

Suppressing *Poa Annua* on Longmeadow Fairways

by Leon V. St. Pierre, Superintendent, Longmeadow Country Club, Longmeadow, Mass.

We had one frustrating *Poa annua* season after another! By mid-New England summer, the fairways were decimated with dead *Poa* in spite of all our efforts to hold on. Ugly to look at and no fun to play, it was an annual blow to the membership's ego, pride and golfing enjoyment. Something had to be done.

In late August, 1966, Longmeadow Country Club decided to undertake a long range program of *Poa annua* suppression. We would follow a project similar to the one already in progress on a neighboring Massachusetts golf course, Belmont Country Club. Plans were made. Budgeting was approved. Materials were purchased and, in the fall of 1966 we started the long journey.

Fairway Overseeding—1966

Our first thought was to increase the permanent grass population on our fairways. Overseeding was accomplished after aerifying the fairways at least six times and verti-cutting them one time. A cyclone seeder mounted on the rear of a scooter was used for seed distribution. Fairways were then dragged with mats and finally mowed with old units to break up the clods and to firm the seed into place.

It is my judgment that this seeding program was largely wasted. The new seeds were simply lost by crowding and competition from the *Poa annua* crop during the spring of 1967.

1967 First Year of Full Treatment

The spring of 1967 was a late one with cold and wet weather predominating into May. On May 11 the first application of a 48 per cent tricalcium arsenate granular material was made at the rate of two pounds per 1,000 square feet to all fairway areas. A second treatment was applied in early June at the rate of one pound per 1,000 square feet. This provided approximately 1.5 pounds of actual toxicant per 1,000 square feet.

During the first week of August, all fairways were sprayed for broadleaf weeds as well as for knotweed. A combination of 16 ounces dicamba plus eight ounces of MCPP was applied for each acre. Two weeks later we aerified the fairways six times and again followed with a vertical mowing operation to a 1/2-inch depth.

Fairways were then overseeded with a mixture of 28 pounds of Astoria bentgrass, eight pounds Seaside bentgrass and four pounds of Penn-cross bent per acre.

This seed mixture was purchased in the spring of 1967 when the price of Penn-cross was down. However, our second lot of seed was ordered when the price of Penn-cross was prohibitive for us and we altered the mixture to 70 per cent Astoria and 30 per cent Seaside bentgrass. We therefore used two seed mixtures on our fairways. We have since learned that it is better not to use Penn-cross on fairways, even if the price of seed is in line. The reason for this is the rapid thatching nature of Penn-cross.

It was felt that liming was not needed on the fairways at this time and fertilizer types such as 20-0-10 and ammonium sulfate were used to bring the pH level down, thereby favoring bentgrass development.

The 1968 Fairway Program

As we went into our second year of fairway improvement, an application of tricalcium arsenate was made to all fairway areas at the rate of four pounds per 1,000 square feet on May 1. A second application was applied on May 26, 1968, at two pounds per 1,000 square feet. The next 30 days were followed by cloudiness and rain. The poorly drained areas and swales lost all of their grass cover and remained in this condition until late summer. The soil structure here varies from Windsor sand (a droughty soil) to Scantic silt loam (a heavy textured, poorly drained soil).

Some knotweed found its way back on fairways by mid-July. Therefore, during the last week of July and the first part of August, we sprayed for control of knotweed with 16 ounces of Banvel D-4S and eight ounces of Mecopex per acre.

On August 6, 1968, we began our third season of overseeding. The same process of aerification and vertical mowing was followed. Again, Astoria bentgrass made up 70 per cent of the mixture and Seaside bent the other 30 per cent. This mixture was applied at the rate of 40 pounds per acre. We had a marvelous catch of seed this time. As the overseeding program

progressed, the areas needing overseeding continually grew smaller and smaller.

The 1969 Program

The first application of tricalcium arsenate was made to our fairways on April 29, 1969, and again at the rate of four pounds per 1,000 square feet. The summer was sunny and cool. An application of ammonium sulfate was made on May 27 at the rate of 100 pounds per acre.

We then experienced over 21 days of cloudiness and rain that produced vast areas of dead grass caused by wet wilt. To overcome this, the aerification and vertical mowing programs were started on August 21. The same seed mixture of Astoria and Seaside bentgrass was used at the rate of 40 pounds per acre and matted in at the time of seeding. As in the past, the fairways were mowed with old units in order to break up the soil cores and sod clods. An irrigation after the mowing operation helped to settle the surface contours and provided moisture for the germinating seedling.

To sustain the newly developing turf, a 21-0-10 fertilizer was applied on September 11 at the rate of 110 pounds per acre. Unfortunately, germination and growth of these newly seeded areas did not appear to be as rapid and aggressive as it was in the preceding years.

OUR CONCLUSIONS

Our program is now going into its fourth year. Personally, I am very gratified with the results. We no longer find it necessary to cool off the fairways with light syringing even on the hottest summer afternoons. I feel it is essential for this program to continue. It started as a 5-year undertaking and we have one more year to go. After this goal is achieved, I believe that a light yearly application of a *Poa annua* suppressent material will be necessary.

The cost of a *Poa annua* suppression program can be part of a regular golf course maintenance budget without too much of a strain to the average country club. The following breakdown of materials will illustrate our costs for one season:

Tricalcium arsenate—400 bags	\$2,800.00
Dicamba—6 gallons	200.00
Mixed bentgrass seed	2,500.00
The Aero-blade (including seeder)	1,500.00
Total	<u>\$7,000.00</u>

The most difficult part of this type of program is not financial. The most difficult time comes when the *Poa* starts to fade away in mid-summer and with it the pride and golfing enjoyment of the membership. It is a 5-year program at best, but well worth the patience!

SUPER SAM by Paprocki

THE BOSS SAID HE
DIDN'T WANT TO SEE
ANOTHER
STRAIGHT
LINE ON THE
COURSE

