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About the Cover

The Jewel Golf Club's par 3, No. 11. The most difficult par three on the course. The Jewel is located in Lake City and will be the site of the Harold Stodola Research Scramble on September 24.

Upcoming 2007 MGCSA Schedule

Tuesday, August 28
MGCSA Championship
Hillcrest Golf Club of St. Paul
Host Superintendent: Thomas Schmidt

Thursday, September 13
University of Minnesota Field Day
University of Minnesota St. Paul Campus
Hosts: Dr. Brian Horgan and Larry Vetter

Monday, September 24
Harold Stodola Research Scramble
The Jewel Golf Club, Lake City
Host Superintendent: Doug Mahal, CGCS

Monday, October 8
MGCSA Fall Mixer
Le Sueur Country Club, Le Sueur
Host Superintendent: Thomas Meier

Tuesday, December 4
MGCSA Awards & Recognition Banquet
Prestwick Golf Club, Woodbury
Host Superintendent: Dave Kazmierczak

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PRESIDENT'S MESSAGE

Politics as Un-usual

By James Bade

Let's play that word association game where I say a word and you think of the first word that comes to your mind. Ready, here we go.....politics.....It sure would be interesting to print all the answers that came to mind. How about one more word, here we go.....politician.....not a lot of difference in those words, but I am sure different answers might come up for the two.

So what did you think of? Government? Chaos? Corruption? Gridlock? Schmuck? Sleaze, Futility, Corruption, oh I said that word. Or did the phrase "I am not a crook" come to mind. It would be interesting to see which people came to mind, and if they were positive or negative role models.

I remember the day Jim Nicol called and asked if I would serve on the Board of Directors. My first thought was, that isn't for me, too much politics involved. But I was willing to give it a try. My first MGCSA board meeting was quite memorable. It was my turn to give a committee report and I was totally lost and scratching my head; the President and board were quite kind.

At my second meeting I had an "aha" moment. Rick Frederickson was talking about a research fund that earlier superintendents, like Keith Scott, had worked on. I remember thinking, these board members know what they are doing and they have a genuine concern for what happens to these precious donated funds. Quite a different picture from the one we see on the television every night. It was politics as unusual. These guys really cared about the MGCSA and its members.

The culture of politics as unusual existed at board meetings long before I got there and I am sure will exist long after I am gone. Sure there is politicking, but it is usually with other organizations in hopes of getting things done for the "greater good of our association." As people we aren't perfect and we make mistakes, but we try and do our best with integrity as our guide. In other words, we try and do what is right and effective with efficiency, remembering where we came from. All this is to say if you are ever interested in getting started with involvement, join a committee and begin to see how the nuts and bolts of the association work. And hopefully you will find it as politics as unusual and possibly run for a director position.

I had my 2-day summer break in Park Rapids this past week. As I drove by Greystone I thought of the Scholarship Tourney I was unable to attend. The golf course sure looked in nice condition. But the thought of everyone willing to participate in the association is what came to mind. So if you are able to make it to any of the next five events of the season: MGCSA Championship, Field Day, Research Scramble, Fall Mixer and Awards & Recognition Banquet, your involvement is what makes all the board work worth the while.

- James

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The Jewel Set to Host the Harold Stodola Research Scramble on August 28

The Jewel Golf Club was being built between 2002-04 and opened in July 2005. The course was designed by Hale Irwin and Stan Gentry.

Doug Mahal, CGCS, has been Superintendent at the course for four years. His first assistant is Marc Exner and his second assistant is Jeff Fjosne.

Unique design features include a combination of links-style and wooded golf holes on rolling terrain along 500 ft. bluff land; five sets of tees ranging from 4,900 to 7,000 yards of playing length; many acres of native fescue and a variety of native prairie areas; three major water features that come into play; 54 strategic sand bunkers; generous 32 acres of bentgrass fairways (in addition to green and tee bent), but minimal bluegrass rough perimeters before encountering unmowed fescue or prairie, and fast, tightly groomed surfaces (greens - .125, tees & approaches - .250", fairways - .375")

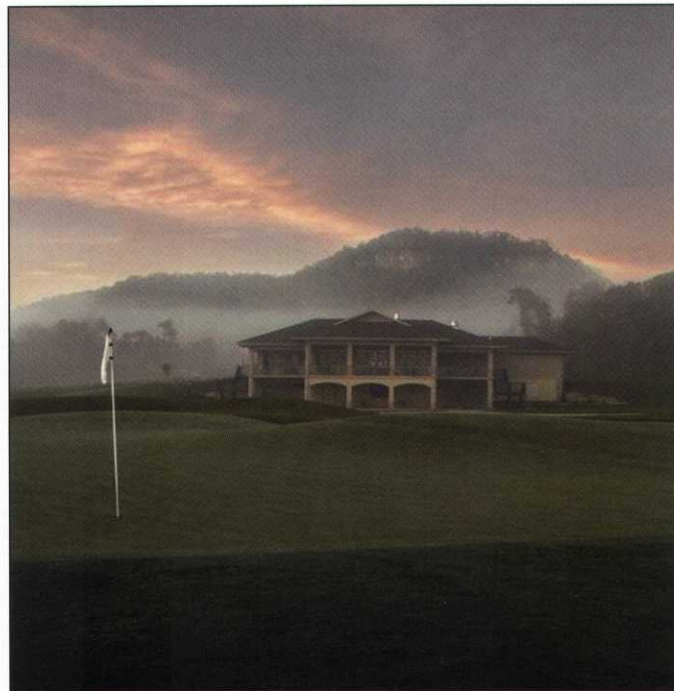
Major challenges:

Soils. By and large, all topsoil was removed from the golf site, leaving a predominantly native silt soil in which to establish and grow new turf. Surfaces can get very firm and tend to drain poorly

Drainage. Minimal subsurface drainage was installed, creating long surface flows to drain off excess moisture recovering from substantial rainfall and washouts immediately following seeding operation

Weeds. There is considerable undeveloped land around the

(Continued on Page 6)



The Jewel's clubhouse and ninth green.



GROUPS STAFF AT THE JEWEL

Back row: (left to right) 1st Assistant Marc Exner, Chuck Pelowski, Turf intern Nick Lewison, Brendan Getschmann, Dylan Schroeder, Bob Ziebell, Mechanic Bob McLean, Travis Krucker and 2nd Assistant Jeff Fjosne. **Front row:** Anstasio Trejo, Carlos Lopez, Abel Gonzalez, Mike Shequen, Justin Denzer, Tom Carmichael and Juan Ortiz.

The Jewel—

(Continued from Page 5)

course, providing ample blown weed seed into the play areas. The wind is almost always a factor when playing the Jewel, even while putting.

The Jewel has received a variety of awards including being honored as a "Top Ten Best New Course in America" by *Golf Magazine* in 2005; 2005 Seed Research of Oregon "Golf Course of the Year"; 2006 *Golf Digest* "Top Ten Best New Public Course" (under \$75 category)

The golf course was built on the former site of the historic Jewel Tree Nursery. A few recognizable remnants are still visible from the course



Superintendent Bio **Doug Mahal, CGCS**

Doug Mahal, CGCS. Superintendent since 1979 with stints at Interlachen C.C. (1979-89), and The Minikahda Club (1990-2002) and was involved in the early construction & grow-in of The Big Fish Golf Club in Hayward Wisconsin before signing on with The Jewel in 2003. CGCS since 1986. MGCSA Past President -1987. Wife Norma of 30 years with three grown sons and two grandchildren. Interests in hunting, fishing and golf.

1st Assistant Bio **Marc Exner**

First Assistant at The Jewel since spring 2005. Hired from 2nd assistant position, which he had held since his arrival in 2004. Marc is engaged to be married to fiancé Jenn in March 2008. He grew up in south central North Dakota and has a BS Degree from University of Minnesota - Crookston. Marc's experience includes time at King's Walk in Grand Forks, Minnesota Valley Country Club and The Minikahda Club.

2nd Assistant Bio **Jeff Fjosne**

Jeff arrived at The Jewel as 2nd assistant in June 2006. He's been married to wife Darcy since April 2003. No children but a clever little dog named Sophie. Jeff also holds a BS degree from U of M Crookston (2002). He performed his internship at Deacons Lodge and has been 2nd assistant at Midland Hills in St. Paul and Spanish Peaks in Montana. Jeff grew up in extreme northwest Minnesota (Karlstad).



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Insight One Superintendent's Perspective

By Steven A. VanNatta
Owatonna Country Club
Owatonna, Minnesota



I am currently the Superintendent at Owatonna Country Club and have been in the turf business for 31 years after receiving a B.S. degree in Horticulture at the University of Wisconsin/River Falls.

Why and/or how did you enter the turf management industry?

I started to work, at the age of 14 and really developed a passion for this type of work.. I was fortunate enough to be approached by Joe Moris, Supt. Of Tartan Park Golf Course and became aware of the golf course maintenance careers that were available. Also Davis Usgaard, high school teacher. Their support and vocational information inspired me from that point to pursue my passion and enroll in a horticulture science program.

Who was your professional mentor?

My mentors were John Granholt, Superintendent of Eau Claire Golf & Country Club, and Dr. Donovan Taylor at the University of Wisconsin/River Falls.

What has been the highest point in your career?

I've had many high points in my career.

What has been your lowest point?

Dealing with Summer Bent grass decline the past two seasons on three new golf greens.

Are your greatest challenges political, agronomic or managerial?

Agronomic. Trying to maintain an 18-hole golf course at today's standards with outdated maintenance equipment and irrigation system, without budgetary support.

What is the most difficult disease to manage on your course and how do you?

Dollar Spot. This is dealt with by practicing good cultural maintenance practices.

Is it hard to find good help in your area of the state?

Quality people are out there. You just have to find them.

Do you have a dog on your crew?

Yes, I have a dynamic duo. Bell, an Australian Shepherd and Abbey, a Black Lab cross. They do a pretty good job with geese but how they control wood chucks is unbelievable.

Where will our industry be in 10 years?

We will be a much more environmentally conscious industry. All inputs and decisions related to turf grass culture will be highly regulated and scrutinized.

Where would you like to be in 10 years?

Growing turf on some golf course in the Midwest.

What is your perspective of our state association?

I feel the MGCSA is making great strides to support today's Minnesota Golf Superintendents through its financial support for research.

Name your foursome

Tiger Woods, Jack Nicklaus and Bobby Jones. Having the privilege to spend an afternoon with three of the game's greatest and most influential players.

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- 4% magnesium from low residue, highly dispersible magnesium sucrate
- 3% manganese from low residue, highly dispersible manganese sucrate
- 2% iron from low residue, highly dispersible iron sucrate

"Product Benefits"

- Utilizes three nitrogen sources providing staggered, more consistent N response
- Controlled release coated potassium reduces potential for leaching
- The micronutrients are high concentrations of dispersible sucrates which provide improved plant utilization and minimize staining
- The micronutrient delivery system provides immediate and longer term availability resulting in improved plant utilization versus traditional source of micronutrients.

Product Specifications:

Particle size:	SGN 100
N Source:	70% Nutralene / 20% AS / 10% Urea
K Source:	100% coated controlled release potassium sulfate
Micronutrients:	4% Mg / 3% Mn / 2% Fe (all dispersible sucrates)
Rates:	4.55 (Low) 6.82 (Medium) 9.10 (High)
Lbs. Nutrients/M (4.55 rate):	N: 0.501 P: 0.000 K: 1.00
Pounds / Acre:	198 lb/A at low rate (4.55)
Product Code:	AGC117WMS

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Maximizing Herbicide Effectiveness

“Investing time and effort before an application will provide greater weed control and prevent lost time and wasted product.”

(Editor's Note: Each month an affiliate member is invited to write or supply an article from a question they have been asked by a Superintendent. If you would like to supply an article, please send the article and a head and shoulders photo to scott@mgcsa.org.)

While today's modern pesticides and application equipment help make golf course superintendents' jobs easier, when it comes to providing year-round control of turf-attacking weeds, there is still much that must be considered. The work that is done before and after the herbicide application will eliminate time- and resource-draining errors and ensure a successful treatment.

Identify Your Targets. The best starting point in any weed control program is correctly identifying the weeds (broadleaf and grassy) in the area you are planning to treat. This includes those visible and those that you can anticipate seeing throughout the year.

Broadleaf weeds are easily identified in turf and are especially visible when in bloom. Bright yellow dandelion, white clover and purple henbit flowers are good examples. Grassy weeds such as crabgrass, goosegrass and foxtail are more difficult to identify early and become increasingly difficult to control once established due to the large quantity of seed they produce.

The importance of correctly distinguishing between broadleaf and grassy weeds directly correlates to the type of herbicide that you will need to use. As an example, phenoxy herbicides control broadleaves but have little to no effect on grasses, while a pre-emergence herbicide such as pendimethalin can be used to control grassy and many broadleaf weeds at the same time with one product application.

Once your target list of weeds is established and you've determined whether they are broadleaf or grassy, understanding each weed's lifecycle will help determine what herbicides will work best and whether a pre- or post-emergent strategy is the correct method to provide the best control. While the product label should be your guide in determining what herbicide(s) will work best to control your targeted weeds, some basic considerations should include the following:

Pre-emergent Weed Control

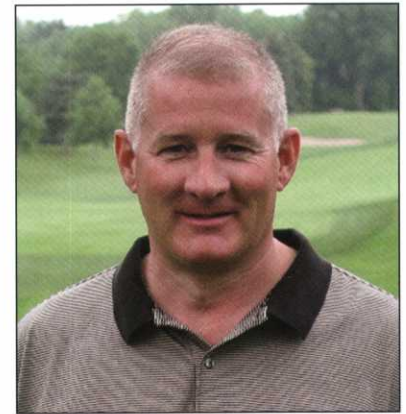
Annual grasses and broadleaf weeds are best controlled with pre-emergent applications in early spring prior to weed seed germination.

When the turf is well-established, a number of pre-emergent herbicides can be used to provide broad-spectrum seasonal weed control -- the most effective and least costly means of weed management.

If the turfgrass is significantly thin or will require large areas of turfgrass replacement, choose herbicides that are labeled for use during or directly following sodding or sprigging.

Post-emergent Weed Control

This strategy is generally more costly than pre-emergent programs.



Many post-applied herbicides can only be used on specific cool or warm season grasses. Do not assume your turfgrass is safe until you check the label.

Applications should be made when weeds are small. A lower rate can generally be used on newly germinated weeds more effectively.

Lower rates used equate to greater turfgrass safety.

Many post-applied herbicides can be used as spot spray applications, an economical approach to treating actively growing weeds.

Some tank-mix combinations can be used for broader spectrum control, but some mixes may cause an antagonistic effect or may cause injury to the turfgrass. Always consult the labels on both products prior to tank mixing.

Check the Label

If you've taken the time to identify the weeds that you need to treat and are trying to decide which herbicide to use, take the time to read and understand the herbicide product label. The label provides a wealth of information that is many times overlooked by applicators that will help achieve better weed control and avoid potentially harmful effects to non-targeted plants. The labeled information for precautionary statements, uses, weeds controlled and application instructions should always be reviewed prior to any application.

Equipment Check

Making sure application equipment (sprayers and spreaders) is in good working condition and properly calibrated is critical to ensure proper coverage is achieved.

Properly functioning spray equipment must be able to maintain constant pressure and flow to allow the even distribution of chemicals throughout an entire application and to calibrate the machine to deliver solutions at the labeled rate. Before conducting a calibration test, carefully check the spray tank and lines for leaks, the pressure regulator and flow meter for proper operation and spray tips for clogs or excessive wear. Worn spray tips will cause erratic coverage (over or under application).

Handheld and backpack sprayers that do not function properly can be traced to corroded metal parts, clogged nozzles or damaged seals. This is usually caused by leaving chemical solutions in sprayers and is prevented by cleaning after each use which is also the key to preventing cross-contamination between chemicals that can cause plant injury.

Spreaders, while generally simple machines, can easily cause poor product application when not working correctly.

(Continued on Page 10)



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Herbicide Effectiveness—

(Continued from Page 8)

Applicators should check to ensure that the hopper is opening and closing properly and that the product spreader is rotating freely. Additionally, calibration tests can be completed to ensure that the spreader settings match product application rates.

Water Basics

Manufacturers of sprayable pesticide products recommend that the water used to make the spray solution should be in the pH range of 5.6 - 6.5 (basic). While this is generally the range of most city and well water, a water quality check is a good precaution to take in regions with highly acidic soils or if the source is reused or grey water. Simple water test kits are available through water conditioning retailers while municipal water treatment plants regularly test the water and would be able to provide pH measures. When working with extreme spray solution pH environments, adding a buffering agent to the spray solution should be considered to maintain product efficacy.

Mix It Up - Correctly

A common technique used to save application time is tank mixing products. This is generally a safe practice, if the applicator knows in advance that the products are compatible and can be mixed together without negating efficacy. Again, the product

label is the best place to determine product compatibility and provides specifics on products that can and should not be mixed.

When it comes to tank mixing, the most common mistake is the order that products are combined in the tank. The quick reference below is a proven sequence that will ensure that you don't end up with a congealed mess in the bottom of your spray tank:

- 1) Fill tank 1/2 full of water; begin agitation.
- 2) Add soluble packet products.
- 3) Add product types in this order:
 - a) WP, DG, LF or DF formulations
 - b) S or L formulations
 - c) EC formulations
 - c) NIS, COC or MSO
 - e) Liquid fertilizers
- 4) Fill the remainder of tank with water.

Play It Safe

The health and safety of the applicator should always be a primary concern. Applicators should never cut corners when it comes to wearing protective equipment required on the herbicide label. Even if not stated on the label, applicators should wear the following protective wear when mixing or applying herbicides: chemical resistant gloves and boots, protective overgarments such as tyvek suits or coveralls, and safety glasses or goggles. Applicators should always consider wearing a respirator, even when not required by the label. A good quality dust mask should be considered when preparing and applying dry products.

Clean Up

After application, first clean and store application equipment and then thoroughly rinse personal protection gear with cold water from a hose or hand-held container that was not used during application work. Applicators should bathe and change clothing as soon as possible. Clothes used during application must be washed and dried separately from other clothing, even if it doesn't appear contaminated.

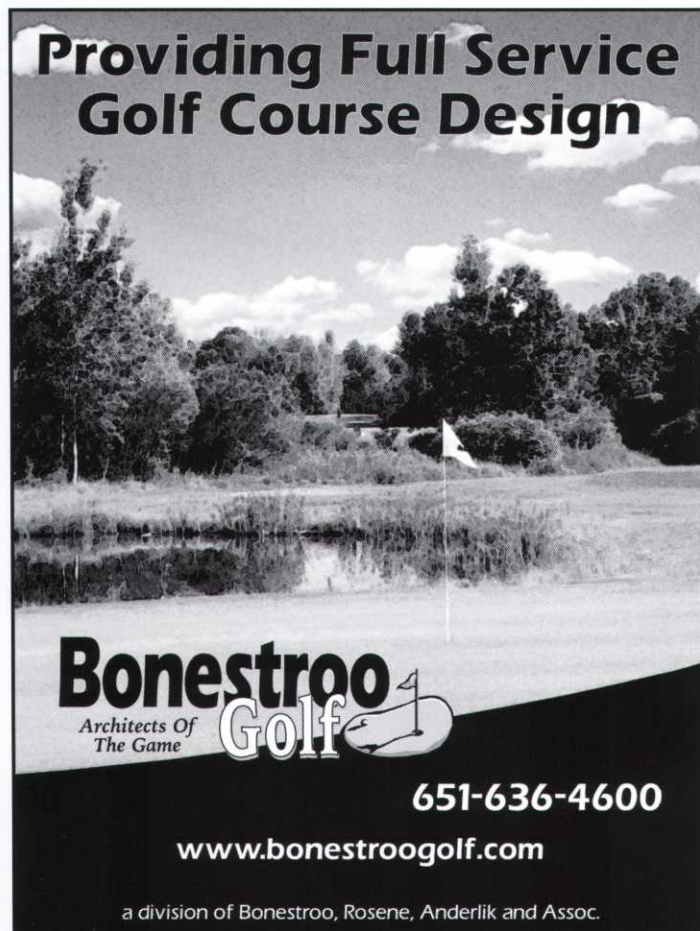
Storage and Disposal

The product label provides exact details on storage and disposal of unused chemicals and their containers specific to each herbicide. Pesticides and their containers deemed as waste should be handled as toxic and disposed of in conjunction with state and federal laws. A state's pesticide or Environmental Control Agency as well as regional EPA offices are prepared to assist by providing resources and information for proper storage and disposal.

Avoiding herbicide mix-ups relies primarily on the professionalism of the applicator to make certain that they understand the capabilities of the product being used, the care and use of their application equipment and proper safety precautions. By investing time upfront to adequately plan and prepare for their herbicide applications, golf course superintendents can achieve better weed control while maximizing the return on investment in terms of application time and herbicide product used.

* * * *

(Editor's Note: David Oberle is a senior sales specialist with BASF Turf & Ornamental in the Midwest region and can be reached at 651.681.8050 or via e-mail at david.oberle@basf.com.)



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