What’s Wrong with My Plant?

By Susan Camp

“I don’t know what could be wrong with this tree, but something has happened to it”, a friend said to me last week. To me, the tree looked like a dogwood in the middle of February: gray bark, no leaves, and a few shriveled, orange berries that the turkeys hadn’t eaten. She continued, “The leaves didn’t look good last summer or fall.”

I wanted to tell her that she should have asked me to look at the dogwood when she first noticed that the tree wasn’t thriving. If she had called me before the leaves dropped, I might have found it easier to discover the problem. I could have called in Gloucester Tree Stewards with experience in diagnosing tree problems. We could have obtained twig, leaf, and soil samples to send to the Virginia Cooperative Extension (VCE) lab for examination. We can still gather samples, but only of twigs and soil, until spring arrives and the little dogwood begins to bud. I hope it won’t be too late.

Diagnosing a plant problem often presents a challenge for even the most experienced Master Gardener, Tree Steward, or professional horticulturist or arborist. Virginia Cooperative Extension publication 426-714 offers a systematic approach to diagnosing plant problems, beginning with three crucial questions to be asked by the homeowner or resource person. The first question concerns how long ago the plant was placed in its current location. If it has been recently planted, it may not have had sufficient time to establish roots and acclimate to the new environment. This could mean the plant is not receiving enough water to put out new growth. Next, discover or recall any activity that has taken place near the plant. A construction project can damage or decrease oxygen to the roots. Toxic chemicals that have been spread by careless fertilizing or spraying can weaken or destroy a plant. Finally, look at the weather conditions in the plant’s environment. Was the previous summer unusually hot and dry? Was there a mild fall that encouraged new growth, followed by a sudden temperature drop and subsequent foliage damage? Has there been a mild spring followed by a cold snap? Hurricanes, tornadoes, and ice storms wreak their own kinds of damage on trees, shrubs, and other plants. Salt water can cause plant death. Trees, already weakened by storm damage, may become susceptible to insect infestation or viral, fungal, or bacterial infection.

Based on the pattern and spread of damage to one or more plants, it is possible to determine whether the damage has been caused by living factors, such as pathogens, insects, or animals, or nonliving factors, including mechanical, chemical, or physical damage. Nutrient deficiencies, too much or too little light or water, and excessive heat are also considered nonliving factors.

The Penn State Extension article “Diagnosing Poor Plant Health” presents symptoms accompanied by lists of possible causes of damage or failure to thrive. Many reliable resources for diagnosing plant problems exist on the internet, but if you are not comfortable with a do-it-yourself approach, please contact Gloucester Master Gardeners or Tree Stewards at (804) 693-
2602. We can arrange to make a home visit and observe your tree, shrub, or other plant firsthand. If we can’t discover the problem, we can put you in touch with other helpful resources. The Master Gardener or Tree Steward may suggest that you bring plant specimens to the Gloucester Extension Office. Specimens will be sent to the VCE lab in Blacksburg. You will complete a detailed two page Plant Disease Diagnostic Form (Publication 450-097) to send with the specimens.

Spring will arrive in a few weeks and, as new leaf and flower buds appear, it will be time to observe for damage that may have occurred due to harsh weather, disease, or overwintering insects. Observe for worsening of problems that you may have noticed last fall. Once a problem has been diagnosed, follow up with the recommended treatment. It may not be too late to save a damaged or diseased plant and prevent the problem from spreading to nearby healthy plants. I am looking forward to examining the new leaves on my friend’s little dogwood, so we can figure out how to nurse it back to good health.

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