

On-Site Testing Putting Green Variety Trial

National Turfgrass Evaluation Program

Kevin Morris

Start Date: 1996

Number of Years: 5

Total Funding: \$71,600

Objectives:

Provide bentgrass and bermudagrass putting green trials on golf course practice putting greens.

Many new bentgrass and bermudagrass cultivars have been commercialized in the last few years, however, there is a lack of research data on their performance under intensively managed putting green conditions. This project evaluates these grasses on golf course putting or chipping greens built to USGA specifications. This research differs from evaluations conducted at university research stations because the greens are used by golfers for practice putting and/or chipping. The evaluation trials are jointly sponsored by the Golf Course Superintendents Association of America (GCSAA), the United States Golf Association (USGA) Green Section and the National Turfgrass Evaluation Program (NTEP). Trial sites are located on golf courses near a land grant university with a turfgrass research program or in a major metropolitan area which is readily accessible to a university turfgrass scientist. Sixteen evaluation trial sites have been established. Bentgrass trials were all seeded in fall 1997, with one exception. Bermudagrass trials were planted using vegetatively propagated material in June 1998.

The first progress reports containing 1998 data and management information on this project were compiled and distributed in May 1999. The two reports can be found on the NTEP web site at <http://www.iitp.org/onsite/ost.htm>. The on-site advisory committee decided to report data from each location separately and not summarized over all locations, as in standard NTEP reports. Detailed management information was also reported for each site including establishment (date and any problems), mowing (height, frequency, mower type, rollers and groomers used), cultivation (dates and type of aerification, verticutting and topdressing), pesticide and fertilizer regime used (dates, rates and products used) and factors of play (opening and closing date for play, types of spikes allowed, uses of green).

The bentgrass entry "Penn A-4" was the most consistent top-performer having the highest mean quality rating at ten sites in 1998. Performance of the cultivar "Century" was surprising with quality ratings in the top statistical group at twelve sites. This performance was better than in the last NTEP Bentgrass Test (1994-97 data). Previous topperforming entries such as "Cato", "Providence" and "L-93", often did not land in the top statistical group. Monthly stimpmeter readings show little or no statistical differences among the cultivars.

Since bermudagrass plots were not planted until June 1998, data collected mostly reflected establishment rate. The standard entry "Tifgreen" was the poorest performer at

five of the eight locations, while the other six entries were inconsistent in their performance. The site at St. Charles, MO suffered severe winterkill on the bermudagrasses therefore, that aspect of the test green may