

QUESTIONS AND ANSWERS

All questions sent to the Green Committee will be answered as promptly as possible in a letter to the writer. 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.

Question.—According to our score card, all ditches are water hazards and the hazard is defined as from margin to margin. After a player has found his ball lying in the grass in such a water hazard, has he the right to touch the grass before he makes his stroke?

Answer.—Yes, the player has the right to touch the grass in addressing the ball, or in a forward or backward swing, but he must not sole his club on the ground. Rule 25 covers this point.

1. PREPARING A BENT TURF BED TO BE PLANTED FROM SEED.—We intend to start a small turf bed, using creeping bent seed, and should be glad to have your suggestions on proper procedure. (Ohio.)

We would advise the same preparation as for seeding a putting green. It is not necessary, however, to incorporate so much manure or other fertilizer in the soil, but the soil should be well-worked and level and free from stones for at least three inches below the surface in order that the turf may be lifted without trouble. You should seed to creeping bent at the rate of three to five pounds of seed per 1,000 square feet. The smaller amount is ample with seed of high purity. The grass should be kept cut as soon as it becomes an inch or an inch and a half high, just as in the case of a putting green. By fall (if planted in March or April) it should be in first-class condition for relaying wherever needed. Such a turf bed is an excellent thing to have in case of rebuilding a green or in case of necessity for replacing inferior turf with good turf. We know of instances where greens have been resodded after this method without putting them out of play for more than two or three weeks.

2. VEGETATIVE PLANTING OF BENT GREENS.—Can we depend on commercial supplies of bent stolons for vegetative propagation, or should we start our own nursery to take care of our requirements? What kind of machine is used for cutting the stolons? How many square yards of new green will a bushel of stolons cover and be adequate to form a solid green in a short space of time? Approximately what percentage of rooted stolons can be had from a bushel? We have an offer from a grower to supply stolons of pure creeping bent at . . . per bushel in sixty-bushel lots. Is this price excessive? or rather, is the price good value? (Minnesota.)

We are inclined to think that the propagation of creeping bent stolons will be largely a commercial enterprise; that is, there will be those who will grow the stolons and sell them to the clubs that are needing them. There

is no reason, however, why a club should not develop its own nursery if it desires to do so, and several clubs are doing that. One club grew enough material during last summer for planting seven greens in the fall and has a sufficient supply of stolons on hand for planting three or four greens this coming spring.

We have used an ordinary hand fodder-cutter for chopping up the stolons. This is a machine that the farmers use for cutting up corn stalks and similar coarse forage.

A bushel of the stolons, if there is no more dirt attached than is necessary to keep the stolons alive for shipping, will plant about 100 square feet of green. It would, therefore, take about sixty bushels to an average green of 6,000 square feet.

It is not necessary that a joint be rooting at the time it is planted, as the grass grows from every joint. Each bud will start to grow and produce a plant if it is planted in moist soil and kept watered.

We do not consider the price of . . . per bushel as excessive. Each club can grow its own material cheaper than this if it desires to do so; but it has been our experience that few clubs will take the trouble to care for a nursery as it should be cared for in order to get results. If a club is not willing to plant the stolons and care for them according to the directions, it had better buy the material from somebody who is making a business of growing it.

3. HOW TO DISTINGUISH BETWEEN CREEPING BENT AND VELVET BENT; RELATIVE VALUE OF THE TWO.—Will you please advise me if there is any characteristic difference that can be readily recognized between velvet bent and creeping bent? Are there different strains of velvet bent, as is the case with creeping bent? Do you think that velvet bent would be adapted to this latitude? (Indiana.)

When one becomes familiar with both velvet bent and creeping bent there is usually no difficulty in distinguishing the one from the other, although it is difficult to point out just what the differences are. The chief distinguishing character is the stolons. Creeping bent (or "carpet bent") sends out runners which are sometimes two or three feet long. Velvet bent does not have these extended runners, but sends out short stolons, which usually end in a tuft of leaves. Velvet bent will spread scarcely more than a foot during an entire growing season. There are several varieties of velvet bent, but on the whole it is a more uniform species than is creeping bent. You perhaps have quite a quantity of velvet bent on your course at the present time. It has been found on nearly all of the golf courses in the corn-belt. It usually appears in circular spots of very fine texture, these spots being one or two feet in diameter. While velvet bent makes an excellent turf, we would not advise you to spend much time working with it, as it is much slower in spreading than is creeping bent, and will not stand as much wear. There is really not sufficient difference in the quality of the turf of the two grasses to justify the extra expense in establishing velvet bent turf.

4. PREPARING FOR A BENT NURSERY.—Kindly give me specifications for the building of the seed bed and the proper method of seeding for a putting green nursery. (New Jersey.)

We would suggest that you prepare your ground as you would prepare a vegetable garden. It is not as necessary to have the planting bed as thoroughly prepared nor as rich as in the case of a putting green, but if possible an area should be selected that is relatively free from weeds, as otherwise the matter of weeding will be rather important. If you do not have a soil that approximates a good garden loam it will be well to work in a little manure or good compost to which is added some bone meal. An application approximating 1,000 pounds to 45,000 square feet should be made. As for planting, bent stolons or runners should be used, not seed. These stolons should be put in rows approximately six feet apart and covered lightly, not to exceed one-half inch, and kept moist until growth has made a good start. A square foot of runners as taken from a nursery will plant 100 running feet of row. The runners should be laid end to end, not more than two or three runners being placed side by side; more, of course, is not objectionable, but it is not economical to use more where the scarcity of material is a factor.

5. *POA ANNUA* IN PUTTING GREENS; RENOVATING BENT GREENS.—Our usually beautiful putting greens have suffered the last two years, and this year particularly, from *Poa annua* when it dies out during the hot weather. I particularly noticed on some greens that its blossoming was very plentiful in the spring, and on those same greens the dead blotches, considered by some to be blight, have appeared, but already are disappearing from the coming fall growth. It seems a crime where the better grasses grow so prolifically to see perfectly wonderful greens materially damaged by such a secondary grass as *Poa annua*. (Connecticut.)

The condition you describe is similar to that we noticed at a golf course in New York. There the greens, on about two-thirds of their surface, were covered with circles of bent grass and in the spaces between was *Poa annua*, which in the summer is very thin. There was, however, no more *Poa annua* on those greens than there is on other greens which may be entirely covered with bent. The way out of the difficulty is to get your greens completely covered with bent. At Columbia Country Club, near Washington, the greens look as if they are practically pure *Poa annua* from late fall until June, but as the *Poa annua* disappears in early summer the greens become pure bent. In other words, *Poa annua* is an annual grass which for part of the year conceals the bent, but which never destroys it. Therefore, when you have a complete covering of bent the thin spots will not appear as the *Poa annua* dies out. In order to get your greens covered with solid bent we would recommend good treatment of the greens. Proper feeding will always bring it about, and this includes top-dressing as well as occasional applications of ammonium sulfate. Another method which is likely to hasten the process is to take plugs of good bent and insert them in the places in the greens where there is no bent. These plugs increase in size from the margin and will speed up the covering of the greens with bent. Putting additional seed on top of the greens is, in our judgment, largely a waste of seed. The plugging method properly followed will prove very effective.