

No-Till Fairway Conversion To Celebration Bermudagrass

Dataw Island Club
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Issue

Like many golf courses in the southeastern United States, Dataw Island Club was facing numerous issues with their 20-year-old Tifway bermudagrass fairways. The fairways were contaminated with a variety of warm-season turfgrasses and the differences in leaf texture, tissue color, and dormancy timing were creating issues with presentation and playability. Additionally, the fairways had extensive shade issues due to trees along their perimeters. Shade was causing several bare areas along the wood lines. Nematodes—i.e., microscopic pests that feed on turfgrass root systems—were also negatively affecting turfgrass health.

Faced with these challenges, management programs simply could not provide consistent fairway quality throughout the golf season. The situation reached a point where fairway conditions were no longer acceptable to existing golfers and had started impacting the recruitment of new golfers. Dataw Island Club needed a new fairway turfgrass that addressed all of these issues and could provide excellent playing conditions.

Action

Regrassing fairways was a priority, but the golf course was also undergoing a complete renovation and was operating on a tight budget. Dataw Island Club chose no-till renovation—a relatively low-cost process—to convert their fairways to Celebration bermudagrass. Celebration was selected because of its ability to thrive in the tough environmental conditions at Dataw Island Club. It is able to withstand approximately 70 percent shaded conditions and the root system is so abundant that nematode issues are not as evident.



The Celebration bermudagrass sprigs are planted directly into the old fairway turf that has already been killed with non-selective herbicides.

The no-till fairway conversion process involved spraying the old bermudagrass fairways three times with Roundup® and Fusilade® before planting Celebration bermudagrass using a specially designed sprig machine that simultaneously placed and cut sprigs into the ground. All 18 fairways were sprigged in less than a week and it took approximately eight weeks for the fairways to establish before they were playable. The planting process did cause some minor damage, but it was easily repaired. Following planting, the fairways were topdressed with old greens mix and bunker sand and a large roller was used to smooth them.

Results

The finished product is outstanding and Dataw Island Club finally has consistent turf quality in the fairways. Texture and playing quality are now uniform throughout the fairways, as are dormancy and green-up transitions. Celebration bermudagrass has proven resistant to the shade and nematode issues that caused agronomic issues in the older fairways. The slightly different color of the Celebration fairways also creates a visual contrast with the Tifway bermudagrass rough, an aesthetic unlike many other courses in the region. The fairway topdressing program has provided firm, smooth fairway conditions that play well for golfers.

The biggest bonus from the club's perspective was that the no-till conversion process was not overly expensive. The process required minimal soil preparation and disturbance to the fairways before planting—saving time and money. Twenty-five acres of fairways were converted for about \$50,000. In contrast, a bid to convert the fairways by tilling, smoothing the seed bed and using a traditional sprig machine was \$150,000. Dataw Island Club demonstrates that a no-till conversion process on fairways can be done relatively quickly and affordably with outstanding results.



Eight weeks after planting, the fairways are once again ready for golf.