

# USS Tee-Green 16-4-8... When you want uniform particle size we can deliver!



Distributed By

**MINNESOTA TORO, INC.**

14900 21st Avenue North ■ Plymouth, Minnesota 55441

Phone Glenn Rasmussen at (612) 475-2200



When you apply USS Tee-Green 16-4-8 to your tees, greens and aprons you're assured that's where it will stay. There's no need to worry about mower pickup because the uniform particle size (90% minus 10 + 20 Mesh U.S. Sieve) means the granules will work their way quickly down through the grass to provide a consistent and even feeding.

Of course this is just one of the advantages of this great

product. Your local USS Vertagreen distributor can tell you much more about the advantages of nitrogen derived from urea-formaldehyde, the chelated iron, sulfate of potash and the guaranteed amounts of secondary and micro-nutrients in this fine product. USS Tee-Green is another reason we say, "see the best, for the best" — and that's your local Vertagreen distributor. He can always deliver.

**Best Products! / Best People!**



**Agri-Chemicals**

Division of United States Steel

P.O. Box 1685, Atlanta, Ga. 30301

# The President Reports

The 48th International Turfgrass Conference and Show was held in Portland, Oregon February 6-11 with about sixty Minnesotans in attendance. Our many thanks to Gordy Miller of R. L. Gould who handled most of the airline and hotel accommodations.

The conference was kicked off Monday morning by Keynote Speaker Heywood Hale Broun with the concurrent educational sessions starting Monday afternoon and running through Thursday p.m. Tuesday a.m. the exhibits opened with many new and exciting innovations. One which many of us are going to find that we cannot do without is a monorail golf cart system which we can have installed for a mere \$300,000.00!

Monday night was a feast for all seafood lovers. The local chapter put on a crab fete featuring all the crab you could eat. They must have gone broke the way many of us ate. As usual, we were royally entertained Thursday night at the banquet by Cathy Johnson, Glen Ash and the Johnny Reitz Orchestra. It was announced that there were over 5,200 in attendance at the conference, making this the largest ever!

Many thanks to Minnesota Toro and host, Milt Wiley, for a very delightful cocktail party on Wednesday night. Also our thanks to Jack Kolb for the Par-Ex get-together on Tuesday evening.  
Jim Lindblad, President



MEETING SITE. The impressive Portland Coliseum was an ideal facility for the meetings.



TOGETHERNESS. Joann and Jon Heimsness of Moorhead at Waverly Country Club on golf course tour.



NEW IDEAS. Julie and Randy Nelson of Owatonna like hole designation sign on golf course tour.



SPECULATION. Old hand Dean Sime checks possible turf disease at Portland Golf Club.

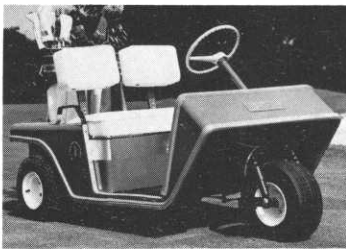
# GREEN CLIPPINGS

**CLIP 1:** Bergerson-Caswell, Inc., Minneapolis well drilling firm and its subsidiary, Tonka Equipment Company, have completed a move from Highway 12 in Minnetonka to new and larger facilities specially constructed for both firms in Maple Plain, about fifteen miles west of their previous location.

The new quarters consist of 4700 sq. ft. of office, joined to a 6000 sq. ft. heated shop and 1900 sq. ft. mezzanine for heavy storage. A large pole building provides an additional 5000 sq. ft. of cold storage. All buildings on the eight-acre site are enclosed by chain link fencing.

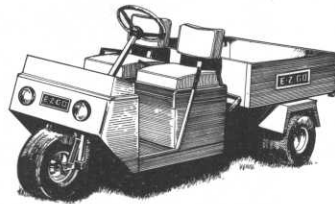
The principle business of Bergerson-Caswell is the construction of water wells and well and well pump maintenance, primarily for municipalities, industrial firms and golf courses. It serves all of Minnesota, western Wisconsin, northern Iowa and eastern North and South Dakota.

## E-Z-GO

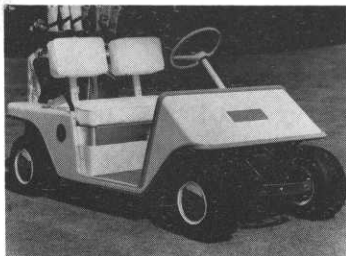


**THE E-Z-GO  
MAINTENANCE  
MACHINE  
GT-7 TRUCK**

**E-Z-GO GOLF CAR  
THREE WHEEL MODEL  
GAS OR ELECTRIC**



**E-Z-GO GOLF CAR  
FOUR WHEEL MODEL  
GAS OR ELECTRIC**



LOWEST POSSIBLE PRICES ON ALL NEW AND USED GOLF CARS AND GT-7 TRUCKS.

LARGEST SELECTION OF USED GAS AND ELECTRIC THREE AND FOUR WHEEL GOLF CARS.

FOR MORE INFORMATION CALL OR WRITE

### Stegner Golf Cars

DISTRIBUTORS OF E-Z-GO

5900 University Ave. NE Rainbow Bldg. Main St.  
Minneapolis, Minn. 55432 Ortonville, MN 56278  
Phone 612/571-4230 Phone 612/839-2511

**SALES-SERVICE-LEASING-PARTS**

**CLIP 2:** The Toro Company has introduced the first all-hydraulic triplex reel mower, the Turf Pro 84, for use on golf courses, parks, sports fields, cemeteries and other formal turf areas.

The Turf Pro's hydraulic system powers the three seven-blade reels, all three drive wheels and the lift mechanism for the cutting units. Each of the reels and each of the wheels has its own hydraulic motor, eliminating the drive chains and belts that need constant adjustment, repair or replacement.

The three prime characteristics that Toro engineers have built into the new mower are low maintenance, high reliability and outstanding performance. The all-hydraulic triplex cuts an 84-inch swath and mows up to 3.8 acres an hour.

**CLIP 3:** Dave Fedie in Anoka has a large area fertilizer spreader for sale ( 2-ton capacity) PTO Drive with stainless steel mesh fertilizer feeder. Gearboxes are rebuilt and it has large turf tires. If interested call Dave at 612/427-4920 or after 5:30 p.m. at 612/421-8610.

**CLIP 4:** Jim Lindblad at the Wayzata Country Club has the following items for sale: 3 Jacobsen Verticuts, 1 Jacobsen Edger, 1 Ryan Edger, 2 Jacobsen Trim Mowers, 1 Mars Sweeper, 6 Toro Spartan Gang Mowers complete except reel and 1 Toro Sandpro. If interested, please contact Jim at 612/473-8846.

**CLIP 5:** WELCOME ERIC ANDREW JENNRICH! Born February 1. Proud Mother and Father are Mary and George Jennrich.



# MR. GOLF SUPT: SERVICE IS ALWAYS IN SEASON

FROM MINNESOTA TORO, INC.

## WHAT'S IN IT FOR YOU?

1. You sign up with your Toro Distributor
2. You get the Factory-Trained Service Technician and the Toro Red Wagon at your door every 30 days to assist you with all your maintenance
3. You buy only as much time as you need on a regular basis
4. Longer equipment life
5. Reduced investment in specialized maintenance machinery
6. Maximum performance from your Toro equipment



Mar. '77

Mr. Supt:

In support of your staff, golfers and your Toro equipment, can you afford to not spend

**\$1.00 PER DAY?**

I'm asking each of you Supt's to sign-up on the Toro Red Wagon today.

"TRY-IT - YOU'LL LIKE IT"

*Glenn*

## SIGN UP NOW FOR RED WAGON!

### MINNESOTA TORO, INC.

14900 21st AVE. N.  
PLYMOUTH, MN 55441

(612) 475-2200

GLENN N. RASMUSSEN



# SPRAYER + SPRAYEE ≠ SPRAYING

W. C. STIENSTRA

ASSOCIATE PROFESSOR AND TURF SPECIALIST

UNIVERSITY OF MINNESOTA

Two plus two does not equal five. The device or machine for spraying plus the person hired for spraying do not necessarily equal spraying. Spraying is to scatter or let fall in the form of a spray or more precisely is the application of a suspension or solution of pesticides.

Disease control measures are aimed at breaking the disease triangle on one of the three basic sides. First, the host is made resistant or immune; second, the environment is made less favorable for the causal organism and more favorable for the host; and third, the causal organism is killed or prevented from reaching the host and producing disease. This last area includes application of fungicides. Remember, however, that "All the fungicides on the golf course do not substitute for a poor turf management program". I don't believe that the Minnesota Golf Course Superintendents have an over reliance on fungicides, however, the following thoughts may be helpful to you.

Fungicides can be applied before the disease strikes or after the disease starts. Fungicides can be contact or systemic. Fungicide action occurs on the surface of the host "protectant" and some must enter the causal organism to be effective. The ability to enter the fungal cell is "permeation" and the ability to damage the cell after entering is called "toxicity". When the fungicide damages the host cell, it is "phytotoxic". Fungicide action may also occur in the host. These systemic materials must not be phytotoxic but fungitoxic. The study of mechanisms by which fungicides kill fungi or inhibit their growth is difficult but required before use. This was done by the manufacturer and tested in many locations. This valuable information is digested and presented for your information on the label. Read the label! You will find directions regarding rate, interval, compatibility with other chemicals and what hosts it is to be used on.

The sprayer is important in the application of any pesticides. I use and suggest five gallons of spray solution per one thousand square feet which is adequate to wet the grass blades, thatch and top layer of soil. The solution must be uniformly divided over the entire area. The solution should not be applied with high pressure as it tends to create small droplets which drift and do not penetrate. In many cases, the multi-nozzle boom with applications equally divided in two directions is the best way to apply. Remember, it is important to get uniform coverage of the grass.

Contact fungicides such as Daconil, Thiram and Maneb are applied to prevent fungi from infecting turf. They must be reapplied frequently to protect newly emerging portions of the leaf. Most contact fungicides are relatively stable to chemical changes. The contact fungicide is also called a "protective" fungicide. The protective fungicides seldom kill the fungus in the leaf tissue which means they do not stop the spread of existing infections. Contact fungicides, however, are effective against a wide range of pathogens which may attack the grass plant. Contacts do not adequately protect roots and crowns of turf because coverage is limited, and if they did enter the host as systemic materials can, they probably would be phytotoxic. The contact-protective fungicide must resist removal and/or chemical change by water and other environmental factors and still remain toxic to fungi. This is a big order which few chemicals fulfill completely.

CONTINUED ON BACK COVER

FIRST CLASS

PERMIT # 38

MOUND, MINN.

# BUSINESS REPLY MAIL

No Postage Stamp Necessary if Mailed in the United States

*Postage will be paid by:*

KROMER CO.  
RT. 2 BOX 681A  
MOUND, MINN. 55364



DATE \_\_\_\_\_

**WE ARE INTERESTED IN THE  
FOLLOWING . . .**

- PLEASE QUOTE PRICES  
 PLEASE SEND ADDITIONAL INFORMATION
- 

**PLEASE SHIP AS FOLLOWS:**

- MAIL       EXPRESS       TRUCK
- 

QUANTITY	ITEM	PRICE
----------	------	-------

---

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SIGNATURE \_\_\_\_\_





KROMER Co  
MOUND, MINN. 55364  
(612)472-4167

# The Answer



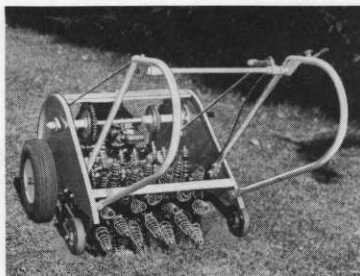
The Hahn Flex-A-Matic 140 is the answer to your turf maintenance needs. Match the Flex-A-Matic against other gang units, and you'll see why this machine is the best all-around, self-propelled gang mower in the business. Ideal for commercial turf care operators; parks, cemeteries, and schools. Perfect for all-around golf course maintenance.

- REAR WHEEL STEERING FOR TIGHT, 45-INCH TURNING RADIUS...permits use where ordinary gangs can't perform.
- INDIVIDUALLY CONTROLLED REELS...outside reels can be folded hydraulically so Flex-A-Matic can be used in tight situations.
- BIG 11'8" CUTTING WIDTH WITH 20 HP ENGINE...gives high-quality mowing over large acreage, fast.
- PLUS...variable reel speed, cable-driven reels, superb visibility.
- FACTORY TRAINED SERVICE PERSONNEL...assures you of prompt service and parts availability.

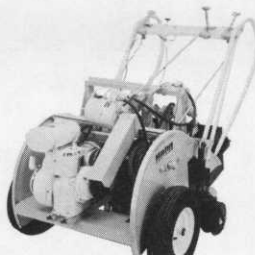
There's no question about it! If you want the best in turf maintenance you want the Flex-A-Matic 140. Test drive a Hahn Flex-A-Matic 140 at your nearby Hahn distributor.

**For healthier turf use Hahn Vertifiers, Aerifiers, and Verti-Cutters.**

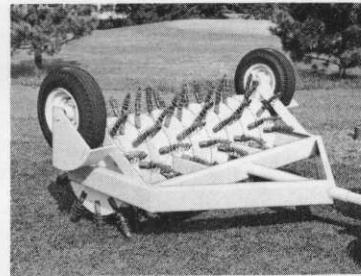
Hahn JR-3 Aerifier



Hahn MC-5C Vertifier



Hahn AB-1 Aerifier



HAHN TURF PRODUCTS • HAHN, INC. • 1625 N. Garvin • Evansville, Indiana

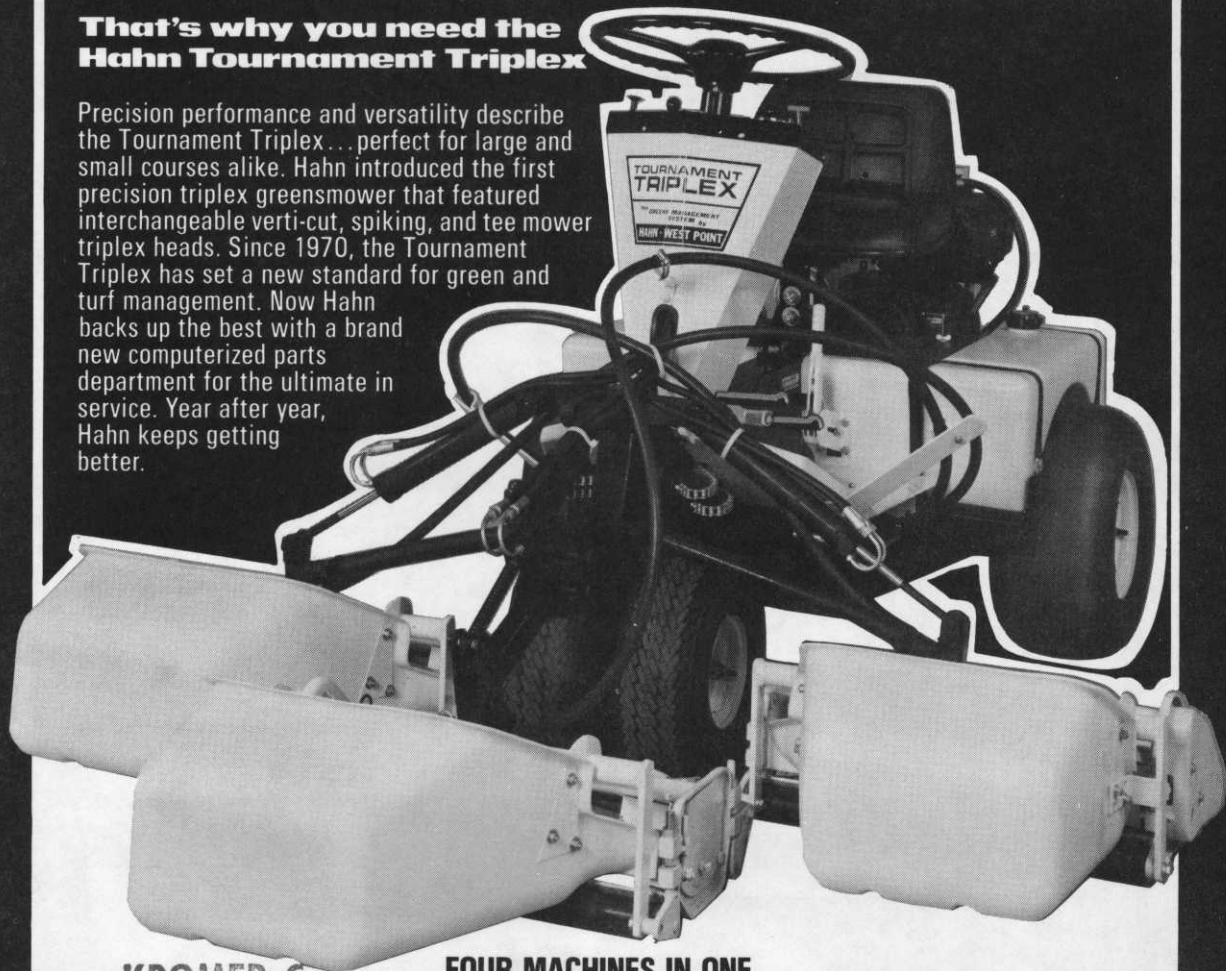
# Hahn



# Time is money on a golf course

## That's why you need the Hahn Tournament Triplex

Precision performance and versatility describe the Tournament Triplex... perfect for large and small courses alike. Hahn introduced the first precision triplex greensmower that featured interchangeable verti-cut, spiking, and tee mower triplex heads. Since 1970, the Tournament Triplex has set a new standard for green and turf management. Now Hahn backs up the best with a brand new computerized parts department for the ultimate in service. Year after year, Hahn keeps getting better.



**KROMER Co**  
MOUND, MINN. 55364  
(612)472-4167

### FOUR MACHINES IN ONE.

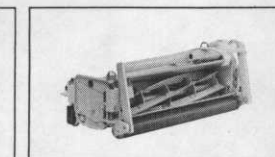
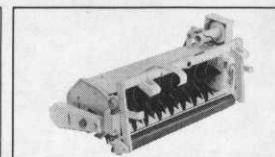
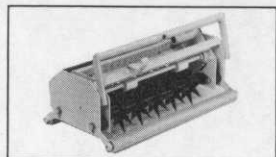
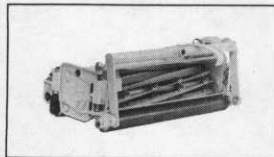
Heads change in just three minutes from greensmowing to verti-cutting, to spiking, to tee mowing, Hahn's quick-change, cable-driven heads make conversion easy and fast.

**Tournament Greensmower:**  
a clip of tournament precision. Each head is up front for maximum visibility and can be lifted individually. Cable drive ends hydraulic oil leaks on green.

**Triplex Vibra-Spiker:**  
high frequency vibration achieves good penetration. The size and speed of coverage allows frequent regular spiking, creating more healthy greens.

**Triplex Verti-Cutter:**  
patented, thin offset blades remove thatch and grain quickly and easily.

**Triplex Utility Mower:**  
ideal for approach and tee mowing. Variable speed permits cutting of all grasses. Ideal general purpose mower.



Hahn, Inc., Turf Products Division, 1625 N. Garvin, Evansville, Indiana 47711

# Hahn



# TURF TRUCKSTER SYSTEM.

Because the flexibility of the Cushman Turf-Care System saves you time and money. Here's how!

The System is built around the rugged, versatile 18 hp Turf-Truckster, 3-or 4-wheel model. With this one power source and options, you can haul, spray, spike, spread and top dress. And

save as much as 35% on equipment in the process.

Because, instead of buying separately powered units for each job, you buy only the Turf-Truckster and the modular Cushman accessories you need. So you pay less in total for equipment... and have only one power unit to maintain.



**CUSHMAN®**  
**TURF-CARE**  
**EQUIPMENT**  
2909 E. Franklin Avenue  
Minneapolis, Mn. 55406

But that's not all.

The System is also a time saver that can cut your labor costs. Accessories mount on the back of the Turf-Truckster. Your men do their work quickly, efficiently... and then move on to the next job at speeds up to 22 mph. There's less wasted traveling time, so you get more work out of each hour of labor cost.

The Cushman Turf-Care System. Versatility, superior performance, economy. It's a tough system to beat.

Write today for your free Cushman Turf Care Catalog.

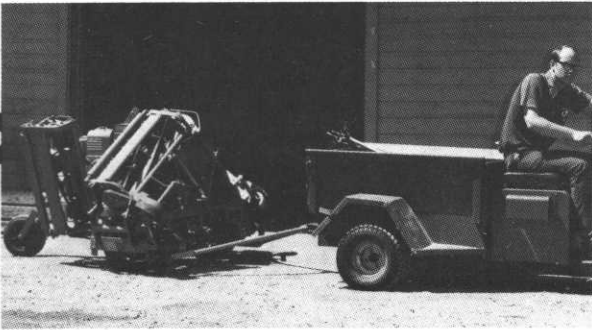
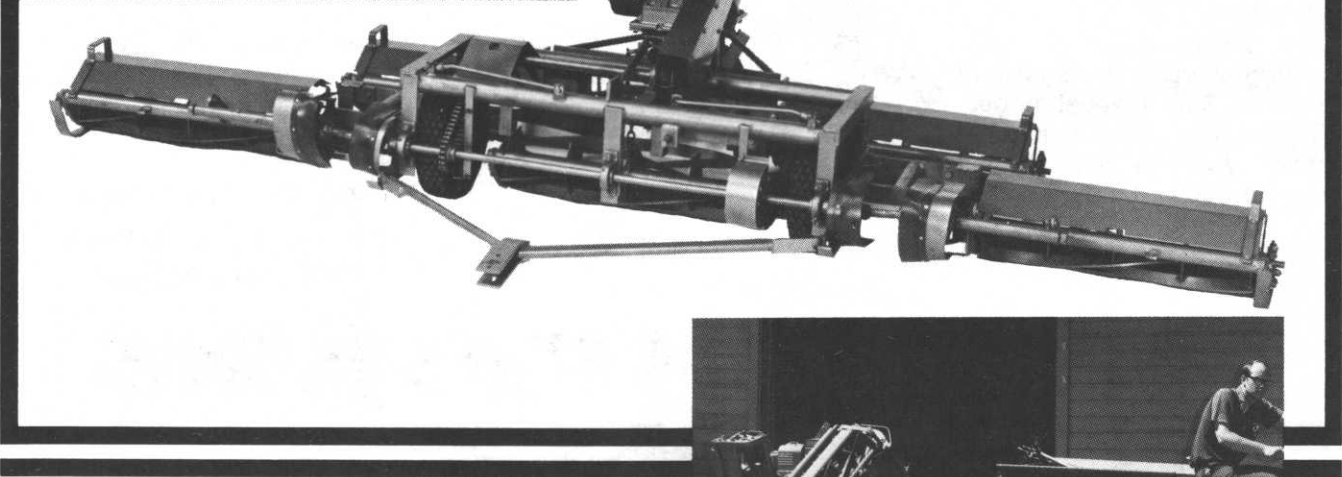
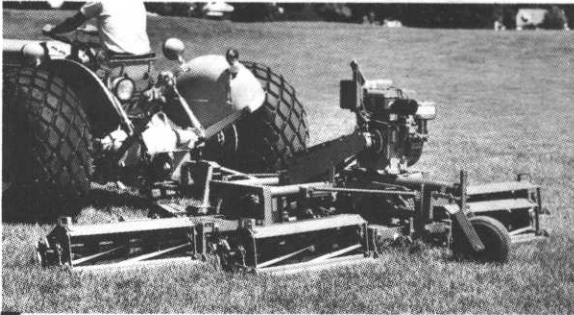
**CALL GERRY COMMERS**

**PHONE: 612 • 333-3487**

## You can't beat the system.







NATIONAL MOWER'S  
**NEW Power Quint**

**Economical to buy,  
 operate and maintain**

National Mower's Power Quint is designed to meet the demands of today's economy. It is priced less than any comparable unit. It is a simple, functional machine without unnecessary levers, gadgets and chrome decorations. It is made so as many parts as possible are standard, off-the-shelf items available from the user's local sources.

**Power Quint was deliberately designed to provide its own power source. A feature that allows the unit to be pulled by almost any size tractor with or without PTO.**

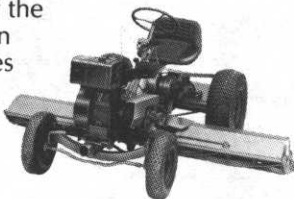
**FEATURES:**

- Five, powered, free-floating reels cut an 11½ foot swath without skip or scalping.
- Wings fold to 68" for easy transport and storage.
- With no need for outrigger wheels, cutting units reach out over curbs, golf course traps and up to obstruction to eliminate trimming.
- Unit is easily backed out of difficult areas and quickly negotiates inclines because powered reels produce less drag.

As with all National Mower models, the Power Quint reels are designed to adjust down to fixed bed bars providing for more rigid, longer-lasting mowing units. All bed knives have turned-up lips for extra wear... a feature National introduced as early as 1925.

**84" TRIPLEX**

National's 84" Triplex is one of the best hill-climbing, rough terrain machines made today. Operates as efficiently on an 83 per cent grade as on a level. Its no-nonsense design makes maintenance easier and faster.



**68" TRIPLEX**

With its low center of gravity and wide track, National's Model 68 maneuvers sharply, climbs banks and hillsides easily and safely. Unit mows a 68-inch swath at speeds up to 4 MPH... that's half an acre in 15 minutes. Wings fold to 37½".



**Don't look for chrome frills or shiny hubcaps on any National Mower... we've been adding nothing but quality since 1919.**

**Reed's Sales and Service**

1260 PAYNE AVE.  
 ST. PAUL, MINN. 55101 612-774-9515

# What does your Northrup King man offer you besides quality turfseed?

A willing ear. We listen carefully to your problem and study it thoroughly so we can solve it together.

The voice of experience. Northrup King continues to be a leader in the development of new varieties and blends.

Reliability. Northrup King has a testing and quality control program that is your assurance of quality seed.

At his fingertips, a wide range of proven turfseed varieties. And we can custom blend to meet your special needs.

The right turfgrass decision can improve the quality of your turf. It can also save you maintenance dollars.

So the person who helps you make that decision is very important to you. That's why we stress the professionalism of your Northrup King man. And his willingness to get involved with your needs.

Grass-stained knees, if that's what it takes to understand your problem. Northrup King people get involved.

For a thoroughly professional evaluation of your turf requirements, talk with your Northrup King representative or distributor. He offers you quality turfseed—and a lot more.

Feet firmly planted in your area, so we can recommend varieties and formulate mixtures that will work in your particular region.



**NORTHROP, KING & CO.**  
BOX 959 • MINNEAPOLIS, MINNESOTA 55440

# MEET YOUR SUPERINTENDENTS !



Russ Adams is superintendent at the University of Minnesota Golf Club. He started his career at the University twenty-six years ago as ice rink supervisor. During that same period he worked on the golf course during the summer months. Russ was given the superintendent's job in 1962. He has been a member of M.G.C.S.A. since 1962 and a member of the National Association since 1967. His club is semi-private and all his programs' budgets are supplied by the Athletic Department and Mr. Holger Christiansen, facilities coordinator. Russ is married and his wife's name is Marilyn. They have two children, Lee, nine and Debby, seven. In the off season from golf, Russ keeps very busy by refereeing both college and high school hockey.



Dick Grundstrom is the new superintendent at Indian Hills Golf Club. Dick moved to Indian Hills in September 1976 from Dellwood Hills Golf Club where he had been superintendent for the past eight years. Dick is a member of M.G.C.S.A. and the National Association. I understand some of Dick's hobbies include working with wood, fishing, hunting and playing golf when possible. Dick is married and his wife's name is Elsie. They have two children, both boys. Dean is ten and Kevin is seven. Dick, we wish you well at Indian Hills Golf Club and the best of luck this coming year.

## MARCH MEETING FEATURES SEMINAR



Interstate 694 at Lexington Exit  
Arden Hills, Minnesota  
Area Code 612/636-4123

ADVANCE REGISTRATION IS A MUST! DEADLINE IS MARCH 18.  
\$10.00 includes Seminar and Filet Dinner

ON MARCH 21 AT 1:30 P.M. AT MCGUIRE'S INN OF ARDEN HILLS, KEITH SCOTT WILL MODERATE THE FOLLOWING SESSION:

- 1:30 Preparing Poa for Overwintering, Dr. Don White, Dept. of Horticulture, U of M.
- 1:45 Winter Protection, Dr. Jim Watson, Vice President Toro Manufacturing.
- 2:00 Experiences With Overwintering, Dr. Robert Shearman, Asst. Prof. of Hort., U of Neb.
- 2:15 Sand Topdressing & Sand in Your Mix, Dr. George Blake, Soils Dept., U of M.
- 2:30 Winter Disease, Dr. Ward Stienstra, Dept. of Plant Pathology, U of M.
- 2:45 Questions and Answers
- 5:00 Business Meeting
- 6:00 Cocktails
- 6:30 Dinner

Mail the Reservation Form below to Jim Lindblad, 15916 North Eden Drive, Eden Prairie, Minnesota 55343. Make check payable to M.G.C.S.A.

### RESERVATION FORM - SEMINAR AND BUSINESS MEETING, MARCH 21, MCGUIRE'S INN

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

NUMBER ATTENDING \_\_\_\_\_ ENCLOSED IS CHECK FOR \$ \_\_\_\_\_