JOURNAL OF
ARBORICULTURE

May 1991
Vol. 17, No. 5

UTILITY TREE DAMAGE CLAIMS

by Richard E. Abbott and Kenneth C. Miller

The performance of any line clearing tree trimming and removal activities or chemical, mechanical, or manual reclearing exposes the utility and its contractors to potential real, imagined, or contrived law suits for alleged vegetation damages. Increasingly, in today's litigation-minded society, property owners are anxious to sue big wealthy electric companies and their rich contractors. Any tree, shrub or plant of the property owners that has any abnormality after R/W maintenance activities are performed is priceless and has sentimental value because it was planted by a deceased relative.

This is the environment the utility arborist works in every day!! They must take all protective measures to assure that accidental damage to vegetation does not occur. However, if someone sues the utility, they must have the necessary expertise and information for their protection.

There is a definite need to apply the American Society of Appraiser's established "Principles of Valuation" to any appraisals of alleged vegetation damages. This has been demonstrated to us over our combined 50 years of tree and landscape appraisal experience, including expert witness testimony in federal, state, and local courts and before government agencies. The use of professional appraisal concepts of Value, Cost, Price, Reasonable, and Rational will result in defensible tree dollar values that can withstand adverse court cross examination.

The Council of Tree and Landscape Appraisers (CTLA) is composed of a representative from each of five organizations that collectively developed the publication *Valuation of Landscape Trees, Shrubs, and Other Plants. A guide to the Methods and Procedures for Appraising Amenity Plants.* This book is copyrighted by the International Society of Arboriculture (ISA) and is in its seventh edition. An eighth edition is in the process of review and may be available in 1991. The book may be purchased through the ISA at P.O. Box 908, Urbana, Illinois, 61801, or through one of the organizations involved with CTLA. Additionally, CLTA, located at 1250 "I" Street, N.W., Suite 504, Washington, DC, 20005, has a *Manual for Plant Appraisers* that provides additional procedural information. Many chapters of ISA have regional species ratings lists for use in appraisals in their areas.

The ISA appraisal guide recommends two basic methods of valuation based on A) individual tree size for trees too large to transplant successfully, and B) the cost of replacement of a tree damaged with an equivalent specimen. Individual plant size dollar value is based on a cross sectional inch basic replacement value.

Replacement appraisal values are generally restricted to plants less than six inches in diameter but are possible with larger plants up to 10 inches dbh dependent on access and individual site circumstances. Whichever method is chosen to serve as the base technique, the further qualification parameters of species, size, condition, and location must be factored into the final dollar cost determination. Species are included in the cost of the tree value appraisal, but not in the cost of replacement planting. No adjustment or only a portion of the location value may be appropriate with replacement values since a tree is going back in same location.

The ISA/CTLA formula utilizes size, species, condition, and location to establish value. *Size* is measured in one of several ways. If the tree is of transplantable size as in replacement, it is measured as diameter at six inches height for

trees four inches or less. On trees over four inches, it is measured at twelve inches above ground to minimize influence of root flare. If other than replacement is the method of valuation choice, size is measured as dbh at breast height (4 1/2 feet) and the larger the size, the greater the value. *Species* are rated by relative desirability in the landscape. For instance, poplar and willow which are weak wooded, short lived species are rated lower than oaks and maples which are longer lived and have stronger wood. *Location* factor considers where the tree is situated in the landscape and aesthetic and functional value of trees siting. Trees in a forest have a lower location value than a single well situated landscape tree. *Condition* rating is an evaluation of the health and safety of that tree and prospects for continued satisfactory growth measured at a point just prior to any incident. Trees in poor condition are rated lower than trees in good or excellent condition. However, despite numerous educational efforts, the two subjective tree evaluation factors, condition and location, are many times misapplied. Often there will be as much as a 200 to 800 percent variance in the dollar value between two vegetation damage appraisers. By comparison, generally, real estate appraisers will only have a 10 percent variance in monetary value on a particular property.

Research by the U.S. Forest Service and other professional appraisal organizations has determined that generally a well designed and maintained landscape can contribute from 10 to 25 percent to real estate property values. A house, lot, and trees that would sell for $50,000 *cannot* have an $80,000 tree value irrespective of the size, location, and number of trees. If no one will pay more than $50,000 for the house, lot, and trees the total trees and landscape by itself cannot have a value greater than $10,000.

The following are frequently used definitions in appraisal terms:

- *Value* is a word of many meanings. People determine value. What are you, or someone else, willing to pay? If no one is willing to pay the asking price, then that value is not there. Value is basically the estimated dollar relationship between goods and services and a willing buyer under no duress to purchase.
- *Economic value* is what products will bring in the market place. The manufactured wood products that can be produced from tree trunks are worth more than the standing trees in the forest. Value of a tree in the forest should be evaluated as wood resource for its highest and best economic forest produce use, not as a finished grade lumber or manufactured wood product.
- *Market value* is what fruits and nuts will bring in the market. Actual appraisal damages should be the wholesale price at the farm not the retail store value. Apples may be worth $16 per bushel retail at the supermarket, but the farmer with crop damage on the tree is only entitled to the wholesale price less the cost of harvest.

When figuring complete loss in fruit trees, consideration must be given to when young trees reach production age and annual yield estimates. How many years from planting does it require before the fruit tree begins producing? When is the tree past prime crop production?

- *Landscape value* is a most difficult value to establish because of multiple components such as lawn, shrubs, trees, and flowers and their relationship to the total property values.
- *Aesthetic value* is the most intangible value. BEAUTY is in the eye and mind of the beholder. What is aesthetically pleasing to one person may be offensive to someone else.
- In a court of law, *Sentimental value* is an intangible on which no price can be placed. What is sentimentally valuable to you will not necessarily be to someone else.

When analyzing damages to vegetation, our appraisal procedures are:

1. Investigate the alleged damaged plants and all surrounding vegetation on site, and try to establish a pattern to the injury.
2. Consider all landscape components such as shrubs and trees when figuring damages.
3. Figure all damages two ways, on each appraisal, if possible. *Example:* in the case complete loss of the fruit trees, the *market price loss* and *cost to reestablish* basis in most instances. However, there should be a positive correlation between market price and cost to reestablish. If there is more than a 10 percent variance between those numbers, reconsider your calculations. Something is wrong. In the

case of forests, the value of timber and cost to establish new planting and grow to comparable size. For landscape plants, use the dbh values compared to cost to transplant and reestablish equivalent plants.

4. Sleep on the calculations overnight. Pick up the field damage appraisal notes, review the reasoning and verify all the factors before preparing the report.
5. If there is more than a 10 percent variance between yours and someone else's appraisal of damages, you must consider: a) one of you is not figuring the same damage, b) the other appraiser knows something you don't, c) one of you is in error in method or arithmetic.

If you cannot determine the reason for the greater than 10 percent variance between you and the other appraisals, you need to get another professional opinion before proceeding.

The appraisal value must meet the following additional criteria:

- *Rational.* Would someone pay the appraised value for the trees, shrubs, etc.? Has the appraiser ever known of a willing buyer, under no duress, paying a comparable price for similar undamaged vegetation? A key question I ask myself on all appraisals is, would I pay that price for the tree or shrub? If **WE** are not willing to pay the price, then we will review all our appraisal procedures.
- *Reasonable.* The total value of each component cannot exceed the value of the entire landscape. Many landscape appraisers will figure the individual value of each tree and shrub without considering how they collectively represent a proportional value of the entire landscape.

Automobile insurance companies, long ago, recognized in figuring auto damages that cost of individual replacement car parts could exceed the total value of the car. When that happens, they totaled the vehicle and paid on that basis since replacement of component parts would be higher.

Some tree and landscape appraisers estimate tree and landscape value replacements upon an individual component basis *but fail to adjust the total* when the landscape component estimates exceeds the value of the total property, house, and land. Unfortunately, most nurserymen, landscapers and forestry appraisers have not learned or fail to recognize that reasonable value principle. The cost to reestablish equivalent value is

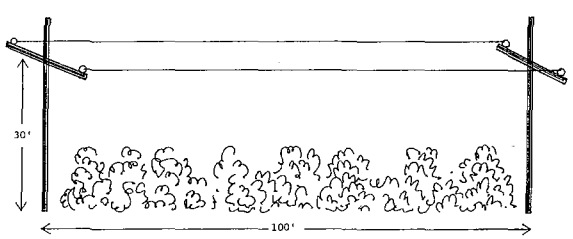

Figure 1. Area before damage by utility. Heavy thicket of underbrush in the 1" to 2" diameter range.

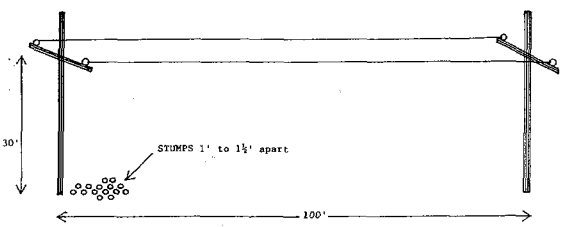

Figure 2. Area after damage by utility. Stumps close together 1' to 1½' apart, 3,000 sq. ft., 2,000 trees. The attorney instructs the nursery-landscape appraiser to figure replacement value. Appraiser counts each and every stump and figures replacement with nursery grade, equivalent size trees on a one for one basis.

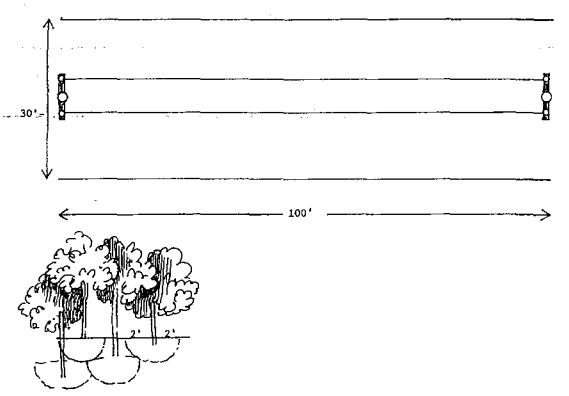

Figure 3. Diagram to illustrate one for one replacement not practical. Each ball of tree 2' on each side, total of 4' ball. Each ball 6.3 square feet, 476 maximum side by side in 3,000 sq. ft. Diagram shows with balled and burlaped nursery grown trees it is only possible to fit a maximum of 476 trees in the space even though 2,000 wild saplings were removed.

a legally accepted measure of damages.

Frequently, a nurseryman will be asked to appraise tree damages where the utility has cut or sprayed brush and saplings on a reclearing operation. The nurseryman will count the number of brush stem cuts, figure the nursery retail value of replacement trees or shrubs, and calculate damages. Usually, these result in very high unreasonable damage estimates.

Replacement of natural forest or hedge row grown brush and saplings by nursery grown plants is an upgrade not an equivalent replacement because nursery grown plants are pruned, shaped, fertilized, and sprayed for insects and diseases.

Attorneys frequently instruct their appraisers, usually nurserymen, to provide an appraisal based on replacement value of each bush, sapling, and tree involved. The nurseryman will figure replacing each piece of brush in the hedge row with a balled and burlapped plant. The American Association of Nurserymen has a standard for ball size on different size plants. Frequently, you can show that it would be physically impossible to fit to all those B&B replacement units back into the area of damaged vegetation as illustrated in Figures 1, 2, 3.

Another question for the opposing appraiser on the equivalent reestablish/replacement appraisal is, what is good horticultural or silvicultural practice? Usually the nursery appraiser will figure one for one replacement and the plants were overcrowded to begin with as in an unmanaged setting.

When figuring values of brush and saplings in undeveloped areas, their highest and best utilization is usually as cordwood, not as nursery grown trees. My question to the nurseryman is how many similarly situated native, unmanaged or cultivated brush saplings has he purchased for resale as nursery stock?

Another frequent problem on equivalent reestablishment appraisals is the nurseryman will figure on using different species. Replacing an alder with a flowering dogwood is not an equivalent replacement but an upgrade.

Applications of all these principles to appraisal of tree, shrub, landscape and crop damages will result in reasonable, rational appraisal values that can be defended under adverse cross examination in the courtroom.

The utility arborist should do everything possible to prevent situations when someone could sue over vegetation damages. However, when a law suit is threatened, a consulting arborist with expertise and experience in vegetation appraisals should be retained by the utility arborist as soon as possible. This is the time to use the best appraisal resources available. You may save money sometime by waiting until a law suit is filed, but oftentimes an impartial expert tree appraisal by a third party provides a basis for early settlement and saves future court costs.

Environmental Specialists
ACRT, Inc.
P.O. Box 219
Kent, Ohio 44240