## Insight-

(Continued from Page 18)

## What is your perspective of our state association and what would you change?

I am proud to be a part of the MGCSA. I think that this is the best state to work in and I think that it has to do with the support of all the members of our association. I think that it is well run, and the BOD thinks of the membership when making decisions.

Name your foursome, who would you play with and why?
Adam Sandler: I want to see a 400-yard hole-in-one.
Chris Hovan: Had to put a Viking in here. He is the only one that, I think, would try the whole way through a round.

Phil Mickelson: We could pretend that this is a major and then he would have a good chance of finally winning one.

## Additional Comments

Working in the golf Industry has been the most fulfilling thing that I have ever done. It has its ups and downs each year but doing anything else would not be as rewarding as working on a golf course. I try to show to everyone that this is a fun, and challenging job. I can't think of anything better then waking up, watching the sun rise, walking the course and seeing the work that is being done on a daily basis. In this job you can actually see what you have accomplished and it gives you something to be proud of each day you leave work.


## CLASSIFIED ADS

1993 Cushman Utility Truckster - 3-wheeled wide tire model complete with ROPS, hydraulic dump box, auxiliary hydraulics, PTO hydraulic dump box, auxiliary hydraulics, PT
and hi/lo gear range. Liquid-cooled engine
with 3,825 hrs. - $\$ 3,000$
1979 Meyer Snowplow - new frame, lights and
rebuilt lift motor. fits Ford F-350 - \$900
1993 Vermeer 620 Brushchipper - comes with
20 HP Kohler engine. Low hours (265);
Recently serviced and ready to go. - $\$ 3,750$
Wayzata Country Club
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FOR SALE
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+ Jacobsen 2 cycle- 3; + Jacobsen 518-2
+ Jacobsen 2 cycle- 3; + Jacobsen 518-2
+ Jacobsen 522- 4; Jacobsen Groomer Attachment; Greens Roller: Greensiron 3000 Toro 322 D with flail deck /blower attachment 'Flymowers' 22"-4 Call for pricing. Spring Hill Golf Club
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Peerless Single Blade Grinder Model 1300
Circa 1950-1960 - Best Offer
Contact: Michael Cohrs
Bluff Creek GC
612-799-0605

FOR SALE

+ Toro Greensmaster 3000 with cutting units (new motor and reels) $\$ 1,250$
+ Jacobsen Greensking IV with cutting units,
diesel, runs great \$1,000
+ 1992 Jacobsen LF100 fairway mower with cutting units, diesel, still cuts great
+ 1991 Jacobsen LF100 fairway mower for parts, sell both for $\$ 1,000$

$$
+ \text { Toro verticut reels, never used } \$ 750
$$

+ Two 1998 Terra Broom rotary sweepers
3.5 hp Briggs great for sweeping in topdressing or cleaning cart paths $\$ 500$ for both
+ Yard Machines 5 hp push blower, never used \$100
Contact: Scott Greenfield Spooner Golf Club
(715) 635-6438

FOR SALE

+ 2000 - 84" Reelmaster 3100-D Sidewinder beelade, 392 hrs.
blaster
beer
+ 2000 - 72" Reelmaster 3100-D Sidewinder w/o Sidewinder option, 8 blade, 650 hrs .
Both machines are better than excellent
shape. $\$ 10,500$ each
Contact: Scott Held Blackberry Ridge GC 320-229-1888

CHECK WWW.MGCSA.ORG FOR A COMPLETE LIST OF CLASSIFIED ADS.

## Industry News - <br> (Continued from Page 28)

of South Dakota and Wisconsin. The partnership was announced at the Green Expo in early January, and is effective immediately. "We are excited by the opportunity to sell and service both TURFCO and National," said Butch Greeninger, Director of Sales and Marketing for MTI. "We are committed to providing the same level of service and support to these lines as our customers have come to count on. We have already stocked parts for these products so customers should not miss a beat."

John Kinkead, CEO of National Mowers said, "The new partnership between National Mowers and MTI holds great promise in exposing both National's and MTI's customers to our complete line of mowing equipment." This sentiment was echoed by George Kinkead, the President of TURFCO. "TURFCO is excited by our new parthership with MTI Distributing. We believe it will enhance our ability to offer our topdressers and material handlers in the four-state area to our current, and prospective customers."

Mike Anderson, President of MTI Distributing, was also pleased. "With this agreement MTI now represents the largest manufacturers of turf maintenance equipment in our territory. "We truly believe that this local partnership will prove to be a success for the customer, TURFCO and National as well as for MTI Distributing."

## Congratulations to Troy Carson

In early February he will begin a new role as a Research Agronomist with The Toro Company. Troy has been an Assistant Scientist at the University of Minnesota working with Drs. Brian Horgan and Don White for the past nine years.

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# Trees, Turf and Shade A Relationship That Makes a Difference 

By JASON BASS, StrataPoint

The interrelationships between the sub-systems of a golf course are significant and demand the consideration of those who manage the resources and assets. The immediate "jump out at you" relationship is between trees and turf.

The most common questions/concerns routinely confronting StrataPoint centers on the compatibility of turf and trees. Course superintendents are under constant pressure to maintain a system that is highly unnatural.

The negative effects of shade on growing turf are well known. As all trees mature across the golf course shade becomes an increasing difficult issue. Too often members only remember the small tree that was planted many years ago, forgetting that this tree is dynamic and always changing. Emotional attachments frequently get in the way of making decisions for the good of the course. So, what can be done with these trees that are producing too much shade and to which golfers have an emotional attachment? The answer has to be found in informing, educating and objectivity based on fact.

## Environmental Facts

The overarching fact is that too much shade inhibits having quality turf. Shade reduces the quality of light available to turf and the length of time it is available.

Of course, any solution to the problem requires knowing the existing
 conditions. Since trees are contributors in the problem, knowing the biology and habits about trees is vital to understanding how to manage them. A thorough investigation of conditions is fundamental to knowing alternative solutions.

The quantity of light that penetrates the tree canopy to the turf depends on size, height, spread and crown density of the trees. The distance from the impacted area, geographic location in relation to the sun's position (which in turn varies by season and time of day), and the tree species all impact turf growth. Trees that grow on the south and east sides of the turf tend to be more troublesome because trees block the morning sun, which is critical to turf health.

The duration of light reaching the turfgrass depends on several factors. Sunrise and setting at different angles from the horizon at any specific date or time. The size and location of the trees and their relationship to the angle of the sun all play significant roles.

While all of these aspects play a role in the tree-turf relationship. The question still becomes one of how to deal with so many variables when seeking a solution to the problem. This is where technolo-
 gy can be extremely helpful.

## Technology Advancements

Shade profiling software that simulates sun patterns and tree canopy structures make decisions not only fact but offer visible results to unsure members. Simulation and analysis of shade profiles can be viewed on the computer screen while changing certain variables (height, crown density and width) and viewing the results before any field work occurs. Rerunning the simulation as many times as needed and comparing the different possibilities (removing, pruning, or planting) can and should be part of any scenario.

GIS and other software packages currently in the market have made these results real for any superintendent with shade issues. Using GPS/GIS for a one-time data collection and the integrated database approach pays off with a view of the larger picture. Once the infor-
 mation is compiled the scenario described above can be used repeatedly on multiple sites across the golf course.

As you would expect, Shade profiling accommodates all of the customizing the user needs when defining alternative solutions and testing the effects. Using the Shade profiling capability of a comprehensive management tool offers great advantages to golf course management. Every step toward bringing all functions into one application package brings course managers closer to having it all within view.


## And Why Shouldn't We? It's Your Investment.



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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cunrrois | - Primer Select <br> - Leafshield | $\begin{array}{\|l\|} \hline \text { UNIROYAL } \\ \text { Chimicat } \\ \hline \end{array}$ | - Turfcide 400 <br> - Turfcide10G | PRECSION | - Incide out <br> - Knockdown |  | - Teremec SP | Anderson's | - Chloroneb 7.5 |

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& 651-454-3106 \cdot 1-800-551-4857
\end{aligned}
$$



Mike Leitner, Leitner Company, donates $\$ 500$ to the MGCSA Scholarship Fund. Accepting the donation is Scholarship Chairman Jack MacKenzie, CGCS, of North Oaks Golf Club.



Two out-going Board members are Greg Hubbard, CGCS, Manitou Ridge, left, and Mike Brual, Faribault Golf \& Country Club. Greg served as MTGF representative while Mike handled the office of the Treasurer.


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## Legal Requirements Related To Pesticides And Fertilizers

The Minnesota Department of Agriculture is the state agency that is responsible for regulating pesticides and fertilizers. The MDA wants to remind you that there are certain legal requirements related to pesticides and fertilizers in Minnesota.

If your business is engaged in one or more of the following activities, it must have in place a current Plan for Pesticide and Fertilizer Storage, Handling, Disposal and Incident Response: commercial pesticide application; noncommercial pesticide application; structural pest control application; storage of bulk pesticides; or storage of bulk fertilizers, including anhydrous ammonia.

This Plan is a document that details: how you store, handle and dispose of pesticides and fertilizers how your facility will respond to pesticide or fertilizer spills quickly and effectively; who does what in the event of an emergency and who is responsible for performing such tasks during normal business hours.

Regardless of whether or not you store bulk pesticides or fertilizers, a Plan is prudent and a valuable part of planning and preparing for an emergency. The Plan needs to be revised annually.

The MDA routinely conducts inspections of applicator facilities and may take enforcement action including stopping of activities not in compliance with the requirements of the Minnesota pesticide and fertilizer laws.

For more information on Plans and other requirements go to the MDA web site at www.mda.state.mn.us. From the home page click on "Water and Land" and then under Environment click on "Agricultural Chemical Contaminated Site Cleanup". Scroll down to the Incident Response Program guidance documents, specifically:

Guidelines for Developing and Maintaining an Incident Response Plan (Short Form)

+ best for those with small packaged pesticides and fertilizers.
http://www.mda.state.mn.us/incidentresponse/responseplan.htm
Guidelines for Developing and Maintaining an Incident Response Plan (Long Form)
+best for those with bulk quantities of pesticides and fertilizers.
http://www.mda.state.mn.us/incidentresponse/responseplanlong.pdf
Reporting spills: Click on "Guidance Documents on General Information for Incidents", then click on "GD1Guidance for Reporting Agricultural Chemical Incidents".
http://www.mda.state.mn.us/incidentresponse/gd01.htm

Patrick Kelly
Agricultural Chemical Incident Response
Minnesota Department of Agriculture
651-297-5387
Patrick.Kelly@State.MN.US

Jerry Spetzman
Water Quality Advisor
Minnesota Department of Agriculture
651-297-7269
Jerome.Spetzman@State.MN.US

## MGCSA Membership Report

New Members - January 2004

Jeff Reich
First Tee of Blaine
National Youth Golf Center
Blaine, Minn.
W: 763-785-5600
Korey Edholm
North Links Golf Course
North Mankato, Minn.
W: 507-947-3335
Bret Kirchner
Sundance Golf and Bowl
Maple Grove, Minn
W: 763-420-9168
Jason Mell
The Residences at the Jewel
Lake City, Minn.
W: 651-345-2695
Jacob P. Schmitz
Class D - GCSAA
Wayzata Country Club
Wayzata, Minn.
W: 952-473-8846
Rob Langer
Affiliate
Natural Shore Technologies, Inc.
Champlin, Minn.
612-703-7581
Class B - GCSAA

## r

Class C

Class C
,

Class C - GCSAA
 $\square$ -

## -

Judy Zierden
Shemin Nurseries
South St. Paul, Minn.
W: 651-451-1042
Reclassifications
Andy Keyes
Windom Country Club Windom, Minn.

Bryan Haraldson
Willingers Golf Club
Northfield, Minn.

Submitted by Mike Nelson MGCSA Membership Chairman


Affiliate
Afriliate

B to A-GCSAA

C to B-GCSAA

GOLF COURSE ARCHITECTURE


## Industry News

## Par Aide Establishes New Scholarship

Through the generosity of Par Aide Products Co., a new scholarship is being made available through the Environmental Institute for Golf. Children and stepchildren of those with five years or more of consecutive GCSAA membership are eligible to apply for the Joseph S. Garske Collegiate Grant Program. Applicants must be planning to attend a postsecondary school or trade school. This award of $\$ 2,500$ is renewable for a second year with proof of enrollment and a 2.0 grade point average.

In 1996, Par Aide established a scholarship program through the Minnesota Golf Course Superintendents' Association. This new program expands the company's efforts on a national level as an added benefit to GCSAA members.

Go to www.gcsaa.org/career/pursuing/scholarships/ garske/ garske.asp for more information and applications, or contact Pam Smith, scholarship and student programs manager, at psmith@gcsaa.org or (800) 472-7878, ext. 678.

## Hydrologic Named Authorized Rain Bird Golf Distributor

Last December, Hydrologic Water management Systems inc. was awarded a Distribution Agreement for Rain Bird Golf products in 16 counties of the greater Chicago, Illinois area and Eastern iowa. This makes Hydrologic the largets land mass distributor for Rain Bird golf in the Continental USA.

Hydrologic has been in the process of consolidating numerous distribution channels in the Midwest in order to perform under the new economic conditions that exist in the golf course industry.

Hydrologic now has 15 warehouse locations in eight states.

## Plaisted Companies Introduces Early Green Pre-Winter Topdressing

At this year's Minnesota Green Expo, Plaisted Companies, Inc. introduced Early Green Pre-Winter Topdressing. Applied in the fall or spring, this specially formulated topdressing raises soil and turf tem-
 peratures in early spring, expediting spring growth and green-up.

One application in the fall protects greens from harsh winter conditions by capturing and retaining radiant energy especially at times of limited sunlight. Early Green can also be applied during the winter months to melt ice and snow.
Spring application helps heal win-
terkill damage and enhances spring green up.

## Brock White Introduces SandMat

SandMat is a product that combines manufacturing, geotechnical and geosynthetics expertise in response to the growing need for improved bunker management techniques. SandMat is an engineered blend of high tenacity polyester fibers bonded to form
a thick blanket like matrix specifically designed to prevent infiltration of contaminating fine or coarse subgrade particles, enhance bunker drainage system performance and mitigate washouts enabling steeper bunker designs.

The product is available locally from Brock White
 Company.

## MTI Distributing Co. Introduces New Workman and Pro Core



## Healthy Ponds by Bioverse EAC Introduces AquaSphere ${ }^{\text {TM }}$

Bioverse ${ }^{\circledR}$ introduces the AquaSphere ${ }^{\mathrm{TM}}$, a disposable dispensing system for Healthy Ponds® Pond Cleaner. The AquaSphere is available in/ and 1 acres sizes to treat ponds up to 10 acres. Each AquaSphere provides 30 days of continuous treatment to prevent algae.

The AquaSphere is tossed into the pond, and disposable after 30 days, eliminating mixing, spraying or refilling hassles.

EAC Solutions is the local distributor, (952) 435-5533 ext. 116.

## New for the 2004 Season <br> From Turf Supply Co.

| Aquatrols | 16/90 Granular |
| :--- | :--- |
| Dow | Spotlight |
| Emerald Isle | 4 new Foliars |
| FMC | Talstar EZ |
| Griffen/Dupont | Vital |
| Syngenta | Primo WSP |
| SeaPro | Cutless |

Soil First and Earthworks: Soil testing and new organic products for the soils. Contact your Turf Supply representative for more information.

## MTI Distributing Partners with TURFCO ${ }^{\oplus}$ and National Mowers ${ }^{\circledR}$

MTI Distributing now represents both TURFCO and National Mowers throughout Minnesota and North Dakota as well as parts (Continued on Page 21)


## Mission: Greens quality cut. Less compaction.



## Accomplish it with the only Super Lightweight Fairway Mower. Jacobsen SLF-1880'

The Jacobsen Super Lightweight SLF-1880 Fairway Mower was specifically designed to deliver a greens quality cut, faster fairways and reduce turf compaction. Narrow 18" floating cutting heads handle contours perfectly for a precision, Jacobsen cut on undulating fairways. And the SLF-1880 delivers an 80 inch cut with little or no turf compaction due to its light weight. Plus, the ergonomic cockpit helps improve operator productivity.
You also get CustomerOne ${ }^{\text {t" }}$ support with every Jacobsen product which means exceptional warranties, OEM parts, dealer service, and superior technical assistance. So, when you want the most productive, greens quality cut for your fairways, depend on Jacobsen. For a free demonstration of the SLF-1880 or other Jacobsen equipment come see us or give us a call.

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## In Bounds

## By Jack MacKenzie, CGCS

 North Oaks Golf ClubThroughout the years and at various functions both family and business, I am often asked what it is like to be a golf course superintendent. Beyond the agronomic skills of growing grass and maintaining golf course accessories, I used to describe myself as a classic painter from the Impressionist period. An artist who used bright color and great texture to enhance the simplicity of a scene, my canvas was the design created by Stanley Thompson, my paint the grasses, trees and flowers.

It was a terribly arrogant atrocity to align myself with the masters such as Monet, Van Gogh and Renoir. For in reality I am a leader of a troop of artists, each trained to perform specific important tasks. My league is charged with producing the most beautiful and playable piece of golf property possible. I really wasn't the painter, but rather the guy who mixed the paint.

A couple of years ago I expanded my musical horizons and began attending local performances of the Metropolitan Symphony Orchestra. Besides broadening my cultural perspective I went to watch my brother-in-law Bill Schrickel, the lead conductor, enunciate with deliberate fashion the cues necessary to elicit harmony from a group of musicians

His dramatic overtures persuaded distinct sounds from individual players. In and of themselves, the music would be fine, but in a group without a leader it would be a true cacophony of disastrous proportions. However, with repetitive practice and the prodding of a conductor well versed in the art of visual manipulation and musical management, a delightful and consistently grand orchestral event is always accomplished.

Not unlike a conductor, I too manage individuals to the fullest of their capabilities and in harmony to produce a golf course. Some of my staff are well versed in bunker grooming, but upon a green mower they would be disastrous. Several members are faster than the rest and must be tempered. And others are slower and must be encouraged.

On a day to day basis we practice our chores in preparation of the "big events" of the season. The Women's Guest Day, the


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Men's Three-Day Invitational and the Club Championships. During these occasions we perform in concert to produce a synchronization of pleasure, both visual and physical. I am a conductor of a well rehearsed orchestra. However, even the most practiced consortium must have a contingent plan for the unforeseen challenges.

And thus I am not unlike an astronaut.
Recently I viewed, for the umpteenth time, the movie Apollo Thirteen. As always I was thrilled by the adventure, warmed by the conclusion and impressed by the lengths to which the astronauts and their peers went to, to save the mission. Their well laid out plans, detailed to exacting precision, were thrown out the window when disaster struck.

However, by applying themselves to the individual tests at hand, they were able to succeed. It was an individual goal, to return safely to earth, yet undeterminable by any one alone. It required a group of professionals up to the task, motivated by a leader capable of making decisions based upon team recommendations.

Hmmm, does this sound familiar? Many times I have laid out plans weeks in advance in preparation for a golf event. The bunker edges are manicured; the greens smoothed and slickened, the wastebaskets Armoralled and bathrooms power cleaned. All of this effort for naught, for too often on the day of the event something happens; Mother Nature dishes up a storm that washes all the bunkers away, environmental condi-

## "In times of crisis a golf course manager must be able to orchestrate team talented individuals to perform beyond their abilities for the duration of an event."

tions become optimal for a Pythium outbreak, a six inch main line blows a coupling or the event is changed from tee times to a shotgun. Holy Moly Rocky, call in the conductagrononaut!

In times of crisis a golf course manager must be able to orchestrate team talented individuals to perform beyond their abilities for the duration of an event. The superintendent must appreciate everyone's skills and apply them where they will do the most good, or impact the project with the greatest result. And after the calamity, and typically success of an event, everyone again goes back to practicing golf course maintenance.

In times of leisure, day to day operations educate the turf management staff as to their individual strengths and weaknesses. The mundane prepares them to be a working machine ready to charge, at the whim of the superintendent or during a battle with the elements.

Today when I am asked what it is like to be a golf course superintendent I am proud to announce that in truth I am really a conductagrononaut. In conjunction with applying my agronomic skills, I lead my team of turf professionals through a rigorous drill of training in preparation for the climatic events alongside of and into which we must sail like a schooner abreast a hurricane, racing to deliver the goods, a wonderful golf experience. - JM

