

The Summer of 2005: Lessons Learned

by Chris Hartwiger



Answer: The summer that never ended.

Question: What was the summer of 2005. As this article is being written in late September, daytime temperatures throughout the region continue to exceed 90 degrees and the much anticipated end of summer conditions has not occurred. The wet conditions experienced in July and early August have given way to extremely dry weather. Add them all together and the summer of 2005 equals the worst summer for bentgrass putting greens in the southeast region since 1995.

Two questions have been asked repeatedly on late summer visits by course officials and golfers: 1.) "Why has summer bentgrass decline been worse at some golf courses than others?" and 2.) "What can we do to make sure this does not happen again?" In this article, we will review the factors that the most successful bentgrass management programs shared. Remember that the success of a bentgrass putting green is the result of many factors and maintenance practices.

Core Aeration – One of the cornerstones of successful bentgrass putting greens over a long period of time is the management of the organic layer in the upper rootzone. Core aeration and sand topdressing are the two best tools to manage organic matter and promote acceptable soil physical properties. To be sure, core aeration is disruptive to golf, but as we have seen over and over, thin weak turf that must be nursed back to health in the late summer and early fall is much more disruptive and expensive.

Surface Topdressing Applications- The regular topdressing of the putting greens with sand dilutes organic matter accumulation and promotes smoother, firmer surfaces.

Rootzone Construction – Properly constructed sand based putting greens with functioning internal drainage and the

absence of excessive organic matter in the upper rootzone were better able to handle frequent and excessive rainfall.

Summer Venting – This practice involves punching small holes in the putting greens with ¼" hollow tines, the Hydroject, or small ¼" solid tines. These treatments improve oxygen exchange between the rootzone and the atmosphere which helps to prevent a sealing of the surface. This practice is critical in summer like 2005 when heavy, frequent rain was followed by intense heat.

The Hydroject was valuable when greens became soft and shallow rooted in the hottest part of the summer. The Hydroject is the least disruptive cultivation technique when the putting greens become soft.

Water Management – Overwatering is the enemy of bentgrass putting greens in the summer in the south. In the southeast, superintendents lost control of the amount of water the putting greens received for much of the summer. The putting greens were at the mercy of frequent and heavy summer thunderstorms.

Fans – The use of fans to promote surface drying and increased evapotranspiration has been proven by turfgrass researchers to improve turfgrass quality and summer survivability in the summer months. In almost all cases, the turfgrass quality improved as the distance from the fan was closer.

Mowing Practices – Researchers have proven that increasing the mowing height during the summer months increases summer survivability. Managing the surfaces for golf requires creating a balance between what is good for the golfers and what is good for the grass. A strategy with a goal of reaching September 1 with full turfgrass coverage at the

expense of green speed paid off at many golf courses. If the goal is met and there is full turfgrass coverage in early September, it is easy for the superintendent to shift the balance more toward playability during the fall.

Disease Control – Although disease is a secondary problem (excess organic matter being the primary problem) in the summer months, no bentgrass putting green can make it through the summer without the use of fungicides. The most successful courses used fungicide programs that minimized disease pressure.

Experienced Staff – The best agronomic plan can be down on paper, but unless a trained staff is in place to carry out the plan, the desired results will not be achieved. There is an economic value to having crew members with more than one year experience. Crew members are not a commodity. You can not plug in a new crew member and expect him/her to be as effective as a worker with multiple years of experience. Crews with experience were better prepared to handle the tasks that help make putting greens successful.

The summer of 2005 was a disappointment for many golf courses and unfortunately, the recovery process this fall is going to be painful. It is not too early to begin planning and preparing the putting greens for 2006. Practices like aeration and topdressing done this fall will help make a difference next year. Next summer is only nine months away and if it has been a tough summer, that nine months already seems too close. Let us know if we can help you this fall.