

OPEN LETTER TO GREEN CHAIRMEN ABOUT POA ANNUA

Dear Mr. Green Chairman:

This letter has been inspired by the many complaints which have reached us concerning the "bumpy" condition of the putting greens this spring and the large amount of *Poa annua* in the greens. We are writing to you because you are in the position of having to answer to the gripes of the golfers, whether you know the answers or not. You always have your superintendent who can tell you what is happening but, if you are a new chairman and don't know your superintendent well, you might have by-passed him unintentionally in the hopes of getting the answers from an outside source. We are taking the liberty of saying to you now:

"Please, don't try to get a commitment from the Green Section until you've gone over the problem in detail with your superintendent. Then, if there is still disagreement or if there is a need for certain points to be clarified, let the question or the request come as a joint effort of the chairman-superintendent team."

Please understand, we want to be of every possible assistance to our member clubs but we become terribly distressed when we are caught "in the middle" or when we are asked to inspect a golf course without a previous understanding between the chairman and the superintendent. If your superintendent has been encouraged (expenses paid) to attend turf conferences and turf field days, the chances are good that he can answer most questions on turf management every bit as well as we can and, so far as local conditions are concerned, a lot better. Please don't take this as a "scolding."

Now, let's talk about poa (we'll just call this pest *Poa annua* by the popular term "poa" to simplify things) for a little while so you will have a better background for answering the irate golfers who get a few bad breaks on their putts on account of bumpiness caused by poa. It doesn't do much good to heckle and

chide your superintendent by saying: "Such and such a golf club doesn't have any poa; why are we so full of it?" Chances are the other clubs in the area have just as much of it as you do and you can bank on it that your superintendent is doing the very best he can to provide conditions as nearly perfect as possible for your members. Remember, too, your superintendent is working with Nature, a fickle and unpredictable dame. The subject of turf management is partly science and partly art—never can it be reduced to cold, scientific, engineering-like terms.

Result of "Open Winter"

Do you remember the "open" winter of 1949-1950, when poa grew all winter and filled the soil with untold numbers of seed? Do you remember that the summer of 1949, and to a less extent 1950, was one of the worst for turf diseases and that the weakening of the turf by disease was just like a "come-on" sign for poa? Well, we are reaping the harvest now and practically every golf course is affected in greater or lesser degree. Those that are affected in a lesser degree have something for which to be thankful. Perhaps it can be laid to a basic program developed over a good many years which, in a large measure, has reduced the *Poa annua* in the fairways and approaches. It is inevitable that if fairways and approaches were practically solid *Poa annua*, the seed will be tracked onto the greens in large numbers by the feet of the players, and by machinery, wind, water and other means. If the turf is at all susceptible to the invasion of poa, there will be poa in the greens with the usual consequences.

The presence of poa in fairways is the result of a number of factors which are still being studied. One of the reasons why the Green Section has spent some ten thousand dollars in graduate research work at Penn State is to discover what are the factors responsible for poa coming into fairway turf and how can it be reduced or eliminated. At the present

time we make these statements but if we find that they are not correct we shall certainly change as soon as we are shown differently.

Close mowing of fairways which is demanded by the golfers today eliminates practically all of the turf grasses which are used commonly in fairway seed mixtures except the bents. Therefore, those fairways which have not been seeded regularly to the bents and managed for bents become pretty largely poa. The watering of fairways has increased the content of poa in most cases because we have not had the grasses that were strong enough to withstand the invasion of poa. Constant traffic on fairways has created a compacted condition of the soil which seems to favor poa and which seems to discourage the turf grasses which we plant. Fortunately, mechanical aerating and cultivating devices have been perfected which are correcting this basic situation. It is not true that the use of these aerating and cultivating machines has been the basic reason why we have so much *Poa annua* today. Courses that have not used these machines have as much *Poa annua* as those that have. Conversely, some of the courses that have been using the cultivating machines regularly have far less *Poa annua* than those that have not.

Obstacles to "Perfect Conditions"

Your superintendent certainly is not to blame because he has not been able to buy disease-resistant grasses that are tolerant of close mowing and able to crowd out poa. These "perfect" grasses simply have not been available. We are beginning to see the light, and find that some of the improved and superior grasses now being developed are able to hold their own against poa and will eventually replace it. There is a long row ahead of us before we achieve success.

Now let's get back to the putting green and discuss that angle for a moment in the relation to invasion of poa. There are a number of things your superintendent does to discourage poa, whether you know it or not. For one thing, he had been using arsenate of lead regularly

when it was available at reasonable prices. Today the cost is so high that with his limited budget he probably has stopped using it. We cannot justify a flat recommendation that arsenate of lead be used in sufficient quantities to control poa because there is not enough to go around.

Your superintendent has been paying very close attention to watering schedules so that only sufficient water is used to keep the greens in such condition that the minimum number of gripes are registered about "hard greens." In a way, it is extremely unfortunate that we have allowed the golfers to learn to like soft, mushy, spongy putting greens: It has, in a measure, ruined the moral fiber of the rank and file of golfers, because they have not learned how to play to a firm green. The softer a green is kept (and usually this has to be done with water) the more poa one can expect in the green. Excessive water tends to encourage disease, limits root systems, weakens the grass, and encourages poa, which loves lots of water, especially cold water. Put all these things together and it's no wonder we have a lot of poa in our greens today.

A few superintendents have used sodium arsenite regularly on their putting greens, which has almost entirely eliminated poa. The Green Section never has made and never shall make broad sweeping recommendations for the use of sodium arsenite on putting greens for the control of poa, simply because there are a few individuals who would misuse this good material and burn up a green or two, and we would be held responsible. It must be reported (as it has been reported before in the JOURNAL, June, 1948) that regular use of sodium arsenite on putting greens has resulted in the complete control of poa, clover, chickweed and almost all other weeds, including pearlwort, that normally infest bent putting greens. One of the big reasons why this material cannot be recommended generally is that every putting green is different, and a schedule of treatment would have to be worked out by the superintendent on his own course for each individual putting green. Many

Comb and Brush for Bent Greens



Ellis W. Van Gorder, Superintendent of Stanford University golf facilities, with his home-made device for keeping "grain" and "mat" out of bent putting greens. It has brushes fore and aft with a Del Monte rake section in the center.

greens are made up of South German mixed bent in which there is still a large percentage of velvet bent, which heals very, very slowly. There is a large percentage still of certain colonial types and many weak creeping types. Such a green must be treated for the weakest member in the green, otherwise there would be severe discoloration in those weaker patches and the membership immediately would want to know the reason for it and would not understand even if told. Therefore, we must learn to tolerate a certain amount of poa in such greens, and with skillful management it need not be too serious.

If your putting greens tend to be bumpy when the poa is growing at its greatest rate and before the bents have started to grow well, it is because there are scattered plants of poa. When the green is solid poa there is no bumpy putting because it presents one of the finest

putting surfaces it is possible to produce. In the case of a solid poa green, the difficulty is that if we get high humidity and high temperatures, before the poa has reached its peak, we may suddenly lose all of it through disease and so-called "melting" which, of course, calls for raised eyebrows. Fortunately, very little of this happens any more because of our improved knowledge of conditions and of turf management in general.

You can report to your membership that, in general, the poa situation is well understood, is well in hand, and bids fair to come under control within the foreseeable future.

Sincerely,

FRED V. GRAU

DIRECTOR, USGA GREEN SECTION

P.S. If the greens on your course are free of poa, won't you write and tell us how your superintendent has done it? We'd like to print it, and I know that lots of folks would like to read it.