



The winter of 1983-84 took a heavy toll of bermudagrass greens throughout the South and Southwest.

Bent or Bermuda Greens? A Tough Decision for the Southern Superintendent

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WHEN YOU TALK about golf course turf throughout the South and Southwest, you're usually talking about bermudagrass. While most courses there depend on this warm-season perennial from tee to green, more and more superintendents discuss a vastly different grass for greens, collars, and even other areas — bentgrass!

Bentgrass is not a new idea for Southern courses. It has been successfully grown for many years in certain areas, but the choice between bermudagrass or bentgrass has recently become a serious issue over a wide geographic range. What has prompted such a radical change in thinking? Why are superintendents from Amarillo to Louisville considering an alternative grass species where once bermudagrass was king?

Two major factors have caused turf managers to consider such a change.

The first is the golfer and his demands, the second is the unpredictable weather.

Players today demand putting surfaces that are not only firm and true, but also fast. Speed of greens, the most often discussed agronomic factor of the golf course, has caused a major change in the maintenance of bermudagrass greens. Not long ago, cutting heights of 1/4-inch on bermudagrass greens provided a surface satisfactory to the golfing public, but as the desire for faster and faster putting surfaces increased, the height of cut decreased. Today, 3/16-inch is generally considered to be high; some superintendents regularly cut as low as 1/8-inch. Under this type of cultural program, bermudagrass superintendents can provide a putting surface that rivals bentgrass greens. However, the winter of 1983-84 proved there is a heavy price to pay for mowing bermudagrass so low in many areas of the South.

THROUGHOUT MUCH of north Texas, for example, including the Dallas-Ft. Worth area, one can find both bentgrass and bermudagrass greens; or at least you could before last winter. A prolonged siege of freezing temperatures devastated the bermudagrass greens. The 296 hours of continuous freezing temperatures took a heavy toll. Jere Mills, director of golf for the city of Dallas, oversaw the replanting of 91 of the city's 114 bermudagrass greens that make up the municipal golf courses. Quenton Johnson, superintendent of Brookhaven Country Club, in Dallas, saw all 58 of his bermudagrass greens, which had survived the previous 27 Texas winters, succumb to low-temperature kill. Jon Anderson, superintendent of Bear Creek, a 36-hole facility located at Dallas-Ft. Worth airport, sodded nine greens and replanted all 36 bermudagrass greens to bentgrass last fall.



Some bermudagrass greens were reestablished by sprigging.

No one escaped injury; regardless of the club's budget or the superintendent's expertise, bermudagrass greens suffered tremendously from the cold. On course after course in the spring of '84, one could find the dead greens surrounded by healthy, vigorously growing bermudagrass collars — collars that had been maintained at 1/4-inch or higher. Superintendents throughout the South reported the same problems, and they almost unanimously agreed that the lower the cutting height, the less chance for survival.

Many clubs faced with replanting chose to make the most of a bad situation. Those that chose to replant to bermuda saw an opportunity to first fumigate and rid their greens of goosegrass, *Poa annua* and other pests. Other clubs felt the time was right to make the conversion to bentgrass.

The clubs that chose to convert greens from bermudagrass to bentgrass faced a number of other difficult decisions. For the superintendent, it meant developing and instigating a radically different maintenance program. Walking greens mowers, new disease pressures and the resulting increase in the budget for chemicals, and a greater dependency than ever before on the irrigation system

were just a few of the changes he had to make. The club membership would not only have to be willing to accept increases in maintenance expenditures, they would also have to adjust to certain changes on the golf course itself, such as frequent syringing of the greens during the long hot summer.

The most difficult decision, however, was what to do about the immediate problem of the dead greens. Some clubs chose to nurse what little of the cool-season, overseeded grasses that survived the winter through the summer and into the fall. They would then plant the greens to bentgrass. Other clubs, not willing to accept a poor-quality putting surface through the 1984 season, chose to pay the price of replanting the greens with bermudagrass early in the summer. They then would fumigate this new bermuda and replace it with bentgrass in the fall. Either choice required patience and understanding on behalf of the superintendent and every member.

BENTGRASS PUTTING greens in the South and Southwest require not only a progressive golf course superintendent but also an understanding club membership. In the past, the Southern

golf course superintendent had to rely, in large measure, on bentgrass information, research, and cultural practices adapted from his northern counterpart and northern research stations. This information had to be readjusted to fit his circumstances.

In 1981, a Texas group of concerned club officials and golf course superintendents recognized the need for practical bentgrass research to be carried out under their conditions to give the superintendent the new tools he needed. Thus was formed Bentgrass Incorporated. The organization's first fund-raising golf tournament was held at Colonial Golf and Country Club, in Ft. Worth, Texas. The teams were composed of club presidents, golf professionals, green committee chairmen, and golf course superintendents from bentgrass courses around the state. This initial effort by Bentgrass Incorporated raised \$16,000 for research. In subsequent years, as the number of Texas clubs wanting bentgrass greens increased, Bentgrass Inc. grew.

Today, at the Texas A&M University Research and Extension Center in Dallas, research is being conducted on a bentgrass putting green that was built with the funds raised by Bentgrass Inc. The group is currently supporting research concerning various topdressing rates for bentgrass greens under Southern conditions. In addition to the funds provided, local superintendents and their crews contribute their time and effort to help maintain this bentgrass research green. Paul Cato, Jr., President of Bentgrass Inc. and a USGA Green Section Committeeman from Ft. Worth, points out that the goal of Bentgrass Inc. is not financial gain or notoriety, but "simply to provide the superintendent with the information he needs to do his job better."

BENTGRASS GREENS may not be for everyone in the South. Many of our courses must still deal with heavy traffic, small or improperly constructed greens, and severe climatic restrictions. These courses will continue to rely on bermudagrass because it has served them well for many years. But thanks to research sponsored by groups like Bentgrass Inc. and the USGA Green Section, along with the technical breakthroughs by agricultural industry, the Southern golf course superintendent now has increasing opportunities to select from more than one grass species for putting green use and will have even more choices for fairways, tees, and roughs in the future.