

Diagnosis of Tree Health Problems

Accurate diagnosis of tree health problems requires much information about the affected tree(s) and the nearby environment. Answers to the following will assist the diagnostician in an examination of tree health problems.

1. Provide following background data on affected tree(s):
 - A. Species
 - B. Age (years)
 - C. Height (feet)
 - D. Trunk diameter (inches)
 - E. How long in present site (years)
2. Describe the symptoms of the tree's health problem. Include details of any mushrooms, conks, molds, ooze (flux), or insects on the tree. Also any unusual appearance of foliage, twigs, flowers, fruits, seeds, branches, trunks, or roots.
3. Are more trees of the same kind nearby? How near? Are these or others similarly affected?
4. Has the trouble appeared in previous years? For how long?
5. Has this or nearby trees been sprayed for insects or disease control? If so when? What materials?
6. Have herbicides (weed killers) been used in the vicinity? How near? If so, when? What materials?
7. Is there any evidence on trunk, roots, or branches of mechanical injuries from lawn mowers, automobiles, tools or machinery? Has the tree received special treatment for this or other troubles? When? By whom?
8. Describe any unusual local weather conditions (hot or cold, wet or dry, etc.); Present season; Previous season.
9. Is the tree shaded by buildings or other objects for part or all day? Is the tree in an exposed, windy location?
10. Describe the topsoil (upper 6 to 8 inches) around the tree (sandy, heavy clay or intermediate). Wet or dry? Drainage? (Well drained or poorly drained).
11. Has fertilizer or other material been added to the soil around or above the roots? If so, when? What materials?
12. Is there a healthy grass turf or sod over the tree's roots?

13. Has there been any construction activities near the tree in the past 10 years? How near? When? Describe in detail. Does cement, asphalt, or other type of pavement occur near the tree? If so, what type? How near? How long has it been there? Has the soil near the tree been compacted by automobiles or other traffic?
14. Are gas, water, steam, sewer, or other pipes or conduits in the ground under or near the tree? If so, have tests for leakage been made?
15. Is the normal outward flaring (buttress swell) of the roots visible at the base of the trunk? Does the tree trunk appear to go straight down into the ground like a telephone pole? Has the soil level around the tree known to have been raised or lowered by fill or by grading operations during the past 10 years? If so, when? What was the change of level?
16. Check the base of the tree for girdling roots.
17. If some of the branches are wilted examine the outer wood (sapwood) of the affected twigs for discoloration caused by vascular wilt pathogens. A laboratory culture of a suspect twig may be necessary to confirm this diagnosis and to identify the pathogen.