

# Converting to Bent in Tenn. Saves on Maintenance<sup>\*</sup>

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During the past three years there has been much progress made with bent grass in Tennessee and other Southeastern states. One club in Knoxville has converted all 18 greens to bent grass and another club in Chattanooga has converted six greens so far and plans to finish the other 12 greens this year. An Atlanta club put in one bent green last fall as an experiment in that section. At Richland Club in Nashville we have only one green in Bent but plan to convert just as soon as funds are available. At present a \$200,000.00 club house under construction must be completed before funds can be made available for conversion to bent greens.

For many years clubs in the South have tried experiments with bent grass, using various methods to convert. Some clubs tried killing off the bermuda with chemicals, then sowing seed or planting stolons. Others tried to strip off the bermuda and then plant bent and still others tried to sow bent seed on a bermuda green. None of these methods was successful.

Several years ago we organized and held Turf Conferences in the South. Dr. Fred Grau and O. J. Noer participated and told us the advantage to be gained by proper sub-drainage and proper mixture of top soil to provide for drainage and aeration and stressed their need in the South. They told us about the new and superior strains of bent grasses that had been developed.

After Dr. Grau visited Nashville my club decided to experiment. We converted one green to bent grass. The following method was used. We took off the top fourteen inches and dug tile lines, then back filled the lines with pea gravel bringing this material up to where we needed approximately ten inches of top soil to complete the green. This top soil was mixed in the barn using 60% sand, 20% loam and 20% peat moss. We hauled it to the green and then planted Arlington C 1 stolons at the rate of one bushel to each 100 square feet. This work was done in December 1948. The green was opened for play in April of 1949. We had a little trouble in July and August of 1949. This trouble was not due to disease but was due to our inexperience in mowing bent grass, but in September the

green was completely healed and we have had a perfect bent grass green ever since.

The cost of converting this green was approximately \$100.00 for each 500 square feet. Much to our surprise we feel we are going to get this back in the savings on maintenance. We find the bent grass green to require less top dressing, less mowing, less water and less fertilizer and we have a year round green that we don't have to sow with rye grass in the fall and no transition period in the spring.

## Comparative Costs

For comparative costs in maintenance, bermuda grass needs frequent top-dressing to keep the stems buried to provide a smooth putting surface and when rye grass is sowed on top of bermuda in the fall a heavy top-dressing is needed. Our bent green was top-dressed the last time during September of 1949 or 16 months ago. The savings on this one item of upkeep are tremendous. Our bermuda greens require a lot of water while our bent green needs very little water. We believe this is due to the better mixture of top soil we have in the bent green. Both bermuda and rye grass are fast growing and need mowing often, bermuda grass must be mowed seven days a week during the summer months while bent grass requires mowing not over three or four days a week. Both bermuda and rye grass are heavy feeders and need frequent applications of fertilizer, we find that our bent green needs 65% less fertilizer than our bermuda or rye greens. As bent is a year-round grass we don't have to buy rye grass seed in the fall which results in a big saving on that item.

During the summer months we swept the dew off the bent green every morning. A mixture of Calo-Chlor and Tersan was applied each week at the rate of three ounces to each 1 M sq. ft. to prevent brown patch. Cadminate was used every other week at the rate of 1½ ounces to each 1 M sq. ft. to prevent dollar spot. We fertilized the soil whenever the tests showed the need of nitrogen, phosphate or potash.

Our thanks go to Dr. Grau and Dr. O. J. Noer for their help and guidance. Before these men began to visit with us we were groping in the dark but now we feel that better days are ahead for Southern Golf Courses.

<sup>\*</sup> Presented before Annual Turf Conference, Chicago, Ill., Feb. 1, 1951.