

## TEE-TO-GREEN QUALITY FROM JOHN DEERE

#### 2653

Hydaulic reel drive, exceptional climbing ability, and 26-inch cutting units let you mow where others can't.





#### **GATOR VEHICLES**

Your best choice for utility hauling with 4- and 6-wheel low-groundpressure models available.

## 3215/3235

Both deliver ground-hugging fairway performance with five John Deeremanufactured 22-inch cutting units.





#### 3365

Five 30-inch cutting units combine to deliver a quality cut over wide areas—from fairways to roughs.

#### 1200A

New design features more power, more comfort, more attachments, and less noise





#### 1800

True utility performance with your choice of sprayer, spreader, and cargo box configurations.

#### 220

This new walk-behind features an operatorpresence safety system, new engine, and 11-bladed reel.





Gas and diesel models both feature 18hp engines and John Deere cutting units, for exceptional quality of cut.



NOTHING RUNS LIKE A DEERE®



## **Polfus Implement**

1409 Hwy. 64 East New Richmond, WI

Call for Demonstration

(612) 439-6776 or (715) 246-6565

## Golf Course Study At Four Courses Identifies Environmentally Responsible Turf Management

By the Suburban Hennepin Regional Park District

Hennepin Parks staff recently completed two pioneering research studies designed to determine if the pesticides and fertilizers used on golf courses affect the quality of adjacent waterbodies. The research was conducted from 1990 to 1994. One study measured the amount of nitrogen, phosphorus and selected fungicides infiltrating through a green at Baker National Golf Course. The second study measured surface runoff from two private and two public metropolitan area golf coruses: Baker National Golf Course, Meadowbrook Golf Course, Woodhill Country Club and The Minikahda Club.

The results of the studies were very surprising relative to the small amounts of fertilizers and pesticides running off of the courses. For instance, the loss of phosphorus from golf courses was very small, about 0.13 pounds per acre annually. By comparison, the loss of phosphorus from urban

residential areas averages 0.94 pounds per acre annually. The loss of nitrogen from the four golf courses was also lower than the loss from urban residential areas, 1.54 pounds per acre annually and 4.8 pounds per acre annually respectively. The total quantity of phosphorus, nitrogen and fungicides infiltrating through the green at Baker National during the three-year study was less than 0.1 percent of the amount of each chemical applied to the green. This data indicates that there was no significant movement of chemicals from the green to the underlying groundwater table.

Two factors were identified which contributed to the runoff water quality. Contrary to popular belief about golf courses, these four facilities did not receive massive amounts of fertilizer. In fact, records show that, on average, the four courses received 80 percent less phosphorus than most urban lawns. All four of the golf courses regularly test their soils to dtermine fertilizer needs, and apply only the amount recommended by the test.

Secondly, three of the study sites were on golf courses which are Audubon Cooperative Sanctuaries. The Audubon program promotes integrated pest management, which may have reduced chemical use, and therefore chemical runoff, from these courses. Turf areas were inspected daily during the growing season for evidence of disease problems. Chemicals were used only when diseases were found, and then applied only to problem areas, not indiscriminately over the entire course.

The four golf courses demonstrate that high quality turf can be maintained without constant applications of phosphorus fertilizer and herbicides. By adopting some of the management practices of these four golf courses, such as soil testing, aeration and addition of organic matter, golf course managers can reduce nutrient and fertilizer runoff from their courses.

For a complete report of these studies or further information, contact John Barten, Hennepin Parks Water Quality Manager at (612) 473-4663.

The following organizations provided funding to implement the studies: Legislative Commission on Minnesota Resources (LCMR), Hennepin Parks, Lake Minnetonka Conservation District, Minnehaha Creek Watershed Management District, Elm Creek Watershed Management Organization, Pioneer Sarah Creek Watershed Management Commission, Riley Purgatory Creek Watershed Management District, Hennepin Conservation District, and the Minnesota Golf Course Superintendents' Association.

## **The Oxygen Giver**

A blade of grass. It has no moving parts. Yet in its growth process, it takes polluting gases from the air and returns pure oxygen.

A blade of grass. In a season of active growth, the grass in a well-maintained, 50-foot-square lawn produces enough oxygen to support family of four, day after day.

A blade of grass. In a world where personal attempts to improve life go unnoticed, there's a way for you to make a difference...by taking care of your turf.

Call your ProTurf, Tech Rep for details.

Leif Erickson, Territory Sales Rep Tel: 800/728-0354



Mike Redmond, Territory Sales Mgr. Tel: 612/422-0785

22 • HOLE NOTES

## Minnesota Golf Course Superintendents' Association

## **BUDGET REPORT**

June 1996 through May 1997

(Presented here is the MGCSA budget from June 1996 through May 1997. The budget was approved by the association's Board of Directors at its June 17, 1996 meeting.)

Income  4000-00 · MEMBERSHIP DUES  4010-00 · MONTHLY MEETINGS  4060-00 · GOLF CHAMPIONSHIP  4070-00 · MINI SEMINAR	60,000.00 9,600.00 3,000.00 8,000.00
5000-00 · ADVERTISING REVENUE	52,500.00
Total Income	133,100.00
Gross Profit	133,100.00
Expense 6000-00 · ADMINISTRATIVE SERVICES	بو
6000-08 · PROFESSIONAL SERVICES	2,200.00
6000-09 · ADMISTRATIVE EXPENSE	28,757.00
Total 6000-00 · ADMINISTRATIVE SERVICES	30,957.00
6010-00 · MEETING EXPENSES	
6011-00 · ANNUAL MEETING	1,500.00
6020-00 · MONTHLY MEETING	9,000.00
6030-00 · BOARD MEETING	1,000.00
6040-00 · GOLF CHAMPIONSHIP	3,000.00
6050-00 · FAMILY OUTING	0.00
6060-Q0 · PRESIDENTS DINNER	600.00
6080-00 · MINI-SEMINAR	8,000.00
Total 6010-00 · MEETING EXPENSES	23,100.00
6100-00 · INSURANCE 6120-00 · TELEPHONE	2,775.00
6120-07 · 800 TOLL EXPENSE	960.00
6120-08 · PHONE/LONG DISTANCE EXP	960.00
6120-09 · FAX EXPENSE	720.00
Total 6120-00 · TELEPHONE	2,640.00
6200-00 · OFFICE EXPENSES	
6210-00 · PRINTING EXPENSE	1,000.00
6220-00 · POSTAGE EXPENSE	1,000.00
6230-00 · ENVELOPE/STATIONERY	400.00
6240-00 · FLOWERS & GIFTS	200.00
6250-00 · OFFICE SUPPLIES	400.00
6260-00 · EDUCATION EXPENSE	1,000.00
6270-00 · BANK CHARGES	100.00
Total 6200-00 · OFFICE EXPENSES 6300-00 · MEMBERSHIP SERVICES	4,100.00
6305-00 · MEMBERSHIP CARDS-CERT-BADGES	2,000.00
6310-00 · AWARDS EXPENSE	450.00
6320-00 · DONATION EXPENSE	500.00
6330-00 · DUES & SUBSCRIPTIONS	210.00
6340-00 · ENVIRONMENTAL EXPENSE	1,500.00
6350-00 · EMPLOYMENT ASSISTANCE EXPENSE	3,500.00
6360-00 · PUBLIC RELATIONS	1,600.00
6365-00 · HUMAN RESOURCES	500.00
6370-00 · SCHOLARSHIP COMM EXP	1,500.00
6380-00 · RESEARCH COMM EXP	0.00
6390-00 · ROSTER	6,000.00
Total 6300-00 · MEMBERSHIP SERVICES	17,760.00
6400-00 · HOLE NOTES PUBLICATION	
6400-01 · PRINTING/PRODUCTION	48,000.00
6400-02 · HN POSTAGE	2,400.00
The same are the same and the same and the same are the same and the same are the s	
Total 6400-00 · HOLE NOTES PUBLICATION	50,400.00
Total Expense	131,732.00
Net Income	1,368.00

## COMMITTEE UPDATES



### Scholarship Committee

The Scholarship Committee has received approval from the Board of Directors to sell raffle tickets at the MGCSA booth on the show floor at the Turf and Grounds Convention.

Tom Kientzle at The Pines at Grand View Lodge has donated a weekend of golf with room and board included to be used anytime in 1997 as one of the prizes to be raffled off.

We are submitting an application to the Minnesota Gaming Commission along with our non-profit status to receive a license to print tickets for sale on the show floor.

We are hoping to have a list of high quality prizes available in the raffle with all profits going to scholarship funds. Anyone having a prize they would like to donate please contact the MGCSA office at (612) 473-0557 or toll free at 1-800-642-7227 or fax (612) 473-0576.

We would like the prizes to be valued at \$100.00 or more and are currently looking at pricing the tickets at \$5.00.

Charlie Pooch
 Chairman
 MGCSA Scholarship
 Committee

# A (W)HOLE IN ONE

One-stop shopping for golf course materials

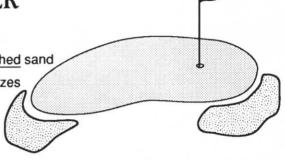


- 80/20, 70/30, or mix to order
- Sand screened with 1mm screen (USGA spec)
- Product blended then rescreened through 3mm screen to assure clean mix
   All specs available upon request

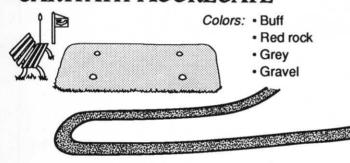
## BUNKER SAND

· Clean, washed sand

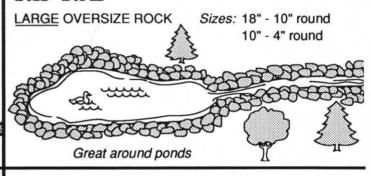
 2 particle sizes to choose from



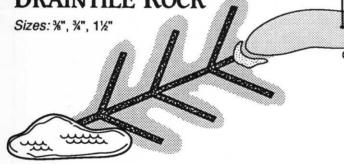
## **CARTPATH AGGREGATE**



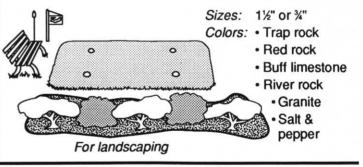
## RIP RAP



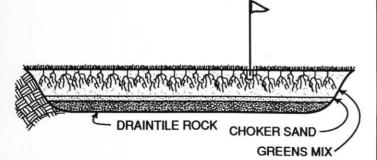
## **DRAINTILE ROCK**



## **DECORATIVE ROCK**



## **NEW CONSTRUCTION**





P.O. Box 332 Elk River, MN 55330

Minnesota's complete supplier of golf course materials

Todd Plaisted • John Plaisted • Steve Young

(612) 441-1100

## Letter to the Editor:

Congratulations on your latest issue and the editorial policy that faces straight on some of the issues facing *Green Space Managers*. As you can see, I do a cover-to-cover job on the copies of state/regional GCSA publications that I receive.

Reading is a great way to beat the heat down here (Whitney, Texas) — it can be done indoors.

While we have had few rains, we are about 50% of normal — whatever that is. Our golf course is in good shape, but some that irrigate with river water are likely to suffer later on. Lack of rain enables the natural salt seepage in West Texas to become more concentrated than usual. Add high evaporation rates and we have trouble. Our lake (Whitney) on the Brazos River is six feet below normal and is due to be drawn down another five feet to provide water for the rice growers downstream. I'm glad I'm not in the marina business.

Oh well, if we didn't have something to complain about, it would be a pretty boring life. Here's hoping that you foks have a better summer than '95, so that those who pay the bills can make up for play time lost in the spring.

Keep the peace and keep up the good work on Hole Notes.

-Sincerely, James M. Latham



## Paskvan Consulting

Route 1 Box 77A Akeley, MN 56433 218-652-3542 Fax 218-652-2949

Where Success is Never an Accident

Specialists in Soil and Plant Nutrition Tailored to Golf Courses and Sports Turf

#### Services Provided:

Complete inventory of the soils on the course or job site Sampling, analyzing, delivery and interpretation of the results to eliminate guesswork

Help find corrective fertilizer materials to save money Physical analysis on sand-soil-peat to determine proper mixing for greens and topdressing

Fast turn around time, yet quality is never compromised

## **Oxygenated Gasoline Information**

- 1. Make sure the carburetor is adjusted properly for the fuel that is being used. Oxygenated gasoline has a tendency to cause the engine to run "lean" when compared to standard fuels. A slight enrichment of the carb adjustment needles will take care of this.
- 2. Us a good quality two-stroke oil in the gas/oil mix. Water-cooled two-cycle oil does not have the necessary additives to provide proper engine protection.
- 3. Keep the fuel fresh. Ethanol has an affinity for water and if enough moisture is introduced into the fuel the alcohol will settle out of the mixture and could cause a major engine failure. Only buy enough gas that can be used up in a 30-day time period.
- 4. Properly store the equipment. If the engine is not going to be used for 30 days or more, the remaining gasoline that is in the equipment should be drained from the tank and properly disposed of. This will help keep the fuel from going stale in the tank and absorbing moisture.
- 5. Gasoline that contains MTBE do not appear to have as much of a problem separating from the mixture if water or moisture is present. All the guidelines mentioned above should still be followed.

—The Green Breeze Greater Cincinnati GCSA



Specializing in
Re-Design & Construction
of Golf Courses

Consultants Project Management

Contact: Gerald "Gary" Rohling

817 Gates Avenue Elk River, MN 55330

(612) 441-5127 Fax (612) 441-3851

JULY 1996 HOLE NOTES • 25



## Four Fairway Mowers to Choose From

- Hydraulic Reel Drive
- 2-or 4-Wheel Drive
- Diesel Liquid-Cooled Engine
- Lightweight (5100/5300-D)
- Mid-Sized (6500-D)
- Heavyweight (3500-D/4500-D)

REELMASTER® 5100-D / 5300-D. (below) An advanced standard of lightweight fairway mowing — delivering enhanced playability, reliability and a new dimension of serviceability.



REELMASTER® 6500-D. (at right) Has the capacity to take charge of your most challenging fairway conditions. It's lightweight, agile and ushers in a new era of features which enhance quality of cut and after-cut appearance. You'll come to know it as the first truly mid-sized fairway mower.





**REELMASTER® 3500-D.** (above) A versatile, hard-working triplex mower. Deisgned to mow a wide range of turf areas — hills, formal and informal turf.



**REELMASTER® 4500-D.** (above) Superior playability. Superior cutting technology with exclusive variable reel speed and proven reliability with power to spare.

## CALL MTI AND TEST THEM TODAY



DISTRIBUTING CO.



### **PLYMOUTH HEADQUARTERS**

14900 Twenty-first Avenue North Plymouth, Minnesota 55447-4655

1-800-362-3665 • 612-475-2200 • FAX: 612-475-0351

### **FARGO BRANCH**

4310 Main Avenue Fargo, North Dakota 58104

1-800-782-1031 • 701-281-0775

## **UNDERGROUND DISPOSAL CONTROL PROGRAM**

## Car Wash and Vehicle Maintenance Facilities



Underground disposal of commercial and industrial wastewater can cause serious soil and groundwater contamination if not carefully controlled. On-site sewage treatment systems are designed to treat household wastewater and do not provide adequate treatment for the types of contaminants found in commercial and industrial facilities. This article provides an overview of the regulations and restrictions concerning the management, treatment and disposal of industrial wastewater in underground sewage systems in Minnesota. Because of the potential for wastewater to contaminate soil and groundwater, the policies and regulations regarding underground disposal systems are strict.

## **Hazardous Waste Disposal**

It is illegal in Minnesota to dispose of any hazardous waste through underground discharge, including septic systems and dry wells. All wastes must be evaluated to determine if they are hazardous. Wastes which meet the definition of a hazardous waste must be managed in accordance with Minnesota's hazardous waste rules.

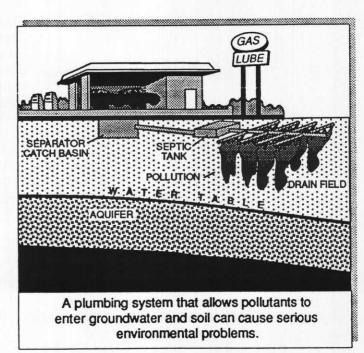
## Floor Drains and Shop Sink Connections

Floor drains and shop sinks connected to on-site septic systems or drywells can be pathways for contaminants to reach groundwater sources — especially in vehicle maintenance facilities (as illustrated in the graphic). For this reason, these types of connections will not be allowed. This position is consistent with current federal policy.

Floor drains and shop sinks must be connected to a municipal sewer or holding tanks so that wastes can be treated in a wastewater treatment facility.

#### Vehicle Wash Wastewater

Discharge of vehicle wash wastewater to an on-site sewage treatment system could result in contamination of ground water sources. For this reason, it should be avoided where possible. Two possible options are hooking up to a municipal sewer system or capturing and reusing wastewater.



## **Connecting to Sewers**

Connecting to a municipal sewer system with permission from the local utility may allow operators to discharge larger volumes of wastewater than they would using on-site disposal methods. In addition, small amounts of hazardous wastes may be discharged into some municipal systems with permission from the wastewater treatment plant operator.

For more information on connecting to sewers, contact the MPCA at (612) 296-8006, or toll-free at 1-800-657-3864.

#### **Reusing Wastewater**

There are a variety of methods to capture and reuse wastewater ranging from sophisticated recycling systems with a series of filters and separators to a simple system of holding tanks hooked in series with water reused out of the last tank.

(Continued on Page 31)

JULY 1996 HOLE NOTES • 27



# The facts are here in black and white. Not to mention classic orange and tournament green.



Jacobsen's 1110 Hauler™ gives you more horsepower, more cargo space

and more colors. For starters, you get an 11 hp, 350 cc, twin cylinder gas engine. Add to that 13.3 cubic feet of cargo space and removable

side panels. Plus, a roomier operator

compartment and a longer,

77-inch wheelbase for more stability and a smoother ride.

Of course, you can also choose Classic Jacobsen
Orange or our new Tournament Green. See your
Jacobsen distributor for a demonstration today.

THE PROFESSIONAL'S CHOICE ON TURF.



3080 Centerville Road St. Paul. MN 55117

(612) 484-8411 (800) 592-9513



## One Guy's Opinion

By Tom Parent River Oaks Golf Course

## I Was Ready to Resign

I was willing to let the dual membership issue drop until tonight. As I write this, it's late Monday night, the 17th of June. I have just returned home from the June MGCSA Board meeting. We approved a balanced budget with surprising ease. We made it through most of the committee reports with even more surprising expedience.

Then we came to the Editorial Committee. I reported that we had received numerous compliments on the last issue of *Hole Notes* including the note from James Latham. I then mentioned that the July issue of *Hole Notes* was pretty well put to bed.

I was ready for the next committee report when the hammer came down! Who the heck did I think I was and what did I think I was doing? I reminded the Board that I did not volunteer for the job, which many would rather have a mild case of the plague than do. I said I was doing the best I knew how. I even offered to swap briefcases with anyone in the room...no takers.

Some suggested that I had singled out our delegate to the GCSAA, Mr. Jim Nicol, for abuse. In short, I had blamed him for the problems I felt existed at the national. I was flabbergasted. Although I disagree with how Jim voted, I made it very clear that I felt he deserved high praise for voting his conviction. For voting how he felt, he best represented our association, according to the input he received at several board and membership meetings. Please go back and reread the first few paragraphs of last month's One Guy's Opinion.

Although I strongly disagree with Jim on many topics, I also strongly admire him for standing up for what he thinks is right. I consider him my friend. If he were running for the GCSAA Board of Directors, I would be a tireless supporter and advocate. Not because I agree with him but because he is a man of courage and conviction.

Jim could have been our association president a year or so back if he had been willing to compromise on his ideals. Like him, hate him, or don't care, we need a lot more Jim Nicols in our organization. To Jim Nicol I must say, if I offended you, which I think you're too big a man to have taken offense, "Jim, I am truly sorry."

My goal in writing the dual membership issue was a number of things. First, I felt that a very short-sighted set of bylaws had been passed without much discussion. Tonight, much to my disbelief, I again heard that "it does not affect us so why should we care." This affects all the affiliated chapters, starting in July of 1997. I don't care that it doesn't affect me, it will effect our organization.

Through efforts of Monroe Miller of *The Grass Roots*, myself and many other editors (The Montana chapter just reprinted "Whose Idea Was this Anyway") that there is a proposal at the national level to reinstate class C voting rights for members of three years or more. This is what a free press is for! Which the *Hole Notes* will no longer be. Now my writings need to be pre-approved by the president before I can print anything, thus the subtitle.

Another goal of a free press, which we're not anymore, is to rouse people from apathy. From the response some board members got (phones rattling off the wall by the sounds of it), I achieved my goal. If we all, including me, had not been so apathetic, the need to write Dual Membership would not have been necessary, as Jim would have known our will and the vote for the state would have been a lot different.

What I find totally amazing is that apparently an astounding number of people called two or three board members and that none of them had the guts to call me. What is even more astounding to me is that *One Guy's Opinion* was a column intended for two-way debate. Yet there are all these members who are so upset that cannot be bothered to writed a rebuttal or even a letter to the editor. Not one word in print from our Association.

I was going to resign over this driving home. Then I thought of Jim Latham's fax encouraging me to keep up the good work. I thought of Joe Moris who is another man I respect greatly that I disagree with quite a lot. When Joe asked me to run for the Board, I told him I was an opinionated SOB. He said that was just what the board needed. So I will stay on until the December election and then I will resign. If I am not allowed to try to make a difference, what's the point? Heaven help I write anything more of a political nature. We don't want to step on anyone's toes now, do we.

PLAN TO ATTEND

## MTGF EXPO

AUGUST 7-8, 1996

MTGF ANNUAL CONFERENCE

DECEMBER 11, 12 & 13, 1996

JULY 1996 HOLE NOTES • 29

## **LESCO**

# LEADERS IN TURF FUNGICIDES

- Touché provides long lasting control of many major turf diseases including leaf spot, dollar spot and brown patch.
- LESCO offers a
   wide range of products
   for turf and ornamental
   disease control.
   Available in sprayable,
   granular and fertilizer
   combination options.





(800) 321-5325 • Fax (800) 673-3030

LESCO and Touché are trademarks of LESCO, Inc.

# Standing Room Only.

Start your own sell-out crowd with Country Club Grass Seed. The same quality that goes into our fertilizer and control products goes into each bag of our Country Club Grass Seed. Which is why you'll find the best grass varieties in the market under the Lebanon name. For more information on our complete line of grass seed, as well as a preview of tomorrow's promising breeds, call your local Lebanon distributor or Lebanon Turf Products at 1-800-233-0628.



FRANK BADEN Territory Manager Bettendorf, lowa (319) 332-9288

## **NATIONAL NEWS**

## Minnesota Superintendent Receives Professional Certification

John Gregory Steiner, superintendent at White Bear Yacht Club, has been designated a Certified Golf Course Superintendent (CGCS) by the Golf Course Superintendents Association of America (GCSAA).

Steiner has been superintendent of the White Bear Lake, Minn., course since 1979.

GCSAA instituted the certification program in 1971 to recognize outstanding and progressive superintendents. More than 1,500 active GCSAA members currently hold "CGCS" status.

To become certified, a candidate must have five years' experience as a golf course superintendent, be employed in that capacity and meet specific educational requirements of college credit or continuing education units. The candidate must then pass a rigorous six-hour examination covering knowledge of GCSAA and its certification program; the rules of golf; turfgrass management; pest management, safety and compliance, and financial and organizational management.

As part of the certification process, an on-site inspection of Steiner's golf course operation was conducted by two certified golf course superintendents: John K. MacKenzie Jr., CGCS, at North Oaks Golf Club, St. Paul, and Greg Hubbard, CGCS, at Manitou Ridge Golf Course, White Bear Lake, Minn.

## **AFFILIATE NEWS**

## North Star Turf Takes on Goosen

Goossen Industries, located in Beatrice, Nebr., recently announced the appointment of North Star Turf in St. Paul as the exclusive distributor of its Turf & Landscape Products within Minnesota, North and South Dakota and western Wisconsin.

Goossen is best known for its line of commercial rake and vacuum products for use on golf courses, parks, schools and institutional grounds. The *Rake 'N Vac* is easily towed and is available with various attachments. The smaller *Vac 'N Load* mounts behind most outfront rotary mowers.

Other products available from Goossen include 3-pt. hitch debris blowers, mulching machines and chipper/shredders. For more information, contact North Star Turf at 612-484-8411 or 800-592-9513.