



Look, Up in the Sky ...

... it's a live oak tree!
Daniel Island Club
goes to great lengths to
preserve wondrous trees

BY LARRY AYLWARD, EDITOR IN CHIEF



Nobody marvels more at Daniel Island's trees than Mike Fabrizio, director of grounds and golf maintenance at the club.

They are as majestic as one of Bubba Watson's towering tee shots. But while Watson, the PGA Tour's driving distance leader, carries a big stick, he has nothing on these bigger and bolder billets — the magnificent live oak trees that dot the Daniel Island Club's two private golf courses in Charleston, S.C.

The live oaks at Daniel Island have been revered since the courses were built earlier this decade. Some trees stand 50-feet tall with canopies stretching 70 feet or longer and are a significant part of the golfing experience.

"There are few things that describe the essence of the low-country experience better than a Spanish moss-draped live oak tree," says Matt Sloan, president of the Daniel Island Co., who developed the property where the club is located.

It's not an accident that the live oak trees stand out like royalty on the two courses, known as Beresford Creek and Ralston Creek. Much thought went into preserving them and other trees during design and building of the courses. In fact, Rees Jones, architect of

the Ralston Course, which opened in 2006, started working two years before construction began to plan a course routing to impact as few trees as possible.

Many trees were also transplanted — and with the utmost care. On the Ralston Course alone, 42 oak trees and 100 pine trees were relocated. Some of the oaks were at least 60 years old and had trunks as large as 31 inches in diameter.

"There was a lot of consideration given to preserving trees and doing what had to be done whether it was changing the design of a golf hole or the position of a cart path," says arborist Ken Knox, who was hired as a consultant for the Daniel Island project.

Daniel Island's commitment to protect the trees has not gone unnoticed by the National Arbor Day Foundation. The environmental organization, whose mission is to celebrate trees, awarded both courses its Building With Trees Award. The Tom Fazio-designed Beresford Creek received the award in 2003, and Ralston Creek received it earlier this year.

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Large mulch beds are used around the live oaks because it's not easy growing turf around them.



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Driving in a golf car across Beresford Creek, Mike Fabrizio takes in the view, a tree-laden vista at which he never gets tired of looking. Fabrizio, a certified superintendent and director of grounds and golf maintenance at the Daniel Island Club, came to Daniel Island in March 1999 about three months before construction began on Beresford Creek.

Fabrizio knows what the trees, specifically the live oaks, mean to the property.

"If a 325- or 350-year-old live oak tree dies, you don't find something to replace it very quickly that has the same impact," he says.

Fabrizio says Charleston has one of the strictest tree ordinances in the country. But the planning meetings for the golf courses turned out to be a breeze. Sloan explained to the committee the steps Daniel Island planned to take to preserve the trees and relocate them, and the committee was impressed, Fabrizio says.

"They are the only public hearings I've ever been to where there was not one negative comment from anybody in the room about the designs," Fabrizio says. "The plans passed unanimously."

From his golf car, Fabrizio points to a corridor constituting one of the holes on Beresford Creek. The average corridor, or total width of a golf hole, is 300 feet to 350 feet, Fabrizio says. But most of the corridors at Daniel Island are 350 feet to 400 feet. While there are trees on the sides of the corridors, the corridors are wide enough to allow ample sunlight to reach the turf, which is vital because bermudagrass needs almost 100 percent sunlight to grow and be healthy, Fabrizio points out.

Fabrizio, who has an associate's degree in turf management from North Carolina State University, has worked around magnificent-looking trees before. He helped build the two golf courses at Wild Dunes Resort in Charleston, where he worked for 10 years. But the fairway corridors were too narrow at Wild Dunes and the live oaks there caused turf problems. "We had tees and greens where you couldn't keep the grass alive," Fabrizio says.

But that hasn't turned Fabrizio into a tree hater. "Even though they can cause us problems with turf, I can appreciate the value of a tree," he says.

Fabrizio played a key role in the club's tree preservation program. It was his idea to bring in Knox, who has gained a name in the golf course industry for his tree expertise. Fabrizio and Knox worked together twice before, once when Fabrizio was superintendent at Wild Dunes. After Hurricane Hugo struck Charleston in 1989, Fabrizio summoned Knox to help preserve some of the damaged trees at Wild Dunes.

At the Daniel Island Club, Knox worked closely with Fabrizio and others. Knox, who calls his consulting business The Tree Doctor, tapped into his 40 years of experience as an arborist to assist in the project.

Knox was impressed with the Daniel Island staff and the dedication its members showed to preserve the trees. Nobody balked at spending money to preserve the trees, Knox says. Incidentally, Daniel Island spent more than \$1 million to preserve them.

"In the long run, what they spent to save those trees will reward them many times over by making their property so much more valuable," says Knox, who advised the golf course construction crew at Daniel Island to place barricades around certain trees to keep bulldozers away from them.

So often, people go into a project similar to that of Daniel Island with no guidance or knowledge of how to protect trees, Knox says. "They end up compacting the soil under the trees and crushing their roots," he adds. "And they change the oil in their bulldozers under a tree's canopy and contaminate the soil and kill the roots."

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Daniel Island contracted with Environmental Design, a Houston-based tree transplanting company to relocate about 45 trees in the fairway corridors using the company's massive 114-inch spade. Most of the relocated trees were 16 inches to 24 inches in diameter. Moving the trees was a slow process. First, the trees' roots were pruned by hand with axes. Then the trees were allowed to grow through the fall, winter and early spring before being removed by the spade. While some good-sized roots were trimmed, they were replaced with young and growing fibrous roots to take up nutrients and water.

It wasn't just live oaks that were relocated. So were pine trees. While pines aren't as prominent as live oaks, they are important because they provide diversity to the property, Knox says.

How long it took to move a tree depended on its size. With a larger tree, it took about one hour to dig it out and up to four hours to move it. Then it took about another hour to replant it.

Although great care was taken to protect the trees, a few were lost during construction. Some were also taken down because they needed to be, Knox says. For instance, if a tree was decaying and posed a possible danger to golfers, it was removed. "It's not all about tree preservation; it's also about knowing which trees to cut down and why, and getting rid of the junk," Knox explains.

"Everything needs to be thinned out, including a forest."

Knox understands why golf courses sometimes have to take out hundreds or even thousands of trees. "Because when the golf course was built ... it wasn't taken into account that there would be too much shade to grow healthy turf because of too many encroaching trees on both sides of the fairways," he says. "You can't play a decent round of golf without quality turf."

The tree preservation program at Daniel Island is ongoing. Because the trees receive supplemental nutrients from golf course fertilization and more water from golf course irrigation, they grow faster and must be maintained more often, particularly live oaks. "They will get so heavy with growth that they are prone to damage from winds," Fabrizio says, noting that deadwood and excess foliage must be removed.

Preserving the trees has also allowed Daniel Island to be more competitive in a golf course-heavy region.

"This part of the world has some of the finest golf facilities in the country, and we're going head to head with some formidable competition," Sloan says. "We felt that preserving and enhancing the natural landscape in this manner was something that would help us stand out. Clearly it has."

The live oaks, with their prolific trunks and long-limbed branches, make sure of that. ■

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