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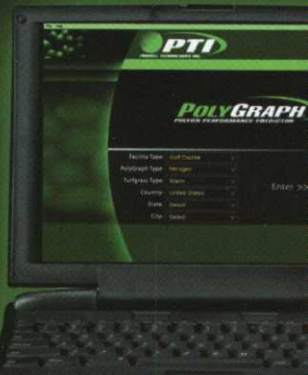
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About the Cover:

Snow Mold in the rough at Somerset Country Club. See Peer-to-Peer Snow Mold responses and photos by MGCSA members on Page 26.



TPC TWIN CITIES' AWARD-WINNING STAFF

Displaying awards they received in 2009 which include the TPC Platinum Award, ELGA National Private Facility Award, and the TPC Network Operation of the Year Award. Pictured from the left, Roger Stewart, CGCS, Erik Pille, Bret Kirchner, Andrew Carlson, Chet Scheer, Tony Gustafson and Bill Hebler.

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MGCSA EVENTS

May 12
MGCSA Vendor Appreciation Day
Midland Hills CC
Host: Mike Manthey

May 26
MGCSA Spring Mixer
Eastwood GC
Host: Jeff Minske

June 14
MGCSA Scholarship Scramble
Greystone GC
Host: Lee Mahnke

August 16
MGCSA Championship
The Jewel
Host: Doug Mahal, CGCS

September 16
U of M Field Day
TROE Center
Host: Dr. Brian Horgan

September 20
**MGCSA Harold Stodola
Research Scramble**
The Classic at Madden's
Host: Scott Hoffman, CGCS

October 4
MGCSA Fall Mixer
Minnesota Horse & Hunt Club
Host: Tom Proshek

December 8
**MGCSA Awards
& Recognition Banquet**
Southview CC
Host: Jeramie Gossman



PRESIDENT'S MESSAGE

Word on the Street is Minimal Damage to Courses

By Paul Diegnau, CGCS

I would imagine the majority of golf courses will be open by the time you read this column. Let us hope for a warm spring with adequate moisture for a change of pace. Word on the streets is that most courses came out of winter with very little damage. If you did have issues with snow mold, UW-Madison once again conducted extensive snow mold fungicide trials in Wisconsin, Michigan and at the Legacy at Cragun's Resort in Brainerd, Minnesota. With the intense snow mold pressure this past winter these trials should clearly show winners and losers. Results will be published in the August issue of *Hole Notes*.

* * * *

The first March Mega-Seminar, sponsored by Syngenta, was a solid success. Attendees were treated to quite an assortment of information on sustainable golf course management practices, winter injury, and establishing and maintaining no-mows and native areas on the golf course. Special thanks to the Superintendents that participated in the panel discussion and helped make it the success it was. I hope that with continued participation from our membership we can offer additional panel discussions in the future.

* * * *

The Garske Legacy Scholarships and the MGCSA Legacy Scholarships are available again this year; forms must be in by June 1 and can be found at www.mgcsa.org. Over the past several years, very few applications have been submitted for the MGCSA Scholarship. If you are a member of our association with children in post-secondary education, check it out!

* * * *

Other events to be aware of in the near future:

- **The MGCSA Spring Mixer** will be held at Eastwood GC in Rochester on May 26. Keep in mind that this and the fall mixer are intended for the Assistant Golf Course Superintendents, though ALL are welcome.
- **Vendor Appreciation Day** is Wednesday, May 12 at Midland Hills CC. Remember to thank our vendor members for their support of our Association. Without their support and event sponsorship our Association would be compromised.
- **The MGA Forum** will be held this year on April 29 at Midland Hills CC. Presenters will be Dr. Brian Horgan and Bob Vavrek. Topics will be "The Latest Issues Facing Golf Course Turfgrass" and "What Kind of Maintenance Practices Clubs Did Last Year to Save Money."
- **This will be the last issue of *Hole Notes*** for those members that have not paid 2010 dues.

* * * *

On a closing note, look for a water usage fee increase if your golf course is located within the 11 county metro area. In addition to the base fee of \$140 and the June, July, and August charge, you will be charged .0008 cents for every gallon of water you pump for the entire season. The fees collected from this new "user fee" will supposedly be used to fund a program for monitoring the groundwater quantity and quality of non-stressed aquifer systems in the 11-county metropolitan area. This bill is currently working its way through the Minnesota legislature and should pass without obstruction.

Have a great spring!
- Paul Diegnau, CGCS

HOLE NOTES

Official publication
of the MGCSA

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How Are You Going to Make the Job Better for Your Staff in 2010?

By ROGER STEWART, CGCS
TPC Twin Cities

I read an interesting article in the *Minneapolis Star Tribune* just after the New Year. On January 5, 2010, AP writer Jeannine Aversa wrote an article about how Americans are growing more disenchanted with their jobs. That shouldn't shock anyone since the recent economic problems have affected almost everyone and their jobs. If you are still employed, you probably know more than one person who has lost his or her job. You have most likely had a conversation with someone about being glad to have a job and hunkering down to weather the economic downturn. You most likely have had a conversation with someone about freezes on wages and promotions and having to wait for things to "get better." This is reality for now.

The article mentions some interesting statistics. People's satisfaction with their job is at a 22-year low. Only 45% of people are satisfied with their job down from a whopping 49% in 2008. Only 51% of people find their job interesting. That is down from nearly 70% in 1987! 51% say they are satisfied with their bosses, down from 55% in 2008. Clearly, we as supervisors would be well served by staying ahead of the curve with our employees as we head into the coming season. I think this is particularly true in the business of golf course maintenance. That's because we have several things working against us even in a good economy. Lower wages, especially entry level, is one thing. Seasonality of our labor staff is another thing. Working weekends, holidays, in the rain, in the heat, around equipment with any number of dangerous moving parts, etc. makes it even more amazing that we are able to retain employees for more than a year or two.

So what are your plans for the coming season? Have you used the off season to create a plan and develop ideas that can make that job for each of your employees just a little bit better than last year? We all know the importance employees put on raises and pay scale. Now, in this economy most companies and businesses have reduced or eliminated raises until the economy improves. That is no different in the golf business, but there are things that can be done to improve the working conditions, the work atmosphere, the teamwork and the job satisfaction of employees. Here are a few suggestions:

1. Develop a good recognition plan. This not only means a program that may include monetary or gift rewards for good work, but what about working with your key staff to insure they understand the value telling someone they are doing a great job. Key staff members are so important in this effort and unfortunately have the least amount of training or experience in this area to be really effective.

2. Make sure your employees know how important their job is and how much they are appreciated for taking an interest in their job and performing at a high level.

3. Would your club be willing to pay for, or partially pay for, tickets to a Twins game for golf course maintenance employees this summer?

4. Could you have a picnic off site for employees with maybe a staff softball game?

5. Photographs are a great motivator. Take random photographs of your staff while they are at work. You can display them in the break room. Put them on a digital picture frame on the wall or put them on a DVD and play them through a TV. Employees like to look at them and they usually have great fun

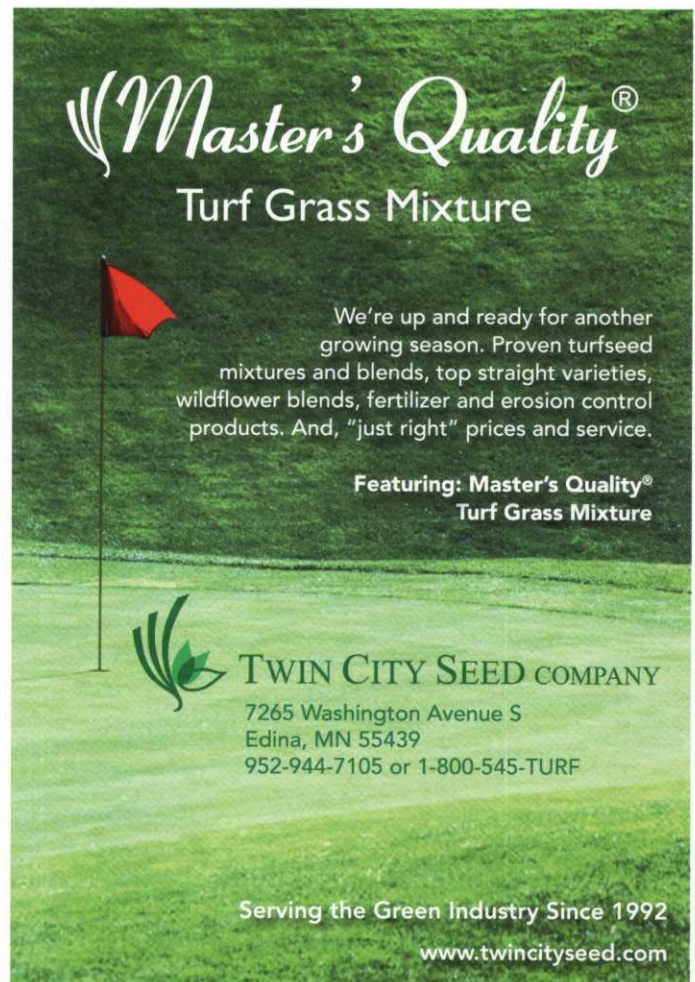
doing it. Remember to update the pictures regularly for the best results. Do you have a wall or entry where you can hang a framed picture of each employee with their name, title, length of service? If so, it goes a long way to instilling pride in the work place.

6. Schedule some simple barbecues throughout the year. Think about things like Pay Day lunches. Maybe you can get some help from your F&B department. Cook the hotdogs and/or hamburgers on a grill for lunch. You and your key staff do the cooking.

7. Golf course maintenance putting contest with small prizes or trophies. Bragging rights are huge!

8. Have you thought about a GCM website for your staff?

These are all good ideas that many of us already have utilized to show our appreciation for our staff. I recently watched an episode of *Undercover Boss* and one of the employees said about working with her undercover boss "I appreciate the fact that he had an interest in finding out what it takes to do my job." The lesson here is take an interest in your employees, work beside them occasionally, help them learn and remember to say thank you. I guarantee that you will be surprised how much it means to the people who work for you.



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Fuel Efficiency of Golf Course Mowing Equipment

By KATHY RICE
The Toro Company

Figure 1

With today's high fuel prices, you likely consider fuel efficiency when purchasing a new vehicle, but have you ever wondered about the fuel efficiency of your mowing equipment? As part of a larger effort to increase the fuel efficiency of their products, Toro conducted a study last summer to quantify fuel consumption for a variety of turf vehicles.

Small GPS devices attached to the machines recorded position, altitude, speed and heading every second of operation. Golf course personnel tracked which machine the loggers were used on and carefully measured how much fuel was used by each machine each day. The data was then downloaded and analyzed using GIS (Geographic Information System) software to come up with a variety of fuel and time performance metrics.

During the summer of 2009, at two local Minneapolis courses, 134 sets of data were collected representing 31 days of operation for 34 separate machines. Additional data was collected at other locations for a total of 213 sets of data at

14 different locations.

A typical dataset contained about 10,000 data points. With the GIS software, each point was connected and the vehicle "tracks" were overlaid on aerial photographs. Based on vehicle location, speed and pattern of movement the connecting lines were classified as:

- Working - performing the specified task
- Transport - driving between work sites
- Trailered - being hauled between work sites
- Stopped 1 to 10 minutes - These stops could be due to dumping clippings or

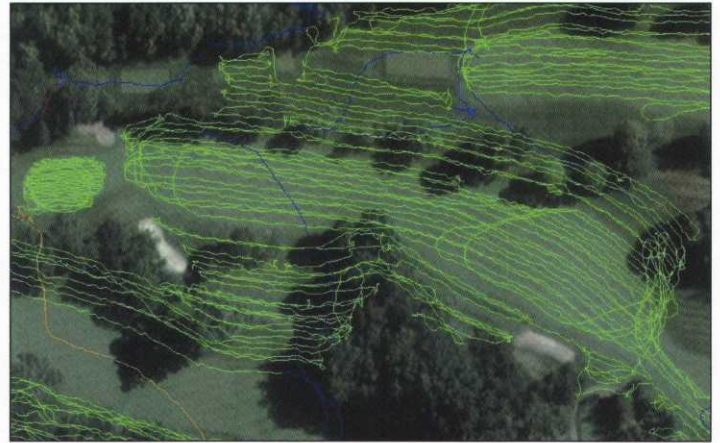


Figure 1. Typical Vehicle Tracks

Green - mowing Blue - transport
Orange - trailered Red - stopped

waiting for play.

- On break - stops longer than 10 minutes were considered break times

Mowed acres were calculated using aerial photography and vehicle tracks.

(Continued on Page 29)



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Sprayer Calibration

By LUKE DANT
Syngenta

In many cases we spend hours and days evaluating the cost and performance of products that protect our turf, but lack the same time commitment in their application. A precise application can mean the difference between a product working or failing, or obtaining 17 days versus 21 days of control. Here are six aspects of spraying that are often overlooked and can sometimes reduce the effectiveness of the products you use.

Sprayer Calibration

This is redundant, but worth repeating. All sprayers should be calibrated at least once per year. Now, before any applications are made, is the best time to do so. This is also a good time to identify any leaks or mechanical issues that your sprayer may have prior to your first application.

It has become very common in the last 15 years or so for sprayers to come equipped with electronic spray controllers or monitors. These are great tools, but do not take the place of a regular sprayer calibration and a well-trained applicator.



Calibrating your controller or monitor is also an opportunity for you or the individual that operates the sprayer take out the instruction manual and become better acquainted with all of its features. I find that, in most cases, we do not use all of the tools these devices have to offer.

Know the product you are spraying and where you want its final resting place to be.


This discussion can pertain to all products we apply through a sprayer, but most notably applies to fungicides.

Fungicides are often divided into four categories based on their topical mode of action. These categories are contact, local penetrant, acropetal penetrant (xylem-mobile), systemic (phloem-mobile). The key is to understand which category the fungicide or fungicides you are spraying fit into and make appropriate changes to your nozzles and carrier volume to maximize performance. Simply put, contact and local penetrant fungicides require excellent plant coverage to perform at the highest level. Therefore, nozzle selection is very important, with water volume being less of a concern. In contrast, acropetal penetrant and systemic fungicides perform the best when applied near the crown of the plant where uptake is the greatest. With these fungicides, nozzles affect performance to a lesser degree, but a higher water volume is required to insure that spray droplets penetrate the turf canopy.

The final location of the spray solution is controlled by three factors: nozzle pattern, nozzle pressure and water volume. Of these factors, water volume is the one that has the greatest impact. Turf pathologists have found that higher water volumes (4 gallons per 1000 sq. ft.) improve fungicide performance when applied to control root pathogens such as take-all patch or summer patch. In contrast, fungicides applied for the control of foliar disease perform best at 1-2 gallons per 1,000 sq. ft. Evaluate the

(Continued on Page 10)

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Fludioxonil (CAS No. 131341-86-1) 1.2%

Other Ingredients: 64.2%
Total: 100.0%

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Sprayer Calibration-

(Continued from Page 9)

water volume you are using and see if it is practical to make any changes to some targeted applications that you make. We often use overhead irrigation to move fungicides to their location of activity. This is often the case when preventing fairy ring, take-all patch and summer patch. The effect of post-application irrigation on the performances of fungicides is not well understood. Consider that 0.1 inches of overhead irrigation is equal to 62.3 gallons of water per 1000 sq. ft.! The question then becomes to what degree are we watering-in fungicides in? To further complicate the issue, some individuals will recommend wetting the leaf blade before the application and watering-in the fungicide immediately after application, while others will suggest to water-in the application the same night as the application. My best advice is to discuss this with the product manufacture.

Conducting a pre-mixing sprayer evaluation

This consists of filling the tank half-full with clean water and running the sprayer as if you were spraying with an individual behind the sprayer to evaluate its performance. Listed below are reasons why this is worth the effort:

- 1) Identify nozzles that are clogged or that need replacing.
- 2) Fix misaligned nozzles or incorrectly spaced nozzles.
- 3) Determine if you have a leak somewhere in the spray system.
- 4) Identify mechanical issues before you put a product in your spray tank.

Of these four, the last one is the most important. Remember that depending on what products you are mixing and for how large of an area, you may have upwards of \$1,500 in products in an individual spray tank. Transferring a mixed spray solution out of a faulty sprayer and hoping that everything remains in suspension is not a great situation for anyone to be in.

Tank-mixing products to avoid compatibility issues and performance issues

In our industry, it is very common to mix up some fantastic "brews", often containing five or more products. Although formulations have become better with time, there still is the need to follow proper procedure to avoid incompatibility. The acronym often used to remember the correct order-of-mixing is W-A-L-E. I have described each step below:

W - water soluble packets (WSP), wettable powder (WP), water-dispersible granular (WDG), dry flowable (DF)

A - agitate while mixing, allowing each product to mix before adding a new one

L - liquid (L), flowable (F), suspension concentrate (SC)

E - emulsifiable concentrate (EC), microemulsion concentrate (MEC)

If you are mixing products that you do not have prior experience with, a jar test is always a good idea. Jar tests are less frustrating and much less costly than a full spray tank of material that cannot be

(Continued on Page 11)



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