The Ultradwarf Investment

By Chris Hartwiger and Patrick O'Brien, agronomists, Southeast Region

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This month's column comes from the mailbag, or the 21st century version, the email inbox.

Chris and Pat, do you any information or studies about the cost savings when a golf course converts from bentgrass to an ultradwarf bermudagrass?

A higher standard and sustainability, not cost savings, are the primary reasons golf courses are converting from bentgrass to an ultradwarf in record numbers throughout the SE Region.

This is a question that we have been asked many times given the large number of golf courses with bentgrass putting greens that have either converted to an ultradwarf or are considering it. Answering the question with any accuracy at all requires a detailed financial survey of golf courses that have gone through this process. No survey or reliable data exists that we know of.

If the average cost of bentgrass and ultradwarf bermudagrass putting greens did exist, it would be simple to calculate the difference in cost. But we don't think this answer alone would be satisfactory to the reader's question. Averages do not tell the whole story. The remainder of this column explores the financial aspects when considering a bentgrass to ultradwarf conversion.

Types of Golf Courses Converting

The first SE Region golf courses that converted from bentgrass to an ultradwarf bermudagrass were courses that just wanted something better. They were not seeking perfection, but for a variety of reasons, they were unable to provide bentgrass putting greens that met expectations most of the time. Typically these were golf courses with smaller budgets and course infrastructures that were far from ideal. Please note that these golf courses did not make the switch with the goal of saving money. They wanted better putting greens and more sustainable greens that were less likely to die in the summer. In many cases, savings were realized in life support tools including no fan costs, fewer fungicide applications, less hand watering, and less sodding/plugging in the fall. By spending less in these areas, some golf courses superintendents have decided to reinvest these savings into the tools and techniques to improve playability.

The next wave of courses that are converting are upper end private clubs. The desire to be able to peak all parts of the course in the summer and provide the combination of firmness and green speed that is associated with championship putting surfaces are the reasons these clubs are converting. What may be saved on managing for plant health in the summer will be spent on maximizing playability in the summer.

Analysis

The best way to determine possible cost savings by converting from bentgrass to an ultradwarf bermudagrass is to complete the following analysis.

Is your course seeking something that is less difficult to keep alive in the summer due to infrastructure problems or is your course seeking to improve playability?

If the goal is to create a more sustainable putting green turf and to overcome infrastructure problems, there can be a cost savings in switching to an ultradwarf bermudagrass. If the goal is to improve firmness and green speed in the summer, do not plan on any cost savings. If one occurs, treat it as a surprise.

Does your course use fans and if so, how many? What is the annual electrical cost for fans?

Fans are not used on ultradwarf bermudagrass putting greens in the Southeast at this time. Savings can come from both the sale of the fans prior to a conversion and the annual electrical cost, too.

Review fungicide program. Courses that have struggled with bentgrass putting greens in the summer can have high fungicide expenditures. Fungicides will still need to be applied on ultradwarf putting greens. Look at fungicide applications over prior years and see if there is an opportunity for savings.

Review watering program. Golf courses with bentgrass putting greens that rely on a deep and infrequent irrigation program rely on hand watering almost every day during the summer months. If a deep and infrequent hand watering program will be used on the ultradwarf, do not expect much savings in labor costs for watering greens. If a lighter and more frequent approach is used, some savings in labor allocated for watering greens can be realized. Take a look at how much was spent on labor for hand watering greens in the past few years and compare it to the plans for watering the ultradwarf.

Special circumstances. Every golf course is different and there may be unique conditions at your golf course that warrant extra expenses for bentgrass. Examples include, but are not limited to, shade, drill and fill aeration, pests, ball mark repair by staff, etc. Determine whether these special conditions will warrant savings or extra costs.

Mowing practices. We have seen this item result in either a savings or more expenses after a conversion. Lower budget clubs have used growth regulators and a triplex mower to provide acceptable putting quality on an ultradwarf. Mid to higher budget clubs have increased the mowing and rolling frequencies in the ultradwarf management program. If the highest standards are desired for an ultradwarf, be sure to plan on spending significant time on mower set up and managing the mower fleet around frequent topdressings.

Specialty Tools. Two items come to mind in this area and they both relate to ultradwarf bermudagrass putting greens: turf paint and covers. Painting is the preferred method to provide winter color on ultradwarf bermudagrass. Several thousand dollars should be allocated for the painting program. Covers are necessary for winterkill protection in many parts of the region. Covers will cost

approximately $18,000 to $36,000 and should last for 15 plus years if properly cared for.

Revenue Opportunities. Ultradwarf bermudagrasses are tailor made for high levels of play, particularly during the summer months. Superintendents with bentgrass putting greens cringe at the thought of frequent outings during the summer months. With an ultradwarf, there is a chance to increase revenues through more play.

A second revenue opportunity will occur at golf courses that historically have struggled with the bentgrass greens in the summer. If thinning or sick bentgrass has been a problem, expect play to increase with an ultradwarf.

A final revenue opportunity exists due to differences in core aeration timing and frequency. Former superintendent and current course owner Dick Shultz of Atlanta converted the greens at The Oaks Course several years ago from Penncross to an ultradwarf bermudagrass to provide more sustainable turf throughout the summer. With the ultradwarf, Dick's goal is to provide 49-50 weeks of excellent turf quality not compromised by core aeration holes. He completes one very aggressive core aeration in the summer and uses the golfer friendly practice of venting the greens periodically through the year. The window of time where aeration compromises turf quality is substantially less than when the greens were bentgrass and there is no disruption during the busy spring season.

Wrap Up

The bottom line with the ultradwarf bermudagrasses is that clubs would not be removing the bentgrass if the ultradwarf varieties were not performing at higher levels. Savings can and do occur, but sustainability and the opportunity to focus resources on practices related to playability (as opposed to life support) are why people are converting.

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Information on the USGA's Course Consulting Service

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