Announcing...





has been added to

TURF SUPPLY COMPANY's

ever-growing family of fine products.



Wipe out dollar spot before dollar spot wipes out your greens. Daconil 2787® fungicide.







IBDU* (31-0-0) and PAR EX* fertilizers with IBDU are custom formulated for high maintenance, high quality turfgrass. Check with your local PAR EX territory manager or distributor for other available grades.

par ex

TURF SUPPLY COMPANY

• Chemicals • Fungicides • Turf Supplies 2970 Dodd Road St. Paul, Minnesota 55121 (612) 454-3106

HOLE NOTES, official publication of the MINNESOTA GOLF COURSE SUPERINTENDENTS' ASSOCIATION.

EDITOR - WARREN J. REBHOLZ 6550 YORK AVENUE SOUTH SUITE 301 EDINA, MINNESOTA 55435 PHONE: 612/927-4643

ASSOCIATE EDITOR - THOMAS P. MAGNE

MGCSA BOARD OF DIRECTORS FOR 1981

OFFICERS

PRESIDENT -SECRETARY -TREASURER - JOHN NYLUND EX-OFFICIO -

DENNIS HENDRICKSON VICE-PRESIDENT - LARRY D. MUELLER STEVEN YOUNG RICHARD DESPLINTER

DIRECTORS

DALE CALDWELL NATHAN DUNN IRWIN FULLER, JR.

KERRY GLADER ROGER KISCH DONAVAN LINDBLAD

THE FOLLOWING IS A LIST OF OFFICE TELEPHONE NUMBERS FOR THE ENTIRE BOARD: AREA CODE 612.

> DENNIS HENDRICKSON....435-7759 LARRY MUELLER......884-1074 STEVEN YOUNG......473-7418 JOHN NYLUND......941-5117 DICK DESPLINTER.....537-1149 DALE CALDWELL......646-7125 NATHAN DUNN......448-3626 IRWIN FULLER......507/388-2546 KERRY GLADER.....253-5250 ROGER KISCH......451-1666 DON LINDBLAD..........755-2140

The best in turf supplies -LESCO 100% Sulfur-Coated Fertilizers, golf course accessories, chemicals including

LESCOSAN

A highly effective pre-emergence crabgrass and poa annua control

(800)321-5325 NATIONWIDE

(800)362-7413 IN OHIO

LAKESHORE EQUIPMENT & SUPPLY CO. "Home of LESCO Products" 300 South Abbe, Elyria, OH 44035



FROM THE PRESIDENT'S DESK

DENNIS HENDRICKSON

Another golf season is nearing the time when play begins to taper off and we start to plan our maintenance program for the winter months. Certainly we have many weeks of good golfing weather remaining, but the season of heavy play is nearly past. This is a time when we should sit down and make a few notes to ourselves for next year's planning. Perhaps we learned a new method of handling young people we supervise or something we should have done differently. We might have some new thoughts about fungicide which didn't work so well this year. It is too easy to forget these little ideas once the golf season has ended. So, write it down in your records to be read again as you plan for 1982.

Last month's meeting at the University of Minnesota Golf Course was very well attended. 107 dinners were served. Those who were able to attend enjoyed the equipment show by R. L. Gould, the many discussions with other M.G.C.S.A. members and the golf course which was in excellent condition.

Thanks to Host Superintendent Russ Adams! It was a perfect day.

Thanks also to Dr. Ward Steinstra, Dr. Don White and Dr. Don Taylor for the time they spent talking with us at the University's Research Plots.

The September meeting is the Annual MGCSA Golf Tournament on September 14 at the Willmar C.C. and the Little Crow G.C. Host Superintendents Jim Wodash and Jim Brown have a great day planned so don't miss this big event. It is one of the most enjoyed events the M.G.C.S.A. has each year. Put a 4-Some together and get your registration sent in now.

SEE YOU THERE!

Trees—An Integral Part of Golf Course Scene

James T. Snow Agronomist, USGA Green Section

The value of trees to our landscapes cannot be overstated. Golf courses, particularly, benefit from the beauty projected by many native trees, especially when those trees are appropriately utilized on the course and properly maintained.

There are many considerations involved in developing a successful tree program. An overall plan must be created, which includes an inventory of trees present on the course, deciding on the tree species to be used for replacing old specimens and planting new areas, determining tree placement on the course, properly planting young trees and maintaining satisfactory health and appearance of older specimens. The importance of such a plan cannot be overemphasized. Continuity is essential when dealing with trees, which may live for 50 to 100 years

MILWAUKEE

ORGANIC

FERTILIZER

or more. Long range goals and objectives with regard to tree planting and maintenance can be met only by a solid long range plan.

Of the mistakes made in dealing with the various aspects of a tree planting and maintenance program, three stand out as being particularly widespread; tree selection, tree placement, and care and maintenance.

Selecting the Proper Trees

One of the most difficult parts of a tree planting program is deciding on the species of trees to be used. The starting point with such a problem is to determine the specific function of the tree which is to go into any particular location. Consider some of the many different functions which trees may serve on the golf course:

- · Pure aesthetic appeal
- Strategic positioning
- Isolation of one area of the course from another
- Safety barrier

- Traffic control
- Framing a view
- Screening off unwanted views
- Protection of adjoining properties/saving errant shots
- Boundary definition
- Distance indication
- · Target indication or definition
- · Line of play definition
- Shade
- Barrier to vandalism and accidental damage
- Erosion control
- Wind control
- Wildlife refuge
- · Edible fruit or nuts

As you review this list, it is plain enough to see that certain species would be better suited to some of these uses than would other species. For example, an evergreen border would produce a better year-round screen than would a border composed of deciduous trees. Also, a tree with a high, thin crown would be better for use near a green than would a tree with a low-branched, thick

continued on Page 6

Landscape & Turf Supply

Div. M.T. Wiley, Inc. 307 E. 6th St., Chaska, MN 55318 (612) 448-3300

1 - 3 ton \$160.00 F.O.B. Chaska 3 - 5 ton \$150.00 F.O.B. Chaska Truckload Bag .. \$103.50/ton + Freight Truckload Bulk .. \$83.00/ton + Freight



MILORGANITE FOR DORMANT TURF

It Eliminates Spring Feeding! The grass "greens up" early without over succulent growth.

Earlier greening than waiting until Spring and applying a chemical! Plot work in Minnesota proves this.

It will not increase snowmold!

It's a Work Saver!

It works!



MILORGANITE ANALYSIS

MILOHOAM	•		-			ALISIS
						Percent
Nitrogen .						6.25
Phosphorus						2.38
Potassium						0.315
Sulfur						1.02
Calcium			1	1		0.69
Magnesium				156	-	0.32
						6.40
Aluminum			10.5			1.20
Chromium						0.60
Lead		14				0.046
Manganese			-			0.018
Sodium						0.136
Zinc		*				0.144
						Parts Per Million
Cadmium .						79.0
Cobalt						5.1
						405.0
Mercury					4	4.8
	Nitrogen Phosphorus Potassium Sulfur Calcium Magnesium Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper	Nitrogen Phosphorus Potassium Sulfur Calcium Magnesium Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper	Nitrogen Phosphorus Potassium Sulfur Calcium Magnesium Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper	Nitrogen Phosphorus Potassium Sulfur Calcium Magnesium Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper	Nitrogen Phosphorus Potassium Sulfur Calcium Magnesium Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper	Iron Aluminum Chromium Lead Manganese Sodium Zinc Cadmium Cobalt Copper

Molybdenum ... 13.0





Hahn SPRAY-PRO

For golf greens, grounds, lawn care and Ag uses. Fast, precision spraying of herbicides, insecticides, and liquid fertilizer.

Compact size for maneuverability, yet it has 160 gal. polytank with patented Hahn jet agitation. 15-ft. 3-section folding boom for $16\frac{1}{2}$ ft. coverage. Use all 3 sections or individually.

Centrifugal pump: 100 PSI max., 55 gpm max. Optional Hand Gun for trees, shrubs or brush control.

Hahn Tournament 1202

NEW QUICK-ADJUST REEL: adjust reel to bed knife without disturbing height of cut.

CABLE DRIVEN REEL: provides constant reel speed independent of ground speed. Eliminates hydraulic oil leaks.

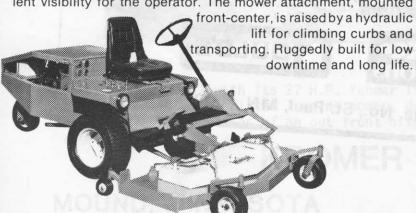
MOST PRECISE CUT AVAILABLE: a full 67" even in turns.

Converts in minutes to become a VERTI-CUT®, VIBRA-SPIKER®, TEE MOWER.

BUNTON.

71" AND 61" FRONT-CENTER TRACTOR MOWERS

optional rotary brush and snow plow. We've eliminated the side discharge to allow close trimming with either side. Clippings are mulched and dropped evenly beneath the mower. Other features include unusual maneuverability, a zero turning radius, and excellent visibility for the operator. The mower attachment, mounted



F@re-Par

- Featuring the Best Materials Available
- * Excellent Durability & Weather Resistance
- * Tee Markers
- * Flags & Poles
- * Direction Signs
- * Practice Green Markers



TURF CARE PRODUCTS

4600 Akron Avenue Inver Grove Heights, Minnesota 55075 Phone: (612) 455-8500

MEMO

TO:

Golf Course Sup'ts.

FROM:

A Turf Professional's Partner

SUBJECT:

EARLY-ORDER DISCOUNTS ON THE ANDERSON'S TEE TIME PRODUCTS

It's time to plan your Andersons' Tee Time purchases for the 1981/82 fertilizer season.

This year Gould's and Andersons' are cooperating on a super early-order discount plan for you. Order your fertilizer products before October 15 and you'll benefit big with:

- * Maximum Early-Order Discount
- * Price Protection
- * Quantity Discounts
- * Cash Discounts
- * Extended Terms

The Tee Time line gives you top performance and quality — all at reasonable cost. If you have any question as to brand — study our special Andersons' insert in this Hole Notes issue.

Stock up on Tee Time NOW and take advantage of some great Early-Order Discounts.

Give us a call today — you'll be glad you did!

the professional's partner"





3711 Lexington Ave. No., St. Paul, MN / (612) 484-8411

crown, which would block light penetration and air circulation around the green.

Following is a list of specific factors which should be considered when selecting trees for the landscape:

- 1) Hardiness and adaptability—Select species which are hardy in your climate zone and adaptable to the respective sections of the course, e.g. wet areas, exposed hillsides, infertile soil areas, etc.
- 2. Rooting habit—Many trees, such as certain pines, willows and maples, have extensive systems of surface feeding roots which rob the turf of moisture and nutrients. Remember to consider rooting habit when locating trees in close proximity to greens, tees and fairways.
- 3. Foliage type—There are evergreens and both large and small leaved deciduous types to choose from. Large leaves are sometimes difficult to deal with, from a litter and maintenance

standpoint. Many different colors, textures and sizes are available.

- 4. Fruiting characteristics—Interesting fruit can add seasonal color to the course, but it can also be a maintenance headache. For example, catalpa, osage orange, horse chestnut, apple, and certain pines and spruces are best kept in rough areas, if used at all.
- 5. Crown shape—There are many different crown shapes from which to choose, from the conical shaped little-leaf linden and pin oak to the irregular honey locust to the columnar types of Norway maple. The tall, columnar types are particularly well-suited for use as screens.
- 6. Foliage density and shade potential—Because heavy shade is detrimental to the growth of turfgrass, it is important to avoid planting trees with dense foliage too close to tees and greens. Norway maple, beech and certain oaks are notoriously heavy shade producers.

- 7. Insect and disease susceptibility—While no tree is completely immune to the ravages of insects and disease, avoid overusing species which are susceptible to many pests and diseases. The American elm is one obvious example. Others may include certain willows, poplars and sycamores.
- 8. Susceptibility to ice and storm damage—Commonly planted trees which are very susceptible to storm damage include red maple, silver maple, birch, ash, callery pear, poplar and willow. In general, trees with weak crotches, brittle wood, shallow roots and those infested with insects and disease are most likely to be damaged by ice, snow or wind.
- 9. **Height**—Consideration of mature height can be very important. Tall trees would be useful if planted for shade, visual screen or as strategical hazards, but would be a hindrance if they blocked a scenic view or interfered with play from the tee. continued on Page 7

HOWARD 727 DIESEL



The Turf Blazer 727 with its 27 H.P. Yanmar liquid cooled <u>Diesel</u> engine and 72" cutting head combines diesel lugging power, durability and fuel efficiency with the trimming capabilities of an out front offset deck.

KROMER CO.

MOUND, MINNESOTA

612/472-4167

trees, expected life spans differ dramatically. Certain oaks can live hundreds of years, while some poplars may last 20 years or less. If a planting is to be an important and permanent feature of the land-scape, the use of trees with greater longevity would be desirable. Every goli course should plan ahead for the eventual loss of older specimens by planting young trees to take their place.

11. Outstanding characteristics—There are many aesthetic characteristics, in addition to flowering and fruiting habits, which may make a tree worthy of use on a golf course. Among these are fragrance, leaf shape or texture, fall color, bark texture or color, crown shape and branching habit.

Do not rely too heavily on just one or two species of trees for the backbone of your landscape plan. Golf courses planted to American elm trees many years ago have been devastated by Dutch elm disease. Others have had similar experiences with Norway maples because of the susceptibility to verticillium wilt. There is always the potential for this type of disaster with any other species if it is overplanted. You should use a variety of trees in the landscape.

Of course there are other good reasons not to plant just one or two kinds of trees. Think how much more beautiful and interesting any landscape is when it displays a variety of plants with different colors, textures, sizes, etc. Consider, for example, if 500 red maple trees were planted on the course one year, how they will grow, mature and decline all at the same time and leave the course at the end of the cycle much the way it was at the beginning.

This brings us to another point. How often has it been said, "We're getting a huge lot of fast-growing trees at a bargain price from Dead Leaf Nursery which is going out of business!" This is not to say you shouldn't take advantage of such a situation, just don't let this type of approach become the sole basis for your program. After all, the trees you plant today will affect the appearance of your golf course for the next 50 to 150 years! Fastgrowing trees certainly have a place on many courses today, but when you recall a visit to a course well-known for its beautiful trees. it is usually the majestic specimens of oaks, beeches and the like which stick out in your mind. So be sure to include a certain percentage of the slowergrowing, perhaps more costly specimens in your plan. They will provide the real backbone for the future. And remember, not all "bargain trees" are bargains. They may be root bound or have some other problem which will inhibit proper growth and development.

Site Selection

Some knowledge of the trees you have selected is necessary in order to locate them in areas where they will prosper. As it is with turfgrasses, different trees are more adaptable to certain areas than others. For example, willows and red maples are particularly adaptable to wet areas on the course, while a tree like the red pine would not survive under these conditions. In addition to wetness. the growth of trees may differ according to other environmental factors such as soil texture, pH, availability of light, temperature extremes, exposure to winds, etc. As a plant reaches the limits of its cold hardiness, it needs a more favorable environment in which to grow properly. For example, when a flowering dogwood is planted on an exposed site in New England, it may not survive or else may produce poor growth. When planted in a protected area near other trees

continued on Page 9



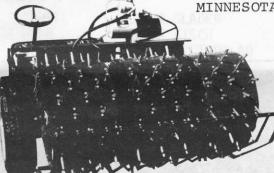
MINNESOTA TORO has everything for the fall......

TORO, OLATHE, METE-R-MATIC, MULTI-CORE, DEDOES





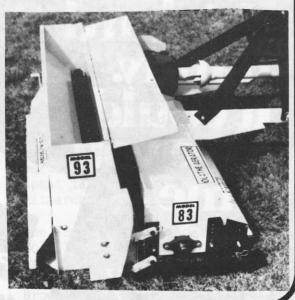
MINNESOTA TORO - Your total turf center...



Can help you with all those rushed Fall jobs, top-dressing, aerifying, overseeding & clean-up.

When you need the best in industrial equipment, we've got it!!!!!





TOLL FREE WATTS:
Minnesota 800-362-3665
WI, ND, SD 800-328-3558

MINNESOTA TORO, INC.

14900 Twenty First Avenue North Minneapolis, Minnesota 55441 Phone (612) 475-2200

or buildings, however, it can be one of the finest ornamental plants.

One of the greatest mistakes in planting trees on the course and near each other is not taking into account the mature size of the Trees can reach heights ranging from 15 to 200 feet and attain shapes from narrow upright to broad-spreading. Too often potentially large trees are located immediately adjacent to tees and greens, which means that some day these often used turf areas will be invaded by roots and shaded during much of the day. Turfgrasses cannot stand up to heavy play under these circumstances.

Just as often, trees are planted too closely to each other. Imagine what happens to specimens capable of growing 30 to 50 feet in width, when they are planted 5 to 10 feet apart! Close planting may be appropriate when the trees are to form a windbreak or screen, but when the specimens are to be developed to their best potential,

they should not be planted closer than their potential width. For example, if oak trees will be 50 feet wide when mature, they should be planted at least 50 feet apart. Trees should also be spaced so that maintenance equipment can easily pass between. Economically, close spacing means more trees will be needed initially and more money will be spent on maintenance in the future.

There are times, however, when it is desirable to overplant trees. For example, a dense planting of small trees may be needed to achieve a certain effect. Nevertheless, it must be recognized that thinning will be needed as they grow. Unfortunately, it is sometimes like pulling teeth to have even one tree removed from an overcrowded stand. If thinning is not done at the proper time, the appearance and health of all the trees will be in jeopardy.

THIS ARTICLE WILL BE
CONTINUED NEXT MONTH
WHEN IT WILL DISCUSS
CONSIDERATIONS FOR
USE OF TREES AROUND
GREENS, TEES, FAIRWAYS
AND ROUGHS. IT WILL ALSO
COVER THE CARE AND MAINTENANCE REQUIRED OF A
GOOD TREE PROGRAM.

At a banquet too much food was served and far too many long speeches were made. When the last speaker's turn came, the hour was late and he was weary. "I have been asked," he said, "to give an address and I shall beg the privilege of giving my own. It is 1440 Garden, and with your kind permission, I will go there at once."

Sunshine Magazine



THINK WINTER

Time To Plan And Order Your Winter Injury Protection Chemicals

CHEMICALS FOR WINTER INJURY PROTECTION

PMAS 10% (2x2½ gal.)	\$163.00 cs.	Calo Clor (25 lbs.) \$520.00 drum
Spot Trete F (2x21/2 gal.)		Calo Gran (2x30 lbs.) \$97.20 cs.
Clearspray (2x2½ gal.)	\$110.00 cs.	PCNB Terraclor 75% (12x3) \$111.24
Tersan SP(12x3#)	\$313.20 cs.	Wet & Hold
		Spreader Sticker (2x2½ gal.) \$105.00 cs.

SUGGESTED WINTER INJURY PROTECTION PROGRAM FROM W.A. CLEARY COMPANY

Clearspray 4 .oz 0.68 per 1,000 sq. ft.

Total \$1.90 per 1,000 sq. ft.

2.) Heavier rate:

 PMAS 2 .oz
 \$0.54 per 1,000 sq. ft.

 Spotrete F 6 .oz
 1.02 per 1,000 sq. ft.

 Clearspray 6 .oz
 1.02 per 1,000 sq. ft.

 Total
 \$2.58 per 1,000 sq. ft.

Cost comparison with Calo Clor

At the 2 .oz level it is costing you \$2.46 per 1,000 sq. ft.

At the 3 .oz level the cost is \$3.69 per 1,000 sq. ft.

GRASS SEED FOR OVERSEEDING & NEW SEEDINGS

Penn Cross lbs. 5.25 Penn Eagle lbs. 5.00

All N.K. Pro Turf Blends Available For Fall Seeding

Landscape & Turf Supply Div. of M.T. Wiley Inc.

307 E. 6th St., Chaska, MN 55318

Call Collect

MILT 612-448-3300 JOHN