



## HOLMES CORNER

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It's been one turf conference after another since the beginning of October. I definitely have been impressed, this year, with the improved caliber of these conferences.

It was pointedly brought out at the Midwest Clinic that golf course superintendents who currently have automated irrigation are definitely in favor of this relatively new innovation and those who do not have automation are interested in obtaining same.

I thought the talk Frank Dobie, golf course superintendent, Sharon Country Club, Akron, Ohio, gave was especially interesting. To my knowledge, the irrigation system he has installed is the most sophisticated in the northern part of the U.S. Indeed, Frank gave an excellent talk and it was obvious from the audience reaction that we were all impressed. I have attended the Midwest Conference for the past 10 years and this was the most informative yet.

As always, I thoroughly enjoyed visiting with the Minnesota golf course superintendents at their 40th annual turf conference held at the Normandy Hotel. It was a great privilege and pleasure to visit again with my old friend Emil Picha, who is recovering from major surgery. Here again, the highlights of the conference centered around watering systems, with automation receiving the lion's share of interest. Jerry Murphy at Somerset Country Club has recently installed an intriguing system and Dave Streater at Oak Ridge Country Club is currently installing an identical one. I will be interested in observing future results with this type of automation. Dr. Ray Keen from Kansas State University gave an excellent talk regarding soil mixtures for use in putting greens which he followed with a pictorial run-down of a turf trip through Scotland. Dr. Keen would make an excellent speaker for the Midwest program sometime in the future.

A superb talk was given at the University of Illinois by Mike Healy, who has recently earned his Ph.D. degree. Dr. Healy was able to prove that various disease-causing fungi, primarily *Helminthosporium*, *Fusarium* and *Curvularia* were more damaging to fine turfgrasses, namely bentgrass and *Poa annua*, if gutated water which contains glutamine were present on leaf blades. Further, presence of water-soluble

nitrogen in soil is definitely a factor in the production of glutamine. In my opinion, this is just the beginning of this work and more information will be available in the future.

The Wisconsin turf conference centered entirely around the science of soil physics, primarily that of the green. In my opinion, this was an exceptionally sound conference and I am patiently awaiting the conference summary, forthcoming from the Sewerage Commission.

While attending the monthly meeting at Beverly last October, I had the opportunity to discuss the fairway program with Ted Woehrle. The following may be of interest to those who are attempting to encourage bentgrass in fairways:

In 1966, Ted decided he was tired of fighting *Poa annua* and with the sanction of the membership initiated a program whereby various strains of bluegrass were to be encouraged in fairways. Therefore, in August, 1966, he applied calcium arsenate at a rate of 4 pounds per 1000 square feet and drilled-in a mixture which contained 25% Merion bluegrass — 25% Delta bluegrass — 25% Newport bluegrass — 25% Park bluegrass, at a rate of 20 pounds per acre. In mid September, calcium arsenate was again applied at the 4 pounds per 1000 square feet rate and the same seed mixture broadcast-sown. Height of cut was raised to 1 inch and the watering program was adjusted so that fairways were not watered more than 3 times a week with a relatively large amount of water each application. At the inception of this program, Ted estimated that his fairways contained 90% *Poa annua*.

In the spring of 1967, *Poa annua* came on strong but began to fade in June. The Western Open Tournament was to be held later in the summer, so when *Poa annua* began to yellow-off later in the year, Ted spray-applied liquid phosphate as necessary to keep *Poa annua* green. Other than this, phosphorus has been applied at Beverly for the past 6 years. No calcium arsenate was used in early 1967, but it was applied at a rate of 2 pounds per 1000 square feet this fall. Ted reports that calcium arsenate will be used for spot treating, as necessary, in areas where *Poa annua* continues to be a problem.

During the fall of 1966, bent came on strong and continued to spread. This fall, Ted has aerotilled and overseeded with a mixture which contains 90% Merion bluegrass — 10% Seaside bentgrass. In the future, Ted believes he may seed with straight bentgrass. In December, 1967, Ted estimates that fairways at Beverly C. C. are 90% bentgrass.

It would seem that, by and large, we are maintaining for *Poa annua* rather than for bentgrass. But, if frequency of water is reduced and surface drainage is assured and a chemical *Poa annua* control is applied, bentgrass can be grown.

It is of special note here that calcium arsenate can not be used unless surface drainage is rapid. If water lays for any length of time, especially during periods of high heat and humidity, after calcium arsenate has been applied, soil is likely to become sterilized. Ted says he makes it a definite point to bring to the attention of anyone desirous of trying this program that if the surface drainage is not rapid and assured at all times, under no circumstances should calcium arsenate be used. Anyone interested in this type of program should discuss this further with Ted Woehrle.

This year I plan to attend the conference and show in San Francisco and hope to see you all there.