

The Toro Greensmaster® 3100. So Quiet You Can Hear A Pin Drop.

At only 82 decibels, the
Toro Greensmaster
3100 has to
be heard to
be believed.

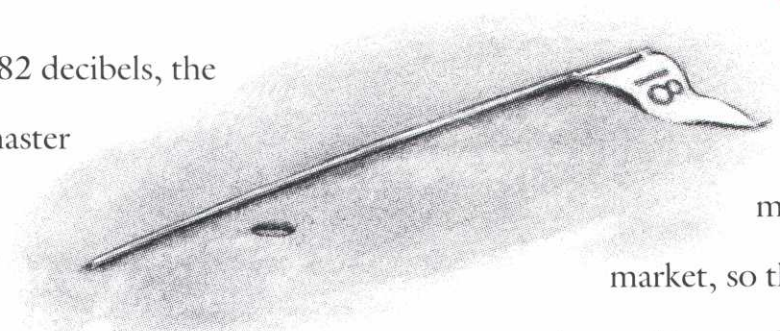
We'd like to come out and let you and
your crew see, and hear, how it works
on your greens.



Greensmaster 3100

Your maintenance
chief, for
example, will
notice that
all major parts
are accessible, so
repairs can be made quickly and easily.

You'll notice that this is the



lightest
riding greens
mower on the
market, so there's lower
compaction and less turf damage for
better playability.

Your crew will love the
responsiveness of our precise power
steering. And your whole team
will appreciate the assurance of
Turf Guardian™ hydraulic oil leak
detection.

Give us a call to arrange a demo
of the 3100. Because until you test this
mower in person, you
ain't heard nothin'.



Helping you put quality into play.™

MTI DISTRIBUTING CO. 

14900 - 21ST AVENUE NORTH • PLYMOUTH, MINNESOTA 55447
PHONE (612) 475-2200 • FAX (612) 475-0351

HOLE NOTES

Official Publication
of the
Minnesota Golf Course
Superintendents' Association

1993-94 MGCSA BOARD OF DIRECTORS

Officers

President Joe Moris
Tartan Park GC
612/733-3472 • Fax: 612/733-5009

Vice-President Kevin Clunis
Stillwater CC
612/439-7760 • Fax: 612/439-2434

Secretary Jim Gardner
Rochester Golf & CC
507/281-3241 • Fax: 507/282-8682

Treasurer Dale Wysocki
Faribault Golf & Country Club
507/334-5550 • Fax: 507/334-0102

Ex-Officio Greg Hubbard, CGCS
Manitou Ridge GC
612/777-1436 • Fax: 612/777-7198

Directors

Tim Commers Cushman Motor Co.
612/333-3487 • Fax: 612/333-5903

William S. Cox Tianna CC
218/547-2141

Cary Femrite Pebble Creek GC
612/261-4656 • Fax: 612/261-4411

John Granholt Eau Claire Golf & CC
715/836-8422 • Fax: 715/836-8425

Richard Grundstrom Indian Hills GC
612/770-3091 • Fax: 612/770-2302

Tom Johnson New Richmond GC
715/246-4850

Tom Kientzle, CGCS Grand View Lodge
218/963-7732 • Fax: 218/963-2269

Monty Montague National Mower/
Turfo Mfg., Inc.
612/646-4079 • Fax: 612/646-2887

Norma O'Leary, CGCS Silver Bay CC
218/226-3111

EDITORIAL COMMITTEE

Dale Wysocki, Chairman
Cary Femrite
Larry Vetter

EDITOR

Dale Wysocki

CO-EDITOR

Cary Femrite

Editorial and Business Office

Scott Turtinen, Executive Director
Minnesota Golf Course
Superintendents' Association
240 Minnetonka Avenue South/P.O. Box 617
Wayzata, Minnesota 55391-1617
TEL: 612/473-0557 • FAX: 612/473-0576
TOLL FREE: 800-642-7227

FROM YOUR PRESIDENT'S DESK

Taking Advantage Of Educational Seminars



This is a very sad announcement, but you all should know Roger Kisch's wife Dione was missing since last Fall. Her body was recently recovered from the Mississippi River.

Roger, the flowers from the MGCSA were a very small part of all the caring and praying we have done for you in the past three months.

* * * *

I believe it is our duty as golf course superintendents to take advantage of all educational sessions you can for the betterment of your club. This may range from growing better turf to grooming it better or gaining knowledge of potential lawsuits.

Being a member of the MGCSA is just a beginning. All golf courses in the United States benefit from the GCSAA. Did you know to be a member of the Ohio Golf Course Superintendents' Association you must belong to the GCSAA.

Just a reminder that the GCSAA Annual Conference in San Francisco is free with a new membership.

* * * *

Please wear your name tags to MGCSA functions. I want to get to know many more of you in the summer ahead. It sure makes it easier to talk in a group with name tags. I really would like to see the tags worn again. Call Scott Turtinen at the MGCSA office if you need a new tag at (612) 473-0557 or 1-800-642-7227.

See you in Benson. Don't forget to ride share!

— Joe Moris
President

ABOUT THE COVER: Hole No. 8 at Brook Hollow Golf Club in Dallas. Brook Hollow Golf Club is a 1922 A.W. Tillinghast design. The course was recently renovated by Crenshaw & Coure. The golf course superintendent is Bill Shrum, CGCS.



Williams-Gill
& Associates

Garrett Gill, Principal

Office (715) 425 - 9511
Facsimile (715) 425 - 2962

Williams, Gill of Wisconsin
421 North Main Street
River Falls, WI 54022

• Services •

- New Course Design
- Master Plans
- Golf Practice Center Design
- Environmental Planning
- Irrigation Design
- Renovation & Restoration
- Site Planning

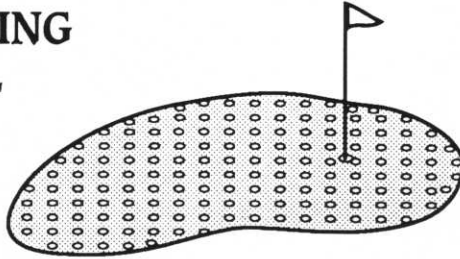
HOLE NOTES is published monthly except bimonthly December/January, February/March for \$2 an issue or \$20 per year by the Minnesota Golf Course Superintendents Association, 240 Minnetonka Avenue South, Wayzata, MN 55391-1617. Scott Turtinen, Publisher. Application to mail at second class rates is pending at Wayzata, MN. POSTMASTER: Send address changes to HOLE NOTES, 240 Minnetonka Avenue South, Wayzata, MN 55391-1617.

A (W)HOLE IN ONE

One-stop shopping for golf course materials

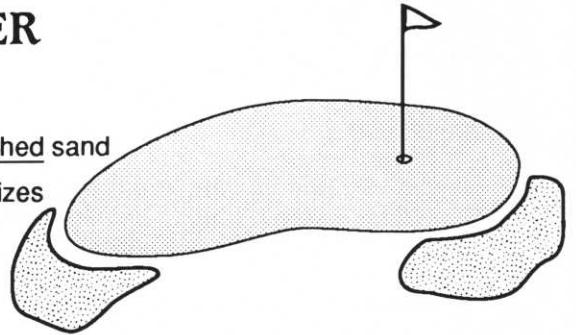
TOPDRESSING MATERIAL

- 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*



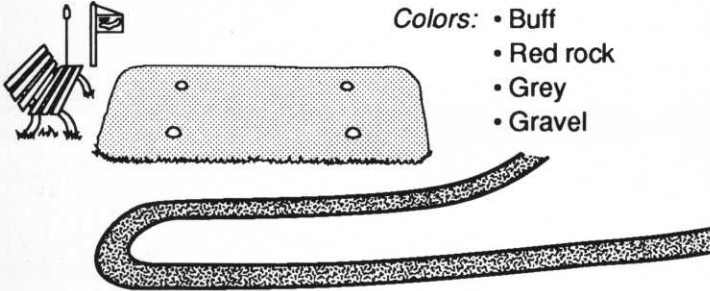
BUNKER SAND

- Clean, washed sand
- 2 particle sizes to choose from



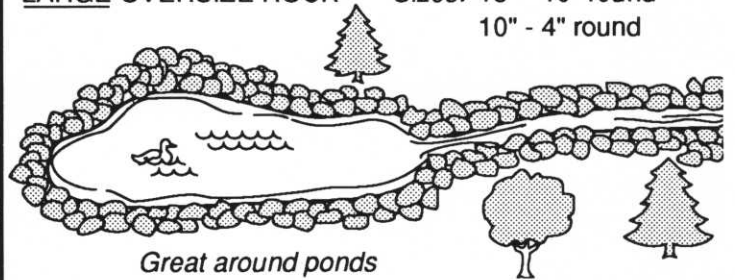
CARTPATH AGGREGATE

- Colors:
- Buff
 - Red rock
 - Grey
 - Gravel



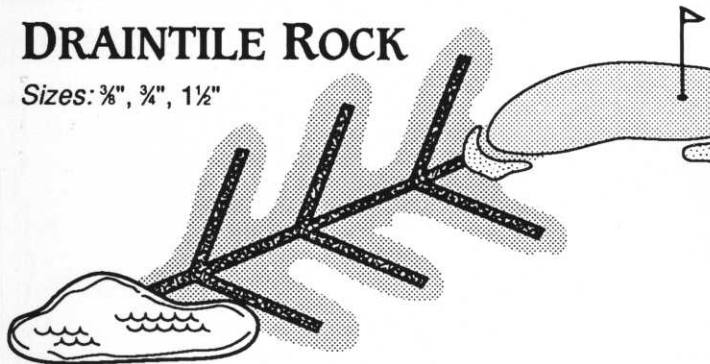
RIP RAP

- LARGE OVERSIZE ROCK Sizes: 18" - 10" round
10" - 4" round



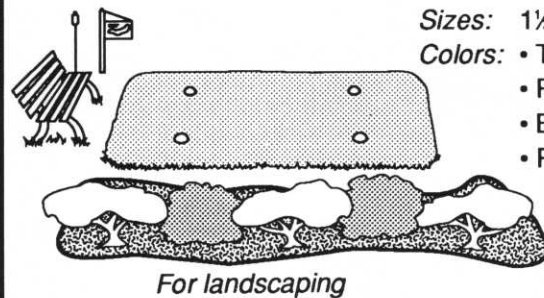
DRAINTILE ROCK

Sizes: 3/8", 3/4", 1 1/2"

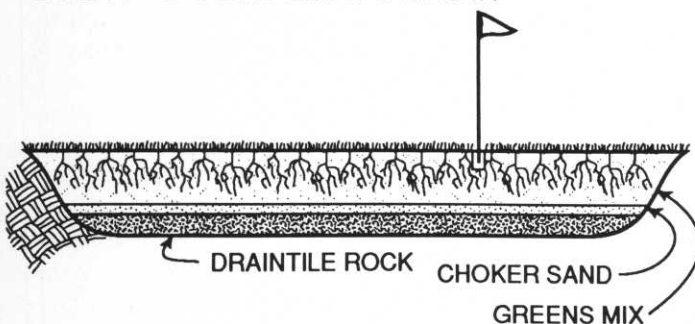


DECORATIVE ROCK

- Sizes: 1 1/2" or 3/4"
- Colors:
- Trap rock
 - Red rock
 - Buff limestone
 - River rock
 - Granite
 - Salt & pepper



NEW CONSTRUCTION



**Plaisted
Companies**
INCORPORATED

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

Golf Course Construction and Cost Budgeting

By CARY FEMRITE
Pebble Creek Country Club

To the Golf Course Manager, the prospect of expansion and construction to the existing facility can be challenging, enlightening, gratifying, exhausting and ultimately fulfilling. It is a task that consumes us.

With proper planning, communication, execution and follow-up, a seemingly scary and hauntingly endless venture can become an exciting, worthwhile and profitable experience. The following article reflects on the important issues I encountered during the 9-hole expansion at Pebble Creek C.C. in 1993.

As Golf Superintendents, our responsibilities include day-to-day activities plus the added duties of being the pivot point in a construction or renovation project. The point being, don't spread yourself too thin! The elements involved here are three-fold: budget allowances, managerial understanding and talented subordinates.

First, you have to be a supervisor to the present facility. You are consumed by this and added duties strain your authority, budget and personnel. You must have extra funds to accommodate the needed personnel to work on the new site, not to mention the need for more equipment. Create a contingency fund. Also, ask for added compensation for yourself because you will be three times as busy as you once were!

Second, your managers need to understand the added burden to your day-to-day responsibilities. You will have approvals to attend to daily with the contractors on site, those being construction matters, squabbles, change orders, crew performance, architects meetings, periodic payment requests and the proverbial Murphy's Law. Stress the importance of your role in decision-making. The latitude extended

to you is respectful of your skills and saves a lot of time! Activity intensifies towards seeding time. You are constantly looking down the road to make sure the new product does not cost your club money later. In this area attention also should be directed toward who will general the project. Unless you are absolutely certain this is the route to take (financially, administratively, etc.), refrain from being the general unless you are prepared for a myriad of challenges. For this

particular project, we had a general contractor. Our architects, Garrett Gill and his associates, processed partial payments and shared the decision-making responsibilities with me. This arrangement met our goals for administration and decisive planning with the change orders that were made.

Upon their recommendations and an important requirement in construction, record all extra work done by your staff and the contractors. At the completion, these figures can eliminate controversial final payment negotiations.

Paying particular attention to cut and fill plans assures your people that grades are matched per plan and that site changes get your input. I can't stress enough the important of site visits by the Architect. The architect's input and support guarantee complete assessments of problem areas. Any questions regarding interpretations of plans and specs can be answered at this time.

Third, having experienced and qualified personnel on board to carry the burden while you attend to the construction phase makes your job easier and produces a superior product in the end. Your assistants and foremen can prepare for added delegation and supervisory experience. They

(Continued on Page 34)





IRRIGATION FIELD SERVICE

**CALL THE TORO IRRIGATION SERVICE
PROFESSIONALS AT MTI DISTRIBUTING CO.**

612-475-2200 • 800-362-3665 EX. 205 OR 267

JOHN ● JEFF ● DAN ● LYNN

**FACTORY TRAINED AND FULLY
EQUIPPED SERVICE PERSONNEL**

- PUMPS & PUMPING SYSTEMS
- PUMP CONTROLS
- CLA-VALVES
- OTTERBINE/TORO POND AERATORS
- TORO CONTROL SYSTEMS
- HYDRAULIC SYSTEMS
- SPRINKLER & VALVES
- WIRE TRACKING

★ TORO AUTHORIZED CONTROLLER REPAIR CENTER ★

★ OTTERBINE AUTHORIZED REPAIR CENTER ★

MTI DISTRIBUTING CO.





'94 Golf Show Helps Promote Golf Course Superintendents

The MGCSA has had a booth at the *Great Minnesota Golf Show* the last two years. It is a four-day event held in February at the Metrodome featuring a wide range of interests and activities for golfers. Golf vacation packages to Hawaii, Myrtle Beach, Minnesota, Wisconsin and other exotic places.

There was new golf apparel, some of which might even cure the hiccups when you see it. You could hit balls with the latest golf clubs or try for a hole-in-one hitting from home plate area (130 yards) to the hefty bag in right field. Incidentally, a Wisconsinite won a truck in that contest. Two of our members each sank a 50-yard putt in the long putting contest that required mostly luck and a little skill. According to Scott Hoffman and Tom Kientzle, the artificial turf putts just fine. Congratulations!

Our booth offered information about the Turf Tourney, Scholarships, the Audubon Program and a booklet compiled by Kevin Clunis listing golf courses in each legislative district along with representatives. We displayed MGCSA apparel and gave away ball mark repair tools with some personalized instruction. The eye-catchers in the booth were the photographs of beautiful golf holes from courses in Minnesota.

The golf show is a great public relations opportunity to promote not only the MGCSA but also the positive image of the golf course superintendent. A thank you to those who volunteered their time at the booth.

—Tom Johnson
New Richmond G.C.

HOLE NOTES

TO DO LIST!

*Order Seeds!
Call Susie Fobes at
1-800-626-6429, by
April 1st, to receive a
10% discount on
annual & perennial
wildflower seeds, &
perennial prairie
seeds!*

**Environmental
Re-Creations**

SUSIE FOBES - Landscape Ecologist
12410 Huntingdon Ln., Minnetonka, MN 55305
PHONE: (612) 933-0553 (metro area)
(800) 626-6429 (non-metro)
FAX: (612) 933-0553

Environmental Consulting Services:
Prairies
Wetlands
Wildflowers
Reforestation
Wildlife habitats
Safety & environmental plans

Private weather services keeping you

Ahead of the Storm

By Amy Rolando-Oliver,
Chief Meteorologist and CEO,
Weather Watch, Inc., Minneapolis, MN
Edited by Caroline Ruden

In the pre-dawn hours, dark clouds gather on the horizon. Remembering that the 10:00 o'clock news mentioned only a slight chance of rain later in the day, something must have changed. Should *you* change *your* plans for the day? Will you be able to apply chemicals today? Will the tournament have to be rescheduled?

As a golf course superintendent, you constantly face decisions that depend on Mother Nature. You need to say one step ahead of the weather. But how?

Planning your daily operations around the detailed forecasts of a private weather service can help your course operated more efficiently.

Cost-saving/Life-saving

Private forecasting companies offer more detailed and frequent forecasts than any other source. These two advantages can save both money and lives.

For example, by knowing the exact hours when rain will fall, you can allow a natural watering in pre-emergents and grub control. It's a cost effective alternative to using the course's irrigation system. Labor costs can be saved by scheduling chemical sprays during the right weather, and also when scheduling crews for upcoming tournaments.

Accurate weather forecasts not only save money, they can save lives. More people are killed by lightning in the United States than any other natural hazard. Private weather services can help prevent such tragedies from happening on your course through advanced lightning tracking devices. And private weather services will warn you specifically when dangerous lightning is headed toward your course.

What to Look for in a Private Weather Service

When shopping for a private weather service, be prepared with good questions to help you evaluate what service would be best for you. Questions like:

1) How big is their forecasting region?

Remember, the most accurate and detailed forecasts will come from a company that forecasts locally. If they forecast for the whole country, or around the world, they may spend only five or ten minutes preparing a forecast for your area.

2) Do their meteorologists understand the needs of a golf course?

You operate 7 days a week. Operations begin at dawn and club functions may last until midnight. Take



notes, and carefully evaluate how well they understand your needs.

3) How technologically advanced is their forecasting equipment?

Be aware that some radar pictures are 15 minutes old! You want instantaneous or "real-time" radar and lightning images, especially during severe weather.

4) If I'm out on the course, how will I know if sudden severe weather is approaching my course?

Look for a company with a pager system to reach you at all times, indoors and outside. Many services will fax you severe weather information, which may not reach you until it's too late if you aren't monitoring your fax machine.

5) Will I be able to reach a meteorologist at all times?

How easy is it to reach your meteorologist when needed? Seek a company that seems interested in serving you when *you* need them.

6) Do they have a free trial period?

A company that's interested in your needs won't mind giving you a week or two free trial to see if you like their service.

7) What is the term of the contract?

Most services have a 6-month or a 1-year minimum term. Ask if they offer a month-to-month term.

8) How easy is it to sign up or cancel the service?

You may have an upcoming tournament and want to get started right away. Make sure that a representative can come out to *your* course to meet with you and that there's not a lot of red tape.

(Continued on Page 17)

WHERE ARE THEY NOW

Ray Hall Keeps Active Carving Wood, Riding His Motorcycle

They called Ray Hall "the grass man" at Greenhaven in Anoka.

He once won a \$50 bet from an ardent Greenhaven golfer when he grew Penncross grass on a tennis ball in 37 hours.

His 33-year career in the turf industry, which started as a night waterman at Columbia Golf Course in Minneapolis in 1947, spanned a variety of jobs, including work at Columbia, Greenhaven, Bunker Hills in Coon Rapids, Minnetonka Country Club in Excelsior, Alexandria Golf Club and Terrace View in Mankato. He built his own par 3 course in Owatonna, then sold it later.

He also designed and built Hayden Hills in Champlin and a course in Mondovi, Wis.; changed sand greens into grass greens and installed a watering system in Olivia and also served as a consultant at a course in Arcadia, Wis.

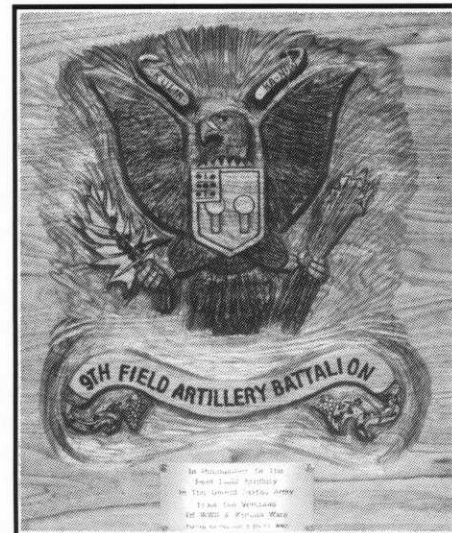
Retired since 1980, Ray, now 76, resides in Owatonna with his wife, Betty, but he's not just sitting

around. When he isn't enjoying his favorite hobby of woodcarving, you often can find him on his motorcycle, which he's used to cover 16 states and plans to see more. Any time after October 1, you can probably find him heading south to such states as Texas and Florida.

Born on November 10, 1917 in Hauge, N.D., Ray joined the MGCSA in the mid-fifties, served in various positions including the office of president and also was on the national board of the Golf Course Superintendents of America.

"One of the most enjoyable aspects of my career was building, rebuilding or designing golf courses," he said, "and I always enjoyed learning more about my profession." Over a span of 18 years he took several courses at the University of Minnesota.

He also enjoyed coming up with new ideas. For example, he was the first superintendent to use burlap on greens at Greenhaven. Ray still does some consulting work, and he ad-



A woodcarving by Ray Hall.

mits he misses working on golf courses, something that was so near and dear to him for so many years. But he still retains a good sense of humor.

When asked if anything unusual has happened to him since he retired, Ray simply responded: "I got older."

But apparently he's still keeping young by carving wood and riding his

(Continued on Page 17)

FAIRWAYS, Inc.

Design and Construction by Contract

Joel Goldstrand

9109 Westmoreland Lane

St. Louis Park, MN 55426

Phone & Fax: (612) 546.3933

Ron Bloom

1972 Hidden Valley Lane NW

Miltona, MN 56354

Phone & Fax: (218) 943.1392



Fertilizer Research at Les Bolstad U of M G.C.

By Charlie Pooch

Les Bolstad University of Minnesota Golf Course

To get a better understanding of the fertilizers available for our use on the golf course, we set up an experiment on our practice range using three different fertilizers.

The three types we used were:

1. Turf Management 24-3-12 Greenscote which consists of 1.2% ammoniacal N and 22.8% urea N of which 10.8% is polymer coated urea. This product was donated for our use on this test by John Wiley at Turf Supply Co.

2. Scott's 25-3-20 NPK Turf Fertilizer with Poly S, what we currently use on our fairways. Nitrogen source is 1.1% ammoniacal N and 23.9% urea with 17.4% coated slow release.

3. Wilbur-Ellis 24-4-12 with Nutralene of which the nitrogen source is 1.57% ammoniacal N, 4.93% urea, 7.25% water insoluble N, and 10.25% slowly available water soluble N. This product was provided to us by Larry Thornton at Wilbur-Ellis.

On May 27, we divided our driving range into 14 plots, each 50 feet x 80 feet, and applied the following: 1½ lbs. N of Turf Management Greenscote, 1 lb. of Scott's Poly S, and 1¼ lb. of Wilbur-Ellis Nutralene, rates requested by each distributor. We left two plots unfertilized to serve as check plots.

Our basic goals were: 1. Test the difference in amount of clippings. 2. Test the quality of turf color. 3. Check for differences in disease incidence.

Notes taken from various examinations of this first application include:

June 18. After receiving 3 inches of rain the prior 2 days, we mowed a 20-foot strip with a Toro triplex greens mower set at ¼ inch, collected the clippings and emptied the contents from each plot next to one another to make a visual comparison. The Turf Management Greenscote had approximately twice as much clippings as the Scott's Poly S and Wilbur-Ellis Nutralene. Scott's Poly S and Wilbur-Ellis Nutralene were approximately equal, with the check much less. There was no noticeable difference in color among the four.

June 25. Scott's Poly S and Turf Management Greenscote had equal amounts of clippings with Wilbur-Ellis Nutralene less and check plot much less. Color: equal, with check plot yellowing.

July 2. Scott's Poly S appeared to have nicest turf followed by Turf Management Greenscote. Wilbur-Ellis Nutralene shows some yellowing. Poly S had the most clippings, Greenscote next, Nutralene not having much more than the check. This is 5 weeks after the original application and cool weather for the end of June.

July 16. After 6.5 inches of rain the prior two weeks, the fertilized plots appeared equal in color with the check plot even looking fairly good. Clipping amounts were about equal for the three fertilized plots with the check plot still

much less. Some dollar spot showed up in the check plot, but none in any of the fertilized areas.

Results so far seemed to pretty much show what the weather dictated. The extra N applied with the Turf Management Greenscote along with the extra percentage of urea left noticeable amounts of clippings on those plots compared to the Wilbur-Ellis Nutralene and Scott's Poly S being quite uniform. Turf color of all the fertilized plots was excellent except for the Nutralene on July 2. That, however, recovered very nicely with the rains and nicer weather.

Next, we wanted to check the amount of clippings with equal amounts of N applied to each plot.

July 22. We fertilized all plots with one pound of actual N/1000 sq. ft.

On the Wilbur-Ellis plots we applied 20-0-20 with Nutralene. We also borrowed a scale from Dr. Ward Stienstra to help give us a more accurate measure of clipping amounts. Again, we would take a 20-foot cut from a designated plot, empty the contents of the three baskets into a bucket and weigh the contents.

(Continued on Page 13)

SEED AND SERVICE.

We've got it covered.

Twin City Seeds. Poised and ready with a full line of proprietary turfgrasses, custom blends and experienced service along with it. And, our prices will fit your budget. Call or fax John Glattly today. We know the area. We know you'll like our style.

Twin City Seed Company
7263 Washington Ave. So.
Edina, MN 55439
Phone: (612) 944-7105
Fax: (612) 944-7239

**TWIN
CITY
SEED**
C O M P A N Y