Real-Life Solutions

DEEP TINTING FAIRWAYS

Deep Tines on Fairways Equal Deep Roots

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

BY LARRY AYLWARD, EDITOR

ave 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 Rexexim Charterhouse, functions by "shattering" the soil to create multiple fissures in the hardpan layer. "This is accomplished

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

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

through a parallelogram having 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

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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 cor-
ing 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 fair-
ways 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. Tegt-
meier 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,” Tegt-
meier 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 ma-
chine,” Tegtmeier says. “But the
benefits outweigh the wear and tear.”

Tegtmeier is not the only superin-
tendent deep tining his course’s fair-
ways. Last spring, fellow Iowa superin-
tendent, 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, El-len-
son 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.”

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