

## EDUCATION RECAP

Charles Anfield, CGCS, *Heritage Bluffs Golf Course*

# March 2009



(L to R) Ty McClellan, Dr. Megan Kennelly, Keith Rincker and Dr. Derek Settle.

*The March MAGCS meeting was held at the Midwest Golf House in Lemont, Illinois. I hate to harp on the same topic, but that place is so nice for educational meetings with its stadium seating, comfortable adjustable chairs and a great stage, top notch. "March Education Madness" featured a lot of "technical stuff". I'll try to summarize the presentations but you really needed to be there to get the full effect. This was the third year of spring presentations of cutting edge turfgrass research that you requested. Some of the research work was done at the Sunshine Golf Course. Derek and the CDGA Staff are looking for ways to improve your turfgrass management through better/faster/cheaper methods of controlling diseases, stress and helping with overall growth.*

"Moss Madness" started the day featuring Megan (pronounced Meegan) Kenelly of the Department of Plant Pathology from Kansas State University. Her studies were conducted at courses throughout the Kansa City, Missouri area.

What is moss and why is it so hard to control? Silvery Thread Moss (our main culprit) is a Bryophyte and lacks a vascular system and chlorophyll. Moss reproduces with spores and favors moist conditions. The spores are transported by water and by fragments or little chunks. It can also grow in hot sunny locations and can withstand extreme desiccation and temperatures above 100°. It's found throughout world. Typically moss is found in locations of low mowing heights, scalping, low fertility, shade and poorly drained sites.

Megan tested soaps, oils, copper, baking soda, iron and copper fungicides. She discovered there is little published on moss control. A summary of her results:

- Junction fungicide. Yes it works, but be wary of copper in the soil that can build up and induce iron chlorosis.
- Daconil fungicide. Yes, sometimes, but it is labeled for algae, not moss.
- Quicksilver herbicide. Yes but repeat applications are required and timing is important to help the bentgrass colonize the moss encroached areas.
- Baking soda. Yes. Her label rate is 6 oz/gal water. It can cause some discoloration.

Her research indicates that cultural practices such as higher mowing heights and more frequent use of nitrogen can play a big part in moss management.

Dr. Derek Settle of the CDGA made his presentation on a USGA Biostimulant Study titled "Evaluation of Cytokinin Plant

Extract Biostimulants, Iron, and Nitrogen Products for their Effects on Creeping Bentgrass Summer Quality". Derek's goal of the study was to present an "unbiased assessment of organic products containing cytokinins". Six products were evaluated for growth and color.

A biostimulant is a broad term often referring to one or more of broad range of ingredients, nutrients, organic acids, hormones, vitamins, microbial inoculants, plant extracts and other additives. It is very difficult to quantify the effects of each specific product so the ratings were measured by visual quality 1-9 and by using the NDVL (Normalized Difference Vegetative Index). The NDVL is an electronic device that uses light to measure biomass.

Spoon feeding has been around the 1960's and before. The goal has been to maintain a steady and consistent growth. Derek applied the different products at two week intervals.

More specific information on the results of his study can be found at: <http://usgatero.msu.edu/v08/n01.pdf>

Keith Rinker of the CDGA made his presentation on "Fungicide Programming for Dollar Spot Control on Bentgrass Fairways".

Dollar Spot is the #1 disease in golf course turf. Seasonal changes can vary the amount of dollar spot pressure. Spring dollar spot is usually not as damaging because turf growth is more vigorous. Fall dollar spot can cause more foliar damage and leave lasting scars into the winter.

Keith's study was to compare the effectiveness of different fungicide programs and on a cost per acre. Products were

*(continued on next page)*

varied as were the rates. Labeled fungicides were compared with off label fungicides. Systemic products were compared with contact products. Preventative programs were compared with curative programs.

The four programs reviewed were:

- Coyote Run
- North Shore Country Club
- CDGA "Bookend"
- Dernoeden 3 Way 21 Day

Dr. Megan Kennelly came back after lunch to make her presentation on Nozzles and Dollar Spot Control.

Some of the nozzle variables are: spray patterns and droplet sizes. Her ideal pressure flow rate is between 30 to 60 PSI. Her 2007 Test Study indicates there is less disease control when using certain nozzles. She found that using certain carrier volumes had similar results of being more or less effective.

Ty McClellan from the USGA made his presentation on "Practical Applications of the USGA Trufirm Testing Device". The USGA was looking for a way to test greens and bunker sand and quantify overall firmness with the objective to predict ball response, measure for consistent roll, eliminate or identify extremes, and determine/track progress of corrective maintenance practices.

The tool works by raising and dropping a hammer device into the desired surface. The design of the tool is simple. Penetration is a direct measure of firmness. It is equipped with an accelerometer. The data is measured by impact and stored directly via computer link using GPS for specific locations. The data is downloaded and stored to a laptop for printing.

The tool will be used at all USGA events, PGA Tour events and TAS visits. There is some fear it may become like the stimpmeter. Club A is thumping .35 and Club B is only thumping at .47! Oh oh.

Ty indicated more research is needed to quantify affects and to provide the most useful information a Club can use. Don't worry; the cost (\$8700) may discourage your Green Chairman from running out and purchasing a unit.

Another great education event was put on at the Golf House. Much of the information was very technical and you really needed to be there to the full impact of the Power Point Presentations complete with graphs, charts and question and answer sessions. This is good stuff! **-OC**

*(continued from page 5)*

company that supports the GCSAA. I'd like to think that the MAGCS's numbers are comparable to this.

Our industry partners play an important role in ensuring the growth and success of the profession of superintendent. The efforts of the Partnership Task Group are now focusing on new and creative ways for the MAGCS to recognize those industry partners who have provided significant support to the association. Their investments make it possible to provide MAGCS members with the programs, services, and research that advance the profession and the industry. In turn, sponsoring partners have the advantage of year-round exposure through a variety of communication vehicles and events.


Associations perform best when members are connecting on a regular basis. Don't fall into the trap of becoming "dissociated" or "unconnected." Come to monthly meetings on a regular basis; take advantage of educational events; and golf with someone new! Active participation is an essential component of making CONNECTIONS that begin to form PARTNERSHIPS, and strong PARTNERSHIPS make strong ASSOCIATIONS. Please join me in thanking our industry partners and make an effort to support the companies that support our association. **-OC**



**Bayer Environmental Science**

John Turner  
Sr. Sales Specialist - Golf

Tel: 630-443-7807  
Fax: 630-443-7839  
Mobile: 630-215-6110  
john.turner@bayercropscience.com



PEA GRAVEL  
BUNKER SAND  
TOP DRESSING SAND  
BOULDERS AND RIP RAP  
ALL GOLF COURSE AGGREGATES

**Richard E. Mika**  
mobile (847) 514-9761  
office (847) 228-9607

**OLD DUTCH  
SAND COMPANY, INC.**