

# TURFCOMMS



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**PURPOSE:** To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

## ARSENIC PLUS RUBIGAN FOR POA CONTROL

Sometimes, especially in this profession, we encounter problems that require extraordinary measures if we are to deal successfully with these problems. Such has been the case at LaFortune Park Golf Course in Tulsa.

Poa (annual bluegrass) reduction in bentgrass is probably the most challenging situation facing Superintendents who have the responsibility of managing aged bentgrass greens. When I came to LaFortune in 1982 we were faced with greens that had been devastated by a combination of pythium and Poa loss. Most greens had no more than 50% turf coverage. I came in with the knowledge that I could not close greens for any substantial length of time. Due to our extreme dependency on revenues generated, the course had to remain open although playing conditions were greatly deteriorated. We immediately used what was left of our putting greens and put 6" plugs on 12" centers and overseeded with Penncross bentgrass. As you can imagine, this led to a great deal of Poa re-establishment.

We initiated a Poa reduction program that, while using all available research as a guide, was largely trial and error. Hopefully some will benefit by the sharing of some of our successes and failures. We all would prefer to learn from someone else's mistakes rather than our own.

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We initiated an immediate program of overseeding twice annually with Penncross bentgrass(our greens are Penncross). We discontinued this program when research indicated that this was not profitable due to suppression of bentgrass germination by the gasses put off by the mature Poa annua plants. In retrospect, from the results I have observed with bentgrass coming in from aerification holes, I feel that this was a profitable undertaking. This does require delayed pre-emergent applications, and should be carefully considered before implementation.

When this method was abandoned, we initiated a program of arsenic applications. We began using tri-calcium arsenate in the fall of 1984. This worked pretty well during the fall application, but the next scheduled application in the spring of 1985, didn't go nearly as well. We experienced extreme difficulty with the product clogging spray nozzles. With the cooperation of both our local representative and the manufacturer we attempted to use two different batches. The problem persisted and we abandoned tri-calcium arsenate in favor of Rubigan.

We did, while changing to a Rubigan program, switch to lead arsenate in order to achieve and maintain an arsenic level that will aid in Poa reduction. We feel that this arsenic level may have aided in the reduction effect of the Rubigan. I have talked with other superintendents who have established arsenic levels in greens, and who saw this same effect when Rubigan was applied. Existing arsenic levels should be taken into consideration when deciding whether to use Rubigan, and at what rates to apply it.

You are now aware, that we were very determined to find a solution to this very trying problem. I feel that to attempt a program of this magnitude and possible consequences, you must be prepared for the worst scenario, while hoping for the desired results. We instituted an aggressive Rubigan program in the spring of 1986, with the following results.

Due to previous experience (when Rubigan was under an experimental label)we didn't feel that it was practical for us to reach an accumulative rate capable of Poa reduction. We had also experimented with a one time, two ounce application, with very limited success. I feel that this lack of results may be tied to the poor construction of our greens, but I can not substantiate that opinion. Our greens are constructed of a clay material.

We decided to apply a one time three ounce application. Our Director of Golf and Parks Director were made fully aware that this was risky and that at very best we would need to institute an aggressive program of plugging out areas where the Rubigan eliminated solid stands of Poa annua. It was explained that it

was possible that as many as five of our greens could be lost when the Poa was taken out. It was decided that this represented our best option, considering our unique situation. The program has been quite successful in Poa reduction. We have seen a 60-70 percent reduction in one season, while two of the greens with extreme Poa content have had to be resodded. It also produced some bumpy putting surfaces and thin greens for a period of 3-4 weeks. We replaced as many as five hundred 6" plugs in some greens. One undesirable side effect of this program was acid stomach and sleeplessness experienced by this superintendent for several weeks during this time. But I feel that it was worth the anxiety.

The greens have since healed nicely and provide the most uniform putting surface we have had during my tenure here. We plan to repeat this procedure in the fall in our continuing effort to provide the best possible putting surface to our golfers.

While this program is aggressive and is not for the meek, I believe it has its place. The meek may inherit the earth, but when they do they'll be hardpressed to find a golf course superintendent among them. I would heavily stress the need for education for your greens committee, or employer, and your membership. As we are all (sometimes quite painfully) aware, no matter how well a program works on turf, without the support of those mentioned, it is doomed to failure. But because of our program of education of those mentioned, we have achieved very substantial Poa reduction. We have also managed to avoid the hostilities that almost certainly would have developed if we had instituted this program arbitrarily.

The decision is yours. Is a program this radical for you?

Rick Barnett, Golf Course Sup't.  
LaFortune Park Golf Course  
Tulsa, Oklahoma

From the Editor:

Rick Barnett is not an ordinary superintendent. He dares to walk where others have not tread. He does so with gusto. He could well have invented the phrase "nothing ventured, nothing gained". He took over a golf course in poor condition and turned it 180° in a very short time.

He has had yours truly scared a number of times. I'm too conservative. I'm not recommending his program above, but he made it work. In Tulsa as in most places Poa annua is an undesirable plant. Rick got rid of it and replaced it with bentgrass. You can to if you'll go for the gusto.

## WINTER COMETH

In the next few issues we will have several articles on the subject of winter preparation. Hopefully some of the articles will help you reduce winter traffic damage.

### ALTERNATE GOLF COURSE LAYOUT:

It is not that unusual for golf courses to have temporary (I prefer the word "alternate") greens under certain conditions. Why not consider an alternate layout for those persistent winter golfers? The USGA Green Section suggested this approach in a Golf Journal article in March of 1974.

The course should be laid out avoiding use of tees and greens. It should be of a shorter length than the regular layout. It may very well play from one fairway to the next. There is no reason the first hole in the "winter course" has to play down the first fairway. But the first hole should start near the men's locker room or the proshop as that is probably a normal meeting place. Or right off the parking lot if the clubhouse is closed in the winter time.

You will need to sell the idea. You should consider roughing it out now. Then take the golf professional and your green chairman out around the proposed layout and let them offer suggestions. It will give both a chance to do some designing. You need to go with them and remind them of various problems that might be encountered with various suggested hole locations. Remember the object is exercise not finesse in winter therefore use as much of the rough as possible to lay the winter course out and leave tees, greens & fairways for in season play.

Winter greens can be prepared by overseeding a 2000 square foot area with perennial ryegrass. You will need at least 15 pounds of seed/1000 and a good heavy topdressing on the seeds will both assist germination as well as provide a smoother putting surface. You will need a cup and flag on greens as well as tee markers for tees. You will need to mow greens some thru the winter depending on your location.

Nine such holes may satisfy your winter crowd. A well designed layout can be a welcome change. I know one very exclusive country club whose membership was provided with such a layout when the regular greens were redone. Most of the membership enjoyed the course laid out by the golf professional and superintendent. It was a much better alternative for them than not playing golf at their club.

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