Staying the COURSE

Superintendents share their experiences with bionutrition programs to help relieve turf stress.

SCORCHING SUMMER

Scottsdale, Ariz., is a Mecca for "snowbirds." These mostly-retired folks flock to the upscale desert community to enjoy the warmth of the bright sunshine during the dark days of winter. But in the summertime, Scottsdale sizzles under relentless heat with temperatures regularly reaching well above 110 degrees.

To shade golfers from the winter sun, golf course architect Jerry Nelson specified a multitude of eucalyptus trees when Pinnacle Peak Country Club was built in 1976. Today, the trees tower 50 feet or more over the course. "Trees this large are uncommon in Phoenix," says Steve Garner, superintendent at the course for the past 10 years.

As the population in the Southwest grew, night temperatures rose and water became more and more scarce – to the point that some of the thirsty trees declined and died. So far, so good as far as the bentgrass and greens and Bermudagrass tees, fairways and roughs go, but water issues are a part of life in the desert.

"The Water Wise 2014 program will be coming out soon," Garner says. "One thing for sure – they probably won't be giving us more water."

Adding to Garner's challenges are the small tees. "The course was remodeled in 1996, and tees were undersized or just not built right, so we have been renovating them a few at a time each year," Garner says.

Of course, renovations and major projects are usually confined during the hottest time of the year after the snowbirds fly home. Garner is always looking for ways to speed up turf establishment during the scorching summer.

One of his suppliers offered him a sample of Performance Nutrition's Z.One T&O 250. LidoChem, the parent company, manufactures this Clinoptilolite zeolite product in several formulations. T&O 250 is enhanced with three KaPre products, which offer humic substances, amino acids, organic extracts and beneficial microbes.

In summer, Scottsdale sizzles under relentless heat with temperatures reaching well above 110 degrees.
"He asked me to use the Z. One on half the tee so I could see how it worked," Garner says. The combination of water retention and soil nutrients did the trick. "The turf rooted three or four days earlier on the treated half. It turned out great." Garner used it at a rate of 250 pounds per acre and raked it into the sand under the sod when rebuilding the tee.

Garner was so pleased with the results that he incorporated Z. One T&O 250 into another turf project. "I redid the collars around the greens; the Tifdwarf tends to decline after annual overseeding. So we resodded and will just paint them in wintertime," he explains. "The quicker you get sod established, the better it will be."

**TOUGH CONDITIONS**

While the recession pummeled the golf course industry hard across the country, Florida was especially hammered. A report released June, 2012 led by Yale University professor Jacob Hacker found that Florida suffered some of the worst economic losses in the nation.

Juliette Falls Golf Course in Dunnellon, Fla., was designed as an amenity for a luxurious community of dazzling, spacious homes. Steve Keller came on board in 2005 for early construction and grow-in and opened the course in 2007. Designed by John Sanford, this Certified Silver Audubon International Signature Sanctuary was named one of Golf Digest magazine’s best new courses in 2008.

Then the luxury home market collapsed, and the cost to maintain the magnificent course became prohibitive. The course owner asked Keller to cut back further and further – as close to zero input as possible. Overseeding the Jones dwarf Bermudagrass on the 12 acres of greens, tees and collars and the 419 Bermuda roughs and fairway ceased. The budget for fertilizers and pesticides was gutted.

Rhizoctonia zeae struck the course with vengeance. Clemson University research indicates the Juliette Falls GC is built on a sandy site, which creates a nutrient-retention problem.
Disease thrives when fertility is reduced, especially in frequently irrigated sand-based greens with shallow-rooted dwarf Bermudagrass.

"The course is built on a very sandy site," Keller explains. "Nutrient retention has always been a problem."

The lack of funds for course maintenance finally took its toll. Conditions deteriorated to the point of losing greens. The owner realized that some sort of budget was necessary to maintain live turf. He and Keller worked together to minimize spending while maximizing results.

Like all superintendents, Keller is constantly asked to try new products. "My sales rep, Glen Thompson, is a friend and was a superintendent himself," Keller says. Thompson’s recommended a line of "green" products that developed healthier turf to ward off diseases, LidoChem’s Performance Nutrition products.

He tried KaPre RemeD8, specifically created to enhance nutrient uptake with a blend of humate extracts, microbes, enzymes, amino acids and more. The improvement in the health of the turf was soon apparent. Encouraged, he tried the Pennamin fertilizers, also enhanced with organics, as well as Vibrant foliar fertilizer and KaPre ExAlt, designed to remediate problem soils.

"There’s two or three other superintendents in this area, and we often bounce things off each other," Keller says. "We’ve all seen results."

While Keller says he still "sneaks in a few fungicide treatments," his program has paid off. He estimates that a bionutrition program costs a third of what a preventative spray program on his tees and greens costs.

"We took a big step back and it took three steps forward to recover," Keller says. "But we’re in such good shape now!"

Helen M. Stone is a West Coast-based freelance writer and frequent GCI contributor.

Make a living. Make a difference.

The irrigation industry is full of potential and the Irrigation Foundation is committed to recruiting the next generation of irrigators AND helping current career seekers find a rewarding profession in our industry.

If you’re looking for a new career opportunity or even a new team member, visit the Irrigation Career Link at www.irrigationcareerlink.org. Browse the job and resume bank and see what the irrigation industry has to offer. You can make a difference by helping our industry effectively manage the world’s water resources.

A Thank You to Our Current Industry Supporters

In recognition of our long-time supporters, we would like to thank our Sustaining Sponsors: Ewing Irrigation Products, Hunter Industries, Inc., Rain Bird Corporation and The Toro Company.