# Wisconsin Turfgrass Greenscape Expo '96 HIGHLIGHTS

By Tom Parent River Oaks Golf Course

If you're looking for educational opportunities close to home, this is a good one. The WTA winter conference is run in a similar manner to our fall conference with sessions for golf, lawn and landscape and public grounds management. There were many speakers which I had not heard before and lots of useful information. Here are some things we need to look for in Minnesota.

## **Pythium Root Dysfunction**

This is a disease of newly established bentgrass turf.

The symptoms: Dead turf and lots of it. Reseeding fails until fall or cooler weather. Duration: worst in first year, over by the third year.

Cause: A complex of root infecting organisms of which pythium sp. are always present. A lack of digestible organic matter in the mix allowing for the unrestricted growth of the pathogen(s).

Cure: Wholesale death of turf supplies organic matter to soil which builds biological diversity in the soil and prevents further infection.

Prevention: Avoid stressing plants in first year. Keeping height of cut no lower than 3/16 in a normal year will reduce or prevent the expression of symptoms. Using microbial amendments and organic fertilizer?

The message given over and over by all the speakers was if you wanted them to help us we must first help ourselves. There was a collective shaking of heads at the simplicity of solving most of our problems especially the ones that are so called "New diseases." Cut our grass higher and don't starve it. Until we start smelling the coffee, I had the impression that they lost respect for our profession and were tired of trying to fix the impossible.

#### **Soft Spikes**

There was overwhelming evidence of the value of soft-spikes on green speed, improved roll, turf quality and reduced disease. In speaking with superintendents from clubs that have switched, they were universally positive with members strongly enforcing the rules due to improved playing conditions. Perhaps this is an area in which we can work with the MPGA and MGA to start an educational campaign and a target date for voluntary conversion statewide. If a lot of courses convert all at once, the impact to the golfer who plays many courses could be lessened.

### Cut Worms

Chris Williams, a researcher at the University of Kentucky, conducted some detailed research of cutworm's eggs on greens (endless hours of lying on a green counting eggs). He found that almost all the eggs laid on the green were removed during mowing. His research suggested that the cut worm infestations came from grubs migrating in from up to thirty feet off the green. Although this was only the results from one year of study, the tentative conclusion he reached was that we should be conducting our IPM sampling in a 30-foot radius surrounding the green. Then, if necessary spray only the areas surrounding the green as needed. This would lower golfer exposure to pesticides and perhaps be more effective. Also clippings should be spread no less than thirty feet away from the green as the cut worm eggs survive the mowing process. Worth a try?

### **Root Zone Mixes**

At the O.J. Noer Turf Research Center, studies were conducted using different types of bentgrass cultivars: upright growth: Chrensha, low growing: Penncross, etc. and management practices, simulated: Daily Fee, Private and Championship. The management practices were varied by the height of cut and mowing frequency. These studies were conducted under simulated wear conditions on both native soil and USGA greens. Under 1995 strenuous conditions there was no significant difference between the turf quality on the USGA green and the native soil green. The only significant differences occurred between management practices, i.e. height of cut or a combination of management practices and cultivar.

#### Hydroject

Extensive field trials using high pressure water aeration over several years show improvement in percolation and compaction relief. The study compated the hydroject at: one week and three week intervals, core aeration spring and fall with and without routine hydroject aeration and a control with no aeration. The study showed there was a loss of root mass with all of the aeration schedules. In all but the weekly hydroject schedule the treatments resulted in improved turf quality. The loss of turf quality with weekly aeration was due to the excessive destruction of root mass. Future research will be conducted to see if spring core aeration can be eliminated by routine high pressure water aeration without loss of turf quality.