The Advantages of Planting Small by James P. Engel, White Oak Nursery, www.whiteoaknursery.biz © 2003

I have heard numerous times from customers referring to a small sized tree, "I'll be dead before I get to enjoy this tree". I think to myself, "what keeps you from enjoying the tree now"? The fallacy in this statement is that trees can only be appreciated when they are large and dominant in the landscape. This can take many years. Is size the only thing that trees have to offer us? Trees have as many ornamental features as any other plant in the landscape but somehow these get overlooked. I say trees have as much to offer us when they are small as they do when they have reached a mature size.

The nursery/landscape industry has perpetuated the outdated practice of planting isolated trees in the landscape. In nearly every yard and lawn, trees are grown in complete isolation from any other plant or tree. You will never find trees growing like this in nature. These trees are nothing more than "green lawn ornaments" imprisoned in our landscapes surrounded by a sea of grass. There are times when this planting design serves a purpose but trees and plants in general look better when they are grouped and allowed to grow as a community of plants. You are limiting yourself in both the numbers, varieties and placement of trees by adhering to this antiquated practice. I will try to dispel this outdated notion and explain to you why trees should be planted in greater numbers, at closer spacing and at smaller sizes.

Standard nursery practice creates a tree that has a perfectly straight trunk with a full rounded outline. In most cases trees are cloned so every tree has the same identical genetics to promote certain desirable traits and standardize the growth habits. This is fine for factory made trees but survival in nature requires genetic diversity and adaptability to environmental changes. Artistically, diversity is more interesting than standardization. Under nursery production, trees are grown with a trunk that measures 1" to 3" in diameter the tree is then dug up from the nursery with only a fraction of the original root system retained in the root ball to support this large canopy of branches and leaves. The tree is then purchased and planted in a landscape and expected to live and grow when most of its supporting root system has been cut away. It is surprising that any of these trees actually survive but a significant number do die in from one to several years after transplanting. For many trees it may take several years before it finally succumbs to a slow death from starvation.

The main problem is that people want instant trees but trees like most living organisms grow at a variable rate over its entire life span which can span several centuries. By digging up and transplanting a relatively large tree the tree is suffering severe injury and shock to its current and often future health from which many trees will never recover.

For better survival and health trees should be planted at a smaller size than they currently are. There are several sound environmental, physiological and economic reasons for planting smaller sized plants. Smaller is a relative term so what do I mean by smaller? For most trees, heights that measure from 5ft to 8ft is a good size for planting. This size is easy to handle, responds quickly after transplanting, is affordable but is large enough to visually fill the planting space.

When a small tree is planted more of the root system is retained with the plant and the root system is more in balance with the above ground portion of the tree. A good thing to remember is that any plant is only as good as its root system. A tree can only grow leaves and branches if the root system can supply the needed water and nutrients. The roots of a small plant quickly establish in the surrounding soil and can then support new growth of the leaves and branches. For this reason smaller trees often catch up to and surpass the growth of trees that were planted at a larger size. The growth of the tree will adjust to the soil and moisture conditions where it is permanently planted, not to where it was grown in the nursery.

The economics of size, survival and time dictates that a smaller sized tree will cost a fraction of the cost of a large caliper tree. A large tree costs more due to the number of additional years it grew in the nursery and the added risk of covering the replacement cost of trees that do not survive transplanting. It takes more labor and the use of heavy equipment to dig, handle and ship a large tree. For nurseries fewer larger trees are sold so a higher mark up is charged per tree to turn a profit. Smaller trees can be lifted and moved by hand whereas larger trees normally require the use of a tractor, chain and bucket. One person can easily dig the planting hole for a small tree by hand but a large tree may even require a backhoe.

Of all the reasons given to justify planting smaller, for me the number one reason to plant smaller sized trees is that you will be able to afford to plant more trees and by planting more trees you will be able to enjoy more of the beauty and artistic interest that each tree provides. Shouldn't this be reason enough?

I've now convinced you to plant more trees but now there is one more hurdle that must be overcome. That hurdle is the long entrenched practice of planting trees in total isolation from each other and from any other plants in the landscape. I'm sure you are familiar with this practice, but now look around, take a look at how trees grow in nature or where homes were built in native wood-land. Witness how these trees grow in mixed communities of several species. Observe how the high airy canopy creates a cathedral like feeling. It is more aesthetically pleasing to the eye to view a grove of trees than an individual tree all by itself. A group of trees in a planting can have the same or greater visual impact as one large tree and offers diverse ornamental interest. Trees can and should be planted closer together. The landscape trend should be to create plant communities using a mixture of large and small trees along with a planting of shrubs at the ground level. This is not only more interesting to look at but also provides critical habitat for birds and small mammals that is absent from most of our landscapes.

Size can still be an obstacle for some people. The mindset that a tree is not a tree unless it is large is hard to overcome. Time will eventually remedy this but in the short term there is an easy fix. The solution is to landscape with a mixture of plant types. Trees, shrubs and perennials can all be planted together in one landscape bed. In this way the tree is just one of the features in the whole landscape planting. The shrubs and perennials provide fullness and cover at the ground level and create a full complex landscape. The shrubs provide additional ornamental interest to the planting that compliment the ornamental features of the trees. As the trees grow they will continue to develop vertically creating the multi-layered structure that is so interesting.

Smaller trees can create the same or greater effect as one larger tree. A grouping of several smaller trees can initially fill the same visual space as planting one large tree. But over time the grouping of trees will create far more visual and ornamental impact in the landscape. A group of trees give you far more variety and options than planting just one lone tree. If you think in terms of flowers would you rather have a single flower in a vase or a whole bouquet of flowers? A grove of trees can give you variety in bark texture, fall leaf color, leaf shape and texture, growth habit, conifer versus deciduous trees.

Trees in a group develop a very different growth habit than a single tree. A single tree will have low broad branching that may be difficult to walk under or see through. The trunks of trees grown at close spacing will grow tall and straight with a high canopy and few lower branches. The area beneath tall trees is open and airy creating a sense of spaciousness much like a cathedral. The high canopy allows light and air to enter and circulate from the sides. A grove of trees is easy to walk under and permits an unobstructed view from end to end. The straight vertical trunks bring your vision upward and invites the viewer to walk beneath the canopy and be sheltered in its shade.

Planting smaller gives you many more options in terms of economics, design and aesthetics. There are unlimited numbers of plant combinations and design arrangements that can be used in the landscape. Read books on natural landscaping and woodland gardening for help in selecting plants and designing plantings. I can help you with design and selection and aand I also grow trees specifically for use in groupings.