

Changing Turfgrasses for Changing Times

Creating a new business model by way of an agronomic decision makes a golf course even better.

BY PATRICK M. O'BRIEN



The high costs of bentgrass putting green maintenance shifted the focus away from other key playing areas. For The Oaks Course, the entire golf course has improved with the switch to ultradwarf putting greens.

Sometimes a decision can take a long time to happen, especially if the decision requires a significant financial investment by the owner of a golf course. Dick Schulz, owner of The Oaks Course in Covington, Georgia, a small town about 25 miles to the east of downtown Atlanta, took seven years to make the most important business decision of his life. The owner, the superintendent, and most importantly the customers at this public golf course weren't satisfied with the Penncross bent-

grass putting greens; they were affecting the reputation of his business. The cost of fighting the heat, disease, and infestations of *Poa annua* and bermudagrass made the game less affordable and the golfing experience less enjoyable.

The time had come to make an investment in the putting greens that would have repercussions beyond the health and quality of the putting surfaces. Dick Schulz would take out the Penncross bentgrass and plant an ultradwarf bermudagrass. Not only was he changing grasses, but he

Table 1
Turfgrass Timeline for Putting Greens in the Southeast



was changing his business model and trying something that no other daily-fee course in Atlanta had attempted. This article will serve as a study to confirm and illustrate how ultradwarf bermudagrasses are changing the agronomy and business of golf in the Southeast Region.

KING OF THE HILL

Bentgrass putting greens have been king in the Atlanta area for more than 40 years (Table 1). Traditional bermudagrass putting varieties, Tifgreen and Tifdwarf, were fraught with problems. First of all, they could not produce putting quality comparable to bentgrass. Secondly, colossal transition issues occurred annually with the older bermudagrass varieties in the fall (over-seeding) and spring months (trying to eliminate it). This led to summer bermudagrass putting greens, where the focus was on growing-in thin areas or using new plant material much to the detriment of putting quality. Thirdly, winter kill occurred occasionally, and the frustration of replanting in the summer was unacceptable. Finally, mutations of Tifgreen and Tifdwarf caused both cosmetic and playability problems.

Bentgrass was what the golfers wanted, and superintendents found ways to keep it alive during the summer months. It was not easy, and it did carry with it significant maintenance costs and risks of summer turf loss. However, golfers' appetite for improvements continued unchecked, and desire for faster and firmer putting greens were unceasing. Today, despite the release of new heat-tolerant varieties that perform better than Penncross, many golfers are not satisfied with bentgrass. They are particularly unhappy in the summer, when root dieback causes softness, and again in the spring and fall, when aeration occurs. At many low- to medium-budget golf courses today, owners cannot afford the annual maintenance costs of bentgrass, and they struggle to meet golfer expectations. The cost of business must be passed along to the customer. Eventually,

these escalating costs will make golf unaffordable.

CONVERSION TO AN ULTRADWARF AT THE OAKS

Dick Schulz traveled in the late 1990s to Dallas, Texas, and played golf at several courses that had recently converted to Champion bermudagrass, one of the three ultradwarf varieties available on the market along with TifEagle and Mini Verde, and the quality of the putting greens got his attention. His first impression after playing on Champion was that it just had to be a bentgrass putting surface because of its high quality! The putting greens at The Oaks were getting more difficult to keep alive each summer and more expensive to maintain, and the idea to change to a more dependable and economical ultradwarf bermudagrass was born.

Bermudagrass and *Poa annua* contamination made the Penncross bentgrass putting greens more expensive to maintain and with reduced quality.



More stolons (above-ground stems) equates to enhanced wear tolerance with the ultradwarfs. Winter traffic issues in particular are less of a concern due to this agronomic feature.



RISKS INVOLVED

Dick Schulz knew that Champion bermudagrass was going to be less expensive to maintain than bentgrass, and the lower costs would benefit his business, but the big question was whether golfers would accept something other than creeping bentgrass. No other golf course nearby had yet planted an ultradwarf, but conversions from bentgrass to ultradwarf were gaining momentum in other cities in the area, such as Columbia, South Carolina, where practically every course had successfully converted. Despite golfers' negative association with bermudagrass (Tifdwarf and Tifgreen) putting greens and poor putting quality, Schulz believed that golfers only care about two issues: high-quality putting surfaces and the price to play 18 holes of golf. From his experiences, ultradwarfs met those criteria without doubt.

After extensive discussion and a number of site visits, Dick Schulz and Curtis Singleton, course superintendent, decided to break new ground in Atlanta and change the putting greens to an ultradwarf during the summer of 2005. By switching to an ultradwarf, it was felt that the

course would save money, minimize the chance of catastrophic turf loss, and increase summer rounds.

CONVERSION PROCESS

Plans to convert the putting greens to an ultradwarf bermudagrass were set into motion once the decision was made. The entire project included putting green conversion, bunker renovation work, cart path repair, tree removal, and replacement of the putting green irrigation system. The total capital expenditures were approximately \$400,000, with the Champion sprigs only 10% of the total cost. Dick Schulz felt the payback from this investment would be five years at most. The golf course was closed for 53 days, but it really was not shut down completely. Golfers were allowed to play an executive course, using a modified layout for golf cart fee only. Temporary greens were set up on approaches, and some holes were divided to create an 18-hole layout. More than 2,300 rounds of golf were played on this temporary layout, generating almost \$80,000 in revenue that was never dreamed. Total revenue included cart fees, pro



shop merchandise sales, food and beverage, and range balls.

NUMEROUS REWARDS

The results of the conversion to an ultradwarf bermudagrass have exceeded expectations. Now Singleton and his turfcare staff focus on the entire golf course (145 acres) throughout the golf season, and not just on the much improved putting greens (2 acres). Savings from the putting greens are allowing funds to be reallocated to other parts of the golf course.

Dick Schulz has also reaped the financial reward of reducing expenses associated with core aeration and annual bermudagrass overseeding. He aerates in midsummer and is able to offer golfers about 50 weeks of great greens without disruption from aeration. When working with bentgrass, the spring and fall aerations caused about 10 weeks of disruption and 42 weeks of acceptable putting quality. This fact alone nets Schulz another eight weeks of optimal revenue.

Putting green maintenance costs are now less than levels of the older bentgrass surfaces,



Curtis Singleton, golf superintendent, and Dick Schulz, owner, were some of the first in the Atlanta, Georgia, area to convert from bentgrass putting greens to an ultradwarf bermudagrass.

The switch to ultradwarf bermudagrass putting greens provided a more available and affordable public facility for the golfers at The Oaks Course.

and overall golf course operational costs are approximately 25 to 30% lower. Some savings resulted from using less chemicals and labor, and also reducing the summer hand irrigation formerly needed for the bentgrass. Overtime hours and stress on the staff have been reduced to much lower levels, too. During the golfing season, the entire course peaks at once, with bermudagrass on all surfaces.

From an agronomic perspective, the denser turf canopies of the ultradwarf allow for closer mowing year round. Green speeds are typically at 9 to 10 feet daily with triplex mowing. Due to the dense turf canopy and its ability to handle winter traffic, no winter overseeding is required. Transition concerns in the spring and fall months are eliminated, too. Painting provides satisfactory green winter color, and it is easier, more reliable, and more economical than overseeding.

Winter injury continues to be a concern with bermudagrass putting greens, and ultradwarf grass stands can die due to cold temperatures. Lightweight winter covers are essential to protect ultradwarf grasses from cold temperature injury. Black tinted covers cost about 15 cents per

square foot and are custom-designed for each green site. On average, covers are used about 10 times annually in the Atlanta area. Reduced mowing in the winter months (approximately 60% less than bentgrass) and significantly lower fungicide costs (approximately 80% less than bentgrass) are other benefits.

CONCLUSION

The conversion from bentgrass to an ultradwarf was a great business decision at The Oaks, and Champion bermudagrass provides a consistent and dependable putting surface. Golfers have validated Dick Schulz's belief that what they really want is a high-quality putting surface, no matter its source. The conversion was affordable, and today the golf course is more available and desirable. It has kept the game of golf reasonably priced, a primary goal of the owners, and provided more access to the game and more opportunities to learn the game.

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Ultradwarf bermudagrass enhanced the business model and lowered annual golf course operational maintenance costs, while providing a high-quality putting surface.

