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# HOLE NOTES

Official Publication  
of the MGCSA

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Jack MacKenzie, CGCS  
jmackenzie426@msn.com

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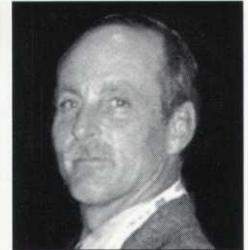
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952/473-0557 Fax: 952/546-1652  
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## PRESIDENT'S MESSAGE

### *Make Plans to Attend the Minnesota Green Expo January 5-7 in Minneapolis*

*By Robert Panuska*



As we watch that last irrigation head blow clean, staple that last cover down and park the leaf mulchers and blowers for the last time, we can begin to reflect on the events of the last year. As I start working on our budget for the upcoming year, my assistant Seth and I are looking for creative ways to further reduce our expenses and still provide our members with a quality course. It seems the past few years, more than ever, we have all been faced with making difficult choices. I think my Green Chairman said it very well when speaking to some new members on our committee. "This next year will not be nearly as much fun as the past when we were deciding on what projects to complete but now we have to be willing to make difficult choices about our maintenance program." As you begin the process of explanation and justification of your budget to the leadership at your facilities, do not hesitate to call on your "network" of turf professionals in the MGCSA. It never hurts to "bounce" ideas off someone else.

\* \* \* \*

**I would like to take this opportunity to thank all of the superintendents that hosted our events this past year.** They include: Jack MacKenzie, CGCS, Jeff Vinkemeier, John Steiner, CGCS, James Bade, Mike Kelly and Terry Negen. Gentlemen, you and your staff are to be commended for all the efforts you put forth on behalf of the MGCSA, THANK YOU!!!!

\* \* \* \*

**If you have not already done so, be sure to register for the Minnesota Green Expo** coming up January 5 to 7, 2005 at the Minneapolis Convention Center. Registration materials may be found at [www.minnesotagreenexpo.com](http://www.minnesotagreenexpo.com). Please plan to attend the MGCSA Annual Meeting to be held at the Green Expo on Thursday, February 6 at 4:45 p.m. Also make plans to attend the Golf Industry Show in Orlando in early February. The "new" design of the show looks very good and much more "user" friendly for attendees.

\* \* \* \*

**Finally, I would like to thank everyone for your trust and support this past year.** The MGCSA continues to prosper and grow because of your support. Also thank you to Scott and Jeff Turtinen and the officers and Board members for your service; you are what "makes it happen" for the MGCSA. I look forward to next year and the opportunities that await us. Until next year, have a very merry Christmas and joyous holiday season. May God bless you and your family.

-Rob

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**About the Cover**

Three golf course architects offer thoughts on the turf industry with articles in this issue. Pictured from left to right are Kevin Norby, Jeff McDowell and Garrett Gill (lower right).

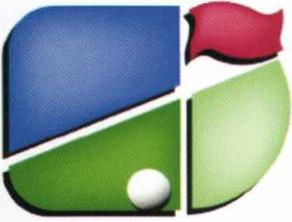
## UPCOMING EVENTS

**Wednesday - Friday  
January 5, 6, 7, 2005  
MINNESOTA GREEN EXPO  
Minneapolis Convention Center  
Minneapolis, Minn.**

## GCSAA SEMINARS

**Monday, January 24, 2005  
Hazard Communication Program  
8 a.m. - 5 p.m.  
Doubletree Park Place Hotel  
Minneapolis  
Education Points: 0.70  
GCSAA Member: \$130 Non-Member: \$195  
Registration: 1-800-472-7878**

**Tuesday, January 25, 2005  
Effective Soil Water Management  
8 a.m. - 5 p.m.  
Doubletree Park Place Hotel  
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Education Points: 0.70  
GCSAA Member: \$130 Non-Member: \$195  
Registration: 1-800-472-7878**



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Minnesota Green Expo Set for January 5, 6 and 7 at the Minneapolis Convention Center

## Green Expo Offers a Great Opportunity to Learn And Meet With Peers in the Turfgrass Industry

By James Bade  
MGCSA Education Chair

The grass sure is green for this time of the year. Guzman is traded to the Washington Expos. *Green Expo*, it is getting to be that time of the year again, the season of continuing education. The Minnesota Green Expo is right around the corner with some exciting opportunities.

There are names that you will recognize like **Vargas** and some names that you will be sure to notice in the future like **Ron Calhoun**. There will be national names like **Peter McCormick** from the Turf Net and regional superintendents like **Dan Dinelli**, CGCS, bringing their expertise to the table.

**Bob Vavrek** from the USGA will be in town with a new and interesting topic. We landed a great pathologist in **Paul Vincelli**, from the University of Kentucky. There is a dynamic speaker coming from Purdue, **Zac Reicher**. Then there is our own **Brian Horgan** from the U of M and his new counter part, **Eric Watkins**.

The goal has been to have too many good things to choose

from. With these speakers and all there is to do hopefully we are close to reaching that goal. Besides the golf course session, there are classes on trees, shrubs, new plant material and wildlife. Does it grab your curiosity to see that Mn DOT will be there? For those of you who recognize "PLT" as opposed to BLT, it is time to renew your license.

And, of course, there is recertification for pesticide use. The objective there has been that even if you don't have to be recertified, you will want to attend. Then in between all this there is the newly expanded Trade Show. What a place to meet your colleagues and friends.

In conclusion, there is something for everybody. The cost for this kind of educational opportunity, to keep on top of your profession, is very reasonable, so bring your gardener, mechanic and other staff workers. I hope to see you there.



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### Make Plans to Attend the MGCSA ANNUAL MEETING

4:45 p.m.

Thursday, January 6, 2005  
Minneapolis Convention Center  
at the  
Minnesota Green Expo

### Participate in the 18 Hole Golf Challenge at the Expo

The 2005 Minnesota Green Expo will feature an 18-hole golf challenge sponsored by affiliate members of the MGCSA. MGCSA vendors are invited to sponsor a hole in the 18-hole challenge on the trade show floor.

MGCSA members who obtain a scorecard from the MGCSA booth at the Expo, visit all 18 or more participating vendor booths and get signatures from the companies will be eligible for prizes. Completed cards will be drawn for great prizes.

All cards must be turned in at the MGCSA booth or by the start of the Annual Business Meeting at 4:45 p.m. on Thursday, January 6, 2005. A drawing will be conducted to pick winners during this meeting.

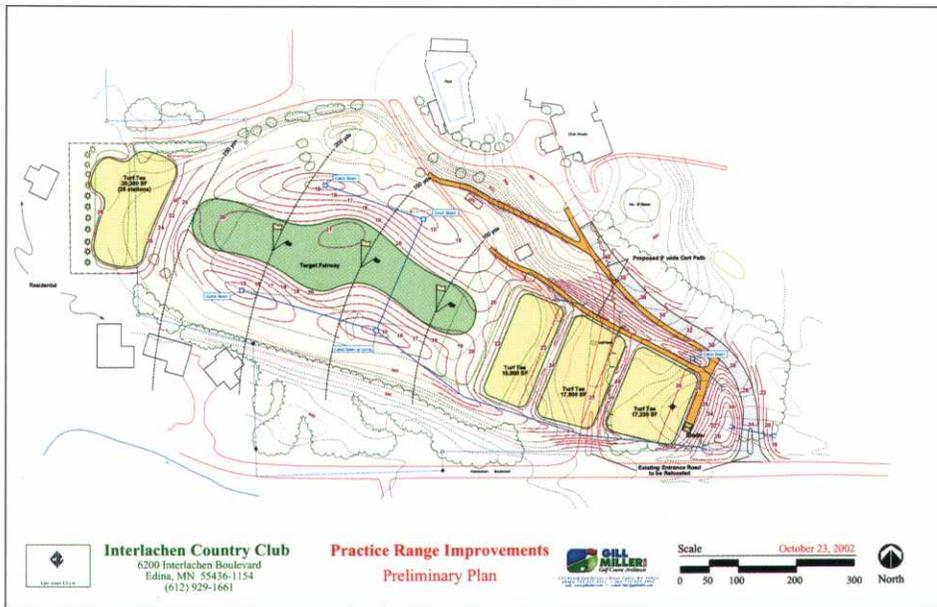
# Interlachen Country Club's Practice Range Renovation Project

By Matt Rostal

Superintendent, Interlachen Country Club

Practice ranges at old country clubs are usually small in size. Interlachen Country Club's was no exception in being undersized. Over the last twenty-five years the growth of the game of golf and golf technology had made our range very inadequate. We lack teeing area, necessary length, practicability, drainage and aesthetics to match the golf course. The practice range's elevation is lower than the surrounding area; it is a flat hole with all the surrounding area surface drains to. The exiting drain line travels 270 feet through a residential lot and under Interlachen Boulevard to Mirror Lake. This drain line is in an easement that dates to 1919. After a one-inch rain there would be a pond for a few days on the range. The practice range had many deficiencies, so in 1998 we started discussions at the club about a renovation of the practice range.

Our first step was to hire a qualified golf course architect. In 1999 we interviewed four architects and hired Gill Miller Golf Course Architect which the club felt was most qualified for this project. There were a few meetings between Gill Miller and the Green Committee to develop a wish list for the new range. Gill



Miller designed a plan which included the entire wish list. They also provided a cost estimate of the project through industry cost standards. The plan developed by Gill Miller was met with little support from our Green Committee and Board. The price put the range project on hold..

In late 2001 the Green Committee start-

ed this process again, we again knew Gill Miller was our architect of choice. Instead of developing an all inclusive wish list, we determined fundamental objectives that must be included in a new practice range. After a couple of meetings with some intense debating there were only three objectives determined.

1. Lengthen practice range
2. Adequate tee ground
3. Drainage

Gill Miller did a fantastic job of designing a plan. Actually the Green Committee charged Gill Miller to design three separate plans with cost estimates associated with each plan. These plans were received in early 2003.

Plan A was the most aggressive by moving our entrance drive 100 yards to the east, so we could maximize teeing ground. Plan B moved the driveway 50 yards to the east and a substantial tee ground enlargement. Plan C did not move the entrance drive but still met our objectives. All three plans met the club's objectives, but to varying degrees. The cost estimates for all three plans were nearly identical which was unexpected. This project

(Continued on Page 7)



Big rigs at work.

## Interlachen Practice Range Renovation –

(Continued from Page 6)

needed fill to develop the elevated target fairway with drainage basins and the less we moved the entrance drive the more fill we needed to buy. The unexpected need of fill offset the price of moving the entrance drive. This was a great selling point for going with the most aggressive Plan A.

The green committee made a decision which I believe was instrumental in getting this project approved. They decided to bring one plan to the Board; also they wanted a firm price to go with it. This decision was made to simplify the approval process. The only problem was we needed approval to spend the money to obtain finalized construction drawings. Somehow my green chairman convinced the board to spend the money even without project approval. Gill Miller provided construction drawings and we sent it to bid with qualified golf course contractors. We received ten bids in April of 2003 and narrowed our choice down to four contractor and interviewed them. Duinink Bros. Inc. was selected as our contractor and we took Duinink's number to our Board.

The Board of Directors supported the decision to renovate the practice range, but needed to get the flavor of the membership, even though they did not need membership approval to approve the project. They decide to have two town hall meetings in May, so the Green Committee could explain the process involved getting to Plan A. The membership also could ask questions and voice opinions about the project. These meetings were very interesting to be a part of; most of the attendees absolutely favored the project and some were against it. The Board weighed all the opinions and approved the project at the May 2003 Board meeting.

Plan A was the most difficult plan but it completely met all of our three major objectives. However, we had some challenges with this plan.

- + Relocate entrance drive 100 yards
- + Replace entrance drive lighting
- + Rebuild entrance sign, needed variance for permitting from city
- + Relocate club's sanitary sewer
- + Lower eight-inch irrigation well 15-feet
- + Replace irrigation mains to golf course

- + Replace power and communication to irrigation satellites
- + Bore 12-inch drainage line 270 feet under Interlachen Blvd.
- + Get permitting from two watershed districts for drainage
- + All club's utilities (gas, electric, phone, cable) were in the construction zone

The project was started on August 18, 2003 and finished by November 1, 2003. After the first two days when 50 mature elms, oaks and pines were removed the area looked like a war zone; even I had my doubts and the membership did too. Through the duration of the project we had many unexpected challenges: the club's power was cut once due to a poor locate, an additional irrigation main was discovered leading to the golf course, picketers at our front entrance and many more. When the final project was finished with trees planted, tees seeded and the field sodded not one member complained, even the members against the project voiced how pleased they were the completed project.

The renovated practice range was lengthened by 100 yards, the teeing area went from 20,000 sq. ft. to 70,000 sq. ft. and the drainage system installed has an outlet sized for the accumulated runoff. The range does not close with significant rain events. Aesthetically the range now looks like a golf hole with a target fairway. The bentgrass tees are very similar to our fairways; this increases the practicability.

Our project was a success for many reasons, but a few were key. First, we set obtainable objectives for the design of the range; second we had a great team with Gill Miller and Duinink. Also we kept our membership informed. I wrote articles in the newsletter, sent letters to membership and posted information in the clubhouse. They knew what to expect during the entire project. Weekly construction meetings kept everyone on the same page. Finally, we had a firm price for the project going into the Board approval process. We kept the change orders to a minimum and finished under budget. That makes for a very successful project.



*Interlachen's new entry drive.*



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# What Makes Good Bunker Sand?

By Kerry Glader  
Plaisted Companies, Inc.

A lot of golf course superintendents have been asking about the availability of bunker sands in Minnesota and would like to know what makes a good bunker sand.

What makes a sand "Good" for use in bunkers? This varies from club to club and has several variables. Is the existing sand acceptable to your membership? The cost of replacing the sand will vary upon whether you use local natural sand or manufac-

tured white sand brought in from out of state. The cost for the sand alone will range from \$12 per ton for local sand to \$70 per ton for sand brought in from out of state. How much of your budget is allocated to bunker maintenance? Does the sand meet the Brown and Thomas recommendation for particle size distribution and the overall sand quality guidelines published in the 1986 issue of

*Golf Course Management* used by all independent testing laboratories? Testing is the only way to determine how sands rank for quality.

Jim Moore with the USGA Green Section has determined the seven factors that should be considered when selecting bunker sand.

## Particle Size

Is the sand gradation comparable to the greens root-zone mix?

## Particle Shape And Penetrometer Value

Is the sand rounded, angular or crushed?

## Crusting Potential

Direct indication of how much silt and clay is in the sand.

## Chemical Reaction (ph) and Hardness

High ph and high calcarous sands are subject to wear.

## Infiltration Rate

Minimum rate of 20 inches per hour is needed.

## Color of the Sand

Do you want natural light brown sand or a white imported sand?

## Overall Playing Quality

Fill a test bunker on your course for your membership to evaluate.

The sands available in Minnesota for bunker sands are generally mined and washed with the sands being sub-angular to well-rounded and have a low to high sphericity. We have had clubs use round silica sand

that was too soft for play and also blew away during high winter winds, to sands with too high silt and clay content that have become like concrete and have no internal drainage.

A clean, washed, modified mason sand that meets USGA Guidelines and that has virtually no clay or silt is the best

available local sand to use that will allow in excess of 20 inches per hour infiltration rate.

Today's bunker sands are measured using a Penetrometer Value (or Fried-Egg Lie Index) with a value of 2.4 or higher being desirable. Our local sands range from 1.5 to 2.2 on this scale unless they have a high percentage of silt and clay in them. You can recognize those sands because they tend to be bathtubs not bunkers.

## Drainage, Fabric Liners And Irrigation

Drainage, fabric liners and irrigation for the bunker sand is a must in today's bunker maintenance programs. Hand raking of elevated faces is recommended and power raking should be reduced to a minimum. Re-design of rainwater run-off is mandated to divert flow away from the bunkers so they do not become contaminated.

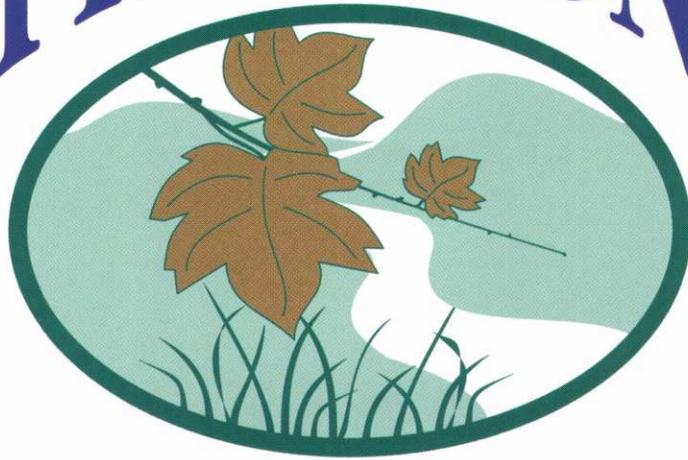
## Available Bunker Sand In Minnesota

We have available in Minnesota three sands for bunkers:

- 1: Natural modified mason sand that meets USGA Guidelines and a penetrometer value of 2.0 to 2.2
- 2: Imported off-white sand with 50% crushed sand and a penetrometer value of 2.6 to 2.8
- 3: Imported 100% crushed white sand with a penetrometer value of 2.8 and above.

Be sure to always ask for independent testing.

# PRECISION



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