

**THE BULL SHEET, official publication of the  
MIDWEST ASSOCIATION OF GOLF COURSE  
SUPERINTENDENTS.**

**1987 Board of Directors**

<b>President</b>	Jim Evans (Debby) Turnberry C.C.	Home: 815-455-3994 Office: 815-459-8570
<b>Vice-Pres.</b>	Mike Nass (Jean) Cantigny Links	Home: 462-1547 Office: 668-5170
<b>2nd Vice-Pres.</b>	Alan Fierst Oak Park C.C.	Home: 456-7815 Office: 453-7525
<b>Sect'y.-Treas.</b>	David Meyer (Penny) Indian Lakes C.C.	Home: 820-1040 Office: 529-0200
<b>Exec. Secretary</b>	Penny Meyer (David)	Office: 820-8181
	MAGCS Mailing Address P. O. Box 248, Eola, IL 60519	
<b>Board</b>	Brian C. Chalifoux (Carol) Olympia Fields C.C.	Home: 481-1778 Office: 748-0495
	David E. Louttit Innsbrook C.C.	Home: 219-663-3830 Office: 219-980-3107
	Ray Schmitz (Jan) Flossmoor C.C.	Home: 815-469-2773 Office: 798-2498
	Bruce Williams (Roxane) Bob O'Link G.C.	Home: 680-1074 Office: 432-0088
	Dennis Wilson (Pat) Sunset Ridge C.C.	Home: 441-8387 Office: 446-5222
<b>Pres. Emeritus</b>	Dave Behrman (Chris) Deer Creek G.C.	Home: 748-5320 Office: 672-5887

**Official Photographer** Raymond Schmitz

**ECKHOFF AWARD**

For Excellence In Golf Journalism



We are not copyrighted and would like to share our articles with any who would like to use them, but please give the author and "The Bull Sheet" credit.

**Editor —**

**Fred D. Opperman, CGCS**  
1022 Shady Lane  
Glen Ellyn, IL 60137  
Phone (312) 469-3444

**Bull Sheet** printed by Ever-Redi Printing, 5100 East Ave., Countryside, IL 60525.

The **Bull Sheet** is published once a month. All articles are required by the 10th of the month to make the next issue. Advertising is sold by the column inch, by the quarter page, half page, and by the full page. All artwork to be finished and in black and white. Circulation is over 500 issues per month.



**President's Message**

While my tenure as President of M.A.G.C.S. ends, I am left with many good feelings about this association. I have had the pleasure of meeting many fine individuals, and have welcomed the opportunity to represent M.A.G.C.S. at allied association functions. I have received encouragement and criticism regarding association affairs. In all honesty, we appreciate and welcome every criticism, positive or negative, for your input only helps to guide us in the right direction. Personally, I hoped to devote more of my time to association affairs. But, in many cases, my family and my job as superintendent took priority over M.A.G.C.S., and for this I apologize. Overall, I feel it has been a successful year. The positives far outweigh the negatives. Hopefully, all our members feel the same way.

I would like to express my sincere thanks to all the board members of M.A.G.C.S. who have made this year a success. These people are enthusiastic and conscientious in their efforts to provide the membership with quality programs and activities. Their attendance and cooperation at our monthly board meetings has been tremendous all year. The countless hours of work that are devoted to the various committees has not gone unnoticed. Their tireless work has helped to make the president's job much easier. I am grateful to them, for a job well done.

I personally want to thank Dave Meyer, secretary/treasurer, for all of his hard work and dedication to the association. Dave has been secretary/treasurer the past 12 years, and is now running for 1st Vice President. Dave and his wife Penny, our executive secretary, have worked unselfishly over the years for the good of M.A.G.C.S. We should all be thankful and appreciative of their efforts. Fred Opperman is another person deserving applause as editor of the **The Bull Sheet**. Fred continues to assemble one of the finest monthly association newsletters in the country. Past President Dave Behrman will be leaving the board this November after serving seven years. His knowledge and expertise will certainly be missed by all of us. Hopefully, Dave will continue his work at the committee level in the future.

Finally, I want to thank the entire membership of M.A.G.C.S. for your support during my term in office. My position as president has been rewarding, but without your help our efforts would be in vain. I look forward to serving you as past president, and hope to serve on various committees during future years. Under the direction of newly elected President Mike Nass and the board of directors, I am confident that M.A.G.C.S. will be in good hands in 1988, and for many years to come.

**James E. Evans**

## Director's Column



### Overcoming Language Barriers in Staff Management

by Bruce R. Williams, CGCS  
Bob O'Link Golf Club

There is a definite trend in the labor market for golf courses in the major metropolitan areas of the United States. The majority of our seasonal employees are Hispanic and speak little or no English. It is obvious that this has created a difficult situation for many of us in golf course management.

Good communication is a key to any successful golf course operation. Even with the best staff it is nearly impossible to reach our desired objectives if we cannot communicate our instructions to our employees. We send a message to our employees in oral or written form and the manner in which they perceive this message provides the line of communication. Most people have a problem communicating effectively in one language without a secondary language.

A perfect example might be to ask a staff member to cut down the first tree at the fourth tee. A mis-communication might result in having the fourth tree cut down at the first tee. It is easy enough for this to happen without a language barrier. Imagine the consequences when sending this message to a person that does not comprehend your language.

Let us look at several ways to overcome potential problems created by a language barrier. The best possible situation would be to have a bilingual staff. This may be a difficult task but not an impossible one. Provide an avenue for Hispanic employees to learn English. There are a number of cassette tapes available for learning English as a second language. A cassette player and a set of tapes are well worth the investment to improve communication. Many high schools and community colleges offer courses in English as a second language. It would also be advisable for all supervisors to learn Spanish. This would eliminate the need for translators. It would also eliminate the old saying "those instructions lost a little bit in the translation".

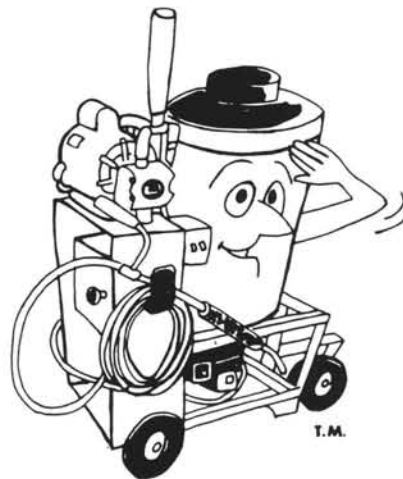
A good start to improve communications would be the use of a bilingual dictionary. The pocket versions will suffice. For those people that are on the forefront of technology there are now pocket translators (about the size of a calculator) that will display a word or phrase in Spanish when you enter the phrase in English. In the future we should see pocket translators with an audio response.

Language barriers present a problem in effectively training employees. Video cassettes are now available to educate your employees in either Spanish or English. GCSAA offers a video

(cont'd. on page 4)



*The Hot Water Cleaner  
For Heavy Duty Jobs*



© 1976  
THE HOTSY CORPORATION

Hotsy will save you time and money:

Dirt can cripple equipment performance. Hotsy removes industrial grime faster and more economically than steam cleaners can.

Hand-cleaning is a tedious time-waster. Hotsy saves employee time and reduces down time on heavy machinery.

***Clean Equipment Runs Better Longer  
Let us Clean Something Dirty For You***

● **CALL FOR A FREE DEMONSTRATION** ●

***Hotsy of Chicago, Inc.***

**SALES/SERVICE/RENTALS**

**90 Models • 200 to 15,000 PSI**

**893-0777**

**25 SOUTH PARK STREET  
ROSELLE, ILLINOIS**

## Executive Blend BLUEGRASS SOD

**THE BLEND**—Combination of 5 disease resistant cultivars chosen on the basis of adaptability to a variety of growing conditions.

**SOIL TYPE**—820 irrigated acres of sandy loam mineral soil.

**ROOTING**—Rapid establishment in any soil type with less water.

**SERVICE**—On-Time—Radio Dispatched—Forklift Delivery.

**PENNCROSS CREEPING BENT SOD** 75% Sand Base



Quality Supplier of  
Seed, Fertilizer,  
Chemicals, and  
Equipment.

**HUBER RANCH  
SOD NURSERY**

Schneider, IN 219/552-0552

- IN 800-553-0552
- IL 800-553-0554

(Director's Column)

entitled "Safe Handling of Pesticides". The Idea Bank in Tempe, Arizona has videos entitled "Applicator's Guide to Pesticide Safety" and "Elements of Pruning". GCSAA member Eugene Stoddard has produced two videos in Spanish entitled "Operating the Toro GM3" and "Cup Changing". His company is Video Training, Inc., 1881 Jeffrey Ave., Escondido, CA.

While we have dealt with long term solutions to overcoming a language barrier there may be a few bits of advice that could be of use immediately. Establish a Personnel Policy Manual and have it translated into Spanish. This will enable management and labor to use the same set of ground rules. Use written instructions when handing out job assignments. It will minimize miscommunication and you should no longer hear "I thought you said". Our Assistant Superintendent, Rick Bowden, writes up the daily work assignments on a blackboard and changes them as necessary. A map of the golf course is also helpful to show employees their assigned work areas.

The Grounds Department at Bob O'Link Golf Club is currently comprised of 4 Americans and 12 Hispanics. We are not alone in this trend in the Chicago area. I couldn't ask for a better staff of hard working and dependable men. Language barriers do present some problems but they are not insurmountable. The golf course superintendent now has a number of resources at his disposal to help the situation. Communication is the key to succeeding in our business today. A well-trained staff can give you optimal results with proper communication.

## LESCO ELITE Fertilizers



**A complete new line of small-particle sulfur-coated urea fertilizers specially designed for low-cut turf.**

**ORDER  
NOW**

**LESCO**

LESCO, Inc. • 20005 Lake Road • Rocky River, OH 44116  
Cleveland 333-9250

**(800) 321-5325**  
NATIONWIDE

**(800) 362-7413**  
IN OHIO

## What Every Good Turf Manager Needs to Know About Soil Testing

by S. J. Donohue  
Virginia Tech University

A healthy vigorous turf is a primary goal of every good turf manager. One of the most important management practices for establishing and maintaining a vigorous turf is soil testing.

There are several reasons for testing soil. First, soil testing assists in determining fertilizer needs, by indicating both how much fertilizer is needed and what kind of fertilizer to apply. Second, soil testing tells us how much lime is needed to correct soil acidity, as well as what kind of limestone to apply (e.g., dolomitic, calcitic, regular agricultural lime). Third, soil testing helps to detect potential minor element needs, both directly, through minor element testing, and indirectly through the soil pH test. Fourth, soil testing assists in identifying causes of poor turf growth. If the problem is one of poor plant nutrition, the soil test will help indicate this. In some cases, factors other than inadequate plant nutrition such as disease, insects, etc. are responsible for the poor plant growth. However, a soil test in this case will help eliminate nutrition as the cause of the poor growth, thereby narrowing down the real cause of the problem. Fifth, soil testing enables one to utilize research in turf production. Researchers have developed a considerable amount of information on turf growth and management. Soil test recommendations are based on these research findings. Therefore, one can utilize this research in turf production through soil testing. Sixth, soil testing helps to protect your investment. When one

(cont'd. on page 9)

# Schroeder's Nursery, Inc.



TREES • SHRUBS • EVERGREENS

RICHARD A. SCHROEDER  
DON VIRGENS  
CARL DRAVIS

Specializing in Large Caliper Trees  
We offer complete installation

TELEPHONE: 312 — 546-9444

23379 W. Route 60 — Grayslake, Illinois 60030  
Located on Route 60 between Rt. 12 (VOLO) & Rt. 83 (IVANHOE)



## B. Haney & Sons, Inc. COMPLETE TREE SERVICE

- TRIMMING • SPRAYING •
- SELECTIVE CUTTING •
- STUMP REMOVAL •
- WOOD CHIPS •

WE "CARE"  
FOR YOUR TREES

(312) 678-7809

3344 Lincoln St., Franklin Park, IL 60131



LAWN CARE

Weed, Insect, Disease Control;  
Fertilizing, Core-aerifying, Slit Seeding

HYDROSEEDING

TREE CARE

Tree Spraying, Feeding,  
Surgery, Trimming, Removal

PRAIRIE SEEDING

3524 LONG GROVE ROAD  
LONG GROVE, ILLINOIS 60047 (312)438-5161

## PAR EX PROFESSIONAL PRODUCTS<sup>®</sup> with IBDU<sup>®</sup>...with IBDU/SCU<sup>®</sup>... with ADDITIVES.



### PROFESSIONAL PRODUCTS for PROFESSIONAL TURFGRASS MANAGERS.

We formulate our products to satisfy the regional nutritional requirements of your turf. Many of these mixes contain our exclusive nitrogen source, IBDU<sup>®</sup>, or our exclusive mixture IBDU/SCU. We are now offering the best additives in our mixes: Ronstar<sup>®</sup>, Dacthal<sup>®</sup>, Balan<sup>®</sup>, Dursban<sup>®</sup>, Oftanol<sup>®</sup>, and others.

Check with your local Par Ex  
Territory Manager or Par Ex Distributor.

**par ex**  
PROFESSIONAL PRODUCTS

Territory Manager  
**Thomas E. Skinner**  
Keokuk, IA  
319/524-8912

**Turf Products Ltd.**  
West Chicago, IL  
312/668-5537

RONSTAR<sup>®</sup> is a registered trademark of RHONE-POULENC, INC.  
DURSBAN<sup>®</sup> is a registered trademark of DOW CHEMICAL, USA

DACTHAL<sup>®</sup> is a registered trademark of S.D.S. BIOTECH  
OFTANOL<sup>®</sup> is a registered trademark of the Parent Company  
of Farben Fabriken-Bayer, GmbH, Leberkosen



## "1987 — The Frenzy of Mechanical Tree Moving"

by M. Beebe, Certified Arborist

Although my main source of income for the past 15 years, I am beginning to wonder if Mr. Vermeer and Mr. Big John were correct in their estimation that one can transplant ten to twelve inch diameter and bigger trees mechanically, with any degree of success.

After relocating trees from the Gulf of Mexico, Florida, Texas, Louisiana, Alabama, Georgia, Tennessee, to the Great Lakes Region, Michigan, Indiana, Illinois, Iowa, and Wisconsin, it seems to me after careful examination of my transplanting records, and personally inspecting the aforementioned trees over the years, that the larger ones, i.e., eight, nine, ten, and eleven inch diameter trees, deciduous and conifers, all eventually succumbed to one form of transplanting stress or other related problems over a five year time span.

On the other hand, the smaller diameter trees, i.e., 4, 5, and 6 inch diameter, whether it be Crape Myrtle, Live Oak, or Red Oak, all did well if properly transplanted at the right time of the year, and were properly taken care of for the following two years. Even with excellent care for two years following, the big trees all died.

With all the emphasis on large trees in this rapid building and moving time we are in, and people wanting a forest now, and not wanting to wait for their trees to grow, it is of my opinion that they would be far better off to plant six inch caliper material or less than the extremely large material that they are buying and having installed. This large material, whether it be Oaks, Maples, or Conifers, does not do well in the third, fourth, and fifth year, and in most cases have died by the fourth year due to stress induced by transplant shock.

If a homeowner, municipality, golf course, or park district is willing to spend huge sums of money on large trees, it behooves us to inform our customers on the facts of these Magnificent Tree Moving Machines, and be more realistic and knowledgeable in our endeavors as purveyors of this plant material that will shade, beautify, and add value to their property. It also behooves these same people, to research the company they are doing business with to ascertain if in fact they are (Killing Trees For Dollars) or they know trees, and have the ability to follow up on care for these newly planted trees. Are they a member of the I.A.A., do they have a certified Arborist on Staff? Big Trees for big dollars usually ends up dead trees, and the homeowner will have to replace his Big Trees with smaller ones, this situation then becomes a lose, lose proposition. He loses his Big Trees, his financial investment, his family loses the shade and beauty, and they and their neighbors all lose respect and esteem for the Green Industry as a whole, not to mention what a volume of dead Big Trees can do for the aesthetic quality of an area.

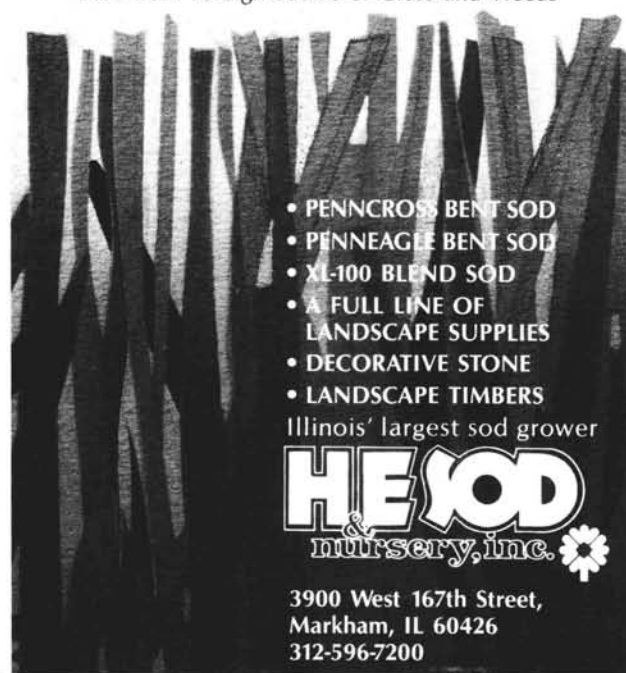
It is of my opinion that we have a law passed, or some prerequisite established, that anyone involved in moving trees or all Tree Moving Companies, must have a Certified Arborist on Staff, and the abilities and knowledge, positive proof thereof, on the after care of these trees.

The Frenzy is on, and trees of all dimensions and sizes are being mechanically moved, irrespective of the American Nurseryman Association's standards of ten inches of dirt for each caliper inch of trunk. I haven't seen any one hundred and

## POA ANNUA FREE BENT GRASS SOD


Grown In Fumigated Soil

Free from Foreign Strains of Grass and Weeds



- PENNCROSS BENT SOD
- PENNEAGLE BENT SOD
- XL-100 BLEND SOD
- A FULL LINE OF LANDSCAPE SUPPLIES
- DECORATIVE STONE
- LANDSCAPE TIMBERS

Illinois' largest sod grower

**HEXOD**  
nursery, inc. 

3900 West 167th Street,  
Markham, IL 60426  
312-596-7200

thirty inch diameter tree spades on the road.

It may hit some of us in the pocketbook if we stop to take a look at the trees we are KILLING FOR DOLLARS, but I feel it will do our industry and our urban areas, and our neighbors a better turn, if we are honest in our tree moving endeavors. And, to be honest is to learn about those trees we are moving, attend all the seminars and classes we possibly can. Like Dr. Alex Shigo says, "HUG A TREE TODAY", and I say "They may be gone tomorrow" if we don't educate ourselves to the task at hand.

Anybody can learn to operate a tree spade, it is not difficult, and any eighth grade graduate can do it, as has been proven over the years. But, to educate yourself about those trees, to do the very best you can for your customer and yourself, and your environment, one needs to focus his attention on education in the Arboricultural and Horticultural aspects of the business as well.

Before municipalities, golf courses, homeowners, park districts, and anybody else hires a tree moving company, I feel they should protect not only their tree dollars, but also their trees, by finding out just how much the company they are doing business with knows about trees, or are they just another "KILLING TREES FOR DOLLARS" tree moving company.

During this period of frenzied tree moving, I only can think of what the future results will be, and if we don't slow down and seriously contemplate what we are doing, all the efforts of the designers of these machines, and their wonderful ability to relocate trees and provide the beautiful benefits to our urban tree canopy, will have been in vain, and we will have created an insect haven of the highest order.

# COUNTRY CLUB

**PROFESSIONAL  
TURF PRODUCTS**

Distributed by  
Turf Products, Ltd., West Chicago  
668-5537

Ask for information regarding Turf Product's new BULK BAGS, 1000#, and the new GREENS GRADE 14-3-18 homogenous/SCU.

**Lebanon**  
TOTAL TURF CARE

BETTER TURF CARE FROM THE GROUND UP.

NEEDING A NEW TRACTOR BUT YOUR BUDGET WON'T PERMIT IT?

WE CAN HELP.

LEASE A NEW, FULLY EQUIPPED FORD 1910 TRACTOR FOR LESS THAN

\$277.00 PER MONTH\*

NO DOWN PAYMENT



\*Based on 48 month lease and optional buyout at end of lease. Offer valid on tractors delivered by November 30, 1987. Longer or shorter terms are available. Call us for more details.

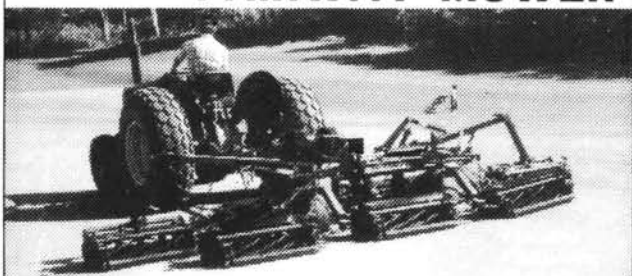


MARTIN IMPLEMENT SALES  
16400 S. 104th Avenue  
Orland Park, IL 60462

(312) 349-8430

**BROUWER**  
TURF EQUIPMENT LIMITED

## 5-or 7-GANG FAIRWAY MOWER



- ✓ FLOATING HEAD TO FOLLOW CONTOURS
- ✓ EASY TO TRANSPORT AND BACKLAP
- ✓ SMALL POWER REQUIREMENTS ALLOW LESS COMPACTION, LESS FUEL CONSUMPTION
- ✓ P.T.O. DESIGN ALLOWS SUCCESSFUL MOWING EVEN WHEN WET
- ✓ VARIABLE FREQUENCY OF CUT ENSURES THE HIGHEST QUALITY OF CUT



FOR DEMONSTRATION, CALL  
**CHRISTENSEN  
POWER  
EQUIPMENT**

815 469-5898 MONEE-MANHATTAN ROAD  
FRANKFORT, IL 60423

## Irrigation Engineering Co.

...SOUND ENGINEERING and QUALITY MATERIALS

Your Exclusive

**Weather**  **matic**  
LAWN AND TURF IRRIGATION

Distributor



9242 BROADWAY • BROOKFIELD, IL 60513  
(312) 485-6023



2 N 255 County Farm Rd. West Chicago, IL 60185  
Phone: (312) 668-5537

### PEERLESS FENCE CO.

3N381 Powis Rd.  
West Chicago, IL

- Chain-Link Fencing
  - Wood Fencing
  - Special Gates
  - Driving Range Fencing
  - Tee Protection Fencing
  - Wood & Steel Guard-Rails
  - Golf Course Work Our Specialty
- 312/584-7710 **Hal Laman**

"Golf Course Work a Specialty"

### LEMONT PAVING CO.

Lemont, IL 60439

Jim, Tracy, Ray Murphy

257-6701

## WHOLESALE SUPPLIER for



LAKE COOK  
FARM  
SUPPLY

### Landscapers • Nurserymen • Golf Courses

- Turf and Agricultural Chemicals
- Common and Elite Turf Grass Seed
- Union Fork Tools
- Peat Moss — Bark — Mulches
- Root Lowell Sprayers
- Shaws and F.S. Fertilizers

#### CUSTOM BLENDING OF BULK FERTILIZERS OUR SPECIALTY

Pickup or Delivered from our Bulk Fertilizer Plant  
Custom Fertilizer Spreading Available

DISTRIBUTORS OF F.S. PETROLEUM PRODUCTS

### GASOLINE • LUBE OIL • DIESEL FUEL



LAKE COOK FARM SUPPLY

PETROLEUM  
DIVISION  
101 E. MAIN ST.  
LAKE ZURICH, IL 60047  
540-0100

TURF  
DIVISION  
1214W NORTHWEST HWY.  
PALATINE, IL 60067  
991-4800

BULK FERTILIZER  
PLANT  
170 CEDAR AVE.  
LAKE VILLA, IL 60046  
356-9600

## Protect Trees from Winter Injury Now

by James Fizzell

University of Ill. Extension Service

The fact that winters are tough on trees and shrubs is an understatement. This summer we saw the effects of the winter as plants expired from delayed reaction to damage. Plants girdled by rodents, or with roots injured by excess water or low temperatures, can live quite awhile before the stored foods are used up. Then when least expected, they die.

You can avoid many of the winter problems by preparing now. To reduce damage from mice, remove all grass and weeds around the trunks of the trees and shrubs. Use hand clippers on vegetation you can't cut with a lawn mower. Be sure not to nick the bark. Unmowed vegetation provides cover for field mice which eat the inner bark of trunks and roots, frequently killing fruit trees.

Rabbits eat the bark off the trunk and any branches within reach, particularly on young fruit trees. However, they do not bother old trees which have developed heavy outer bark. Either chemical repellants or mechanical barriers are recommended for protection from rabbits. Spray the repellant on trunk and lower branches as recommended on the label. Chemicals are more effective in protecting shrubs than mechanical barriers. For trees, use chicken wire or hardware cloth to form a cylinder around the trunk. The cylinder should be at least two inches from the trunk and high enough to provide protection in the event of heavy snow cover. Or, wrap the trunk with newspaper, waterproof paper, or tree wrap.

Wrapping the trunk will also help protect trees from winter sun scald, and will benefit even older trees not subject to rabbit damage. Wrapping the trunk will also help protect trees from winter sun scald, and will benefit even older trees not subject to rabbit damage.

Trunk wrapping does not keep the trunk warmer, but provides shade from the winter sun which could elevate the temperatures of the inner bark to the point where it begins growing even in mid-winter. When the sun sets, temperatures rapidly drop to freezing or lower; this causes ice crystals to form in the inner bark, killing it. Such injury usually occurs on the south or southwest side of the trunk, the area most likely to be warmed by winter sunlight, and may not become apparent until the next summer. Maples and other thin bark varieties are very susceptible to this kind of injury. Some nurseries are using white paint on trunks as protection from winter sun damage.

Remove tree wraps when growth starts in the spring as they provide cover for insects which may injure the trunk during the growing season.

It is equally important that evergreens and newly planted trees and shrubs go into winter adequately watered. Plants standing in water drown, but those in parched, dry soils won't survive either. Roots continue to grow as long as soils remain unfrozen. Evergreens lose water from their leaves on bright winter days. If predictions are correct we are in for a severe winter. Evergreens that suffered from the cold and winds last year may need help to survive this year. Screens of lath or burlap to protect exposed evergreens, or anti-dessicants such as wilt proof might mean the difference between getting a plant through the winter and losing it outright.



# J W Turf inc

14 N. 937, Rte. 20, Hampshire, IL 60140  
(312) 683-4653



# Golf & Turf

SALES • SERVICE • PARTS



## 1500 Utility Vehicle

features: A Multi-Function Vehicle Provides Maximum Productivity Spreader, Sprayer or Utility Truck

### ● SPRAYER ATTACHMENT

- High Capacity, 160-Gallon Tank
- 3-Section Boom Covers 18.5 Feet
- 55 gpm Centrifugal pump
- Main Sprayer Shut-off Valve
- Three Individual Valve Controls

### ● SPREADER ATTACHMENT

- Ideal For Applying Sand Topdressing, Fertilizer, Seed, Lime
- 14-Cubic-Foot Hopper
- Adjustable Pendulum Swaths 12 to 40 Feet Wide

### ● UTILITY BED ATTACHMENT

- 1500-Pound Bed Capacity
- Optional Hydraulic Dump



### SEE THE DEERE PERFORM

call Jim Huber  
(312) 683-4653



## Nothing Runs Like a Deere®

Servicing Our Customers Is Our Way of Business



Servicing 24  
Counties in  
Illinois &  
Indiana

(Soil Testing cont'd.)

considers the cost in labor and materials that go into establishing and/or maintaining a good turf, the importance of soil testing for maintaining adequate fertility levels and ensuring good turf growth to protect the investment becomes apparent.

As discussed, it can be seen that soil testing is an important agronomic tool for a turf manager. The question today is not "why" test soil, but rather "how" to take a good meaningful soil sample. Sampling is perhaps the most important part of a soil testing program. When one considers that a two pound soil sample must represent, on the average, 25-50 tons of soil in the area being sampled, the importance of collecting a good soil sample becomes apparent.

To begin the sampling process, the first step is to separate the turf to be sampled into uniform areas, i.e. areas that have been fertilized and limed the same and areas that have the same soil type. A separate soil sample is required from each uniform area in order to obtain an accurate representation of the fertility status of that area. As an example, the lawn around a house might be separated into two areas for sampling purposes, the front lawn and the back lawn, for situations where the front lawn received more attention (i.e. more fertilizer, lime, and general care) than the back lawn. Tees would be considered apart from greens and fairways.

Within each uniform area, 10 or more subsamples or soil cores should be collected in a random fashion. Care should be taken to avoid flower borders, etc. which might have a fertility level quite different than that of the general turf area. In regard

to sampling depth, an established turf should be sampled from the surface to the 2-4 inch depth. The reason for this is because phosphate, potash, and lime, when surface applied, move downward very little in the soil. In addition, most of the grass roots feed within this area. Sampling at this depth will give a reliable indication of the fertility status of the soil as the plant sees it. When establishing a new turf, the sample should be collected down to the depth at which the soil is being tilled. The mixing effect of the tillage operation makes the fertility status of the soil fairly uniform throughout the tilled area.

After taking each subsample, be sure to scrape away and discard the surface mat of grass. Otherwise, this will affect the soil test. After 10 or more subsamples have been collected from the uniform area, these should be mixed thoroughly in a pail in order to obtain a good representative composite sample. Soil from the pail is then put into a sample box for sending to the soil testing lab.

The laboratory needs to know exactly what kind of grass is being grown and whether the recommendation will be for maintaining an already established turf or establishing a new turf. The reason for this is that recommendations differ considerably depending on whether one will be applying fertilizer to the surface (maintenance application) or mixing it into the soil (establishment application).

(This article is an excerpt from the Summer 1985 Nebraska Turfgrass Foundation Turfgrass Bulletin).



# GROWING GROWING GROWN



## There's too much to see in one day!!!

If you thought last year's show was big, wait until you see Mid-Am/88! We've added another 16,500 square-foot ballroom filled with top-quality horticultural suppliers. There's so much to see and discuss, it just can't be done effectively in one day!

Plan on spending some *quality time* with Mid-Am exhibitors at the Hyatt Regency Chicago Hotel, January 15-17. The special Mid-Am rate of \$68.00/single, makes it very affordable to "stay over" an extra day. Mid-Am lets you cover a lot more ground than you ever could on the road, or on the phone.

At Mid-Am/88, you'll discover the latest in profit producing products and vital business services.

Compare ideas with the experts...ideas that could make a big difference in your bottom line.

Mid-Am has long served thousands of horticultural professionals...all seeking to improve their business, profits and knowledge through innovative, quality products and services.

**Come to Mid-Am/88** to see over 335 industry specialists exhibiting in over 61,000 square feet...over 600 booths featuring green goods, equipment, supplies and services.

**Come to learn** about new trends, developments, products, and ideas while they're still new.

**Come to Mid-Am/88** and **SAVE MONEY** by registering in advance, without lines or hassles.

Sponsored by: Illinois State Nurserymen's Association · Illinois Landscape Contractors Association · Wisconsin Landscape Federation · Indiana Association of Nurserymen

### ADVANCE REGISTRATION FORM

#### **Mid-Am '88** Hyatt Regency Chicago · January 15, 16, 17, 1988

Save \$5 per person by registering in advance. Complete and mail this form, with your check (payable to Mid-Am) for \$7 per person, to Mid-Am, 4300-L Lincoln Ave., Rolling Meadows, IL 60008 • 312/359-8160

##### Be Sure To Include Job Code Number for Each Registrant

- |                        |                     |                                 |
|------------------------|---------------------|---------------------------------|
| 01 Owner/Corp Official | 02 Manager/Foreman  | 03 Landscape Architect/Designer |
| 04 Employee            | 05 Engineer/Planner | 07 Gov/School Official          |
| 08 Student             | 20 Other _____      |                                 |

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

COMPANY'S PRIMARY BUSINESS (Please Check ONLY One)

- |                                      |  |
|--------------------------------------|--|
| <input type="checkbox"/> 10 Grower   | <input type="checkbox"/> 20 Landscape Services |
| <input type="checkbox"/> 30 Retailer | <input type="checkbox"/> 40 Supplier           |
|                                      | <input type="checkbox"/> 50 Other              |

Phone ( \_\_\_\_\_ ) \_\_\_\_\_

NAME

FIRST NAME FOR BADGE

JOB CODE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Use separate sheet for additional names.

☐ Check here if you need hotel information.