



Musing the Minutes

By Rick Traver, Jr., CGCS
Monticello Country Club

Turf-

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with an impermeable cover. Not doing so will potentially cause you significant problems in the spring dependent upon soil types!

Q3: What happened with the weather?

+ Looking through climatological data for the Twin Cities Metropolitan Area (TCMA), November ended with 4" of snow cover and temperatures hovering around freezing. This snow eventually melted in early December.

+ An inch of frost initially developed around November 25. This increased to 3 inches the first week of December. The ground thawed around December 15 before refreezing the 25th.

+ We had an additional 9" of snow which melted in mid-December.

+ Air temperatures warmed up, from December 15 through January 3, where 17 of 19 days, the daily high exceeded 32°F.

+ Remember, the snow melted and was gone in mid-December and did not return until January 24, 2004.

+ Temperatures declined dramatically after January 3 and we had our coldest temperatures for the winter during the last week of January (daily highs below zero).

Uncovered Poa greens were injured dependent upon retained snow cover, biotypes of poa present, snow/ice melt drainage patterns and exposure to the elements.

Poa death on native soil putting greens seemed to be most common amongst a large group of superintendents who used an impermeable greens covers. Another similarity was wet soil. Maybe not saturated, but the soil was wet when the greens were covered.

A couple of things could have happened underneath the covers: Environmental conditions following the snow melt that occurred in mid-December when temperature fluctuations led to the loss of frost in the soil could have caused soil moisture to be drawn to the soil surface and water condensation under the impermeable cover. When the next batch of frigid air occurred at night, the water that had condensed under the covers would have frozen, causing an ice layer to form. We would also expect that the condensed moisture would be present in the upper soil profile near the crowns of the plant which could lead to super-hydration after freezing. Repeated cycles of this phenomenon from December 15 through the 25th, is when some of this damage could have occurred.

The other possible scenario involves the formation of toxic gases under these impermeable covers. If the covers were placed over greens that had excessive moisture (moisture greater than field capacity), anaerobic bacteria could still have been active. These respiring bacteria can produce lethal concentrations of CO₂, CH₄ (methane) or H₂S (hydrogen sulfide) and by placing an impermeable cover over the anaerobic soil, in effect, seals in these toxic gases causing plant death.

If this were the cause of Poa death, it probably occurred very soon after covering during a transition period when soil temperatures were adequate for bacteria and anaerobic decomposition. Upon removal of the covers, you probably noticed a putrid smell which is indicative of rotten, decaying plants. In addition, you may have witnessed variable kill of the Poa near the edge of the cover where gas exchange may have occurred.

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I hope everyone is having a great and stress free spring. The last board of directors meeting was enjoyable and short, so this column shall also be a bit brief. The MGCSA Board of Directors met on Monday, April 5th at Monticello Country Club. The highlights to this months meeting were the roster and again the new golf tournament proposed by BASF.

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The roster is currently being completed and you will soon have the updated sheets to put in the binder you received last year. It appears we will be saving about \$2,000 on the cost of producing the new sheets by having them copied rather than printed. The only drawback to this could be that the ink could smear if it got wet. The board felt that because you will get new sheets every year this was an acceptable risk for the cost savings.

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Kudos to Fred Taylor, CGCS, for his response to an editorial written in the Mankato Free Press. It appears Fred has had to do some written sparring with one of the professors in his neighborhood who doesn't have a high regard for golf courses and their supposed negative affect on the environment. While I haven't read the article, those who did stated that Fred's response was very articulate and represented our association well.

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Thanks to Jack MacKenzie, CGCS for getting his club to host the new BASF People vs. the Pro tournament this year. It was short notice and I am sure it took some salesmanship. Also thanks to Dave Oberle for bringing this event to the MGCSA. This could be an excellent event for our association, so send in your registration early. Class A & B members do have priority placement, but applications must be in early.

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In other news, James Bade reported that all is well with the MTGF; their new president is John Hopko and vice president is Dan Miller. The MTGF has also committed \$25,000 to the design of the new TROE Center building as well as giving \$30,000 to Dr. Horgan's program and \$15,000 to Dr. Wadkins' program.

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Paul Eckholm, CGCS reported that Dr. Frank Fleger is retiring as head of the plant pathology department at the U of M. He has been a strong advocate of hiring a new turf pathologist and his leaving could make filling that position a tougher sell. Eckholm also reported that the legislature is looking at Restricted Use Pesticides and are entertaining the idea of requiring all users of RUP products to file a report monthly to the MDA.

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Here's wishing you all a great spring. I hope to see many of you at Glencoe Country Club. I grew up on that course when it was still nine holes. I am looking forward to getting the opportunity to play there again. Take Care! RT