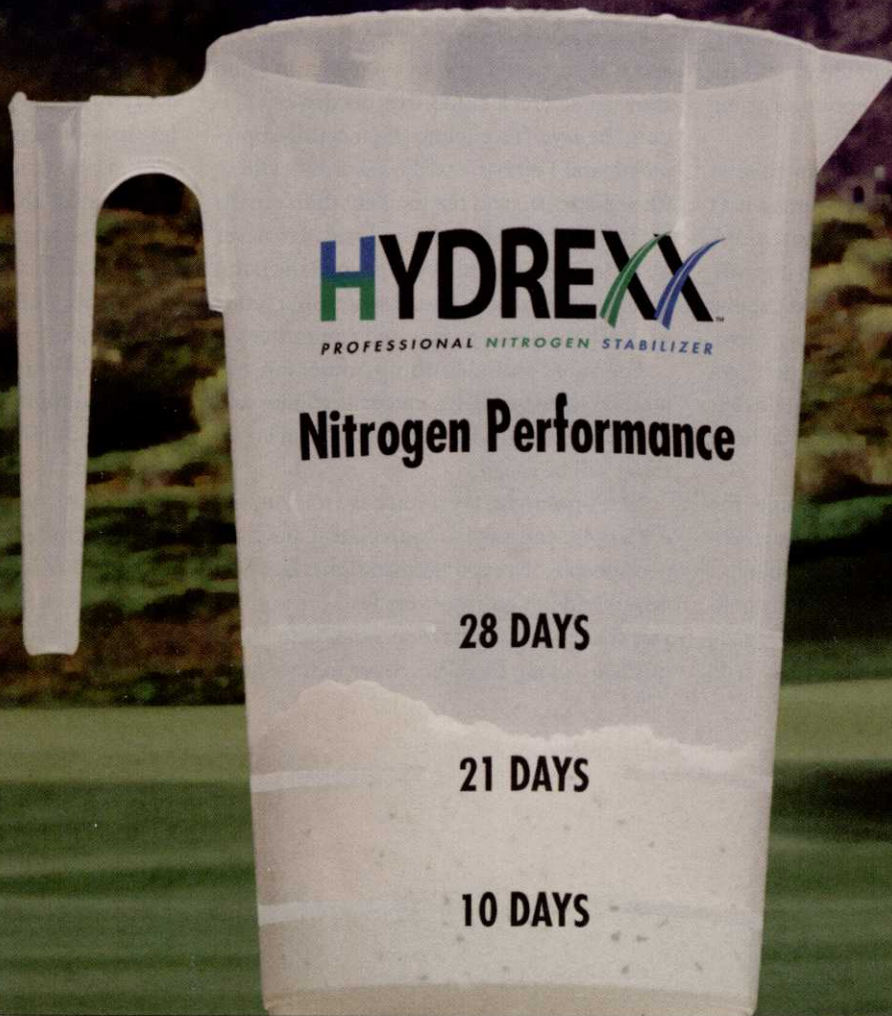




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SUPERINTENDENT PROFILE

and as carefully as we can. There's also a lot of money at facilities invested to take care of pesticide residuals, packaging, sprayer cleaning and that whole side."

Despite sound financial and agronomic reasons for not applying too many pesticides, fertilizer and water, superintendents still are faced with the negative perception of using too many of those inputs.

"That's something we're going to have to overcome," he says. "But that perception isn't the reality. Superintendents by nature think if they can save in one area they can improve in another. We're judged on how we spend those dollars, so if we're just wasting them, we don't get the things we want. We don't get anything by wasting these resources. It's in our best interest not to waste them. That has been the case more often than not."

On a broader scale, Anderson thinks the biggest problems facing the golf course management industry is the number of golfers.

"We have a lower number of wealthy golfers," he says. "We have to keep recognizing the ... need for more golfers. Everybody has to do

their little part, but it's not easy because customers necessarily aren't spending much."

Throughout a long career, one learns a lot. And one certainly can learn from mistakes. Anderson says one sticks out in his mind.

"I was asked to put together a presentation and was supposed to take some pictures and show some creek banks that needed restoration," he says. "I went into this meeting unprepared, and I embarrassed myself. Everything turned out OK, and the incident didn't really hurt me, but from that day on I said, 'I'm never going to do that again.' I understood the point that I needed to be prepared when interacting with other people, groups and committees."

The most valuable thing Anderson has learned throughout his career is to hire and surround oneself with good people and everything will be easier.

"If it's not right, then you have to fix it, but if it's right, you have to appreciate it and have good people," he says. "Preparation is key. Our mistakes don't go away very fast. It's not like you start over. You have to work with those mistakes a long time. You have to have good

turf. There's no one else that can cover for you because they don't know."

Throughout the years, Anderson has worked with many assistants and seen some commonalities among them. He says when they first start, they worry about the agronomic aspect of the job and are concerned they don't know everything they need to know about every fertilizer or fungicide.

"But after they've been there for a while, they realize that's the easy part," he says. "It's the management of the people, the golfers and the members that take the time to develop the skills that really get them set for the next job."

After 34 years in the business, it's natural for one to think about life after a job and retirement. At 57, Anderson has thought about retirement, but hasn't set any time frame and doesn't anticipate doing so any time soon.

"I anticipate I'll stay right where I'm at," he says. "We have plenty of projects. I enjoy where I work and the people I work with. I'll just keep going because I have a little more time to do some things." **GCI**

Like many country clubs throughout the country, expectations at Carmel vary because of different groups. Managing those is an ongoing battle, Anderson says. Photo: Carmel Country Club



“WE HAVE A RESPONSIBILITY TO
USE THE BEST SEED VARIETIES
THAT WE CAN.”

JOHN ZIMMERS ON
2007 US OPEN PREPARATION

“The roughs have been one of our biggest successes while preparing for the US Open. It was one of our weakest areas, but they have really turned around. We have established a tremendous stand of bluegrass. We’ve been very successful using the Jacklin Seed products.”



John Zimmers
Superintendent
Oakmont Country Club
Site of the 2007 US Open

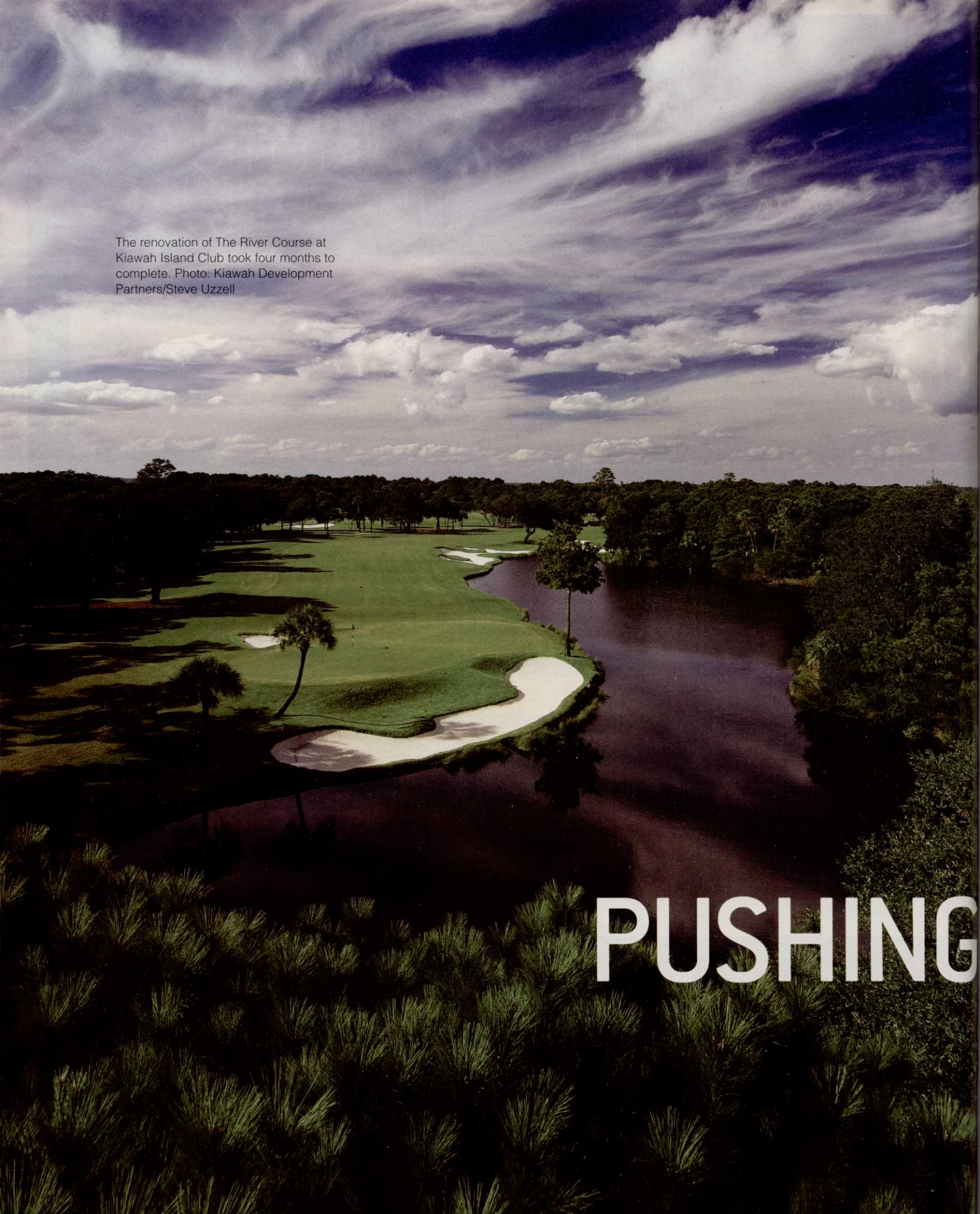
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An aerial photograph of a golf course, likely the River Course at Kiawah Island Club. The image shows a lush green fairway and green, a sand trap, and a winding river that reflects the sky. The foreground is dominated by a dense field of pine trees. The sky is filled with large, dramatic clouds, creating a high-contrast, moody atmosphere. The overall scene is a mix of natural beauty and manicured golf course design.

The renovation of The River Course at
Kiawah Island Club took four months to
complete. Photo: Kiawah Development
Partners/Steve Uzzell

PUSHING

BY HAL PHILLIPS

Like many private clubs in the South Carolina Low Country, The River Course at the Kiawah Island Club in Johns Island slows down considerably during the summer months. Many members head north, and, upon their return, can assume nothing much has taken place at their winter club between, say, the traditional season-ending member-guest tournament and the season-opening member-guest tournament. Out of sight, out of mind.

This was not the case, however, during the summer of 2006 when River Course superintendent Jim Musci undertook a massive renovation project – in the space of four months. In collaboration with contractor Frontier Golf, Fazio Golf Course Designers and Champion Turf, Musci oversaw the regrassing of every tee, fairway, collar and green; the complete rebuilding of two of those greens and the expansion of four others; the addition of a dozen new bunkers; the reconditioning of several waste areas; and, just for good measure, the rebuilding of every existing bunker.

“We closed down the course May 22, after the member-guest [tournament], and we reopened Oct. 1, for the season-opening member-guest [tournament],” says Musci, noting members weren’t inconvenienced in any way by the course-altering activity. “We were on a tight time frame, but Frontier delivered – 3.5 acres of greens in 25 days, planting all the fairways in 10 days, then taking on the tees and bunkers.”

According to Rich Abbott, president of Frontier Golf Southeast, there was actually a tropical depression during those 25 days and four days were missed.

“We had to push the fumigation back, so it was 21 working days,” Abbott says. “But still, certainly the quickest [work] we’ve ever done. Daylight to dark every day, seven days a week, and we had light towers on site the first week in case we fell behind. We would’ve worked till midnight if we’d had to, but we were fully prepared.

“We had met several times prior, simply to work on the logistics of the project,” he adds. “So we had all our ducks in a row. By noon the first day, we had three greens excavated out.”

AGRONOMIC INNOVATION

The River Course project is notable not only for its time frame but for its agronomic innovation, or risk-taking, depending on the point

of view. Once the greens work was completed (all 18 were regrassed with Champion ultra-dwarf Bermudagrass), Frontier directed the regrassing of all 18 fairways, every collar and every tee box with Emerald, a new greens-grade dwarf Bermudagrass from Champion Turf that had never been used on fairways and collars before.

The River Course, which is the original layout at Kiawah Island Club, is only 10 years old, but Musci says turf encroachment and mutations – the result of sustained overseeding – had begun to take their toll on definition and playability, especially in the transition and collar areas. What’s more, several putting greens had shrunk from their original size, and shade had adversely affected turf health in certain areas.

“The grass had started developing off-types and was getting splotchy,” Musci says. “It was time. We had talked with [Champion Turf] about Champion on the greens, but they said, ‘Hey, what about this new grass for tees, collars and fairways?’”

Musci, who’s been in charge at the Tom Fazio-designed course since the day it opened in 1995, had another incentive to undertake major changes: The River Course will play host to the 2009 Mid-Amateur Championship, the first U.S. Golf Association event ever to be held at Kiawah Island.

So far, the Emerald has exceeded expecta-

THE ENVELOPE

NEW TURFGRASS USE, SCOPE OF WORK AND TIME FRAME
MAKE RENOVATION PROJECT NOTEWORTHY

“Seeing that grass establish so fast and seeing the height of cut they were maintaining, it was like greens-grade grass in the fairway.” - RICH ABBOTT

tions, Musci says.

“The color is fantastic, an emerald green, and the contrast with the 419 in the rough is really nice,” he says. “We expected that, and we expected the playability to be an improvement. The members love it. The lower cutting height means better roll, and if you hit it off the fairway, the ball stops dead. It’s a grass you can mow from three-eighths inch to one-eighth inch, down to putting quality. It has deeper roots than the ultradwarf, it’s not thatching up as bad, it has better recovery from divots, and not as much [tender loving care] is required – topdressing, grooming and such.”

Abbott, a veteran of grow-ins in the Southeastern United States, says this past July and August couldn’t have provided better climatic conditions for the grow-in.

“It’s unbelievable how fast the Emerald grew in,” Abbott says, noting that Champion Turf c.e.o. Morris Brown personally oversaw the River Course project. “Champion sprigged it so heavy, it was almost like sodding the fairway. Seeing that grass establish so fast and seeing the height of cut they were maintaining, it was like greens-grade grass in the fairway.”

Although Abbott is a proponent of Emerald, he says it’s not for every club.

“There are very few people who have the maintenance power and staffing to maintain a grass like that year-round – between one-eighth and one-quarter of an inch, treating it like a green, all the walk-behind mowing required to keep the lower heights of cut on the tees and around the greens,” he says. “Jim and his staff can handle it, but those are a lot

of cultural practices that most clubs wouldn’t be able to do.”

GET IT DONE

In conjunction with these major agronomic changes, the designers at Fazio were brought back to make several strategic changes. Senior designer Andy Banfield, lead architect on the River Course project in 1995, explains it’s not uncommon for Fazio to renovate courses it originally designs.

“We do it all the time,” he says. “That’s the nature of the business. The River Course isn’t that old, but golf has changed dramatically during the past 10 years. There’s the distance factor, for one, but there have been major industry improvements in grass types, maintenance techniques and standards. The competition is getting better. All these things factor into it.”

Frontier dedicated a special crew to shadow Banfield and associate designer Bryan Bowers as they tackled the major redesign issues, which were:

- Repositioning the green on No. 1 closer to a lagoon;
- Expanding No. 4 green to create a new, back pin location, which brought an existing bunker more into play;
- Replacing the double greens on No. 5 with a single green complex, increasing the risk/reward values of the drivable par 4;
- Elevating tee boxes on No. 7 to provide a better view of the hole;
- Expanding the green on No. 8 to the right, bringing a pond more into play and replacing a portion of the waste area fronting the green with a formal bunker; and

- Restoring the green on No. 11 to its original size, expanding it back left and center, while replacing the waste area that had wrapped around the front of the green with a single pot bunker.

“On the putting green reconstructions, we cored the greens – literally built the greens up with native material so Andy Banfield could see what they looked like at finished grade – then cored it all out again and rebuilt them,” Abbott says. “It’s a delight to work with the folks at Fazio and Kiawah. Their priority isn’t about price. Their priority is, ‘Show me how we’re going to get it done.’”

As an example, Abbott cited the cart paths that were renovated on the River Course.

“To execute a project of this magnitude, we used a lot of trucks,” he says. “The sand company had two trucking companies on just to keep us in material. In the process of all this trucking, a lot of cart paths were damaged. So we fixed those we damaged plus all the others that had been damaged during the past 10 years.”

AT A GLANCE The River Course at Kiawah Island Club

Location: Johns Island, S.C.
Date construction began: May 22, 2006
Date project finished: Sept. 5, 2006
Date course opened: Oct. 1, 2006
Cost of project: \$2.8 million
Course length: 7,119 yards
Golf course acreage: 125 acres (total turfed area: 95 acres)
Grass on greens: Champion ultradwarf Bermudagrass
Grass on tees, fairways and collars: Emerald dwarf Bermudagrass
Grass in rough: 419 Bermudagrass
Architect: Fazio Golf Course Designers
Builder: Frontier Golf
Golf course superintendent: Jim Musci
Owner: Kiawah Development Partners



The distance factor, better competition, and improvements of new grass types, maintenance techniques and standards were a few reasons for the renovation. Photo: Kiawah Development Partners/Steve Uzzell

DESIGN CASE STUDY

Golf course superintendent Jim Musci oversaw the regrassing of every tee, fairway collar and green. Photo: Kiawah Development Partners/Steve Uzzell



STRIVE FOR PERFECTION

Additionally, there were dozens of other, smaller projects: a new fairway bunker on No. 13; a waste area on No. 9 that was lowered and recontoured to allow for better visibility, and all of the rebuilt bunkers, the faces of which were regrassed with Empire zoysiagrass.

"I've never worked on something of this scope in this time frame – never," Abbott says. "And I'd do it again tomorrow if I could work with this same group of people and if I had the same preparation time. Without the

same level of coordination and this particular group of people in place, it never would have worked."

Abbott says Musci did a superb job.

"My hat's off to him," he says. "He was out there every minute of the entire project and during the grow-in. You never had to look for an answer to a question with Jim or the Fazio guys. They were there at all times striving for perfection."

Musci says it was just about the perfect project.

"We had rain when we needed it, but not too much," he says. "There were no washouts. And even with all the changes we made, Frontier just made every deadline. It was pretty amazing what they did in that small amount of time. You miss one day, and everything else down the line is messed up. But everything was on time." **GCI**

Hal Phillips is a freelance writer based in New Gloucester, Maine. He can be reached at onintwo@maine.rr.com.

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Phoenix Environmental Care Case #189201

Brown Patch, Dollar Spot & Anthracnose

Case# 00185-41

Problem: Dollar Spot

The fungus *Sclerotinia homoeocarpa* ("Dollar Spot") commonly attacks low-cut creeping bentgrass. It thrives in damp clippings or moist, cool soil.

Symptoms:

Fast-spreading Dollar Spot begins as small discolorations. Grass blades bleach, forming dead patches on turfgrass surface. Spreading infection causes ugly, tan-colored spots 2-5" wide (silver dollar size).

1. Many small, round dead patches
2. "Hourglass" shaped lesions
3. Cobwebby white mold
4. Damaged putting greens

Case# 00185-41
Agent: 07-0705

Solution: Pegasus™ Fungicide

Pegasus foliar fungicide effectively controls Dollar Spot and prevents re-infection, using new formulations of the proven ingredient chlorothalonil. Pegasus also provides excellent resistance management. Available in liquid or dry flowable formulations with improved dispersion and suspension.

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Case closed.



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Photo provided by University of Wisconsin

BY MIKE BOEHM, JOE RIMELSPACH, AMY NIVER, YOUNG-KI JO & TODD HICKS

Tired of managing dollar spot?

The secret might be the timing of fungicide applications

Table 1. Impact of preventive fall and spring fungicide applications on dollar severity: 2001/2002 field study.

Treatment	Fungicide applied	Date of application	Dollar spot infection centers/plot ^a		
			OTF ^b	Wedgewood	Brookside
1	nontreated		46.3	1.6	2.8
2	propiconazole ^c	Nov. 10, 2001	24.3	0.8	1.6
3		April 26, 2002	21.3	0.5	1.9
4		May 22, 2002 ⁱ	3.4	0.0	0.5
5	propiconazole ^d	Nov. 10, 2001	12.8	1.0	1.9
6		April 26, 2002	16.8	1.1	1.3
7		May 22, 2002 ⁱ	6.1	0.6	0.0
8	chlorothalonil ^e	Nov. 10, 2001	53.8	1.0	2.8
9		April 26, 2002	27.5	1.0	2.3
10		May 22, 2002 ⁱ	7.8	0.5	0.5
11	thiophanate-methyl ^f	Nov. 10, 2001	39.3	1.5	3.0
12		April 26, 2002	1.6	1.4	2.5
13		May 22, 2002 ⁱ	0.5	0.6	1.6
14	iprodione ^g	Nov. 11, 2001	12.8	1.1	2.9
15		April 26, 2002	18.0	0.4	2.5
16		May 22, 2002 ⁱ	0.5	0.1	0.0
17	BASF 505 ^h	Nov. 11, 2001	16.3	1.1	1.8
18		April 26, 2002	25.0	0.8	1.6
19		May 22, 2002 ⁱ	0.8	0.1	0.0
		LSD _(P=0.05) =	9.1	1.0	3.2

a Dollar spot severity was rated on June 24, 2002 by counting the number of dollar spot infection centers (DSIC's) per plot. (4 replicates per treatment per location).

b Wedgewood = Wedgewood Golf & County Club; Brookside = Brookside Golf & Country Club; OTF = OTF Turfgrass Research and Education Facility.

c propiconazole (1.0 oz/1000 ft² Banner Maxx, Syngenta Crop Protection, Greensboro, N.C.).

d propiconazole (2.0 oz/1000 ft² Banner Maxx).

e chlorothalonil (3.2 oz/1000 ft² of Daconil Ultrex, Syngenta Crop Protection, Greensboro, N.C.).

f thiophanate-methyl (2.0 oz/1000 ft² of 3336 F, Cleary Chemical Co., Dayton, N.J.).

g iprodione (4.0 oz/1000 ft² of 26GT, Bayer Environmental Science, Research Triangle Park, N.C.).

h BASF 505 (0.2 oz/1000 ft² (BASF, Research Triangle Park, N.C.).

i Preventive fungicide applications made every 14 or 28 days starting on May 22, 2002.

Spray for dollar spot in the fall before snow flies or in early spring as turfgrass breaks dormancy and significantly reduce the amount of disease to worry about the following June or July. Sound crazy or too good to be true? Perhaps, but researchers might be on to something.

The research in this update was conducted to answer two questions: (1) Is it possible to make fungicide applications on healthy turfgrass during the previous fall and/or early spring and control disease outbreaks the following season, and (2) if it's possible to deploy fungicides in this manner, when is the best time to make such applications."

This research is ongoing. Although the focus of this update revolves around fungicide use and timing, superintendents shouldn't forget about the importance cultural management practices have on turfgrass diseases.

Dollar spot, caused by the fungus *Sclerotinia homoeocarpa*, is one of the most economically important diseases of cool-season grasses. It's routinely cited as the most sprayed for turfgrass disease and typically tops the list of golf course diseases most difficult to manage. Although increased nitrogen fertility and cultural practices related to the removal of dew/guttation water