



**Photo 1.** More than 25 years ago I noticed this white oak tree, singed by fire, dead.



**Photo 2.** Five years later I passed the same spot. The tree was still standing.

## Death of A Forest Giant

By Grover Brinkman

More than twenty-five years ago I passed this white oak tree, in the bottomlands of an Illinois creek. A grass fire had singed it, and the tree had died. Already some of the smaller branches were falling, although the trunk was still dry and solid. Lumbermen for some reason passed it up, even though at this stage it would still be valuable to the logger.

Five years later I chanced to pass the same spot again. The old tree was still up there, on its feet. But its trunk was denuded of most of its bark now, and most of the smaller limbs were gone as well. I tested the trunk. The rotting process was starting, but it hadn't penetrated more than the sap of the trunk.

The ruggedness of the old tree was impressive. Life had left it possibly seven or eight years ago, yet during all of this time it had buffeted storms and the elements without falling.

The years rolled by. I didn't get back to the old tree. I presumed it was long down.

Then one day, fifteen years from the time I'd taken the last photo of it, I had a chance to make another check.

I was visibly surprised. It was still standing, remarkable as it seemed.

The rotting process was very evident now. Woodpeckers had bored into its trunk. It had the look of a defeated warrior. I was positive that it would fall within weeks.

But it didn't. I checked with a friend, who hunted in the area. Months later he assured me it was still on its feet.

Another year passed. Still there.

But this Spring, when I went back to the spot, it had fallen. It had broken up, in its last ride to earth. But the trunk was still intact. I dug down with an axe—the center of it was still sound, hard and brittle.

Its age, from a leaflet in the forest mould, to its death?

I'm not sure. No doubt it was approaching the century mark when the fire killed it. From its death, to its fall, thirty-two years elapsed.

Trees are tough. This old white oak was tough as they come.



Photo 3. Then, 15 years later, a rotten shell now, the tree was still on its feet.



Photo 4. Finally, I chanced to pass again. The tree was down. From death to fall, 32 years elapsed.

## Checking for Borer Damage in Shade Trees

Insect borers (beetle larvae) attack both established and newly transplanted trees weakened by lawnmower injury, disease, sunscald, or the transplanting itself, says Richard L. Miller, Extension entomologist at The Ohio State University.

Feeding on that part of the tree just beneath the outer bark, several of these larvae can girdle a tree, causing its death.

The first sign of borer damage on an established tree may be a large patch of peeling bark. Underneath you'll find small grooves where borers have burrowed in all directions. To save the tree, cut out the dead area back to live bark and down to hard wood. Paint the area with tree wound material, then follow with a thorough chemical spraying.

DDT or dieldrin are recommended sprays for all trees. Four

applications at 30-day intervals (beginning mid-May) are required, as egg-laying adults are active over 3 to 4-month periods. Spray the trunk thoroughly to the lower branches.

Miller says that wrapping newly transplanted trees before the larvae have had a chance to enter them will help prevent borer attack. Wrap the trunk from the ground to the lower branches with burlap or with tree wrapping paper.

## Herbicide Incorporation Requirements Vary

The type of herbicide you use determines whether you should incorporate it, says Gerald Miller, University of Minnesota extension agronomist.

Volatile herbicides such as EPTC should be incorporated deep enough to reduce surface loss. Those less volatile but that tend to lose effectiveness when

left on the soil surface (such as atrazine) may also perform best when incorporated.

However, herbicides such as CDAA and linuron are usually most effective when applied to the surface.

Leaching can decrease effectiveness of highly soluble herbicides, Miller says. This is also true at times of low solubility herbicides when incorporated. The loss of effectiveness may be caused by greater absorption onto the soil or organic matter particles when mechanical incorporation is involved.

Miller cites recent evidence that many preemergence herbicides control certain grass weeds best when the chemicals are positioned for uptake in the shoot zone. He also describes a "dilution effect" that occurs as incorporation depth is increased. When incorporated, he says, herbicides should be kept relatively shallow and concentrated in the shoot zone.