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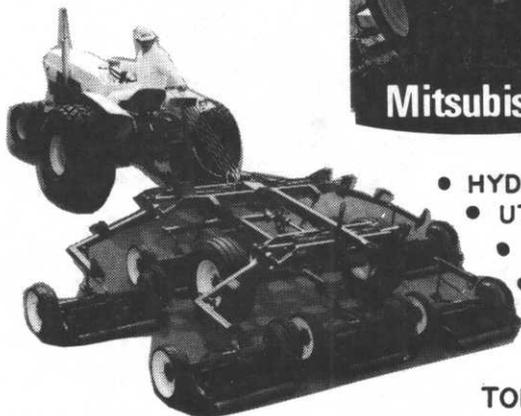


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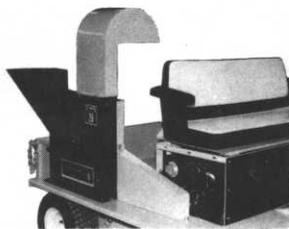
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Official publication of the MINNESOTA
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When you see a married couple coming
down the street, the one who is two or
three steps ahead is the one that's mad.



FROM THE PRESIDENT'S DESK

JOHN NYLUND

I would like to thank Boots Fuller and Mankato Country Club for hosting our April meeting. It's too bad the weather didn't cooperate for golf. The buffet lunch and conversation were enjoyed by all. I would also like to thank the Kaye Corporation for participating in our meeting.

Our May meeting will be at Sundance Golf Club with Host Superintendent Gary Peterson. Hopefully, the weather will permit our first golf outing so plan to attend.

The wet weather in April and the rush to open our courses may lead to severe compaction problems for many superintendents in the coming months. Some may have to increase their spiking and aeration programs throughout the spring.

The popularity of golf by all ages of people has made the superintendent's job more demanding. These golfers show a concern for premium course conditions whenever they play. The superintendent can respond to their questions and requests by answering "diplomatically" and by not showing anger or disgust. This will do a lot for member-superintendent respect. It also helps the rest of the management team (Pro and Manager) so they can carry on their duties at the club. Many times they have to answer the superintendent's questions because he is out on the course. It all boils down to communicating with members and co-workers alike.

HERE'S HOPING MAY WILL BRING SUNSHINE!

TRIPLEX FAIRWAY MOWING THE SUPERINTENDENT'S VIEWPOINT

by

DOUG MAHAL
GOLF COURSE SUPERINTENDENT
INTERLACHEN COUNTRY CLUB

LARRY THORNTON
ASSOCIATE SUPERINTENDENT
INTERLACHEN COUNTRY CLUB

You've all no doubt heard about the idea, or read about it in the February 1983 issue of Golf Course Management or the January-February issue of the USGA Green Section Record; but you, like us at Interlachen, wondered if what they were all saying could possibly be real. The concept of triplex fairway mowing; and, heaven help us, clipping removal, brought lots of jeers and snickers from turf managers in the area. But, after personally conducting a survey of several clubs already incorporating the procedure into their maintenance program, we aren't snickering any longer.

Our primary purpose for conducting the survey was to investigate the rumor that triplex mowed fairway turf experienced an increase in the percentage of bentgrass and to get a handle on just what changes would have to be made in our present maintenance program to accommodate triplex mowing. I sent out 17 survey forms to clubs in Ohio, New York, Michigan, Pennsylvania and Illinois and received only eleven responses back. The survey data can't be considered all-inclusive and certainly not scientifically substantiated; but, we definitely noticed a trend in all eleven responses we did receive. For example, all clubs were removing clippings at least a portion of the season; all experienced an increase in their bentgrass population; on the average, fairway acreage was reduced; all noticed a marked increase in labor requirements and all had budgets of over \$ 200,000 per year (18-Hole basis).

We immediately asked ourselves two questions about the program and looked to the survey for answers. Our first

question was why triplex mow fairways anyway? Does the program offer us enough in Minnesota to make the change worthwhile? There appears to be a definite trend in the golf course industry today toward improved fairway quality - the good player wants that "tight" lie similar to that found on a tee or collar. Triplex fairway mowing seems to offer a way to achieve this. The smaller, light-weight machinery used creates less compaction, less wear patterns, less bed knife skuff at low heights of cut, possibly less fungicide and water usage while allowing for easy cross-cutting capability, smooth cuts at heights below 1/2"; neat cutting under more moist or "dew" conditions, and a generally more aesthetically pleasing surface.

Sounds great so far! Our second question was why not triplex mow fairways? What problems will be encountered? As I mentioned earlier, all the responding clubs were removing clippings at least part of the time. A big concern then was disposal of the huge quantity of clippings that were collected. The smaller, higher RPM equipment will not last as long and will undoubtedly require more maintenance over its shortened life. More pieces of equipment will have to be purchased to mow in the same time frame. Direct labor cost will likely increase four-fold. Removal of clippings may affect the long-term soil structure and nitrogen requirements. Almost all clubs already on the program found it necessary to reduce fairway acreage to an average of 30 acres (could be good or bad point). Just making the management changes necessary to incorporate a triplex fairway mowing program might create initial negativity to the idea.

How are those on the triplex mowing regime battling with the "why not" aspects? Many clubs have begun contour mowing fairways. They have traded size for a more strategic layout. Some have traded size of fairways for an attractive intermediate rough. Clipping removal problems and higher labor costs are being traded for improved playability, more bentgrass and aesthetic enhancement. The bottom line of the whole survey, which did satisfy my purpose for conducting it, was that triplex mowing does increase the bentgrass population (at least at those

clubs surveyed) and it does create a more pleasing, "tighter" lie surface which will survive stress periods quite well. One interesting fact extrapolated from the data was that the percentage of bentgrass increase did not change whether clippings were removed all season or just a portion of the season. No one yet knows if a bent increase can be realized on turf where clippings are not removed at all. Another key fact noted was that the bentgrass population increased considerably more on turf cut at 1/2" or under than that cut at over 1/2".

We're rather impressed with the results the program is showing and are sure there are several clubs in Minnesota who are candidates for the program. We might point out that if a club in the area decides to initiate the program, they might consider a year or two of experimentation and a comprehensive evaluation as to the "total" cost for these beautiful, "tight lie", bentgrass fairways. There are many unanswered questions about the program. It appears to be working very well in Ohio, New York, Michigan, Pennsylvania and Illinois; but, will it work as well in Minnesota? Will we get as much bentgrass

increase in an area that nurtures Poa annua so well respectively? We'll have many more answers in a year from now, so stay tuned and best of luck in '83.

THE VIKINGS' WINTER PARK

by

SAM MONSON
 GROUNDS SUPERINTENDENT
 MINNESOTA VIKINGS

Winter Park, named for Max Winter, President, has been the new home of the Minnesota Vikings for the last three years. Included in the fifteen acre complex are the corporate headquarters and training center, 200' x 200' covered artificial field, two full turf football fields, and a maintenance building. The work I handle would be all grounds upkeep, the air structure, and the mechanical portion of the headquarters. The fields being the primary concern at Winter Park, we had some help to start them correctly.

continued on Page 5

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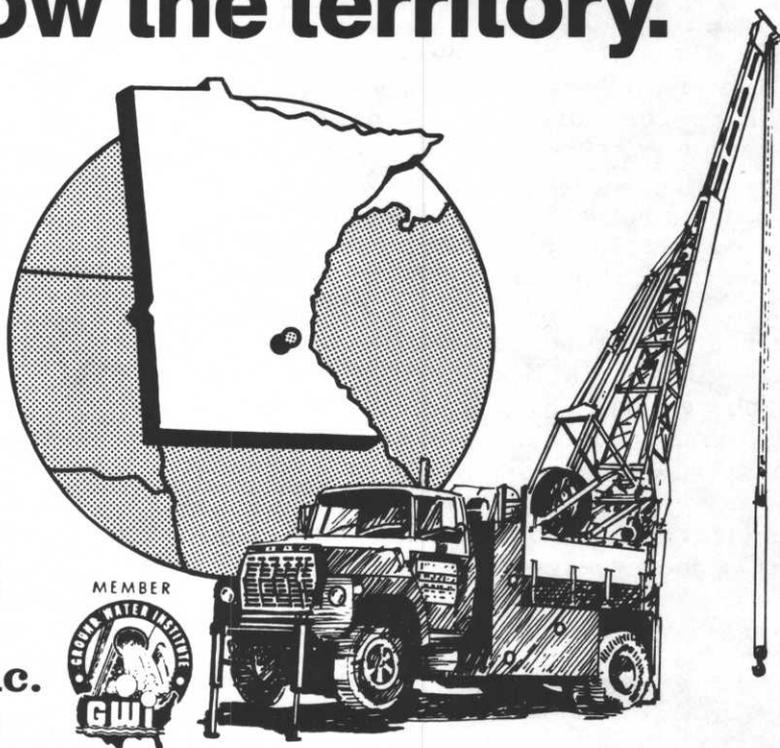
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The two football fields were formulated for us by Dr. White and Dr. Blake upon a soil mixture of 92% sand and 8% peat. The seed we use is Athletic Pro Mix with Delray substituted for NK200 which is watered by an automatic irrigation system and mowed with a reel mower at 1 1/2" height. As for feeding the turf we use a slow release nitrogen firm at 9 lbs./exr/1000 sq. ft. with once a month application of potassium at 1 lb/1000 sq. ft. rate. We have had a high P.H. problem (which is monitored by soil tests once a month) that has been controlled by sulfur applications every four weeks. We have two major fungus problems being pythium rust. We are on a preventative program for pythium. Rust is sprayed as needed. If other disease problems come up, we spray as needed. So far no herbicides have been needed to control weeds because it has been done by hand. In the fall the two fields are lined and numbered with white paint upon need or every week. Along with the fields the air structure is inflated in the spring. Maintaining the bubble includes glueing the carpet and vaccuuming after each use. There also have been times when the bubble has to be hand sewn to repair tears. The one big job in the fall is removing snow from the fields with a bobcat or sweeper. Also snow has to be removed by hand from around the bubble base. The remaining grounds also call for care.

Around the main building we mow with a 21" two cycle mower for appearance. The remaining turf area is mowed with a 52" rotary mower. We fertilize those areas three times a year at 1 lb/1000 sq. ft. The plant beds are sprayed as needed with roundup. We also have 1200 bulbs planted for spring color and add perennials and annuals to the beds for color. The staff receives cut roses from two dozen rose bushes placed in a couple of the beds. The above area has it's own automatic irrigation system to cover it from low rainfall. When the rain turns to snow I also have one other important job to watch for. That being sure that Coach Grant's deer feeder is well stocked.



EDITOR'S CORNER



by

BOOTS FULLER
EDITORIAL CHAIRMAN - M.G.C.S.A.

As I sit here pondering my thoughts, it becomes relatively easy to really get discouraged about this weather. From all indications, it would appear that we are probably looking at our latest opening date in recent memory at Mankato. Those of you who were in Mankato on Monday, April 11 would agree that the weather was nothing short of spectacular, but our course was so water-logged that there was no way we could play golf.

In the days immediately following that nice day, we have seen much more rain, some snow, and generally miserable conditions so that even thoughts of opening here seem quite remote. I surely hope other parts of the M.G.C.S.A. area are having better luck than South Central Minnesota. We are now beginning to have some hope that everything will dry out enough so that we can get in some golf at Sundance on May 9. I wished Gary Peterson good luck on having the opportunity to host our first golf outing of the season. Today I'm not so sure he'll get that opportunity. We'll continue to hope that the weather will break pretty soon.

I was really quite pleased with the entire program at Mankato on April 11. Over 100 people attended. Kaye Corporation and Tom Dawson had an excellent demonstration of the Ransomes Equipment, and Jim Koppen, the head chef at Mankato Golf Club, prepared an extraordinary luncheon which was enjoyed by all. In spite of the fact that golf was not possible on the course, several superintendents stayed and enjoyed the

final round of the Masters Golf Tournament. Jim Wodash managed to get some "side games" going so he could lose a little of his hard earned money to some other enterprising players. All in all, it was a fun day and helped set the tone for a new season which I am sure is destined to be our very best yet.

Russ Adams has just about completed the arrangements for the rest of the season. Jim Wodash and Leif Erickson are hard at work planning our December Conference which will again be at the fine facilities of the Sheraton Northwest. Mark Smith and Don Lindlbard are starting the annual surge for research programs. So stay in touch with that.

Be sure to notice the "Unforgettable Golf Holes" in the national Golf Course Management magazine. Warren Rebholz and the M.G.C.S.A. are getting some good publicity in that magazine. Hope to see many of you at Gary Peterson's course at Sundance on May 9. Get those reservations in early.

PEAT FAIRWAYS

by

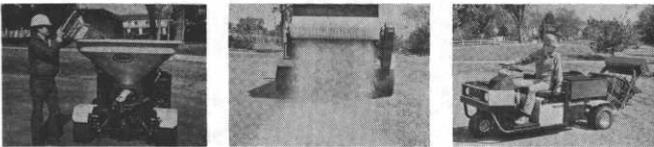
KEVIN BENSON
GOLF COURSE SUPERINTENDENT
EDENVALE GOLF CLUB

At Edendale we have three fairways that are constructed on peat. For the last six years they have been deteriorating, as only peat fairways can. Most of these areas have become so rough that play and maintenance have become impossible.

For the past five years a number of things have been attempted to correct these problem areas. First, a method of plowing and recontouring, followed by heavy rolling and seeding. Only one-half of the fairway area was revamped at a time to keep the hole in play. As with most methods this proved to be only a temporary solution; within three months, deterioration had started.

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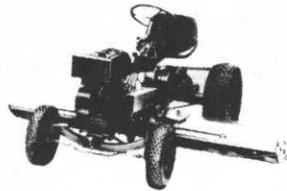
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Another method which proved to be more permanent but also much more expensive and time consuming was to fill the areas with 3 ft. of a gravel and clay soil; then 8" to 12" of top soil layer. This proved to be an unlikely solution due to the large areas involved.

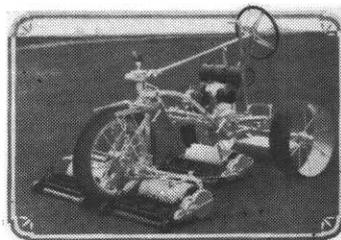
The plan for this spring is to do a complete renovation of the fairways. This process may involve adding one or two ponds to try and stabilize the water table and stop the deterioration of the peat soil. We are also going to try a new fabric material which was developed for road construction...laying the fabric over the roughest areas and filling with two to three feet of soil. They use this fabric when building roads through swampy areas. Though it's very expensive, we are hoping it will solve our problems.

So I would like to ask association members that if any one has had success with a similar problem, share his experience. Any suggestion would be greatly appreciated.

ASSOCIATES' CORNER

by

JAMES KAUFMAN, PRESIDENT
MINNESOTA TORO, INC.



1934 TORO RIDING GREENSMOWER

The name Toro has been around the Minnesota Golf industry since the early 20's. Toro participated with Supt. Charlie Erickson of the Minikahda Club to develop the first gang mower, mechanically powered. Names such as Kenneth Goit and Scotty McClaren are well entrenched in the history of Minnesota Golf Superintendents' Association during the formative years and with Dr. James Watson in the most recent years.

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and
money.**



In the late 1940's, Minnesota Toro, Inc. was created and was appointed by The Toro Co. as their exclusive, specialized distributor for the Minnesota, Dakota's and Western Wisconsin areas. As the products, materials and sophistication of turf grass care developed, so did the manufacturers with their products and their distributors with their services.

Minnesota Toro, Inc. is quite typical of specialized distributors in the turf business. It has three specialized and staffed operating groups, which service the consumer products through dealers, turf irrigation products and the golf and commercial products. As these developments created demand, Minnesota Toro moved with the times and expanded into specialized field and inhouse service, both in irrigation as well as turf/commercial products. When Minnesota Toro moved into its current headquarters in Plymouth, Minn. in 1976, it had an opportunity to specially develop the facility to fit the needs of the business. The service shop had the #1 priority with its cranes, exhaust system, cleaning devices and modern grinding equipment, all to help create

an efficiency in the servicing and the set-up of more technical and innovative products for the golf course trade. To stay in touch with each of these businesses, each operating group has its own Vice President/Manager, with Glenn Rasmussen heading up the Commercial Products group and Tom Cartier the Irrigation group. Each group has its separate sales and service staff to better take care of the specialized needs of the golf course customers.

Over the past ten years, Minnesota Toro has regularly offered service schools, operator schools and maintenance product knowledge sessions, both in the major metropolitan market as well as numerous cities around Minnesota, the Dakota's and Western Wisconsin. Field days with truck and trailer transportation units are a regular part of the efforts to expose all golf course customers to new products and have a chance to try them before they buy them.

Both Glenn Rasmussen and Tom Cartier agree heartily that the turf industry is one that is vital, growing in sophistication and improving every year.

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MINNESOTA FRAC SAND COMPANY is now offering two grades of highly recommended silica sand for building greens and tees, as well as for topdressing and sand traps, at their Jordan Plant. This sand has been tested and approved by Dr. Don Taylor of the University of Wisconsin, and tests have also been obtained from Texas A & M University from Dr. K.W. Brown. The particle size analysis of our two products is shown below.

PARTICLE SIZE ANALYSIS

SOIL MIX MATERIALS	GRAVEL > 2mm (>9 mesh) %	TOTAL SAND (9.300) mesh %	SILT .002-.05mm (< 300 mesh) %	CLAY <.002mm %	SAND FRACTIONS					PRICE/TON F.O.B. Jordan
					VERY COARSE 1-2mm (9-16 mesh) %	COARSE 0.5-1mm (16.32 mesh) %	MEDIUM 0.25-.5mm (32-60 mesh) %	FINE 0.1-25mm (60-140 mesh) %	VERY FINE 0.05-.1mm (140-300 mesh) %	
Sand 4070	0.0	99.7	0.0	0.3	0.0	0.3	86.9	12.4	0.1	\$6.00/ton
Sand 3560	0.0	99.7	0.1	0.2	0.0	0.5	98.6	0.5	0.1	\$10.00/ton

Because of our convenient location, and highly competitive price, pure silica sand can now be purchased at a similar price as local mortar sands. Combinations with peat can be arranged through Leitner Company in St. Paul. Contact your Minnesota Frac Sand Sales Representative for further information.

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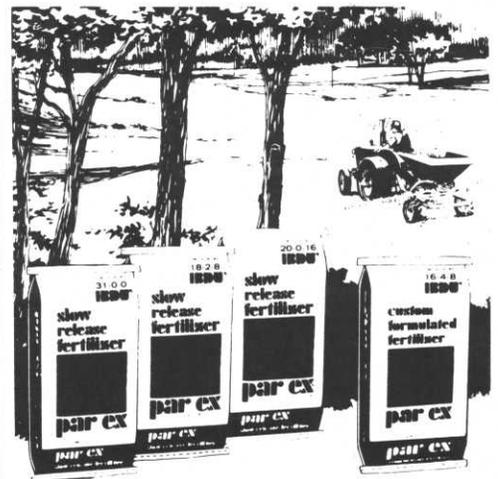
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"It's an exciting part of our business and we certainly look forward to its future growth".

Both Rasmussen and Cartier stress that the Company continue to strive for excellence in serving the customers needs for quality products, parts, service and sound business programs. "After all, they say if we're not working harder to improve ourselves to better take care of our customers, somebody else will"!!!!

WILLING WORKERS

Two juniors in horticulture at the University of Wisconsin-River Falls are interested in work experience on a golf course this summer. One is from Woodbury and the other is from Northeast Minneapolis. They will be available approximately June 1 to August 31. Any superintendents in the Twin Cities area with a possibility of hiring them, please contact Don Taylor, (715) 425-3395.

MEMBERSHIP REPORT

by

KERRY GLADER
MEMBERSHIP CHAIRMAN - M.G.C.S.A.

We are please to welcome the following new members: Mark Poppitz, Class BII, Island View Country Club; Kirby Scharmann, Class BII, Farmers Golf and Health Club; Donald Abild, Class D, Windom Country Club; Marshall Undesser, Class BII, Olivia Golf Club; Harley Flor, Class F, Kate Haven Golf Club; Mark Kocak, Class C, Jackson Golf Club.

The following members received classification changes: David Dehne, Class D, Rolling Green Country Club; Roger Nelson, Class B, Luck Golf Club; Bill Whitworth, Class A, Northfield Golf Club; John Steiner, Class A, White Bear Yacht Club; David Wiesner, Class BII, Woodbury Racket and Golf Club; Tom Herzog, Class D, Mankato Golf Club.

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