Bermuda Survives Cold If Not Over-Cultivated

By E. RAY JENSEN
Southern Turf Nurseries, Tifton, Georgia

The spring of 1963 found many Southeastern course supt.s intenty searching their greens for some trace of Bermuda grass growth. Many of these men, situated north of a line from Birmingham, Ala. to Atlanta, Ga. and north to Charlotte, N.C., found that when winter grass disappeared Bermuda no longer existed.

Little or no winter injury was observed on Bermuda south of this line. In and north of the Memphis area, almost every course suffered enough damage to require some degree of re-planting. This was the first winter that Tifton 328 had suffered any appreciable cold damage in this area and this naturally called for investigation to find out what had happened.

An examination of weather records of selected cities within the Bermuda damage zone was quite enlightening. It revealed that the weather not only was abnormally cold but unusually dry. There was an insignificant amount of insulating snow cover. The weather was so severe, in fact, that many areas lost their overseeded winter grasses.

60-year Record Cold

As an example of the severity of the weather, Atlanta showed an average January temperature of 37.2 degrees — 7.6 degrees below normal. The last 12 days in January there averaged more than 14 degrees below normal, with a low of minus 3 degrees. During that month, Atlanta reported no insulating snow cover. The cold was even more extreme north of this area. Admittedly, the weather was unusual in that it was the coldest Atlanta winter in 60 years. But everyone agrees the same thing could happen again.

With this in mind, green committees took a long look at other grass species for possible use on Southern greens. The first reaction of many was to consider converting from Tifton 328 to one of the bents which is more cold tolerant. But a closer study of this possibility convinced them that bents would not do since they can't tolerate the humid heat of this area during the summer.

The statement has been made that the zone of transition between cool and warm season grasses is a sort of "no-mans land" for grasses, with no single species entirely suitable. This statement must be modified, however, to the extent that warm season Bermuda, perfect from early spring through late fall, simply must be properly prepared to survive severe cold and remain healthy. Practical experience and impartial research have established that Tifton 328 Bermuda is slightly more cold-hardy than U-3 Bermuda under identical management. U-3 has long been used for fairways and tees throughout the lower North and Midwestern states and, under management for these uses, has continually survived sub-zero weather.

Some Came Through

As reports of winterkill came in this year from the more seriously damaged areas, it seemed for a while that all Bermuda greens had been lost. Occasional reports of other courses were then received and indicated that a fortunate few had experienced no loss at all. A close examination of procedures at these latter courses revealed that either the normal practices prior to overseeding had not been followed, or that greens had been taken out of play and covered with straw for protection from the cold. This latter practice, while being the safest to follow, is not always possible since temporary greens are required if the courses remain open for play. Many clubs have memberships that discourage use of temporary greens.

If greens can be covered with a mulch, this should be done in the northern limits.
of the Bermuda belt to insure winter survival. When this isn't possible, a departure from normal preparation for winter overseeding is in order. Usually, normal preparation consists of heavy cultivation of the greens to provide as close to a soft seedbed as can be obtained on established turf. This assures germination of overseeded winter grass, but it also tears the Bermuda turf, weakening it at a time of the year when it is unable to recover. Obviously, weakened turf can't withstand the ravages of extreme cold, dehydration, constant traffic and the competition of winter grass.

The few superintendents who didn't lose unmulched Bermuda last winter reported several facts in common. Very little or no cultivation was carried on within a month of the onset of the dormancy period. Preparation for overseeding was accomplished not by bringing soil up to the surface, but by topdressing. Bermuda was allowed to grow higher in the late stages of the growing season. This encouraged a deeper root growth and provided some insulation against the cold. This general practice requires more topdressing material than normally, but more than pays for itself by providing a stronger plant that can resist sub-zero weather.

**Twenty-Four Men in Running for PGA Home Pro Award**

Twenty-four PGA sections each have nominated one of their members for the 1963 Home-pro-of-the-year award. A committee of amateur golfers will select the national winner after sifting the list of sectional nominees. Presentation of the award will be made at the annual president's dinner, to be held in Palm Beach, Fla. on Dec. 3, during the PGA's 47th annual meeting.

Tom Lo Presti, Haggin Oaks GC, Sacramento, Calif., was the home pro award winner for 1962. The PGA adopted the custom of naming its leading professional for the year in 1955 when the late Bill Gordon, Tam O'Shanter CC, Niles, Ill., was selected. Since then the award has gone to the following: Harry Shepard, Elmira, N. Y.; Dugan Aycock, Lexington, N. C.; Harry Pezzullo, Northbrook, Ill.; Eddie Duino, San Jose, Calif.; Warren Orlick, Orchard Lake, Mich.; and Don Padgett, Muncie, Ind.