The patented swing-out center reel provides easy access to all cutting units.

**EASY TO OPERATE**
- Power steering standard
- Fingertip controls
- Pedal operated 6" disc service and parking brakes
- Foot control pedal disengages reel drive system
- Easy removal of grass catchers
- Power backlapping

**DESIGNED TO PERFORM**
- Exceptional quality of cut
- 11-blade reel with 0.187" clip
- Control clip rate by ground speed
- Automatic mow speed control
- Precision bedknife adjustment
- Optional large capacity quick-mount grass catchers
- Optional tournament bedknife
- Optional TPS™ hydraulic oil leak detection system
- Optional 3 wheel drive
- Optional individual front reel lock-out

**PRODUCTIVE**
- 62" cutting width
- 7.5-mph transport speed
- Hydrostatic drive standard
- Adjustable mowing speed control

**BUILT TO LAST**
- Fuel efficient, 18-hp Kohler gas or 18.8-hp Kubota diesel engine
- Engines meet 1995 CARB specifications
- Welded steel tubing construction
- Strong, durable polyethylene grass catchers

**DESIGNED FOR COMFORT**
- High-back contour seat with 5" fore/aft adjustment
- Adjustable height steering arm
- Optional armrests

**SERVICEABLE**
- Swing-out center reel
- Interchangeable cutting heads
- All components are easily accessible

**CUSHMAN TEXTRON**
TURF CARE AND SPECIALTY PRODUCTS

Factory Authorized Dealer Since 1949
2909 E. FRANKLIN AVE., MINNEAPOLIS, MN 55406 • (612) 333-3487 • TOLL FREE: 1-800-759-5343 • FAX: (612) 333-5903
Are You Ready
To Become More Active
In Our Great Association?

Many of you may remember when last month's column stated that "we wait for
the next curve ball from Mother Nature." It came across home plate in the form
of 90+ degree days with dew points in the mid-70s. I hope we all have our plant
protectorants in place. Judicious use of water resources may also help us get through
this latest curve ball. Looking after your staff's well-being is also encouraged. Perhaps
starting work earlier so they can complete their tasks before the hottest part of the
day arrives while making sure plenty of water is available. Taking short breaks also
helps to ensure they stay healthy and available for the next day. When outside
conditions become unbearable, it might be reasonable to send the
staff home. They
probably aren't getting much accomplished and it helps to keep the morale high
during a time when it tends to deteriorate.

Fred Taylor is working on a slate of candidates for the annual election of
officers and directors. If you, or someone you know, might be interested in becoming
more active in this great association, please contact Fred. It is a great way to meet
more of your colleagues as well as giving something back to our profession. If anyone
has questions regarding the amount of time involved, please call me or any current
board member. The commitment is not as involved as it once was, now that our
Executive Director shoulders many of the duties.

There was an unsigned letter published in last month's Hole Notes. You can
be assured a mistake of this nature will not happen again. We will not publish letters
just because someone needs to vent, particularly if the author is not identified. I
will be happy to assist any member who is having difficulty contacting a vendor. If
anyone needs more details on why this slipped through, feel free to contact me.

Unfortunately, I will not be able to attend the August meeting in Mankato.
Hazeltine is hosting the 2002 PGA Championship, so I will be attending this year's
event at Sahalee Country Club in the Seattle, Washington area. My goal was to
attend each monthly meeting; however, you will be in the capable hands of our Vice
President Tom Fischer, CGCS.

Labor Day will soon be here and the fall aerification programs
will be under way.

– Jim Nicol, CGCS
MGCSA President

Mel Strand, CEO
35 years experience

Double Eagle
Golf Construction
Redesign the Old
...Construct the New

17555 Madison St. • Ham Lake, MN 55304 • (612) 434-0054

HOLE NOTES (ISSN 108-27994) is published monthly except bi-monthly December/January,
February/March for $2 an issue or $20 per year by the Minnesota Golf Course Superintendents
Association, 240 Minnetonka Avenue South, Wayzata, MN 55391-1617. Scott Turtinen, Publisher.
Periodicals postage paid at Wayzata, MN. POSTMASTER: Send address changes to HOLE NOTES,
240 Minnetonka Avenue South, Wayzata, MN 55391-1617.
Albany & Wapicada Team Up To Win Scholarship Scramble
By Scott Turtinen

Turf & Grounds Research And Education Center
By Bob Mugaas

Considering Relocating?
By Mike Nelson

Hole-by-Hole View Of North Links GC
By Jerry Storjohann

Matt McKinnon Receives NCO of the Year Award
By Thomas Kientzle

University of Minnesota Research Updates
Submitted by Bob Mugaas

A Growing Concern
By Tamara Horvath

From Your President's Desk By Jim Nicol, CGCS
 Classified Ads
Editor's Corner By Steve Shumansky

Century Rain Aid ........................................ 15
Country Club Turf ...................................... 11
Cushman Motor Co ..................................... 1 IPC
Double Eagle Golf Construction ....................... 3
Duininck Bros., Inc. .................................. Back Cover
Glenn Rehbein Companies ............................. 7
Hartman ......................................................... 4
Hedberg ......................................................... 9
Herford Norby ............................................. 11
IMC Vigoro ...................................................... 12
Letliner Company ........................................ 6
Losco ............................................................ 34
MTI Distributing Co ................................... 18
MTI Distributing Co ................................... 19
MTI Distributing Co ................................... 26
North Star Turf Supply .................................. 8
North Star Turf Supply .................................. 30
North Star Turf Supply .................................. 24
Parkvan Consulting ....................................... 29
Peterson Seed Co .......................................... 21
P&H Warehouse ........................................... IBC
Plaisted Companies ................................. 33
Paskvan Consulting ............................... 29
Prinsco ......................................................... 16
Rhine-Poulenc ............................................. 27
Robling Green Corp ....................................... 25
Scotts ............................................................. 32
Wilber-Ellis .................................................. 22
Williams & Gill ............................................. 20
Zeneca .......................................................... 17

1998 MGCSA CALENDAR

August 17 ...................... MGCSA Championship
North Links GC
Host Superintendent: Jerry Storjohann

September 14 ..................... Stodola Scramble
Pebble Creek CC
Host Superintendent: Cary Femrite

October 5 ......................... Chaska Town Course
Host Superintendent: Mark Moers

November 14 ..................... Minnesota Zoo
Family Outing

December 10 ..................... MGCSA Annual Meeting
Minneapolis Convention Center

Est. 1972

**Sports Turf Specialists**

- High Tech Drainage Techniques & Design
- Renovation
- Landscaping
- Excavating
- Grading

Jeffrey L. Hartman
President

8011 Bavaria Rd., Victoria, MN 55386 • 612-443-2958 • Fax: (612) 443-3452

4 • HOLE NOTES AUGUST 1998
The College of Agriculture, Food and Environmental Sciences (COAFES) has long had an integrated set of research, teaching and education programs in turfgrass development/management, landscape ecology, urban entomology and landscape materials development. These programs are carried out on the St. Paul Campus at the Landscape Arboretum and at other sites around the state.

The Turf and Grounds Research and Education Center (TGREC) is being proposed for an approximately 1200-acre parcel located primarily on the Rosemount Research Center property in Rosemount, Minn. TGREC has several unique partnership possibilities between the University of Minnesota and other organizations and businesses. These potential partners include the Minnesota Turf and Grounds Foundation, the Minnesota Golf Association, the United States Golf Association and several area businesses. As the programs and facilities are developed, there is likely to be other important partnerships formed that will help support this facility on into the future.

Related more specifically to the turf industry, a unique feature of the proposed Center will be its fully functional playing fields and golf courses that will allow for the study of various turf uses under conditions encountered in the “real world.” Of the proposed golf courses, one 18-hole course would be designed for normal play with minimal disruption for research purposes and one 9-hole “research” course. In addition, areas will be set aside for more traditional research methods and projects. While these particular facilities are focused on the turf industry, they will also provide opportunities for short and long term evaluation of “sustainable” landscape design, landscape restoration, tree and shrub maintenance practices and IPM strategies for woody and herbaceous landscape plants.

Continuing education for practicing professionals in the turf and grounds industry will be fostered through conferences, workshops and seminars conducted at the Center. There will also be formal degree programs offered through COAFES. There may be additional programs conducted in partnership with other area and regional colleges as well.

Following are a few brief examples of the types of projects to be undertaken at, or issues addressed, through the TGREC:

- Turfgrass variety development, pest and cultural management strategies for golf courses, parks, sports fields, sod and seed producers, cemeteries and residential and business lawns.
- Landscape plant development, pest and cultural management strategies, including irrigation technology, for the same groups as mentioned above along with the arboriculture and nursery and landscape industry.
- Recreational facility management practices and their potential to impact ground and surface water resources.
- Containment systems for fertilizers and pesticides to eliminate any adverse impacts to surface and ground water resources.
- Environmentally friendly and sustainable recreational and research facility design.

The creation of TGREC will provide a focal point for the (Continued on Page 7)
LEITNER COMPANY

Specializing In Soils For Golf Course Maintenance & Construction

Soil mixing and processing specialists.

Supplying the Golf Course Industry with soil and sand products for over 50 years.

From 10 yards to 10,000 yards — material to specification for topdressing and construction.

Quality — Reliability — Experience

MIKE LEITNER

LEITNER COMPANY

945 Randolph Avenue
St. Paul, Minnesota 55102

(612) 291-2655

PROUD SUPPORTER OF RESEARCH AND EDUCATION THROUGH THE MGCSA
College's current programs. The specially designed facilities will greatly expand the capabilities of current faculty and staff. Beyond this obvious benefit, several others should also occur:

1) The Center will enhance our ability to attract external support and will provide the College with the only such facility in the nation. This will firmly establish the significance of the University of Minnesota as an international leader in northern climate landscape material development and management. The potential partnership with the USGA will affirm the stature of our turf programs and further strengthen our abilities to compete for grants and contracts.

It is only through the combined efforts of everyone's support that TGREC will become a reality.

2) The availability of the Center will allow the College to conduct workshops, environmentally related youth programs, seminars attracting partnerships and general conferences from around the nation and the world.

3) The Center will positively influence our recruiting of both undergraduate and graduate students interested in turf management, nursery management, landscape construction and maintenance, urban forestry/arboriculture and related degree programs. For example, a two-year degree, offered in cooperation with area Technical Colleges (and perhaps others), will act as an additional source of four-year majors.

4) Net revenues from the Center’s operations will help support research and teaching programs consistent with the mission of the College. This will have significant potential to reduce the dependence on recurring public dollars for support for the Center’s programs.

As you can see, the research, education and outreach programs of this Center contain something for everyone in Minnesota’s Green industry. Whether you are a park superintendent, arborist, cemetery grounds manager, golf course superintendent, grower and/or seller of landscape plants, sod grower or involved in the lawn and landscape service industry, this Center will be a mainstay for current, relevant applied research and education for your profession. However, it is only through the combined efforts of everyone’s support that TGREC will become a reality.

Stay tuned for more information about this Center and how you and your organization can help make it a reality that benefits Minnesota’s entire turf, landscape and grounds maintenance industries.

If you have any questions or would like more information about the TGREC project, please contact me, Bob Mugaas, Coordinator for TGREC. I can be reached by phone at (612) 625-9234 or fax at (612) 624-4941. My address is University of Minnesota, 422 Alderman Hall, 1970 Folwell Ave., St. Paul, MN 55108.

QUALITY SUPPLIER OF TURF

• Washed and Regular Turf (Sod) in 1 1/2 yd. or up to 55 yd. Big Roll Size (42” Wide)

TURF TYPES:
• ELITE KENTUCKY BLUEGRASS BLEND
• SPORTS TURF BLUEGRASS/P. RYEGRASS BLEND
• BENTGRASS

For Quality Turf Contact:
(612) 674-7937 • FAX: (612) 674-7044

8651 Naples St. N.E.
Blaine, MN 55449

QUALITY CONSTRUCTION & RECONSTRUCTION

• Golf Courses • Sports Fields

NETLON ADVANCED TURF SYSTEMS
Self-Cultivating means healthier turf and better drainage.

NETLON MESH ELEMENTS AND MIXES
For Compaction Resistance on cart paths, sports fields and other high use areas.

For Quality Construction & Netlon Products Contact:
(612) 784-0657 • FAX: (612) 784-6001

AUGUST 1998
From the company that created the first revolution in fairway mowers, here's the second: the 34-hp LF-3400™ and 38-hp LF-3800™. They're built to deliver great looks – and the superior quality of cut you expect from Jacobsen. You get 2- or 4-wheel drive, mowing speeds of up to 7.5 mph and your choice of 5" or 7" reels with our patented FlashAttach™ reel-mount system. Together, they make a powerful, easy-to-operate, easy-to-maintain fairway mower. Not to mention mowing history. For your own second look, visit your Jacobsen distributor today. For leasing and financing information, visit our Web site or call 1-800-722-TURF.
Considering Relocating?

By MIKE NELSON
Jackpot Junction

I've challenged myself to contribute to Hole Notes at least once a year and I would hope that others would do the same as the success of a publication like this depends on membership contributions.

I have recently taken a job as Superintendent for a golf course that will be built by the Lower Sioux Indian Community in Morton, Minn. We will be breaking ground mid-August and completion is expected by the summer of 2000. The piece of property we have is fantastic. We've hired Rees Jones as the golf course architect and the resources are in place for a world class golf course in Southwest Minnesota. I'm looking forward to being a part of this project but there were some important decisions that had to be faced.

There are many things to consider if you are looking at possibly relocating. Although the job opportunity may be attractive, one must consider the most important things in life before making a decision. In my case, we very recently had a baby. The changes my wife and I were going through, getting acquainted with our little one, my wife getting used to being an at-home mom, combined with the possibility of us moving and myself staring a new position was a potentially stressful situation. My wife and I had talked about the possibility but it wasn't until I had a job offer that the life changing decisions had to be confronted.

I think we would all agree that there is a nice comfort level we achieve when we've been at a location for a period of time. We value the friendships that have been developed. Possibly the move would take you farther away from family members. If you have children in school it would mean taking them out of that environment. How would they adapt to a new situation? If you are considering relocating, make sure you stand back and see past the exciting employment opportunity and really consider your family's needs and how it will affect them. I love what I do for a living as does every other superintendent I know, but be sure to look at the big picture and be prepared to deal with some stress. I'm excited about my new employment situation and I don't regret the decision we've made, but actually going through it opened my eyes as to what's important in my life and where important decisions should have their beginnings.

I have a few suggestion that may be of help to someone who is relocating. Some of these I've implemented while others I wish I would have.

Take time off in between jobs if possible. There are many things that require your attention at this time such as contacting Realtors and getting your house ready to go on the market which may require some touch-up painting, carpet cleaning and general organization so your home can make good impressions on potential buyers. This is also a good time to give some of those clothes you don't wear anymore to charity groups and also provides an excellent opportunity to lose some of those gifts you've accumulated over the years. You will also be busy scouting out the area you will be moving to and looking at housing along with becoming familiar with other aspects of the area such as schools, churches, possibly job opportunities for your spouse. These scouting trips that are made should not be limited to see how much you can get done in a given day but to see if you can make fun out of the trip by having a picnic or staying in a hotel rather than trying to squeeze in everything and end up spending all your time on the road where

(Continued on Page 12)
LOOKING FOR
Cushman Front-Line Model 800-810 Liquid Cooled
Contact: David Kohlbry Northland Country Club
(218) 525-1941 Ext. 121

MECHANIC WANTED
Midwest distributor of Toro products seeking mechanic with experience in commercial lawn equipment repair or set up including hydraulics, drive train, electrical and diagnostics. Must have own tools. OPEI certifications or ability to be certified a plus. Competitive wages and incentives based on experience. Benefits include health, dental, life insurance and 401K. Send resume or apply in person to: RANDY MACKEBEN, MTI Distributing Co., 14900 21st Ave. No., Plymouth, MN 55447. eoe/aa

FOR SALE
Used
TORO 474 1" BRASS QUICK COUPLER VALVES with standard cover.
Requires 1¼" valve key. $15.00 each.
Contact: DAVID WOOD
Oxbow CC
(701) 588-4266

FOR SALE
1991 Toro Fairway Aerator — Model 9500
Used one season. Price is negotiable.
Contact: KEVIN CLUNIS
St. Croix National Golf Club
(715) 247-4260

FOR SALE
Jacobsen Greens King Model 62 Triplex 1,347 hrs. $2,000 or best offer.
Contact: DAVE SIME
Benson Golf Club
(320) 843-2109

FOR SALE
Contact: JOE MORIS
Tartan Park Golf Course
H: (612) 436-6012 W: (612) 736-8791

FOR SALE
Jacobsen Greensking IV $1,500 or best offer
Ryan Greensaire II Aerifier $1,000 or best offer.
Topdresser for Cushman Truckster $500 or best offer.
Contact: AL HANSON
(612) 434-5501 or 434-9104

HELP WANTED
We specialize in Golf Course Renovation and Drainage. Several Full-time positions are available within our growing company. Wages and benefits are based on experience. If you are looking for a change, give us a call
(612) 443-2958

MGCSA MEMBERSHIP DUES ARE NOW PAST DUE *
IF YOU NEED A DUES STATEMENT, CALL THE MGCSA OFFICE AT (612) 473-0557 OR 1-800-MGCSA-27