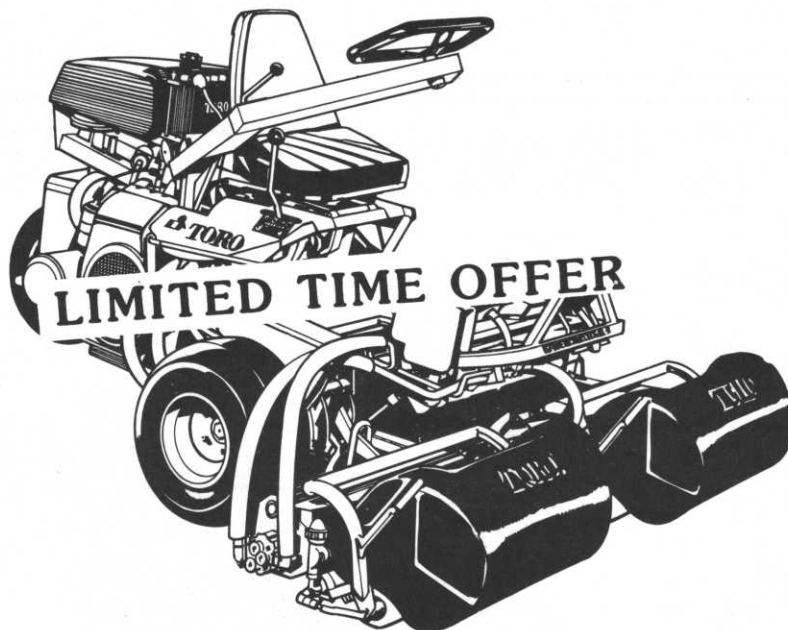


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Thought For The Month

"Have you ever noticed, as you exchange thoughts and feelings with others, that we usually get back exactly what we give? When we try to understand others, they reciprocate automatically by trying to understand us. When we offer help, we also get offers of help. When, instead, we express quick irritation, anger, or intolerance, that's usually what we get in return."

- Bits & Pieces (March 1982)



FROM THE PRESIDENT'S DESK

LARRY MUELLER

Our membership includes the top turf specialists in the state. Our University people are ready to come to our aid with a wealth of information and we should feel free to use this service as the need arises.

The friendships and acquaintances we make with other superintendents and associates through our organization can also be a great asset to us when we need help or advice. A phone call to a fellow superintendent can sometimes solve our problem and put our minds at ease. It seems that no matter what new problems we experience, someone else has experienced it before. The willingness of our fellow superintendents to readily share information and experience with us is our greatest asset and makes our organization all the stronger. No one should be too proud to take advantage of this opportunity.

I would like to thank John Fuller and Midland Hills for hosting the May meeting, a delicious lunch, beautiful golf course and free gas carts. Also thank you to Jerry Commers of Cushman Motors for a nice equipment display with complimentary beverages and caps. This all added up to a perfect day.

In June we will be at Madden's where Scott Hoffman will be our host superintendent. Turf Supply Co. will sponsor Dr. Bill Daniels of Purdue University as our guest speaker. I hope to see all of you there June 14.

The new 1982 M.G.C.S.A. Roster is completed and should be in the hands of each member by now. This is a valuable tool and one of the most important services rendered by your association. Don't be afraid to call other colleagues and seek advice and information. It also would be a good idea to read your association's bylaws for a better understanding of just how the M.G.C.S.A. works.

1980's The Detonating Years for Golf Course Management

BY BRUCE KLINKNER, OAK GLEN COUNTRY CLUB

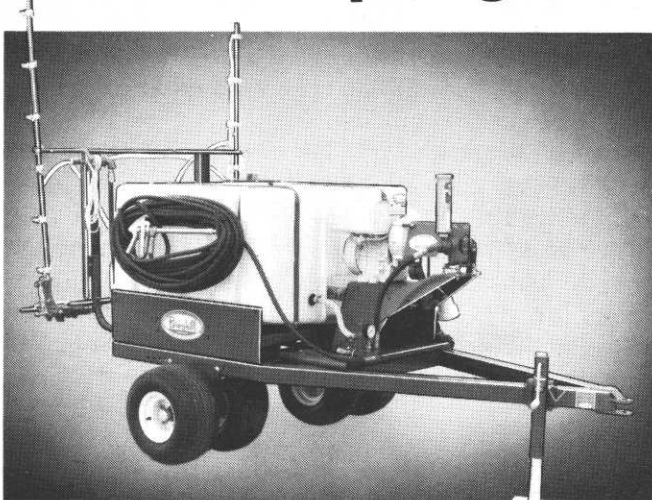
Recently, I had the honor of speaking at a seminar sponsored by the National Golf Foundation. Numerous municipal representatives directly responsible for their facilities attended this seminar. Under the leadership of Mr. Mark DePalma, National Golf Foundation Director, areas of expenditures and revenues were explored within primarily the municipal golf course operation. Presentations from Mr. Tom Magne, M.G.A. - It's Role Within Municipal Operations, Mr. Dick Tollette, Junior Golf At Municipal Operations, Mr. Tom Sampair, Golf Car Fleet Management and myself, Maintenance Practices Within A Municipal Operation, addressed expenditures and revenues from many areas of expertise.

Budgeting, Personnel Management and Long Term Planning, generally established, upper management within municipal operations have the need to understand on a wider scale, the complexities of turf management by superintendents and those factors affecting success or failure at their own facility and how this affects long term budgeting.

Expenditures have continued to progress in areas of labor, supplies, and utilities to produce a choke hold effect on our budgets. Golf Superintendents, as professionals dedicated to turf management, have progressively done a good job of exhausting available cost cutting measures within our club structures. With the vast assistance from our associate members

and the continued education of our members on the local and national level, we have realized a high level of productivity within our maintenance budgets. There is today a continued consensus that sound maintenance policies resulting in quality maintained turf attracts the golfing patrons.

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The process of establishing or origination of revenue producing policies have shown to be a crucial wheel of growth within municipal facilities. An individual club might incur a negative attitude from its golf patrons in its attempt to reestablish or revise a policy proven to be non-productive. Within the framework of public operations the feasibility of a power struggle or political pressure surrounds this type restructuring. A revenue base is contingent upon prime and non-prime demand. Highest revenues are yielded when wise utilization of prime time space is established.

Future alternate forms of recreation for land use could be realized upon the continued competitive nature of golf communities. Some municipal operations have experienced a decline in population growth and in this regard have less pressure for recreation than a younger community. Can municipal operations survive the inward pressure from special interest groups, seniors and juniors, which in some instances yield a 50% reduction of fees?

In summary, the municipal golf community has changed a great deal within the last ten years. Any attempt to cut expenditures further must be superseded by a reevaluation of policy and fee structures, revenue production and community growth and its needs for recreation.



RESEARCH COMMITTEE REPORT

In March our RESEARCH FUND DRIVE kicked off with the mailing of suggested invoices to all clubs indicating the amount we felt clubs in certain categories should contribute.

Thanks to the efforts of the superintendents at forty-two courses we have received \$4,875.00 so far. I know there is a right time to approach this subject with your Board. For you who have not responded as yet, keep looking for that right time because we are counting on all of you to further our cause.

JOHN NYLUND

Concrete results of the RESEARCH PROGRAM are in evidence elsewhere in this issue where Dr. Stienstra reports on winter test plots.

Our thanks to the following clubs, individuals and companies for their 1982 donations to our TURF RESEARCH PROGRAM:

Forest Hills Golf Club, Southview Country Club, Keller Men's Golf Club, Lake Miltona Golf Club, Edina Country Club, Minnehaha Country Club, Mora Country Club, Madden Bros., Inc., Whitefish Golf Club, Somerset Country Club, Wayzata Country Club, Cottonwood Country Club, Minnesota Valley Club, Terrace View Golf Club, Dellwood Hills Golf Club, Austin Country Club, Brookings Country Club, Wheaton Country Club, Baker Park Golf Club, Alexandria Golf Club, Lakeview Golf of Orono, Willmar Golf Club, Riverside Town and Country Club, New Hope Village Golf Club, Hazeltine National Golf Club, Dahlgreen Golf Club, Granite Falls Golf Club, Watonwan Country Club, Interlaken Golf Club, Indian Hills Golf Club, Minneapolis Golf Club, Oak Ridge Country Club, Braemar Golf Course, Rum River Golf Club, Glencoe Country Club, New Richmond Golf Club, Town and Country Club, Owatonna Country Club, Golden Valley Country Club, Koronis Hills Golf Club, Northland Country Club and Minikahda Club.

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Membership Committee Report



NEW MEMBERS. Accepted at the Midland Hills meeting were, left to right, Daryl Ahlgren, Meadowbrook G.C.; Eric Anderson, Golden Valley C.C.; Paula Spangler, Little Crow C.C.; Les Carlson, Milaca G.C.; and Tim Pehrson, Ironwood.

We are happy to announce the new members in CLASS F accepted at the May meeting are Greg Shaughnessy of Long Lake Ford Tractor and Tom Bryan of Bryan Equipment, Inc. Brainerd.

NECROLOGY

We are saddened to announce the deaths of two LIFE MEMBERS who served the Minneapolis Park Board for many years. Mr. Maynard Busbey was at Gross Golf Club and Mr. Burton Joramo was at Hiawatha Golf Club.

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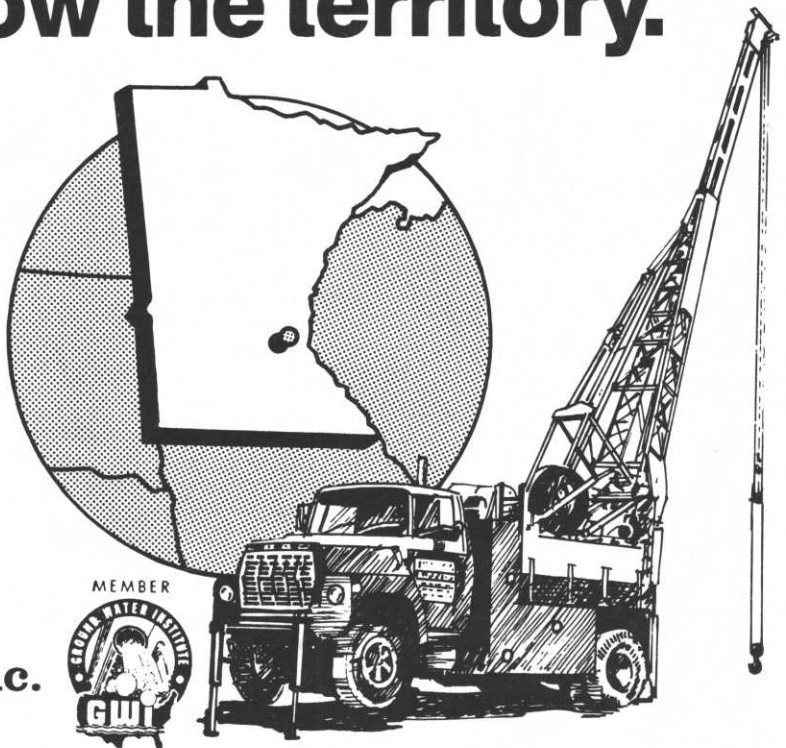
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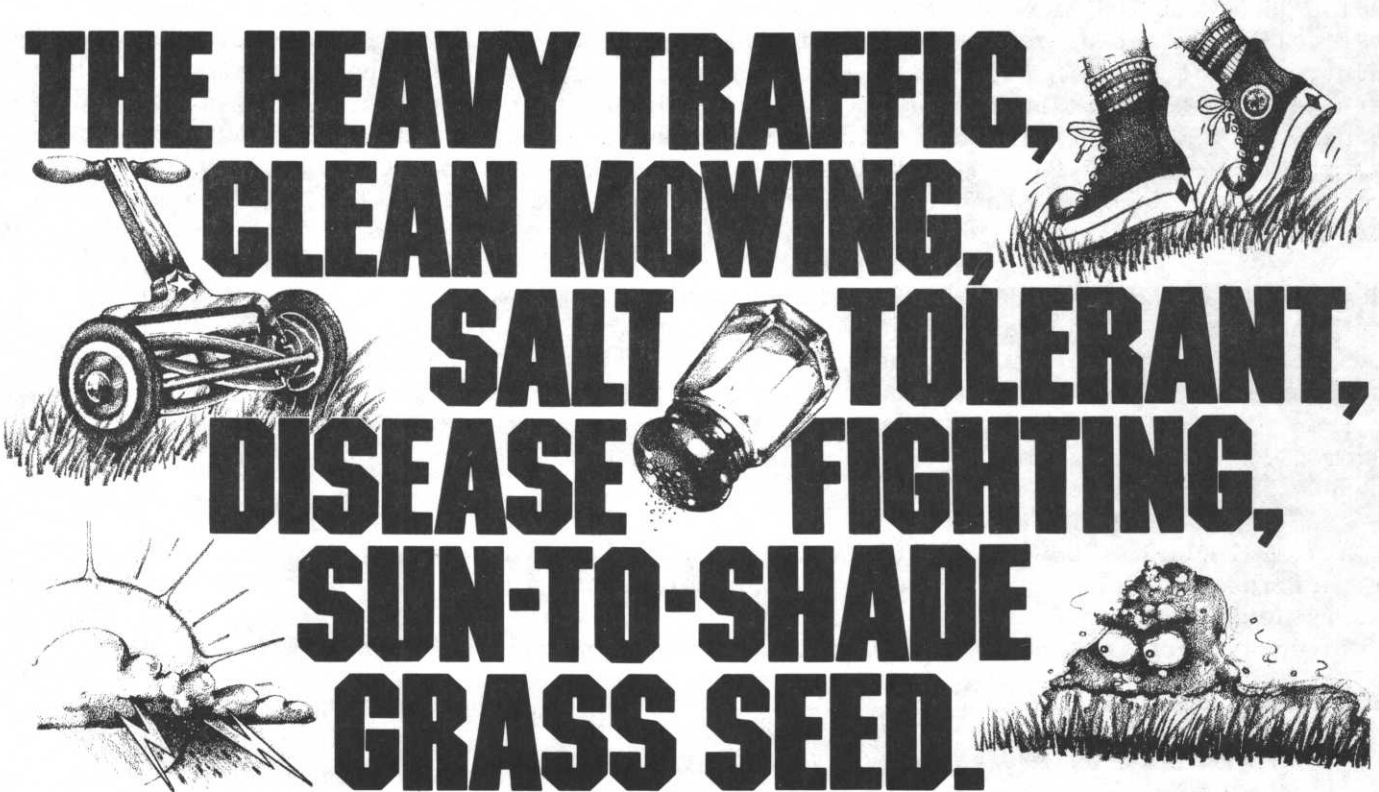
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GCSAA NEWS

FIRST CALL FOR NOMINATIONS FOR G.C.S.A.A. OFFICERS AND DIRECTORS: This notice marks the first call to chapters requesting nominations for the offices of president, vice-president and director of G.C.S.A.A. All nominations must be received by the Nominating Committee Chairman no later than September 1, 1982. The Nominating Committee Chairman is: Melvin B. Lucas, Jr., CGCS, Piping Rock Club, Locust Valley, Long Island, NY 11560. Other committee members are Paul S. McGinnis, CGCS, Phoenix, Arizona; Charlie P. Underwood, CGCS, Lawrenceville, Georgia; Sanford G. Queen, Overland Park, Kansas; Oral L. Redman, Jr., Creve Coeur, Missouri.

HERB GRAFFIS NAMED HONORARY MEMBER: Herb Graffis, a man who has spent a lifetime writing about and promoting the game of golf and the men who care for its courses, has been named G.C.S.A.A.'s fourth honorary member. The honor was officially extended during the GCSAA Post-conference Executive Committee Meeting. Other Honorary Members are Arnold Palmer, Dr. Fred Grau and Walter Wood, superintendent of St. Andrews in Scotland. Graffis will be formally inducted into the organization during the 54th Annual Turfgrass Conference and Show in Atlanta next February.

G.C.S.A.A. TO BE NATIONAL RESOURCE CENTER: G.C.S.A.A. is establishing a resource center for turfgrass and golf information. Anyone interested in donating books to the resource center should contact G.C.S.A.A. Headquarters. We're looking for a wide range of titles, including historic or out-of-print editions, on technical, golf or business-related subjects.

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The resource center will also include a library of taped interviews of individuals who helped bring GCSAA to its current status. This project was begun in 1981 by Director Paul Boizelle, CGCS, and is still underway. If each chapter would tape an interview with one individual, the tape library would be an outstanding resource center of historical information on the industry and well as GCSAA. Sample scripts for the interview are available from GCSAA Headquarters.

GCSAA MEMBERSHIP CARD GOOD AS GOLD: GCSAA Members carrying gold GCSAA membership cards can attend major golf tournaments by presenting their membership card at the main entrance or the "will-call" window.

Golfing events sponsored by the USGA, TPA and LPGA will allow admittance to GCSAA members carrying the gold membership card. The PGA Championship and the Masters also honor the membership card.

It is important that all GCSAA members wishing to take advantage of this benefit go to the main entrance at the tournament site.

The Triplex "Ring"

The advent of the triplex putting green mower in the late 1960's brought with it great expectations for reducing labor costs while at the same time improving the quality of putting green turf. For many of the golf courses that use triplex mowers, his dream has been at least partly realized; the number of hours needed to mow the greens has been greatly reduced and turf quality has not suffered significantly. For others, however, the triplex mower has been a mixed blessing. Though time spent mowing greens has been reduced, extra effort has been needed to cope with new problems associated with the use of the triplex. For example, the wear and compaction caused by turning the triplex mower off the green after each pass may demand that the collars be aerated and top dressed more frequently and hand-watered regularly. Collars are often scalped when units are lowered too quickly or raised belatedly at either end of the pass. There are also the mechanical malfunctions, when individual units on the triplex refuse to rise upon command and when hydraulic lines leak or burst, creating unsightly turf damage which may last for weeks or months.

Perhaps the most common problem associated with the use of the triplex mower is a condition which could be entitled, for lack of a better term, the "triplex ring." It is best described as the ring of weak, scalped or dead grass around the perimeter of the green, in the area where the triplex mower makes its final cleanup pass. The reasons for this problem are easy enough to appreciate. This perimeter ring is the only area to receive double traffic each day the greens are mowed, once then when the mower is making its straight passes across the green and again when it makes the cleanup cut. It is also the only part of the green where the mower travels the same path every day, thereby compounding the wear and traffic problems imposed upon it as compared to the other turf areas on the green.

Finally, the cleanup pass is the only time that the mower is actually turning mowers at the ends of fairways and tees.

In each case, the mower creates downward and lateral pressures during the turn which combine to produce greater wear and soil compaction than if the machine were traveling in a straight line. The sudden turning of a golf cart on wet fairway turf is a more dramatic illustration of this principle.

There seems to be no single solution to the triplex ring situation, in many instances, but there are a number of practices which when combined can help to alleviate the problem.

Cultivation and Cultural Management

Getting back to the basics of turfgrass management, the development of a strong, healthy grass is the best way to resist triplex ring damage. Avoid overwatering and overfertilizing at all costs. Too much water and nitrogen can create a weak, lush turf which is more susceptible to wear injury. Wet soils also compact much more readily, inhibiting root development and resulting in a weakened turf.

To overcome the effects of compaction and wear in the perimeter ring, aerate the soil more frequently. If the greens are already aerified once or twice during the season, then aerate the perimeter ring area by itself several other times. Aerating (coring) achieves positive results even when done in the middle of a stress period, so don't hesitate to aerify if triplex ring symptoms begin to appear. If chronic soil compaction problems are related to the texture of a soil in the greens as well as to the use of the triplex mower, then begin modifying the soil in the greens by topdressing with a compaction-resistant material, one containing a high percentage of sand. Have the topdressing material tested by a soils laboratory in order to insure proper infiltration rate, pore space and bulk density.

Design and Environmental Factors

Most of the time the symptoms of triplex ring will no appear uniformly around the perimeters of all the greens.

continued on Page 10

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Study Last Summer's Disease Problems

To Plan This Summer's Control Program

Summer is the season when you want your course to look its best, but it's also a time of increased stress on turf which makes disease more likely. "Summer's warm, humid conditions encourage such turf diseases as brown patch, dollar spot, leaf spot and pythium blight," says Todd Cutting, TUCO agricultural chemical technical extension field representative. "At the same time, the heavy play a course gets during this time places additional stress on the turf, making it more susceptible to disease problems."

That's why a superintendent who wants to keep his course free from ugly disease blemishes - and himself free from golfer complaints - should carefully plan a program that will prevent summer diseases. "The best way to plan a disease control program for this summer is to go back and analyze what happened on your course last summer," Cutting suggests. He recommends that superintendents analyze these factors:

1) Which disease or diseases caused you the most problems last summer, and where? When did these problems first appear and can you pinpoint the cause? If you can answer these questions, you'll know what your most likely disease threat will be this summer, when you're most likely to face it, and where. 2) The next step is to analyze cultural practices. Fertilization should provide minimum levels of essential nutrients; excessively high nitrogen levels may increase turf's susceptibility to such diseases as Fusarium patch and brown patch. Thatch levels thicker than a half inch also encourage disease development, particularly if the area is poorly drained.

Turf which remains damp for long periods of time is more susceptible to disease so it is recommended that brushing, poling or hosing be used to remove dew from grass blades. It

also is recommended that sand be used to improve subsurface drainage and aeration. Avoid planting foliage in areas where it will block movement of wind through the turf to dry off grass blades.

Avoid daily, light applications of water, particularly in late afternoon or evening. It is recommended that water be applied as infrequently as possible, but at a depth of six inches or more, with each irrigation.

By analyzing last summer's disease problems and where they occurred, it may be possible to pinpoint specific cultural practices that are encouraging the problems.

3) Use of cultural practices that discourage turf diseases often is not sufficient to prevent disease outbreaks because weather stress, coupled with the stress caused by heavy course play, cannot be controlled. "This is why a preventative program should include regularly scheduled fungicide applications every 7-10 days, continued on Page 10

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when weather conditions favor disease development," Cutting says. "By analyzing last year's problems and where they occurred, you can select a fungicide that will be effective against those specific problems and plan applications in areas where problems are most likely to occur."

Cutting recommends use of a broad spectrum antibiotic fungicide such as Acti-dione, which is economical enough to allow a greater number of treatments than many other fungicides and is effective against major summer diseases. In addition, it is compatible with most insecticides.

"A successful disease prevention program should include both proper cultural practices and a scheduled program of fungicide applications before disease signs appear," Cutting emphasizes. "Planning and carrying out a total preventative program can minimize turf disease problems at a time of the year when your course needs to be in top shape."

Weakness or injury is most likely to develop in areas of the perimeter ring where other stress factors also come into play. Sharply contoured greens often develop this malady, especially where the mower makes its sharpest turns during the cleanup pass. Sometimes this problem can be resolved by recontouring the green so that sharp turns are eliminated.

Triplex ring symptoms often manifest themselves on greens only in entrance and walk-off zones, especially when traffic is restricted to narrow passageways by steep banks, sand bunkers or other obstacles. If the area around the green can be redesigned to provide several different entrance and exit channels, very often the triplex ring will disappear.

The presence of trees near a green may create enough extra turf stress to produce visual symptoms in the area of the perimeter cut. Too much shade, poor air circulation and

tree root competition all weaken the resistance of the turf to the additional wear of the triplex mower. Removing or thinning some of the nearby trees in order to improve sunlight penetration and air circulation will usually help alleviate the problem. The trees should be root-pruned by digging a trench between the trees and green, placing tarpaper or some other heavy-duty material in the trench and backfilling.

There are many types of stresses which may have a detrimental effect on the health and vigor of putting green turf. By carefully investigating the causes of this stress, adjusting mowing and cultural programs accordingly, and creating a favorable environment for plant growth, some of the problems associated with the use of the triplex putting green mower can be eliminated.

—James T. Snow, Agronomist

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