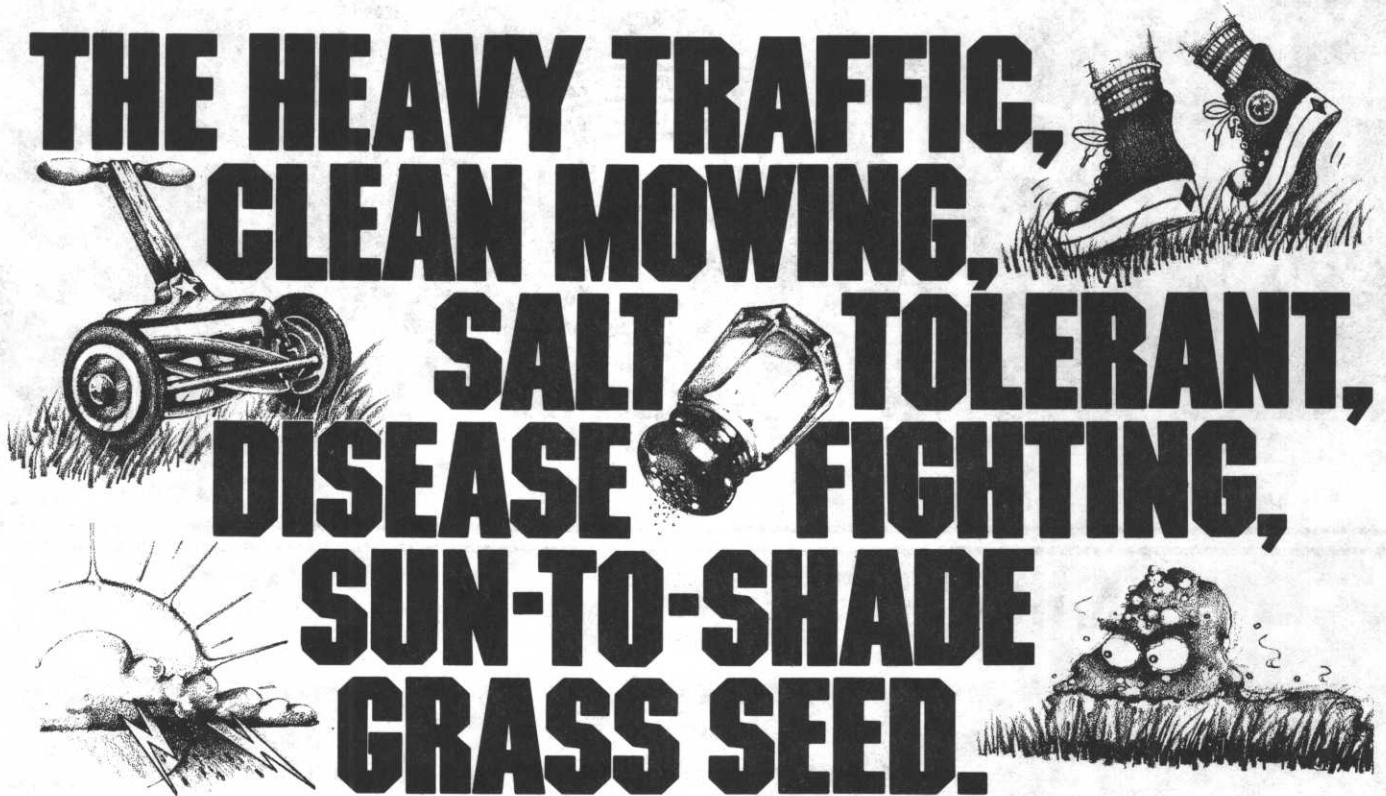


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MEDALIST TURF PRODUCT	MAJOR AREAS OF USE	SPECIAL FEATURES
Athletic Pro Mix	High maintenance athletic turf	Both are well suited for new seeding or overseeding. Fast establishing, excellent traffic tolerance, and rapid recovery. Provides good footing.
Athletic Pro II Mix	Low to moderate maintenance athletic turf.	
Boulevard Mix	Any area with high pH (roadsides, sidewalks, boulevards, beachfronts, etc.)	Contains both "Fults" <i>Puccinellia distans</i> and Dawson red fescue which thrive on high saline or alkaline soils. Performs at low to high fertility levels.
Landscape Pro Mix	School grounds, cemeteries, golf course roughs, lawns	Fast establishing. Adapts to broad range of conditions and management levels. Low to moderate fertility requirements.
Overseeder II Mix	Fairways, tees, athletic fields	Fast establishing, traffic tolerant, disease resistant, penetrates compacted soil.
Overseeder III Mix (Formerly Medalist North Mix)	Fairways, tees, cart paths, wear areas	Long term quality in high traffic areas. Clean mowing and disease tolerant.
Premium Sod Blend	Commercial sod producers	Fast establishing, exceptional dark green color, shade tolerant, superior disease resistance.
Special Park Mix	Parks, commercial developments, lawns	Low fertility tolerance, shade tolerant, adapts to wide range of soil types.

Ask your Northrup King distributor about the Medalist Turf Products for your needs. Or write Northrup King Medalist Turf Products, P.O. Box 959, Minneapolis, MN 55440.



HOLE NOTES

Official publication of the MINNESOTA
GOLF COURSE SUPERINTENDENTS' ASSOCIATION.

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COMPLAINT FORM

Please fill in the block below with all
complaints, questions and suggestions.
(Please write legibly and within the lines
of the block.) Thank you!



Wise man say: "Those who want to do
something find a way; others find an
excuse."



FROM THE PRESIDENT'S DESK

LARRY MUELLER

Spring is at our doorstep once again!
Understandably, our golfers become impa-
tient to get on the golf course after the
long winter.

One of our most difficult tasks can be to
keep the golfers off until the course is
ready for play. By opening too early we
can cause course damage that will plague
us all summer so this is a time when
communication is very important to show
that we truly have the golfers best in-
terest at heart.

I would like to thank Dale Caldwell and
Town and Country Club for hosting a very
successful March Mini-Conference. We had
136 in attendance, a very fine turn out.

During the month of March each of you should
have received a memorandum invoice for our
Research Program. Please follow this up at
your club so we can continue to finance
this important work.

Congratulations to John Fuller and George
Ostler who have been awarded their 25-Year
Plaques. Actually, George has been a member
for thirty-three years and John joined thirty-
one years ago. That's a long time to be a
member and yet they are so young looking!
They must have joined when they were fifteen
years old!

I hope to see all of you at the April meet-
ing to be held on the 12th at the Mankato
Golf Club. Boots Fuller will be back from
Arizona with a sun tan ready to greet us.

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MARK SMITH

Original Greensaire Invented In Minneapolis

The first Greensaire was built in a basement in Hopkins, Minnesota in 1937. It was built by Art Cohrs with some help from his brother, Herb. At that time Art was working as a machinist at Minneapolis Moline and Herb was working on the grounds crew at Minneapolis Golf Club. Herb later became superintendent at Minneapolis Golf Club and remained in that capacity for about twenty-five years.

The first machine was powered by a five horsepower Kohler engine and used sawed-off golf club shafts as tines. The machine had eight tines. It was first tested at Minneapolis Golf Club in the fall of 1937. The tines had a tendency to lift the turf from the soil which prompted the installation of "fingers" between the tines to hold the turf down.

Shortly after the invention of the first machine, a second machine was built in Art's basement in Hopkins. This machine had twelve tines instead of the original eight. Art used this machine to do custom aerifying at various clubs in the metro area in order to get some extra money to finance his newly founded operation. Care was taken to enclose the moving parts of the machine so that nobody would attempt to duplicate it.

In 1943 the machine was named the Greens Air Special and production of the third model began in Art's garage. By this time Lawrence Smieja, a master machinist at Minneapolis Moline, had become Art's partner and was helping him to build the machines. Although attempts to gain a patent had begun as early as 1938, the final patent was not granted until 1951. Later patents were also secured in England and Germany.

In 1952 production moved to a shop in Deephaven, Minnesota. About 100 machines were built at this site. In 1953 Art loaded up a Greens Air Special into the truck of his 1950 Mercury and drove to the G.C.S.A.A. show in Atlantic City, N.J. There he sold his first machine to Frank Svehla, a golf course superintendent from New Jersey, for \$595.00. About this time Idon Haugen joined Art and Lawrence as a salesman and bookkeeper. Haugen was also golf course superintendent at Minikahda. The company was named the C.S. & H. Co. (Cohrs, Smieja and Haugen). About 1956 Haugen dropped out of the picture and the name was changed to the Greens Aerification Co., Inc.

After producing machines for two years at their shop in Deephaven, Art and Lawrence were forced to move their operations to a four stall garage in Hopkins. The dentist with whom they shared a building in Deephaven could no longer tolerate the noise from Art's and Lawrence's shop. About 150 more machines were produced in the Hopkins shop until 1958. During all of this time, Art and Lawrence retained their full time jobs at Minneapolis Moline. They worked on the Greensaire nights and weekends.

At the 1957 G.C.S.A.A. show in Louisville, KY, a deal was struck with Gordy Killander and Earl Nystrom of K & N Machine Works whereby Art would sell the rights to his machine to them. K & N subsequently became affiliated with Ryan. When asked why he decided to sell out, Art said that he was tired of working the long hours that his regular job and production of the Greensaire demanded. In about 1960 Art invented the Meter-Matic topdresser which he sold to Sodmaster. It is interesting to note that neither of the two machines that Art invented has undergone significant changes in the last twenty years.

Art, who is now seventy-seven years old, will begin his thirteenth year of cutting fairways at Minneapolis Golf Club this spring.

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HOW TO REPAIR A BALL MARK

The Trouble With Ball Marks

The ball landed with a thud. The green was soft, and as the ball bounced forward it left a deep little crater in the turf, exposing brown earth at the back and grass blades pushed together at the front.

Ignoring the little crater, the golfer walked up to his ball, cleaned it, holed his putt and glowed with self-satisfaction.

Some hours later, after the exposed earth in the ball mark had dried out, another golfer found the damaged area in his line of putt. He attempted repairs, but the result was not very satisfactory. An unflattened bit of turf twisted his putt off line.

Next morning an inexperienced greenkeeper mowed the putting surface without repairing ball marks. The result was a putting surface pock-marked, untrue and covered with bare spots where the mower scalped the grass from the turf.

What Happens

What actually happens when a ball mark is not promptly and properly repaired?

1. Soil is exposed, and so the area immediately surrounding the ball dries up faster than it would if the ball marks were repaired; and thus a blemish is left on the green.

2. There is a chance that the raised turf caused by the ball will dry quickly and may die out.

3. The open soil invites weed invasion, such as crabgrass, silver crabgrass, POA ANNUA, dandelion, plantain, or Pearlwort ... seed of which could be brought in on the shoes of golfers, caddies or workers or on mowing equipment.

4. The improperly repaired or neglected ball marks leaves a bumpy spot in the green. If not corrected before cutting the next day, then the spot is scalped by the mower and the bruise mark remains for several days.

William H. Bengeyfield, Western Director of the Green Section, says:

"From an agronomic viewpoint, a ball mark bruises the grass plant and severely damages or destroys the meristem or growing point. This means that turf recovery must take place from the perimeter of the damaged area, and this takes considerable time. Rapid drying of the damaged area is a major factor in delaying recovery. Some soil compaction also results from the ball's impact."

How To Make Repairs

There is a correct way to repair a ball mark and, simply stated, it is to stretch the turf back over the bruised area, then loosen the soil beneath so that the bruised turf is able to root again.

To loosen the soil, some sharp-pointed instrument is required, such as a golf tee. The instrument must be sharp enough to penetrate the soil easily, and strong enough to cut through soil laterally at a depth of one inch or less.

In stretching the turf back over the ball mark area, try not to tear it loose. After the soil is loosened, the bruised and stretched turf must be firmed or pressed down to make contact with the soil again; otherwise, it may dry and die.

If a divot is taken when the ball hits the green and skids, the divot must be carefully stretched and replaced.

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JOHN NYLUND

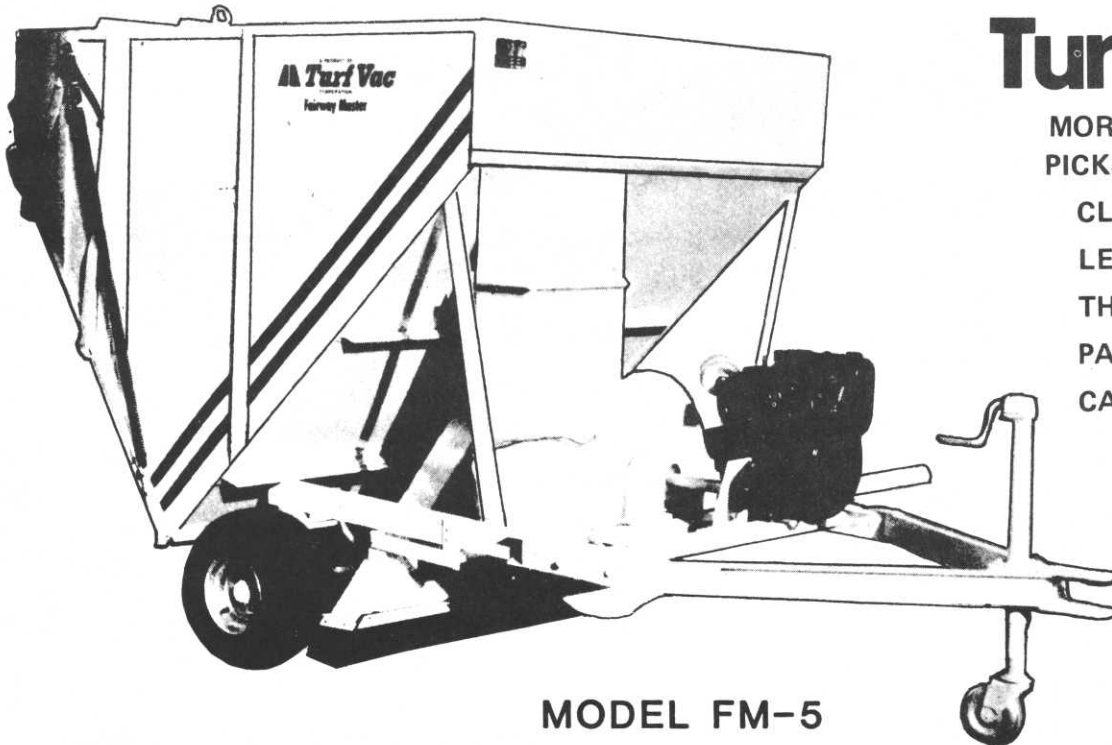
IT'S YOUR RESEARCH FUND

During March research invoices were mailed to your golf clubs. In many instances it is the superintendent's responsibility to see that this invoice is presented to the proper official at the club. All too often that invoice is set on the superintendent's desk or lost in the shuffle of his paperwork and it ends up in the circular file.

Over the years more and more clubs have contributed to the Research Fund. In 1971 only twelve courses participated. In 1981 forty-three clubs donated \$6,000.00 to the Research Fund. In this day and age, research is a valuable asset to the superintendent who has many alternatives available to him. Those alternatives properly researched will benefit the golf course which is our main objective.

This summer Dr. Taylor will return to the Twin Cities. Our Research Fund will help purchase equipment and supplies so Dr. Taylor can continue with the sand program for greens. Many superintendents who use sand or have questions concerning sand usage for problem greens are encouraged to use Dr. Taylor and the U of M Extension Services. He will also be available at our monthly meetings and will possibly have HOLE NOTES articles so please don't hold back comments or questions. Dr. Stienstra will continue his excellent work with winter and summer disease control. He has asked for areas on fairways for disease comparison where he could make plots. If any superintendents have available areas I feel Dr. Stienstra would be interested in hearing from you. How lucky our association is to have such a professional person as involved as Dr. Stienstra to keep us notified of vital facts concerning our golf courses.

continued on Page 13



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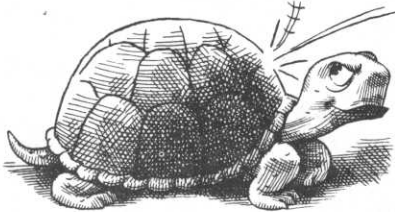
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DON'T MISS A MEETING

- APRIL 12 Mankato C.C., Boots Fuller, Host
- MAY 10 Midland Hills C.C., John Fuller, Host
- JUNE 14 Madden's Pine Beach, Brainerd, Scott Hoffman, CGCS, Host
- JULY Annual Picnic, Braemar G.C., John Nylund, Host
- AUGUST 9 Voyager Village, Danbury, WI., Tom Fischer, Host
- SEPTEMBER Annual Tournament, Brackett's Crossing, Dennis Hendrickson, CGCS, Host
- OCTOBER Minnesota Valley C.C., Larry Mueller, Host
- NOVEMBER Hanson House, Long Lake, MN
- DECEMBER Annual Conference, Sheraton Inn N.W., Brooklyn Park, MN

 THOSE WHO WISH TO MAKE ROOM ARRANGEMENTS AT MADDEN'S FOR THE JUNE MEETING SHOULD CALL
 218/829-2811 AS SOON AS POSSIBLE.

THE FREE MEAL DEAL

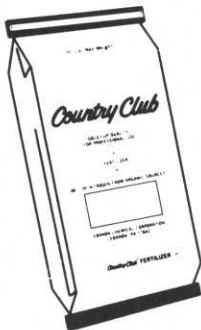
A new policy was initiated at the March meeting at Town & Country Club. At each regular monthly meeting a drawing will be held with the prize being a cash refund for the price of each meeting. Only pre-registered members are eligible. If your name is drawn, you must have on your name tag to win. Bill Johnson from Edina Country Club was the first winner. The purpose of the new "Free Meal Deal" is to encourage 1) monthly meeting pre-registration, and 2) wearing of name tags. The drawing is open to all membership classes.

RECRUIT A NEW MEMBER!



If you know someone, a friend, an assistant,
 a co-worker who is interested in our association . . .
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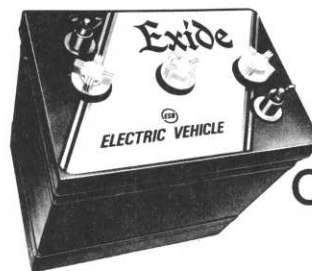
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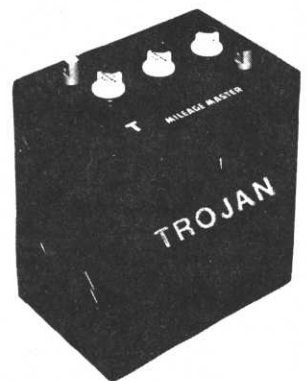
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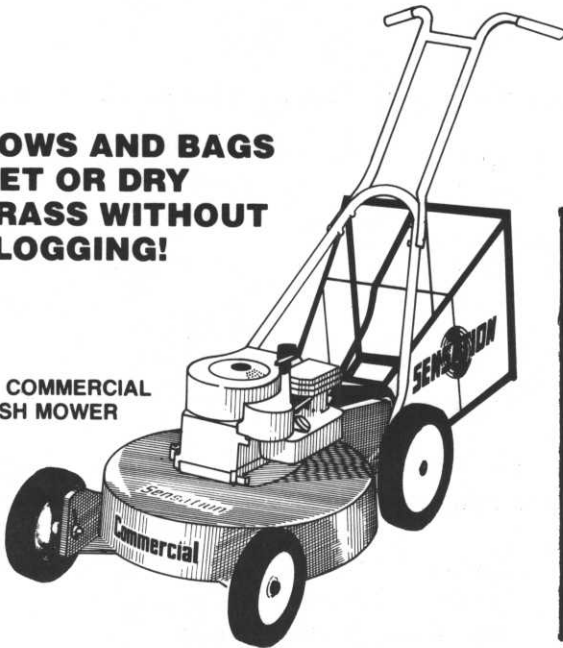
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