## WHAT TO LOOK FOR WHEN YOU BUY YOUR TREE-SHADED NEW HOME

## by Francis W. Holmes

When you buy a house, you judge the quality of its furnace, roof, paint, drains, insulation, you look for signs of termites, you ask about the neighbors, you check whether the title is clear, etc. But do you look critically at the health of those beautiful shade trees which may have decided your choice ... which may have increased the price you were asked and were willing to pay?

Most untutored home-owners worry about leaf infections and little galls on leaves, which often are relatively harmless to the trees, but they don't notice the early symptoms of deadly threats such as root decay and root injuries. Here are a few things to look at and look for.

- 1. LOOK AT the base of the trunk of each tree, where it meets the ground. Does the trunk flare (spread outwards)? If so, good. Or does it go straight into the ground (like a utility pole)? If so, bad. The flare shows normal depth. The straight-pole effect shows that earth "fill" was put over the roots to make a level lawn. This smothers the roots and can kill the tree. To see how deep the fill is, dig down gently beside the trunk and find where the flare begins. Even a few inches of fill may eventually kill ... from 3 to 20 years later. Meanwhile, tree growth will be much slower than normal. (A few kinds of trees, like willow, sprout new roots so easily that they can overcome fill injury.)
- 2. LOOK AT the *top* of each tree. Is the foliage luxurient? Or do dead twigs, even dead branches, stick out of the top of the foliage? This is called a "stag-headed" tree because the dead branches look like the horns of a deer. A dead top usually means rot injuries or root diseases (root rot) and often means the tree is dying.
- 3. LOOK AT the *leaves throughout* the whole tree. In summer, is every leaf remarkably small, so that the tree in mid-summer has a filmy aspect and the sky is easily visible through all the

- canopy the way most trees look in early spring? A gradually worsening case of root rot causes this. So does a slow gas leak, a mild case of fill, a certain mycoplasmal disease, or any other slow root injury. To detect this symptom, you will need to compare with leaf size in other, healthy trees.
- 4. LOOK FOR many new scars on the trunk surface. (A new scar has no "roll of callus" growth along its margins.) Multiple scars mean two things: First, heavy construction equipment probably ran around over the root system, shearing and crushing the thousands of tiny, fuzz-like feeding rootlets which pick up the water on which the tree's life depends. During the next few years the tree is likely to decline seriously. (Whether or not its life finally can be saved by feeding, etc., its form may become worthless to you.) And second, multiple new trunk scars mean carelessness by the operator(s) of the machinery. Such an attitude may be reflected also in the building construction! If the equipment operator worked for a subcontractor, multiple tree scars may mean that the primary contractor did not closely "ride herd" on his or her subcontractors.
- 5. LOOK FOR how near to the house the larger tree(s) is/are standing that are most important to you. The nearer the tree, the more of its root system was cut off in digging the foundation and the cellar hole. The roots had to be cut at least a couple of feet from the outer surface of the cellar wall perhaps farther. Nearly half the roots may have been detached. This means inevitable decline, dieback, probably eventual death and perhaps falling of the tree onto the house in a storm. Meanwhile, the tree that looks so good now may not improve the appearance of your house at all.
- 6. LOOK IN the soil beneath the foundation shrubbery. You need to dig a bit. Is the soil full of

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plaster and trash? The plaster may raise the pH to an unsuitable level for growth of foundation plantings. Broken wood and stumps in the soil will feed the shoestring rootrot fungus and help it to attack healthy trees and shrubs, including those newly transplanted there. Again, trash buried in the shrubbery is a clue to someone's carelessness: trash should have been carried away from the construction site to a dump.

- 7. LOOK FOR small twigs and bark on any dead branches. If you are told "it's always been that way" then (a) all the twigs and bark would have dropped off the dead branches, and (b) care of the tree, like routine pruning, has been neglected for years. If you are told "it wasn't dead like that yesterday," then (a) all twigs and bark should still be firmly attached, and (b) the tree is dying back rapidly, probably because of drastic recent root injuries. In either case, there should not be dead branches.
- 8. LOOK FOR new, large, multiple pruning scars on the trunk and larger branches. Why did so many branches need to be sawed off? Because they were dead! Why, then, did they die? See #2, #5, and #7, above.
- 9. LOOK FOR any constriction around the trunk. A wire, a chain, a fence, even the tree's own roots (just at or just below the soil line for roots), embedded in the trunk, can "strangle" the tree. In rare cases, a tree may graft its own tissues outside the wire. But usually the parts above the level of girdling finally just die of "thirst."
- 10. LOOK FOR large areas of *new pavement* (driveway, terrace, or any construction) over part of the root system. Those roots are cut off from air and will die.
- 11. LOOK FOR standing water in the grass near the tree. A tree's roots can grow to several hundred feet from the trunk. Near a permanent body of water like a river or lake, the roots will have grown elsewhere. But when drainage is changed, so that standing water backs up into soil that was formerly well aerated, the roots "drown." And again the tree top begins to die of "thirst."

- 12. LOOK FOR evidence of *new pipelines* and other new trenching that may have cut the roots near a major tree trunk when a new house was built. Find any metal covers, pipes sticking up, meters, etc., standing in the lawn or shrubbery. Ask where the underground gas, electricity and telephone services come in, where the municipal water comes in, where the sewer goes out. (Look for these in the cellar, too.) Ask to see exactly where the septic tank (if any) is, and what is its shape and size. Walk along all these lines to see how near they are to your major trees. The roots may have been cut along these lines.
- examination and diagnosis by a locally established professional arborist. Ask for a written estimate listing all care the trees seem to need, including likely removals during the next several years, and compensatory replanting with new trees. You would pay an appraiser on the house. The trees and shrubs make up about 15% of the value of the house-and-property. So they deserve appraisal, too. Your arborist can also tell you which of your trees are of kinds whose value is so low that they may be disregarded, and which are of kinds that are highly valuable assets.

Remember, when you buy a home you are buying part of your happiness for many years to come. This may be one of the most important purchases in your life. The final decision is worth thought and care.

Director of Shade Tree Laboratories University of Massachusetts Amherst. Massachusetts