? All attempts should be made to insure

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that the two environments are as comparable as possible.

Rooting is very important, and the tree should be helped to build up a dense root ball if possible. On bigger trees, root pruning must be started up on year prior to the actual move date (ideally during the fall) in order to nurture a denser, more compact, root structure and a strong root ball that won't fall apart.

The first step to root up pruning should always be the measuring of the root ball. A rule of thumb is to measure eight or nine inches out from the tree for every inch of the tree width at diameter breast height (for example, the root ball for a tree with diameter of four feet should be marked off at

between 32 to 36 feet). Pie-Shaped sections should then be cut from the circle. The roots should be clipped back cleanly, and sprayed with an organic rooting stimulant. Phosphorus should never be used to stimulate root growth in trees under severe stress. The extended pruning process is done to keep the tree from going into shock. Remember to keep the ever-so-delicate root hairs moist while they are exposed, and once complete, fill in the excavated area as soon as possible with excellent quality aerated backfill mix.

Once the tree is ready to be moved to its new location, a new hole needs to be dug. Ideally, it should be approximately double the size of the root ball that will be placed in it. Where depth is concerned, one should take into consideration that most feeder roots of even a big tree are at the 0-12 level. If these roots are buried too deeply, the tree will subsequently have extreme difficulty with nutrient uptake. In order to avoid this, care must be taken not to pile soil and mulch at too high a level at the crown of the tree.

Roots need to breathe. They may be aided by using a good backfill mix that includes elements like sand, peat moss, topsoil and sodding. Air tubes can also be helpful if the tree is being planted in an urban setting.

Like all new arrivals, a big tree still needs some help to make sure it gets established. Staking provides the tree with much needed support until its roots have a chance to take hold. On a big tree, three stakes should be used and should run at least one-half to two-thirds of the way up the tree. These stakes should be left in place for a period of three to four years.

Good watering and prescription fertilization programs are essential if the tree is to thrive in its new environment. Water is crucial during the entire process, as evidenced by the fact that 55 gallons of water takes almost 24 hours to soak three feet down into the soil (a slow trickle over a long period of time is optimum).

Obviously, the process explained above is an ideal one for the moving of a big tree. Unfortunately, in the real world, ideal conditions are often not the norm. Many times an arborist is called in after the tree had already been moved and is already in decline (this often happens on construction sites). When this occurs, steps to fix problems created by lack of care in planting should be taken immediately.

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Growth Products president Clare Reinbergen encountered this problem when she was called in as a consultant for the Louis-Dreyfus Estate in Mt. Kisco, NY. After conducting extensive soil and tissue testing, she discovered 100 to 200 times the normal rates of phosphorus and calcium levels which were toxic to the many trees there.

“First we needed to correct the existing soil conditions,” recounts Reinbergen. We had to deal with a great deal of compaction. Care needed to be taken to reduce salts and over abundant minerals, and balance the soil’s pH levels. “

Since trees under severe pressure are often unable to take up nutrients, Reinbergen developed a foliar application fertilization program until the trees were able to accept available nutrients through their roots. Four years later according to estate manager Lewis Sparks, the trees have never been healthier.

Remember, moving a big tree is a big undertaking. Plan well, and more likely than not, that tree will live to grow even bigger for a long, long time.

