

DEVELOPMENT OF A SHADE TREE OPERATION¹

by Joseph Jannarone

The Township of Parsippany Troy-Hills is one of the largest municipalities in north central New Jersey. It covers an area of 27 square miles and has a population of approximately 70,000 people. It has approximately 180 miles of roads and the number is growing each year. The operating budget, including salaries and wages, for the Shade Tree Department in 1978 was \$83,000.

Prior to 1972, Parsippany did not have an active shade tree program. In 1972 I was hired to enforce the two ordinances that were then on the books: 1) the Land Sub-division Ordinance. This ordinance pertains specifically to trees that are being planted by the developer; 2) the Tree Removal Ordinance. This ordinance pertains to any developer or people who wish to remove trees on private property.

I initiated procedures to enforce these two ordinances. This involved working closely with the Building and Engineering Departments, whereas, it was made mandatory that before building or excavation permits were given, a tree removal permit had to be obtained. In the beginning, there were many infractions of these ordinances but since I had the enforcement power, I was able to issue summonses and take a few developers to court. After a short time all builders in Parsippany abided by the regulations.

After these procedures were initiated I began to determine the number of trees growing along the streets of Parsippany-Troy Hills. I had contacted a professor from the Rutgers Forestry School and recruited one of his students to work during the summer.

In the summer of 1972 he surveyed the street trees growing along the roadways. He noted, on a special form, the location, size, and species of every tree growing along the Township right-of-ways. This survey enabled me in 1973 to submit our first working Shade Tree Department budget. In 1973 I purchased a used bucket-truck and

chipper and hired two full-time men. This was the beginning of the Parsippany Shade Tree Department.

The department now consists of 8 men (3 men are C.E.T.A.), one pick-up truck, one flat-bed, two dump trucks, a bucket truck, two chippers, a log splitter, stump cutter, sprayer, and one automobile (Fig. 1). Few of these vehicles were purchased directly through the Shade Tree Department budget. Most of them were obtained from other departments who were going to trade them in. I acquired these vehicles, reconditioned them, and repainted them during our normal rainy-day nonproductive time. I recently obtained a new stump cutter that another department paid for because I successfully convinced them that when they were installing new sidewalks and curbs on existing streets, it was cheaper to grind the stump below the ground line rather than to remove the entire stump and leave a large gaping hole.

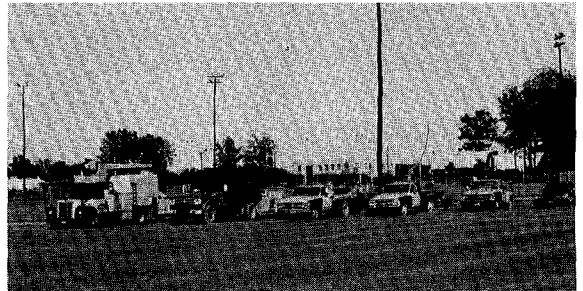


Figure 1. Display of current equipment

We plant approximately 300 trees per year along our streets. We were instrumental in setting up a leaf recycling center in 1975. When we remove trees we also bring all our large wood to a central location, cut it and split it for the residents. Wood chips are available 12 months of the year. We also plow snow for the Road Department during the winter months. I have prepared sets of

¹Presented at the 54th annual convention of the International Society of Arboriculture in Toronto, Ontario, Canada in August 1978.

slides which were taken in Parsippany-Troy Hills showing the different projects and programs that involve the Shade Tree Department.

The slides show all of the equipment the Shade Tree Department uses, how some of the equipment is used, what their special purposes are, and some of the techniques that we have acquired by the use of this equipment. They show how we operate our leaf recycling center, how we handle our trees when we purchase them from the nursery, how we store them in our yard, how we prepare the hole and plant them, and the different soil mixtures that are used. We show the step-by-step procedures used to grow, store, and plant a tree growing in a wire basket, and a picture of each tree species that we have planted in Parsippany up to this date. The slides show how we resolved a liability case where an automobile had destroyed a Township tree. We show a large cavity that we filled in a tree in 1974, this includes before and after pictures. This cavity measured 30 inches wide and was 11 feet tall. We have many before and after pictures that were taken on our road right-of-ways that were overgrown with tree branches and brush.

During the bitter winter of 1976-1977, when heating fuels were scarce, the Shade Tree Department rose to the occasion by removing all

the dead trees on Township-owned woodlands, hauling it to a central location, cutting and splitting it to firewood size, and giving it to our residents to help supplement their heat. During this two-week period we gave away 44 cords of wood.

During 1976 and 1977, Parsippany was the recipient of the Tree City U.S.A. Award that was presented on Arbor Day by the National Arbor Day Foundation. The slide presentation concludes by showing a few pictures taken at one of our municipal parks where 75 students enrolled in an educational course given by the New Jersey School of Applied Arboriculture were receiving instruction.

I feel that it is important to belong to the different arboriculture or tree-related organizations. Being active in these organizations enables you to tap a tremendous reservoir of research, education, and knowledge that are not available elsewhere. Being a member of these organizations also enables you to discuss personally the many problems that are encountered through the duties of your job with other people who have similar positions.

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ABSTRACT

Adams, R.M. 1978. **Plant propagation by tissue culture.** *Am. Horticulturist* 57(2): 28-29.

What plant cells have in common is the property of *totipotency* meaning that each cell carries all the genetic information necessary for the formation of a whole plant. To fulfill its totipotential, a cell must be freed from its connections with other cells, and it must be nourished by a medium fully competent to support its growth. For practical applications, it's much easier to start with a group of cells, as is the common practice in commercial tissue culture. Plucked from the plant body, with its elaborate provisions for nutrition and defense from the external environment, an explanted piece of tissue must be nurtured in precisely controlled surroundings. Production of large numbers of plants in a short time is an obvious advantage of tissue culture, and the majority of florist's crops in the U.S. can be propagated this way. Plants so produced are all genetically identical to the original explant, that is, they form a clone, which makes them easier to manage; all prefer the same cultural conditions, grow at a similar pace, and flower at the same time.