



ISSUE 59 // FALL 2022

# BY DESIGN

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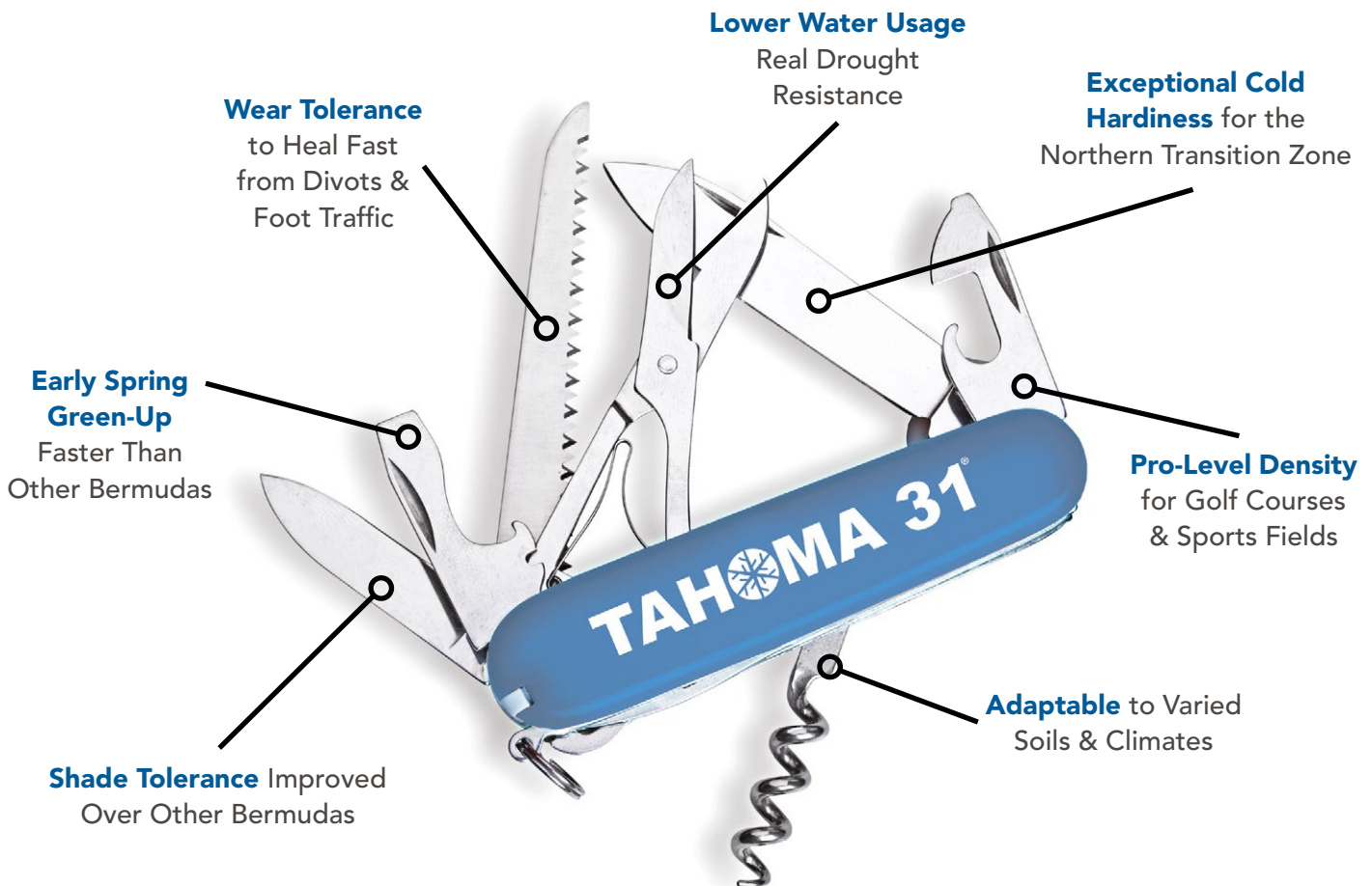
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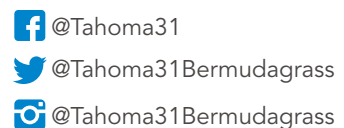
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*Tahoma31 Bermudagrass was developed by the turfgrass experts at Oklahoma State University*

# Renovating a classic

**Columbia Country Club in Maryland converts from cool-season to warm-season grass and is immediately recognizing the benefits.**



**Stacie Zinn Roberts**

Stacie Zinn Roberts is an award-winning writer and marketing expert specializing in the golf and turfgrass industries.

**T**here is a delicate balance to renovating a classic golf course.

Heritage and playability must be preserved while implementing modern innovations in technology such as improved turfgrasses for greater sustainability. This was the case at Columbia Country Club in Chevy Chase, Maryland.

Columbia is a century-old landmark Walter J. Travis design steeped in tradition. It is the site of the 1921 U.S. Open where then-President Warren G. Harding presented the winning medal to Jim Barnes, and a 19-year-old Bobby Jones was edged out by one stroke as low amateur by 1916's Open winner Chick Evans.

While Columbia may have been one of the first in the nation to install an irrigation system, very little has changed at the club short of some minor adjustments to hazards and the addition of a driving range. Still, Travis's layout has never been altered. Safeguarded by a passionate membership of low handicappers (two of whom competed for the green jacket at the

Masters), the course is considered hallowed ground.

It was with the utmost respect and collaboration with an informed and vigilant renovation committee, working alongside a dedicated golf course superintendent, that Joel Weiman, ASGCA, senior designer with McDonald Design Group, based in Maryland, began a renovation master plan in 2017.

Several factors contributed to the decision to renovate the 18-hole course. A long-dormant easement that once allowed for freight train traffic through the club's property (it was turned into a walking path many years ago) was tapped back into service. The easement is now being converted into a light rail passenger line to serve commuter traffic for the suburbs of Washington, D.C. This required a slight reconfiguration of the club's second hole and a move and replication of the fourteenth green.

"We surveyed the putting surface, shifted its location, and replicated it to within a half-centimeter tolerance," says Weiman. "It's



exactly the same green the members played. I remember when a member came up to me during construction and said, ‘you know, Bobby Jones putted on this green, don’t you mess it up’,” he chuckles. “Yeah, we had to get that one right... welcome to Columbia.”

The course was in desperate need of a new irrigation system, and aging bunkers cried out for a rebuild. The decision was made to tackle both projects simultaneously beginning in October 2021. To do it right, every Monday morning, the bunker committee met to discuss the renovation.

“We wanted it to feel rugged, very traditional, classic,” says Weiman. “Our expression with our committee on Monday mornings was, ‘does it smell musty?’, meaning, ‘is it old?’ We didn’t want it to look new and finished. If we could answer yes, then we moved on to the next bunker. That was the character, the style, the identity of Columbia, that the bunkers look broken and aged, that they look like they had been there for 100 years, which gave

it a different character or feel than the clubs down the street.”

Hotter summers and more volatile weather patterns, attributed to climate change, were making it increasingly difficult to keep a healthy stand of ryegrass in the fairways during peak season play. The club’s analysis identified they were getting the most play in the summertime when the existing cool-season turf was at its weakest.

“D.C. is hot. It’s a tough place to grow ryegrass fairways. And they had a lot of fairway slopes that pitch due south. The ryegrass would just become unhappy and wilt under the stress of heat, traffic and disease every summer,” Weiman says. When they most wanted that premium performance, during their busy summer season, the cool-season grass was underperforming.

“If you have one bad season with your fairways every once in a while, it’s forgivable, right? It might be a fluke. But when the ryegrass was taking it on the chin season after season, it was obvious to everyone that it was time for a change.”



*The seventeenth at Columbia, before and (top) after renovation work*

A regrassing project was planned to replace the beleaguered cool-season ryegrass with Tahoma 31 bermudagrass, a new, more resilient warm-season turfgrass developed by the renowned turfgrass breeders at Oklahoma State University. A fairway regrassing committee formed of members whom Weiman describes as having “a high golf IQ” did their research. They toured the Naval Academy Golf Club in nearby Annapolis, Maryland, whose fairways, tees, approaches and green surrounds are grassed with Tahoma 31, and were impressed by its playability, lower water use, lower fertilizer and fungicide requirements, durability, cold tolerance and early spring green-up.

Nearly 30 acres of sod were planted in the summer of 2022,



## TURFGRASS

more than 100,000 square feet (2.5 acres) per day. The sodding was fast-tracked to minimize disruption of play, to make a September reopening deadline, but also to avoid spring washouts that were inevitable considering the predictability of summer thunderstorms and the steep slope of many of the fairways.

Weiman and golf course superintendent Matt Sumpter were expecting significant water savings moving from cool-season ryegrass to warm-season bermudagrass. However, the results on the ground, even just a few weeks after the grass was laid, are remarkable.

"I don't think it's rained for six days, and there has not been a need to water the Tahoma 31 that's been

## "Water savings are going to be dramatic"

established," says Sumpter. "I think we could stretch it out to 10 days. The water usage is night and day. We have established cool-season rough that's wilting before the new, young Tahoma 31 grass is. It's incredible. The water savings are going to be dramatic. I'd say the ryegrass would require 10 times more water than the Tahoma 31."

Sumpter also says he expects a monumental reduction in fertilizer use on the course. "With the

ryegrass fairways we used a pound to a pound-and-a-half of nitrogen per 1,000 square feet, per year," he says. "Next year, with the Tahoma 31 fairways, I hope to be around half a pound for the entire year. I expect about a 50 percent saving there."

Sumpter and Weiman credit Columbia's membership for taking sustainability into consideration when making the grass selection.

"It was forward-thinking as far as the club doing its homework," says Sumpter. "Montgomery County is very progressive and, at some point, pesticide usage is going to be on the chopping block, if you will, for restrictions or reductions. And golf courses are going to be the focus point since restrictions have already been passed for residential and other recreational turf."

Weiman adds: "The club is looking for performance, consistency and playability. But just as important is that it's sustainable. We're in the Chesapeake Bay watershed. It's right near the Potomac River."

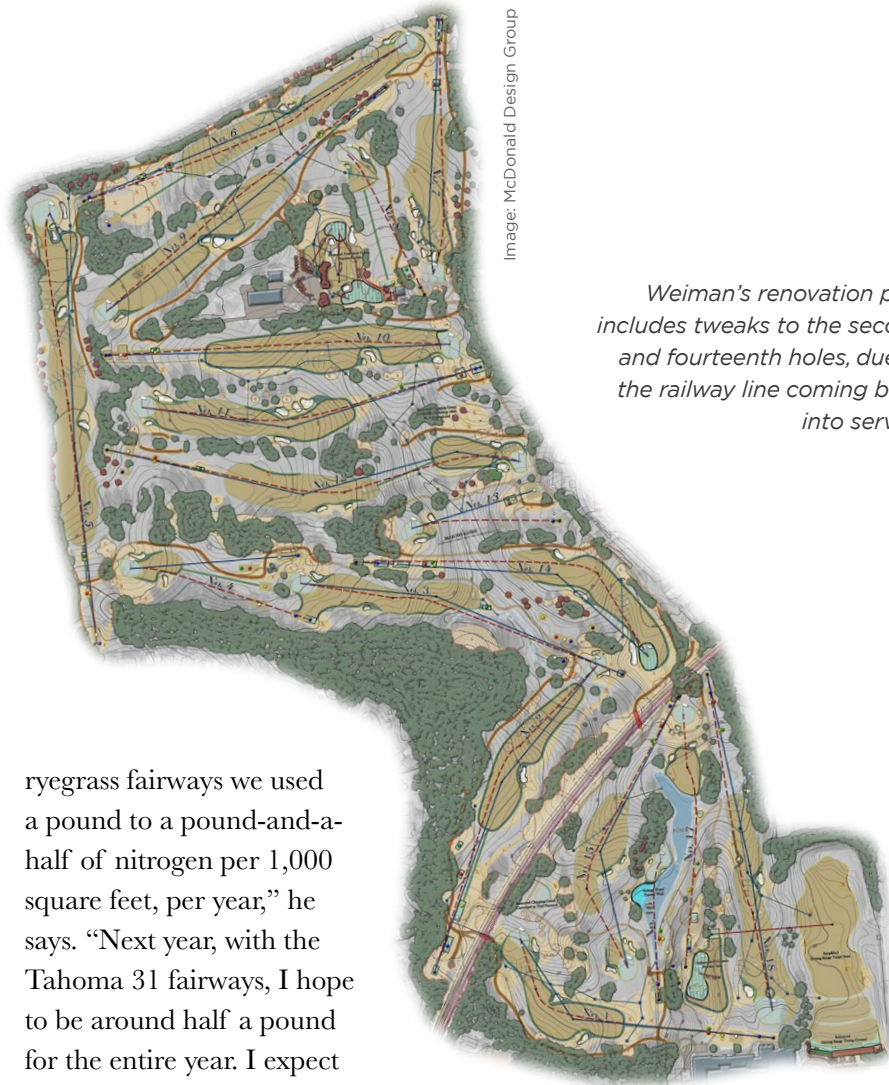


Image: McDonald Design Group

*Weiman's renovation plan includes tweaks to the second and fourteenth holes, due to the railway line coming back into service*

Last year, Columbia supported nearly 30,000 rounds of golf. Sumpter says he expects the number of rounds to increase because of the renovation.

Weiman says the course will be an example for all clubs in the Mid-Atlantic region.

"In the past, bermudagrass was thought of as a somewhat lesser product, but that's all changed now with newer varieties like Tahoma 31," he says. "A club like Columbia doing its research and converting to bermudagrass proactively? That's going to change how many of the area clubs are going to look at that grass. We're going to see the number of turf conversions increase significantly over the next five years, for sure." ●



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## Tahoma 31® Bermudagrass

Developed by the turfgrass experts at Oklahoma State University, Tahoma 31 Bermudagrass pushes the geographic boundaries of bermudagrass into the northernmost reaches of the Transition Zone. Highly cold tolerant, the name "Tahoma" comes from the Native American word that means "frozen water," and the grass lives up to its name. Golf courses as far north as Chillicothe Country Club in Ohio (fairways and tees), and Liberty National in Jersey City, NJ, (driving range tee), benefit from Tahoma 31's ability to stand up to cold winters yet thrive in hot summer temperatures. Tahoma 31 creates a sustainable and maintainable golf course with dramatically lower disease pressures compared to cool-season grasses. A tight, dense turf generally mowed as low as ¼ to ½-inch for excellent playability, with notable wear tolerance to heal quickly from divot damage, and strong drought tolerance to save water, its deep blue-green color offers stunning visual contrast for golf course design.

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In 1919, Toro provided a motorized fairway mower to the Minikahda Club, in Minneapolis, Minnesota, to replace horse-drawn equipment. By mounting five individual reel mowers onto the front of a farm tractor, Toro developed the Toro Standard Golf Machine and helped create the motorized golf course equipment industry. Today Toro continues to lead the global market with best-in-class turf maintenance equipment and precision irrigation solutions. Approximately two-thirds of the top 100 courses in the world use Toro irrigation systems. The company also leads the way in environmental innovations, making products safer, cleaner and quieter whenever possible.

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