

December 2009

Extension Solutions for Homes and Gardens

by Paul J. Pugliese

“Dead Pine Trees in Your Backyard”

Winter is an excellent time to walk through your backyard and inspect the health of your pine trees. Unfortunately, many pines have died during the past two years as a result of severe drought stress and pine beetle infestations. Pine trees are evergreen, which means they should retain needles on their branches year-round, even when shedding old needles. Trees that are not evergreen are referred to as deciduous. Hardwood deciduous trees, such as oaks and maples, normally drop all of their leaves as they go dormant in the fall. If you happen to look up at a pine tree and not see any needles, then you can safely assume that your pine is DEAD! This of course would not be true of deciduous trees. On the other hand, if you think a deciduous tree might be dead then it would be best to take the “wait and see” approach until spring and check to see if any new leaves emerge. Winter is the best time of year to cut and remove pine trees that are dead or diseased from your backyard—and not just because of the comfortable working weather.

The advantage of cutting out dead pine trees during winter is that freshly cut logs will not lure harmful insects such as pine beetles to your backyard. This can be a major problem when pines are removed or pruned during warmer months. You may have had good intentions of removing that dead tree earlier in the year, but in the process, you might have invited more trouble to your remaining healthy trees. When trees are wounded, pruned, or cut, they release various chemical cues such as sap, turpentine, and other stress pheromones that attract insects to the area. As a result, insects that are lured to the area tend to take advantage of not only the stressed trees, but other trees that are nearby too. Pine beetles favor a tree when its defenses are stressed from drought, disease, or injury—kind of like you catching a cold when your body’s immune system is stressed out. Many plant diseases also tend to be less active in the winter and are less likely so spread or cause infections to open wounds left from pruning.

Winter is a great time to inspect pine trees for problems such as physical injuries and plant disease. It’s easier to look through the trees when all of the undergrowth and surrounding hardwoods are dormant and without leaves. Pine trees which have obvious physical injuries such as lightning strikes, wounds from construction equipment, or wind damage should be inspected closely. Trees with any physical wounds that are greater than 30% of the bark circumference of the trunk should probably be removed. These open wounds will eventually cause the tree to die as a result of cutting off the flow of water inside the tree and/or potentially inviting other insect or disease problems. Ultimately they will become a greater liability and risk to falling the longer they are allowed to stay. Pines with more than 30% of live crown branches broken or damaged should also be removed. Many local pines lost a lot of crown branches due to high winds and tornadoes in Cherokee County last spring. Don’t confuse the upper crown branches with lower branches, which normally will die out and limb themselves up as pine trees get older—this is not a concern.

When looking for diseases on pine trees, look for any abnormal growth patterns to clue you in to a problem. The worst pine diseases in Georgia are fusiform rust and pitch canker. These diseases give obvious clues to their presence such as large misshaped cankers, galls, or sunken lesions on branches and main trunks. Also, pitch canker will provide the added symptom of heavy sap bleeding from a resinous canker. Other symptoms include a general thinning and die-back of the tree’s crown. Chemical and biological control measures for these diseases have not proven effective and therefore are not recommended. If cankers are confined to small, individual branches then the best approach is to prune and remove the infected portions. If the tree has a canker disease on the main trunk, then the tree presents a major risk to breaking and should be totally removed. Even small cankers can grow in size over the course of many years and eventually girdle the tree as well as becoming a greater risk to breaking with age. Also, infected cankers, if left in tact, will produce large amounts of disease causing spores that could potentially be wind-blown and infect other nearby trees.

For older trees which have heritage or sentimental value, you may want to contact an ISA-certified arborist to do maintenance work and assist with evaluating the health of a tree before making any quick decisions. Hire a certified arborist to ensure proper pruning and tree maintenance techniques are used. Locate an ISA certified arborist online at isa-arbor.com.

Paul Pugliese is the Agriculture & Natural Resources Extension Agent for Cherokee County Cooperative Extension, a partnership of The University of Georgia, The U.S. Department of Agriculture, and Cherokee County. (770) 479-0418. For more information and free publications, visit our local website at www.ugaextension.com/chokeee