

An irreplaceable American elm, well worth the special treatment it receives at Winged Foot Golf Club; lightning protection, cabling, minor cavity work, fine pruning, annual insect spraying, and (if needed) systemic fungicide injection for DED control.

"A Thing of Beauty Is a Joy Forever"

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CREDIT JOHN KEATS for writing, "A Thing of Beauty Is A Joy Forever." His observation is surely accurate for many things, but there are exceptions. The realm of growing things is, regrettably, one of them. In order to have growth, there must be a time frame or aging. And injuries. And pestilence, too. It is as true for a tree as it is for you and me.

When trees are well placed and healthy, they add another dimension to a golf course. They

influence our feelings for the landscape, challenge us as we play the game, provide some welcome shady spots, break apart a forceful wind, and, more often than we like to admit, they become bruised and battered by wayward shots. But when they outgrow their space or become weakened in body or limb, trees demand attention.

Sometimes the golfer who fights to save a tree should win his case, because we have seen important trees cut down without justification. The result is sometimes the ruin of a golf hole. However, since I was very nearly speared by a falling limb just behind a green some years ago, I have looked more critically at the problems and dangers of trees.

HAZARDOUS TREES

Broken limbs hanging in a tree are called "widow makers." Do not make the mistake, potentially fatal, of believing that limbs fall only during severe storms when no one will be on the golf course. Broken and obviously weakened limbs or trees must always be brought down intentionally, preferably by a professional crew, since this can be particularly hazardous work.

Cavity work and conks - one didn't stop the other.



Less obviously dangerous situations, which may be more difficult to appreciate but which will still usually require tree or limb removal, include trees with large open cavities and those with extensive but hidden wood rot. Although insects may be involved, the major weakening process in such cases are two general classes of fungi that colonize tree wounds. These fungi are specially adapted to utilize woody tissues for nourishment.

The first rule of tree care, therefore, is not to allow wounding. Another is to ensure that wounded trees receive adequate water and nutrition so that healthy new wood will be rapidly produced and offset weaknesses that surely will result from a wound infection. Unless the tree is wounded further, the new wood will not be subject to infection, because trees are able to compartmentalize or prevent the spread of organisms to newly formed tissues.

While fresh wounds should be traced and newly broken limbs pruned to promote uneventful healing, infection of wounds cannot, as of now, be prevented, i.e., wound painting is primarily cosmetic. Neither can established infections be halted, except by complete limb or tree removal. Nor can they be excised entirely. Cavity work is usually for cosmetic purposes, but if it is done carelessly, it can even cause the infection to spread.

To detect the most severely weakened limbs and trees, look for the fruiting bodies, or conks, of the fungus that extend from the bark. These take many shapes and sizes, but they always indicate extensive weakening of the underlying wood. Open cavities, in the absence of conks, are more difficult to evaluate. Probing with a knife can be helpful in determining how much sound wood remains, and a new tool, the Shigometer, which some tree care companies may have, is used to resolve doubtful situations. Keep in mind that a tree with an infected trunk will generally fall away from the damaged side, using the healthy wooded side as a hinge. However, if the extent of rotten wood is this severe, the tree would best be removed.

INTERFERING TREES

Dangerously weakened trees are not the only ones which should come down. Quite frequently trees, or tree branches, interfere with either the normal play of the game or with the effective maintenance of turf areas important to the game. Spreading limbs may, for example, inhibit the golfer's use of the full teeing area by physically impeding his swing or by obstructing his vision or excessively narrowing the line of flight. Each situation involving this type of interference should receive careful evaluation, but pruning or complete removal should be seriously considered solutions.

Shade and tree root problems are too commonly endured, to the detriment of the turf on greens and tees in particular. In some cases root pruning can be effective without greatly injuring the tree, but usually the club membership will have



Into each life, may a limb not fall.

to choose between accepting the less than ideal turf conditions or sacrificing the offending tree(s).

Blockage of air circulation is perhaps the leastappreciated problem with trees. The lack of circulating air greatly extends the duration of extremely humid conditions in and near the turf, and this increases disease incidence and severity. Unfortunately, it may be necessary to remove several trees to effect significant improvement in air movement, although less drastic steps sometimes succeed.

GONERS

Both old age and specific diseases can also dictate a decision to remove a tree. While all trees will eventually show decline, some have a habit of quite quickly outliving their usefulness. Merely neglecting to put over-the-hill trees out of their misery will not restore their beauty or utility. With certain diseases, too, we know that the trees will probably be the losers, making it advisable to assess the value of each susceptible tree before taking heroic measures to save it.

Trees do great things for golf, but we must return the favor with concern and care, not only for the trees, but also for our turf, the play of the game and the safety of all those who use the golf course.

FOR FURTHER READING

- Pirone, P. P. 1972 *Tree Maintenance*. Oxford University Press, N.Y. 574pp. \$15.
- Shigo, A. L., and Marx, H. G. 1977 Compartmentalization Of Decay In Trees. Agriculture Information Bulletin #405. Superintendent of Documents. U.S. Government Printing Office. Washington, D.C. 20402. Stock #001-000-03671-8. 73pp. \$1.85.

It's gone - but which way will it go?

