

## Timber!

**ASSESSMENTS AND A MANAGEMENT PROGRAM NEED TO BE IN PLACE BEFORE CUTTING DOWN AND TRIMMING TREES**

by  
T.R. MASSEY

**W**hen golf started, it was played on land near seas surrounding Scotland, or so the story goes. When Scotsmen crossed the Atlantic to design courses for their American cousins, they did so in big, open fields – land resembling places they were used to playing. To them, trees were bunkers in the skies.

Nowadays, especially in parkland settings, trees play a major role on golf courses, but that role isn't always positive. Trees affect turf health and sometimes pose a threat to the well-being of workers and players. To protect turf, as well as reduce the cost of cleaning up debris and limit the liability of falling limbs, many facilities have established well-defined tree maintenance programs.

Michael Hurdzan, Ph.D., golf course architect with Columbus, Ohio-based Hurdzan/Fry Golf Course Design, believes trees should be a lightly used spice, not a red-hot chili pepper. The reason? Trees require special maintenance.

"Trees in the wrong place are nothing more

than weeds," Hurdzan says. "They complicate turfgrass maintenance and add to the cost of the game. They steal one of the things that make the game fun – wind."

Trees aren't necessarily sylvan beauties that frame golf holes. Courses can be designed without trees surrounding each green. Trees that surround greens deny turf most of its needed requirements – morning sun and air movement.

"If a tree shades your turf in the morning, you'll have problems with that turf," Hurdzan says. "Trees are competing with grass for moisture and nutrients. Less light is available, so the plant doesn't live in a healthy state. This can cause pest problems and powdery mildew. Several diseases prefer the shade, and they'll attack and weaken the turf."

The Emerald Ash borer problem plaguing the Midwest, for example, is a tree blight that might make tree programs more necessary.

"Many courses have 60 percent ash trees, and it will be like the American Elm blight from the '50s or late '40s," Hurdzan says. "Even now, up North, they still have American Elms that have to be taken down. Trees are susceptible to blight. We're not ruthless woodcutters. We're trying to manage a diversified stand of trees intelligently."

Brian Zimmerman, director of golf for the Milwaukee County Parks system that includes 15 golf courses, believes those courses are in the path of the Emerald Ash borer. He and his staff are working with the University of Wisconsin to identify trees, set up testing and collect data to see if the borer is in the area.

"Some of our properties are predominantly ash, which makes us very nervous," Zimmer-

man says. "We've tracked some of our feature trees, but that's on the radar for all of it."

### Get with the program

Tree management programs start with consulting an arborist or forester. Hurdzan suggests conducting a tree inventory and classifying the trees by type, size, age and health. A full survey of trees and shrubs should be conducted so they can be rated by condition.

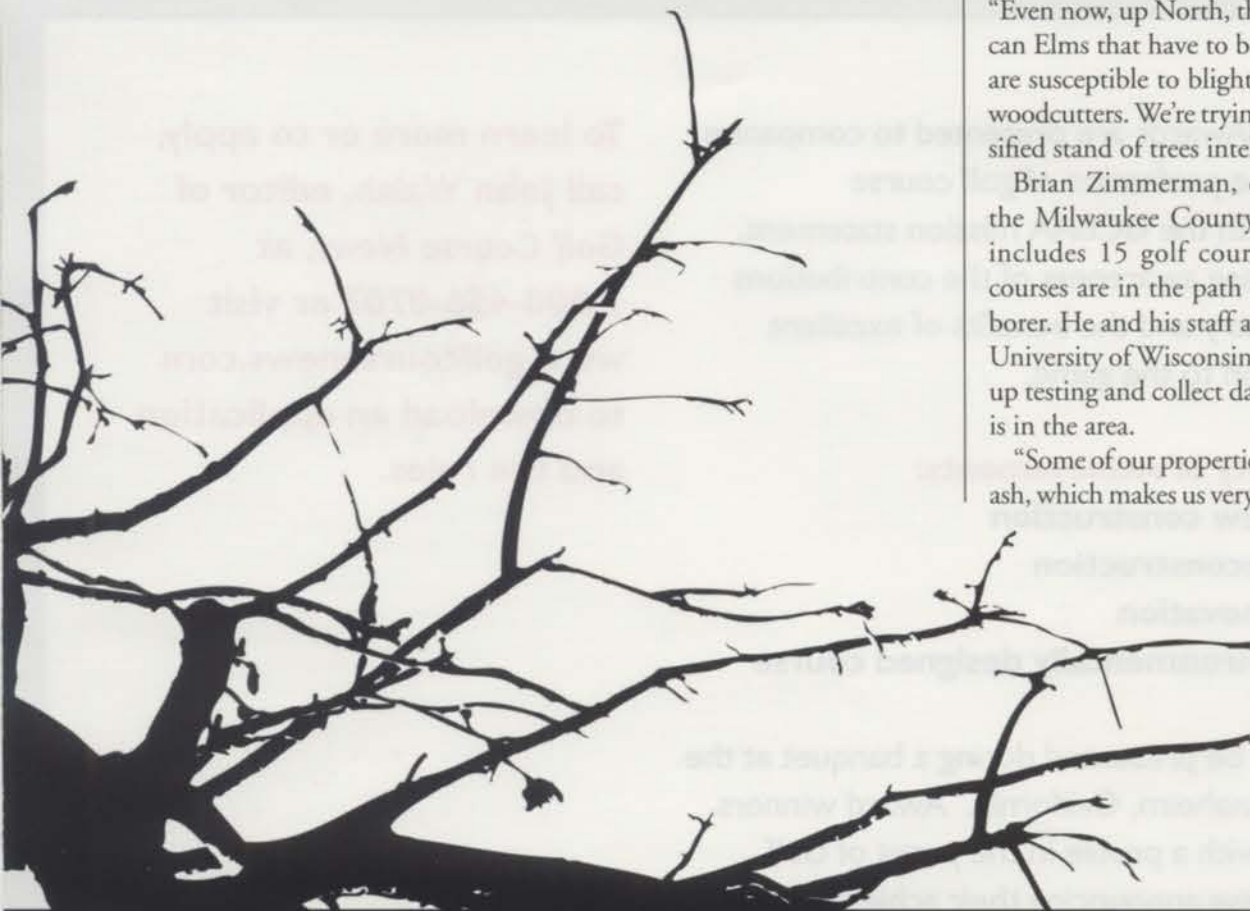
Hurdzan also suggests using a GPS system to track the inventory. The user types in a code for each tree at each location and then downloads the information. The next step is to rate the trees from a playability aspect and develop an action plan to protect the trees of high value. Next, according to Hurdzan, superintendents should have a plan for lightning protection, sanitary pruning, fertilizer and clearing trees that inhibit growth.

"To say that all trees have equal value is very naïve," he says. "That's like saying all geese are good. You have to tell members you have a management plan that's been put together by pros and you're looking at the long-range health of the trees and are trying to protect them."

Tree maintenance should be part of every golf course's budget, says Mike McBride, a turf consultant and renovation specialist who previously served as the superintendent at Muirfield Village Golf Club in Columbus, Ohio, for 18 years.

"Some might not have any trees, but parkland courses with mature trees have to have a line item for this," McBride says.

The first issue of a tree maintenance program is safety, regardless of the turf issues, and health is next, he says. When putting together a tree maintenance program, McBride recommends hiring an arborist to identify diseases and nutrient deficiencies because not all superintendents have that knowledge. If trees are having a degrading effect on turf, superintendents should consider removing them.





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"The expectation of putting surfaces today is way, way different than it was 20 years ago," McBride says. "The firmness, speed and amount of activity are much greater. They get worn out. If you can improve the situation by removing a few trees, that might be a possibility. It helps the turf withstand more stress."

That might be understandable to superintendents, however, golfers might not realize trees have a beginning, middle and end to their lifespan. Many times golfers don't know if trees were removed if it was done professionally.

Nonetheless, there's a lot of emotion involved with tree removal.

"Let's say there's a tree out there that's been there forever, and the members love it," McBride says. "It could be a strategic part of the hole or it could have been dedicated to someone, but the entire situation must be evaluated before you react. Maybe you can thin out or limb up instead of a mass exodus with a bunch of chain saws."

Sometimes superintendents need backing from agronomists. Commercial companies can arrive on site with computer models that identify shade and what trees will do as they grow and what will get worse. They can map out all the trees and make a presentation to boards or green committees with the help of technology.

### Who does the deed?

Superintendents also need to decide who will actually do the tree work. Hurdzan advises subcontracting it.

"You don't have to think real long about whether you want to put a low-paid worker up in a tree with a chain saw," he says. "Every golf course superintendent should contract that out, unless you have special training. Otherwise you're courting danger."

An example: Insurance reasons force Chad Mathieu, golf course superintendent at the private Ramsey Golf & Country Club in Bergen County, N.J., to contract tree work,

which increases his tree maintenance line item, which he says is substantial.

Hurdzan recommends superintendents talk to their peers to decide how much to spend on tree work.

"They should be looking at \$50,000 annually for trees, maybe \$100,000 if you have an extensive amount," he says.

To take down a tree, clean up and remove a stump costs about \$2,500 to \$3,000 per tree, Hurdzan says. Lightning protection can cost \$1,500 per tree.

Loblolly pines, white oaks, sweetgums, willow oaks, sycamores and cypress trees abound at the private Country Club of

South Carolina in Florence, where golf course superintendent Rob Strobel is protecting his Tifeagle greens by clearing surrounding trees. Even though Strobel handles his tree program in-house, he still spends about \$40,000 a year.

"We have numerous pieces of equipment – dozers, trackhoes and center-point scoop buckets," he says. "We take down a 100-foot tree with no problem, and I have one person who's trained to run that sort of equipment."

### Which ones can go

At Ramsey, Mathieu has to go through a



As part of a recent renovation at Scioto Country Club, trees were taken from green sites and out of areas where bunkers needed to be moved. Photo: T.R. Massey





Brian Zimmerman, director of golf for the Milwaukee County Parks system, is concerned about the negative effects of the Emerald Ash borer. Photo: Milwaukee County Parks

strict borough shade tree commission to take down trees.

"Five years ago, we had a lot of neglected trees," Mathieu says. "That winter, I came in and took down a bunch of trees, and the shade tree commission handcuffed me to six trees a year. The next year, I told them I had 15 trees that needed to go. They said six, so I brought an attorney in and told them if one of those nine trees hurts someone, I hold the town responsible."

Not every situation has to be so tense. Mathieu and his green committee take a tree tour each fall. They inspect trees for dead wood, look for ones that shade putting surfaces, and discuss pruning and topping

issues. Letting the members be a part of the program helps them understanding what needs to be done more.

"You've got to really keep on top of it," he says. "If you don't, you'll end up taking down thousands of trees. I know many superintendents who are handcuffed by members."

Twice Mathieu has invited the USGA Green Sections' Turf Advisory Service, which is available to almost any course in the country, for help explaining why some trees are in jeopardy.

"I'm for turf, not trees," he says. "In the end, with help from the USGA, the committee and I have been able to get together."

In Columbus, Ohio, Hurdzan recently was

involved with renovating Scioto Country Club's bunkering system and advised the club about which trees needed to be removed. Many were taken from green sites and out of areas where bunkers needed to be moved. Hundreds of trees were removed. Hundreds of trees also have been removed at Oakmont (Pa.) Country Club, Muirfield Village and the Scarlett Course at Ohio State.

"It's hardly noticeable," he says. "These aren't 'Eisenhower' trees at Augusta National. These are planted in the wrong place or the wrong variety."

At Brown Deer Park Golf Course in Milwaukee, tree roots were growing under a green because there was a silver maple tree five feet from the corner of it. Since 2002, when Zimmerman started, he has assessed each property's tree supply.

"At Brown Deer, we thinned out a lot of trees in the rough," he says. "Our forestry crew, which we're blessed with in Milwaukee County, came through and cut things back for us. We've got high lift trucks, multiple chipping trucks, stumping equipment and trained staff that can climb trees and cut certain limbs. Each property in our system is different, and we manage them as such. We don't have a greens committee. We make sound agronomic decisions based on what's best for the golf course." GCN

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## Successful planting

Cutting down and trimming trees is just part of a tree management program. Planting trees is important as well. But planting trees without proper vision can lead to catastrophic results.

Michael Hurdzan, Ph.D., golf course architect with Columbus, Ohio-based Hurdzan/Fry Golf Course Design, says the 1930s Dust Bowl can be blamed, in part, on improper management of trees.

"Before World War II, we cut down lots of trees for various reasons," he says. "We planted trees willy-nilly after the war. Americans aren't patient, so we planted fast growing trees – silver maples, red maples, Chinese elms – and now they're at the end of their lives. All those trees planted carelessly are causing us to establish tree programs. Planting the right ones is what good forestry is all about."

Rob Strobel, golf course superintendent at the Country Club of South Carolina in Florence, is establishing a tree theme, similar to Augusta National, in

which each hole is populated with the same kind of tree.

"We plant trees off to the side so they don't get in the line of play," Strobel says. "We go out into our woods and dig up a tree and plant it in the rough. When a limb encroaches on the playing surface, we take care of it, or it gets way out of hand. We transplant a lot of trees and put them in spots where they won't have to be cut down."

Lay people have difficulty understanding how big a tree's canopy will get, Hurdzan says. Because people want instant gratification, they plant trees too close to the play line and the canopy ends up over the fairway.

Brian Zimmerman, director of golf for the Milwaukee County Parks system, has an architect on the county staff who helps him decide where to plant new trees. There's always debate about where to put trees, he says.

"Proper positioning of trees can save thousands of dollars in the future," Zimmerman says. "The goal is to plant the right amount of trees in the right area. You have pick the right trees for the right soil and look. It's extremely key to your success rates." GCN