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Cobo Hall Flower Show

The following note was received from Bruce Wolfrom, Chairman of the booth at the Flower Show held at Cobo Hall in March.

I would like to give special thanks to Bob Kirkpatrick of Lawn Equipment Corporation for lending us the equipment and personnel to get our booth at the Flower Show set up. Also, I would like to thank Tom LeBoeuf of Display & Exhibits, Inc. and Jim Scott of James Scott and Associates Landscape Architects.

If I have failed to thank anyone who helped make this venture possible, believe me it is not intentional. Thanks again for all your help.

Bruce Wolfrom, Chairman

Here is a list of all the people who helped make the booth a success:

Board Appoints Timmerman

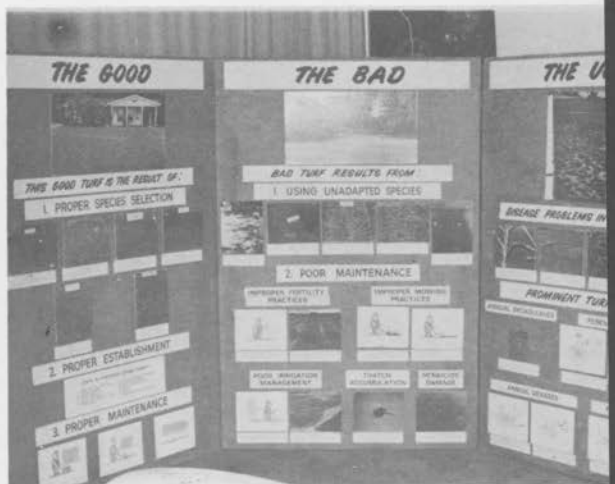
At a meeting of the Board of Directors of the MBCGCSA in March, President Gerald Gill appointed James Timmerman, Superintendent, Orchard Lake Country Club, Orchard Lake, Michigan, to fill the vacancy created by Bill Milne's resignation.

Jim will serve the remainder of this year and then will have to be elected by the membership at the Annual Meeting.

We were sorry to receive Bill's letter of resignation and it was with a great deal of disappointment that the Board accepted it.

Gene Johanningsmier	Premo Diaminan
Don Ross	Gerry Penner
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Bob Pontius	Jim Timmerman
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Dick Monahan	Les Aennier
John Kosmalski	Gerald Gill
Al Zupanc	Craig Marfia
George Carson	Mary Dominic
Roger Gill	Gordy LaFontaine
Bob Hope	Don LaFond
Dr. Joe Vargas	

And a special thanks to Clem Wolfrom.



Above: The "eye catcher" — this brought the people into the booth.

Above right: A picture story furnished by Michigan State University for our booth.

Right: Andy Bertoni, center, giving Jim Timmerman, newly appointed Board member, a quick course on selling.

Below: Jim Timmerman making a sale after Andy's quick-selling course.

Below right: Two of the prizes being raffled off; a riding mower and a wheelbarrow full of booze.



GRASS CLIPPINGS



Hopefully, by the time this issue is released things will have changed considerably. At this writing, however, Pink Snowmold seems to have taken its toll on the Fairways of most of the Golf Courses in Southeastern Michigan. While most Superintendents had their Greens and Tees well protected, many Clubs do not have the budget for treating Fairways. Because of above average temperatures and early winter snowfall, this area of the Golf Course proved an easy mark for *Fusarium Nivale*. Fortunately, not much desiccation is reported throughout the area and if recovery is speedy from the Pink Snowmold, we may escape with only minor permanent turf damage this winter.

Clem Wolfrom speaks to millions

It's not often that a member of our Superintendent's Association get a chance to share his technical knowledge with over a million people. Such was the case, however, when J. P. McCarthy of WJR Radio interviewed Clem Wolfrom of The Detroit Golf Club on the air. It is always refreshing to see one professional recognized by another of the different field. By the way, I'm told Clem's autograph can be had for a mere 50¢ - that's a bargain even in today's economy.

Hydroseeding Solves Fritz's Problems

Fritz McMullen of Forest Lake Country Club ran into a bit of a problem this spring trying to seed one

of the many hilly areas on his Golf Course. It seems the ground was either too soft to get equipment on or too hard to work. The problem was solved when Fritz decided to hydroseed the entire area (about 4 acres). Fritz says germination is over 90% with this process and the time saved is well worth the expense. Not only is it fast, but the wood fiber mulch used in the operation gives a bluish green color to the slurry, and the finished job is very neat looking.

Flower Show Profits Exceed \$500

Congratulations to everyone who took part in the Home and Flower Show ticket sale. Special accolades go to Bruce Wolfrom who set up the booth and spent some exhausting time in preparation and actually working on the floor. He reports that net profits were slightly in excess of \$500. While the Michigan Turf Foundation is the obvious winner here, it was certainly gratifying to see such a large percentage of the Michigan and Border Cities Superintendent's Association working and pulling together towards a common goal and an excellent cause.

New MBCGCSA members

NEW FACES - I am sure that all members of the M.A.B.C.G.C.S.A. join me in welcoming two new Golf Course Superintendents to Southeastern Michigan. Mike Johnson, who hails from the Grand Rapids area, has taken

Continued on Page 10

Anselme Bourassa, golf course owner in Canada, talks about baron Kentucky Bluegrass . . .

U.S. Plant Patent #3186 Dwarf Variety



"We used baron on all our tees and fairways when we built our front nine holes. And baron performed so well that we're using it for the back nine too!"



"In our cold climate and short growing season, it's important to select a grass that'll come up fast. We planted a Baron Kentucky Bluegrass mixture on all our tees and fairways and only one month after seeding, I saw it everywhere."

"Baron comes up fast. We seeded the course in late August 1973. The fairways were ready for play by May 1974. We could have opened the course then except the greens weren't ready until mid-June."

"And Baron stays green until the first snowfall. Last winter was bad . . . lots of rain and thick ice. But as soon as the ice and snow were gone, Baron came up green and beautiful. We didn't have any winter kill. I told my neighbors they should have overseeded with Baron this fall."

"We usually cut to 1-1/4 inches and Baron stays green and nice. We found this to be true even when we cut to 3/4 inch. We didn't have any problems with diseases, not a single one."



And here's what Jean Pierre Masse landscape contractor and turf consultant for the golf course has to say about baron

"There's no question that Baron can adapt itself to different growing conditions. All this land was woods before we cleared it through with a bulldozer. See this sand? That's what's under the top layer of soil in the fairways. This soil is extremely sandy, very acidic and obviously very porous. But regardless, Baron did a fine job."

There's not much more we can add except that Baron is available from Pedigreed Seed Company or any authorized distributor who is nearby wherever you grow quality turf.

Anselme Bourassa is the owner of Les Vieilles Forges Club in Trois-Rivieres, Quebec, Canada. Jean Pierre Masse is a turf consultant and landscape contractor for Masse & Fils Co., Cap de la Madeleine, Quebec, Canada.



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Protection applied for under the U.S. Plant Variety Protection Act



Mike Donahue Wins Outstanding Alumnus Award

Mike joined the Toro Company in October of 1973. He came to Toro from the Toronto Park Department, having joined that organization when he completed his studies at Michigan State. Mike's training at Michigan State served as a sound base which he has used to expand his career opportunities. His responsibilities have grown rather rapidly since joining Toro's International Marketing Group in October, 1973. Mike was employed to handle irrigation marketing in Canada and Mexico. Later he was assigned Central and South America. Early in his career with Toro he displayed sound and practical business judgement. This coupled with his ability to meet and to deal favorably with people and his above average maturity for his age led to his selection for a four-month assignment in South Africa.

Dean Lawrence L. Boger, right, is presenting the 1975 Outstanding alumnus Award of the Institute of Agricultural Technology of MSU to J. Michael Donahue, 1970 graduate in Turfgrass Management.

There is no doubt that the sound fundamentals he acquired and the guidance he received from the staff members during his training at Michigan State contributed substantially to what is considered high achievement and outstanding progress.

Our congratulations to Mike Donahue and to Michigan State University for producing such fine men.

Mike graduated from the Turfgrass Management program in 1970, was President of the Turfgrass Club and the third recipient of the Michigan Turfgrass Foundation Outstanding Award.

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GCSAA Happenings

GCSAA Pesticide Manual Available

The Pesticide Manual is now available from GCSAA Headquarters. Cost to GCSAA members is \$7.50. Educators and Governmental Agencies are eligible to purchase a copy at a cost of \$11.25; however, individual GCSAA *non*-members are ineligible to receive the manual. Enclosed is a small supply of order forms. Members ordering the Pesticide Manual should allow 30 days for delivery.

Results of Seminar Survey

There were a total of 456 replies to the Seminar Preference Survey. Members were asked to indicate their first, second and third choices from among the three current GCSAA Seminars and five possible new seminars. The overall results were as follows in rank order from the most frequently indicated to the least indicated:

1. Landscape
2. Public Relations
3. Pesticides
4. Management II, Leadership Motivation and Employee Relations
5. Soils
6. Management I, Financial Decision Making
7. Plant Nutrition
8. Personal Finance

The many responses by GCSAA members is greatly appreciated and extremely helpful and beneficial in analyzing the current GCSAA Seminar Program and assessing future directions of the seminar series.

Golf Superintendent Wants Suggestions

The staff of THE GOLF SUPERINTENDENT welcomes member and Chapter suggestions for the magazine. Manuscripts for proposed articles,

Thinking Superintendent features, pictures for Photo Quiz, suggested topics for educational articles and news of member and Chapter activities will be considered. Send your news and suggestions to THE GOLF SUPERINTENDENT, 1617 St. Andrews Drive, Lawrence, Kansas 66044.

Inform GCSAA of Change in Address

Members are reminded to inform GCSAA Headquarters of changes in address, as soon as possible, so that membership services can continue correct mailings with minimal delays. All changes are entered in our data processing system which gives a monthly up-date. If an address change is received after the 12th of the month, new labels for THE GOLF SUPERINTENDENT are not shown until the following month's issue. With your help, we will endeavor to continue prompt service at minimal inconvenience and delay.

Grass Clippings Cont.

the position at the Ann Arbor Country Club and Bob Crosby, from Gaylord is the new Superintendent at the Clio Country Club. Welcome, Gentlemen, and good luck to both of you in your new positions.

Newsworthy articles wanted for column

This column is intended to help keep Golf Course Superintendents abreast of newsworthy events and incidents happening in the South-eastern Michigan area. If you have any items to contribute or comments to offer both critical and favorable, please forward your remarks to:

Frank Green
Box 111
Birmingham, Michigan 48012

W.F. Miller Wins USSAC Award

Hal Vogler and his W. F. Miller Company have certainly contributed their efforts to our lush mid-western golf courses. Hal was recently the happy recipient of the USS Agri-Chemical Appreciation Award. W. F. Miller was the top dealer in the nation for 1974 in chemical sales and fertilizer for USS Agri-Chemical.

In case Hal neglects to point out his award the next time you see him, we'll print the inscription below:

to
Hal Vogler
of

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and Garden Distributor
1974

— Congratulations, Hal!

from *THE BULLSHEET*,
December 1974

Changing Times

Old Bill he was a gardening man
of skill in high degree;
Few others could produce
near half as well as he.
The folks around often asked him why
things grew so fast and sure;
To which Bill always would reply:
"I use race horse manure."
Bill had a daughter, fussy lass,
who sought her Pa to cure,
And make him use a nicer word
instead of (ugh) "manure."
So she called her Mother's aid
to see could she advise her
On any way to get her Pa
to call it fertilizer.
"You leave your Pa be," said she,
"His way you must endure;
It took me twenty years to make
him call that stuff manure!"

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- ☐ Chipco Buctril
- ☐ Chipco Turf Kleen



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Legislative Awareness — A Must Today

In recent months, various government instrumentalities have attempted to enact legislation which could have had an adverse effect upon the operation of golf courses and their resultant quality. In several instances, attempts have been initiated which could have limited or banned the use of fertilizer on golf courses. Additionally, we have seen trial balloons flown concerning rationing of fuel, real estate taxation methods and increasingly harsh regulations of necessary pesticides.

Government, be it local, state, or federal, continues to be felt more and more on the golf course. The time when golf courses were seldom affected by such matters has long since passed, and now the superintendent and all other supervisors at a golf course must consider these laws with almost every action they take.

We may be an industry guilty of complacency and not mindful of serious inroads which have been made and others which some contemplate that could easily alter this picture if allowed to continue unaltered. Consider for example that most decisions made concerning golf are based upon the premise that golf courses as they have become known, will continue. Recent governmental attempts in some areas cast a dark shadow across all golf courses, and in some instances, endanger their very existence.

When professional associations of "greenskeepers" were established some fifty years ago, the primary reason for their formation was to assist the members in scientific areas of turfgrass management through the

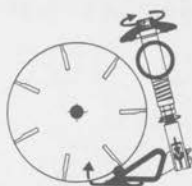
dissemination of new information. While this reason still exists today, an important new area is that of being in a position to react to potential government actions.

Graphic examples of cooperation between professional associations and governmental bodies can be found daily. Within the golf course superintendent's profession, there are several excellent examples of how a united group can insure that its interests are represented and considered prior to final action. First at the federal level and more recently at the state level. Massachusetts and Michigan for example, some legislators proposed the banning of non-farm fertilizer usage. While individual or local interest was first aroused, this was closely followed by organizational efforts to present information to legislators which was vital to a complete and thorough understanding of the problems which would follow such a ban. Fortunately, we can say today that these federal and state proposals were permitted to die without moving beyond the committee level. However, this is not to say that further attempts by these or other governmental bodies will not be forthcoming, nor can we afford to become relaxed on the issue. Unfortunately, the golf superintendent's interests may not always receive the mindful considerations they deserve by the law makers.

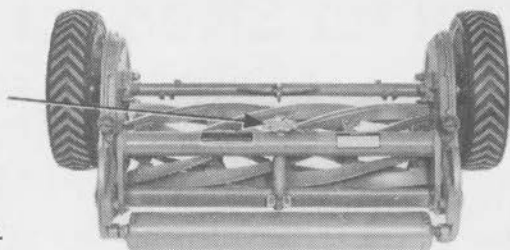
The Golf Course Superintendents Association of America (GCSAA) made determined efforts on the Massachusetts and Michigan fertilizer bills and on a Wisconsin pesticide bill by advising the chapters in those states

Continued on Page 16

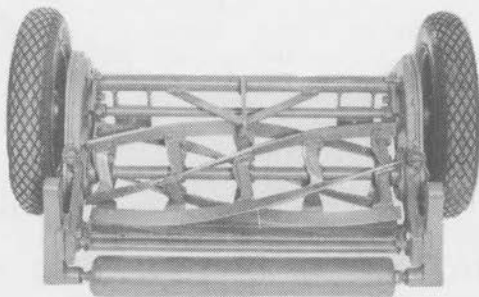
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NAME OF INTERESTED PERSON _____ DATE _____

MAILING ADDRESS _____

CITY _____ STATE _____ ZIP _____

Or you may contact the next golf course supplier who calls on you and give him the information needed for application.

We'll try again . . . last month's photo was too light.



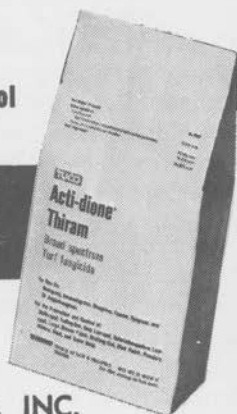
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Legislative Awareness Cont.

of the proposals, followed by suggested actions and/or GCSAA position information. Superintendents in those states acted in unison through a letter writing campaign and in offering testimony to support their concerns.

This is not a totally new area of action for GCSAA, with it having given testimony, concerning pension reform legislation, as well as in dealing with the Environmental Protection Agency; however, involvement in the state-level legislation is relatively new and caution must be taken to insure that counter-productive measures are not permitted through a conflict of actions by the state and national organizations. Neither should GCSAA attempt to supercede the chapter's prerogatives in state-level actions, because the impetus must remain at the local level where those who will be most directly affected will have the greatest input. GCSAA's intended posture is that of acting as a hot-line to disperse information and to serve as a reservoir of resource information and prepare nationwide position papers.

Because more and more legislation is of concern to golf courses and historically it has been demonstrated that legislative actions are duplicated from the local and state levels to the national level and vice versa, a seemingly minor item of legislation may soon become so significant that it is affecting the profession nation-wide. Additionally, a piece of legislation may appear to be insignificant at the time of passage and later, through interpretations and enforcement policies, become of tremendous import to the profession and the superintendent's ability to perform his required tasks.

Based upon these trends and historically documented cases, each member of the chapter must be on the alert for legislative developments within his geographic area and report

to the chapter. Next, the chapter must determine if the proposal could be harmful or helpful and what would be the best approach to the matter. If the chapter feels this development is of a considerable magnitude or if possible assistance is desired, they could report the item to the GCSAA officers or headquarters personnel. In some instances, GCSAA may advise chapters of impending legislation or seek the assistance of persons within the chapters to represent the national organization at the local level.

Individual superintendents may not be able to be aware of all legislation which could affect them, nor would they always be able to bring to bear the impact an organized effort would. However, it is the individual superintendent who must bring these matters to the attention of the organization so that the appropriate actions can be taken. This effect could become even broad based if a course's golfers could be encouraged to become involved to the extent of reporting items of interest to their superintendent.

We can ill afford to be legislated out of existence and fortunately through our professional association, we can position ourselves to insure that our interests are represented on all items of legislation which could negatively or positively effect our ability to provide the type of conditions that today's golfers have learned to expect and appreciate.

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Potassium, Calcium, Magnesium

How they relate to plant growth

by CARL SCHWARTZKOPF, Mid-Continent Agronomist, USGA Green Section

Potassium, calcium and magnesium play an important role in soil-plant relationships. These elements are not only essential to the complex biochemistry of plant growth, but their presence in the soil in adequate amounts and in suitable proportions to one another and to the other exchangeable cations, such as aluminum, hydrogen and NH_4^+ , is necessary if the soil is to be a suitable medium for plant-root development. Should one element be in excess, it may "tie-up" or make it unavailable to the plant.

POTASSIUM

Potassium is absorbed by plants in larger amounts than any other mineral element except nitrogen and possibly calcium. This element plays an important part in many of the vital physiological processes in the plant; the exact mechanism by which potassium functions is not known. It is needed for the plant cell's metabolic processes and apparently has a role in influencing the uptake of certain other mineral elements, in regulating

the rate of respiration, affecting the rate of transpiration and in influencing the action of enzymes, as well as in aiding the synthesis and translocation of carbohydrates. Potassium also has a counterbalancing effect on the results of a nitrogen excess. It enhances the synthesis and translocation of carbohydrates, thereby encouraging the cell walls to thicken and help the plant to remain upright.

Potassium plays a vital role in the winter survival of turfgrass, disease resistance, and in increasing the overall hardness of the grass plant. Deficiency symptoms of potassium on turfgrass are yellow-streaked leaves, followed by browning and dying at tips and margins.

SOURCES OF POTASSIUM

Hardwood ashes supplied much of the potassium in the United States through the first part of the 19th Century. A decline in the potash industry resulted after the hardwood forests along the Atlantic Coast were depleted. The first factory that pro-

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Potassium Cont.

cessed KCL (murate of potash) was in Germany, and the Germans monopolized the potassium market until World War I. The embargo placed on potassium exports forced development of the resources of the United States and of other countries as well. Most potassium today comes from New Mexico, California, and Utah.

CALCIUM

Calcium, as potassium, is absorbed by the turfgrass plant in the ionic form. The calcium in the soil other than what was added as lime or in fertilizer material originated in the rocks and minerals from which the soil was formed. Calcium is a part of many minerals, such as dolomite, calcite and calcium feldspars. Upon their disintegration and decomposition, calcium is released.

Calcium is an extremely important mineral in plant nutrition. Many soils, particularly in humid regions, contain this element in amounts so small that plant growth is limited. Turfgrasses as a group are able to tolerate low levels of calcium; however, abnormal growth has been observed with extremely low levels. One of the primary roles assigned to calcium in the plant is the key role it plays in the cell walls. Calcium is also important in root development, since short roots are observed on calcium deficient plants.

The first sign of calcium deficiency

in older plants is the appearance of a reddish-brown discoloration in the tissue between the veins, along the margin of the blade. The most obvious method of correcting this deficiency is by the application of calcitic or dolomitic lime. Should calcium be required without changing the pH that would result from the use of lime, gypsum may be used.

Liming is the addition to the soil of any calcium-containing compound that is capable of reducing acidity. The correct use of lime refers only to calcium oxide (CaO), but the term almost universally includes such materials as calcium hydroxide, calcium carbonate, calcium-magnesium carbonate and calcium silicate slags.

A description of various liming materials describing their availability and manufacture follows:

Calcium Oxide - Calcium oxide (CaO), also known as unslaked lime, burned lime, or quicklime, is a white powder that is quite disagreeable to handle. It is manufactured by heating calcite limestone in an oven or furnace. The carbon dioxide is driven off, with calcium oxide remaining. This product is most frequently handled in paper bags because of its powdery and caustic nature. This material reacts quickly when added to the soil. When unusually rapid results are desired, either calcium oxide or calcium hydroxide should be used.

Continued on Page 21

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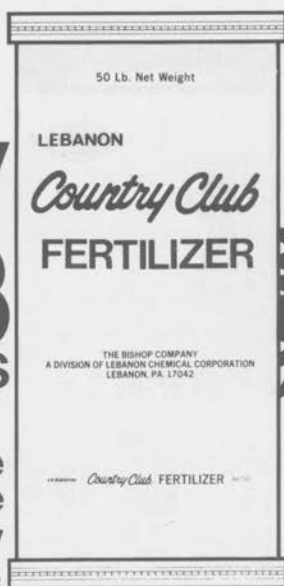
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Potassium Cont.

Calcium Hydroxide - Calcium hydroxide ($\text{Ca}(\text{OH})_2$) is commonly referred to as slaked lime, hydrated lime or builder's lime. It is similar to calcium oxide in that it is a white powdery substance, difficult and unpleasant to handle. Slaked lime is prepared by the hydration of calcium oxide. A large amount of heat is generated; upon completion of the reaction, the material is dried and packaged.

Calcium and Mixed Calcium-Magnesium Carbonates - The carbonates of calcium and magnesium occur widely in nature and in many different forms. Crystalline calcium carbonates are referred to as calcite or calcitic limestone. Crystalline calcium-magnesium is known commonly as dolomite.

MAGNESIUM

Magnesium is also absorbed by plants in the ionic forms. This absorption takes place from the soil solution or possibly by contact exchange.

Magnesium plays a vital role in photosynthesis, as it is the central atom in the chlorophyll molecule. It is involved in many enzyme reactions. It reacts with phosphorus in uptake and transport. Magnesium is also quite mobile in the plant, and yellow deficiency symptoms first appear on the older leaves, as it moves to the younger plants.

SOURCE OF MAGNESIUM

Magnesium in the soil originates in the decomposition of rocks containing minerals such as brotite, dolomite and olivine. Upon decomposition, these minerals set magnesium into the surrounding soil solution. Once in the soil solution, magnesium may be 1) leached, 2) absorbed by living organisms, and 3) adsorbed by surrounding particles.

MAGNESIUM IN THE SOIL

The coarse-textured soils of the humid region are those in which a

Continued on Next Page

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magnesium deficiency is generally manifested. These soil types usually contain small amounts of exchangeable magnesium. This condition is aggravated by the addition of large quantities of fertilizer salts which contain little or no magnesium. The magnesium in the soil is released by ion exchange when these fertilizers are added; the larger quantities of chlorides and sulphates speeds its removal by leaching. Magnesium can be supplied in dolomitic limestone, or as magnesium sulphate, if soil pH is to remain the same. A deficiency of magnesium is less of a problem on finer-textured soils and on soils found in the arid regions. In some semi-arid locations, magnesium compounds may actually be precipitated in the soil profile.

When the appearance of a plant and environmental factors indicate a nutritional disorder, steps should be taken to verify the problem before attempting to correct it haphazardly with nutrients that are not needed. Since nutrient deficiencies on turf-grasses are difficult to visually diagnose, a suspected deficiency should be verified with soil or tissue tests before trying to correct the problem. A most important criterion for a soil test is that it should measure the nutrient in the soil that is available to the plant. Many times nutrients in the soil are held tightly and are unavailable.

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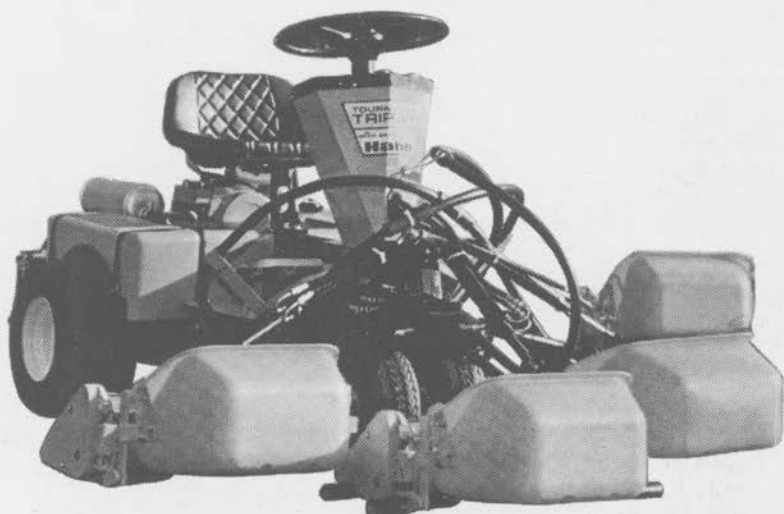
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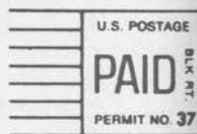
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