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Horticulture News

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This past year we saw an early freeze, an extremely cold stretch of time in the winter, a hot, humid summer and many fungus diseases that took advantage of the timely rains and temperature to grow and infect plants. These events combined are stresses on trees. In our area, pine and spruce are not well adapted and high stress years like this one can lead to decline and death. However, there are natural conditions that can look like the tree is dying that actually are not harmful. How can you tell the difference?

If the needles are browning just on the inside of the tree, but the needles farthest out on the branches remain green, the tree is going through natural needle drop. Natural needle drop does not harm the health of the tree and is a normal process as two- and three-year-old needles are shed. Drought may increase needle drop but this, in itself, does not harm the tree. But in some cases we are seeing all the needles on a branch turn color. On pines, this may be due to pine wilt, a fatal disease that is found primarily on Scots and Austrian pines. However, the heat and other stresses of this summer has caused more trees than normal to be affected.

However, sometimes environmental stress may be severe enough to kill branches or entire trees. How can you tell if the tree will survive? First check to see if the branch with the browning needles is alive. Scrape off a small area of the "bark" of the branch with a sharp knife. There should be green tissue immediately under the bark. This green cambium layer is quite thin with the underlying woody tissue being white. If there is no green at all, the branch is dead. Also check the ends of branches. Dry, brittle twigs are a sure sign that at least that part of the tree is dead. Dead branches should be removed. Major branch removal may destroy the aesthetics of the tree making tree removal the only viable option.

What can you do to reduce stress? Concentrate on good watering. During dry weather (including winter), water the trees to a depth of at least 12 inches, with deeper watering preferred. You can check the depth the water reaches by pushing a long screwdriver, metal rod or wooden dowel into the soil. It will stop when it reaches dry soil. During hot, dry weather, trees may need watered once a week but cooler weather will only require watering every 2 to 3 weeks. If we have a warm, dry winter, water the trees once per month when the temperatures are above freezing.