receive the John Nichols Memorial Scholarship for my first year at the university. My golf course experience includes working at the Tournament Players Club at Eagle Trace in Coral Springs, Florida, for three years and one year at Lake Geneva Country Club in Lake Geneva, Wisconsin. I am truly looking forward to my next years at the UW-Madison and reading "The Grass Roots".

## SPRING BUSINESS MEETING — REVITALIZED!

By Mark Kienert

Was it the weather? This year on a particular day or last summer in general that brought 102 WGCSA members out of hibernation?

A record number of WGCSA members attended the 1988 spring business meeting which featured a morning educational session. Over 100 people made the trip to Fond du Lac. An even bigger surprise, to most past and present members, was the number of members in attendance that stayed for the actual business meeting! Those who took in the full day of activity realized it was time spent really well.

To get things off and running, Wayne Otto opened the morning educational session with his thesis on 13 years of sand topdressing and the related problems. He emphasized his return to aerification and overseeding with bent-grass in the process. Otto predicts a return on the use of the power spiker to open up the surface and to break layers formed, thereby creating a space for more sand. If you decide to use sand, you must start early in the year to avoid layers and the topdressing should be heavy enough when applied to equal the growth rate.

Jerry Kershasky gave a review of his literature review of phosphorus deficiency associated with cold weather. Jerry's slide presentation gave vivid proof the the "Purplish Hue" that covers the entire putting surface on many of his greens. Nutritional deficiencies were concluded after the appearance of fairy rings which appeared in green crescent shapes across much of the putting surface. Jerry recommends the use of Mono-Ammonium Phosphate at the quarter pound rate when the air temperatures are at or below the 50° mark.

Of particular note to those not attending the GCSAA International Turfgrass Conference and Show held this year in Houston was Jerry's review of the Black Layer Forum. As a review, for a black layer to form you have to have 1.) anaerobic conditions; 2) an electron donor, either through a "Surface Algea" donor or ammonium or sulphur fertilizer products; 3) lower pH's associated with sulphur use and; 4) sulphur reducing bacteria. It was the consensus of the panel that a program to halt the Black Layer includes 1) hand watering; 2) return to aerification practices; 3) the use of mono-ammonium phosphate; 4) the use of potassium nitrate fertilizers, which will add five free oxygen molecules to the soil profile

University of Wisconsin soil scientist, Dr. Wayne Kussow, reviewed his fertilizer management programs for putting surfaces and encouraged a late season fertilizer application approach. He suggested that turfgrass has a memory, so treat your bread and butter with a little TLC. In tune with green fertility management, Dr. Kussow advised against the practice of green speed management through the reduction of season nitrogen applications. Also, avoid nitrogen application to heat stressed turf since the plant has already increased plant tissue percentages of nitrogen. Always culturally do whatever it takes to increase the turfgrass plant verdure, since it increases nitrogen recovery. Dr. Kussow sees the day when we use plant tissue analysis as a basis for our nitrogen applications.

Comments concerning the phosphorus role in increasing *Poa annua* populations were somewhat refuted by Dr. Kussow. His research has shown that plant tissue concentrations of phosphorus increase with each nitrogen application made. He recommended maintenance levels of phosophorus from .5 to 1.5 pounds/M/season.

With regard to potassium levels, increased nitrogen rates also increase the level of K found in plant tissue. He recommended a rate of 3-5 pounds/M/

year or on a 1:1 ratio with nitrogen. Dr. Kussow made one recommendation that will help the plant cope with moisture stress. It has been proven that lowering the height of cut and increasing the frequency of mowings per week reduces the canopy. A reduced and less dense canopy reduces water loss caused by air currents.

Blackwolf Run golf course superintendent, Marc Davison, presented an excellent slide show depicting the construction and growing-in problems associated with new course construction. He gave many in the audience their first glimpse of this exceptional golf course soon to be born in the state.

Red Roskopf, golf course owner and WTA Director, reviewed for the group the statewide fund raising efforts underway to construct a research facility on the new UW golf course. The ambitious, yet attainable goal of the WTA to open the O.J. Noer Turfgrass Research Center by the year 1992. Red asked all in attendance to start programs, both individually and with their clubs, to support this worthwhile endeavor. He mentioned that the new pesticide regulations have sparked new interest in the lawn care industry around our state to help us in fund raisina efforts.

Highlights of the business meeting included a one year freeze on the dues paid by Class E members and the creation of a panel to review this process.

THE GRASS ROOTS will once again be delivered to us via First Class Postage. This expense will be picked up by the association.

The WGCSA adopted a three year pledge of \$20,000 to help with the construction of the new research center. And finally, the bylaw changes pertaining to our tax status, as drawn up by the IRS themselves for organizations like the WGCSA passed without question.