

group was the Pocono Turfgrass Assn.; others followed.

In a future issue of GOLFDOM we shall discuss the role of extension specialists in different fields and how they fit into the turfgrass picture. For the present, it has been my aim to tell, very briefly, how a county agent can be of great assistance to turfgrass groups if he is asked and is given a chance. He really does not have to know anything about turf — that he can learn. What he has is an office, a thorough knowledge of people and the ability to help people help themselves.

If you don't know your county agent take time to find out who he is, then go see him and invite him to come to the next meeting. He is a "good guy" to know.

Topdressing for Greens

Q. I'd like information about topdressing for greens. At our club we have a problem in that any topdressing we get contains the seeds of various types of weeds. Our club is not big enough to treat the soil before it is applied because of the expense involved. Is it possible to purchase soil which has been treated? (Me.)

A. It is my opinion that by the time you locate and purchase soil that has been treated for weed seeds, you will have spent more money than you would if you had treated your own soil in the first place.

There are two ways in which you can treat your soil at rather low expense. First, to each cu. yd. of moist topdressing add 13 lbs. of granular calcium cyanamid and mix them thoroughly. Let them stand for two or three months and you will find that practically all of the weed seeds have been destroyed.

Another way is to fit up a bin and treat the soil in the bin with Dowfume MC-2. Complete directions can be obtained from your local course supply house. By treating your own soil you will have the kind of topdressing you want. You will be sure it has no weed seeds and the expense actually will be less than if you purchased soil already treated.

Would Better Himself

Q. I am employed as Greenkeeper's helper at the X X X Club in N. H. I have worked here three years. I worked for two years at the X X X Club in N. H. I want to go further in this work, but I am at a disadvantage because I do not have either a high school or college education. Are there Correspondence Courses I can study at home to get a high school diploma? Do you consider this a feasible plan?

If so, what subjects should I take for entrance at a college that offers training for a turf manager? I realize that to qualify for a full four years of college I should have the required four years of high school. My idea is that if I can study at home I may be eli-

gible to enter the university to take some courses in turf management. The two courses where I have worked have given me the necessary experience to continue in this work. (N. H.)

A. With your experience and desire and excellent command of the English language, as shown in your letter, I believe that there may be a possibility that a high school diploma could be waived if you are able to pass a college entrance exam.

There are two possibilities open to you and one is nearby at the University of Massachusetts, Amherst. I suggest that you write to Dr. Eliot Roberts and get his advice.

The other possibility is Pennsylvania State University, where, starting this fall, there will be offered four eight-week terms of instruction in Turfgrass Management. The prospectus states that high school graduates 16 years of age or over are eligible for enrollment. Here again, I would make application for the course, stating experience and asking for permission to take a college entrance examination so that you might possibly take the course even without a high school diploma. This is somewhat irregular but I believe it would pay you to make application. It is possible that you could take some summer courses at some school near you that would enable you to get a high school diploma or the equivalent.

You Pronounce It

Q. What place, if any, does Mondo grass, (*Ophiopogon japonicus*) have for course use in southern Wisconsin? (Wis.)

A. None that I can think of.

Asks Soil Check

Q. Please analyze this dirt for me. Is it good topsoil? I have been using it on my greens and it is very expensive. Would appreciate answer. (Ohio)

A. I see no need for running an analysis on the soil because I do not believe it is the right soil for you to use on your greens. It is very high in silt (the fine, smooth, flour-like grey particles) which tends to pack tightly. It has low sand content.

I suggest that you locate a good grade of clay subsoil (subsoil has fewer weed seeds) from some of your Cincinnati hills. Find a good grade of coarse concrete sand and some peat and make a mixture such as this:

- 75 per cent sand (7½ parts by volume)
- 15 per cent clay soil (1½ parts by volume)
- 10 per cent peat (1 part by volume)

When you have this mixture made up put a cupful in a strong plastic bag (polyethylene), pack in a strong pasteboard box and mail it to me at PO Box 177, College Park, Md., for an examination.

Clover in the Bent

Q. We are having trouble with clover in our bent greens. Would you be so kind as to write us a letter or send some information on this matter? (Tenn.)

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Grau's Answers

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A. Clover in bent greens may be due to several causes. First, the bent that you have may not be well adapted to your soils or climate. If you have Seaside Bent I would expect clover as one of the natural consequences because Seaside Bent has a number of weak strains in it that permit clover to invade. Also, some of the strains in Seaside are very susceptible to disease and it is, first, the disease that weakens the grass and allows clover to invade.

The trouble may be in your soil conditions. If the soil is tight and dense and drains with difficulty it is possible that excess water that must be applied to keep the greens playable favors the clover rather than the bent. Clover is notoriously shallow rooted and can survive in a very shallow layer of soil if adequately supplied with nutrients and moisture. Getting rid of the clover can be done with chemicals but I wouldn't advise it until the causes for clover invading have been discovered and corrected.

One of the best ways to discourage clover is to "just grow grass." This is done by observing all basic principles of bentgrass management from the ground up and that begins with good drainage, good aeration, the adapted strain of bentgrass suited to the area, excellent management practices and adequate fertilization. Clover makes its own nitrogen and it can be discouraged by repeated applications of nitrogen fertilizers. In fact, this is one of the best ways to get rid of clover if all the other factors are favorable.

If you have a weak strain of bent it would be inadvisable to use chemicals for the control of clover because they could also discourage the bent.

Before I go further in making suggestions, I think it would be most helpful if you would sit down at your earliest convenience and give me an outline of everything we have discussed here in relation to what you are doing on your course — the kind of grass, management, type of soil, topdressing practices, watering, and everything else that you can think of. Then I think we can develop a good, sound clover control program for your conditions.

Disappointing Mixture

Q. I am the supt. at a club in Pennsylvania, at an 18-hole public course. I am very much disappointed with the bent mixture I have been using: $\frac{1}{3}$ Seaside Creeping Bent, $\frac{1}{3}$ Astoria and $\frac{1}{3}$ Colonial Bent. Would you please inform me what kind of grass to use on a 6,000 sq. ft. putting green, which has a base of crushed sand rock, 3 ins. of topsoil and 10 ins. prepared soil of 1-sand, 1-humus and 1-topsoil. (Pa.)

A. The bentgrass mixture which you have been using is not designed to give the highest quality putting greens. I strongly urge, if you

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