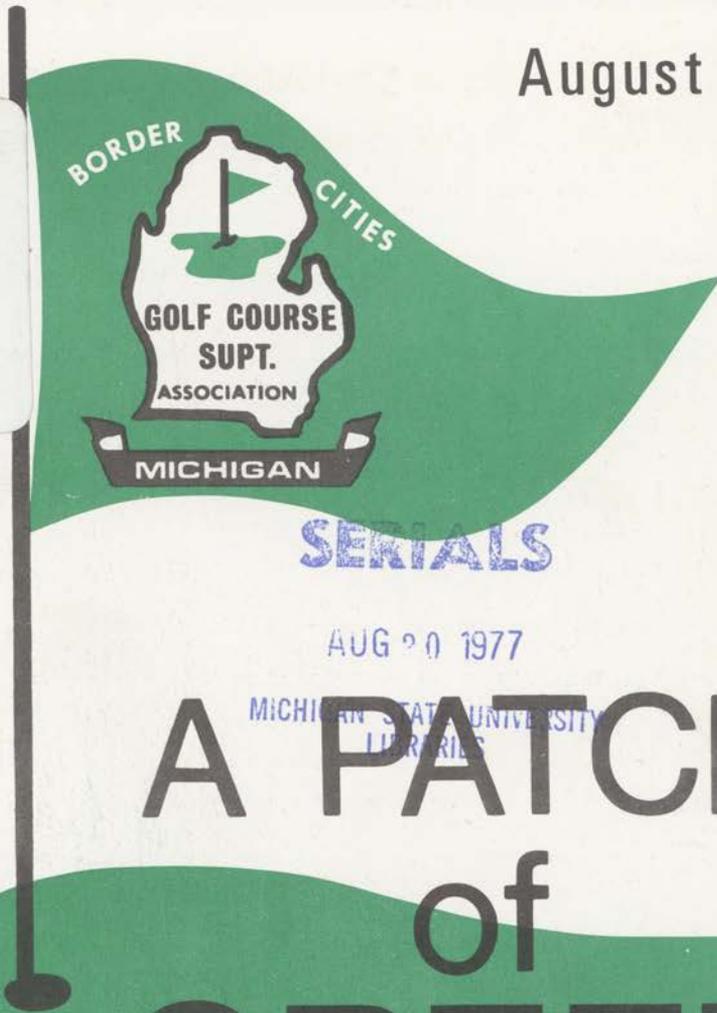


August 1977



V  
75  
A  
B  
Aug. 77

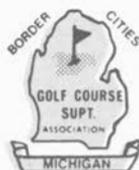
SERIALS

AUG 20 1977

MICHIGAN STATE UNIVERSITY  
LIBRARIES

# A PATCH of GREEN

Official Publication of the  
Michigan & Border Cities Golf Course Superintendents Association



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

**PRESIDENT**

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

**VICE PRESIDENT**

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

**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**

JAY DELCAMP  
GOWANIE GOLF CLUB  
19957 Great Oaks Circle South  
Mt. Clemens, Michigan 48043  
Off. 468-1432, Res. 791-8481

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

WARD SWANSON  
PLUM HOLLOW GOLF CLUB  
29642 Westfield  
Livonia, Michigan 48150  
Off. 352-2436, Res. 421-8049

JAMES TIMMERMAN  
ORCHARD LAKE COUNTRY CLUB  
2474 Lafay  
Orchard Lake, Michigan 48033  
Off. 682-2150, Res. 682-7234

WALTER TROMBLEY, CGCS  
ARROWHEAD GOLF CLUB  
3130 Orion Road  
Lake Orion, Michigan 48035  
Off. 373-5240, Res. 693-2924

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

**PRESIDENT EMERITUS**

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

**"A PATCH OF GREEN"**

*Published monthly by the*  
**MICHIGAN AND BORDER CITIES GOLF  
COURSE SUPERINTENDENTS ASSOCIATION**

Circulation: 1,250

Ted Woehrlé, CGCS, Oakland Hills C.C.  
James Timmerman, Orchard Lakes C.C.  
**CO-EDITORS**

*Printed At*

**BLAKEMAN PRINTING COMPANY**  
31823 Utica Road  
Fraser, Michigan 48026  
Phone: (313) 293-3540

**MONTHLY 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 column inch).....	5.00

DISCOUNT RATE: One Year 10%

Note: Advertising fees may not be deducted  
from the above rates.

*This Month's  
Advertisers...*

Century Supply Corporation  
W. A. Cleary Chemical Corp.  
FDS Fertilizers, Inc.  
Gregory H. Dent  
Golf Car Distributors  
Howell Farm Tree Nursery  
Lakeshore Equipment Corporation  
Lawn Equipment Corporation  
Lebanon/Agrico  
W. F. Miller Garden  
Northrup King & Co.  
O. M. Scott & Sons Company  
Sprinkler Irrigation Supply  
Terminal Sales Corporation  
Turfgrass, Inc.  
Turf Supplies, Inc.  
USS Agri-Chemicals  
Wilkie Turf Equipment Company

# Ask your Northrup King man what to do about traffic and he might start you on Parade.

Northrup King is a primary distributor of Parade Kentucky Bluegrass, a vigorous, remarkably wear-tolerant variety that provides rapid recovery from damage.

So if you've got a traffic problem and you ask your Northrup King man what to do about it, he might recommend Parade.

On the other hand, he might not. He might recommend another variety — or a blend or a custom blend—that will perform better under your particular circumstances.

That's the beauty of talking with a Northrup King man. He's not committed to any one approach. He's committed to finding the best solution to a given problem.

If that sounds good to you, write for the name of your Northrup King representative or distributor. He won't put you on Parade or anything else until he thoroughly understands your problem.



**NORTHROP KING CO.**  
80X 959 • MINNEAPOLIS, MINNESOTA 55440



# USS Vertagreen Fall Fairway Fertilizer... We'll help winterize your fairways!



Hit the fairways this fall with an application of this great new USS Vertagreen fertilizer and you're on your way to fewer turf problems next spring. This quality product is ideal for fall fairway fertilization because it has a high potash analysis ...and that means less winter kill.

A soil test in the late summer or early fall will determine if

your fairways lack this vital nutrient. If they do, USS Vertagreen Fall Fairway Fertilizer is the answer because it's formulated with primary nutrients specifically for your area. See your USS Vertagreen distributor and he'll show you how to winterize your fairways this fall. Next spring you'll be glad you did.



**Agri-Chemicals**  
Division of United States Steel  
P.O. Box 1685, Atlanta, Ga. 30301

# Thoughts From One Superintendent's Wife - To Another -

by CAROLINE C. TWOMBLY\*

I have been talking about executive's wives for 35 years. Now that I am to put these thoughts on paper, I am not at all sure it is a good idea, but I am sure that every executive's wife reading this will be certain it does not apply to her.

I have worked in electricity and electronics for 30 years while my husband worked in another profession. Through the years I met many executive's wives from all areas of the business world. I met far too few who really understood or wanted to understand what their husband's job was, what abilities he had to have to stay in that position, what it required of him or how it affected him mentally or physically. The greatest percentage of women were mainly interested in the social level his salary permitted. What he did interested them only to the point of how many days off he could take and when he would have his next vacation.

I've been married to the same man for 49 years. Thirty-eight of those years he has been a golf course

superintendent. This is why I am interested in the wives of golf course superintendents. There are some who think that, because their husband is a golf course superintendent, they are not an executive's wife? They are very wrong!

Webster's dictionary defines "executive" as any person or body charged with administrative or executive work. Your husband and mine are executives, but the caliber of the executive is up to you and him. Club members, other superintendents, officials from other areas of the golf world, club managers, golf professionals, salesmen and even his own workers look at the things he does and listen to what he says and judge the type of executive he is. If he is assured and self-confident, dedicated to his club and the personnel, they then know he has an understanding wife. His willingness to stay for an unexpected meeting or to deal with a sudden problem; his always-on-time record; his ability to return to the club in the evening or on a day off to straighten out some major problem; all of these show your love and concern

Continued on Next Page

\*Caroline Twombly is the wife of Ardyce Twombly, Superintendent of Bel Air Country Club in Los Angeles.

**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

for him, your understanding, your ability to adjust your life to the demands of his job.

If he is anything but assured and self-confident, chances are his wife is not understanding and he is torn between two loves. He is never sure how his wife is going to accept the demands of his position, neither is he sure how the club is going to accept the demands his wife makes on him. He tries to balance the two but rarely succeeds.

It is to this group of wives I address myself. Fortunately, they are in the minority.

When he shows an unwillingness to stay for any unexpected problem or meeting, or if he does stay, has anxiety to leave as soon as possible, he demonstrates a lack of understanding at home. His tendency to call on one of his men to take care of a problem that you lack concern for what happens to the club, its property or its equipment. Acres of very valuable land and thousands of dollars worth of equipment are entrusted to *his* care, not to one of the workers on the course.

He does love his work. If he did not, he would be doing something else. He loves you and wants to make the best living he can for you. You say he has competent help and he does, but if any one of those men were as competent as he, he would be superintendent, not your husband.

A wife must remember that chinch bugs, beetles and worms have no respect for what you might want to do. The insects are hungry and their one object is to eat as much as they can before they are discovered. Disease strikes any time conditions are right

and it has no regard for what you have planned. Of course the summer rains are needed, but your husband didn't ask for them to come down in torrents to wash out sand buckers, stand in puddles all over his golf course and, when the sun comes out, cook his grass like spinach. Summer downpours have also been known to wash out newly seeded areas and destroy important construction work he has started. Plans must often be changed.

Our men, the superintendents, are almost in the genius class. They are doctors who identify and cure diseases of the grass; entomologists who identify and destroy the insects and worms, part-time lawyers who know the legal codes of town, city, county, state and federal governments regarding electricity, gas, gasoline and noise levels. They must know what, how much and how often different chemicals can be used, labor laws and building codes. They are engineers, for they must rebuild or construct greens, tees, fairways, bridges, cart paths and in some cases buildings. They are diplomats maintaining good relations with their members, club officials, their employees, other superintendents, salesmen and various groups within their professional sphere.

Our men are great people but to be at their best, they need our understanding and our cooperation. Your man may need to release tension by talking to you. He isn't really asking for advice, just for the one he loves to listen to him. Often problems resolve themselves just by talking about them. He needs to know you love him and that you understand that he loves you. You may not understand his problems and be able to give advice, but if you don't listen, you never will understand that it is his self-respect, his integrity and his desire to make the best living he can for you that keeps him on the job when you want him home.

MIDWEST TURF FIELD DAY  
26 SEPT. 77  
PURDUE UNIVERSITY  
LAFAYETTE, IND 47907  
W.H. DANIEL & R.P. FREEBORG



**FORE-PAR MANUFACTURING  
CHICOPEE MANUFACTURING CO.  
3M ENVIRONMENTAL PRODUCTS  
AGRICO FERTILIZERS  
FOX VALLEY MARKING SYSTEMS  
E. I. DUPONT**

**ACTI-DIONE PRODUCTS  
VELSICOL CHEMICALS  
CONTAINER DEVELOPMENT  
CYCLONE SEEDER COMPANY  
MALLINCKRODT CHEMICALS**

- DISTRIBUTED BY -



**TURFCRASS, INC.**

Phone: Area 313 437-1427

## Gowanie Golf Club Meeting

Gowanie Golf Club was the site of the June 28, 1977 meeting of the MBCGCSA. Despite some very hot, muggy weather, Host Superintendent, Jay Delcamp, had the golf course in excellent playing condition.

The golf portion of the meeting was highlighted by a fine 73 shot by Chris Meyer, Superintendent, Bloomfield Hills C.C. This should lower the handicap sharply. If Chris keeps this up, we may have another candidate for the golf team.

Our guest speaker for the evening was Henry Lyons, representative of the Upjohn Company. Henry's talk was part of his salesmanship series entitled "The Art of Effective Listening."

One of the main points brought out was that we as individuals can listen much faster than people talk and, therefore, we get bored and are easily

distracted. The key then to becoming better listeners is to improve our concentration. A good exercise proposed by Henry was to listen intently for just one minute to a speaker. You'll be surprised at how much you'll absorb.

### SCHEDULED MEETINGS - 1977

- September 12 or 13, 1977  
Forest Lake Country Club
- September 19, 1977  
GOLF DAY
- October 4, 1977  
Maple Lane Golf Club
- October 25, 1977  
Rochester Golf Club

# Preparing Turf to Survive a Drought

by VICTOR A. GIBEAULT

Many western turfgrass facilities will face a serious water deficit this summer. The extremely dry winter of 1976-77 has resulted in a reduced snow pack, limited reservoir supplies, and an overdraft of groundwater in many western states. Most water districts, agencies, and elected officials today are still only talking about water conservation urging voluntary reductions in water use. However, some water districts already have imposed mandatory water rationing, and in those areas the situation throughout the summer can only worsen. Therefore, it is essential for turf managers in drought-affected locales to know what their water supplies will be for the summer months and to plan accordingly.

Under normal conditions, planning for summer irrigation usually consists of ensuring that the irrigation budget will be adequate, performing preventative maintenance on the irrigation system, and then irrigating "as needed." This year, planning also must include methods to increase irrigation efficiency by modifying management practices and, in some instances, redesigning the area for selective survival of turf.

## *Drought Tolerance*

One of the first questions that must be answered in an impending dry year is the drought tolerance of the various commonly used grass species. To produce a quality sward, all turfgrasses require applied water or rainfall in amounts equal to or greater than the water they use and lose through evapotranspiration in a given time. When drought conditions exist and total water application is less than evapotranspiration or is eliminated, grasses do differ in their responses to these conditions. Turfgrasses

commonly used are ranked according to their drought tolerance in Table 1.

TABLE 1. The comparative drought tolerance of commonly used turfgrasses (6).

Good Drought Tolerance	↑	Improved bermuda
		Zoysia
		Common bermuda
		Tall fescue
		Red fescue
		Kentucky bluegrass
		Meadow fescue
		St. Augustine
		Colonial bent
		Creeping bent
Poor Drought Tolerance	↓	

In general, warm-season or subtropical grasses are more drought tolerant than cool-season or temperate grasses. Grasses with deep root systems have better drought tolerance than shallow-rooted grasses. Bermuda and zoysia, for example, frequently have root systems that penetrate 6 to 8 feet deep, providing them with a tremendous soil water reservoir for plant growth and survival. In contrast, well-maintained Kentucky bluegrass has a 6 to 12-inch root system and closely mowed creeping bentgrass a 2 to 6-inch root system.

In a study at the University of California, Davis, Dr. John Madison (3) removed all irrigation from selected turf plots for 120 days. Thereafter, he resumed normal watering and observed the recovery of various turf species. Under his conditions, he found that bermuda, zoysia, and tall fescue recovered well in 15 days. "Highland" bent recovered in five months, while Kentucky bluegrass and red fescue showed poor recovery. Note that the deepest rooted species recovered fastest. There are limits to the drought tolerance of each species beyond which the grass sward will not survive, as was evident from the Kentucky bluegrass and red fescue plots.

Madison concluded that there is a "high genetic potential for drought

Continued on Page 10

# SHADE TREES

NURSERY REDUCTION INVENTORY SALE  
- PERFECT SPECIMENS -

	2"	2½"
EMERALD QUEEN MAPLES	\$20.00	\$25.00
COLUMNAR MAPLES	20.00	25.00
SUGAR MAPLES	20.00	25.00
LOCUSTS		29.00

BALLING, BURLAPPING & DELIVERY EXTRA

## HOWELL FARM NURSERY

FOR ADDITIONAL INFORMATION  
CALL

Ward Swanson  
357-4740

Bill Buettner  
(517) 546-8253

### 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



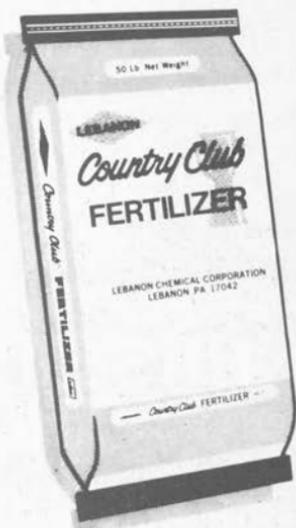
NAME OF INTERESTED PERSON \_\_\_\_\_ DATE \_\_\_\_\_

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.*

# Complete!



That's our coverage and our products

**Country Club** Turf Products  
COUNTRY CLUB fertilizers are balanced to meet the total needs of growing grass. And our pest control products will solve your every problem. Precision sizing makes spreading fast and distribution even.

COUNTRY CLUB products are designed for the professional and sold by your local distributor. Try them - you'll know it's truly the COMPLETE PRODUCT LINE

Sold by:

**James L. Camp**  
**(219) 485-6828**

## Preparing Turf Cont.

tolerance among turfgrass species but it has not been exploited." Fortunately, current research at Colorado State University by Dr. J. Butler is examining the drought tolerance of turfgrass species and varieties as well as the influence of management practices on drought tolerance.

To conclude this discussion, grasses do differ in their drought tolerance, their ability to survive extreme drought conditions is in large part due to their root system depth, and there is a drought limit beyond which sward survival is affected.

### *Review Management Practices*

Mowing, fertilization, irrigation, vertical mowing and coring are the five primary management practices regularly used in turf management. During dry periods, these practices should be evaluated and adjusted in terms of maximizing turfgrass drought tolerance.

With respect to mowing height and frequency, the first consideration must

be the requirements imposed by the use of the facility. Using a golf course for example, a putting green must be maintained in the 3/16- to 5/16- inch height range, a tee slightly higher, and a fairway from 1/2 to 1 1/4 inches depending on player preference and the grass species used. If it becomes necessary to prepare a turfgrass for drought tolerance, increase its cutting height to the highest allowable height within the use-mandated range. This will result in a deeper root system with an increased soil water extraction capability (2). Also, the higher cutting height will shade crowns and soil during periods of high temperature. It should be understood that research (5) indicated the higher cut turf will use more water by evapotranspiration. However, I believe that the deeper root system will result in a stronger plant with a greater water foraging potential and, therefore, greater drought tolerance.

Continued on Page 12

# TORO®

## GROUNDMASTER 52



**A new dimension in riding rotaries: the perfect mid-size mower. Big enough to mow up to 18 acres a day. Maneuverable enough to mow, and trim, an acre or less. Groundmaster 52. With hydrostatic drive and clean, simple engineering all the way. Haven't you done without a new Toro long enough?**

**WILKIE TURF *Equipment Company***

P.O. BOX 749 • PONTIAC, MICHIGAN 48056  
1050 OPDYKE ROAD • PHONE (313) 373-8800

# 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.

**Spectro** A combination contact and systemic which controls dollar spot, copper spot, brown patch, and leaf spot.

- 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 CHEMICAL**  
CORPORATION

1049 Somerset Street, Somerset, NJ 08873  
(201) 247-8000

## 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

## Preparing Turf Cont.

Research has shown (5) that water use increases as mowing frequency increases; therefore, it is best for drought tolerance to mow as infrequently as possible, again within the confines of facility use.

As for a drought tolerance nutritional program, a soil test will indicate needed addition or adjustments of phosphorus, potassium, pH, and salt load for optimum turfgrass growth. Such correction should be made immediately, before temperatures increase. Nitrogen fertilization should be eliminated whenever possible from the management program during late spring and through the summer, especially on cool-season turfgrasses. If it is determined that nitrogen must be applied because of play or use, then light, infrequent applications should be considered, because moderate or heavy nitrogen application during the spring and summer will reduce the depth and amount of rooting and will result in a higher water use because of stimulated topgrowth. Certainly, lush topgrowth is to be avoided if drought tolerance or water conservation is a consideration.

Thatch control and coring are important management practices in a dry year because both processes tend to increase irrigation efficiency. Thatch and compaction can reduce water entry into a soil profile, thereby resulting in wasted water from runoff or evaporation. Similarly, thatch and compaction restrict nutrient and air entry into the soil which reduces the rooting needed for maximum drought tolerance.

Irrigation is by far the most important management practice when preparing for drought; every effort should be made to increase watering efficiency. The following checklist can be helpful in this regard. While pursuing the points mentioned in this checklist, remember that the objective of irrigation is to replace water used by evapotranspiration of the turf as

Continued on Next Page

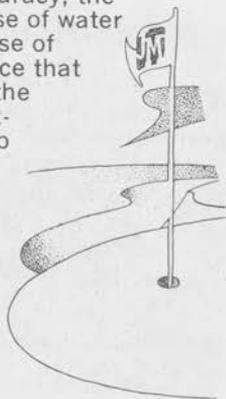
# Turf Topics

**J-M irrigation systems  
save water,  
time and money**

Some of our most beautiful and best cared for environments are golf courses.

We can help make the good ones better and keep the great ones great . . . easily, in fact automatically, with complete Johns-Manville turf irrigation systems.

Here are all automatic systems that give you the controlled accuracy, the efficient use of water and the ease of maintenance that add up to the lushest settings a club could ever ask for.



**Johns-Manville**

**Buckner sprinklers**

*Write or call direct*



Sprinkler Irrigation Supply Co. A division of A.J. Miller Inc.  
316 No. Campbell Rd. Royal Oak, Mi. 48067 Phone (313) 398-2233  
Chicago Sales Office/Warehouse  
1738 Armitage Court, Addison, Ill. 60101 (312) 629-7730

infrequently as possible.

*Determine rooting depth.* Since the objective of irrigation is to replace water in the soil profile to the depth of turfgrass roots, knowledge of root system depth is essential.

*Determine soil water holding capacity.* Soils differ in their ability to hold water for plant absorption. Table 2 (1) indicates the amount of available water per unit depth.

TABLE 2. Available and unavailable water per foot of soil (1).

Soil Texture	Inches per Foot	
	Available	Unavailable
Sand	0.4-1.0	0.2-0.8
Sandy Loam	0.9-1.3	0.9-1.4
Loam	1.3-2.0	1.4-2.0
Silt Loam	2.0-2.1	2.0-2.4
Clay Loam	1.8-2.1	2.4-2.7
Clay	1.8-1.9	2.7-2.9

*Evapotranspiration (ET) rate.*

The rate of water used is largely governed by the climate. Of extreme importance are factors such as: radiant energy (ET increases as radiant energy increases), temperature (ET increases as temperature increases), humidity (as humidity increases, ET decreases) and wind (as wind increases, ET increases). Other factors such as rainfall, soil fertility, growing season, cutting height and frequency also influence water use.

## A Short Way To Estimate Your Sand Trap Needs

- \*Sand weight-96 pounds per cubic foot.
- \*One ton of sand-22 cubic feet.
- \*One ton of sand will cover 66 square feet at a depth of four inches or 44 square feet at a depth of six inches.
- \*Average sand trap will use five to eight tons of trap sand at a four-inch to six-inch depth.
- \*Formula to determine amount of trap sand required:  
Length x width x depth x 96 ÷ 2000 lbs.

\*\*The Gateway Green

# Potash Helps Keep Turf from Getting Behind

R. W. SCHERY

The Lawn Institute, Marysville, Ohio

QUALITY TURF species - such as Kentucky bluegrass, fine fescues, bentgrasses, and bermudas - need fertilizer rich in nitrogen. Nearly everyone agrees, though some debate whether the nitrogen should be at least partly organic, including "slow-release" ureaform.

A mowed turf is meant to produce only green leaf, obviously stimulated and better colored by ample nitrogen. Nitrogen gives fast, striking results - so striking that other fertilizer components can be overlooked and their relation to nitrogen sometimes ignored. But nitrogen cannot do the job alone.

It is true that very few cases of minor element deficiency have shown up in naturally growing turfgrass. These are almost entirely confined to iron on alkaline soils or to temperamental grasses such as centipede in the Southeast. As far as I know, there has been only one or two other cases of minor element deficiency in lawns, such as copper on peculiar Florida soils.

This is not to imply we have mastered the role major elements play.

Take phosphorus, for example. It is very important to the seedbed and to good rooting. But why does it frequently immobilize in the soil,

although not necessarily unavailable to the plant root? Why does it interact with other elements, "counteracting" arsenic influences, for example? The answers are not yet clear to us.

Potassium has long been a vital element in food production, but until recently somewhat slighted in our turfgrass research. Research is now uncovering important needs for adequate potassium and phosphorus in lawn and turf fertilizers.

The evidence is clear country-wide from Florida to Washington. The potassium symposium and other reports featured at the 1967 American Society of Agronomy sessions make this clear: NORTH CAROLINA (Gilbert and Davis) Have shown that K improves the cold

Continued on Page 17

## LAKESHORE

EQUIPMENT & SUPPLY CO.

DISTRIBUTOR & FORMULATOR

GRASS SEED - FERTILIZERS

INSECTICIDES - FUNGICIDES - HERBICIDES

REPLACEMENT MOWER PARTS

REPLACEMENT TIRES

LESICO 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

Scotts

ProTurf

## 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

Steve Dearborn

Technical Representative  
6152 Cold Spring Trails  
Grand Blanc, Mich. 48439  
Telephone: 313/695-2738



Guarantee up to 10" Dia. Trunks.

**T R E E S**  
**R E L O C A T I O N & E X C A V A T I O N S P E C I A L I S T**

**GOLF COURSES ARE OUR SPECIALTY!**

817 Pleasant  
Grand Ledge, Mich.  
48837

General Manager  
Gregory H. Dent  
Office Ph. 517-627-9155

# AERATE 10 TIMES FASTER, REMOVE 3 TIMES MORE SOIL... WITH THE NEW CUSHMAN AERATION SYSTEM.



The amazing new Cushman Greensaver® attachment provides penetration down to 2-1/2", yet gets aeration and cleanup done up to 10 times faster than most methods.

Attachment is simple. Just put the two interlocking weight bins on your 3- or 4-wheel Turf Truckster chassis (equipped with hydraulic system), slide in three quick-release pull pins, add sand for weight, and you're ready to go.

You drive between work areas quickly, saving time. When you reach a green, just use the hydraulic lever at your side to lower the Greensaver into the turf. You keep moving, aerating at speeds up to 6 mph.

The inexpensive and easily-changed tines leave a neat 3-1/4" x 4" pattern of holes. The unique tine shape eliminates any pivoting action, allowing them to go deeper without damage to the green surface. So you

can remove up to three times more soil than with other drum-type aerators.

But the Greensaver also makes the aerating operation faster by automatically picking up the soil cores. As the tines enter the ground, the cores are forced through the tines into the drum. When it's full, just open the large door to empty it. Or you can leave the sides of the drum open, to deposit the cores on the green.

And the Greensaver features a special turf guard and roller which smooth the turf and prevent the sod from rolling up on the drum.

The new Greensaver is just one more way to put your 18-hp Turf Truckster to work.

With other accessories, your Cushman can spray, spike, dump, and top-dress. Use it.

It's more than basic transportation. It's a total turf-care system.

Write for your Cushman Turf catalog today.

**CUSHMAN**  
TURF-CARE  
EQUIPMENT



OMC-Lincoln,  
A Division of Outboard Marine Corporation  
2211 Cushman Drive, P.O. Box 82409  
Lincoln, NB 68501

## GOLF CAR DISTRIBUTORS

1980 W. Wide Track Drive (U.S. 10)

Pontiac, Michigan 48058

Phone: (313) 338-0425

## Potash Cont.

tolerance of Tifdwarf and Tifgreen bermudagrasses. High nitrogen and low potassium give the least resistance to cold. Greatest winter hardiness comes when potassium about equals nitrogen. But half to two-thirds as much potassium as nitrogen seems ample for winter-tender varieties to be used many miles further northwestward.

Gilbert's literature survey shows that potassium, when adequately balanced with nitrogen, helps northern grasses (bluegrass and bent) better tolerate both low and high temperature. WASHINGTON (Goss and Gould) Have reported that high nitrogen and low potassium cause non-protein nitrogen and unused carbohydrates to accumulate. Such a physiological condition, they theorized, favors disease invasion. And they found ample potassium suppressing *Ophiobolus* disease in the field.

FLORIDA-IOWA (Markland and Roberts) Have called for the right

nutrient "balance," noting that potassium influences root growth and foliage stiffening. Horn of Florida believes adequate potassium improves growth, quality, and behavior on most southern grasses.

## "HANDY HINTS ON CALL"

Quick answers to gardening and home economics problems via a phone message - call 858-2519. Messages changed Monday, Wednesday and Friday. 24 hour service, 7 days a week.

Sincerely,  
Gregory Patchan  
Extension Horticultural Agent

A woman was describing her husband to a friend. "He's the kind of man who always hits the nail right on the thumb."

**THERE IS SOMETHING NEW UNDER THE SUN!**

**NS**  
**56**

The Highest Concentration of Slow Releasing Turf Nutrients  
in a SINGLE Prill

32% Nitrogen + 24% Sulfur = **NS** 32-0-0-24  
**56**

It's "Controlled" release N from Sulfur Coated Urea

**STANDARD GOLF**  
**Pro-Line**

GRASS-CEL™ PAVING BLOCKS

TREES-SHRUBS Wholesale

Introducing



First in Quality

"Nothing  
runs like a  
DEERE"

Premium Fertilizers by

**The Andersons**

DISTRIBUTORS  
OF  
QUALITY CHEMICALS  
BY THE

**CLEARY**  
CORPORATION

**Lofts**  
Pedigreed Seed, Inc.



**FDS FERTILIZERS**

5324 W. Bloomfield Lake  
W. Bloomfield, Mi. 48033  
Phone: (313) 681-9336

We're the  
**WATER MOVING  
SPECIALISTS ...**  
and we'll help you  
put it all together

**We've  
got systems**

An engineering staff  
to consult with you  
on irrigation systems design  
& specifications,  
and budget estimates.

**We've  
got supplies**

The largest  
selection & stock  
in the midwest:

PIPE & FITTINGS:

PVC • Sewer & Drain (Corr.)

Polyethylene • Galvanized

Copper • Aluminum

Pressure Reg. Valves • Elec. Valves

Pressure & Flow Switches

Controllers

PUMPS & PUMPING STATIONS

EXCLUSIVE FRANCHISED DISTRIBUTOR

**RAINBIRD  
NELSON  
SAFE-T-LAWN/MOODY**

**CenturyRain aid**

**WHOLESALE DISTRIBUTORS**

3890 W. 11 Mile Rd., Berkley, Mich. 48072  
(313) 543-7730

22159 Telegraph, Southfield, Mich. 48075  
(313) 358-2992

341 Lively Blvd., Elk Grove Vill., Ill. 60007  
(312) 640-6660

**Educational Tax Deduction Available**

"Tax Deduction for Educational Expenses: Treasury regulation #1.162-5 permits an income tax deduction for educational expenses (registration fees and costs of travel, meals, and lodging). Undertaken to: 1) Maintain or improve skills required in one's employment or other trade or business, or 2) Meet express requirements of an employer or a law imposed as a condition of employment, job status, or rate of compensation."

Many golf course officials are unaware of the need for updating agronomic information in order to produce the playing conditions they want.

**SEGUS'S SPACE:**

**SOMETHING TO REFLECT ON  
WITH THE COMING OF SUMMER ...**

"Slow me down, Lord!  
Ease the pounding of my heart  
By the quieting of my mind.  
Steady my hurried pace  
With a vision of the eternal reach of time.  
Give me,  
Amidst the confusion of my day,  
The calmness of the everlasting hills,  
Break the tensions of my nerves  
With the soothing music of the singing streams  
That live in my memory.  
Help me to know  
The magical restoring power of sleep.  
Teach me the art  
Of taking minute vacations of slowing down  
to look at a flower:  
to chat with an old friend or make a new one;  
to pat a stray dog;  
to watch a spider build a web:  
to smile at a child;  
or to read a few lines from a good book.  
Remind me each day  
That the race is not always to the swift;  
That there is more to life than increasing its speed.  
Let me look upward  
Into the branches of the towering oak  
And know that it grew great and strong  
Because it grew slowly and well.  
Slow me down, Lord,  
And inspire me to send my roots deep  
Into the soil of life's enduring values  
That I may grow toward the stars  
Of my greater destiny."

**Credit: The Bonnie Greensward, July 1977**



## The New \*Turf-Blo from Turf-Vac

Now there's a fairway blower that is completely self-contained. A unit that can be towed by any vehicle from a tractor to a pickup truck because no power takeoff is required.

Even though the Turf-Vac "Turf-Blo" is compact and light weight, it delivers a tremendous stream of air. A stream that can be quickly deflected from side to side without moving from a tractor seat!

High flotation pneumatic tires reduce tire marking, heavy duty blower features the same engineering know-how that goes into every Turf-Vac product.

Contact us or your nearest Turf-Turf-Vac distributor for a demonstration. And, ask about the Turf-Vac sweeper line. They're great companion pieces to the all-new Turf-Vac "Turf-Blo."

\*Patent applied for

#### General Specifications:

Engine: 12 HP  
Tires: 13 x 6/5 x 6 low pressure  
Frame: 3" 4.1 channel  
Turbine: Abrasive resistant steel, direct engine drive.  
Air direction: Blows from either side. Controlled by lever.  
Height: 36"  
Length: 51"  
Width: 42"  
Shipping Weight: 480 pounds  
Accessories: Electric start, battery.



A Division of TSI, Inc.  
1717 Four Mile Road, N.E.  
Grand Rapids, Michigan 49505  
(616) 364-9441 or 364-0719



### LAWN EQUIPMENT CORPORATION

520 W. 11 MILE ROAD

ROYAL OAK, MICH. 48068

TELEPHONE: (313) 398-3636

JACOBSEN  
**UV4**

the articulated, 4-wheel drive  
truck that goes everywhere

**4-WHEEL DRIVE TRUCK**



Powered by a 16 HP engine, the UV4 features a rugged torque converter transmission with 2 forward speeds, plus reverse, along with powerful hydraulic brakes. The box handles items 5 feet long and 4 feet wide. The tailgate hinges at the top and bottom for your choice of loading and dumping (dumping is done hydraulically with the flip of a lever).

Test drive the UV4 for yourself. Have W.F. Miller arrange a demonstration on your obstacle course. And have 2000 pounds of something handy to take along for the ride. Four 500-pound canaries ought to do it.

**W.F. Miller** Garden & Lawn  
Equipment Company

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  
EAST LANSING, MICH. 48823