

ADVISORY COMMITTEE

W. A. ALEXANDER, Chicago, Ill.
 EBERHARD ANHEUSER, St. Louis, Mo.
 A. C. U. BERRY, Portland, Oreg.
 WILLIAM F. BROOKS, Minneapolis, Minn.
 N. S. CAMPBELL, Providence, R. I.
 WM. C. FOWNES, JR., Pittsburgh, Pa.
 F. H. HILLMAN, Washington, D. C.
 THOS. P. HINMAN, Atlanta, Ga.
 FREDERIC C. HOOD, Watertown, Mass.
 K. F. KELLERMAN, Washington, D. C.
 NORMAN MACBETH, Los Angeles, Calif.

E. J. MARSHALL, Toledo, Ohio.
 W. L. PFEFFER, St. Louis, Mo.
 GEORGE V. ROTAN, Houston, Tex.
 SHERRILL SHERMAN, Utica, N. Y.
 FREDERICK SNARE, Havana, Cuba.
 JAMES D. STANDISH, JR., Detroit, Mich.
 W. R. WALTON, WASHINGTON, D. C.
 ALAN D. WILSON, Philadelphia, Pa.
 M. H. WILSON, JR., Cleveland, Ohio.
 FRANK L. WOODWARD, Denver, Colo.

Velvet Bent (*Agrostis canina*)

By Major R. Avery Jones, Baltusrol Golf Club

Velvet bent makes the finest and the most beautiful turf of any of the northern grasses.

On nearly all old seeded greens, circular patches of this fine turf, varying in diameter from one to four feet can be found. It is strange that the fact that velvet bent produces such fine turf has been overlooked so generally. While some attempts have been made to produce pure velvet bent seed, and seedsmen have advertised their mixed bent as having a large percentage of velvet bent seed, there appears to have been no real effort made to produce pure velvet bent greens.

Three years ago a turf garden was established at Baltusrol Golf Club. The garden contained, in addition to creeping bent planted in beds and rows, twelve beds of velvet bent planted by the stolon method, and three beds consisting of velvet bent patches of divot size—a total area of 5,000 square feet.

The velvet bent stolons were obtained on the golf course early in November. They were hand-picked from edges of greens and the rough. No doubt there were dozens of different strains varying in color from a light green to dark-blue green.

There being no data as to the quantity of velvet bent stolons required for a given area, each bed was planted with a different quantity, varying from a light covering to three times the quantity of creeping bent stolons recommended by the Greens Section.

The divot planted was as follows: The divots were small circular patches about four inches in diameter. They were placed on prepared ground about four inches apart. Screened soil was then applied in sufficient quantity to fill in between the patches.

The nursery planting was finished about November 15, and with the exception of topdressing and watering, received no further attention that fall.

Due to the very late planting there was very little growth, but sufficient to indicate that both the stolons and divots were established. In the following spring, the creeping bent grew much more rapidly than the velvet bent. The creeping bent beds were well covered in May, and were mown every day, but the velvet bent grew much more slowly. However, during the summer the velvet bent began to grow rapidly, and by July every bed was a solid mat. The velvet bent had produced in the same period, far better putting turf and a much more beautiful turf, than had the creeping bent stolons. Despite the radical difference in planting and quantity of stolons used, there was very little variation in the quantity of turf.

During the month of September, 1925, five thousand square feet of the velvet bent turf, and three thousand square feet of creeping bent sod—the entire nursery—was cut, and used to sod the new ninth green of Baltusrol's Upper Course. The approach and back of the green received the creeping bent.

The turf was a little too young for moving, but it soon became established, and is now in fine condition, although, not yet as dense as the mats to be found in the older seeded greens. It would seem that it takes three to four years for the dense mats of turf to form.

In the treatment of velvet bent in the nursery, it was found that it did not require, and in fact would not stand, nearly as much topdressing as creeping bent, and the quantity of ammonium sulfate that can be applied to it with safety is also less.

Little brown-patch has attacked the velvet bent green, but not to any greater extent than other greens. There was no loss of turf.

As a putting green grass, velvet bent has the following advantages:

Excellent color, fine texture, and a dense turf. Weeds made little headway in well established velvet bent. Less topdressing is needed. The growth of the grass is less rapid than creeping bent, and mowing is much easier. Velvet bent appears to require less water than does creeping bent. There are several greens at Baltusrol in which velvet bent amounts to as high as 80 percent of the turf; yet in those greens little brown-patch gives the least trouble.

Whilst one can not draw conclusions after so short an experiment, the writer has proved to his own satisfaction the following:

1. Velvet bent turf can be produced from stolons in the state of New Jersey.

2. Topdressing must be very light. Application of sulfate of ammonium and similar fertilizers must not exceed two-thirds the quantity normally applied to creeping bent.

3. Surface drainage is imperative. Velvet bent winter kills much more easily than does creeping bent.

4. When once established, velvet bent does not send out runners on the surface as does creeping bent.

Metropolitan Bent at Marble Hall

By H. C. Toomey

Marble Hall, Philadelphia's only "Pay-as-you-play" course, was designed and laid out during the summer of 1924, but the planting did not begin until the last week in September, was held up by heavy rains, and was not finished until the first week of November.

All the tees, fairways, and greens, with the exception of three holes, were sown with the Metropolitan strain of creeping bent by the vegetative process. The soil on the greater part of the course was heavy clay, more suitable for making bricks than for growing grass.

No manure or humus was used on the fairways, but 400 pounds of tankage to the acre was applied. Very little growth was noticed during that fall.

The following spring was dry and hot with very high winds. A water system had been installed when the course was built, and 300