Seeds of Struggle

Lessons learned from problems seeding the back nine smoothed the way for a flawless front nine seeding at Firestone CC's West Course

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Problem
Firestone CC's natural drainage patterns allowed rainstorms to wash away seed on the back nine fairways continuously, leading to increased labor costs and uneven coverage.

Solution
When it came time to seed the front nine, superintendent John DiMascio decided to put a layer of hydromulch over the seed to protect it from nature's wrath. The result was a consistent, smooth playing surface at a lower cost.

Other Nature just wouldn't cut Firestone CC superintendent John DiMascio a break as he renovated the Akron, Ohio, club's West Course. Every time the construction crew seeded the back nine fairways, She'd blow in with high winds and rain, which washed the seed into drainage swales and roughs. Then DiMascio would send a crew to put down more seed, only to have another rainstorm destroy their work.

"We finally got the seed down to stay, but it wasn't pretty," DiMascio says. "There were a lot of bare spots and uneven seeding because we had such a hard time keeping the seed down on the fairways."

Despite the problems on the back nine, DiMascio says he and Brian Mabie, the club's director of golf course maintenance, never considered sodding the front nine when the project reached that stage of construction.

"We decided it would be too expensive and wouldn't grow in evenly," DiMascio says. "It was back to seeding, no matter what problems we'd had before."

The problem
Firestone CC has a history of hosting tournaments on its 54 holes, which are divided into the original South Course (1929), the North Course (1969) and the West Course (1989). While the South Course is by far the most famous, the other two courses have also hosted their share of the world's best players. Unfortunately, the West Course never caught on.

"Revenue declined on the West Course and it never captured the hearts of our players," Mabie says. "With the other two courses being so famous and well-respected, we decided to tear out the West Course and improve the design."

In 2001, the club hired Tom Fazio, who doesn't like to use catch basins in fairways, to handle the redesign, DiMascio says. Therefore, the fairways are edged by steep swales which carry water to catch basins in the roughs. Though the swales help the fairways drain quickly after a rainstorm, they presented problems during seeding. After a hard rain, the water washed the seed into the roughs. DiMascio says he and the crew tried to stop the erosion by building sod barriers to prevent the seed from washing into the rough — to no avail.

"It stopped the seed from washing away to an extent, but what really happened was that it built up on the edges of the rough," DiMascio says. "That meant uneven growth in the middle of the fairways."
DiMascio also battled wind whipping around the fairways, which blew the seed off the soil and desiccated the turf when it started to sprout. On No. 15, he and his crew reseeded the fairway at least four times. When it came time to seed the front nine, DiMascio knew he had to do something to reduce the costs from what he incurred on the back nine. It cost the course $5,000 each time the crews had to reseed a fairway, Mabie says.

“It wasn’t cost-efficient,” Mabie says. “We tried to do an aggressive syringing program to keep it wet so the seed wouldn’t blow away, but it didn’t work.”

DiMascio’s inspiration for a solution came as he watched Tom Nichols, a former Firestone employee and president of Ohio Hydroseeding and Erosion Control, based in Rootstown, Ohio, hydroseed the course’s native areas.

“I decided that if you could hydroseed the native grasses, why couldn’t you use it to do the fairways?” DiMascio says. “The problem was that we wanted to seed the fairways traditionally to ensure the evenness of the growing. We had to figure out whether we could combine the two processes.”

The solution
When DiMascio approached Nichols with his problem, the two created a program they thought might work. Instead of putting down a complete hydroseeding mixture, they decided to put down a hydromulch instead. That way, they could seed the fairways traditionally while still getting the ground cover necessary to keep the seed from washing away.

Though Nichols says he’d never done a project like that before, he thought it was a great idea when DiMascio proposed it. He then contacted Fairfield, Ohio-based Finn Corp., which manufactures hydroseeders and the products necessary to make the mix.

A typical hydroseeding mixture includes grass seed, mulch, polypropylene fibers (to hold the mixture together) and tackifiers to bond the mixture to the soil.

“We created a heavy slurry to put over the seed,” Nichols says. “The only thing missing from the mix was the seed, which the club didn’t need.”

Nichols covered the front nine fairways with a one-eighth inch slurry. He had a dual tank seeder and used the irrigation system’s quick couplers to add the necessary water to the mixture. As he’d run out of water, Nichols would stop the hydroseeder, hook it up to the irrigation system and refill the tanks.

“Whenever you’re hydroseeding, there’s always a question about whether you’re putting down an even layer of seed,” Nichols says. “With this operation, you didn’t have to worry about that, which made the job much easier.”

DiMascio says the process took about six weeks last fall. Nichols covered each hole as the construction company finished it. Once the project was finished, all DiMascio could do was sit back and wait to see if his experiment worked.

Outcome
“I held my breath while I waited for the first fairway to come in, but I shouldn’t have worried,” DiMascio says. “The grass grew in nicely. It allowed me to get out far earlier with the first cut on the front nine than I’d been able to do on the back nine.”

At $1,000 per acre, hydromulching the front nine fairways saved time, money and headaches, DiMascio says.

“Since we didn’t have to keep reseeding the fairways after a rainstorm, it cost considerably less to finish the front nine,” DiMascio adds. “The crew was able to work on other projects instead of constantly doing repair work. It worked out well.”

Nichols says he would recommend the process to architects who want to open courses promptly.

“You can save so much time and lose a lot less seed if you use this system,” Nichols says. “It’s so smooth.”