

DONATE YOUR GREENS

Use your golf course as a research test plot prior to renovation.

BY CHUCK GAST

Everyone remembers the old sage advice . . . "When opportunity knocks, you should at least open the door and see what's on the other side." Well, I believe that we, as superintendents, have been letting a valuable opportunity pass by without even considering it.

As you've probably figured out already, this article is about conducting a few unobtrusive research tests by utilizing test plots on an out-of-the-way turf area. Well, not exactly. Most good superintendents already perform subtle trial-and-error experiments on the nursery green or the maintenance shop lawn, so that wouldn't be much of an eye-opener. What I'm suggesting is to take it a step or two further: an entire golf hole, tee to green, and don't hold back. Let me explain.

As mentioned, we've all conducted our own test plots over the years to help determine the best course of action at our facility. But let's be honest — we probably don't treat it as routinely as we should to get the most accurate information, as we've got another 120+ acres that need to be healthy.

We took this turfgrass idea a step further when Dr. Jim Robbins from the



Members of the research team from the University of Arkansas discuss herbicide test results on the 15th green at the Country Club of Little Rock.

University of Arkansas phoned one day and asked to conduct some fertility tests on our El Toro zoysiagrass fairways. What better way to get accurate data specific to our golf course while helping others to benefit from our research? We staked out a small plot at the beginning of the fourth fairway, where Dr. Robbins performed all the work on a very routine basis. Our only request was to be gentle, as this area was in play.

Then, early in 2001, the Country Club of Little Rock embarked on a major renovation program fueled primarily by the need for an expanded practice facility at this nearly 100-year-old country club. To expand the range, located internally on the course, two golf holes were to be added on the perimeter of the property to compensate for the two holes that were to be unguled and eliminated by this range-expansion project.

That's when the idea hit me — how about conducting some full-blown, no-holds-barred experiments on this defenseless, soon-to-be-executed turfgrass? The first step was to run it by the Golf Committee before performing hari-kari on their golf course. After that, it didn't take long to figure out

that I didn't have the expertise or the time to devote to this project, especially in the middle of a major renovation program. A couple of phone calls later to Dr. Jim Robbins, horticulture specialist, and Dr. John Boyd, weed scientist, both the with University of Arkansas Turfgrass Program, set the stage.

It was like Christmas all over again. The excitement in their voices with the initial phone call, not to mention the look on their faces when they arrived at the course with their "house call" doctor's bag in hand, was just the beginning of the fun. As approved by the Golf Committee, these designated turfgrass areas on the 15th hole, tee to green, were theirs to do with as they wished for the advancement of turfgrass science, with environmental awareness in mind. My job was to continue our routine turfgrass programs to provide a real-time experimental scenario and otherwise stay out of the way. Keep in mind that these golf holes were still in play at the onset of these trials around the middle of March, and play continued through the end of June, when the bulldozers arrived.

Throughout the spring of 2001 it was intriguing to watch the turfgrass

reaction to the variety of experiments to which it was subjected. Dr. Robbins focused a number of fertilizer sources and rates on the SR 1020 bentgrass greens as well as the Meyer zoysiagrass collars. The full gamut of too little, too much, and just right was clearly evident on plots throughout his test areas.

Similarly, Dr. Boyd's herbicide trials provided very clear and dramatic results. Dr. Boyd focused primarily on the response of the SR 1020 bentgrass to various herbicides and rates. The damage to the bentgrass illustrated what can happen when herbicides are misused on greens mowed at 0.13" and subjected to an annual rate of 28,000+ rounds a year.

Throughout this testing period, the trials were evaluated and photographed by Robbins, Boyd, and their associates. Our facility is closed on Mondays until 12:00 noon, and this window provided a routine, unobstructed time frame to conduct a majority of their experiments. Additional observations throughout the week were conducted at their discretion during early morning hours.

To assist in our efforts of spreading the word to our members as to our "diabolical" plans on the 15th hole, we installed a small, inexpensive sign at the back of the green, explaining the Golf Committee's approval and the intended experimental procedures. This provided an on-site explanation as the turfgrass took on a patchwork look during the research efforts.

While the scientists were performing various tests on the green, we were conducting our own little drought tolerance test on our El Toro zoysiagrass fairway. Since the irrigation system was undergoing a complete overhaul during this same time period, we took the opportunity to experiment with the El Toro. This fairway was to be eliminated to make way for the driving range landing area, and the existing irrigation system was cut off, to be replaced later as the range was expanded. Consequently, this old fairway area did not receive any supplemental irrigation

for well over a four-month period, from the middle of March through the beginning of August. To nobody's surprise, the El Toro zoysiagrass was dormant by mid-June as it entered into some stage of drought avoidance.



WE ARE PLEASED
TO ASSIST THE
UNIVERSITY
of
ARKANSAS
TURFGRASS RESEARCH
DEPARTMENT IN A
HERBICIDE STUDY
ON BENTGRASS
GREENS!

A sign doesn't have to be deluxe to communicate a message. An inexpensive yet effective sign was placed behind the 15th green site to provide an on-site explanation of the programs underway.

Around mid-July, it was determined that the newly renovated 14th fairway would be ready for sod within a few weeks. Rather than bulldoze the existing turf on the old fairway, we brought out the hoses and roller base sprinklers and surprisingly resurrected the straw-colored turf. With the help of the local Quail Valley Farm turfgrass producer, we harvested the zoysiagrass and recycled it on the new 14th fairway. We gained some valuable knowledge about the true toughness of El Toro and saved the club some construction costs in the process. The entire procedure was a win-win all the way around.

Throughout this process, we gained factual and pertinent information directly relative to our specific turfgrass and growing conditions. We were able to define treatment options and accurately determine limits of exposure to various materials at different application

rates, and we gained valuable on-site information about the response that could be expected when turfgrass is pushed to the limit with regard to irrigation application. Plus, all this was accomplished through the assistance and guidance of professional turfgrass researchers.

In retrospect, the only regret relative to this entire operation is the fact that we didn't start sooner, thereby allowing more time to conduct more exercises. Once we initiated this program, it became evident that we were limited in our treatment options, as the deadline for renovation/construction was set.

Therefore, the take-home message is this: As turfgrass managers, we all have future plans and goals that we would like to accomplish in specific areas throughout our facilities. Rather than focus just on the obvious renovation procedures, give some consideration to the potential information that can be learned through turfgrass trials prior to firing up the bulldozers. Begin to formulate ideas and topics of interest well in advance of the project, so that once the renovation schedule is in place and you receive proper approval, you can immediately initiate controlled studies specific to your facility. By all means, don't forget to include local university turfgrass research personnel in the program for the most accurate test data.

As turfgrass managers in today's marketplace, we must constantly strive for improved turfgrass quality through efficient management practices. What better way to fully understand the specific parameters of your turfgrass than through real-time test trials with the help of turfgrass researchers?

So, the next time opportunity knocks, don't waste a valuable learning experience. Donate your greens!

CHUCK GAST, CGCS, has been the golf course superintendent of the Country Club of Little Rock since 1999. From 1990 to 1995, he was an agronomist with the USGA Green Section's Florida Region.