

No-Till Establishment Of Bermudagrass To Improve Year-Round Playing Quality And Reduce Water And Pesticide Use

Moss Creek Plantation
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The Problem

The fairways on the south course at Moss Creek Plantation did not provide an acceptable playing surface due to the presence of many different types of bermudagrass including common bermudagrass, seeded varieties and Tifway. The course needed a uniform, affordable fairway grass.

The Solution

Mitch Wilkerson heard stories about successful conversions to Celebration bermudagrass using a no-till method at Jupiter Hills Club in Florida and nearby Dataw Island. Wilkerson visited each site during grow in and developed a cost-effective plan for Moss Creek. Before converting all of the fairways, the no-till method was used to convert half of one fairway to Celebration. The test fairway allowed course officials and golfers to see the conversion process and compare Celebration bermudagrass to the old bermudagrasses.

Using information from the test fairway, course officials approved a plan to convert the remaining fairways using the no-till method. First, the fairways were sprayed with a combination Roundup® and Fusilade® herbicides in April and again in early May. At the end of May the fairways were aerated, dragged and rolled. Before sprigging the fairways were deeply verticut in two directions. The verticutting debris was removed and the fairways were again rolled.

Sprigs were planted at 800 pounds per acre within 24 hours of being harvested. All of the fairways were planted in seven days. After sprigging, the fairways were rolled once a week for the first month. The conversion process was so well received that plans are in place to convert the north course fairways in 2015.

The Results

Golfers like the year-round fairway conditions provided by the new Celebration bermudagrass. The improved performance of the renovated fairways also has saved Moss Creek around \$18,000 per year by reducing fertilizer and fungicide, fuel consumption and eliminating winter overseeding.

The biggest challenge of the conversion occurred during the first six months as golfers had to adjust to larger divots while the Celebration was forming an organic pad and deeper root system. Once the fairways matured, divots became less of an issue and playing quality was greatly improved.



Figure 1 - The use of asphalt rollers after sprigging helps improve sprig-to-soil contact and speed up establishment.