

**JB VISITATIONS:****March - Phoenix, Arizona.**

Presented an invited lecture before the Arizona Golf Course Superintendents on Champion bermudagrass. There was great interest in Champion vertical dwarf bermudagrass (*Cynodon dactylon* x *C. transvaalensis*). Its performance on golf course sites has been good to date, with putting speeds comparable to creeping bentgrass being produced. In Arizona in the winter of 1996-97, Champion exhibited much better winter low-temperature color retention than either Tifdwarf and Tifgreen under putting green conditions.

The one concern I have for this cultivar, and similar high-density, vigorous lateral stemmed, vertical-dwarf genotypes, is that the superintendent conduct the appropriate frequency and timing of vertical cutting and topdressing, along with close mowing, in order to avoid development of a thatch problem. Experience to date at the oldest 18-hole golf course planting (Barton Creek), which is in its third year, indicates it is possible to maintain thatch control.

**May - Dublin, Ireland, UK.**

Presented an extended lecture before a large group of golf course superintendents from around Ireland. More than two-thirds of all golf courses in the country were represented. They were certainly a very enthusiastic and inquisitive group. The Irish government is very active in promoting tourism, with golf being a key cornerstone.

**May - England, UK.**

Presented extended lectures in three locations around England. Sunshine and very warm weather were the norm throughout the 1½ weeks, a rare occurrence in England. Ran across an interesting problem situation near Durham in northeast England. The golf course was constructed and a well drilled for irrigation water. A water analysis

showed good quality. The grow-in and subsequent surface quality of the turfed putting greens were good for the first several years. Subsequently, in a very short time serious problems started to develop, with the putting green turfs continuing to deteriorate. Proper diagnosis of the problem was not achieved until new soil tests revealed a high saline level. A subsequent analysis of the well water also revealed a high saline level. As it turned out, the well had been drilled into a cavity or possibly a mine shaft, where they initially were pumping fresh water. However, when this supply was exhausted there existed interconnections over a 20 mile (12.4 km) distance to the North Sea, such that salt water eventually moved throughout the cavity area and they began pumping this salt water for irrigation. This occurrence suggests the need to periodically monitor the irrigation water quality level.

**June - Germany, Netherlands, and France.**

The pesticide, fertilizer, and environmental issues are a hot topic throughout these countries. Attendance was particularly strong at Munich, Germany. In most of these regions the golf course superintendents do not meet regularly for educational programs.

A common question throughout the lecture tour concerned the perceived problem of excess vigor for many of the newer turfgrass cultivars. It was explained that the appropriate vertical cutting practices may be needed on less intensive trafficked portions of a turf area, and furthermore that lower nitrogen nutritional levels should be considered. The typical response was that there is no time for vertical cutting because of too much golf play. I then would ask what is too much golf play? The response typically would be in the range of 10,000 to 15,000, and sometimes 20,000, rounds a year. I would respond that many golf courses in the United States have two to four times that intensity of golf play and still can sustain proper thatch management including vertical cutting and topdressing.