Fertilizing Putting Greens at Oakmont Country Club

By Emil Loeffler
Oakmont Country Club, Oakmont, Pa.

Our chief aim in handling our putting greens during the past years at Oakmont (near Pittsburgh, Pa.) has been centered in keeping the foundation and topsoil in the best possible physical condition for the production of good turf. In this way a minimum amount of fertilizer is required, this resulting not only in a saving in expense of upkeep but in keeping the grass in the best condition possible for combating disease and adverse weather conditions. In brief, we fertilize only when it appears that the grass is in need of a little nourishment.

Our putting greens are 27 years old. They were originally seeded with mixed bent and Kentucky bluegrass. For some years after that however the turf was mostly annual bluegrass (*Poa annua*) and Kentucky bluegrass. In recent years the bents have crowded out the bluegrasses to such an extent that at present the turf is about 75 per cent bent. Annual bluegrass is evident only in the spring after the greens have been cut several times and put in playing condition, after which it gradually disappears.

The new sixteenth putting green on the Oakmont course, Oakmont, Pa.

Our subsoil is clay. A 4-inch layer of topsoil produced by top-dressing once or twice a season for the past 15 years has put our greens in very satisfactory condition. Our top-dressing material consists of about 60 per cent well-decomposed compost and 40 per cent sharp river sand. The sand is quite essential, as it produces a soil texture which could not be produced by the use of compost lacking in sand. Sand keeps the soil mellow so that water and air can get down to the roots of the grass and puts the soil in the best possible condition for growth. It also makes it possible to hold a ball on the putting greens under any condition. Compost keeps up the humus content of the topsoil and supplies plant food in a natural way; and this can not be effected by the use of fertilizers alone. Top-dressing also helps to make a true putting surface. At one time we let our grass grow about an inch long in the spring before top-dressing. This resulted in a coarse turf which could not be converted to a turf of suitable fineness until after a month or six weeks. Now we cut and roll our greens several times before applying the top-dressing.

We try never to overfeed our greens. We determine the need of fertilizer by the way the ball acts on the putting green. If the turf loses its nap and the ball is hard to control on a long putt we make an application of fertilizer. During the past season all the feeding we did was to top-dress the greens once and give them two applications of sea-fowl guano at the rate of 40 to 50 pounds to a green.

We believe the most important features in maintaining our putting greens have been good surface drainage, not overfeeding, good top-dressing for providing a good topsoil, and keeping them as free as possible from worms. Drainage we consider exceedingly important. Most of our greens do not need subdrainage; they are either built up and have perfect surface drainage, or are trapped in such manner that the traps serve both as drains and hazards. Our greens never winterkill or become water-logged under any conditions.

Fertilizing Putting Greens at Brookline

By Howard D. Farrant
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Our putting greens are bent grass, 19 having been seeded with mixed bent and 9 having been planted with the Virginia strain of creeping bent stolons. All have considerable annual bluegrass (*Poa annua*). We do not intentionally seed with annual bluegrass for we do not like to have it in our greens, but it seems to thrive all through this section of the country and has come in of its own accord and is especially troublesome in our new greens. The subsoil of our greens is mostly clay. The surface layer is a heavy loam, which is being steadily improved by the sand which we mix into our compost. Three of the greens are drained with a herringbone system of tiling 10 to 12 inches below the surface; all the other greens have only surface drainage.

The greens are not covered during winter, except for the brush which we scatter around the edges of certain ones, mostly on the north and northwest sides of the green. The brush is allowed to remain as late as possible in the spring. It is surprising how beneficial a windbreak of this kind appears to be, as after the snow has gone in early spring the turf that has been thus protected responds as if it had been fertilized.

Our first spring treatment is top-dressing. This is done after the grass has started to grow, care being taken not to apply the top-dressing too soon. The time depends entirely on weather conditions, but it is generally around the last of April or first of May. The top-dressing material is compost which has been prepared the year before and into which sulphate of ammonia has been mixed, in the loam shed, just before the material is applied. One cubic yard of compost is used on a green of average size (about 6,200 square feet). Sufficient sulphate of ammonia is used to give an application of 5 pounds to 1,000 square feet. The material is spread from wheelbarrows, by hand. The spreading is started at the side of the green opposite from the pile of compost left by the truck on the edge of the green. We try to select a good drying day on which to make the application, also a day when the play is light. The top-dressing is then worked into the turf with steel mats, lightly swept with birch brooms, and thoroughly watered.