

## 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.

**1. Winter seeding.**—I notice in the December number of THE BULLETIN an inquiry from Ohio as to seeding golf courses in December, and that you disapprove the recommendations of the architect to seed so late in the season. I would say that one of the best stands of grass on our fairways here was sown in December. If there is no weather mild enough after the seed is sown to cause germination the seed will lie dormant all winter and be ready to sprout just as soon as spring opens up and will quite outgrow seed sown in early spring. It has long been the practice for farmers to sow clover seed in February when the ground is frozen, depending on the seed being sufficiently covered by the soil freezing and thawing. Just after a light snow has always been considered an ideal time. As the snow melts the seed sinks into the ground, and is ready to germinate as soon as the soil warms up in the spring.—(New Jersey.)

The sowing of grass seed on snow is very satisfactory in any region where spring seeding gives satisfactory results. That is not, however, the best time to plant grass seed in central Ohio, as fall seeding gives far better results there. Where spring seeding can be done satisfactorily, the earliest possible seeding is highly desirable, and that is best accomplished by seeding on snow. In replying to the Ohio inquiry the editors had in mind the relative advantages of spring seeding and fall seeding. We are glad that you have brought the matter to our attention, as your comments and our further answer will serve to clarify the matter.

**2. Spring treatment for new vegetative greens.**—It would be a great help if you would be kind enough to outline a program for the care of the greens which we recently planted with creeping bent runners.—(Ohio.)

As soon as the greens are dry enough in the spring so that it is safe to work on them, they should be top-dressed. This is advised largely for the purpose of leveling up the surface and burying the stolons. We would recommend not more than one-eighth inch of top-dressing at any one application. The top-dressing should be followed with a fairly heavy rolling. The greens should then be mowed, being kept down to putting conditions from the start. It is much easier to keep grass down low than it is to correct the condition resulting from its growing too high. One application of top-dressing, and frequent mowing, should put them in good condition.

**3. Growing Bermuda grass on sandy soil.**—Our soil is a very light, sandy variety, and we have seeded it heavily with Bermuda. It comes up good and strong, but we do not seem to be able to get the smoothness ordinarily found in Bermuda putting greens. We have plenty of water; but we note this is not recommended by some of the Bermuda advocates. Our course is very young and probably we are expecting more than we should for greens of this age. We began to cut off the timber last May, and the subsequent work of stumping, rooting, plowing and planting took considerable time. We have had a pretty fair turf over most of our course for the past four or five weeks, but it seems to us that

now the putting greens should begin to smooth up with the top-dressing which we have been using for the past month. The compost we are using is composed of this light, sandy soil, mixed with muck, so called, which we get in the low country surrounding the golf course. We have accumulated a lot of opinions regarding our light, sandy soil, and the principal difficulty we find is that they do not agree very well. One professional will advise plenty of water, and another none at all for Bermuda. We note, however, that the professionals who advise no water have a heavy clay subsoil; the professionals who advise plenty of water have a soil similar to ours—that is, of light, sandy composition. We attribute whatever success we have had to a plentiful rainfall and our unlimited supply of water, which we have piped to all fairways and greens. We are still far short of what we would like to have, and if you can contribute any information that would assist us in getting the smooth putting green that we have seen on other courses which depend on Bermuda alone we shall appreciate it greatly.—(Florida.)

The growing of first-class Bermuda greens on sandy soils is difficult, whereas on clay or clay loam soils it is easy. For some reason Bermuda grass behaves differently on sandy soils from what it does on loams and clays. Therefore we have advised that if clay is at all procurable a compost of a clay loam texture be used as a top-dressing on Bermuda greens. Muck and sand mixed together as a top-dressing is pretty nearly useless—the muck particularly so. The sand, of course, will help to fill in depressions, but will not help the texture of the Bermuda grass. By all means see if you can not locate some clay so as to make up a clay loam compost, preferably of the clay loam mixed with well-rotted manure.

We would suggest that you use Arizona-grown Bermuda grass seed for your conditions.

4. **Providing bent stolons for vegetative planting.**—We have been advised that the vegetative method of obtaining bent sod is still in the experimental stage and that it is hard to secure stolons. We should like to have your advice with regard to this. Can you give us the address of some reliable firm who can supply bent stolons?—(New York.)

The vegetative method, we think, is well past the experimental stage. About 150 greens have been planted last season in that manner. We do not know of any source from which material can be purchased until next fall, and by that time you can easily grow a great amount in nurseries. If you prepare your ground thoroughly and plant nursery rows early next spring you may expect a row 100 feet long to grow enough runners to plant a green, and a row 150 feet in length will do it beyond any question. We would, therefore, suggest that you get the ground prepared with the idea of planting nursery rows early next spring. We assume that you already have bent growing on your fairways; from such turf you can make your own selection of runners for propagation purposes.

5. **Burning over turf for controlling crab grass.**—What would you think of burning over in some way areas that have been practically taken by crab grass with the object of destroying the seeds which are at present in the soil? We have no definite idea of how it could be done to be effective, but if before sowing the new grass seed the existing crab grass seed could be destroyed, we might then, it seems to us, be able to get the soil full of grass before any new crab grass seed could find lodgment there.—(Maryland.)

We do not believe it would be possible to kill all the crab grass seed

by burning, but if you did there would be the continual danger of more seed being tracked on the ground from surrounding grass lands. This pest has an efficient means of distributing its seed. We have never seen any ground here at Washington, no matter how well it has been kept free from it, but what will come up to crab grass if it gets an opportunity. The best way to fight it is to get a good sod of other grasses, and this can be done by fall seeding. Any preparation which is given the ground in the spring is quite sure to make an ideal seed bed for crab grass, as it thrives so much better than the other grasses during the hot summer months and therefore is usually able to crowd out the finer turf grasses.

**6. Eradication of dandelions and plantain from putting greens.**—It is generally accepted, we believe, that to eradicate dandelions and plantain from putting greens the roots of the weeds should not be cut but either pulled out or killed by means of a poison. Our greenkeeper, who has had long experience in the care of putting greens and in general is a practical man, says that if the weeds are cut not less than an inch below the surface many of them will die and the ones which do grow up do so in a weakened condition. He admits that sometimes a split root will cause several shoots to grow where one grew before, but he says that they are small and more easily taken out. In other words, he thinks that where a club has to contend with a good many varieties of weeds and can only employ so much labor it is more practicable to keep the greens free from those two weeds by cutting them out as soon as they appear rather than to try to eradicate them altogether, especially when there is available less labor with which to do the work carefully than is needed. Can you give us your opinion in regard to this?—(Pennsylvania.)

We think your ideas are entirely sound.

**7. Probably safe to compost pearlwort sod.**—We have just finished stripping three of our greens here which were nearly covered with pearlwort. We intended making a compost pile out of it to top-dress fairways, but were afraid of it spreading from the fairways on to the greens. Will it be all right to use in a compost pile the turf which contains this pearlwort?—(Pennsylvania.)

We do not believe there would be any danger from using in the compost pile the sod which contains pearlwort. A few pounds of nitrate of soda added to the sod in the compost pile will hasten its decay, and it is probably advisable to use it. It has been our experience that all living material is killed in the course of a year in a compost heap.

**8. Unsuitability of iron sulfate in eradication of dandelions.**—We are informed that applications of solutions of iron sulfate are serviceable in the eradication of weeds. Our fairways are quite overrun with dandelions. Would you advise the application of this chemical to eradicate them?—(Ohio.)

We do not think you will find iron sulfate thoroughly satisfactory for the killing of dandelions. By ordinary methods of spraying it, the leaves are killed but the roots remain active. In putting greens it has been our experience that dandelions must be treated individually. Some prefer the acid method; that is, applying a drop of sulphuric acid to each root, and others prefer cutting them out considerably below the surface by means of a hand spud.—(See *Bulletin*, Vol. 1, pp. 25, 128.)