

**T**he decay and decomposition of organic matter is a natural recycling process that has occurred for eons. In the forest, this recycling continually supplies the sources of nutrients for the on-going process of plant growth. Leaves, twigs and woody debris fall and rise again as nutrients building a new plant.

Organisms such as insects and fungi help this process of decay, but not necessarily only on dead wood. There are some organisms which exist in living trees and are considered to be *pathogenic* when contributing to or causing the death of a tree. They already can be at work when a tree is still green and standing.

In the forest, where many of the external stresses that affect landscape trees are limited, individual conifers with thinning crowns and poor shoot growth may be infected with decay fungi. As well, the progression and spread of the disease to the surrounding trees may be quite apparent.

In the landscape, however, we generally will not observe the spread of

decay fungi from tree to tree. Thinning crowns and reduced shoot elongation could be caused by any number of human induced factors, including root girdling or compacted soils.

One thing that can help us see the presence of some decay fungi is the existence of conks or mushrooms on the tree or surface roots. These are the fruiting structures of certain decay fungi and their presence may indicate that a disease is well established. Basal conks and mushrooms can be considered to indicate decay fungi present in the roots and base of the tree. Conks further along the trunk can indicate columns of decay in the trunk.

The presence of decay in a tree can cause a reduction in the structural stability of the tree. In fact, a 5 percent loss of wood weight can result in

significant loss of wood strength. While in the forest, this might not be a serious concern, in the landscape it should be. Even before the presence of visible symptoms of decay, the structural integrity of the tree has been compromised. Once decay symptoms are visible the progression of the decay is well established and may be quite advanced. The tree must then be evaluated for hazard concerns.

The presence of perennial conks is sometimes overlooked as they start small and increase in size from year to year. So it can be easy to fail to note their presence or significance. The summer and fall can be a good time, however, to notice the presence of annual conks and mushrooms. The fact that they occur 'suddenly' where there was nothing before can catch our attention.

While in some cases the fungus may not be a concern, there are other fungi whose activities are serious enough for the tree to be considered for removal. Few of us are expert enough to differentiate between the variety of fungi fruiting bodies out there, which is where extension services or diagnostic testing facilities may come in handy.

Even if you don't deal with customers' trees, if you observe conks or mushrooms on a tree, inform your client. This is particularly important where a potential target or high use area exists. Recommend that they have the tree looked at by a professional such as a certified arborist with hazard tree experience, and have the fungus identified. A good professional should have the ability and tools or resources to help identify the extent and severity of the decay and to make appropriate recommendations.

Agree/Disagree? Comments/Questions? Column Suggestions? Let Nancy Stairs know at 440/891-2623. Fax: 440/891-2675. E-Mail: [nstairs@advanstar.com](mailto:nstairs@advanstar.com) **LM**

## Keep an eye out for signs of fungi in trees



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