## TREE VALUATION PITFALLS'

by S.H. Davis, Jr.

Tree evaluation is not an exacting science like mathematics and physics, but it does require a scientific knowledge of the trees, their problems and deficiences and an appreciation for their location in the landscape. And above all, it requires an honest appraisal regardless of which side you represent.

In recent years there has been more and more emphasis on tree evaluations for casualty losses to keep from paying money to the Internal Revenue Service, as well as for insurance and court cases resulting from accidents in which trees were damaged by vehicles or neighbors cutting off branches or even trespassing on your property and removing trees from your property.

Years ago not too much attention was paid to the value of a tree. It is true, there was the Felt formula and then the Spicer revision which did give a dollar value to a tree but the values were primarily on size and kind.

More recently, five organizations - The International Society of Arboriculture, the American Society of Consulting Arborists, the National Arborist Association, the American Association of Nurserymen and the American Landscape Contractors Association put their efforts and knowledge together and their representatives went under the name of the Council of Tree and Landscape Appraisers. The CTLA then authored a booklet put out by the ISA in which the formula they developed considered not only the size and kind of tree, but also gave detailed consideration to the condition and location of the tree in question.

Any high school student in mathematics could determine the square inches in the bole of the tree by measuring the circumference four and a half feet above the soil line and dividing by 3.14. Even with today's mathematics they could then multiply their answer by $\$ 18$ or perhaps soon by $\$ 22$ and thus determine the basic value of that tree.

And many high school biology students and cer-
tainly the college student with a bent toward biology, or even your next door neighbor can give you the name of many species of trees. So now we have the two easy parts of the formula. And let's suppose that at this point the value of the tree comes to $\$ 5,000$.
But now we come to the part which requires the expert who is really knowledgeable about trees to determine the condition of the tree and then downgrade the value of that tree based upon the many items listed in the publication Guide for establishing values of trees and other plants. The points to be considered are: general condition, foliage, twigs, large branches, trunk, roots, soil and previous treatments. You must have a knowledge of the various diseases, insects, nutrients, pollutants and other factors which can play a part in the condition of the tree.

The first two factors in determining value have little or nothing to do with knowledge and it would be difficult to see where "honesty" would play a part in the determination of value up through those first two points. The factor of "condition" does require not only knowledge, but also a new factor "honesty".

How many times would you tell a client who is paying you a good consultation fee that his tree is worthless, or even has a negative value based upon its condition? Or perhaps you might even bend to try to please your client by telling him that the condition of the tree would give it a value of only $5 \%$ of the basic value. This means that the tree first valued at $\$ 5,000$ because of size and species is now valued at only $\$ 250$.

Honestly now, if your client is paying you the good fee to evaluate his tree which was hit by lightning or knocked down by a truck, would you tell him the condition of the tree was reduced $95 \%$ because of extensive heart rot, insect infestation, girdling roots and prior herbicide damage caused by his application of the wrong material in too high a quantity too close to the

[^0]tree? Would you tell him the tree at the end of the third factor in the evaluation formula was now reduced to the $\$ 250$ ?
How many lawyers take a case and then go to court and acknowledge the fact that his client did not slip on a pool of water on the floor of the supermarket, but rather she tripped over her youngster who suddenly darted in front of her on the way to the candy counter? Honesty is not part of the lawyer's business! His business is based upon how much money he can get for his client from an insurance company or how he can sway the jury to vote to take a big sum from an impersonal corporation or insurance company.
This is a pitfall into which you must not sink if you are not only completely knowledgeable but also entirely honest in your profession of arboriculture.
And now for the fourth part of the formula on tree evaluation. As you will recall, the fourth part of the formula deals with the location of the tree and again you must be not only a good arborist but you must be an honest one. How are you going to rate the location of the tree and how much are you going to depreciate or knock-down the dollar figure you have placed on the tree based upon its size, kind and condition?

If the tree that was split apart by lightning is a red oak which was planted by your father 50 years ago and is one of two matched trees in the large circuar drive in front of the $\$ 300,000$ home it has a much higher location factor.

If your client had the tree painted about 30 years ago in his backyard as one of 8 or 10 trees, it certainly has a much lesser value even though it does shade part of the back yard and does support the swing for the grandchildren.

And if the tree is one which a squirrel or bluejay planted as an acorn some 30 years ago at the easterly edge of the back lot and it is crowded by some wild cherries and a mulberry (also planted by wildlife) what percentage factor are you going to place in the formula?

If you are not only a good knowledgeable arborist but also a very honest one you may knock the value down another $90 \%$ because of the location and you now tell that client that his tree is worth only $\$ 25$. That is about $1 / 2$ or $1 / 3$ what you are charging him per hour for your consultation; it
is $\$ 75$ less that IRS will allow him to deduct as casualty loss because there is a $\$ 100$ deductible clause in the IRS form for casualty loss, and the client can cut up the tree and sell the firewood for $\$ 30$.

How much tree evaluation work have you done or do you hope to get into? I know you can measure the tree, determine its basic value by multiplying that basic figure by the number of dollars the tree evaluation guide says is the current figure, and you can also determine the value based upon the species and the geographical area in which it is growing. I know that you are a well qualified arborist who considers himself $100 \%$ knowledgeable about tree conditions so that you will have no trouble with the third factor in the tree-evaluation formula. And so far as the location is concerned - you can read about that in the tree-evaluation guide also and place a value on where the tree is growing.

So now perhaps we should have a fifth factor in the evaluation which is not and should not be printed in the evaluation guide and can be determined by you alone. That is the honesty factor and it is a pitfall which should not be a problem for you!

The honesty factor is related to how you determine the value of a tree depending upon the side of the client you represent. If a truck ruined your client's tree will you value it very high? Or if you represent the truck company or its insurance carrier will you find that the tree was in very poor condition to start with and was certainly growing in a downgraded location?

Will you be like the lawyer and try to get the most money for your client if you represent the plaintif, or will you have your client pay as little as possible if he is the defendant?
I have been faced with these problems and potential pitfalls and do know that your client can be very unhappy when your report shows that (1) there was $11 / 2$ feet of landfill around the root area, plus, (2) there was resultant retarded growth, plus, (3) the location of the tree was in a low grade area and added little to the property or its value. As a result my report showed that the client could claim very little from the Public Utility Company whom he claimed had mutilated his tree when doing a line-clearing job into his house. Incidentally, he is also forgetting or perhaps intentionally
overlooking the fact that during the year between the pruning job and time when his case went to litigation there had been no electric failures in his home while prior to the pruning job there had been frequent problems as the result of shorting-out caused by rubbing branches.

How good an arborist, or consultant or tree appraiser are you? You may score $100 \%$ in the mathematics factor. You may have a perfect score in the biology aspects of the appraisals. But if you allow yourself to drop into the pitfall of appraising a tree and quoting a value based upon the side you represent, the plaintiff or defendant, then your
value as an appraiser drops $90 \%$ or even more. That means if you charge $\$ 60$ per hour for your consultation work, you should be paid only $\$ 6$ or less per hour.
So what are your consultations worth - per hour?

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FLEMER, WM. III. 1982. How to cope with tree stress in urban environments. Am. Nurseryman 156(6): 39-49.

With few exceptions, there is no more stressful environment for trees that areas along inner city streets. Everything that is needed for successful growth-good friable soil, fertilizer elements, root space, water and pure air-is in extremely short supply. It is a wonder that trees survive and grow at all. Therefore, it is important to know the requirements for tree survival and growth and what can be done to fulfill them in the inner city. The one limitation for tree growth that does not occur along inner city streets is overhead utility lines, the scourge of suburban or even rural shade trees. Many city streets are narrow, with even narrower sidewalk space. Thus there is simply not enough room for the grown of a normal-sized shade tree. The most serious obstacle for tree growth and long survival in the city is adequate root space. Adequate oxygen in the soil is every bit as important for tree growth as is adequte moisture. One of the great problems that urban trees face is soil compaction at the surface of the planting pit. Unless special provisions are made, people walking on the soil (especially when it is soft, such as after rain or snow melt) rapidly destroy its tilth and permeability to water and air alike.


[^0]:    ${ }^{1}$ Presented at the annual conference of the International Society of Arboriculture in Louisville, Kentucky in August 1982.

