

## A Healthy Tree Doesn't Show Its Colors Early

In many parts of North America, people enjoy one of nature's finest shows: fall foliage. Color-changing leaves make for a beautiful display, but early changes in leaf color can be a sign that your tree is stressed and susceptible to insect and disease attack.

If the leaves on your trees seem to have gotten a jump-start on fall compared with those on similar trees in the area, then you might want to consult a professional arborist who can identify any problems and offer possible solutions.

"Premature color can be an indication that a tree isn't vigorous enough to withstand insects and disease organisms that may attack it, not to mention the usual changes that occur when the weather turns cold," explains Peter Gerstenberger, director of safety and education with the National Arborist Association.

Occasionally, only one or two limbs of the tree will show premature fall color. This could be a sign of disease at work, weakening only the infected limbs. The more common situation is for the entire tree to exhibit premature fall coloration, a phenomenon usually linked to root-related stress. "Trees respond to these stresses by trying to curtail their above-ground growth," adds Gerstenberger.

Leaves can be thought of as small factories containing raw materials, products and by-products, all in chemical form and some with color. As the leaf is "abandoned" by the tree, the green chlorophyll – the dominant chemical found in most leaves – is broken down and "recycled" by the tree, leaving behind other-colored chemicals. Supply lines to the leaves also become clogged. If the major chemical remaining in the abandoned leaf is red, then the leaf turns red. If it's yellow, then the leaf turns yellow, and so on.

"The yearly variation in color intensity is due to varying weather conditions, which can affect the balance of chemicals and their composition in the leaves," Gerstenberger says. Differing amounts of rainfall, sunlight, temperature, humidity and other factors may have an effect on how bright, how quickly and how long the "leaf-peeping" season will be in any given year. If you are unsure about your tree's health, consult a professional arborist who will identify and remove hazards as well as treat the causes of tree health problems. Call the licensed tree experts at Pardoe's Lawn and Tree Service at 800-427-4890.

