

Deep Tines on Fairways Equal Deep Roots

Thanks to new aerification strategy, fairways are in fabulous condition, Iowa superintendent says

BY LARRY AYLWARD, EDITOR

Have you ever purchased something to use on something and you ended up using it on something else?

About three and a half years ago, Rick Tegtmeier purchased a deep-tine aerator to use on his golf course's greens and tees at Elmcrest CC in Cedar Rapids, Iowa. Six months later, the certified superintendent was using the machine,

the Verti-Drain, on his course's fairways as well.

"We have push-up greens here that are 70 years old," Tegtmeier says. "After we started [deep-tine aerating them], we saw some success. We thought, why not try it on the fairways?"

They did, and Tegtmeier and his crew have been deep tining the course's bentgrass fairways once a year ever since. The process is a slam-dunk for deep-rooted, healthy turf, Tegtmeier says.

The Verti-Drain, manufactured by Redexim Charterhouse, functions by "shattering" the soil to create multiple fissures in the hardpan layer. "This is accomplished

The Verti-Drain functions by "shattering" the soil to create multiple fissures in the hardpan layer.

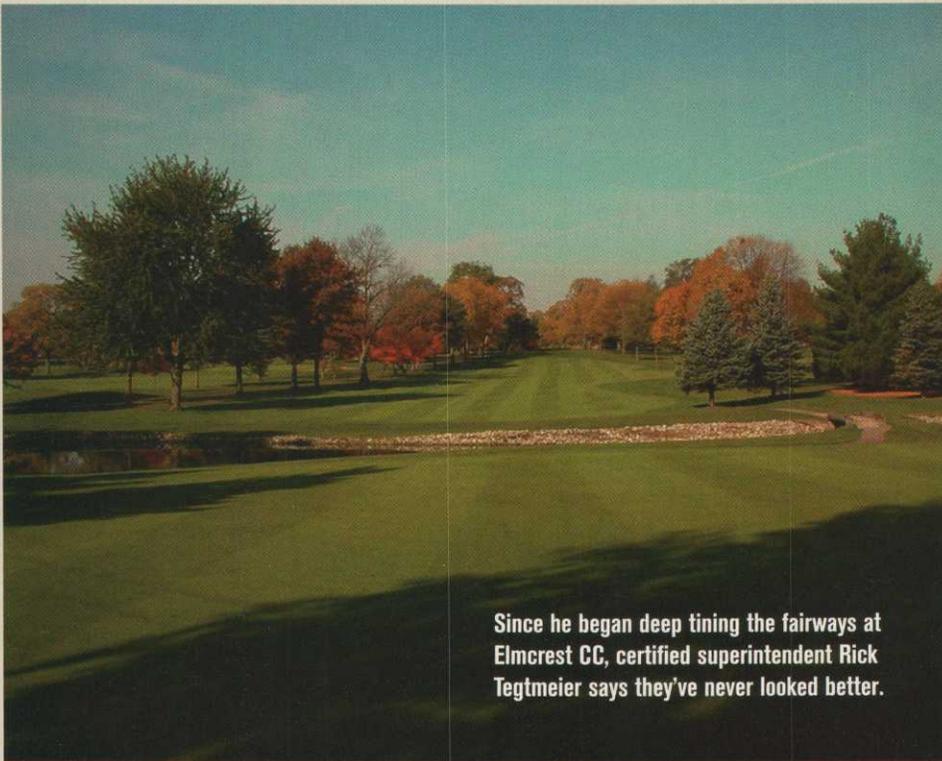
The Goal

Certified superintendent Rick Tegtmeier wanted to improve the health and look of the fairways at Elmcrest CC so the turf could better combat stress and pests.

The Solution

Tegtmeier decided to deep tine the fairways after he and his staff had success deep tining the greens. The fairways now have much better drainage and deep, healthy roots.





Since he began deep tining the fairways at Elmcrest CC, certified superintendent Rick Tegtmeier says they've never looked better.

through a parallelogram heaving action in which each tine is forced backward underground, shattering compaction at depths ranging from 6 inches to 24 inches and at speeds up to 2.7 mph," the company states.

The machine can be easily adjusted for increased heave and shattering or simply straight in and out movement of tines for minimal surface disturbance, the company adds.

When they first started deep tining the greens, Tegtmeier and his crew were using half-inch solid tines at about 10 inches deep.

"I told the guys, 'Let's go to about 8 inches on fairways so we don't hit anything,'" Tegtmeier says. "The first year [we used the Verti-Drain on fairways], we saw some big improvements. The course had much better drainage, and the localized dry spot went away. I have a 16-inch soil probe, and I was seeing roots down about 14 inches to 16 inches."

The deeper roots equate to healthier turf, which can better combat drought, heavy traffic and attacks from turf diseases and insects. "We have some of the best fairways around," Tegtmeier contends.

Tegtmeier recalls the reaction he received from members the first time he used the Verti-Drain on fairways.

"We were aerifying the fairways, and there were no cores," he says. "Our members were asking, 'When are you going to start aerifying the fairways?' I said, 'We're about halfway done.' The members were ecstatic because there were no cores."

Tegtmeier and his crew were previously coring fairways twice a year. Since they began deep tining, they're only coring once a year.

Tegtmeier credits his former boss, Bill Byers, director of golf for the Des Moines (Iowa) Golf & CC, with turning him on to the Verti-Drain. Tegtmeier worked under Byers for seven years as the superintendent for one of the club's two 18-hole courses.

But there's a bit of ingenuity in Tegtmeier's approach to deep tining the fairways, which can be classified under the all-important "cultural practices" category. In fact, Tegtmeier recently made a substantial decision that will change his agronomic approach.

Previously, Tegtmeier and his crew were deep tining in the spring and coring in the fall. It made more sense to deep tine in the spring because coring can become messy and muddy during April showers.

"When you core in the spring, you bring
Continued on page 34

The deeper roots equate to healthier turf, which can better combat drought, heavy traffic and attacks from turf diseases and insects.

**Read another
Real-Life Solutions
on page 50**

Real Life Solutions: Deep Tines

Continued from page 33

a lot of dirt up," Tegtmeier says. "You go through a lot of reels (on mowers), which have to be grinded again. It's a hassle for the mechanic. That's why I was coring in the fall."

That said, Tegtmeier cored the course's fairways for the last time this fall. In the fall of 2003, he'll switch to deep tining.

He has decided to go back to coring in the spring — muddy mess and all — because coring in the fall means possibly fetching *Poa annua* seeds that could germinate. Tegtmeier would rather deal with temporary messy fairways than dreaded annual bluegrass. "I don't want to bring up any *Poa* seeds," he laments.

Besides, coring in the spring has its advantages. The soil microbes from the cores help decompose the thatch buildup in the Penncross bentgrass

throughout the spring and summer, Tegtmeier notes.

"Penncross is a thatch producer," he says. "Getting those soil microbes up helps."

The Verti-Drain requires only one worker at a time for operation, but that doesn't mean the machine helps cut down on aerification labor. Tegtmeier employs one worker in the morning and one in the afternoon to deep tine the fairways.

"I can core all the fairways in two days with eight to 10 people," Tegtmeier says. "But I use two people when deep tining, and it takes about a week and a half."

Yeah, it's a big job and it's tough on the Verti-Drain and the tractor that pulls it, Tegtmeier admits.

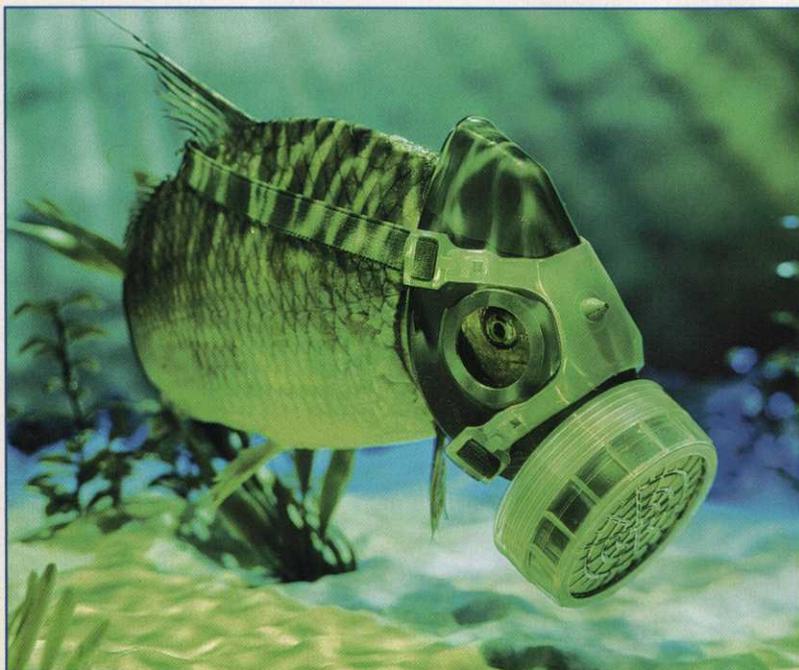
"We've bent some tines, and there's been a lot of wear and tear on the machine," Tegtmeier says. "But the

benefits outweigh the wear and tear."

Tegtmeier is not the only superintendent deep tining his course's fairways. Last spring, fellow Iowa superintendent, Ken Ellenson, superintendent of Amana Colonies GC, contracted a business to do the job. "We have heavy-duty clay in our fairways, and I wanted to see if it would help," he says.

Ellenson says the contractor used the Soil Reliever aerator, manufactured by Southern Green. Previously, Ellenson only aerified the course's fairways once a year by coring them in the fall. But he plans to deep tine them again next spring along with coring in the fall — and deep tine in the springs thereafter.

"We had a lot less problems with turf stress this year than we've had in the past," Ellenson says. "[Deep tining] helped a lot." ■



Maybe It's Time to Look into an Aeration System

No one should have to live with poor water quality. Being the industry leader for over 50 years, Otterbine offers a variety of surface spray and sub-surface aeration systems that effectively circulate water and transfer oxygen. And with independent testing conducted by the University of Minnesota, you can rest assured that Otterbine systems will surpass all industry standards and your expectations. The result? Beautiful, healthy waterways — on the surface, as well as below where it counts!



1-800-AER8TER

610-965-6018 • www.otterbine.com

Product leasing available.