

# Alonzi testifies: Tissue analysis saves turf and money

By PETER BLAIS

MAMARONECK, N.Y. — The 6th East green at Winged Foot was supposed to be a showpiece.

Over the years, the front of the putting surface had settled, creating a severe slope. Tom Fazio was called in to restore the green, reducing the grade and creating more pin placements.

But shortly after Fazio departed, problems arose. The front section of the green, which had required 15 inches of new soil in some places, started to

wilt and go under stress more easily than other greens.

Superintendent Robert Alonzi thought the 6th was probably percolating faster than his other putting surfaces and needed more water and fertilizer. He blamed it on the additional soil.

But coincidentally, shortly after completing the restoration, Alonzi started using tissue analysis. The Karsten Turf Analyzer showed the restored green to be very low in potassium and iron. Alonzi increased the feedings of

these materials and the green quickly returned to normal, rivaling the condition of any other putting surface at the famed Long Island club.

The \$29,000 Turf Analyzer is about the size of a small personal computer and interfaces with IBM-compatible PCs. Grass clippings are collected, washed, dried in a microwave and ground in a blender before being placed in the analyzer. Using near-infrared reflectance technology, it measures the levels of 11 ele-

ments essential to turfgrass growth. The whole process takes about 20 minutes.

Alonzi performs tissue analysis on specific areas on an every-other-week basis — greens and tees one week, fairways the next. Over the past two years, he has developed a baseline that helps him decide whether to increase or decrease fertilizer and other treatments.

"It's another tool for the superintendent," Alonzi said. "It doesn't tell you to go out and



feed the grass this material or that material. It gives you a reference point from which to work."

Alonzi said the analyzer has allowed him to reduce overall pesticide use while providing information that allows him to effectively adjust fertilizer applications to materials with needed micronutrient levels.

"In the long term, it's worth the cost," said Alonzi. "We spend that much on a single piece of maintenance equipment. If a club couldn't afford it then it might be worth contacting a lab with an analyzer that could perform the test for a fee two or three times a month."

Karsten Turf General Manager Ernest "Buck" Menendez said roughly 30 courses have purchased the unit since it was first introduced in 1991. Many of those have been 36-hole facilities or management companies that can share the equipment among several courses.

"It's an expensive piece of equipment," Menendez conceded. "But fertility management is a concept that's gaining steam. If this helps superintendents maintain their turf through stress periods, then it's a good investment."

## Elm disease battle

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recommended dosage but still sees no toxicity.

As effective as fungicide treatment appears to be, it is only a partial solution. The residual period for fungicide treatments is typically one to two years, and constant vigilance is required to protect existing elms.

Another approach that may provide more lasting relief from the ravages of Dutch elm disease is the development of disease-resistant varieties of American elm. To this end, ERI has developed the American Liberty elm.

Working in conjunction with the Boy Scouts of America, ERI has undertaken an aggressive distribution program to place the disease-resistant elm in communities throughout the United States. So far, the tree's resistance to Dutch elm disease is impressive: Of more than 250,000 trees planted in the United States and Canada, only 14 cases of Dutch elm disease have been reported.

Carey Mitchelson, superintendent at the Country Club of Hudson (Ohio), has planted some 50 elms as part of ERI's Liberty Tree Memorial Program. "They're upright and they have a vase shape, so you can put them fairly close as a hazard, giving a graceful appearance without detracting from the hole," said Mitchelson. "Architecturally, the elm tree is probably one of the most graceful trees you can put on a golf course."

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