

SURVIVING THE HARSHTEST CONDITIONS:

PremierPRO Bermuda Grass at Old American Golf Club

Dallas, TX - In the summer, when temperatures climb to 108-degrees and it hasn't rained in more than 50 to 75 days at Old American Golf Club, just north of Dallas, Texas, the heavy clay soil in the unirrigated areas surrounding the golf course dries up and cracks open. Sometimes those cracks are up to two inches wide—wide enough for Russell Birkhimer, director of agronomy at Old American, to stick his hand in far enough to be swallowed whole.

In the winter, 40 to 60 mph winds off of nearby Lake Lewisville strip moisture from the soil and turn the PremierPRO Bermuda grass on the golf course a dormant, golden brown.

It's in these conditions that, for the past four years, Birkhimer has grown-in and managed this golf course grassed with PremierPRO, a new proprietary Bermuda grass cultivar developed by Blue Moon Farms (Dr. Virginia Lehman) and Turfgrass Development Inc. (Dr. Milt Engelke). Without this advanced cultivar of Bermuda grass on his fairways, roughs, and tees, Birkhimer says he doubts he'd have a golf course at all. "I've been a superintendent for 13 years," he says, "and I've never seen a grass as young as this take the stresses that it's taken."

When the clay soil is wet, it's the consistency of Play-Doh. When it's dry, it forms brick-like protrusions that make it difficult to stick a probe in the ground more than a ½-inch deep. Over the past four years, Birkhimer has hauled in some 500 tons of sand/organic soil in an effort to remediate the clay.

The irrigation water at Old American isn't much better. The course's irrigation source measured levels of salt up to 1,373 ppm and a water/soil pH of 8.8 or 8.9, all the while with no measureable rain events during growing temperatures.

Working through the dastardly combination of heavy clay soil that doesn't easily leach salts and poor quality water, Birkhimer tries to manage growing conditions by injecting acids into the irrigation system in the summer, and calcium in the winter.



In 2014, Birkhimer gained access to 35 million gallons of cleaner water out of the lake, and although the Dallas region is still classified as experiencing drought, there was some small but measurable rainfall during the growing season. The better water has allowed Birkhimer to reduce his nitrogen applications by half, he says, "because we weren't trying to force what mother-nature wasn't doing for us."

Even with all of these challenges, the PremierPRO continues to thrive. "At the end of the day, we've had extremely positive feedback from members and guests. Fighting the conditions we've been fighting over the past four years and to have the course look as good as it has, it's been interesting," Birkhimer says.

Old American was designed by Tripp Davis and PGA Tour Player Justin Leonard. "From an artistic standpoint, for management and for playability, they did their due diligence when selecting grasses" for the course, Birkhimer says. Of PremierPRO Bermuda grass, he says: "They chose wisely."

