Ideal conditions for a sod farm—flat, open and organic soil.

To Sod or Seed?—That Is the Question

by **WILLIAM G. BUCHANAN,** Eastern Agronomist, USGA Green Section

With the fading of summer and the sun setting earlier in the West, thoughts turn to the work of fall. There are many chores that have to be done and re-establishing a turf cover on worn and bare areas is one of them. But then, this chore is not limited to the fall alone, even though it is an ideal time for it.

Courses throughout the country have either experienced the loss of turf or will experience this travesty at some time or another. Turf loss can result from many causes, but to the golfer, the cause is not nearly as important as how soon the turf can be replaced and be made playable again. This leaves the superintendent and green committee with two choices; either seed or sod the area.

Sod has many advantages in areas where traffic and maintenance is kept to a minimum. However, on areas with heavy traffic and maintenance such as greens and tees, the decision to sod should be made very carefully.

In recent years, the sod industry has grown by leaps and bounds. This rapid growth has made it necessary for a sod certification program to be initiated by many states. The certification program encourages the sod grower to produce a higher quality sod by using a higher quality seed. The production of certified sod is essential for golf course use. Superintendents should no more purchase a sod that is not certified than purchase seed that is not certified.

Golf courses should be very cautious. The choice of a turfgrass variety should be made clear when discussing the purchase. Many times in the past, a variety selection has been made at the nursery and the sod has been quite contaminated with several varieties of turfgrasses upon arrival.

When considering purchasing sod, it is wise to know something about the maintenance practices being followed by the nursery. Keep in mind that these establishments have to grow sod quickly, because the more crops produced

the more revenue received. The sod grower must be cost conscious and, for a moment, let's look at his viewpoint.

The first consideration for the grower is the land. It must be relatively flat, free from rock, trees and other debris that would hinder the harvesting of the crop. Also of great importance is the type of soil on the land. The first choice for a sod grower would probably be a high organic soil, like a peat or muck soil, because these soils have a lower specific gravity and therefore the shipping costs would be cut. A turf will generally develop and mature faster on an organic soil than on a mineral soil. Generally, a sod can be developed in 12 to 18 months on an organic soil, whereas it would normally take 18 to 24 months on a mineral soil. There have been, of course, some sods developed on organic soil as quickly as three months, but these cases are more the exception than the rule.

The second consideration of the sod grower is water. He must have a good supply for the grass plant.

The third consideration is probably what varieties of grasses to grow to satisfy the market. In most cases, the largest share of the market is the homeowner. Now keep in mind that you are purchasing sod to be used on a golf course, not on a home lawn. As you have probably told some member at one time or another, conditions on a golf course are not quite the same as on a home lawn.

Since the sod is for golf use, the specific variety of grass is important. A variety of bluegrass, bentgrass or bermudagrass may fill the bill. But the golf superintendent must be more selective than the home owner and therefore, his choice of sod nurseries will be more or less limited. Once a nursery is found that grows his type of sod, the superintendent must consider the quality of the sod and the soil upon which it has been grown. As mentioned earlier, the sod grower has to consider his costs, because although he wants to have a good-looking sod, he also wants to produce it as economically as possible. A way to do this is to mow at a relatively high height of cut and to apply a high rate of nitrogen and water to make a lush growth and a green appearance. These are acceptable practices for a sod producer, but on a golf course, consideration has to be given to a strong, healthy turf that can withstand heat and traffic stresses. Lush turf cannot do this for extended periods. When the sod is received, the grass will be clipped to the height you requested. However, the grass will be in a weakened condition because of the rapid change of clipping height and the fact that it has been transplanted.

Careful consideration should also be given to the differences in soil types the nursery has and the soil on your course. Experience tells us that a sod grown on organic soil and placed on a mineral soil has difficulty becoming established. The root systems of the plants do not make the transition easily. The reason is that the organic soil will retain moisture longer than the mineral soil, and as long as the organic soil has a supply of water, the roots will not go to the mineral soil in search of water.

The considerations about the soil should be the most important factor in determining whether a particular sod should be used. If the soil types are not alike, then seeding would be the best decision. Perhaps the best solution to the "Sod or Seed" problem is for each golf course to grow its own sod. A good nursery is a very good "insurance policy" for any club. The area that is designated to grow sod for greens should have the same soil mix as the green and it should be maintained exactly like the greens. A nursery is best located near the maintenance building if possible but, where space is limited, any area, even part of the rough, will do for your own "sod farm insurance policy." Like any insurance policy, it must be established well in advance of the actual need. And this fall is an ideal time to do it.

Troubles can develop when organic sod is placed on mineral soil.