ON A ROLL

Steve Van Natta has been preaching the gospel of rolling greens, and he's making true believers out of his colleagues in southern Minnesota.

BY MIKE ZAWACKI

At the end of the season, in late fall or early winter, superintendents from public and private courses around southern Minnesota get together to discuss the challenges and successes they experienced during the year.

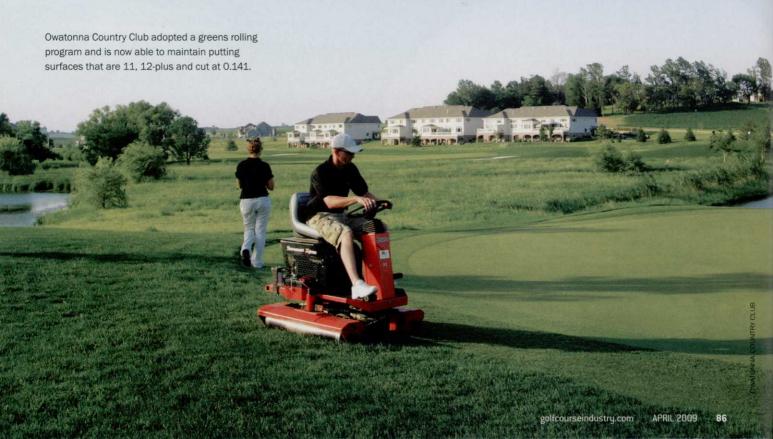
This past fall, Steve Van Natta, CGCS, and his staff presented to their industry colleagues how successful their newly adopted greens rolling program has been, and how the benefits have exceeded all of their expectations.

Their presentation raised some eyebrows and some disbelief.

"The people attending could hardly believe their ears," says Van Natta, superintendent at the private 18-hole Owatonna Country Club in Owatonna, Minn., roughly 65 miles south of Minneapolis. "We're talking about maintaining putting surfaces that are 11, 12-plus with a green that's cut at 0.141. It's absolutely unheard of because they were cutting at 0.100 or 0.120."

To put Van Natta's operation into perspective, his maintenance budget at Owatonna is \$550,000, and his staff consists of five full-time people and as many as 18 seasonal workers during the summer months. The club hosts between 40 and 45 events over the course of a season and three large tournaments, including The Joseph Shea Invitational, The Owatonna City Open and The Club Championship.

Unlike many of the courses in his market, Van Natta must overcome a unique turf challenge. Owatonna has three distinct types of greens throughout its 18 holes. The original golf course was built in 1919 and features five very old, push-up greens. These are topdressed with a 3.5- to 4-inch layer of sand



Owatonna has three distinct types of greens throughout its 18 holes, presenting a unique challenge to superintendent Steve Van Natta.



and are a high percentage of *Poa annua* with colonial bentgrass.

Seven are a modified USGA green built around 1972 and feature a higher percentage of bentgrass, like a penncross with a little coarser bent.

The rest are USGA-spec greens built within the last five years and some Van Natta is currently building. These greens feature Dominant X-treme, which is a finer, more aggressive bentgrass.

"I'd say it's highly unusual," Van Natta says of Owatonna's green makeup. "It may be the norm to have two different types, but to have three, and have them so completely different from each other in all the physical ways – from the drainage aspects to how the grass can be mowed. Having a consistent putting surface of a consistent speed, that has been the problem."

It's a dilemma Van Natta began troubleshooting in the late 1990s. At that time his crew had rolled the greens in the spring and fall using older-style rollers on a triplex greensmower, and hand mowed the greens on a daily basis in the summer to provide consistency.

"That made a significant change because we were able to have the quality of cut from a walk-behind mower," he says. "That seemed to make a difference with the various types of green."

The solution, though, was time consuming and labor intensive. And even though the speeds of the various greens were now very similar, Owatonna members felt they could tell the difference between the quality of cut and green speed.

"And that was the breaking point," Van Natta says.

FINDING A SOLUTION

Before the start of last season, Van Natta knew he wanted to explore rolling to remedy his problem, especially since he was budgeted to purchase new rollers to replace the old rollers that were mounted on triplexes.

So he appointed Nikk Dickerson, Owatonna's assistant superintendent, to investigate the impact a rolling program would have on maintaining consistent green speeds. Dickerson turned to "The Superintendent's Guide to Controlling Putting Green Speed," which was written by Thom Nikolai, a turfgrass academic specialist at Michigan State University. Nikolai lectures extensively on the benefits of greens rolling.

Dickerson also consulted Nikolai about the overall quality of a roll from the various types of machines on the market. They settled on a pair of Smithco Tournament rollers, which are dedicated electric-powered sidewinder rollers.

Another consideration in choosing rollers was the machine would need to be adaptable to Owatonna's three different styles of green complexes. For example, some greens are more elevated than others, so how a roller is driven and its traction capabilities were important considerations. All three of Smithco's rollers are powered, improving the machine's traction on a green, Van Natta says. Other roller models feature only one or two powered rollers, he adds, making them less suitable to Owatonna's unique challenges.

"The last thing I wanted to deal with was people getting stuck halfway up a hill," he says. "It's something we didn't need to add to our already busy schedule."

Since no one on staff had extensive experience operating a sidewinder-style roller, Van Natta charged Dickerson with taking the equipment through its paces.

The roller was similar to other types of course equipment, Dickerson says, which helped in adjusting to its feel and function on a green.

"It's pretty basic," he says. "It's a seat, a steering wheel and two directional pedals. It's a very simplistic piece of machinery."

For the first three days, Dickerson went out by himself and rolled only a few select greens – one from each different vintage. He then asked some of the members if they noticed any differences in play on those greens.

"They all seemed to love it," he says.

Dickerson then trained a pair of the seasonal employees based on what he'd learned over the course of those first few days. Those individuals, in turn, were charged with training at least one other employee.

"Essentially, after me, we had about five people who could roll greens after six to seven days," Dickerson says. "We got to the point pretty quickly where they were comfortable rolling greens."

The learning curve with how to use the roller was very small and Dickerson encoun-

tered very few problems in training.

"We had one guy who fell into a bunker with one," he says. "But that's going to happen when you're getting to know a new piece of equipment."

For members playing the course, rolling made an immediate difference in play. Earlier in the season, Dickerson had queried members about what they felt was the ideal speed of Owatonna's greens. This input served as the target for Van Natta and Dickerson's rolling program.

"We were able to maintain speeds that were in excess of what our target was," he says. "We actually had to back off on stuff because we were creating greens that were like lightening. Some golfers at the club thought they'd died and gone to heaven, but some of the older members wanted to know what we were doing because they felt if you just touched the ball it'd roll halfway across the green."

Owatonna's greens are rolled every other day, unless there's a tournament scheduled. "We have three large tournaments during the year and we rolled two to three days leading up to the tournaments just to get them putting quick and rolling as true as possible," Dickerson says.

Rolling even has allowed Van Natta to skip days of mowing without affecting quality of play. "You're not stressing the turf and you're giving it another day of top growth, which is going to give you a healthier plant," he says of rolling's benefit to the turf. "And you're still giving the members what they're looking for as far as the smoothest, most consistent putting surface."

In addition to green speeds, another of Van Natta's concerns was keeping the cut as high as possible.

"Normally, people cut as short as they can get with the hopes of getting a faster putting surface," he says. "But in the process of doing that you take away the benefits of a high cut and you have a plant that is much weaker. You're pretty much creating a time bomb."

Van Natta and Dickerson consulted Nikolai's data and learned that rolling could allow them to maintain a higher cut.

In addition to the new rollers, Owatonna purchased a new Jacobsen Eclipse walking greensmower with groomers, which allowed Van Natta's crew to mow Owatonna's greens at 0.141 inch.

"Rolling allowed us to mow at a higher height, and because of the groomers, we're able to keep the grass standing upright," Van Natta says. "This makes each green type not only visibly looking the same, but the quality consistent."

Rolling has provided Owatonna with

greens that are comparable in speed, but are healthy, too. These are important factors when maintaining greens in July and August, Van Natta says.

"I saw the quality of the color and overall look of the greens improve," Van Natta says. "We had an overall better root system, and a more extensive root system means the turf will be hardier when it's dry."

PLUGGING IT IN

To date, Van Natta and Dickerson have encountered very few, if any, problems maintaining the rollers.

Because they're electric-powered, the units must be plugged in at the end of the day to ensure they're charged and ready to go come morning.

It takes about three to four hours to charge the roller's battery, and that ensures about five hours of operating time if the unit is set at its slow setting. While the roller comes with two speed settings – fast and slow – the faster setting drains the battery at a considerably faster rate.

"From my experience, the faster speed setting only allows you to go faster across the green and does not have much of an impact on the turf compared to the slow speed," Dickerson says. "If it does, then it's negligible." GCI

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