



When this tree failed, it took out power and telephone lines, and blocked traffic on a busy secondary road in suburban Cleveland.

3) Prescribe corrective measures, but then make sure they're done "according to standards."

4) Assign one person who will make tree decisions.

5) Keep records of completed inspections and of all remedial work.

#### Act quickly

While there's no way to completely eliminate the risk of tree failure, says Smiley, you should be aware of, and act on, conditions that can lead to failures.

Also, be aware that a tree doesn't have to be structurally unsound to present a hazard. Perfectly healthy trees in the wrong locations can be just as hazardous.

For instance, how about the lightning danger presented by trees in your park or on your golf course? Or the tree that is obstructing the view at an intersection or of a road sign? Or that dead tree you've allowed to remain standing near a fairway or beside a parking lot because it provides habitat for wildlife?

Because most of you are managing properties that contain mature trees, and you're concerned with the safety of the people using your properties as well as limiting your liability, you should acquaint yourself with, at least, the basics of tree risk analysis, believes Smiley.

And, while some risks, like hanging dead branches and split crotches, are visible, others aren't. It often takes an experienced arborist to determine the amount of decay *within* a tree, and whether that decay warrants remedial action. This includes decay and other problems in tree roots. One U.S. Forest Service study suggests that up to 75 percent of tree failures in conifers and about 50 percent of failures in hardwoods are due to root problems.

"We've got a lot farther to go with predicting root failure. We're pretty good with above ground, but when it gets below ground, failures are harder to predict," says Smiley.

He presented these observations at the Institute of Parks and Grounds Management Conference in Toledo, Ohio, this past November. □

# Develop a tree failure reduction policy

by RON HALL / Senior Editor

**Y**ou as a grounds manager or golf course superintendent spend most of your time caring for turfgrass, but don't ignore what's hanging over your head and the heads of others who use the properties you manage—trees.

Your responsibility, to one degree or another, includes trees, particularly from a safety standpoint.

You can meet this responsibility by developing a "Tree Failure Reduction Policy," says Dr. Thomas Smiley, a plant pathologist and soil scientist for the Bartlett Tree Research Labs, Charlotte, N.C.

"It (the policy) can protect people using your properties, and it can protect you," says Smiley. Also, it helps reduce the "politics" that too often muddy tree management decisions.

To be effective, the policy must be written out and include the signature of your superior. The remainder of your grounds crew must also be aware of it, says Smiley.

Broadly, the policy should:

1) Define what you consider to be a hazardous tree. (Books are available from the International Society of Arboriculture, P.O. Box GG, Savoy, IL 61874-9902; 217-355-9411.)

2) Set tree inspection intervals. Once a year? Twice a year? After major storms? Different managers have different intervals, says Smiley, and most schedules are acceptable as long as they're reasonable.