How Does Your Turfgrass Rate With The Toughest Critics?

At the 19th hole, what do your golfers say about the previous 18?

Now available EXCLUSIVELY from Precision Turf — a fertility program with POLYON® controlled-release fertilizer that assures thicker, greener, healthier turf — consistently and predictably — so you can have tournament conditions every day. Ask your Precision Turf rep to run a FREE POLYGRAPH® computer customized fertility program for your course. For more information contact your rep or contact the office directly.

7728 Commerce Circle
Greenfield, MN 55373
www.PrecisionTurf.com
Phone: (763) 477-5885
Fax: (763) 477-6511
Toll Free: (800) 925-TURF
Email: Email@PrecisionTurf.com
Inside This Issue Of Hole Notes

4 President's Message - Richard A. Traver, CGCS
5 Wayzata CC to Host Research Scramble
6 Water Thirsty Golf Courses - Frank Deford
7 Watering Fairways - 1923
12 Let's Save Water - 1949
13 Know How to Water - 1953
15 Lessons Learned - 1968
19 Effective Use of Our Natural Resources - 1981
21 The Changing Scene - 1983
24 MGCSA Scholarship Scramble Re-cap
26 Peer-to-Peer: Maintenance Practices
27 The Savory Super: Carrot Marinade
   - Scottie Hines, CGCS
28 MTGF Report - Jack MacKenzie, CGCS
29 GCSAA Expands TGIF Access
30 In Bounds: Serenity Now! - Jack MacKenzie, CGCS

2008 MGCSA Calendar

Monday, August 4
MGCSA Harold Stodola Research Scramble
Wayzata Country Club, Wayzata
Host Superintendent: Bob Distel

Monday, September 8
MGCSA Championship
The Minikahda Club, Minneapolis
Host Superintendent: Jeff Johnson

Thursday, September 11
University of Minnesota Field Day
The TROE Center
UI of M Host: Dr. Brian Horgan

Tuesday, October 7
MGCSA Fall Mixer
Pleasant Acres Golf Club
Host Superintendent: Dennis Perreault

About the Cover
Wayzata Country Club's par 5, sixth hole. Wayzata CC will host the 2008 MGCSA Harold Stodola Research Scramble on August 4. See preview article on Page 5.

Advertisers

About the Cover
Wayzata Country Club's par 5, sixth hole. Wayzata CC will host the 2008 MGCSA Harold Stodola Research Scramble on August 4. See preview article on Page 5.

Advertisers

BASF Corporation .................................................. 10
Bonestroo .......................................................... 6
Classified Ads ..................................................... 23
Country Club Turf ................................................... 29
Excel Turf & Ornamental ......................................... 7
Glenn Rehbein Company ......................................... 28
Greenimage LLC .................................................... 8
Hartman Companies ............................................... 27
John Deere ........................................................... 12
Leitner Company .................................................... 9
MTI Distributing, Inc. ............................................... 3
MTI Distributing, Inc. .............................................. 16
MTI Distributing, Inc. .............................................. 17
MTI Distributing, Inc. .............................................. 23
Plaisted Companies, Inc. .......................................... BC
Precision Turf & Chemical ....................................... 2
Superior Turf Services, Inc. .................................... 20
The Tessman Company ........................................... 5
Turfwerks ............................................................ 31

THE MIDWEST'S LARGEST USED EQUIPMENT DEALER

SPRAYERS and VEHICLES!

ROTARY MOWERS!

REEL MOWERS!

AND MORE!

Stop in today for all your golf and turf equipment needs. Or view our entire inventory online at www.mtidistributing.com

4830 Azelia Avenue N. #100
Brooklyn Center, MN 55429
763-592-5610 / 800-362-3665

Hole Notes July 2006 3
PRESIDENT'S MESSAGE

The Value of Water

By Richard A. (Rick) Traver, CGCS

I was recently directed toward an article about water use and golf courses. The article talked about the value of water and the importance of using it judiciously. Both are concepts I truly believe in. This particular writer also goes on to tout the many things that we as an industry are doing to manage our resources more wisely. He also goes on to say that we are water guzzlers and, finally, that for us to be green and fit in, we need to go brown. He does have a point in that irrigation water isn't used very prudently in this country (not just golf courses, but others as well, for instance the home lawn irrigation systems, but don't get me started) and there are areas of our golf courses that we can leave a little less pristine. The undertone of the article, while positive in many aspects, still shows that the golf community will be one of the first places people look to save water.

While we were the targets for the phosphorus issue, we ultimately will be the targets for water use as well. This is one of the many reasons the board is in the process of putting together a committee to develop a Best Management Practices program for Superintendents, which will ultimately help us if negotiations are needed in the future with legislators over water use and improve our image with the public. I hope you all had the opportunity to complete the survey that Mike Knodel put together for us. He has been working pretty hard at putting the questions together in an effort to get useful responses and not have you get burdened down with a long survey. The deadline was June 30 and the data received will be discussed at length at our next board meeting.

Thank you to Coffee Mill Golf Club's General Manager Robert Sill and Superintendent Jeff Nelson for hosting the MGCSA Spring Mixer. While I was unable to attend, I understand it was a great day.

We had a great time at Somerset Country Club for the MGCSA Scholarship Scramble. I want to thank James Bade and the Somerset crew for hosting the event and for the wonderful course conditions. The sunshine was just an added bonus. Thank you, James for a job well done.

Interlachen's Matt Rostal also deserves some kudos. Matt was interviewed in the Star Tribune during tournament week for the United States Women's Open at Interlachen Country Club, and provided a very positive image for Superintendents. Thank you, Matt. You, your crew, along with many MGCSA volunteers, presented the historic Interlachen Country Club beautifully for those on the grounds and also the ones watching on TV.

Here's hoping everyone has been having a great start to the summer and I will see you next month.

Respectfully,
Rick Traver
Wayzata Country Club Set to Host MGCSA
Harold Stodola Research Scramble on Aug. 4

When MGCSA members travel to Wayzata to play in the Harold Stodola Research Scramble, they will notice some changes going on. Wayzata Country Club Superintendent Bob Distel, his assistants Michael Cauley, Adam Beers and Mike Havens, his crew, and intern Kevin Schneider are in the midst of some major projects.

Some of the major projects being undertaken are bunker, tee and driving range renovations along with upgrading a 6-hole short course.

Duininck Bros. Inc. was hired to help Distel and his staff with a majority of the renovations.

The Harold Stodola Research Scramble will be limited to 30 teams. Because of the limited amount of entries that may be accepted, Class A and Class SM members will be allowed three guests each. Other classifications may play but may not bring a guest.

Club staff and golf professionals are welcome to play. Entry fee is $110 per person which will include lunch, dinner, research donation, golf cart and golf.

A reception and dinner will follow in the Wayzata Country Club clubhouse.

Wayzata Country Club's golf course was designed and built by Robert Bruce Harris 52 years ago. He took an amazing piece of land and crafted a large, traditional course for the members to enjoy. His expansive design and use of the terrain have created a unique identity for the course.

Many of the trees on the course were planted when the course was first converted from a farm.

Over the years, lakes have been built, thousands of yards of tile have been added to assist drainage, bunkers replaced and an irrigation system was installed to provide consistent watering.

A testament to Harris' design is that the course has not undergone a remodel in the history of the club, until now.

—

Aqueduct and the complete line of Aquatrols products are available at Tessman.

The Tessman Company — 1300 Sylvan Street • St. Paul, MN 55117 • 651.487.3850

WHAT IS AQUEDUCT? Aqueduct is a curative surfactant formulation designed specifically to provide rapid recovery from existing water management problems such as localized dry spot. Aqueduct can also be used as a pre-treatment tool to correct problem areas before starting a regular preventative program. It moves water deeply into problem areas, reducing water repellency and restoring the root zone’s ability to regain optimum moisture levels. Aqueduct quickly reduces turf wilt and promotes recovery of stressed turf.

TREAT PROBLEMS WHEN THEY APPEAR — Because Aqueduct works rapidly to correct localized dry spots and other water movement issues, it’s a quick and economical solution to problem areas course wide. It’s the perfect match for areas such as mounds, slopes and bunker faces that tend to lose water quickly. Aqueduct helps water move more evenly into these traditionally dry areas, making sure turf gets the water it needs to stay alive and play well. For areas that are hard to reach with spray equipment, try our spreadable water-dispersible SWDG granular formulation for easy application.

ALSO GREAT FOR LANDSCAPED AREAS — Whether you are establishing new plantings or maintaining existing landscaped areas, Aqueduct can help you successfully maintain attractive greenery even when the weather turns hot and dry. Water management is one of your most important issues; loss of plant materials on new landscapes from moisture stress is all too common and the need for replacement plantings can be expensive. Gaining control of water repellency issues with Aqueduct will result in more attractive landscape areas that are less expensive to maintain.
Water-Thirsty Golf Courses Need to Go Green

By FRANK DEFORD
Golf Writer

(Editor’s Note: Over the next series of pages, articles about water and golf courses dating back to 1923 have been reproduced courtesy of the USGA Green Section and Golf Digest.)

I have always thought that golf courses are perhaps the finest collaborative work between God and man. Yes, only God can make a tree, but golf course architects can make trees seem prettier, and golf course superintendents can make the grass greener and the flowers brighter, so that even when you can’t hit a fairway or sink a putt, it certainly is an awfully lovely place to be frustrated.

The only thing is, the whole experience, the whole sport, is utterly dependent on one thing: H2O ... water. And, of course, we don’t have enough water anywhere for all the people on the earth. And, of course, whereas we lack oil, there are other forms of energy, but when we lack water we simply get thirstier. And a golf course is a selfish creature.

There are now approximately 16,000 courses in the United States — about half the total in all the world — and if you laid them out together, they would be as large as Delaware. And that Delaware of golf courses uses water, lots of it. They call them "greens" for a reason, don’t they?

Audubon International estimates that the average American course uses 312,000 gallons per day. In a place like Palm Springs, where 57 golf courses challenge the desert, each course eats up a million gallons a day. That is, each course each day in Palm Springs consumes as much water as an American family of four uses in four years.

Now, granted, it’s easy to pick on golf. It’s a rich man’s game, and when we see its stewards, they’re always in military blazers and they’re stuffy and pompous. But a great many people in golf are catching on. Eleanor Sterling, the curator for a magnificent exhibit about the water crisis that’s been at the American Museum of Natural History in New York, tells me: "There are opportunities for the sport to adapt, and there are signs that it is doing so."

In its May issue, Golf Digest devoted a huge, candid article by John Barton to the subject, in which the magazine states very frankly: "Golf will face a crisis over water." And then it outlines what must be done. It won’t be easy. Golf Digest points out, for example, that an incredible 41 percent of golfers polled believe that global warming is a myth.

But among the 59 percent of the enlightened golfers, the problem is being addressed. Perhaps as many as 1,000 courses are using recycled or reclaimed water, and the United States Golf Association has made that mandatory for some areas of the Southwest. New grasses are being developed that require less moisture to thrive. Overseeding is being frowned upon. Courses are being returned more to their natural state, so grass will often have to lose some of its sheen.

You see, at the end of the day, for golf to go green and accommodate itself to the real world, it’s simply going to have to be much more brown.
Mr. Chairman and Gentlemen: I want to pay a tribute to and to thank Dr. Piper and his associates for the splendid work which they have been doing and especially as it affects us in the northwestern part of the United States. Ours is a new country; most of the courses are new.

There has developed recently a great interest in golf. I think there are 22 golf courses in the cities of St. Paul and Minneapolis today, and two-thirds of them have been built and organized within the last few years.

Now I hesitate to appear before an audience like this, of men so skilled and experienced in matters connected with the care of golf courses, but we in the northwestern states have been suffering in the last three or four years from extreme drought, with which I hear some of you gentlemen living near New Jersey and the seaboard have not been affected.

With us, the past season has been the fourth consecutive season of excessive drought. The records of the Weather Bureau show that in the area of which Minneapolis is the center, the rainfall for four years has been over five inches per year below normal. In the spring, when the rains were abundant, our fairways were in fine condition. As the summer heat came, however, the fairways dried up and the higher ridges became brown and burned hard.

In 1922 we conducted some experiments in breaking up or aerating by various methods the surface of the soil on these dry hard ridges. We tried a disk, but we found that an ordinary disk, with the blades set as nearly vertical as possible, would work all right on the higher ground, but as we dropped down into a hollow it would tear or mutilate the sod. We then tried a spiked harrow with the spikes set at an angle, but no matter how great the angle of the spikes, even though they were set in the line of the cut, this machine also tore the sod. "We then built a spiked roller on the principle of the spiked rollers which were used on the putting greens and with which you are familiar. This spiked roller was made out of cement poured into a cylinder of sheet iron punctured with holes at the proper places so that spikes would protrude. The spikes were quarter-inch iron boat-spikes 4 inches long with chisel-points. The points were put in line with the direction in which the machine would be hauled. This machine worked very satisfactorily. It broke up the surface of the ground thoroughly. On certain portions of the fairway we put the machine over once, on other portions twice, and on other portions three times, running it once north and south, and another time east and west, and crossing the cuts. This broke up the soil. Our theory was that when the rains came, with the soil broken up on the

(Continued on Page 9)
A better approach to fairway mowing is at GreenImage, your John Deere dealer. The 7500 PrecisionCut Fairway Mower from John Deere mows great on the front and back nines, so your course gets a beautiful cut as it keeps the green year in and year out. And it's all backed by excellent service at GreenImage that's par for the course.

7500 PrecisionCut Fairway Mower

- 37HP Yanmar turbocharged diesel engine
- GRIP All-Wheel Drive Traction System
- Double acting, single-rod hydraulic steering cylinder
- Heavy-section 7-blade standard cutting units
- 18-gallon fuel tank

GreenImage, LLC
12040 Point Douglas Dr S. | Hastings, MN
651-437-7747
www.greenimagellc.com

“Where Customers
Become Our Friends”
Watering in the 20s—

(Continued from Page 7)

surface, every drop of water would penetrate the soil and the plants would get the full benefit of the rain. It worked all right in the fall and it worked all right in the spring, but when the drought came we found that in those areas which had been thoroughly spiked, the weeds, dandelion, and the knot-grass grew and crept in more rapidly than in the areas that had not been spiked.

We have been cutting our course for 25 years. A great many members of the club vitally interested in the course felt that we had depleted the soil by constant cutting of the grass, and that our remedy lay in fertilizing. Therefore in the fall of 1922 we spent a large sum of money in top-dressing. We hauled in hundreds of loads of good rotted manure, and spread it all over the course, and seeded. The results appeared in the late fall. The grass came up, and in the spring we were very much pleased. But again when the drought came, this fine, tender new grass turned brown and faded away, not as badly as if it had not been fertilized, but still we lost that good growth of grass.

We then made up our minds, and it seemed to me a simple proposition – that what we ought to have was water. Our soil is good, the majority of the soil is very suitable for raising good grasses, but 'we needed water. In the latter part of April of this year (1923) I decided to try an experiment. I staked out a circular area 50 feet in diameter and selected the worst piece of fairway that we had on the entire course. It was on a high ridge with rather poor soil; it was infested with dandelions and it had areas of knot-grass, that red-stemmed wiry weed with which you are probably familiar, so very prevalent but in the western part of the country. In that area were also what we call fairy rings, a fungus of the nature of a toadstool, which grows in a circle or crescent and kills the grass and apparently depletes the soil so that nothing will grow on it; there is a complete change in the chemical nature of the soil; what it is I do not know. This area, as I say, was about as poor a piece of fairway as we could select. In the center of that fairway I drove an inch-square peg, level with the surface and divided the circle into four sectors - north, south, east and west. Where those lines touched the outside of the circle I drove another peg. We then divided each one of those sectors into halves, and drew a line, and drove a peg. We marked all those lines with a tennis marker with white lines, so that the marks were perfectly plain on the surface of the ground.

On the 1st day of May 23, we started a rotary sprinkler. That sprinkler was placed on the center peg, and the greenkeeper had orders to run that sprinkler every morning from seven until eight o'clock, irrespective of the weather, rain or shine. Before we started sprinkling, we seeded this area. In one quarter we sowed redtop; in the next quarter, bluegrass; in the next quarter, red fescue and in the last quarter, a mixture of 40 per cent bluegrass and 60 per cent redtop. Then in each one of these quarters, which was divided in half, we sowed the seed in different densities; that is, in half of the quarter where the redtop was we sowed at the rate of about 100 pounds to the acre, and in the other half at the rate of 200 pounds to the acre, which, of course, is intensive seeding. Then we started watering. Our fairways had already commenced to dry up in the latter part of April, when this watering was started, and by the end of May the results had become very

(Continued on Page 11)
Rescue your course from the effects of summer stress. Use Trinity and get better TURF™

Finally, an SI you can use in the summer! Trinity™ fungicide delivers superior control of tough diseases like anthracnose, brown patch, take-all patch, summer patch and dollar spot — all without unwanted PGR effects. Trinity even suppresses algae, giving you improved turf quality for a healthier course. Save your turf this summer. Use Trinity.

Find out more: bettersurf.com
Find a turf care supplier: 800-545-9525

We Don’t Make The Turf. We Make It Better.™

Always read and follow label directions. Better Turf, Trinity and We Don’t Make The Turf. We Make It Better, are trademarks of BASF.
©2007 BASF Corporation. All rights reserved. APN 07-14-002-0024