

# Help your trees resist pests

On your property, insects and microorganisms abound. This is a natural and beneficial state, since insects and microorganisms are key components in nutrient recycling, decomposition, plant succession, natural pest control and wildlife habitat.

“A landscape without insects and microorganisms would be a very unhealthy environment,” notes Tchukki Andersen, staff arborist for the Tree Care Industry Association.

“A healthy property is a functioning ecosystem with young, mature, and even dead, downed trees,” says Andersen.

Periodic outbreaks of destructive tree insect pests, as well as diseases, occur as part of natural fluctuations in ecosystems. The actions of homeowners make these outbreaks more severe or lessen their impact locally. To promote a healthy landscape and to prevent pest out-breaks, take steps to ensure diversity and vigor on your property.

## **Increase diversity**

Many property owners have lots with just a single or a few trees. Others have small backyard woods, which have become an important component of the urban environment. Small woodlands with a mix of tree species are often less susceptible to pest outbreaks than woods with a single species.

A diversity of tree ages also reduces the risk of pest outbreaks. As with species diversity, age diversity increases the complexity and stability of the ecosystem. A natural balance of organisms is more likely to develop as age diversity increases. For example, potential pests of young trees could be regulated by parasites and predators already well established on older trees.

“A healthy landscape is less susceptible to pest outbreaks and is more resilient if an outbreak does occur,” stresses Andersen. When trees are overcrowded in your landscape, competition for light, water and nutrients results in increased stress. Trees under stress are more likely to be attacked by pests.”

The first clues of a tree health problem may be symptoms like yellowing needles or leaves, thinning foliage or dieback on upper limbs. These problems may be caused by insect pests or disease pathogens; or they may arise from “abiotic” factors such as soil problems, construction damage, drought, pollution or herbicide injury.

## **What to do**

A professional arborist can examine your trees to find the source of the problem. A professional arborist can also recommend treatments, including thinning dense woods, planting new trees, correcting soil deficiencies, increasing water and nutrients, or pest management. Homeowners can contact the Tree Care Industry Association (TCIA), a public and professional resource on trees and arboriculture that was established in 1938. It has more than 2,000 member companies who recognize stringent safety and performance standards, and are required to carry liability insurance. TCIA also has an Accreditation program that requires companies to meet industry standards and qualifications, including ANSI A300 pruning standards. An easy way to find a professional tree care service provider in your area is to use TCIA’s “Locate a member company program.” You can use this service by calling 1-800-733-2622 or by doing a ZIP code search at: [www.treecaretips.org](http://www.treecaretips.org)

*Editors: If you would like additional information or digital photos, please contact [editor@tcia.org](mailto:editor@tcia.org).*