Why Fescue Does Not Make Good Putting Turf

It has long been observed that fescue is not satisfactory for putting green purposes. The reason for this is that it will not stand up under the close cutting that is necessary. This matter has been explained in some detail by Dr. R. A. Oakley in his article on "Morphology" which appeared in the "Journal of the American Society of Agronomy," Vol. 16, No. 9, September, 1924, and from which the following is quoted:

"Putting greens must have turf of fine texture and of uniform surface. To accomplish this, close cutting is necessary and, with the modern putting green mower, it is possible literally to shave the grass down to the very surface of the ground. Because of the urge of the players for fast greens, the greenkeeper is inclined almost unknowingly to cut the grass exceedingly close. The bent grasses thrive under this treatment, but red fescue does not. The latter will withstand close cutting for a time and then in the language of the greenkeeper it 'commences to go back.' The common treatment has been to apply a topdressing of compost, or some quick acting nitrogenous fertilizer, or both. Careful studies have revealed the cause of the trouble. It is due to a peculiar morphological character of the red fescue plant. At the crown or base of each turfgrass plant, regardless of species, there is a short stem or axis made up of a number of unelongate internodes from which new shoots, with leaves, are continuously developing. In the bents and certain other species, these shoots may come from the very lowest buds. In the case of red fescue, the shoots that make the turf are produced from the upper part of the basal axis. Consequently, when the top of the basal axis is cut off by the mower few shoots develop from the lower nodes and the turf becomes thin. Topdressing and fertilizing to improve such a turf is merely treating symptoms. What is needed is to raise the mower so that the basal axis of the plant is not injured."

Uncovered Compost Beds and Covered Compost Piles

If the location for an uncovered compost bed is carefully chosen comparatively little of the soluble fertilizing elements will be lost by leaching, and the bed can be turned frequently and very cheaply by the use of a team and harrow, thus hastening decomposition and destroying weed growth. On the other hand, a covered compost pile may be turned over or screened at any time, regardless of the weather; but decomposition and germination of weed seeds will not be so rapid and labor costs will be increased. The best practical method of storing and handling compost is probably a combination of these two methods. Build a compost bed, also a shed for storing screened compost only. When the compost is ready for use in top-
dressing, screen the entire bed as soon as the weather and routine of other work permit, and store this topdressing in a covered shed. Then rebuild the compost bed. By adopting this method, dry topdressing material is always immediately available, which is a most important feature in topdressing greens at regular intervals.

**QUESTIONS AND ANSWERS**

All questions sent to the Green Committee will be answered in a letter to the writer as promptly as possible. The more interesting of these questions, with concise answers, will appear in this column each month. If your experience leads you to disagree with any answer given in this column, it is your privilege and duty to write to the Green Committee.

While most of the answers are of general application, please bear in mind that each recommendation is intended specifically for the locality designated at the end of the question.

1. Improving “winter-killed” turf.—A recent examination of one of our greens discloses that the turf is far from being up to the quality desired. Our greenkeeper reports that it has suffered from winter-killing. Please inform us what causes this condition and what steps can be taken to remedy it. (Pennsylvania).

**ANSWER.**—Injury from winter conditions rarely happens to turf that is properly drained. Water-logging of soil over winter will however seriously injure turf, and this condition can be remedied only by giving the green proper drainage. If there is a reasonably good stand of grass on a green (thin but uniform), it can be thickened by applications of compost and ammonium sulfate. An application of 1 cubic yard of compost to 2,500 square feet of surface is recommended for the first dressing, to which has been added 8 to 12 pounds of ammonium sulfate, well mixed in. This should not be applied, however, until such time in the spring as the grass starts growth. Where the grass is entirely killed out it is advisable to prepare the green as for new seeding. Where there is sufficient grass to be worth saving, though not enough to permit of thickening by the use of compost and ammonium sulfate, the seeding of German mixed bent seed and redtop seed, in equal proportions, at the rate of about 3 pounds per 1,000 square feet, is recommended, to be followed at once by a topdressing of well-screened compost to cover the seed and serve as a germinating layer.

2. Fertilizers for greens and fairways (compost, mushroom soil, sheep manure, stable manure, poultry manure, bone meal, ammonium sulfate).—For the past two years we have been topdressing our greens about every two weeks with a mixture consisting of compost, mushroom soil, sheep manure, ammonium sulfate, and sand. We are in doubt as to whether we have been using the correct proportions of these fertilizers to obtain the best result. What do you think of this mixture, and what proportions do you advise us to use to the cubic yard? We have recently been urged to use pulverized poultry manure in place of sheep manure. What is your advice as regards this? For several years we have fertilized our fairways with No. 2 ground bone. Last spring we used 20 tons and had a