

Mechanical Tree Transplanting — Another Perspective

by Greg Oltman

During the 1987 season, Williamson Nursery & Associates, Inc. transplanted slightly more than ten thousand trees, using mechanical tree spades ranging in size from thirty-six inches to ninety inches. We feel qualified, therefore, to comment on Mr. Beebe's article from the November 1987 *Bull Sheet*, "1987 — The Frenzy of Mechanical Tree Moving."

At first reading, Mr. Beebe's article seems to be a rather general indictment of tree-spade transplanting. Perhaps, however, this is merely the defensive reaction of someone who has often been challenged on the effectiveness and advisability of relocating large trees mechanically. Upon re-analysis, we found that Mr. Beebe does, in fact, cite several legitimate concerns and makes some very valid points.

It is the transplanting of the very large trees (10" + caliper) which, historically, has prompted the greatest controversy. In this area, Mr. Beebe and I agree most entirely. It is seldom possible to successfully transplant trees of this size with tree spades, simply because the largest commercially available spade is only ninety inches in diameter. Transplant failure need not be an absolute, however, if proper preparation techniques are employed. We have found that root-pruning very large trees and leaving them in the ground for a full season, helps to moderate transplant shock when the actual move takes place. We perform root-pruning by digging the tree with the spade, but not removing it from the hole. We usually try to dig the tree about six inches smaller than the full "dig" of the ninety-inch spade. Then, when the tree is actually transplanted, we dig a full ninety inches. In theory, and, seemingly, in practice, at time of transplanting, we are able to capture the new roots that the tree has initiated as a result of the earlier root-pruning.

Even when this method can be used, however, we recommend it only for nursery-grown trees. We recommend very strongly that native trees (or "volunteer trees") not be moved in sizes above seven or eight inches of caliper. Without any history of transplanting, a tree larger than seven inches caliper will almost certainly not survive. This is due to the extremely random nature of the root system of a tree which has never been transplanted. It is likely that as little as three percent of the feeder root system will be captured in the transplanting of a nine or ten inch caliper native seedling tree. There is simply no way that this minute percentage of the root system can support the canopy, even after canopy reduction by pruning.

In addition to pre-transplant preparation, post-transplant maintenance is absolutely imperative. This is true not only on extremely large specimens, but on intermediate size material as well. It may take up to five growing seasons for a transplanted tree to become entirely self-sufficient again. In light of the temperature and moisture extremes which are a common part of our weather pattern, this length of time should not be surprising. We sometimes tend to think that after one or two seasons, the transplanted tree is "over the hump." This can be a critical mistake, and one which can lead to that one hundred percent mortality Mr. Beebe mentions in his article.

There are numerous other factors which enter into our decision whether to transplant a tree: species, the tree's current location, the conditions found at the new site, time of year, expected follow-up maintenance by the client, etc. For our own reputation, the good of the client, and the reputation of tree-spades in general, it is often best to say a polite "Thanks, but no thanks."

We share with Mr. Beebe the concern that tree-spades are portrayed as miracle machines. For this image, we lay a large part of the blame at the doors of the manufacturers. Tree-spades can be a very effective and efficient means of transplanting trees, but they are not capable of transmuting the laws of Nature. There will always be people who use tree-spades beyond reasonable limits, and, therefore, there will always be those individuals who condemn all tree-spade transplanting. This is unfortunate, for we see properly performed tree-spade transplanting as an increasingly important part of the landscape industry.

We don't expect that we will convert everyone to our way of thinking. But, given the opportunity, we remain convinced that we will win far more than we will lose.

NGF Creates Golf Program Guide for Schools, Colleges

JUPITER, Fla. — The National Golf Foundation has created a complete program guide for middle schools, high schools or colleges wishing to include golf as part of their regular physical education curriculum. Packaged in kit form, it is a distillation of teaching methods used by leading golf instructors throughout the United States.

"Many physical education programs today do not include golf," says Dr. Ed Cottrell, the former associate dean for the physical education department at Pennsylvania's West Chester University, who currently serves as chairman of the NGF's Association of Golf Educators, a national service organization for golf coaches and teachers. "And this is often because the teachers are not trained in golf and therefore are uncertain just how to implement such a program.

"This kit gives the schools and their teachers all the tools needed to successfully add golf to their current physical education programs. By the same token, we believe that instructors and coaches who have been teaching golf for years will find it just as useful."

The NGF GOLF CURRICULUM KIT contains 16 lesson plans adaptable to any grade level or teaching time frame. There are also master copies of student hand-outs, drills and sample tests; the two-volume NGF golf instruction video, *How to Play Your Best Golf*, and, four specially developed NGF publications: *Golf Instructor's Guide*, *Golf Coach's Guide*, *Golf Lessons* and *Easy Way to Learn Golf Rules*.

"We feel that by responding to the needs of golf educators we are also helping the game," says NGF President and CEO David B. Hueber. "Golf is the game of a lifetime, and the sooner tomorrow's generation of golfers get started, the better it is for them and the industry."

Available through the NGF for \$149 (\$89 without the video), the kit can be purchased by NGF members at a 10% discount.

The National Golf Foundation is a nonprofit golf industry research organization that also works to promote the game with programs aimed at introducing more people to the game while also encouraging the development of the additional golf facilities that will be needed for those players in the years ahead. Founded in 1936, its 4,000 members include golf companies and golf courses throughout the U.S., as well as national, state and local golf associations, golf course architects and builders, and, golf teachers and coaches.