# YOU JUST CAN'T BUY A BETTER MOWING TRACTOR.

That's just one of the many advanced features you'll like about the Jacobsen F-10 mowing tractor.

The seven out-front reels not only cut the turf evenly, they're also steerable. Because they turn in the same direction you turn the steering wheel, you can get a more accurate cut and smoother finish.

When all the reels are down, you can mow a 15' wide swath. The reels can be raised or lowered in any combination hydraulically right from the driver's seat. And when they're all raised, the whole vehicle is only 8' wide for convenient transport.

Because you have excellent visibility of the reels from the driver's seat, trimming and precision mowing is made easier.

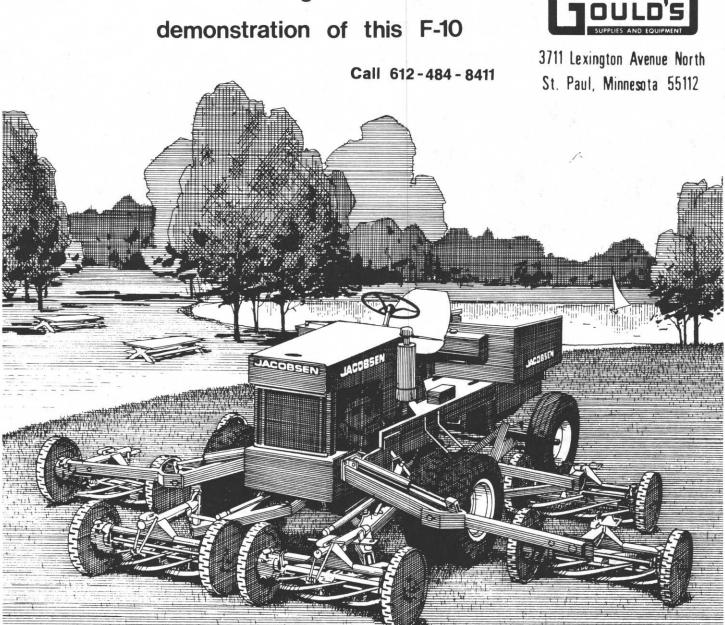
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If you're looking for a big mowing unit that cuts up to 62 acres in an 8-hour day and gives a professional finish to your turf at the same time, ask us about the F-10.

The more you hear about its many fine features, the more you'll know we've been listening to our customers.

We hear you.





1

HOLE NOTES, official publication of the MINNESOTA GOLF COURSE SUPERINTENDENTS' ASSOCIATION.

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# FROM THE PRESIDENT'S DESK

DENNIS HENDRICKSON

This is one of the seasons of the year when the importance of the M.G.C.S.A.'s Research Program really becomes apparent. As we battle turf problems of all kinds it is very important to communicate with the members of our clubs so they are aware of what the problems are and what is being done to remedy the situations. Conversations concerning these problems will show the importance of more research. The effect on the game of golf and the costs involved speak loud and clear to the golfer as well as pointing out that the job of the golf course superintendent goes far beyond cutting grass. More research is indeed badly needed.

Last month's meeting at the Mora C.C. was well attended and enjoyed by everyone. The weather even cooperated so we could get out and tour the course as well as look at equipment displayed by Robertson's Turf Care Products. A special thank you to Fred Anderson and everyone at the Mora C.C. for making the day such a success.

The July meeting will be held at Braemar Golf Club on July 13. The July meeting is always our annual family picnic. Once again, the Wileys will don their chefs' hats...so load up the family and come out and unwind. It's always a fun day for everyone. See you there!

GOLF IS LIKE A LOVE AFFAIR:

IF YOU DON'T TAKE IT SERIOUSLY, IT'S NO FUN.

IF YOU DO TAKE IT SERIOUSLY, IT BREAKS YOUR HEART.

.....ARNOLD DALY

## PATHOLOGICAL POINTERS



By WARD C. STIENSTRA, Extension Plant Pathologist University of Minnesota

The past memorial weekend was something to remember. A state-wide turf disease epidemic! For you who missed it, the weather was cloudy, cool and wet with very little sunshine and most soil temperatures had not consistently gotten into the 55°F or high range except for a few hours in the afternoon sun. While Fusarium patch is usually late fall - late winter - early spring disease, it can and this year did occur in late spring, i.e., the end of May. Temperature optima are reported to be 32 - 45°F and economic damage can occur up to 65°F. This fungus liked the natural moist conditions present from Bemidji to the Twin Cities and indeed over all of

Minnesota. An application of fertilizer that generated excessive growth could also favor this disease. The leaves are attacked and when favorable conditions exist, crown damage does occur which may completely kill the plant. Some reported disease patches with white aerial mycelium. A plug from Como Golf Course was nearly covered with white mycelium after 12 hours in a bucket on my desk. That sample was about 85% dead and recovery from that kind of damage will be slow.

Those who had applied a systemic such as Benomyl, etc., or 26019 had much less damage. When you saw the problem it seemed as if you could not stop it. The symptom was usually restricted to the Poa and little was reported on bents. The bents are susceptible, but Poa was clearly damaged much more. Several reports of Fusarium patch on fairways and tees were also heard.

#### GRASS DOES NOT LIVE BY NITROGEN ALONE!

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Yes, it takes a balance of all nutrients to grow good turf. Country Club products provide total nutrient feeding. Look to Country Club for all your fertilizer and combination fertilizer-pesticide products. You can rely on Country Club turf products for satisfaction and results.

For more information, call 1-800-637-2101 (217-446-0983 in Illinois)

#### LEBANON CHEMICAL CORPORATION

P.O. Box 647 Danville, IL 61832 P.O. Box 180 Lebanon, PA 17042

FUSARIUM NIVALE spores were easy to see. The spores in younger cultures were usually non-septate or up to 3 septate. The mycelium was nearly white in the lab, while on turf plants the color was pale rose. The plants were very slimey and wet, the blades shrivelled and collapsed, leaving the turf flattened and reddish in color. A few reported "frog-eye" symptoms also. Leaves not completely killed by the fungus became yellow and stopped growing. Crown death resulted in dead spots similar in size to the dollar spots. The dead plants bleached somewhat when exposed to the sun. Recovery is usually good and new blades should quickly fill in when sun and warmer drier weather occurs. Early fungicide treatment provided the best results while applications when the disease was active only seem to slow the progress. Recovery is dependent on regrowth and fungicides don't change that pattern. Next time you may want to check the soil temperature and use that as a guide for your growth expectations.

#### FOR SALE

PEERLESS MODEL 1300, REEL TYPE MOWER SHARPNER PRICE: \$500 (\$1400 when new). ROGER MIELKE, 537-3474. CALL AFTER JULY 18

## **PROTECTING YOUR CREW FROM PESTICIDIES**

Pesticides are one of the worst health hazards involved in golf course maintenance. It is a superintendent's responsibility to make sure that the proper protective equipment is provided and worn by his crew. The following information is taken from G.C.S.A.A.'s "Pesticide Usage Reference Manual" available from Association headquarters in Lawrence, KA.

Many superintendents are alert to the dangers present when <u>applying</u> pest control chemicals but overlook these equally hazardous situations:

- 1) Handling of containers in moving from transport vehicle to storage area or in rearranging containers in the storage area
- 2) Measuring, loading or mixing operations
- 3) Disposal of empty containers
- 4) Cleaning of equipment after use
- 5) Laundering of contaminated clothing
- 6) Personal cleanliness

Cotton, leather or canvas gloves or boots will absorb large quantities of toxic materials and provide a constant exposure to the skin. If organophosphorus or carbamate insecticides are involved, wear natural rubber gloves unless the container label specifically states otherwise.

Rubberized boots are generally preferred for protection against chemicals because they wear well and can be cleaned with soap and water. Disposable plastic boots and gloves should not be used because they may not be strong enough to stand the rough conditions of continuous golf course usage.

Workers need additional protection when opening containers, mixing chemicals and filling application equipment because these operations involve direct skin or lung exposure to the chemicals. Therefore, goggles or face shields, head coverings and respirators should be worn. A rainsuit or coveralls can provide maximum protection, especially when very toxic chemicals are being handled. Headbands or goggles and face shields should be replaced periodically since they are absorbent and are in direct contact with the skin and hair.

Maximum protection is needed when chemicals are being applied, and the type of protection is dependent upon the types of chemicals being used. In spraying operations, operators are exposed to considerable hazard, because their clothing can become very wet. Waterproof rainsuits are recommended for the greatest degree of protection. If dusts or granular materials are being used, full-length coveralls are satisfactory. Both wet and dry applications need the use of respirators, gloves, boots and head and neck covering for maximum protection.

A moderately high risk factor is involved in the cleaning of equipment after use. Workers often are eager to shed protective clothing as soon as they return to the maintenance building, especially on hot days when most pesticides are applied. Every effort must be made to prevent this since the normal splashing and spilling of contaminated water onto bare skin or clothing can lead to serious consequences.

Protective clothing suggested during clean-up includes: rubberized boots, rubber gloves, goggles or face shield, and waterproof suit or large rubberized apron. All clothing should be thoroughly washed with soap and water after each usage. This includes gloves, boots, coveralls, waterproof suits, etc. The final safeguard is that of personal cleanlinesseach person who has handled toxic chemicals must be instructed to wash or shower thoroughly as soon as possible after finishing his work. Failure to do so can produce tragic results, especially if the worker is unduly sensitive to a given chemical.

If all this seems unreasonable, bear in mind that you, as a golf course superintendent, are completely responsible for the health and safety of your crew.

Reprint FORE FRONT G.C.S.A.A.

# GETTING INFORMATION OUT OF WASHINGTON, D.C.

Almost every part of our lives, from our jobs to the very air we breathe, is affected in some way by our government. It's only fair, then, that we should return the favor by keeping a close eye on those who make, interpret and enforce our laws.

Even if you don't know your "way around" the Washington maze, you can still find out what's going on there. The information you need is usually available. The challenge is sorting it out of all the information you don't need.

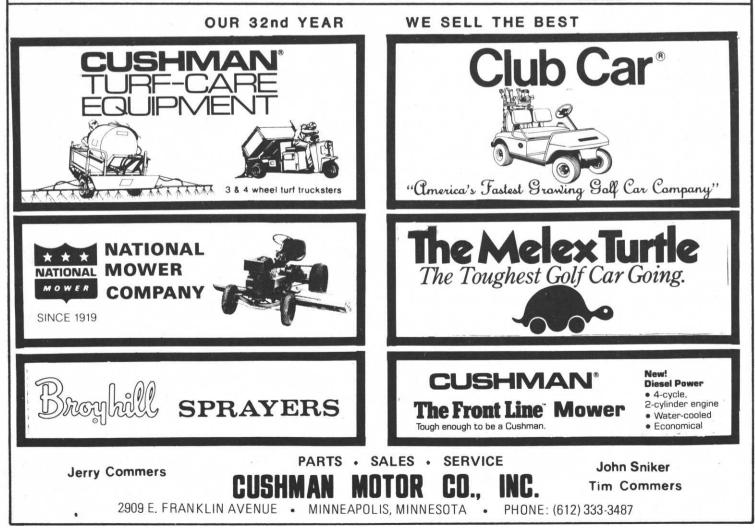
You should start your search in one of the Federal Information Centers located in major cities in most states. The information specialists there will help you find the right federal office to answer your particular questions. You can also write the Federal Information Center, General Services Administration, 7th and D Streets, S.W., Washington, D.C. 20407.

To get information out of Congress, start with the <u>Congressional Staff Directory</u>, which is available at most libraries. This annual publication lists names, room numbers and direct extensions of staff members of Senators and Representatives.

Another valuable source of information is the Government Printing Office. Not only is this office in charge of all government printing, it also operates bookstores in 20 U.S. cities. More than 25,000 titles are available, including one called <u>Consumers Guide to Federal</u> Publications.

For timely information on Congressional activities, consult the daily <u>Congressional Record</u>, <u>The Congressional Monitor and The Congressional Record Scanner</u> or the weekly <u>Congressional</u> <u>Quarterly and Regulatory Monitor</u>.

Reprint FORE FRONT G.C.S.A.A.



# TURF SUPPLY COMPANYNewsPHONEUpdate

#### (612) 454-3106

#### Vol. 1 No. 2

#### NEW FUSARIUM BLIGHT TREATMENT

Dr. Joe Vargas, writing in the "American Lawn Applicator" March/April 1981, expounds the value of Triadimefon which will be sold under the trade name **Bayleton** as a tool in the management of Fusarium blight.

Good cultural practices for Fusarium blight management consists of nitrogen fertility from low level slow release fertilizers in the summer months and light frequent irrigation during the warm weather. Kentucky bluegrass turf undergoing senescence (natural aging and dying) is more susceptible to Fusarium blight than those not undergoing senescence. Nitrogen fertility in the summer helps prevent the Kentucky bluegrass from undergoing senescence. This goes against traditional beliefs of applying nitrogen only in the spring. Slow release fertilizer has debunked both mid summer nitrogen release and nitrogen release into freezing weather in the fall. Now both concepts are accepted as good practices. Applying concentrations of highly soluble nitrogen is another story!

#### GRANULAR PESTICIDE CONTROL PRODUCTS

For the SUPERINTENDENT that finds granular application more convenient — or for those who do not have sprayers!

TURF SUPPLY COMPANY has now acquired a complete line of cost competitive granular fungicides. Granular fungicide products are now available to prevent or control most of the turf problems that are found in the state of Minnesota.

• TURF FUNGICIDE — TYPE B Contains benomyl (1991), a proven fungicide.

- TURF FUNGICIDE TYPE D
- Contails Daconil (2787), a superior broad spectrum fungicide.
- TURF FUNGICIDE TYPE T Contains Cadmium — Thiram, that is a time-tested general purpose fungicide.

This program does not give you fertilizer when you do not want fertilizer (e.i.: combinations).

Economy and variety are better had with concentrates, but we offer this as an alternative.

#### ESTECH CHEMICAL CO. HONORS TURF SUPPLY COMPANY

Summer 1981

Turf Supply Company was given the outstanding sales award by Estech Chemical for being the No. 1 PAR-EX distributor in the UNITED STATES for the third consecutive year.

There is much pride in this award since the giants in the industry have as many as six or more salespersons while TURF SUPPLY's Dave Krupp outsold them all! We are very proud of Dave's accomplishment.

This is the third year in a row that Dave has accomplished this feat.

#### STARTER FERTILIZERS

Turf Supply now carries a 13-25-12, an economical starter fertilizer to help develop strong and vigorous root systems. This popular 1-2-1 ratio, as recommended by most leading universities, is ideally suited for new seed-lings, ornamentals, flower gardens, nurseries, and to build levels in low phosphate soils.



### UNIVERSITY STUDIES ARRIVE AT THE FOLLOWING DATA ON SLOW RELEASE NITROGEN MATERIALS

IBDU	PAR-EX	31-0-0	W.I.N. 27.9%	Isobutylidene Diurea
SCU	CIL	37-0-0	C.R.N. 28.8%	(S.C.U.)Sulfur Coated Urea
UF	NITROFORM	38-0-0	W.I.N. 27.0%	Urea Formaldehyde
MU	PRO-TURF	41-0-0	W.I.N. 10.1%	Methylene Urea

Slow Release 90% Slow Release 70% Slow Release 65% Slow Release 24%

Study this chart carefully as it should reflect the respective costs of various materials.

#### NOW, ONE-SHOT WHITE GRUB CONTROL

NEW OFTANOL — ONE APPLICATION CON-TROLS WHITE GRUBS FROM SEASON-TO-SEASON.

New OFTANOL insecticide from MOBAY CHEMICAL delivers unparalleled residual control of white grubs. In fact, you can expect one application of OF-TANOL at the highest recommended rate to control white grubs about the same time next year.

- OFTANOL does not require watering-in.
- OFTANOL does not tie up in thatch.
- OFTANOL does not require critical application timing.

One application — once a year. That's the OFTANOL one-shot advantage. 5% Granular available.

#### TURFACE TO AMEND SAND TOPDRESSING

TURFACE works directly with the physical properties of soil. When used correctly, TURFACE provides a freer movement of moisture, oxygen and better utilization of nutrients. Since TURFACE is also highly absorbent, moisture retention properties are maintained while drainage is improved.

TURFACE meets the following criteria:

- 1. Chemically uniform.
- 2. Chemically inert and neutral.
- 3. Retains moisture.
- 4. Provides aeration.
- 5. Assists drainage.
- 6. Prevents excess loss of nutrients by leaching (has 30% base exchange).

TURFACE holds water not only by adsorption, like other soils, but also by absorption because of the capillaries in each particle. Water penetration is faster because of structure; moisture retention is greater because TURFACE absorbs and adsorbs moisture. The absorbed moisture is gradually released to maintain an equilibrium with the adsorbed moisture. This dual action raises the field capacity of the soil.

TURFACE RETARDS LEACHING IN SAND GREENS

By including TURFACE in sand topdressing of sand greens, the base-exchange capacity is more closely satisfied by minimizing nutrient washout. This occurs through absorption and adsorption by TURFACE particles. However, merely holding nutrients is not enough; they must be made available to plants upon demand. TURFACE particles will give up nutrients via the water carrier (solvent) upon both soil and plant demand. An equilibrium is thus maintained.

TURFACE will not break down or lose its baseexchange capacity, because of its special high temperature processing!

## TURFACE ELIMINATES HOT WEATHER BURN-OUT

1. TURFACE reduces hot weather burn-out because of its large pore spaces which allow capillarities too large to hold water to thus become air spaces — yet TURFACE absorbs its own weight in water and retains enough moisture to minimize damage from prolonged dry spells, greatly reducing water requirements in sand soils.

- 2. TURFACE drains four times faster than sand even after repeated rains or irrigations! TURFACE acts as a "separator" — lets roots breathe! Wet or dry, TUR-FACE will not compact and puts structure in sand mixes.
- 3. TURFACE allows oxygen to penetrate to a deeper level in sand soils. Roots grow deeper where moisture and oxygen are in balance.
- 4. A GREEN constructed of sand has difficulty to absorb or hold water because of lack of "structure". TUR-FACE works to control moisture content, thus reducing the danger of too high a moisture content or a severe drought.

#### TURF SUPPLY COMPANY HAS BEEN CHOSEN TO DISTRIBUTE THE NEW "BAYLETON"

TURF SUPPLY COMPANY has been chosen by MOBAY CHEMICAL CORPORATION to distribute the new chemical **BAYLETON**.

**BAYLETON**, also generically called **Triadimefon** is a new class of chemicals called sterol inhibitors.

BAYLETON is a highly systemic fungicide which offers unique, multi-site protection. It is rapidly absorbed into the turfgrass, stopping the growth of the fungus. Preventive activity of BAYLETON can be greater than 21 days depending on environmental conditions.

The contract was signed May 1, 1981 and BAYLETON is carried by TURF SUPPLY in good quantity.

#### SOME "DUMB" THINGS TO REMEMBER

Iprodione = Chipco 26019 Triadimefon = Bayleton Thiophanate "E" = 3336 Thiophanate "M" = Fungo 50 Chlorothanil = Daconil 2787 Chloroneb = Tersan SP Benomyl = Tersan 1991 Benlate = Tersan 1991





Superior control of Fusarium blight. Preventive and curative action for many other turf diseases.

BAYLETON 25% Wettable Powder provides good residual activity for <u>long-</u> <u>lasting</u> control. That means fewer applications throughout the year. New from Mallinckrodt:

#### DUOSAN

Developed by Mallinckrodt to overcome the problem of fungicide — resistant turf disease strains.

Approved by leading turf researchers, the contact component in Duosan provides immediate action, while the systemic ingredient offers long lasting control.

Comments from universities involved in testing Duosan have stated:

In addition to controlling dollar spot, the Duosan plots had an over-all good color. Tests show that the broad spectrum synergistic action of Duosan results in good color, vigor, and excellent dense turf. Duosan controls dollar spot, brown patch, copper spot, red thread, leaf spot, fusarium patch, rust, and anthracnose.

Both Dr. Vargas, MSU, and Dr. Sanders, Penn State, report Duosan as one of the top melting-out control chemicals in the market place.

Include Duosan in your rotation program with Daconil and 26019, applying every third application. We're sure you will find Duosan effective and pleasing on your turf.

#### UNIVERSITIES REPORT IT TAKES LESS KOBAN 30 TO PREVENT PYTHIUM

Universities report it takes less Koban 30 to prevent pythium. Superintendents report longer, more effective control with Koban 30 than other leading fungicides.

Mallinckrodt had a new improved label rate of 2 to  $4\frac{1}{2}$  oz. of Koban 30 per 1,000 square feet. The 2 ounces will prevent pythium infection.

Koban is more effective and less costly than competing brands.

It is important that Koban 30 **be watered in** to receive the most effective control. Penn State reports that Koban 30 is safe at rates as high as 9 ounces per 1,000; if the recommended amount of water is used. Use either 5 gallons of water per 1,000 or water in immediately for best safe results; no chance for burn.

Include Koban 30 in your disease prevention program.

#### **MORE ON NEW PRODUCTS**

One of the great people in the profession of Golf Course Superintendent was LEO FESER, and it was the writer's pleasure to have known him as a friend. Leo wrote an article for GOLFDOM MAGAZINE back in 1957 and entitled the article, "GOD! AM I CONFUSED." Leo was a very learned person, but this statement must hold true for most of us in this profession.

One of the tests that seldom is performed on a chemical is the breakdown of that chemical while exposed to the various rays of the sun's spectrum. Remember Chlordane, which would not last an afternoon in the sun; yet, when watered into the soil, could persist for 3 to 5 years.

TURF SUPPLY COMPANY has taken on another new product called "UVF". **PRO-TEC UVF** is a unique waterbased hydrophilic polymer. A key ingredient is a "sunscreen" compound which effectively filters out a portion of the sun's chemical-destructive ultra-violet rays without affecting the critical photosynthesis of plants.

PRO-TEC UVF can extend the life of Thiram from 1-4 days to **up to 6 months.** Thiram is used as a deer and rodent repellant as well as a fungicide. Can you imagine 6 month's protection on other chemicals?

#### IT DRIVES YOUR SOIL TO DRINK! AND DRAIN!

THE PROFESSIONAL WATER MANAGEMENT TOOL FOR GOLF COURSES AND PLAYING FIELDS

Aqua-GRO prevents losses of turf under dry or wet conditions. Dry soils take water rapidly — less run-off; quick infiltration. Excess moisture quickly drains through treated soils. Water wets more uniformly in an Aqua-GRO treated turf. Watering can be reduced by 30% to 50%.

Aqua-GRO is a blend of ester-ether-alcohol organic wetting agents, 100% active ingredient (contains no water) low foaming and non-toxic to turf or micro-organisms. Aqua-GRO is blended for top performance in all soils (sandy, loam, etc.) and soil-mixes (sandy, loam, clay, etc.).

#### GREENS

1) Apply 16-oz. Aqua-GRO/1000 sq. ft. in early Spring (soon after your irrigation is turned on). Make 2x8-oz. applications about 1 week apart. Wash in each application (about 10 minutes watering). If possible use 1 gal. water with each 1-oz. Aqua-GRO. If not possible to spray this much water, wash in **immediately** to prevent any discoloration. Some recommendations use 3x6-oz. Aqua-GRO applications instead of 2x8-oz. Aqua-GRO for added care.

2) In areas of severe soil conditions, a third 8-oz. (or a fourth 6-oz.) application would be recommended. Apply this extra treatment 2 to 3 weeks after step (1) if sufficient improvement in infiltration, softness, drainage, etc. is not noticed.

3) Maintain the initial treatment by weekly sprays of  $1\frac{1}{2}$ -to 2-oz. Aqua-GRO/1000 sq. ft. applied with your regular sprays. If you miss a week. add double the next week. Do not spray with Actidione.

4) In late Fall (just before your irrigation is turned off), apply one 8-oz. treatment and wash into the soil.

Average: 56-oz. Aqua-GRO/1000 sq. ft./year.

#### TEES

The same general program for the greens is usually recommended on the tees. Sometimes only one or two sprays per month are used to maintain the initial 16-oz. treatment. 4-oz. Aqua-GRO/1000 sq. ft. per month should be sufficient. The late Fall treatment may be omitted if winter injury is not a real problem on your tees.

Average: 32-oz. Aqua-GRO/1000 sq. ft./year.



# The Most Complete Line of Turf Products For Complete Turf Management Under One Company



# TURF SUPPLY COMPANY 2970 Dodd Road St. Paul, MN. 55121

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Call: John L. Kolb or Dave Krupp (612) 454-3106

# MGCSA GOLF TOURNAMENT SEPTEMBER 14, 1981

# Willmar Golf Club - Little Crow Country Club

As we head into the middle of summer, many superintendents turn their thoughts to the somewhat less stressful seasons ahead. One such pleasureable thought which occupies our minds when we think of late summer and early fall is that of participating in the annual Superintendents Golf Tournament.

This year we will have the opportunity to play on one of two very fine golf courses outside the metropolitan area. Now is the time to talk to your club officials, club managers and club professionals or otherwise line up your foursomes and plan to spend an enjoyable day and evening in West Central Minnesota's Little Crow Lake Region.

The scheduled event is a 1:00 PM shotgun, limited to 128 players at each club. Please remember to indicate which club you would like to play. The cost is \$25.00 per person which includes golf, dinner and prizes. Payment must accompany reservations. Make checks payable to MGCSA. Singles making reservations will be paired to make foursomes. Cancellations made prior to Sept. 7, 1981 will receive a full refund. Cancellations made after that date will receive no refund. No reservations (except for dinner) will be accepted after Sept. 7, 1981. Send reservations to Jim Wodash, 512 East Third Street, Willmar, Minnesota 56201.

As usual, try to send your reservation in early to assure yourself of playing the course of your choice. Dinner and awards will be at the Willmar Golf Club, with cocktails at 7:00 PM and dinner at 8:00 PM. Both corses will be open Monday morning if you wish to play in the morning as well. Lunch will be served at both clubs. Please indicate the number having lunch.

#### MGCSA TOURNAMENT ENTRY FORM

Please reserve	for		for	the following foursome:	
		(Name of sponsoring sup	t.)	1)	\$25.00
				2)	\$25.00
I wish to play	at:	Willmar GC		3)	\$25.00
		Little Crow CC		4)	\$25.00
Limit one cart	per	foursome. Please reserv	e	_ cart at \$10.00.	
		Please reserv	e	extra dinners at \$20.00 e	each.
				Total	

Please indicate number having lunch: yes no

# **RESEARCH FUND REPORT**

The 1981 RESEARCH FUND drive has attracted thirty-nine donors who have contributed \$5,104.25 to date. If your club or organization is not listed, why not follow up the original mailing with a personal call to remind them of the need for such research. With both a winter and summer program now in progress, 100% support is needed.

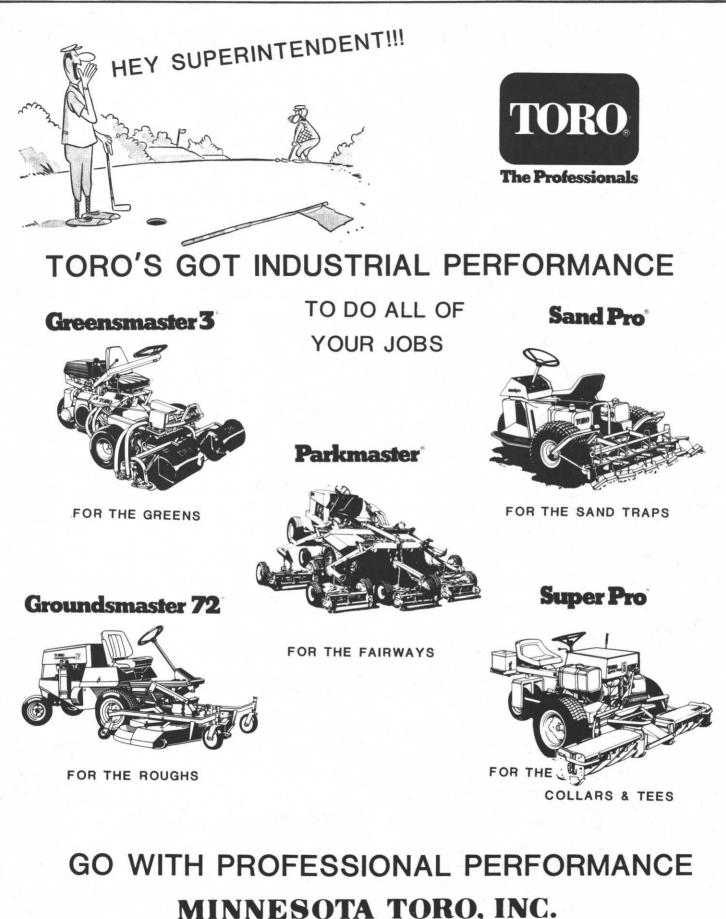
OUR HEARTY THANKS TO THE FOLLOWING! Let's make this list grow and grow!

CLOQUET COUNTRY CLUB SOMERSET COUNTRY CLUB GLENCOE COUNTRY CLUB MIDLAND HILLS COUNTRY CLUB CASTLEWOOD GOLF CLUB LAKEVIEW GOLF OF MINNETONKA MESABA COUNTRY CLUB KELLER MEN'S GOLF CLUB KORONIS HILLS GOLF CLUB ANOKA-GREENHAVEN GOLF CLUB OAK RIDGE COUNTRY CLUB DELLWOOD HILLS COUNTRY CLUB BRAEMAR GOLF COURSE LESUEUR COUNTRY CLUB PIERZ MUNICIPAL GOLF CLUB MINNEAPOLIS GOLF CLUB MADDEN'S GOLF CLUB INTERLAKEN GOLF CLUB EDINA COUNTRY CLUB SOUTHVIEW COUNTRY CLUB

DETROIT COUNTRY CLUB HILLCREST-EAU CLAIRE WAYZATA COUNTRY CLUB MINIKAHDA CLUB HAZELTINE NATIONAL GOLF CLUB INTERLACHEN COUNTRY CLUB NORTHLAND COUNTRY CLUB LAFAYETTE CLUB GOLDEN VALLEY COUNTRY CLUB STILLWATER COUNTRY CLUB WHITE BEAR YACHT CLUB VOYAGER VILLAGE OLYMPIC HILLS GOLF CLUB BAKER PARK GOLF CLUB HUDSON COUNTRY CLUB INDIAN HILLS GOLF CLUB MENDAKOTA COUNTRY CLUB MINNESOTA VALLEY CLUB NORTH OAKS GOLF CLUB

> Larry D. Mueller, Chairman M.G.C.S.A. Research Committee





# 14900 Twenty First Avenue North Minneapolis, Minnesota 55441

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# FUTURE GCSAA CONVENTION SITES

YEAR	HOST CITY	EXHIBIT HALL
1982	New Orleans	The Rivergate
1983	Atlanta	Georgia World Congress Center
1984	Las Vegas	Las Vegas Convention Center
1985	San Francisco	George Moscone Convention Center

San Francisco's soon to be completed George R. Moscone Convention Center will be the site of the Golf Course Superintendents' Association of America's 56th International Turfgrass Conference and Show January 30 - February 5, 1985, G.C.S.A.A. President Michael R. Bavier, CGCS, announced today.

"Besides its excellent convention facilities, San Francisco offers a wide variety of activities for the entire family. We're confident that San Francisco will be one of our most popular conference destinations", Bavier said.

Since its beginning in 1927, G.C.S.A.A.'s Turfgrass Trade Show has grown so large that relatively few convention centers in the U.S. can house its more than 200 annual exhibitors, Bavier noted. The Moscone Convention Center, scheduled for completion this fall, is the largest column-free exhibit hall in the United States, with 275,000 square feet of unobstructed exhibit space. It is unique in that its main facilities, including the exhibit hall and the 30,000 square foot ballroom, are 30 feet underground.

The San Francisco conference schedule also includes a golf tournament, seminars, education sessions and the association's annual membership meeting. It will mark the association's first return to the West Coast since its 1981 conference in Anaheim, which had a record week's attendance of 17,946.

# Fast, efficient maintenance and repair of well pumps.

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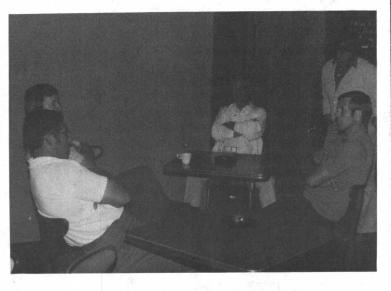
Well pumps are quickly and easily pulled for inspection and repair by 10T Smeal Hydraulic Pulling Rigsamong the many special units in the Bergerson-Caswell fleet operating in the Upper Midwest.



# MORE FROM MORA



WELCOME BACK. Lyle Olson, right, is back in the area as superintendent at Forest Hills C.C. after a year's absence. With him is Bob Messerli, his mechanic.



BRAINS. Left to right, Nick Dunn, Joe Wilmes, Russ Rose, John Wiley and Roger Kisch discuss sandtop dressing.



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### Question Of The Month

WHAT DO YOU USE AS A MEASURING POINT TO RESTRICT THE USE OF GOLF CARS ON RAINY DAYS?

INCHES OF RAIN. LIST AMOUNT

OBSERVE CONDITIONS ON KNOWN WET AREAS

\_\_\_\_GOLF CARS GO REGARDLESS OF GROUND CONDITIONS

OTHER METHODS. PLEASE DESCRIBE:

NUMBER OF GOLF CARS AT YOUR COURSE

NAME

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