## COMBATING ANNUAL BLUEGRASS WITH CREEPING BENTGRASS

By Wolfgang Mueller, Supt.

Over 90% of Onwentsia's grasses consist of Bentgrass. This percentage has been achieved during the past six years by the undertaking of a specific program.

Our first step was to install, up to the present, over 12,000 feet of drain-tile, with approximately 6,000 feet to be completed over the next two years. The feeder lines were selected, depending on location, from 6 to 12 inches and the main lines from 15 to 18 inches of perfurated, galvanized steel piping. All piping was backfilled with a cover of at least 10 inches of pea gravel.

In conjunction with our extensive drainage program we started an over-seeding project with Seaside, Astoria and Highland Bent. We began the overseeding program in May, 1972 at the rate of 75 lbs. of seed per acre. The seed mixture consisted of 25 lbs. of Seaside, 25 lbs. of Astoria and 25 lbs. of Highland Bentgrass, all certified seed material. The seeding was accomplished with the use of a Mc-Cormick drill seeder. Unfortunately, the overall results of this over-seeding were disappointing. The new seedlings had to compete with the existing Poa Annua and extremely wet ground conditions due to heavy rainfalls. I realized then that timing was the most important factor in this particular over-seeding program.

Our next strategy was to take advantage of the weak conditions of the Poa Annua in the end of July and early August to aerate all our greens, tees and fairways, and over-seed them at the rate of 60 lbs. per acre with certified Seaside Bent only. This time our efforts were rewarded with good germination and strong seedlings.

We repeated the same process in the two following years at the rate of 30 lbs. of certified Seaside Bent per acre, keeping in mind the correct timing, that is, end of July and beginning of August.

The next three years we limited ourselves to aerating the greens, tees and fairways, at the time the Poa Annua is at its weakest (again end of July and beginning of August for our area). It had been our experience that to aerate at any other time would only promote the Poa Annua's reseeding.

In our program we are on a low fertility regime, consisting of approximately 1.2 lbs. of actual Nitrogen for fairways and approximately 2 to 2 1/2 lbs. of actual Nitrogen for greens and tees. We apply approximately 120 lbs. of Potash per acre every other year.

Due to our existing water sources and system our water practices are very limited. Unlikely as it seems, I believe this is a major factor in the success of our bentgrass, since water loving Poa Annua is not able to survive under these conditions. Even during very hot and dry periods we only water our greens and tees once a week. Our fairways are watered every ten days, due to the fact we can only water four fairways a night.

We also are on a preventive fungicide program and spray our fairways approximately four times a season. We spray our greens and tees every second week.

Furthermore, we keep our greens cut a 1/8", the tees are cut at 3/8" and the fairways are cut at 5/9". This height of cut provides good playing conditions and does not allow the Poa Annua to flourish.

I would like to share with you a letter written 50 years ago, that seems to bridge the span of time and methods and fully endorse our less than revolutionary approach to the Poa Annua problem. The letter is addressed to the Bulletin of the United States Golf Association Green Section, Washington D.C., and publish in Vol. 7, Vol. 9.

I quote: "Gentlemen,

In reference to Poa Annua in putting greens.

We have two greens of bent of the Inverness strain. These two greens have been a great disappointment but have improved as Poa Annua came in.

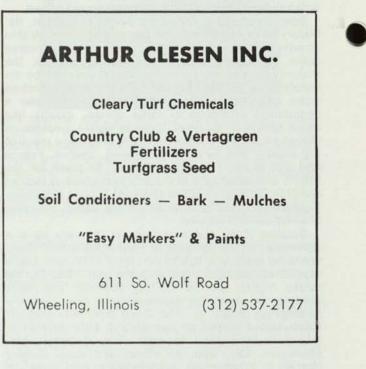
We have several old greens, seeding in 1921 with the good Lord knows what, but with considerable clover, and these also have improved as regards putting as they have been invaded with Poa Annua.

At present we have six creeping bent greens of a good strain. We will have nine or ten more greens next year of the same strain of bent.

While Poa Annua has improved the putting qualities of the old greens we do not think that they compare with the new greens. Therefore we are fighting out all Poa Annua from the good bent greens.

What we do is cut it out with a hole cutter just as soon as we see it, and replace with a plug from the bent nursery. From thirty to fifty plugs are needed to keep a green clean of Poa Annua, chickenweed, etc., most of the plugs of course being used during the spring and early summer.

> Spencer M. Duty The Canterbury Golf Club



## SMILE

"It happens in a flash, but the memory of it lasts forever, it cannot be begged, borrowed or stolen, but it is of no earthly good to anyone until it is given away. So if in your hurry you meet someone who is too weary to smile, leave one of yours, for no one needs a smile guite as much as he who has none to give!"

"It takes only 17 muscles to smile ... 43 muscles to frown. Conserve energy."

