

GV
975
A1
P3

1978

July 1978

BORDER CITIES



SERIALS

AUG 1 1 1978

MICHIGAN STATE UNIVERSITY
LIBRARIES

A PATCH of GREEN

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

We have the most complete line of turf chemicals in the midwest.

Weed-Killers • IBDU-fertilizers • Foggers
Diquat • Acti-Dione • Caddy • Cadminate
PMAS • Malathion • Microgreen • Dursban
Kelthane • Diazinon • Sevin • Proxol
Aqua-Gro • Spot-Kleen • Daconil
Hydro-Wet • Thiram • Dacthal
Fungo • Dyrene • Cleary 3336
Tersan 1991, LSP, SP
Calo-gran • Namacur



**J.J. DILL
COMPANY**

CHEMICALS • PESTICIDES • EQUIPMENT
P.O. BOX 778 KALAMAZOO, MICH. 49005

Representing many reputable companies:

American Cyanamid
Diamond-Shamrock
Geigy
Amchem

E.I. DuPont
Swift
FMC
Kalo Labs

Elanco
Mallinckrodt
Upjohn
Velsicol

Delavan
Dow
Rhodia
Chemagro


**IN MICHIGAN CALL TOLL FREE
FOR FURTHER INFORMATION**

800 - 632-4057

OTHER STATES CALL (616) 349-7755

*Truckload distributor and formulator insuring competitive
prices and prompt delivery.*

**We feature custom building of spray apparatus
by our trained service technician.**



Tire Wholesalers Company, Inc.

19240 West Eight Mile Southfield, Mich. 48075
(1/2 Mile West of Southfield Road)

Phone: (313) 354-5644

MICHELIN



jtw



**TRUCK - CAR
TRAILER
MOTORCYCLE
INDUSTRIAL
TIRES**

WE STOCK
from 450/310-5 2 Ply
to 18-22.5 20 Ply

**WHOLESALE PRICES
TO COMMERCIAL
ACCOUNTS**

CALL GREG OR ROSS FOR A PRICE



MICHIGAN & BORDER CITIES GOLF COURSE SUPERINTENDENTS ASSOCIATION

PRESIDENT

CLEM WOLFROM
DETROIT GOLF CLUB
530 Kendry
Bloomfield Hills, Michigan 48013
Off. 345-4589, Res: 334-0140

VICE PRESIDENT

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

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

ED HEINEMAN
WATERS EDGE COUNTRY CLUB
10531 Bellevue
Grosse Ile, Michigan 48138
Off. 675-0927, Res. 676-3095

ROGER O'CONNELL, CGCS
RED RUN GOLF CLUB
P.O. Box 38
Royal Oak, Michigan 48068
Off. 541-8184, Res. 399-6916

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 48038
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

PRESIDENT EMERITUS

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

"A PATCH OF GREEN"

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

Circulation: 1,250

Ted Woehrlie, 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.....	\$150.00
Back Outside Page.....	75.00
Full Page.....	65.00
Half Page.....	40.00
Quarter Page.....	30.00
Eighth Page.....	15.00
Sixteenth Page.....	10.00
Classified Ad (per column inch).....	7.50

DISCOUNT RATE: One Year 10%

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

This Month's Advertisers...

Century Supply Company
W. A. Cleary Corporation
J. J. Dill Company
FDS Fertilizers
Golf Car Distributors
Lakeshore Equipment Corporation
Lawn Equipment Corporation
Lebanon/Agrico
Northrup, King & Co.
W. F. Miller Garden & Equipment
O. M. Scott & Sons Company
Sprinkler Irrigation Supply
Terminal Sales Corporation
Tire Wholesalers Company, Inc.
Turfgrass, Inc.
Turf Supplies, Inc.
Wilkie Turf Equipment Company

What does your Northrup King man offer you besides quality turfseed?

A willing ear. We listen carefully to your problem and study it thoroughly so we can solve it together.

The voice of experience. Northrup King continues to be a leader in the development of new varieties and blends.

Reliability. Northrup King has a testing and quality control program that is your assurance of quality seed.

The right turfgrass decision can improve the quality of your turf. It can also save you maintenance dollars.

So the person who helps you make that decision is very important to you. That's why we stress the professionalism of your Northrup King man. And his willingness to get involved with your needs.

For a thoroughly professional evaluation of your turf requirements, talk with your Northrup King representative or distributor. He offers you quality turfseed—and a lot more.

At his fingertips, a wide range of proven turfseed varieties. And we can custom blend to meet your special needs.

Grass-stained knees, if that's what it takes to understand your problem. Northrup King people get involved.

Feet firmly planted in your area, so we can recommend varieties and formulate mixtures that will work in your particular region.



NORTHROP, KING & CO.

PACIFIC HEADQUARTERS
Fresno, 93725 (209) 237-4731
Berkeley (415) 843-7020
Los Angeles (213) 722-7893
Tangent, Ore. (503) 928-2393



CPR

Is anyone on your crew trained to save a life?

We are all becoming aware of the need for at least one member of our grounds crew to learn how to perform Cardiopulmonary Resuscitation (CPR). This is the artificial circulation and ventilation procedure that can save lives by restoring the heart and lungs to their function of pumping oxygen thru the body.

CPR training has been encouraged by the Golf Association of Michigan for several years and more recently we heard an excellent speaker at our June 6 meeting at the Lakelands C.C.

Mr. Carl Welser, an instructor with the Red Cross emphasized the importance of performing this important treatment.

In the March issue of "Fore Front" we read the following -

First Aid On The Golf Course

What would you do if a golfer had a heart attack before your eyes? Would you recognize it as a heart attack? What would you do for heat prostration? Stroke? Poisoning? A serious laceration? A broken leg or arm?

How many of your employees would know what to do in any of these situations?

The employees and golfers at a course, while vulnerable to the normal range of afflictions requiring first aid, are even more likely to suffer from some of them than the average person. Strenuous work or recreation, exposure to a variety of chemicals and the use of potentially dangerous tools and machinery all lead to an increased likelihood of injuries occurring on your golf course.

Every superintendent should have a well-thought-out procedure to put into action when a medical emergency occurs on his course.

Post the telephone number of the

emergency care facility in your community near every telephone - a good place is in the front of the phone book. Many communities use "911" as an emergency number. Also, make sure you know where the emergency room in the nearest hospital is in the event that an ambulance is not available.

Strongly encourage your employees to participate in a first aid training course, and be the first to sign up. In many areas, the Red Cross will provide free instruction to your group, so the only cost is for materials. First aid classes are often offered through local adult education programs or from the Red Cross.

"CPR - cardiopulmonary resuscitation - is another important skill for you and your employees to acquire. CPR is a method used by either one or two people to restart breathing and heartbeat in an injured person. The CPR method is not difficult to learn, but it has great potential for saving lives. The American Heart Association estimates that 100,000 lives a year now lost could be saved by basic CPR followed by advanced life support. CPR training is often incorporated into first aid classes."

Equip and maintain a first aid kit. Consider keeping kits at many locations around the golf course. Don't forget to replenish supplies as needed.

Finally consider that the Red Cross estimates people who have had first aid training are much less likely to become injured themselves. ■

The timing of resuscitation rather than the credentials of those who perform it is crucial to its success. If you are not willing to administer CPR to a stricken person than you would be better off to call the undertaker instead of the ambulance.

Continued on next page

The Canadians join us for our April Joint Meeting at Essex G & CC in Windsor

Twenty representatives from the Ontario Superintendent Association traveled by bus to the joint meeting with the Michigan & Border Cities GCSA on April 11, 1978 at the Essex G&C.C., Windsor, Ontario. Host Superintendent, Bill Fach welcomed some 100 guests to his Club for golf and dinner.

Guest speakers were: Dr. Louis Janke, Agronomist from London, Ontario and Dr. Paul Rieke, Michigan State Turf Specialist. They covered all aspects of soils, sands, and fertilization.

Paul (Pelino) Scenna, President of the Ontario Superintendents Association, doubled as tour director and bus driver.

CPR Continued

Studies have shown that persons resuscitated by bystanders within minutes of the victims' collapse suffered death or serious complications less often than those who were forced to wait for the arrival of rescue squads.

Strongly encourage your employees to participate in a first aid training course, and be the first one to sign up. Call GAM today! They will schedule a class for you.



Dr. Paul Rieke speaks on sand specifications and quality at our Joint Meeting in April.

A Smile, it costs nothing, but . . .

A smile costs nothing, but gives much. It enriches others who receive it, without making poorer those who give. It takes but a moment, but the memory of it sometimes lasts forever. None is so rich or mighty that he can get along without it, but none is so poor but that he can be made rich by it. A smile creates happiness in the home, fosters goodwill in business, and is the countersign of friendship. It brings rest to the weary, cheer to the discouraged, sunshine to the sad, and it is nature's best antidote for trouble. Yet it cannot be bought, begged, borrowed, or stolen, for it is something that is of no value to anyone until it is given away. Some people are too tired to give you a smile. Give them one of yours, as none needs a smile so much as he who has no more to give.

*Calif. Assoc. of
Conventions & Visitors Bureaus*

***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

THE STIMPMETERS ARE COMING! THE STIMPMETERS ARE COMING!

**This simple device for measuring green speeds promises
to become one of your course superintendent's most useful tools.
Better still, it's likely to save your strokes!**

By Charles Brome

Not long ago - starting in mid-February, to be a little more precise - some 500 long, skinny packages were shipped from USGA Headquarters in Far Hills, New Jersey, to superintendents at golf courses all over the country. The contents of those packages (and of the hundreds more the USGA Green Section expects to dispatch during 1978) may eventually do as much to make America's golfers happy as anything since the invention of grass.

Each package contains a "Stimp-meter" - a device which will enable a superintendent not only to measure the speeds of his putting greens with a high degree of accuracy, but also to establish reliable numerical values for each speed.

Isn't that exciting?

You're right. At first glance, the news that your course superintendent can now write down numbers which represent green speeds ranks right up there with the discovery of a dramatic new system for coiling dental floss.

But give the idea a little while to sink in. And, while it's sinking, consider this observation by Alexander Radko, National Director of the Green Section. "When viewing the factors that affect play, in tournament competition or in a friendly knockabout," he says, "one element stands out above all the others - the variability of speeds between one green and the next, or even on different areas of the same green." Variations in green speeds, he declares, can do more to

negate a player's true skill than can ragged fairways or unkempt bunkers.

NOTE, PLEASE, that Radko is making no judgements about the relative virtues of fast vs. slow greens. "We have no desire at all to attempt to standardize green speeds," he says. "Whether the greens at a particular are slow, medium, or fast is up to the membership, not the USGA."

It is the *uniformity* of greens, whatever their pace may be, that is significant. In other words, if you stroke a level putt with sufficient force to roll it 12 feet on one green, the same stroke and the same force should also give you a 12-foot roll on each of the other greens. Reading a putt correctly and then stroking it the way you want to is challenge enough in itself - you can do without the added element of surprise that comes from inconsistent green speeds.

With this in mind, the information your course superintendent can determine with his Stimp-meter seems a bit more intriguing. Because it is distance, not direction, that presents the greater problem on most of your putts, right?

Most superintendents are well aware of this, and they do their best to establish uniform speeds on all their greens. Until the Stimp-meter came along, though, this goal was difficult, if not impossible to reach. A superintendent has any number of techniques for adjusting green speeds, to be sure. By applying or withholding

Continued on page 10



AS THE SEASONS CHANGE, SO DOES THE GREENSAVER AERATOR.

The condition of the soil on any golf course or fine turf area changes throughout the year. And for proper turf management, you need to change the way you aerate.

Now you can, with the Cushman Greensaver aerator. Three interchangeable drums let you pick the type of tines that are right for the soil and the season, while you aerate up to ten times faster than walk-behind aerators.

The Greensaver attaches easily to any Cushman Turf-Truckster chassis equipped with the hydraulic system and dump set. You travel between areas quickly, raising and lowering the Greensaver without leaving the driver's seat.

The standard $\frac{1}{2}$ " coring drum provides maximum soil removal for normal aeration. In the fall, during slow-growth periods, you can use the $\frac{3}{8}$ " coring drum to remove less soil.

And for the hot stress periods of summer, you can use the slicing drum.

With the coring drums you can collect the cores as you aerate, or leave them on the turf. Either way you get an accurate $3\frac{1}{4}$ " x 4" pattern of holes up to 2 $\frac{1}{2}$ " deep.

CUSHMAN
TURF-CARE
EQUIPMENT

GREENSAVER SPECIFICATIONS

SLICING TINE DRUM

Pattern Width: 22 $\frac{3}{4}$ "

Pattern: 3 $\frac{1}{4}$ " x 4"

Drum: Heavy 12-gauge steel drum.

Tines: 112 tines per unit. Special heat treated formed steel. 2 $\frac{1}{2}$ " deep 2 $\frac{3}{4}$ " base.

Frame: Heavy steel welded construction. Method of attachment: 3 pull pins.

$\frac{3}{8}$ " TINE DRUM

Core Size: $\frac{3}{8}$ " x $\frac{3}{8}$ "

Pattern Width: 22 $\frac{3}{4}$ "

Pattern: 3 $\frac{1}{4}$ " x 4"

Drum: Heavy 12-gauge steel drum.

Trap door for core removal.

Tines: 112 tines per unit. Special heat treated formed steel.

Frame: Heavy steel welded construction. Method of attachment: 3 pull pins.

$\frac{1}{2}$ " TINE DRUM

Core Size: $\frac{1}{2}$ " x $\frac{3}{4}$ "

Pattern Width: 22 $\frac{3}{4}$ "

Pattern: 3 $\frac{1}{4}$ " x 4"

Drum: Heavy 12-gauge steel drum.

Trap door for core removal.

Tines: 112 tines per unit. Special heat treated formed steel.

Frame: Heavy steel welded construction. Method of attachment: 3 pull pins.

CALL NOW
For a demonstration
and price quotation.
(313) 338-0425



GOLF CAR DISTRIBUTORS

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

Pontiac, Michigan 48058

Phone: (313) 338-0425

Stimpmeters Cont.

water, for example, or by varying the height, method, or frequency of cut, he can achieve just about any speed he wants to on any given green. But - since until now he has had no reliable means of measuring that speed - his efforts to duplicate it on the remaining 17 greens have been largely guesswork.

The Stimpmeter removes the guesswork: the superintendent can use it to measure the speed of one green and, by adjusting the remaining greens to the same measurement, achieve uniform speeds throughout the course. "The Stimpmeter is your speedometer," Radko tells superintendents. "With it, you can set your green speed at any level your membership desires."

THE DEVICE is named for its originator, Edward S. Stimpson, who devised an instrument for measuring green speeds in the mid-1930s. The model now being distributed by the USGA, a slightly modified version of Stimpson's original, is an extruded aluminum bar 36 inches long and 1½ inches wide. It has a V-shaped groove along its length and a notch near one end.

The principle is simplicity itself. The superintendent places a ball in the notch and rests the other end of the Stimpmeter on the green. He raises the notched end slowly until the ball rolls out of the notch, down the groove,

and onto the green. Since the ball is always released from the notch at the same angle of elevation, it will reach the green with the same velocity each time. The distance it rolls will indicate the speed of the green.

The first shipments of Stimpmeters are going to superintendents at clubs that subscribe to the Green Section's Turfgrass Advisory Service. Instruments will also be made available, at cost, to the remaining 4,000 USGA member clubs. After the device has been in widespread use for a time and the resulting data can be analyzed, Radko considers the possibilities for improved playing conditions to be "virtually endless."

One immediate result should be improved hole locations. A hole cut at or near the bottom of a slope, for example, might present a fair challenge when green speed is a slow 4'6", but be an unfair position on a green measuring a fast 8'6".

Clubs that subscribe to the USGA Turf Advisory Service will receive one Stimpmeter as part of compensation for the annual fee. Other USGA member and non-member clubs and members of the Regional Association Liason Committee may purchase a Stimpmeter for \$15. To order, write to the United States Golf Association, Golf House, Far Hills, N.J. 07931.

Nothing can be compared to a faithful friend.

How to kill weeds, stop diseases and make your job easier... all with one company... W.A. Cleary

Herbicides

MCPP • MCPP PLUS 2, 4-D
METHAR 30 • AMA PLUS 2, 4-D
AMA (SUPER METHAR)

Fungicides

336 TURF FUNGICIDE
BROMOSAN • SPECTRO
CLEARY'S GRANULAR TURF
FUNGICIDE
SPOTRETE • PMAS (10%)
CADDY • CAD-TRETE

Specialties

ALL WET • TRU-GREEN
CLEAR SPRAY • GRASS-GREENZIT
TANK CLEANER • DEFOAMER
BALL WASHER

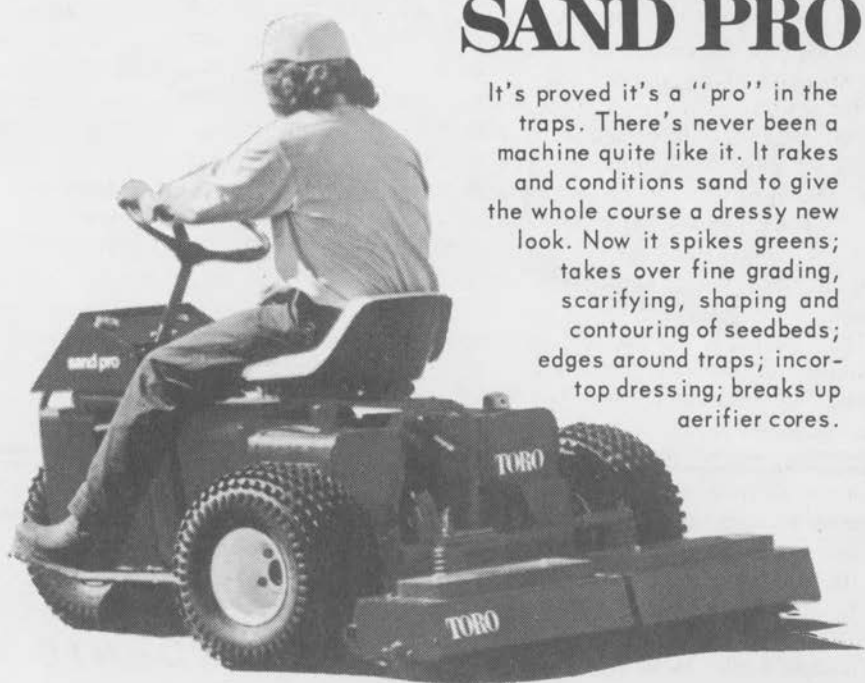
W-A-CLEARY CHEMICAL
CORPORATION

P.O. Box 10 Somerset, N.J. 08873 • (201) 247-8000

TORO

SAND PRO

It's proved it's a "pro" in the traps. There's never been a machine quite like it. It rakes and conditions sand to give the whole course a dressy new look. Now it spikes greens; takes over fine grading, scarifying, shaping and contouring of seedbeds; edges around traps; incor-top dressing; breaks up aerifier cores.



Altogether, the Sand Pro's as useful a machine as you can have around — and it's backed up by TORO people, by TORO parts and service and by our new one year warranty.

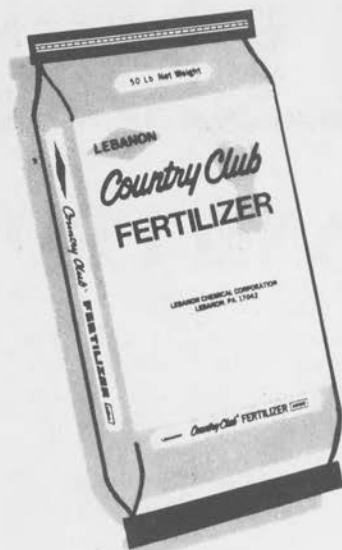


— DISTRIBUTED BY —

WILKIE TURF
Equipment Company

1050 OPDYKE ROAD PONTIAC, MICH. 48057
(313) 373-8800





LEBANON

COUNTRY CLUB PROFESSIONAL TURF PRODUCTS GIVE YOU MORE!

- ★ Full Weight (High Density) for easy, fast, full width spread.
- ★ A Complete Feeding in every granule of needed turf-grass nutrients.
- ★ A Balanced Fertilizer Ratio with no inert fillers.
- ★ Available only through a network of trained distributors, thus assuring you of lower sales costs, meaning greater value to you.

For More Information, Contact:

James L. Camp
(219) 485-6828

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.

Turfgrass Management

TWO-YEAR PROGRAM AT MICHIGAN STATE UNIVERSITY

The two-year program was developed and established by Dr. James B. Beard in 1966 in response to a need for academic training in this field. Dr. John W. King, now Professor of Turfgrass Management at the University of Arkansas, coordinated the program from its initiation until February 1970. Dr. K.T. Payne has been the coordinator since that time.

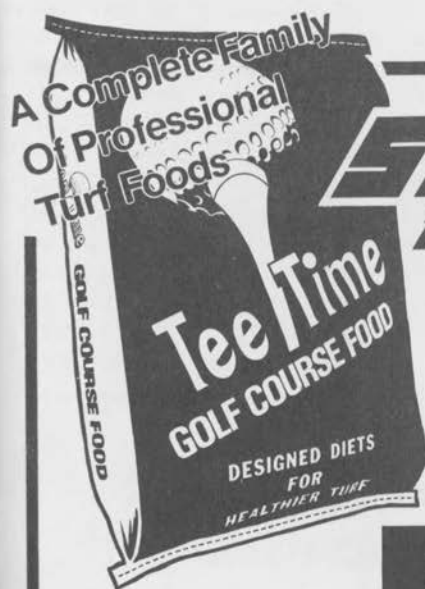
The program originally was designed to provide training in several areas of the industry. By 1971, however, it had become apparent that over 95% of the students in each class were preparing for golf course management careers. Since those interested in sod production, park management, etc. could be appropriately trained in the Landscape and Nursery curriculum

or in the four-year Turfgrass program, the emphasis has been entirely on preparation for a career as a golf course superintendent.

Numbers of applications have been as high as approximately 150, and about 50 to 55 are admitted to each fall class. Experience has shown that between 45 and 50 of these will actually enroll and by the end of the first term about 42 will still be enrolled. The goal is to have 40 to 42 in class after two terms. In recent years very few have been eliminated because of academic failure after the first term. Most who leave decide to withdraw before the term is completed.

The number of students who have completed the certificate are as follows:

Continued on next page



EXCLUSIVELY
OFFERED BY:

SPECIAL 10% DISCOUNT

on
**NS/56 Sulfur Coated Urea
and
"Micro-Prill"**

**Fall/Dormant Feedings
32-0-0-24**



FDS FERTILIZERS, INC.
5324 W. BLOOMFIELD LAKE
W. BLOOMFIELD, MI 48033
PHONE: (313) 851-7766

Turfgrass Management Cont.

1968	-	5
1969	-	16
1970	-	22
1971	-	21
1972	-	25
1973	-	30
1974	-	34
1975	-	41
1976	-	37
1977	-	29*
1978	-	46*
Total		316

* Only 35 students registered Fall Term 1975 (of 45 accepted) and nine additional students were accepted Winter Term 1976. These graduated in 1978.

Approximately 80 to 85% of those completing the certificate enter the golf course profession. From two to four students in each class go on to four-year degrees. From five to ten percent are now going into lawn service positions.

About 25% of each class come from out of state. Of 53 accepted for Fall Term 1978, 20 are from other states. Eighteen of 39 Placement Trainees during the summer of 1978 are taking this training in other states.

A high proportion of graduates of the initial classes preferred to start as superintendent, and many had the ultimate goal of owning their own course. It is common for current students to prefer a "post-certificate" experience at a course with a higher

demand level than those of their previous experience before going on as assistant or superintendent.

As more of our graduates assume responsible positions, almost universally they provide preferred placement training experience for students and willingly accept them.

Job opportunities are excellent, and the number of inquiries increases each year.

There has been concern expressed that:

- 1) too many students are being trained
- 2) the exclusive training for golf careers works to the exclusion of those with other turf interests.

With over 11,000 golf courses in the U.S.A. and well over 500 in Michigan, there appears to be little danger, given the present annual output, that job opportunities will decrease. On the other hand, there is an increased interest in technically trained superintendents as knowledge spreads that they are available.

The two principle alternative career areas graduates enter are 1) lawn service and 2) equipment and supplies sales and service. The present curriculum, while not ideal preparation for these two fields, does not seem to penalize graduates who have entered them. For the past three or four years, golf course crew experience has been required for admis-

Continued on next page



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

Turfgrass Management Cont.

sion. This has contributed to greater interest and a communality among the students which has been very beneficial.

There has been some interest, although relatively little, in an Associate Degree. The opinions of our readers will be welcomed.

Placement Training Considerations Michigan State University

Equipment

1. Gain a working knowledge of each piece of equipment - know it's purpose.
2. Inventory the equipment.
3. Learn preventive maintenance procedures.
4. Know the present value and cost of important equipment.
5. What is the depreciation rate of equipment?
6. What type of equipment is lacking - or in excess?
7. State any equipment-related problems such as compaction, wear, scalping, etc.

Drainage

1. Know the overall drainage system at your course.
2. Sketch an average drainage design on a particular hole.
3. Study patterns used to drain difficult areas.
4. What type of materials are used for tile?
5. Are French drains or slit trenches used?
6. Know the specifications for tile diameter as well as depth of tile.
7. Sketch a standard drainage pattern for a green.
8. What type of drainage is used for bunkers?
9. Where does the drainage H₂O eventually end up?
10. Are roots a problem in clogging tile lines?
11. Know how to flush and rod a tile line.

Continued on next page

Susco Offers

NOW



GOLFERS HAVEN .. provides low cost lightening and weather protection for your golfers. Lightening rod is bonded to alum. frame and grounded at four corners - U/L and Lightening Protection Inst. approved.

Give your golfers a safe shelter in a storm.

Golfers Haven comes with Jalousie or solid acrylic plastic sides - 10 times stronger than glass.

Stop by our office and see unit all set up.

Susco
ENGINEERED RAIN

Sprinkler Irrigation Supply Co. A division of A.J. Miller Inc.
1316 No. Campbell Rd. Royal Oak, Mi. 48067 Phone (313) 398-2233
Chicago Sales Office/Warehouse
1738 Armitage Court, Addison, Ill. 60101 (313) 629-7730

Placement Considerations Cont.

12. Learn to find existing tile lines with the use of a map (blueprint) and a probe.

13. Make recommendations for improved drainage as needed.

Irrigation

1. What is your water source?

2. Is it supplemented by city water?

3. What is the cost/gal of city water?

4. How many pumps and/or pumping stations do you have?

5. What is the capacity of the pumps in gpm?

6. What amount of voltage is required to operate your pump?

7. Is there an auxiliary power source; i.e. generator?

8. What type of pipe is used - PVC, cast iron, Transite, etc.?

9. Know the diameters of the main lines and laterals.

10. What is the throw of a fairway head and a green head?

11. How many sprinklers may operate simultaneously?

12. What size nozzles are used?

13. What is the pH of the water?

14. Are chemicals applied through the irrigation system?

15. What types of valves, head, controllers, etc. are utilized?

16. How is the system drained for winter?

Personnel Practices

1. How are employees selected?

2. Is there a formal training program?

3. Is there a good deal of communication between employer and employee?

4. What forms of discipline are used?

5. How are wages and promotions handled?

6. What is the chain of command?

7. Is responsibility equal to authority?

8. Are there job descriptions for all employees?

Continued on next page



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

- DISTRIBUTED BY -

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



TURFGRASS, INC.

Phone: Area 313 437-1427

Placement Considerations Cont.

9. Is the Superintendent a part of the "triumvirate system"?

10. Does the Superintendent report directly to a "Green Committee"? Chairman? Board of Directors?

11. Establish a file designating record-keeping methods employed by the Superintendent.

12. Are personnel practices efficient?

Business Management

1. Learn the budget system.
2. Are there adequate inventories?
3. Who is responsible for purchasing?

4. What methods of financing are used?

5. Learn the payroll system.

Plant Pathology

1. Know the diseases and their cycles which are prevalent in your area.

2. Know the fungicides, their rates and their effect on the pathogens.

3. Is the treatment curative or preventative?

4. Know your sprayer capacity, pressure and nozzle size.

5. What atmospheric conditions were present causing the introduction of the pathogen?

6. Is the fungicide a contact or a systemic?

7. Are safe measures used in the handling of pesticides?

8. What time of day are pesticides applied?

9. Is the wind a drift factor?

10. Following application, when does the next mowing and irrigation of turf occur?

11. Learn to calibrate sprayer.

Soils

1. Know the soil texture and structure on the native soil and amended soils.

2. What is the level of moisture retention?

3. What is the pH?

4. What level of organic matter is present?

Continued on next page

LAKE SHORE

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

MICHIGAN TURFGRASS NORTHERN FIELD DAY

September 13, 1978

Traverse City Country Club
TRAVERSE CITY, MI

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

When you talk irrigation,
talk to us . . .

**we're the
answer people**

**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:

PIPES & FITTINGS:

PVC • Sewer & Drain (Corr.)

Polyethylene • Galvanized

Copper • Aluminum

Pressure Reg. Valves • Elec. Valves

Pressure & Flow Switches

Controllers

PUMPS & PUMPING STATIONS

EXCLUSIVE FRANCHISED DISTRIBUTOR

RAIN  BIRD®

CenturyRain aid

WHOLESALE DISTRIBUTORS

31691 Dequindre

Madison Hts., MI 48071

(313) 588-2990

341 Lively Blvd.

Elk Grove Vill., Ill. 60007

(312) 640-6660

Placement Considerations Cont.

5. Is liming necessary?

6. What ammendments are incorporated into the soil?

7. Topdressing - when, what, why, how often?

8. Slicing - when, what, why, how often?

9. Vertical mowing - when, what, why, how often?

10. Aerating - when, what, why, how often?

11. Is compaction a problem?

12. Are percolation and infiltration rates adequate?

13. Establish a record of fertilizer applications.

14. What is the annual rate of N-P-K for greens, tees, fairways and rough.

15. Are micronutrients required?

16. Use soil tests to ascertain nutrient deficiencies.

Turfgrasses and Their Uses

1. Identify the different turfgrasses and weeds present.

2. What height of cut is maintained?

3. Is thatch a problem?

4. Which herbicides are used? when? what rate?

5. Know the vital signs - learn the signs of wilt and nutrient deficiencies.

6. Spot diseases before they spot your turf.

7. Learn methods of seeding and sodding.

8. What varieties of seed are used?

Entomology

1. Know the pest you are controlling - identification, life cycle, etc.

2. Know the effective control and rate.

3. Does the insect inhabit the soil or the leaf?

4. Should the insecticide be drenched in?

5. What is the residual effect of the chemical?

Don't be TRAPPED...Use the **EASY RIDER '76** TRAP MAINTENANCE SYSTEM

Why does Easy Rider '76 do the BEST job maintaining your sand traps?

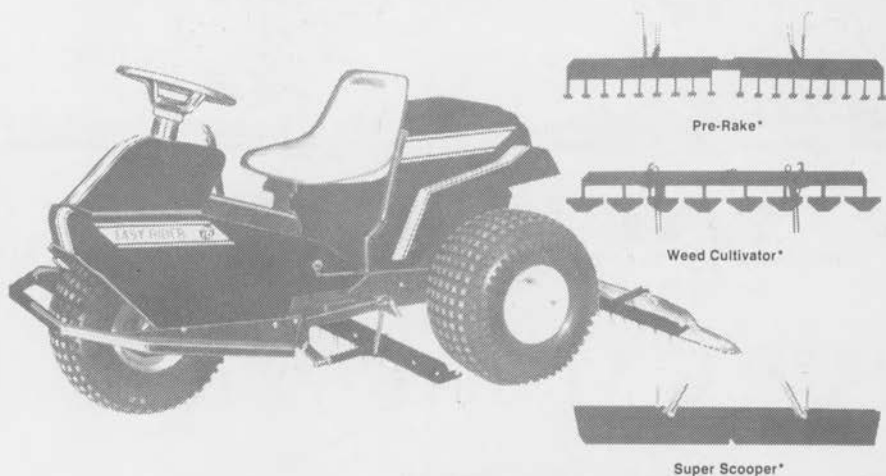
Because Easy Rider '76 is not just another trap rake. The Easy Rider is a complete TRAP MAINTENANCE SYSTEM specially designed to maintain sand traps. The simplified finishing rake provides ultra-fine top layer raking, superior to a hand raked finish. In addition to the rear mounted finishing rake, there are THREE INTERCHANGEABLE ATTACHMENTS: The *Weed Cultivator*, a *Super Scooper* and, for 1976, a *Pre-Rake*, all of which can be operated independently or simultaneously with the rear mounted finishing rake.

The entire body of Easy Rider is molded fiberglass, mounted on a steel chassis. The rear engine hood and fender section is hinged for easy maintenance.

The Pre-Rake*—Uniformly scarifies tightly packed sand where a softer, deeper raked surface is desired.

The Weed Cultivator*—Knocks out weeds and loosens deep, hard packed sand. The operator controls the cultivating depth.

The Super Scooper*—Picks up eroded sand in low spots and transports it back to the desired high locations. The operator controlled hand lever spreads and feathers the sand to a level finish in one easy operation.



SMITHCO

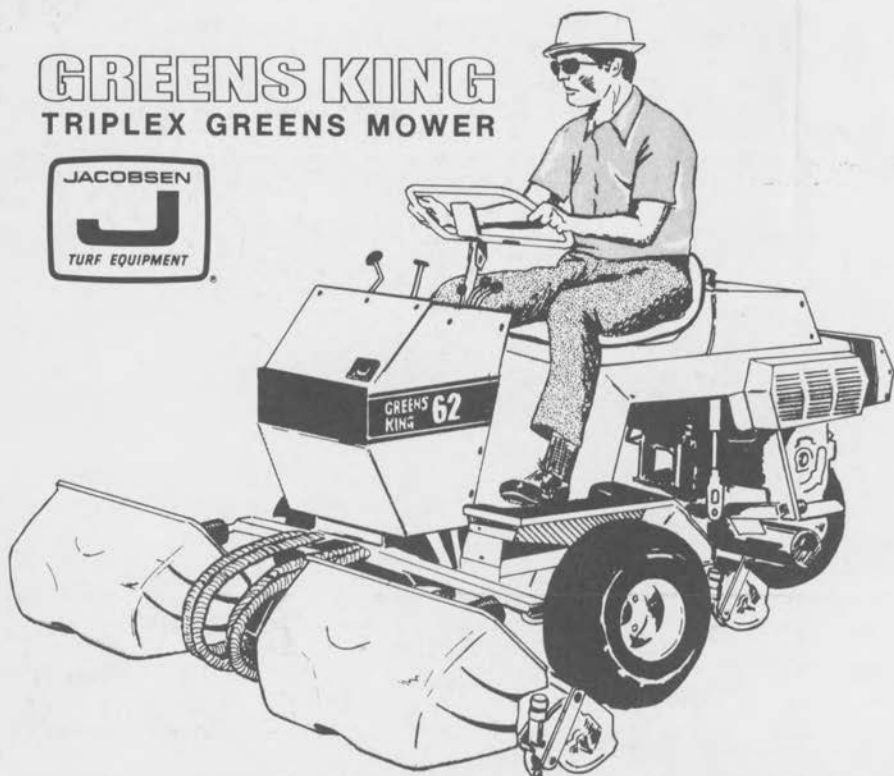
*Patent Pending



LAWN EQUIPMENT CORPORATION
520 W. 11 MILE ROAD ROYAL OAK, MICHIGAN 48068
TELEPHONE: 313: 398-3636

GREENS KING

TRIPLEX GREENS MOWER



JACOBSEN.

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

