# Velvet Bent As A Manufactured Product for Golf

By FRANKLIN HAMMOND

Grass can be produced as a manufactured product to meet very close specifications. The various steps in its production can be controlled to a surprising degree if one is willing to accept this theory. We are not producing a crop. What we are trying to do is to make a definite product for a particular purpose just as a manufacturer makes a radio, chair or any other object.

The materials of construction are known to us. A great deal of knowledge of how these materials act and react is at hand. Seed, soil, fertilizer, water, mowing, and pest control, all are familiar. We use them constantly. We have been lazy in our production of turf. We have left it to nature to do the work. We put all the materials into the machine (soil), sit back and wait for results. Sometimes the results are far from what we expect.

Why not select the exact materials we want in just the proportions we wish, leave out what we do not want and see if the results are not more satisfactory? Agriculture, nature, or whatever you wish to call it, has taught us how, why, and when to use the materials. We must adjust this knowledge to our own particular problem just as the chemist mixes his chemicals, watches reactions and keeps his work under control.

I believe turf growing as we practice it today is more or less of the trial and error method based on the principles of Agriculture as laid down for crop production. We are trying to produce a specialized product with a technique adapted to our needs rather than designing a method for the particular problems we have to deal with.

It is suggested that those engaged in the production and maintenance of turf follow standard practice for their locality only as long as it seems correct to the user. If some variation, or outright departure from accepted methods is indicated try it out.

Keep an open mind on the subject. If the other fellow gives you a hint of something you think is workable, try it out. Not once, but several times. If it works stay with it.

Be very careful in interpretation of results. You could be wrong. If you are convinced you are right stay with it. One can make mistakes with velvet bent and still have something left to start again.

I hold radical ideas on the methods of producing velvet bent turf. Particularly so regarding the soil, seed bed, watering, and feeding.

## Growing Methods for Velvet Bent

The materials and technique used, where they differ from accepted practice, have been developed over a period of 18 years of growing Kernwood velvet bent. So far they have proven satisfactory to me. The turf produced has pleased me very much. The methods used have been applied, not once, but several times and the results have confirmed my opinions. Much is suggested for improvement but progress has been satisfactory.

Reasons why velvet bent is desirable for fine turf are:

Top quality in appearance and feel.

Suited to a wide range of soils and locations.

Tough, vigorous, and a persistent grower.

Easily produced and maintained.

This grass was named for its appearance and feel.

Wherever grass may be grown in the northeastern United States velvet bent will grow. It can be produced on the complete soil range from heavy clay to light sandy loam. Even though the extremes of wet and dry soil are not good for turf this grass can be so managed under these conditions as to make a fairly satisfactory piece of turf. It does well in shady places and is excellent in the open.

#### Stands Mismanagement

From its many fine blades it acquires toughness. The abundance of roots and reproducing stems contribute much to the vigor of growth. The plants are able to maintain themselves in good health when cut as short as a quarter of an inch. It quickly adjusts itself to dwarf habits of growth. Once established in the soil it becomes the most dominant plant in the area. While it is slow to germinate the seed will produce plants which are permanently established and will stubbornly withstand mismanagement.

There are several strains of velvet bent in common use. Which is best I believe is a matter of personal opinion. Each grower is apt to think his strain is best and without doubt, for him, it is. The writer's experience has been confined to Kernwood exclusively. As I have looked over various experimental plots in other locations it has not been difficult to convince myself that this strain was the best of the lot. At the same time other growers with me could easily see that their own particular strain was outstanding.

Many promising strains are still in nurseries throughout the country. Some of them will be heard from later, without doubt. Each grower should be on the watch for promising types and develop with one or two himself.

The original Kernwood strain was selected by the greenkeeper at the Kernwood CC, Salem, Mass., in the early 1920's. He did some work in propagating his selection. His successor at the club, Robert A. Mitchell, is the man who did most toward bringing this strain to the attention of the growers of fine turf. Mr. Mitchell ("Bob" or "Pop") has the natural qualifications for this work. He is very methodical, conservative, and slow to form judgments, and very careful in interpreting results. I have seen, at his club, nurseries containing several strains of velvet he has selected but as far as I know at this time Kernwood is still first choice with him.

## Methods of Producing Turf

Turf is produced by two methods: Seeding and Stolons. Which method to use will be decided by the purpose of the turf and local conditions.

Velvet bent seed is very small in comparison with other fine turf seed, there being about 10 million seeds to the pound. Other lawn seeds such as Colonial bent average around five million seeds per pound. For this reason this seed should not be scratched or brushed in to the seed bed. Such an operation would bury the seed so deeply that it would be unable to push its first leaves above ground before the nourishment in the seed is exhausted and roots established to feed the young plant.

Preparing the seed for spreading requires judgment. The seed is so fine and light that the slightest breez will carry it long distances. The motion of the arm, if spreading by hand, will create enough air current to carry the seed 20 feet or more in any direction.

Should pure cleaned seed be used it must be mixed with some form of a spreader or carrier. This spreader should be moist or sticky enough to reduce the wind action or the neighboring areas will benefit at the expense of the area being seeded.

If seed is combined with its own chaff no better spreader can be obtained. Until a good reliable material is developed for this purpose it would be well to secure seed in the "chopped hay" form from some reliable grower than to use pure seed with an unsuitable spreader.

After the seed is spread a light rolling will press it into the seed bed the proper depth. A 24-inch water roller half full of water will be a satisfactory tool for this purpose.

From this point on water and temperature are the important factors. The first week or 10 days the area should be watered several times a day with a fine spray. The aims are to keep the surface of the soil moist, not soaked, at all times; and to accumulate a little excess moisture which will gradually penetrate the seed bed as the roots develop. Keep in mind air must be available to the roots as well as moisture so do not flood the soil at this time.

Seeding may be done at any time during the growing season. There will be little germination with temperatures below 50 degrees or above 90 degrees (F). The more uniform the temperature within this range the better for germination. This is one of the reasons why Fall seeding is desirable. Competition with weeds is of minor consideration with velvet bent. This grass is such a vigorous grower in New England that very few weeds can compete with it. Where soil, water, and temperature are favorable velvet bent can start from scratch with any weed in this locality and crowd it out of the picture. Without doubt seeding in late August is best and will produce a dense tough turf by June of the next season.

If time, with regard to the use of the turf to be grown, is not important seeding is the best and most simple method of producing new turf. The seed is easily applied with a minimum of labor. Maintenance operations up to the time of the first mowing consists of watering only. Germination of the seed is slow, from 10 to 20 days being required. It could be a month before the grass is ready for the first mowing.

#### HARRIS BUSY IN ILLINOIS

Robert Bruce Harris, Chicago, golf architect, is reflecting current brisk activity in course construction with a considerable volume of work in Illinois. He has finished plans for a new course for Macomb CC, another one at Macomb for Illinois State Teachers' college, remodelling the Pekin Park District 9-holes and adding another 9 and a new muny course at Flora, in the heart of the Illinois oil fields.

# RENEWED YOUR SUBSCRIPTION?