

Restoring Minnesota Valley

By DAN HILL

*Assistant Superintendent
Minnesota Valley Country Club*

The summer of 1997 was a busy, yet exciting time at Minnesota Valley Country Club. Although we came through the winter well, we had a lot of work ahead of us. The club took out a loan to build a new clubhouse, build a practice facility, install a new irrigation system, drill a new well and undergo course renovation.

Clubhouse Construction

Although the maintenance department was not directly involved in building the new clubhouse, we were affected by the site chosen for the new building. The putting green and the well which feeds our pond would need to be moved to new locations. The loss of the putting green made installing a new putting green top priority. It would need to be ready to accept play by September.

Keys Well Drilling was hired to install a new well and cap the existing well. The amount of sand and silt that was dispersed in the process of conditioning the new well came as a surprise to me. In order to avoid the silt and sandstone from contaminating the pond, which is our water supply for our irrigation system, we routed it to the bottom of the 18th fairway. The fairway was then resodded with bent grass out of the nursery.

Practice Facility

We began work on the practice facility in early spring. The facility replaced four rarely used tennis courts and consists of an 11,000 square foot putting green, a 40,000 square foot practice fairway with a target green and a sand chipping

green.

Hartman Companies, in Victoria, Minn., did the excavation and started by tearing down the tennis courts. In order to avoid the large expense of hauling the debris offsite, the asphalt was ground up into class 5 and used to build a much-needed cart path leading to the driving range. This path doubles as the maintenance road.

The practice facility was then shaped, the drain tile was installed, as well as the irrigation system, and the greens mix was brought in. The facility was now ready for us to seed with Providence bentgrass and grow in.

We had a problem with crabgrass on the practice facility fairway. This had been the area under the tennis courts and was a problem we did not expect. It was a difficult problem to solve, as we could not find a recommended control for crabgrass on new bentgrass seedlings. We chose to spray Acclaim at half of the recommended rate. After about five treatments the crabgrass was gone and the bentgrass came in beautifully. The new green was being used by early September. The rest of the practice facility will be open by the summer of 1998.

Installing Irrigation System

A Toro Osmac irrigation system with a Flotronex pump station was installed. The system was designed by Eric Christianson, of Des Moines, Iowa, and we were very impressed with his plan. After consideration of installation bids, we decided on Midwest Irrigation out of East Dubuque,

Ill. Installation began on August 1st and was completed by November 1st, 1997.

The old system was used throughout the summer of '98. Because the old system was a normally closed hydraulic system, and the blueprint was not very accurate, we were apprehensive about starting the project so early. Not surprisingly, the crew with Midwest Irrigation had never seen a normally closed irrigation system.

A normally closed irrigation system differs from a normally open system immensely. In a closed system, if the hydraulic tubing is cut, the head will never come on. In an open system, the head would pop on immediately. Obviously, with a closed system a problem is very difficult to detect. Unless heads are consistently checked, the problem may go undetected until the turf is affected. Because there is no way to track the tubing, solving the problem is very difficult. However, Midwest did an excellent job of keeping the old system operating while installing the new one.

Perhaps the largest effect the installation had on our crew was hand watering the miles of sod due to the trenches from irrigation lines. With the exception of a few unexpected problems, the project went surprisingly well. I was very impressed with Midwest's professionalism and skill. I found it very educational and a great experience in general to work with this company.

Course Renovation

Although the previously mentioned
(Continued on Page 13)

Common Environmental Violations For Minnesota Golf Courses

By **BILL KEEGAN** and **DAVE BROWN**
SECOR International Incorporated

In past *Hole Notes* articles, the responsibility of golf course superintendents to remain abreast of environmental regulations related to underground storage tanks (USTs) was discussed. The most critical UST issue covered previously was the impending December 22, 1998 deadline for the installation of proper spill, overfill and corrosion protection on UST systems.

However, golf course owners and superintendents are increasingly faced with more environmental and health and safety issues than just those surrounding USTs. The fact is, some improper practices in other day-to-day operations continue to be a constant challenge for golf course owners and superintendents. Many of these practices are regulated and permitted under the Environmental Protection Agency (EPA), Regional Water Management Districts, the Occupational Safety and Health Administration (OSHA), the Department of Agriculture, as well as the Minnesota Pollution Control Agency (MPCA). Recently, state and federal agencies have stated that new regulatory performance standards will soon be instituted. As a result, environmental practices at Minnesota golf courses will likely be regulated with greater scrutiny by those agencies. The following is a list of common environmental, health and safety issues which may apply to your golf course.

Regulated Environmental Issues

- Storage, placarding and/or labeling of chemicals.
- Segregation of pesticide application equipment and general equipment wash areas.
 - Disposal of used lead cell batteries, chemical containers, spent solvents and other wastes.
 - Chemical application and segregation from sensitive area exclusion zones such as surface water bodies.
 - Use of secondary containment structures for above-ground storage tanks containing fuel oil or liquid chemicals.
- Management and disposal of grass clippings.

Regulated Health and Safety Issues


- Providing and/or maintaining proper personal protective equipment for chemical exposure and noise hazards.
 - Adhering to pesticide applicator license requirements.
 - Maintaining safe work areas including the use of safety guards and/or shields on applicable tools and equipment.

Regulated Administrative Issue

- Maintaining proper records.

These issues are regulated by various federal, state and local agencies, occasionally creating competing and/or overlapping standards. However, the prudent golf course owner/superintendent stays on top of these issues and regulations to avoid violations and resultant fines and penalties.

The most effective way to play the "environmental fairway" is to remain well informed of the current regulations. These issues listed above will be expanded upon in subsequent *Hole Notes* to help your golf course remain on "Par" this coming golf season.



SECOR
International Incorporated

Environmental Solutions for
Industry and the Private Sector

- Underground Storage Tank (UST) Upgrade Services to Meet the December 22, 1998 Deadline
- Mix-Load Area Management and Compliance
- FIFRA/SARA/OSHA Compliance
- CERCLA/RCRA/TSCA Compliance
- Water Resource Assessment and Management
- Environmental Workshops for Certified Golf Course Superintendents (.55 CEUs)
- Real Estate Assessment

4463 White Bear Parkway, Suite 106
White Bear Lake, Minnesota 55110
(612) 653-9112 (612) 653-1751 FAX
Offices Nationwide

Minnesota Valley—

(Continued from Page 11)

projects were major, the course renovation was our greatest challenge. The course superintendent, Larry Mueller has always felt that Minnesota Valley was a "classic style" golf course. The seminars and books on classic style courses that Larry has taken in over the years has only strengthened this belief. Larry took the opportunity to talk with Tom Doak from Renaissance Golf at the National Convention in Las Vegas. Renaissance Golf specializes in classic style courses. After describing the features of Minnesota Valley to Mr. Doak and his head shaper Jim Urbana, we felt stronger than ever that we had something special here. The information was presented to the club, and the board contacted Renaissance Golf Design to make a personal visit. Their visit concluded that Minnesota Valley was indeed a classic style golf course and had many aspects of a Seth Raynor design. Seth Raynor was a famous 1920s golf course architect who also designed the University of Minnesota, Somerset and Midland Hills.

The club reviewed the information and decided they would hire Renaissance Golf to consult the club on renovation. Although Renaissance Golf was extremely busy, they accepted the project and sent Jim Urbana. Mr. Urbana walked the course once again and then submitted a renovation plan. I felt very fortunate to spend a day so closely with an expert in this field. Mr. Urbana gave much insight about the features of Minnesota Valley and how they had been replicated from many old Scottish courses. In his renovation plan, he suggested we expand our greens back to their original shape, bring back some bunkers that had been lost over the years and rebuild tees that had been built out of character with the rest of the course.

We accomplished the greens expansion project by removing the thatchy bluegrass that had taken over what was once putting surface. The greens lost their original shape over the years, mainly due to downsizing dur-

ing the depression and also World War II when maintenance was minimal. We cut out the existing turf one inch thick in order to assure the removal of the thatch that had accumulated from many years of fertilizer and irrigation. Once the sod was removed and the bare ground was prepped we purchased our bentgrass sod. The sod was custom cut by Country Club Turf to a depth of one inch. The next step was to lay the sod on the native soil. It took many long days of nurturing and hand watering, but the new sod rooted in nicely. We completed all 18 greens this season but have a lot of work ahead of us. In the coming years, maintenance of each green will be equivalent to maintaining two greens. Because the new sod is laid on straight soil, it will demand extra aerifying, top dressing and hand watering until it is comparable to the rest of the green.

We acquired a 1930s aerial map showing the original bunkering of the course. From the map we were able to determine which bunkers had been removed or rebuilt over the years. From Mr. Urbana's suggestions we were able to determine which bunkers to put back in and which ones to rebuild. Placement of the bunkers needed to be altered to accommodate today's golfers. This is due to improvement in equipment of the game, which enables golfers to increase hitting distances. This makes some of the original bunkering obsolete. We hired Hartman Companies for bunker restoration. They did an outstanding job replicating original bunkers on the course.

Over the years, some tees had been rebuilt and were uncharacteristic to the rest of the course. We rebuilt seven of these tees to better fit the classic style golf course. The renovation was complete when the club decided to reverse the nines (ten becomes one, one becomes ten), which is how the course was originally played.

None of these accomplishments would have been possible without the hard work and dedication given by our crew. It was not a typical year at Minnesota Valley, but a busy and successful one. I feel privileged to have been a part of it.

Applications For 1998 MGCSA Legacy Awards and MGCSA Scholarship Awards Are Available at the MGCSA Office

The MGCSA Legacy Awards offer educational aid to the children and grandchildren of Class AA, A, B, C, D and Affiliate MGCSA members who have been active members. The MGCSA provides scholarships to students attending college or vocational programs at any accredited post-secondary institution.

Scholarship recipients are selected on the basis of academic record, potential to succeed, leadership and participation in school and community activities, honors, work experience, a statement of education and career goals and an outside appraisal.

Questions regarding the scholarship program should be addressed to:

MGCSA Scholarship Committee
240 Minnetonka Ave. So.
P.O. Box 617
Wayzata, MN 55391
Phone: (612) 473-0557
Toll Free: 1-800-642-7227
Fax: (612) 473-0576

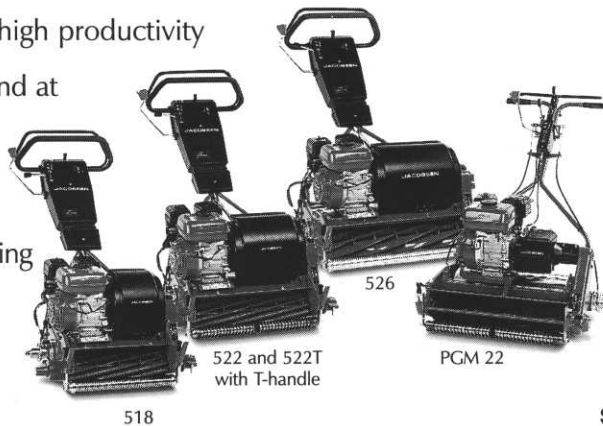
Applications must be postmarked by June 1, 1998.



Around. Across. Up and over.

Around greens, you'll want the Jacobsen Greens King 526. Its 26" width offers high productivity on surrounds, aprons and tees. The Greens King 522, 522T and PGM 22 — each 22" wide — offer superior quality of cut and high productivity across a variety of terrain. And at 18", the Greens King 518 is just what you need to go up and over severely undulating greens. All Jacobsen

Walk-Behind Greens Mowers offer the patented Turf Groomer® for faster, truer, healthier greens. Plus, a comfortable OPC is standard. See your Jacobsen distributor for a demonstration today.



518

522 and 522T with T-handle

526

PGM 22

THE PROFESSIONAL'S CHOICE ON TURF



800-727-JAKE www.jacobsen.textron.com

North Star
Turf Supply

St. Paul, MN 55117
612-484-8411
800-592-9513

Eagan, MN 55121
612-454-3106
800-551-4857



By Golf Digest Magazine

Classic at Madden's Ranked No. 3 Best Upscale Course

Scott Hoffmann, CGCS, head golf course superintendent at Madden's Resort on Gull Lake north of Brainerd, has good reason to be smiling broadly these days.

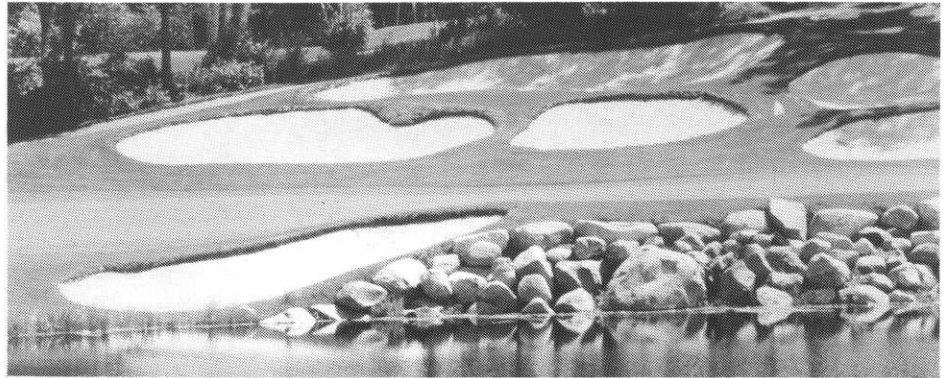
The Classic at Madden's, the new 18-hole course he designed, has been ranked by *Golf Digest* magazine as the "Third Best New Upscale Course in the United States and Canada.

Conceived in 1982, the *Golf Digest* Best New Course ranking is conducted annually to recognize the best among new courses in the United States and Canada. The magazine's panel of judges evaluated the courses over a six-month period. Candidates were judged on the basis of five criteria: shot values, playability, design variety, memorability and aesthetics. In addition, bonus points were awarded to courses that allow walking.

"The Classic integrates all three major golf course design styles of heroic, strategic and penal," said Hoffmann. "I think The Classic leans mostly toward heroic with a great number of risk/reward shots. Because we are a resort and our guests come here to be in the Northwoods, we paid a great deal of attention to aesthetics and protecting the existing environment. We tried to create each hole with some degree of solitude to give golfers the feeling they are the only ones there."

"I believe one of the great attractions of golf is to bring out the character of the player, whether it is a tolerance for risk, dependence on physical ability versus strategy, reaction to both adversity and success, or for the sheer enjoyment of participating in a friendly match in beautiful surroundings."

Brian Thuringer, owner and gen-



eral manager of Madden's Resort, is beaming, too.

"This is not only a tremendous honor for Madden's Resort and Brainerd, this is an endorsement for the state of Minnesota," he said. "This ranking comes from one of the highest authorities in golf and says that Minnesota, which is home to the second highest number of golfers per capita in the nation, is an exceptional golf vacation destination."

Lending credence to Thuringer's comments about this area being an "exceptional golf vacation destination" is the number of outstanding new courses like The Pines and The Preserve at Grand View Lodge, which also have received several honors in recent years; the announcement of the new course being built at nearby Cragun's Lodge and the sever-

al other excellent course in the Lakes Region.

Thuringer gives much of the credit to his predecessors for the recent success of Madden's.

"It is the vision and hard work of Jim Madden, John Arnold and others like them that have given us a great foundation to work from," he said. "Madden's Resort is continually growing and adding more amenities for our guests like The Classic and it is our guests who give us our direction and drive."

Established in the 1930s, Madden's now has 63 holes of golf. The resort is located on 1,000 acres and has more than one mile of sandy shoreline.

Other amenities include tennis, croquet, a fully-equipped marina, five pools, three gourmet dining rooms and several casual dining areas.

 <p>Williams-Gill & Associates</p>	Office (715) 425-9511 Facsimile (715) 425-2962 E-mail golfwga@presscenter.com	<p>• Services •</p> <ul style="list-style-type: none">• New Course Design• Master Plans• Golf Practice Center Design• Environmental Planning• Irrigation Design• Renovation & Restoration• Site Planning
	<p>Golf Course Architects</p> <p>Williams, Gill of Wisconsin</p> <p>122 N. 2nd St. River Falls, WI 54022</p> <p>Garrett Gill, Principal</p>	

Q. Why FLOWTRONEX PSI?

A.

REASON #1.

SUPERIOR PRODUCTION. The Silent Storm Variable Frequency Drive pump station combines efficiency and simplicity to save you up to 50% on your power bills and countless hours in maintenance to your pump station and entire irrigation system.

REASON #2.

INDUSTRY LEADERSHIP. FLOWTRONEX PSI is the world's largest pump station manufacturer, with more installations than all of our competitors combined.

REASON #3.

WORLDWIDE SERVICE. Using the revolutionary FlowNet service network, FLOWTRONEX PSI is able to provide 24-hour support and fast on-site service when you need it.



**LEASING
AVAILABLE**

Whatever your needs:

- Variable Frequency Drive or Conventional
- Vertical Turbine or Horizontal Centrifugal
- Prefabricated or Retrofit

MTI DISTRIBUTING CO.

FLOWTRONEX PSI
Pumping Systems

**Contact: Dean Chaltas at
612-475-2200 Ext. 224**

**MTI Distributing Co.
14900 21st Ave. N.
Plymouth, MN 55447**

You Would Have Liked Charley Tillman!

By JACK KOLB

Charles "Charley" Tillman was to be the subject of one of our "Where Are They Today" columns. I had interviewed Charley late last summer and because there is always a question or two on whether the information was correct or accurate, I tried again in late August and September to contact him by phone. The phone always rang but no one answered. When I tried again around November first, the phone was disconnected. Unbeknownst to me Charley had died.

I never did get to ask his age, although I would suppose it was in the early 70s. Charley was one of those WWII military veterans who was mangled in the process of training for the "big fight." Many were small-town boys, such as Charley, who were thrown into situations of unfamiliar, heavy and lethal equipment, run by inexperienced operators. After months of hospitalization he was discharged and went back to civilian life. Charley was a strong supporter of the Montevideo VFW and a befriender of the National Guard "Battalion Commander" (our son) who was dutifully trying to protect Montevideo and surrounding areas during the spring flood of 1997.

He bought a "Meat and Grocery" store in Montevideo, and specialized as a "sausage maker." By 1970 the "mega-market chain stores" with absentee ownership began moving in. Charley's legs began to give him trouble after many years of standing on the hard floor behind the meat counter. In retrospect Charley decided to look for a new career. He was a volunteer fireman with the Montevideo Fire Department. He also volunteered a lot of his time in the summer helping the superintendent at Montevideo Country Club who was not in the best of health. When the superintendent died, Charley finished the season as the top man.

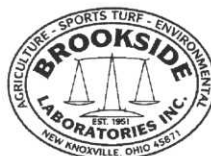
Charley did not feel qualified or confident to fill the position at Montevideo Country Club so that the following year he signed on as an assistant to Karl Johnson at Alexandria Golf Club. After two seasons with Karl he moved on to take the position as superintendent at Montevideo Country Club. This is where I met Charley. He was a gregarious man. He was a high energy person, always asking questions and seeking answers to problems. We worked well together and solved many of his dilemmas. He was always requesting "Plant Pathology Books" and information on different diseases. He was fascinated by the freakishness of nature.

To appreciate the following story you would have to understand this gentleman's excitable nature. Charley had

aerifier holes in his greens that were not healing. We determined that he had an infestation of cutworms. Upjohn Chemical Company had just developed a material for soil insects called "Proxol." This product acted as an irritant as well as toxicant which made "little buggers" (cut worms) come to the surface before they died. I had delivered this product at about three o'clock in the afternoon and apparently Charley applied it immediately. As I was having dinner at home that evening, the phone rang. It was Charley. He was excited and astounded! The cutworms had all crawled to the surface and were as thick as 6-10 critters per square foot. Golfers were complaining that they could not putt through the mat of "cutworm-bodies."

Charley moved on down to Hudson Country Club in Hudson, Wis., where he and his wife managed not only the golf course but the clubhouse as well. Both were bothered by health problems and after a few years retired to Brownsville, Tex. After the death of his wife he returned to Montevideo and lived in their original home until the time of his death. All of you would have liked this venerable man!

Analytical Services By:



Paskvan Consulting

Route 1 Box 77A
Akeley, MN 56433
218-652-3542 Office
218-652-2949 Fax
paskcons@mega-com.com e-mail

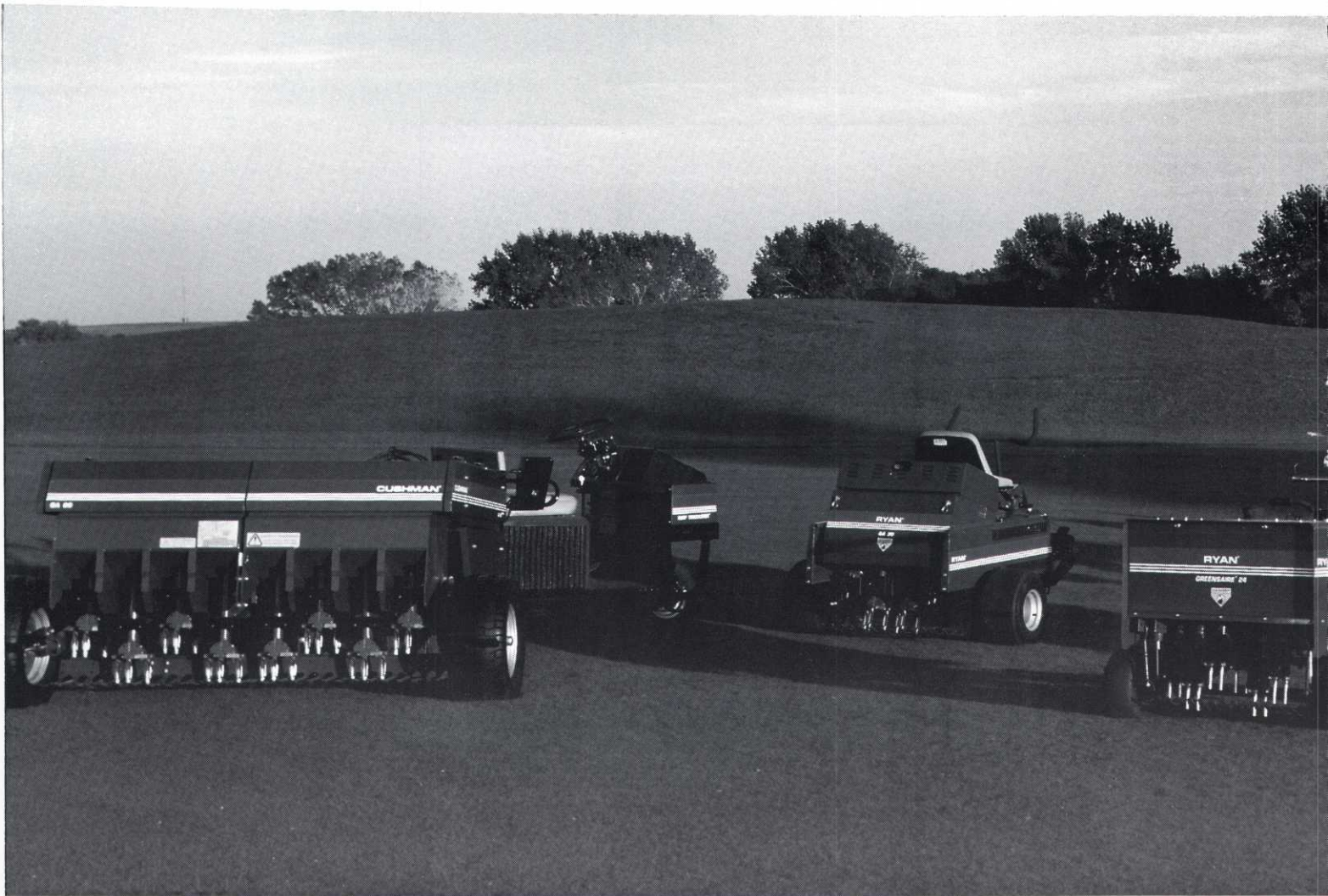
"Where Success is never an accident"

WWW.mega-com.com/soils

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

We provide the following services:

- Complete inventory of the soils on the course or job site
- Sampling, Analysis, Delivery and Interpretation of the results to save you money
- Recommend corrective fertilizer materials to save you money
- Physical analysis on sand-soil-peat to determine proper mixing for greens and topdressing
- Irrigation quality analysis
- First lab in the country A2LA accredited under the new USGA guidelines for new greens construction
- Fast turn around time, yet quality is never compromised



We cover the

Make us part of your hole maintenance program. From greens aeration to fairway aeration to core cleanup, nobody covers more ground.

Cushman® GA™ 60—Aerate a wide range of turf conditions on fairways, tees and greens at the rate of up to 1.1 acres per hour.

Ryan® GA™ 30—Ryan pioneered variable hole spacing six years ago with the GA 30. Designed for greens, fairways and tees.

Ryan Greensaire® 24—Developed for greens and other fine turf areas, it delivers 110,000 more holes on 10,000 square feet than the competition, making it the ultimate in greens aeration.

AUTHORIZED FACTOR DEALER

CUSHMAN MOTOR

2909 EAST FRANKLIN AVENUE • MINNEAPOLIS, MINNESOTA 5540



e hole thing

Cushman Core Destroyer—Pulverize aeration cores at the rate of 115,000 square feet per hour.

Cushman Core Harvester™—One person can pick up, load and dump aeration cores in the same time it takes three workers with shovels.

**Call today... (612) 333-3487 or
Toll Free 1 (800) 759-5343
for a free on site demonstration.**

All Cushman and Ryan aeration equipment is backed by Ransomes America Corporation Performance Engineered Parts Program.

SINCE 1949
R CO., INC. 

**CUSHMAN
TURF-CARE
EQUIPMENT**


**CUSHMAN
RANSOMES
RYAN**
For The Best Results

• (612) 333-3487 • FAX (612) 333-5903 • TOLL FREE 1(800) 759-5343

ON MARCH 9 IN ST. LOUIS PARK

Outstanding Program Set For MGCSA Mini-Seminar

By **MICHAEL BROWER**
Hillcrest Country Club

An outstanding group of speakers will highlight the 1998 MGCSA March Mini-Seminar on Monday, March 9th at the Doubletree Park Place Hotel in St. Louis Park, Minn. Registration will take place between 8:00-8:30 a.m., with MGCSA President Jim Nicol, CGCS, kicking the program off with a special message at 8:30 a.m.

Lee Mangum, Director of the Audubon International Cooperative Sanctuary System, will begin with an overview of the ACSP for Golf Courses, which will bring us up to speed on certification requirements, the sanctuary program for schools and innovative projects and methods for creating habitat on golf courses.

Doug Mahal, CGCS, The Minikahda Club in Minneapolis, and his first assistant, Jeff Johnson, will present "Minikahda after 100 years." Superintendent Mahal and his staff will host the 30th Curtis Cup on August 1-2 this summer, a fitting tribute to one of the very finest and mature golf courses in Minnesota and the United States.



Chatting about the upcoming Mini-Seminar on March 9th are Mike Brower, Hillcrest, and Doug Mahal, CGCS, Minikahda. Mahal is one of the guest speakers while Brower helped organize this year's Mini-Seminar.

Minikahda will celebrate its 100-year anniversary in 1998.

Attendees will have the opportunity to learn more about one of the newest and intriguing pesticides to hit the market in recent years — Heritage fungicide. **Matt Giese**, Zenecca Professional Products, will present an in-depth look at Heritage and the latest information on fungicide applications on fine turfgrasses.

The afternoon presentations will begin with **John Harris**, a well-known Minnesota golfer, top-ranked national amateur player and participation on several Walker Cup teams. Mr. Harris will offer "A Player's Perspective on Course Conditions," which will be both educational and entertaining, considering the quality of both his game and the courses he has played.

Jeff Knutson and Mike Kelly, of Glenn Rehbein Companies, will follow with an overview of the construction of Troy Burne Golf Course, near Hudson, Wis. Both Michael Hurdzan and Tom Lehman were instrumental in the course design with Glenn Rehbein Companies the construction contractor. Some of the newest construction methods and materials were utilized at Troy Burne and will be presented using video and slides.

The final presentation of the day will be given by a former golf course superintendent, **Eric Christianson**, of EC Irrigation Consulting. Mr. Christianson is a Des Moines, Iowa-based consultant who has worked with many golf courses in the Twin Cities and Upper Midwest, and will present valuable information on new irrigation and management technologies.

With the 1998 golf season fast-approaching, the March Mini-Seminar is an excellent educational experience just before the season gets going. Each of the speaker presentations will offer new insight on our profession and give each of us new management techniques to utilize in 1998. We encourage all MGCSA members, their staffs and club officials to attend.

We'd like to say we buried the competition. But that would mean putting an extremely inferior fertilizer in the ground.

Only par ex with IBDU® has the highest WIN percentage.
We have more than Lebanon® and more than Scotts®. Because the higher the Water Insoluble Nitrogen content, the longer your turf will remain green and the less chance there is for burn.

IMC Vigoro

FROM FERTILE MINDS.

*Lebanon is a trademark of Lebanon Seaboard Corporation. *Scotts is a trademark of O.M. Scotts & Sons Co. © 1998 IMC AgriBusiness Inc. All rights reserved.

Precision Turf & Chemicals 7728 Commerce Circle Greenfield, MN 55373 612-559-5293	Ken Quandt Territory Manager West Allis, WI 414-327-3993
---	--