BEFORE WE DEVELOPED THESE PROBLEM-SOLVING TURFGRASS MIXTURES, WE MARCHED THROUGH ACRES AND

Nobody knows the troubles we've seen. Our Northrup King turf specialists and researchers have hoofed through salt problems, soil compaction, disease, starved turf, baked turf, cleated-to-shreds turf, and dormant winter turf—all depressing sights. But it was a road well worth our travels.

The result is a complete line of Medalist® turfgrass formulas that meet the demands of the professional turf manager.

If you've been staring down at a turf problem, look up your solution here.

And if you think it's a turf problem we haven't seen, just let us know.

Our business is putting your problems behind us.

| MEDALIST TURF PRODUCT | MAJOR AREAS OF USE | SPECIAL FEATURES |
|--|--|---|
| Athletic Pro and Athletic Pro II | For athletic turf. | Well suited for new seeding or overseeding. Fast establishing, traffic tolerant, rapid recovery. Both provide good footing. |
| Boulevard Mix | Any area with high pH (roadsides, sidewalks, boulevards, alkaline soils, etc.). | Contains 'Fults' and Dawson red fescue for beautiful salt- tolerant turf. Performs at low to high fertility levels. |
| Landscape Pro Mix | School grounds, cemeteries, golf course roughs, home lawns. | Establishes fast. Adapts to broad range of conditions and management levels. Low to moderate fertility needs. |
| Overseeder II Mix | Fairways, tees, athletic fields. | Rapid germination and establishment. Withstands heavy traffic and resists diseases. Penetrates compacted soils. |
| Medalist North Mix | Fairways, tees, cart paths, wear areas. | Quality turf for high traffic areas. Clean mowing and disease resistant. |
| Premium Sod Blend | Commercial sod production. | Exceptional dark green color. Tolerates light shade. Superior disease resistance. Rapid sod producer. |
| Renovator Pro Mix | Problem solver for heavy traffic areas (athletic fields, golf tees, and fairways). | Penetrates compacted soils and combats <i>Poa annua</i> . Adaptable to most geographic regions. |
| Medalist Brand Overseeding Products | Winter overseeding of dormant bermudagrass. | Establishes rapidly and evenly. Tolerates traffic while providing a superior putting surface. Smooth spring transition. |

Ask your Northrup King distributor about Medalist Turf Products to solve your turf problems. 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

EDITOR: WARREN J. REBHOLZ

6550 YORK AVENUE SOUTH

SUITE 402

EDINA, MINNESOTA 55435-2383

PHONE: 612/927-4643

ASSOCIATE EDITOR: GUY R. GREEN

EDITORIAL COMMITTEE CHAIRMAN: FRED R. ANDERSON

M.G.C.S.A. BOARD OF DIRECTORS FOR 1985:

OFFICERS

PRESIDENT......DALE CALDWELL
VICE—PRESIDENT....KERRY GLADER
SECRETARY......LYLE OLSON
TREASURER......KEITH SCOTT
EX-OFFICIO.....DONAVAN LINDBLAD

DIRECTORS

FRED ANDERSON DOUGLAS MAHAL
TOM FISCHER RANDALL NELSON
SCOTT HOFFMAN CHRIS HAGUE

THE FOLLOWING IS A LIST OF OFFICE TELEPHONE NUMBERS FOR THE ENTIRE BOARD:

| DALE CALDWELL612/544-4474 |
|----------------------------|
| KERRY GLADER612/253-5250 |
| LYLE OLSON612/464-3097 |
| KEITH SCOTT612/938-6900 |
| DON LINDBLAD612/755-2140 |
| FRED ANDERSON612/689-3800 |
| TOM FISCHER715/259-3926 |
| CHRIS HAGUE612/448-3626 |
| SCOTT HOFFMAN218/829-2811 |
| DOUGLAS MAHAL612/929-1661 |
| RANDALL NELSON507/451-4144 |





FROM THE PRESIDENT'S DESK

DALE CALDWELL

By most reports, the summer of 1985 was a relatively pleasant season. Temperatures were not excessive, disease pressure was reasonable and moisture was adequate, with some notable exceptions, particularly southeastern Minnesota. The majority of us in the turf industry would certainly welcome a repeat performance in 1986.

With the fall season approaching, we are already losing our summer help. Aerification is completed or soon will be. It won't be long and we'll be up to our elbows in leaves. Many of us are embarking on projects of reconstruction or improvements deemed necessary through the course of the past season. This fall season can be equally as trying as hte summer season.

An observation from the meeting at Island View in August....There are many members of our association who are new and not familiar to many of us "old timers". If all of us would take the time to introduce ourselves to someone we don't know each month, I'm sure it could be a valuable experience and mutually beneficial. You may learn something which you could apply to your operation or you may be able to teach someone else something. Take time to meet one or two unfamiliar members each month.

FOR SALE

THATCHER UNITS FOR TORO 6M3, 4 YEARS OLD..ONLY USED 1 SEASON, \$950.00. CONTACT BOB WESTON, MILLE LAC C.C., GARRISON, MINN. 56450, 612/692-4325.



SLOPE SYSTEM WORKING WELL



by GUY GREEN
Minnesota Golf Association

The U.S.G.A. Slope Handicap System has settled into place and, well into its second year of operation, appears to be having the effects it was designed to produce. Using the M.P.G.A. Four-Ball and the M.G.A. Senior Four-Ball as examples. we have seen that the great advantage formerly held by players from longer, more difficult courses has been reduced. Different players from different courses have found their way into the winners circle. In general the system has been made more equitable, giving each player that tees it up in a handicap event a more reasonable chance of success, which is good for the game of golf. We at M.G.A. have tried our hardest to make using the slope system as easy as possible. We have sent information packets to all our member clubs and spoken to various groups around the state to answer any questions people have had. We have also published a booklet of all the Slope Handicap conversion charts for every course in Minnesota; thereby eliminating the need to hunt for the chart at the course you are playing.

In addition to our efforts, the players in Minnesota have embraced the system. They made the effort to understand and work with the changes. They weren't afraid to ask questions and suggest constructive changes, and really made the transition smoothly and positively. In doing so they have helped pave the way for the slope system to go national in the very near future.

This is not to say there have been no problems along the way. As with any rating system, Slope can lead to some misunderstandings. As superintendents you are probably most aware of how members can get caught up in the numbers game and

equate high course ratings and slope ratings with the quality of golf courses. Questions of comparison come up all the time. "Why is our course rated at 120 and this other place rated at 125?" Our greens are so much faster than their's, I can't believe our slope is lower!" "We have so many more bunkers than course X, why is our slope lower?"

The answer to these questions is that the Slope Rating of a golf course is not a statement on the quality of conditions or the number of bunkers nor is it a handy means of comparing two golf courses with each other. The Slope Rating is statement of how difficult a golf course is for an average player (about 18-20 handicap). A course need not have a high course rating to have a high slope. converse is also true. There are strict vardage ratios for the average player of both sexes which go a long way toward determining the final numbers. One or two strategicly placed bunkers can account for higher ratings than half a dozen bunkers that don't come into play as often. or three well placed trees can cause more trouble than a completely lined fairway that is 60 yards wide. Speed and contour combine to create difficulties on putting surfaces that an excess of one alone will not.

As a further example of the futility of comparing courses through ratings and slopes alone, look at two famous courses in New York. Winged Foot, dubbed by many as the hardest of the U.S. Open Courses, has a lower slope rating than Westchester Country Club which is usually the scene of some of the best scoring on the tour. This is because many of the problems emcountered by scratch players professionals are out of reach for the bogey player at Winged Foot. Those deadly Tillinhast bunkers are too far away for 20 handicappers off the tee, and the greens can't be reached in 2 shots so a player is usually chipping to the well bunkered greens. It all goes to show that the slope system is not a means for judging the quality of conditions or the amount of fun you will have playing a golf course. It is rather the best means yet devised for equalizing and improving the handicap system. In the long run we think it will make our game more enjoyable for everyone.



GREENS REELS

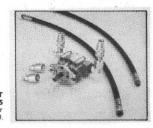
New

Cutting Units

down force



NEW BACKLAPPING KIT Model 04425 Backlapping Kit for Greensmaster 300.



TEE REELS

SINGLE KNOB ADJUSTMENT



New Options

NEW QUICK HEIGHT-OF-CUT CONVERSION KIT MODEL 04451 Quick Height-Of-Cut Kit allows 6 cam setting by flip of a handle, each altering H.O.C. by .100 inch, total range of 1/2 inch above base setting of cutting unit.





Allows operator to shut off one or two reel assemblies when cutting around greens.



Greensmaster 300





Toro's special profile-tooth blades spike cleanly without ruffling turf so greens are playable immediately after spiking. An adjustable transfer spring brings weight from the traction unit to bear on the reels 57" spiking width to achieve the maximum penetration of 114."

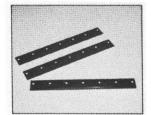


The spiral blade pattern of Toro's thatching units means less wear on the drive motors through more efficient thatching and throwing of thatch into baskets. The spacing between blades over the three reels 59" thatching width is adjustable from 1/2" to 1½" to allow depth-of-thatch adjustments in meeting varying



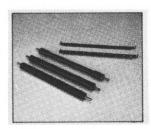


Provides infinitely variable speed control from 0 to 3.5 mph Allows operator to select the constant ground speed that ensures the desired constant clip as the cutting units mow. For a finer clip at low heights of cut, or for easy maneuvering in tight spots, simply adjust the speed



THREE BEDKNIFFS THREE BEDKNIFES TO CHOOSE FROM Toro's extra-thin, high carbon steel tournament bedknife for a close, smooth cut down to 3/32", P/N 51-2610. Lo-Cut Bedknife, smooth cut down to 1/8", P/N 19-8880, Hi-Cut Bedknife, cuts down to 3/16", P/N 17-7040.

ROLLERS AND SCRAPERS
Wiehle, full and swedged front
rollers available. Front roller
scraper with polyurethane
comb is standard and scraper
with brush is optional. Springmounted rear roller scraper
also available also available







DON'T GO DORMANT THIS WINTER-GO TO SCHOOL.

Have you thought about taking some courses to improve your future in Horticulture? Did you find that most of them start before your season ends, and end after it begins? At Anoka Vocational Technical Institute, we have an answer for you: classes that start when you finish work for the year and end when you begin next season. We know that the maintenance season doesn't end Labor Day weekend or begin on Memorial Day, so we've made our flexible programs even more flexible. We've designed special part-time programs that can get you through our one or

1355 West Main Street Anoka, Minnesota 55303

(612) 427-1880, ext. 292

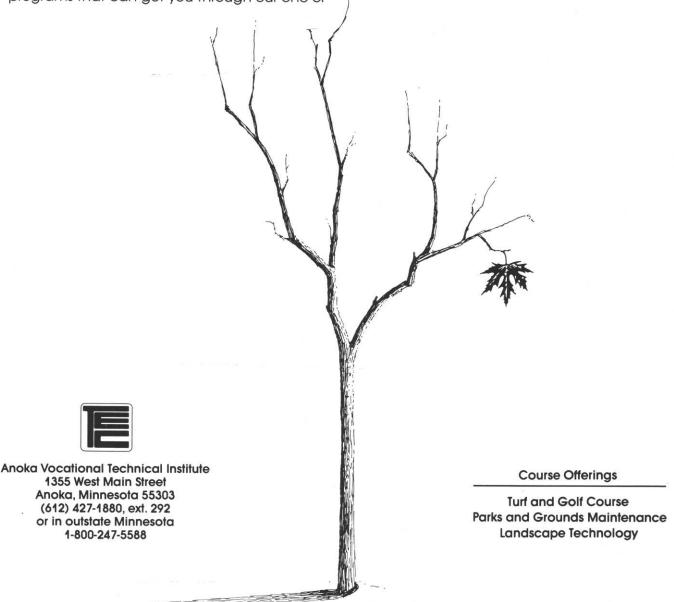
or in outstate Minnesota

1-800-247-5588

two year courses and not interfere with your full time job. In fact what you learn in the off season will begin helping you right away when you get back to work.

Our offerings include, Turf and Golf Course, Parks and Ground Maintenance, and Landscape Technology.

So, don't go dormant this Winter, class up your off season: Call or write to find out more about Anoka AVTI's non-traditional start times and Horticulture course offerings.



RENOVATION AT EDENVALE

by KEVIN BENSON
Superintendent Edenvale Golf Club

The back nine at Edenvale Golf Club in Eden Prairie is partially built on peat. Two of those holes, numbers ten and twelve, were primarily peat and had been steadily collapsing over the past five years, making them almost unplayable.

The renovation begins with number ten being plowed up and a pond being dug which would provide needed soil for the project. This surface was rough graded and cleaned of rocks which provided the surface for the fabric anderliner from Dupont. The fabric was put down only on the projected fairway. The fabric was then covered over with a mixture of existing peat and hauled in black dirt. The fabric was designed to let moisture pass up and down through the fabric while preventing the topsoil to mix with underlaying soil.

The twelfth hole is located next to a new development. The development provided a gravely clay that was hauled in and laid approximately three feet deep on top of the collapsing peat. This surface was covered with one foot of black dirt. The surface is showing no signs of any collapsing.

Both holes were seeded with a 70% perennial rye 30% bluegrass mix. were seeded in mid-May and ready for play in six weeks. By the next summer the tenth hole with primary peat surface was an excellent playing surface. The twelfth was slightly more sparce. Both were primarily rye. The following winter 1984-The dead rve 85 killed most of the rye. has started to give way to Poa Annua partially due to a new electric watering system from which has given us the ample irrigation to support Poa.



ASSOCIATES CORNER

by TOM MUNDY
Sales Manager
E-Z-GO TEXTRON

E-Z-GO Upper Midwest would like introduce itself to the superintendents of Minnesota. We opened for business last December at 3850 Annapolis Lane Plymouth. We have picked experienced service staff which is headed by our Service Manager, Steve Bjorngaard. Steve has been with E-Z-GO for ten years. Our staff also consists of quality service to better serve our many technicians customers. I have been in the golf car industry in the past and along with Steve and the rest of us we look forward to serving you.

We now carry a complete inventory of parts and accessories at our new location. Our forty-car tournament fleet consists of 1983 four-wheel E-Z-GO's and is available by appointment. We also sell and lease the number 1 golf car in the world, which can be financed through our sister company, Textron Finance.

Recently, we have purchased the Eagle Vehicle line which consists of Personnel Carriers, Bar cars and many other commercial vehicles. Along with our turf vehicles such as the GX800, GT7 and other turf vehicles, we can provide your golf courses with all these vehicle needs.

Being a member of the MGCSA has given me the opportunity to meet many superintendents this year and I sincerely look forward to meeting all of you in the very near future.

A MINISTER had reached that point in the service where the collection was to be passed. "And now, brethren," he said, "let us all give in accordance with what we reported on Form 1040."

IT'S A SAVINGS BLITZ



TEE-TIME

BOTTOM-LINE RATES
ON IT'S
EARLY ORDER PROGRAM

CHECK THE ENCLOSED BROCHURE
CHECK GOULD'S EARLY ORDER
SPECIAL DISCOUNTS
BY A TOLL FREE CALL

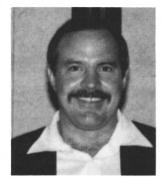
Local: 484-8411/MINN: 800-592-9513

OTHER: 800-328-9564

BLITZ TIME IS NOW - DON'T MISS IT

R.L. GOULD & CO.

3711 Lexington Ave. North St. Paul, MN 55126



EDITOR'S CORNER

FRED ANDERSON, JR.

looks like our luck finally ran out on as far as having good weather at our Monday outtings. And the rain-out was by no means the fault of Mark Poppitz, Host Superintendent of Island View Golf Club. We were only sorry we could not finish the tournev his fine course. The tournament has been rescheduled information will follow from Randy Nelson. Thanks go to your staff Mark and the clubhouse staff for the fine meal and the use of your facilities for the day. And I think everyone that participated in the putting contest did quite well, except myself, but it was still fun.

The "Violet Vulture" was this year's site for the M.G.A. Junior Championship. Our

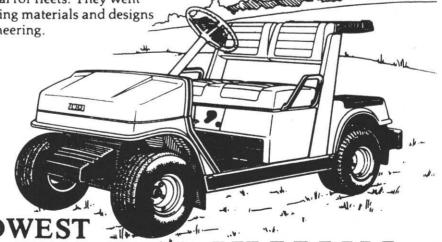
preparation began over a year ago with major dredging and recontouring of two of our ponds and the digging of a bunker on a par three. The fall was extremely wet so there was a lot of rutting by heavy equipment going off and on the course. The dredging material was to remain along side the pond until such time allowing it to dry enough to be pushed where I wanted it (this wouldn't be until late spring due to the nature of the material. clay and I was fortunate in that peat). construction areas were areas that were not in major playing areas, but seeing this mess everyday was still depressing The bunker, however, was another story. It was named "Anderson Lake" for a while this spring before we could get it drained, tiled and filled. It takes a while to fill with sand when you've taken out 15 dump truck loads. Then, due to wetness of the area plus hand shoveling sand into Cushmans this 1/2 day project took about 2 days. The other areas were disked, harrowed and seeded. Looking at the area now you'd never know that major surgery had been performed months earlier. The rest of the preparation was quite basic but yet something we never have time to do like cleaning-up around the M.G.A.

Continued on page 10

A 4-STROKE OF GENIUS.

Never has a golf car answered so many needs — course profitability, player comfort, power and performance, ease of maintenance, sensitivity to the golfing environment. Yamaha engineers achieved it all with the new G2-A5 Gas Car, ideal for fleets. They went beyond the golf car industry, specifying materials and designs from fuel-concious automobile engineering.

- Overhead Valve engine.
- Uses 20% less gas than competing 4-strokes.
- Low torque engine.
- New lighter centrifugal clutch.
- Quiets noise level to a whisper.
- engineered for your profitability.
- Two year warranty.



GOLF CAR MIDWEST

BURNSVILLE & ORTONVILLE, MN

Call Toll Free 800-328-6665

In Minnesota 800-352-2779



WHY DID IT HAVE TO HAPPEN TO ME?

by CHRIS L. HAGUE, CGCS Superintendent Hazeltine National Golf Club

I have asked myself this question many times in the past two month period. Never in my 20 years of golf turf experience have I been faced with such an uncontrollable and frustrating situation as the C-15 Bacterial Wilt on putting greens.

As a superintendent you ask yourself all the obvious questions — what did I do wrong? — how could I have prevented it? — why didn't I notice it sooner? — and the last one, why did it have to happen to me? Then, after you answer all of these, others pop into your mind like — will the membership understand? — will we lose members because of these problems? — will I still have a job in 3 months?, etc., etc. And believe me the questions just keep on surfacing.

After completing two seasons as Course Superintendent here at Hazeltine, we went into the 84/85 winter in very good condition. I had no physical symptom indicators that the bacterium, Xanthomonas Campestris, was already slightly weakening the Toronto C-15 host population. So we came through the winter in an weakened state on several greens particular, all of which have historically problem winter greens anyway. I first became skeptical of possibly more serious problems with certain greens in mid-May. At that time I had numerous local superintendents in from time to time just to bounce ideas and perhaps gain more insight as to what I could do to accelerate the growth of some of my worst weakened turf on greens. mid-June. after several switching fungicides, and generally much extra care, I made the diagnosis as C-15 Decline and sent several turf samples to

Dr. Dave Roberts and Dr. Joe Vargus of Michigan State University. At the same time Dr. Phil Larson from the University of Minnesota also was evaluating more turf samples. By July 2nd, Michigan State positively identified the bacterium and by July 9th the University of Minnesota had also confirmed the same diagnosis.

I let my Green Chairman, Mr. Reed Mackenzie, know of this potential problem on Saturday, June 29th. Only July 5th, we went public at the Executive Board level and by July 6th, had a full membership letter out to everyone explaining the disease.

As most of you probably are aware, this bacterial is only specific to C-15 stolons used from Warren Turf Nurseries. some 65 golf courses have succumbed to the disease in the states of Illinois. Ohio, Kentucky, Indiana, Wisconsin, Michigan and now Minnesota. There is no treatment available to cure this disease, oxytetracycline will only manage it for a short period of time. With this in mind, there were only two options to really discuss for correcting the problem: 1) Fumigate and seed to Fumigate and sod Penncross. Penncross.

All other options discussed were only versions of the above.

After much deliberation, several board meetings and one full membership meeting on July 17th, Hazeltine made the decision to go through the sodding process as opposed to seeding. From a membership standpoint this would keep the golf course out of service for the shortest period of time possible. It was also decided that the course would remain open through the third week of September. At that time we would begin playing temporaries and embark on the first phase of the renovation process.

My staff will be responsible for stripping sod, aerations, core removal, installation of soil mixes, installation of some drainage, maintaining existing contour surfaces before and after constructing, preparation for methyl bromide treatment, and sharing in half the labor of actually laying the sod, rolling, etc.

Continued on page 10

EDITOR'S CORNER from page 8

medallion, mowing and properly staking O.B. stakes as well as direct and lateral water hazards stakes, changing water in the ball washers, new towels, making sure all bunkers have rakes and trees mowed around. These are many things I know we should do on a regular basis but like I've said sometimes end up on the back burner. Having the M.G.A. staff, Warren, Ross and there to ensure a properly run tournament will guarantee a successful tournament which it was. Even the weather cooperated. So if your club is ever asked to host an M.G.A. Junior or any other event, don't say no if at all possible. It is a great experience plus doing our part to enhance Minnesota golf.

I'd like to thank the following HOLE NOTE contributors, Doug Mahal, Interlachen Country Club; Ransome Corp. and John Nylund Braemar Golf Club; and to Tom Haugen, Brayton Chemicals for providing one of our speakers and to Kent Kromer, Kromer Company for our other speaker. It really makes for an enjoyable day and we all can learn something.

Don't forget our September 9 member-guest

scramble tournament at Hazeltine National Golf Club, Chris Hague, host, and October 7 meeting at Golden Valley Country Club, Mike Olson, host. Don Lindblad is requesting the 2nd call for names for election of new directors. Please call Don at Majestic Oaks. He usually isn't doing much this time of year so call him with your name. See you at Hazeltine National.

BACERIAL WILT from page 9

If all goes well sodding should begin in mid-April and end within 30 days. It is our objective to have 9 greens playable by June 1 and the second 9 holes available by June 15.

Overall the process has been very interesting and rewarding. As a Green Committee our number one concern was to get the support of the membership and help everyone understand that Hazeltine, as many others, is faced with a very uncontrollable situation that would take some extreme measures to correct. This we feel has been accomplished.

SAVE during the ProTurf® Pre-Season Sale Call your Tech Rep today.



