

April 1975

BORDER

CITIES

GOLF COURSE
SUPT.
ASSOCIATION

MICHIGAN

LIBRARY SERIALS

APR 23 1975

MICHIGAN STATE UNIVERSITY
LIBRARIES

A PATCH of GREEN

MICHIGAN AND BORDER CITIES GOLF COURSE SUPERINTENDENTS ASSOCIATION

50TH
ANNIVERSARY

LET THE EXPERTS AT J. J. DILL HELP YOU

MAKE IT "a green year"

**BUY DIRECT • SAVE MONEY
GET FAST DELIVERIES**

Your budget will buy more — in chemicals and equipment to apply them — when you deal direct with Dill. As manufacturer, formulator and/or distributor, Dill can save you money. Consistently.

Dill offers the most complete line of quality turf chemicals in the midwest . . . complete with application instructions.



DIAL TOLL-FREE (WATTS) 800-632-4057

TURF CARE
TIP OF THE MONTH

FREE

VALUABLE CATALOG

Latest edition, up-dated in all respects. Contains a wealth of information. Lists and describes hundreds of chemicals, pesticides and equipment for maintenance of grounds and waters of golf courses, parks, recreation areas and resorts.



Dill is headquarters for complete lines of: • Fungicides • Herbicides • Algaecides • Insecticides • Foggers • Sprayers.

PROMPT DELIVERY throughout southern Michigan and northwestern Ohio, including weekly shipment via our trucks covering the Detroit, Flint, Lansing and Toledo areas.

THIS SPRING . . .

Don't be caught this Spring without adequate chemical supplies! Order your 1975 supplies NOW and assure prompt delivery and favorable prices.

J. J. DILL COMPANY Box 788 KALAMAZOO, MI 49005 Dept. PG-4

Gentlemen: Please send your latest Turf Care Catalog.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

SPRAYING HINTS

SPRAYING HINTS FOR EFFICIENT WEED CONTROL

Apply between 20 and 40 gallons of water per acre.

Operate pump at a pressure between 30 and 40 lbs. per sq. inch.

Replace worn teeject tips.

Never use metal of any kind to clean plugged tips.

USEFUL INFORMATION

1 mile	=	5,280 feet
1 square yard	=	9 square feet
1 acre	=	4,840 square yards
1 acre	=	43,560 square feet
1 square foot	=	144 square inches
1 tablespoon	=	3 level teaspoons
1 ounce	=	2 level tablespoons
1 pint	=	16 ounces
1 quart	=	32 ounces
1 gallon	=	128 ounces
1 ounce per 1,000 square feet	=	2.72 pints per acre
1 pound	=	16 ounces
1 ounce per 1,000 square feet	=	2.72 pounds per acre
1 pound per 1,000 square feet	=	43.6 pounds per acre
1 gallon per 1,000 square feet	=	43.6 gallons per acre
100 gallons per acre	=	2.3 gallons per 1,000 square feet
1 gallon	=	4 quarts
1 acre	=	160 square rods
1 square rod	=	272 square feet
1,000 square feet	=	4 square rods

CALIBRATION INFORMATION

For determining gallons per acre where forward speed of sprayer is constant, this formula may be used:

$$\frac{\text{Gallons}}{\text{Per Acre}} = \frac{495 \times \text{gallons per minute per nozzle}}{\text{Nozzle spacing in feet} \times \text{miles per hour}}$$

Example: How many gallons per acre will be sprayed if each nozzle delivers .067 gallons per minute. The spacing is 1.67 ft., and the desired speed of travel is 4 miles per hour.

$$\frac{495 \times .067}{1.67 \times 4} = \frac{33.17}{6.68} = 4.98 \text{ or } 5 \text{ gallons per acre}$$

MEASURING HINTS

Diameter of a Circle	=	Circumference x .31831
Circumference of Circle	=	Diameter x 3.1416
Area of Circle	=	Diameter squared x .7854

To find miles per hour: Walk alongside for 20 seconds; divide number of normal steps by 10.

To find the capacity of tank in U.S. gallons: Square the diameter, multiply by the length and by .0034.

From the J. J. DILL COMPANY



**MICHIGAN AND BORDER
CITIES GOLF COURSE
SUPERINTENDENTS
ASSOCIATION**

PRESIDENT

GERALD GILL
TAM-O-SHANTER COUNTRY CLUB
3466 Walnut Lake Road
Orchard Lake, Michigan 48033
Off. 626-8325, Res. 851-7904

VICE PRESIDENT

GEORGE W. PRIESKORN
BURROUGHS FARM GOLF CLUB
5341 Brighton Road
Brighton, Michigan 48116
Off. 227-1381, Res. 229-9437

SECRETARY-TREASURER

ROBERT HOPE, CGCS
THE LOCHMOOR CLUB
20740 Marter Road
Grosse Pointe Woods, Michigan 48236
Off. 881-8112, Res. 884-8684

BOARD OF DIRECTORS

WILLIAM W. MILNE
COUNTRY CLUB OF DETROIT
220 Country Club Drive
Grosse Pointe Farms, Michigan 48236

ROGER GILL
PINE LAKE COUNTRY CLUB
1894 Alton Circle
Walled Lake, Michigan 48088
Off. 681-1322, Res. 264-6931

DON LA FOND
BAY POINTE GOLF CLUB
8835 Union Lake Road
Union Lake, Michigan
Off. 363-0144, Res. 363-1142

BRUCE WOLFROM
BARTON HILLS COUNTRY CLUB
639 Barber Street
Ann Arbor, Michigan 48105
Off. 662-8359, Res. 663-9213

CLEM WOLFROM
DETROIT GOLF CLUB
530 Kendry
Bloomfield Hills, Michigan 48013
Off. 345-4589, Res. 338-6375

JAMES G. VLASSIS
LAKELANDS GOLF AND C.C.
8760 Chilson Road
Brighton, Michigan 48116
Off. 227-5441, Res. 227-6926

PRESIDENT EMERITUS

TED WOehrLE, CGCS
OAKLAND HILLS COUNTRY CLUB
Birmingham, Michigan
Off. 644-8352, Res. 646-8512

"A Patch of Green"

31823 Utica Road, Fraser, Michigan 48026
(313) 293-3540

Published monthly by the Michigan and
Border Cities Golf Course Superintendents
Association

Circulation 1,250

Ted Woehrle, Oakland Hills C.C.
Clem Wolfrom, Detroit Golf Club

Co-Editors

Blakeman Publications
Graphic Arts/Circulation

ADVERTISING RATES

Double Page Spread.....	\$ 100.00
Back Outside Page.....	65.00
Full Page.....	55.00
Half Page.....	35.00
Quarter Page.....	25.00
Eighth Page.....	12.50
Sixteenth Page.....	7.50
Classified Ad (per inch).....	5.00

DISCOUNT RATES

One Year 10 %

**THIS MONTH'S
ADVERTISERS**

Century Supply Corporation
Chemagro Division of Baychem
Chipman Division of Rhodia
W. A. Cleary Corporation
Cowbell Seeds, Inc.
J.J. Dill Company
Lakeshore Equipment & Supply Co.
Lawn Equipment Corporation
Lebanon/Agrico
W.F. Miller Garden
O.M. Scott & Sons Company
Sprinkler Irrigation Supply
Terminal Sales Corporation
Turfgrass, Inc.
Turf Supplies, Inc.
USS Agri-Chemicals
Wilkie Turf Equipment Company

The President's Message

The 46th Annual Turfgrass Conference and Show held in New Orleans, Louisiana, February 16-21, 1975, was another fine tribute to our profession.

Although the total registrations were down from last year, we had more Superintendents registered than any other year. It seems the commercial people in attendance this year was far less than last, resulting in a lower total attendance.

My personal congratulations to the members from Michigan who attended, for we had a fine representation at the Show.

New Orleans Conference a Success

Over 4,800 golf oriented registrants attended the 46th International Turfgrass Conference and Show. This was below the 5,000 registrants last year in Anaheim, but figures indicate that more golf course Superintendents attended this show than at any other conference in our history.

The new concept of offering seminars in Management and Pesticide Usage was received by a great number of Superintendents as the greatest thing in Education that has happened to the Association.

Thirty members took the Certification exam while in attendance at the Conference. The results are not final yet but it looks like three Michigan and Border Superintendents passed the exam.

The split sessions were well received by the membership as was the golf course tours on Friday.

Maybe it wasn't planned that way, but American ends in "I can".

Once again our Hospitality Room was a rewarding effort. It seems each year this room gains in popularity. A special thanks to all the members who donated their time to help with the staffing of this room, and also to everyone who contributed money, especially the Western Michigan G.C.S.A. for their fine donation. Bob & Jackie Hope, Gene & Barb Johanningsmeier, are to be thanked for a fine job in managing the room. I would also like to thank our delegates, George Prieskorn and Bob Hope, for representing our association at the advisory meetings and also the voting booth. Although Ted Woehrle was defeated in his bid for Vice-President of G.C.S.A.A., prospects for victory next year are very promising. Good Luck, Ted.

The Annual Golf Tournament this year was won by, who else, our own Michigan foursome composed of Fritz McMullin, Ward Swanson, George and Bob Prieskorn. Congratulations, Fellas! Bob Prieskorn also won the Seniors tournament. Nice going, Bob! So once again, thanks to everyone for enabling us to have another successful convention.

President,
Jerry Gill

LAKESHORE

EQUIPMENT & SUPPLY CO.

DISTRIBUTOR & FORMULATOR
GRASS SEED - FERTILIZERS
INSECTICIDES - FUNGICIDES - HERBICIDES
REPLACEMENT MOWER PARTS
REPLACEMENT TIRES
LESCO Products

Price Quotation On Request

CALL OUR NEW OFFICE

300 So. Abbe Rd., Elyria, Ohio 44035
(216) 323-7544

MICHIGAN CUSTOMERS
Call Toll Free: (800) 321-7423



Dr. Fanny Fern Davis, 1975 USGA Green Section Award Recipient with (left) H. S. Semple, USGA President and E. S. Jennison, Jr., Green Section Committee Chairman.

First Woman Receives Green Section Award

Dr. Fanny Fern Davis, Valparaiso, Fla., has been named recipient of the 1975 USGA Green Section Award, presented in recognition of distinguished service to golf through work with turfgrass.

Davis is the first woman to receive the award, which was first presented in 1961. Over the years, she has made important contributions in the field of turfgrass and has had close ties with the USGA Green Section.

She was acting director of the Green Section from 1943 until late 1945 while director John Monteith was serving in the Army during World War II. During this time, Davis conducted experiments with plant growth regulators in cooperation with John W. Mitchell and Paul C. Marth, who were then employed by the U. S. Department of Agriculture at its plant industry station at Beltsville, Md.

They noticed during their experiments that the grass around the area where they had used the hormone-type herbicide 2,4-D was free of weeds. Together they published the paper

"Turf and Weed Control with Plant Growth Regulators," and their work led to widespread use of 2,4-D.

When Davis left the Green Section, she returned to the Horticulture and Maintenance Division of the National Capital Parks Service, a part of the Department of the Interior. She conducted more tests and did a complete study on the effects of 2,4-D and published her findings in the paper "Turf Weed Control with 2,4-D."

Although 72 years old, Davis remains active. She is chairman emeritus in biology at Okaloosa-Walton Junior College in Niceville, Fla.

Davis accepted the award Jan. 24 at the USGA's Annual Conference on Golf Course Management at the Biltmore Hotel in New York City.

Past recipients of the Green Section Award are John Monteith, Jr., Lawrence S. Dickinson, O.J. Noer, Joseph Valentine, Glenn W. Burton, Elmer J. Michael, James L. Haines, Fred V. Grau, E. R. Steiniger, Tom Mascaro, Herb and Joe Graffis, Marvin Ferguson and Howard B. Sprague.



OUR CHAMPS: Left to Right; Fritz McMullen, Ward Swanson, George Prieskorn, Bob Prieskorn (holding his Seniors Trophy also).

MBCGCSA Chapter Crowned GCSAA Golf Champs

Our Chapter Golf Team, comprised of George Prieskorn, Captain; Fritz McMullen; Bob Prieskorn; and Ward Swanson participated in the annual golf tournament which was held in Pensacola, Florida the week before the Conference and won the title by 12 strokes.

Congratulations to these fine golfers. We're proud of you.

Bob Prieskorn also won the Seniors Championship. This is becoming old hat for Bob. This make at least four times since I joined the Chapter in 1968.

Our Chapter golf teams have always done well in this event. Maybe one of our members will win the individual Low Grass Championship next year.

George Prieskorn is Superintendent of the Burroughs Farms Golf Club in Brighton, Michigan; Fritz McMullen is Superintendent of Forest Lake C.C. in Bloomfield Hills, Michigan; Ward Swanson is Superintendent of Plum Hollow C.C. in Southfield, Michigan; and Bob Prieskorn is Superintendent of Godwin Glen Golf Club, South Lyon, Michigan.

***No synthetically produced fertilizer can compare with
MILORGANITE***

Golf Courses Use More

MILORGANITE

Than Any Other Fertilizer



TERMINAL SALES CORP.

12871 EATON AVE.
DETROIT, MICH. 48227
(313) 491-0606

CHIPCO the most effective arsenal ever assembled to protect your turf

- Chipco Spot Kleen
- Chipco Microgreen Liquid
- Chipco Turf Herbicide "D"
- Chipco Spreader Activator
- Chipco Thiram 75
- Chipco Crab Kleen
- Chipco Turf Herbicide MCPP
- Chipco Buctril
- Chipco Turf Kleen



RHODIA INCORPORATED
AGRICULTURAL DIVISION
Somerset, New Jersey 08873

Palmer Maples Elected President of GCSAA



Palmer Maples

Palmer Maples, Superintendent of The Standard Club, Atlanta, Georgia, was elected the 39th President of the Golf Course Superintendent's Association of America at the 46th International Conference and Show held in New Orleans, February 16-20, 1975.

Richard Malpass, Superintendent of the Riverside Golf and Country Club, Portland, Oregon, was elected Vice President.

George Cleaver, Superintendent of Chestnut Ridge C.C., Lutherville, Md., and Gordon Witteveen, Superintendent of the Board of Trade C.C., Woodbridge, Ontario, Canada, were reelected to the Board for another two year term.

Louis Haines, Superintendent of Denver C.C., Denver, Colorado, was the only newly elected Director added to the Board.

President Maples appointed George Cleaver to his second term as Secretary Treasurer.

Michigan Turfgrass FIELD DAY

June 24, 1975

CROP SCIENCE FIELD LAB
Michigan State University
EAST LANSING, MICHIGAN

Contact:

Jeffery V. Krans, Turfgrass Ext. Assoc.
Department of Crop & Soil Sciences
Michigan State University
East Lansing, Michigan 48824

Add **®NEMACUR** to the growing line of high-performance Chemagro pesticides that help keep your turf in top playing condition

NEMACUR 15% Granular is a fast-acting nematicide that provides months of residual control of all major turf nematodes. Requires no injection—apply with a granular applicator and water in.

®DYRENE fungicide. DYRENE controls dollar spot, plus all *Helminthosporium* diseases—melting out, leaf blight, leaf spot. Also controls copper spot, stem rust, brown patch and snow mold. Its small cost offsets the big cost of repairing after disease gets started.

®DEXON fungicide. Stops *Pythium*. This non-mercurial fungicide is also extremely effective in preventive programs to control cottony blight. It's compatible with other turf pesticides.

®DASANIT nematicide/insecticide. Broadcast DASANIT 15% Granular for control of microscopic "eel-worm" nematodes that destroy turf root systems, cause grass seedlings to wither and die. Requires no injection

that makes turf unplayable for weeks during spring and summer. Easily applied with any conventional granular insecticide applicator. Thorough watering leaches insecticide into root zone for maximum control.

®DYLOX insecticide. The fast-acting selective insecticide gives quick clean-up of sod webworms. Dissolves readily in water for application with any type of spray equipment.

®BAYGON insecticide. A carbamate insecticide that controls turf insects, including many species resistant to chlorinated hydrocarbon and organophosphate insecticides. Safe to Bermuda, zoysia, rye, clover, colonial bentgrass and other common varieties when used as directed.

For great turf that gives your golfers great shooting, order these Chemagro turf pesticides from your chemical distributor.

Chemagro Agricultural Division, Mobay Chemical Corporation, Box 4913, Kansas City, Missouri 64120. 7559B

RESPONSEability to you and nature

THE GROWING LINE FOR FINE TURF



1975 GCSAA Distinguished Service Awards

Three Named for GCSAA's Highest Honor

Raymond H. Gerber, Dr. William H. Daniel and Dr. Fred V. Grau have been named recipients of the 1975 GCSAA Distinguished Service Award, the greatest tribute the Association can bestow upon an individual. The selection was made by the Executive Committee at its Fall meeting, after the Public Relations and Awards Committee had received a total of nine candidate nominations.

Selected for their outstanding individual service to the profession, they were formally recognized at the opening assembly of the GCSAA Conference and Show, Monday morning, February 17, in New Orleans.

The following citations were presented by the Awards Committee in defense of the nominations for each individual.

MR. GERBER was selected in a general category of contribution to the profession. He has spent many years as a golf course superintendent, is a Past President of GCSAA, and has served in offices in local chapters and turf foundations. He continues to remain interested in our profession and to be an active participant in its affairs even after he has retired.

DR. DANIEL was selected for his contribution through education and extension work in the golf turf industry. Dr. Daniel has helped to educate many turf students who subsequently became superintendents or who have contributed to the education of superintendents. He has inspired many young men as a result of his close personal contact with his students. He has always been a willing participant on programs on the local, state, regional or national level. He has always made himself available to answer calls for help from superintendents who may find themselves in difficult situations. He has authored many articles and papers as well as contributing many new innovations to the field of golf turf management.

DR. GRAU was selected for his contribution through his promotion and participation in research programs dating back many years. His work with the USDA, the USGA Green Section, various universities and several commercial interests has resulted in many improved tools of our trade which have enhanced the progress of our profession. He has always tried to

Continued on Page 13



Helping the superintendent through turf research...

- Controlled Release Fertilizers
- Fertilizer/Pesticide Combinations

- Fungicides—Herbicides—Insecticides
- Soil Testing—Weed & Disease Identification

SCOTTS • LELY • GANDY SPREADERS

Finest quality turfgrass seed—Fairways • Greens • Tees • Roughs
Scotts Windsor and Victa blends

Ted Mulcahey

Technical Representative
7205 S. Jennings Road
Swartz Creek, Mich. 48478
Telephone: 313/655-4702



TOROWORKMASTER

HEAVY DUTY INDUSTRIAL-QUALITY HYDROSTATIC DRIVE gives infinite speed control, instant forward/reverse, high torque to rear wheels for drawbar pull that surpasses competition. It's a closed, self-lubricating drive system as in our Sand Pro and Groundsmaster 72. No gears to change, no clutch to slip.

UP-FRONT SEATING FOR TWO, with passenger safety grip handle, means safe, comfortable seating for operator and passenger.

EASY ACCESS TO ALL COMPONENTS saves maintenance time. You don't have to empty the box to get at the battery. All frequently serviced parts are easy to get at.

STANDARD BOX SIZE carries existing engine-driven top dressers, sprayers, mowers and other maintenance equipment.

AUTOMOTIVE CONTROLS AND MORE LEG ROOM FOR OPERATOR helps reduce learning time, give greater security and comfort than competitive machines.

LOWER CENTER OF GRAVITY - long wheel base; low box bed-height gives greater safety and stability, reduces lifting.

SPRING SUSPENSION, SHOCK ABSORBERS ON ALL WHEELS, provides comfortable ride. Easily carries 1000 lb. payload.

OVERSIZE 23 X 8.50 X 12 REAR TIRES give the WORKMASTER a soft footprint, excellent traction, for greater hill climbing ability and sidehill stability.

WILKIE TURF Equipment Company

1050 OPDYKE ROAD PONTIAC, MICHIGAN 48057

(313) 373-8800

NOW IS THE TIME TO PLAN YOUR SPRING NEEDS!

Do you need:

Compression Couplings?

Repair Clamps?

Buckner® Parts?

We stock for your irrigation needs.

GIVE US A CALL!

Sprinkler Irrigation Supply Company
Division of A. J. Miller, Inc., 1316 N. Campbell Rd.,
Royal Oak, Mich. 48067, (313) 398-2233
Chicago (312) 629-7730



ARE YOU INTERESTED IN JOINING THE MICHIGAN AND BORDER CITIES GOLF COURSE SUPERINTENDENTS ASSOCIATION?

Fill in the questionnaire below and mail to:



BOB HOPE
The Lochmoor Club
20740 Marter Road
Grosse Pointe Woods, Mi. 48236
Off. 881-8112, Res. 884-8684



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.

George Prieskorn Thanks MBCGCSA Membership

On behalf of the Michigan Turfgrass Foundation may I express our sincere appreciation for the contribution of \$8001.63 from the Michigan & Border Cities Golf Course Superintendents Association.

GCSAA Awards Cont.

inspire the superintendent to improve himself professionally. He continues to be active in contributing toward the advancement of our profession despite many personal adversities.

To be considered for this award, an individual must first meet the basic criteria of having made an outstanding contribution to the advancement of the profession which can be judged significant on a national or international basis, and he must not have received the award during the preceding 10 years.

There were no Distinguished Service Awards presented for 1974.

The Michigan Turfgrass Foundation presently is investing this money along with your past gifts, a total that now exceeds \$60,000.00, to be used for the purchase of necessary research equipment for the Turfgrass Wing of the planned new Crop and Soil Science Building at Michigan State University.

The planning of this building is currently in its final stages, reports from the Dean of Agriculture indicate that construction could possibly begin this year or next.

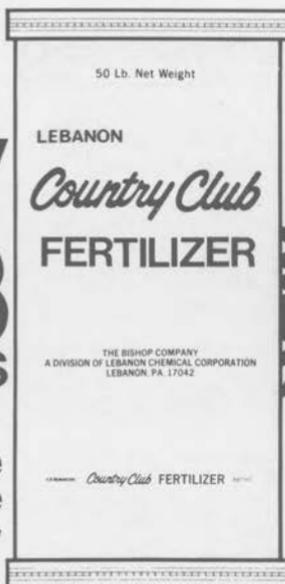
Again, congratulations to the Michigan & Border Cities Golf Course Superintendents Association on their successful Ninth Annual Turfgrass Benefit Day and many thanks for your continued support of the Michigan Turfgrass Foundation.

Sincerely,
George W. Prieskorn
President



COUNTRY CLUB
TURF PRODUCTS

**A New Outside
Appearance - Same
Dependable Quality
Inside**



*Good Names To
Grow By*

Call your Country Club Distributor
or James L. Camp, (219) 485-6828.

Use of "low grade" sewage sludge

The use of digested (non-activated) sewage sludge has in the past hardly been considered worth the cost of hauling. However, with fertilizer being scarce and higher priced and organic matter commanding a high trucking cost, this so called low grade material with one to three percent nitrogen and high in organic matter is taking on a new value, and may soon be removed from the "outcast" list. In addition to nitrogen, a nice amount of phosphorus is present along with small quantities of potassium and various trace elements.

Sludge is to be found in the sanitary disposal plants of many cities and towns and the number is increasing as federal requirements and assistance increases. Disposal for the cities is a problem, so the stage is set for rather easy procurement.

Probably the best method for using the sludge will be as an organic component of topdressing material. It can be substituted for a part of the peat ordinarily used. However, it would serve as both a fertilizer and as organic matter.

A reasonable assumption can be made that you could obtain from two to three pounds of nitrogen and adequate phosphorus for each 1000 sq. ft. of

area with a mixture by volume of 80 parts sand and soil, 10 to 20 parts of the sludge, with up to 10 parts of peat. This would be applied four to 8 times annually depending on the analysis of the sludge and the mixture to be used. This may all seem like quite a chore but the results may prove worthwhile enough to convince you of its value. We need more information on the value of sludge as an organic source and on the amount of minor elements and the possibility of toxicity on a long run basis. There should be no problem in using the material for two or three years until it has been tested for further analytical makeup.

The basic steps in getting a project of this kind underway may be as follows:

1. Call or contact your nearest or most likely source (city, town, county sewer department).

2. If available and price is reasonable have the material hauled to you. Place in a six to eight inch layer if possible.

3. Rototill a few times to break the "cake" and assist in drying. You may prefer to stockpile it and run it through a Royer or Lindig. Regardless, the sludge should be as dry as the soil or peat for final mixing.

Cont. Page 18

TURFGRASS SPECIALISTS

TWO COMPLETE SEED INVENTORIES

Merion
Baron
Winter
Green

Fylking
Nugget
Norlea

Cowbell

WAYLAND
MICHIGAN
49348

BRIGHTON
MICHIGAN
48116

GOLD TAG
SEED QUALITY
BLENDS

*Special Mixes
for your
particular need*

COWBELL SEEDS, INCORPORATED

TELEPHONE
WAYLAND 616-792-2241

BRIGHTON 313-229-6169
GRAND RAPIDS 616-877-4614

From one pro to another



WRITE FOR COMPLETE SPECIFICATION SHEETS



Agri-Chemicals

Division of United States Steel

P.O. Box 1685, Atlanta, Ga. 30301

Overgrooming is overspending . . .



Last month's author of "Overgrooming is Overspending", Paul Vogkin, standing in a bunker at Santa Rosa CC, Pensacola, Florida, depicting the type of work he is advocating.



clean water products.

3M
COMPANY

ENVIRONMENTAL PRODUCTS

MARINER Brand
Aquatic Herbicide and
Algicide Products

for
further information
contact:



TURFGRASS, INC.

Phone: Area 313 437-1427

from the 'CONNECTICUT CLIPPINGS'

De-icing Salt Severely Damages Key Element in Life of Maple Trees

Deicing salts spread on highways in winter have been found to cause severe damage to the mycorrhizae of roadside sugar maple trees.

Mycorrhizae — key to plant life — are the symbiotic association of certain fungi with the roots of plants.

This finding was reported at the recent Second North American Conference on Mycorrhizae held at Corvallis, Oregon, by Dr. A. J. R. Guttay, head of the plant science department of the University of Connecticut.

He said that such trees, showing extreme dieback of the top growth and leaf scorch, were generally found to have mycorrhizal roots in the top six inches of soil. In addition, other symptoms of salt damage were early leaf coloration and leaf fall. In contrast, healthy sugar maples were heavily mycorrhizal right to the soil surface.

Dr. Guttay, who studied the complex role of mycorrhizae in plants while on sabbatic leave last fall, stated that destruction of the mycorrhizae — the prime feeder roots of the trees — amounted to a severe root pruning. The remaining deeper roots were unable to sustain the trees with resultant dieback of the crown.

As for leaf scorch and other leaf damage, he believed that these occurred after destruction of the mycorrhizae. His research showed that massive uptake of salts to the leaves did not occur until after mycorrhizae were destroyed.

Additionally, the UConn plant scientist noted that deicing salts had generally destroyed the soil structure around the tree. The soil was so hard and compact and retained sufficient sodium that he doubted the tree roots

**Cleary
Products for
Better
Turf**

Fungicides

3336 Turf Fungicide

A broad spectrum systemic fungicide that prevents and controls all six major turf diseases.

Bromosan Turf Fungicide

The newest broad spectrum systemic fungicide for those persistent trouble areas.

- Caddy
- Granular Turf Fungicide
- PMAS (10%)
- Cad-Trete
- Spotrete

Herbicides

MCPP

MCPP Plus 2,4-D

Methar 80

Methar 30

AMA Plus 2,4-D

AMA (Super Methar)

Specialties

All Wet

Clear Spray

Tru-Green

Grass-Greenzit

W-A-CLEARY

CORPORATION

P.O. Box 10, Somerset, N.J. 08873

TURF SUPPLIES INC.

6900 Pardee Rd., Taylor, Michigan
(313) 291-1200

DON'T EVEN THINK
OF BUYING

GRASS SEED
FERTILIZERS
FUNGICIDES

WITHOUT CALLING

291-1200

TURF SUPPLIES INC.

6900 Pardee Rd., Taylor, Michigan
(313) 291-1200

"Your Best Bet"

for

IRRIGATION SPRINKLER SUPPLIES

**RAINBIRD - NELSON - SAFET-LAWN
BUCKNER - MOODY - SKINNER**

PIPE & FITTINGS

- PVC - Sewer & Drain (Corr)
- Polyethylene - Galvanized
- Copper - Aluminum

PUMPS AND PUMPING STATIONS

COMPLETE IRRIGATION

- Systems Design
- Specifications
- Budget Estimates

Century Rain Aid

WHOLESALE DISTRIBUTORS

CENTURY SUPPLY CORP.	RAIN-AID DIV.
3890 W. Eleven Mile Rd.	22159 Telegraph Rd.
Berkley, Mi. 48072	Southfield, Mi. 48075
(313) 543-7730	(313) 356-9137

could grow back into that soil, even if no further salts were applied.

Dr. Guttay felt that on severely damaged trees the only possible solution was to remove the compact, salt polluted, root-free soil and replace it with leaf compost.

He recommended the use of leaf compost, since the continued deicing operations necessary to safe winter driving conditions would have a lesser detrimental effect upon compost than on soil.

He added that a mulch of wood chips placed on top of the compost would improve the esthetics of the compost as well as provide protection from erosion.

Sewage Sludge Cont.

4. Mix the sludge with the sand, soil and peat (if peat is used) prior to the time of topdressing application, if at all possible. Aging or composting of the mixture makes a better topdressing.

5. Place the mixture on the green tee or wherever it is to be used.

There are many other possibilities here and you will be getting more information about sludge during the coming year. In the meantime you may be able to obtain enough nitrogen for much of your needs with a minimum of extra cost, and perhaps at an actual saving to you.



the Hahn Flex-A-Matic 140^{T.M.} Not your ordinary gang.



Hahn

TURF PRODUCTS

You get a well-manicured turf every-time, everywhere with the **HAHN FLEX-A-MATIC 140**. You also get a big cutting width of 11' 8" . . . and a unit that can turn in a 45" radius. The **FLEX-A-MATIC** can dart in and out between trees like a riding mower . . . and it's powerful enough to cut on steep slopes.

Plus the **FLEX-A-MATIC 140** features swing up and swing away reel housings . . . cable driven reels . . . independent reel speed . . . and superb visibility of all cutting reels.

Test ride the **FLEX-A-MATIC 140** at **Lawn Equipment Corporation**.
Call (313) 398-3636 for a demonstration.



LAWN EQUIPMENT CORPORATION

520 W. 11 MILE ROAD ROYAL OAK, MICH. 48068
TELEPHONE: 313-398-3636



MARTY J. 1648 RIDING MOWER

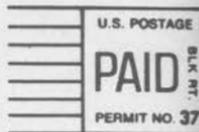
- MANUAL LIFT HEADER
- ZERO TURNING RADIUS
- 0-5 1/2 MPH FORWARD OR REVERSE
- FRONT DRIVE
- SNOW THROWER, DOZER & VACUUM COLLECTOR ATTACH. AVAILABLE.
- 1 CYL., 16 HP ENGINE
- 12 VOLT, ELECTRIC START
- 48" CUTTING SWATH
- DUAL HYDROSTATIC TRANSMISSION

CALL W.F. MILLER FOR A DEMONSTRATION.

W.F. Miller Garden & Lawn
Equipment Corporation

1593 S. WOODWARD AVE. BIRMINGHAM, MICHIGAN 48011
TELEPHONE: (313) 647-7700

"A Patch of Green"
31823 UTICA ROAD
FRASER, MICHIGAN 48026



MICHIGAN STATE UNIVERSITY
LIBRARY - SERIALS
E. LANSING, MI. 48823