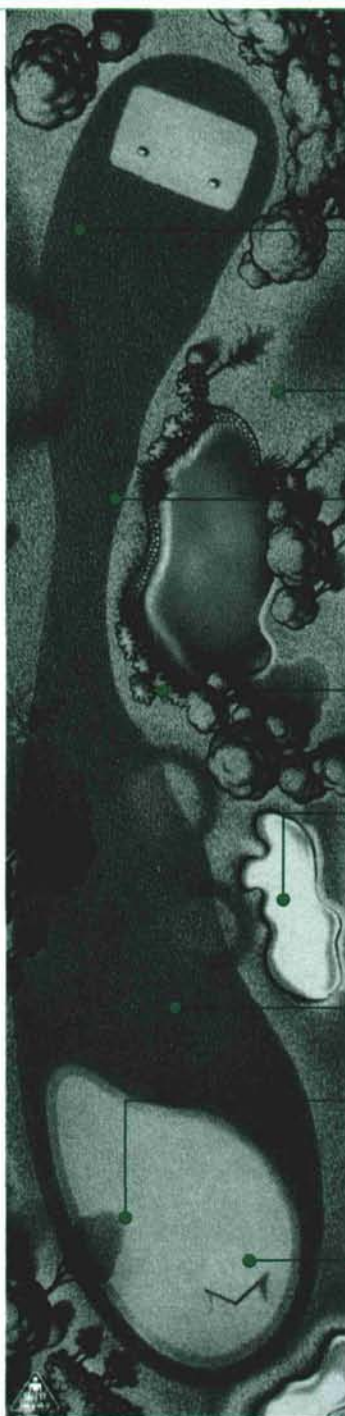


TEE-TO-GREEN QUALITY FROM JOHN DEERE



2653/2653A

Hydraulic reel drive, exceptional climbing ability, and 26- or 30-inch cutting units let you mow where others can't.



GATOR VEHICLES™

Your best choice for utility hauling with 4- and 6-wheel low-ground-pressure models available.

3215/3235

Both deliver ground-hugging fairway performance with five John Deere-manufactured 22-inch cutting units.



3365

Five 30-inch cutting units combine to deliver a quality cut over wide areas—from fairways to roughs.

1200A

New design features more power, more comfort, more attachments, and less noise.



1800

True utility performance with your choice of sprayer, spreader, and cargo box configurations.

220

This new walk-behind features an operator-presence safety system, new engine, and 11-bladed reel.



2243

Gas and diesel models both feature 18-hp engines and John Deere cutting units, for exceptional quality of cut.

For the name of your nearest distributor, or more information, call 800-557-8223. Or write John Deere, Dept. 956, P.O. Box 2795, Research Triangle Park, NC 27709-2795.

J.W. Turf, Inc.

14N937 U.S. Hwy 20
Phone: 847/683-4653



Hampshire, IL 60140
Fax: 847/683-3978

NOTHING RUNS LIKE A DEERE®

Enter *Trichoderma*

While the BioJect system had a season-long trial last year at North Shore, only late in the season did Dan Dinelli load the second barrel in his biological arsenal, that with a hybridized strain of *Trichoderma harzianum* (T.h.). Available commercially on the market now under the trade name Bio-Trek 22G (from Wilbur-Ellis Co. Fresno, CA), T.h. was developed by a trio of researchers at Cornell University (Eric Nelson, C-T Lo, and Gary Harman). Unlike the bacterium *Pseudomonas*, *Trichoderma* is a fungus that is applied dormant in dry granular form. T.h. is very efficient at establishing itself in the rhizosphere by colonizing roots...so efficient, in fact, that the fungus continues to colonize plant roots as they grow and has been shown to overwinter on turf roots even in harsh northern climes.

Trichoderma fungi, in the form of Bio-Trek 22G, are applied by broadcast spreader at the rate of 1.5 lbs./1000 sq. ft. The dormant fungi are activated upon contact with moisture on the soil surface or in the thatch layer. Two applications, in most instances, should give season-long control of many soil-borne fungal pathogens. It is not effective against foliar diseases.

While Dinelli's *Trichoderma* application last fall was too late to affect any disease pressure, soil samples sent to Dr. Gary Harman at Cornell for analysis show a tenfold increase in *Trichoderma* populations since application. "This indicates an ability of *Trichoderma* to establish itself readily in the soils here," noted Dinelli. "Based upon the numbers of colony-forming units (CFUs) indicated by the soil tests, we should see positive results this season."

1+1=3

Given the tremendous results seen last year from the *Pseudomonas* treatments at North Shore, why would Dinelli bother with *Trichoderma*? "The two products really are complementary in their modes of action," he noted. "While *Pseudomonas* has difficulty achieving naturally self-sustaining populations in the soil here, we know for a fact (from Gary Harman's report from Cornell) that *Trichoderma* will colonize the roots readily. *Pseudomonas* is effective in the leaf and crown area, while *Trichoderma* is not. By using the BioJect system to constantly renew *Pseudomonas* populations in the leaf and crown zone (and as far into the soil as it will go), and with *Trichoderma* colonizing the roots, we should have some form of biological disease control from root tip to shoot tip. The practical benefit will be increased root growth and overall plant health due to reduced stress from pathogenic fungi, and a dramatic reduction in our chemical fungicide applications."

Dollars and Sense

So what does all this cost? The BioJect system is custom-tailored to each specific site and will vary depending on acreage to be treated. Dinelli is leasing the BioJect system at a cost of \$18,000 annually, soup to nuts. That includes the bioreactor, injection system, gallon jugs of resting *Pseudomonas*, and the food source. "It's a complete package, with no surprises," according to Dinelli.

The granular *Trichoderma* applications cost between \$10-\$15/1000 sq. ft. annually, depending upon rate and number of applications.

"I am projecting an average savings of \$25,000 annually from reduced fungicide applications, due to the BioJect treatment

a'one," said Dinelli. "That will vary, however, depending upon the weather each particular year. In a dry year, we may save \$40,000; in a wet year, maybe only \$15,000. There is a potential budgetary concern with running into one of those bad years...you really need to figure a way to integrate some buffer or contingency into your budget to cover the added expense of extra fungicide applications, when needed (in the case of a rainy year)."

"Those estimated savings," notes Dinelli, "are strictly from pesticide expenditures alone. They don't take into account labor savings, or the ripple effects from better nutrient absorption or overall increased plant health. One of the big intangibles might be the effect on the soil microflora from reducing fungicide applications. Plus, by applying *Pseudomonas* through the irrigation system, we are treating areas (surrounds, tee banks, etc.) that would not normally be sprayed."

"Our goal last year was, very simply, disease suppression. We experienced very broad spectrum control, even broader than what I had hoped for initially," summarized Dinelli. "These products have brought the science of biological disease control from the laboratory to practical reality in the field. While not an end-all-be-all, they fit well into an IPM program and give us another tool from a different perspective. Hopefully, in addition to greater disease control, the healthier plants that result will be better able to deal with the other stresses they encounter throughout the growing season." ■

Reprinted from the June 1996 issue of TurfNet Monthly with permission of TurfNet Associates, Inc.

For information about TurfNet, visit their web site at <http://www>.



ON TARGET A.D.C.

TAKE CONTROL OF YOUR TURF !

- ◆ Are grubbing skunks causing thousands of dollars worth of damage to your course?
 - ◆ Are beavers having a field day with your freshly planted trees?
 - ◆ We specialize in removing targeted species only! No Non-Target catches.
 - ◆ Our goal is to protect your course from animal damage, satisfaction guaranteed!!!
 - ◆ Our business is owned and operated by a certified state trapping instructor with over 25 years of experience.
 - ◆ We will provide a sensible, in detail wildlife management plan to suit your needs for the future and eliminate your current problems quickly.
 - ◆ Minimal use of traps to insure safety to your golfers.
- We take as much pride in our work as you do in your course.

On Target Animal Damage Control

Specializes in the selective control of grubbing skunks. Muskrats caveing in banks on ponds. Groundhogs and beaver removal. Our control methods have proven to be 100% effective in major golf courses in the Chicago area.



MUSKRATS



SKUNK



RACCOONS



GROUNDHOGS



BEAVERS



ON TARGET A.D.C.

P.O. BOX 5345 GLENDALE HTS. IL.

630-858-4895

email/wctech@ix.netcom.com

Inside the Ropes

(continued from page 14)

went deep into the night. The first day ended on the practice tee where I visited with David Frost regarding course conditions. If there were any doubts as to whether all this work was worth it, they were answered today. It is a great honor to be part of this special event.

Tuesday, April 9

The four o'clock wake-up call seemed much earlier today. Crew morale was slightly lower as many of the crew were feeling the effects of a 15-hour day on Monday. The grind had started, but day two was just as exciting as the first. After completing my daily tasks, I had the chance to watch some of the players tour the course. I was impressed with Ben Crenshaw's willingness to help out Masters rookies Scotty

McCarron and Woody Austin as they enjoyed a practice round together. You'd swear Gentle Ben was Governor of Georgia—fans just love him! Seve and Constantino Rocca provided some humor on the par 3, 16th by attempting to skip some knockdown shots off the pond onto the green. I shot an entire roll of film on my favorite player, Nick Faldo, and was constantly in awe of the length of Tiger Woods. Jack Nicklaus played today, and I saw the respect many golf fans have for perhaps the greatest player to ever play the game. After the course cleared from play, the crew was hard at work again mowing everything from tees to greens, filling divots, fixing ballmarks, and doing whatever it took to get the job done. The day ended about 9 p.m., and anticipation for another great day had begun.

Wednesday, April 10

Today was the third day of practice rounds and also signaled the start of the prestigious par 3 tournament. It was scheduled to start at 1 p.m., but due to frost, it was pushed back about an hour. It is amazing the amount of crystal they give out at this event! As for our crew, it was business as usual. By now, everything had become fairly routine; and thanks to great weather, things were running very smoothly. Most of the morning crowd followed the threesome of Jack Nicklaus, Arnold Palmer, and Tiger Woods. Some of our crew headed to the par 3 tourney to tend their responsibilities, but most stayed on the main course to begin final preparation for the start of the tournament tomorrow. I had to mow the practice putting green that evening, and it was a thrill to talk with some of the pros

(continued on page 26)

PRECISION BLENDED TOP DRESSING

Custom blended to your specifications
by our modern equipment.

*Buy when you need —
Eliminate costly storage*

We sell an air-dried, uniform and
free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HENRY FRENZER

Area Code 708
658-5303

620 Webster St.
Algonquin, IL
60102

DUNTEMAN

TURF FARMS

Growers of Quality Sod

SERVICE!

LOCAL GROWING FOR
EASY PICKUP OR QUICK DELIVERY.
DELIVERY ON TIME, EVERYTIME.

QUALITY!

FEATURING
ELITE KENTUCKY BLUEGRASS,
BENTGRASS SOD, AND
TURF-TYPE FESCUE

- LOWER MAINTENANCE
- MORE DROUGHT
& SHADE TOLERANT
- BETTER WEAR RESISTANCE

PRICE!

CALL FOR A QUOTE

NEW
PRODUCT

630-557-2900



MAIN STREET
11 MILES WEST
OF BATAVIA, IL



SPECIALIST IN:

Club House Landscape Design/Build:

Design and Installation of specimen plant material for high priority areas. Design and installation of perennial, annual and wild-flower displays.

Complete Expert Maintenance Service:

Use Mariani to renovate and rejuvenate shrubs, ornamentals and all landscape areas as you dedicate your precious time on the golf course.



300 ROCKLAND RD., LAKE BLUFF, IL. 60044
(847) 234-2172 FAX: (847) 234-2754

EASY SOLUTIONS FOR TOUGH TRENCHING JOBS

LM-42 Plow/Trencher

Designed for maneuverability, easy operation and reliability. Features dual Operator Presence controls, adjustable plow blades and an enclosed wet-disc park brake. Numerous optional attachments available.



Vermeer® Makes The Job Easier

- Trenchers ▪ Plows ▪ Directional Boring ▪ Pneumatic Piercing Tools
- Brush Chippers ▪ Stump Cutters ▪ Tree Spades ▪ Tub Grinders



Vermeer-Illinois, Inc.
2801 Beverly Dr. ▪ Aurora, IL 60504
Phone: (630) 820-3030 ▪ Fax: (630) 820-3490

Vermeer® is a registered trademark of Vermeer Manufacturing Company ©Vermeer Manufacturing Company, 1996



18250 BECK ROAD
MARENGO, IL 60152
TELEPHONE: (815) 923-1868
FACSIMILE: (815) 923-3662

DESIGN / BUILD
NEW CONSTRUCTION
RENOVATIONS

*S*ubtle,
*S*ecure,
*D*ramatic.

Now, Moonscape can help your grounds become more dramatic, while addressing security and safety concerns.

We creatively design & install lighting systems that elegantly highlight your landscape with the subtle glow of moonlight, creating an artistic view of shades & textures.

Moonscape Inc.
Landscape Illumination

3710 Fairview •
Downers Grove, IL 60515
(630)852-2400



Consultation

•
Design

•
Installation

•
Maintenance

Inside the Ropes
(continued from page 24)

as they tried to make final adjustments to their game before the tournament started. Every last detail was polished; and at 9 p.m., we were released to rest for a few hours until early the next morning.

Thursday, April 11

After all of the waiting and preparation, it was finally tournament time! The players' attitudes changed from smiles to serious business as they were called to the first tee. The crew had the routine down by now as we had our quickest and most efficient performance with morning tasks. No doubt about it, the course was in excellent shape! I watched Greg Norman play flawless golf en route to a course record tying 63 on this course—give me a break! The crowd was unbelievable, and working in front of thousands of people each day was exciting. I had back-

pack duty on the second green again and was constantly asked by gallery members about mowing heights and stimp readings. Top secret, of course! Play finished up, and the crew hit the course late but still managed to finish all duties in preparation for Friday's second round. Each day was a challenge for us to look for ways to improve the course for the weekend. There is only so much you can do to a golf course, and it seemed as though there was nothing left unattended.

Friday, April 12

Mother Nature continued her good grace as the crew was treated to another warm and sunny day. Course prep and maintenance went off without a hitch; however, I could notice that the long work week was starting to take its toll on several workers and volunteers. Earlier in the week, everyone opted to watch golf dur-

ing any spare minute of free time. This trend was starting to reverse itself as workers would try to catch a nap wherever possible, including offices, the irrigation building, and even golf carts. The meeting room in the maintenance building was full of guys watching the tourney on the big screen rather than live on the course. The excitement was still there, but the grueling week was taking its toll on everyone. No problems as far as our crew is concerned, and Greg Norman is starting to look like the next Masters Champion. Fosters Lager for everyone!

Saturday, April 13

The tournament cut was made last night, and many big names were left off the tee sheet for weekend play. The golf course was firming up, and the greens were becoming quicker each day. Should make for some interesting golf! By
(continued on page 28)

TURCAM®

Insecticide to control a wide variety of pests including white grubs, chinch bugs, mole crickets and several other surface and subsurface pests.



A company of Hoechst and NOR-AM

Specialty Products
AgrEvo USA Company
Little Falls Centre One, 2711 Centerville Road
Wilmington, DE 19808

Important: Please remember always to read and follow carefully all label directions when applying any chemical.

John Turner
Senior Sales Representative
630-462-9866

(800) 553-6320
Joe Marley, Owner

1111 Timber Trails
Downers Grove, IL 60516

TURF Concepts

Specializing in fine
turf cultivation



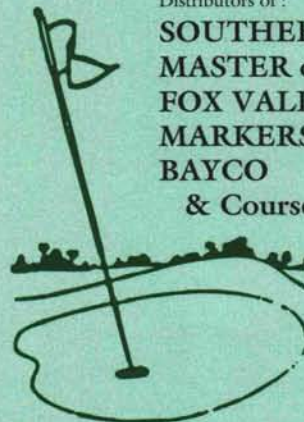
Golf Course Hydroinjection
- Day or Evening Hours
- 2 Machines Per Course

Burdett's, Inc.

Distributors of:

**SOUTHERN GOLF
MASTER of the LINKS
FOX VALLEY SYSTEMS
MARKERS INC.
BAYCO**

& Course Maintenance Supplies



P.O. Box 1865
Lombard, IL 60148-1865
1-630-620-5558
FAX #1-630-627-1104
IL Toll Free 1-888-TURF-888

We've spent over 140 years learning what works and what doesn't. Let us save you the time.



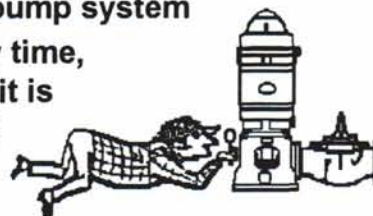
Hinsdale Nurseries

INCORPORATED
ESTABLISHED 1850

Hinsdale Nurseries Inc. • 7200 S. Madison • Hinsdale, IL 60521 • (630) 323-1411
Yorkville Farm • 8111 Route 34 • Yorkville, IL 60560 • (630) 553-6411

Let FPS Inspect Your System

A neglected pump system can fail at any time, usually when it is needed most!



Pump System Specialists

- :We offer the most complete pump system inspections.
- :We will service all motors, controls, pumps & valves.
- :We rebuild all types of pumps.
- :Authorized Flowtronex/PSI service station.
- : 24 Hour **EMERGENCY** pager service.

Fluid Pump Service, Incorporated
1000 Lee St
Elk Grove Village, Illinois 60007
Page Chris at (708) 399-9210
or call the office at (708) 228-0750



PROFILE
POROUS CERAMIC
SOIL AMENDMENT



Profile a porous ceramic soil modifier that enhances your soil modification program for top dressing and construction material... profile creates the ideal root zone for stronger and healthier roots by increasing...

- ...Oxygen Retention
- ...Nutrient Retention
- ...Increased Microbial Growth
- ...Buffers Soil Temperature

Call Us Today For Further Information

TINLEY PARK
6730 South St.
708-532-4723

WAUCONDA
27310 W. Case
847-526-0007

KANSASVILLE-WI.
4304 S. Beumont
414-878-2048



Our Greens Grade Fertilizers with Dimension® Keep You Tops In Your Class

For weed control and fertilization in a single application, you can't beat the high performance, uniformity and results you'll get out of our TeeTime combination products.

Find out more about how you can help your greens make the grade.

Call Craig Filley at 1-800-825-2639.

the professional's partner®
The Andersons

Inside the Ropes

(continued from page 26)

the way, in case you were wondering who cuts the cups each day, the same guy has been doing it for the past ten years! Because of the reduced field, tee times did not start until 11 a.m. This was considerably later than the 7:45 a.m. start times of the previous two days. The crew took extra time on their morning duties since there was no major rush. I spoke with Scott McCarron, a Masters rookie having a great tourney, as he came off the second green where I had backpack duty all afternoon. He was very impressed and complimentary on the condition of the course. The realization of having only one more day of this magnificent event was starting to hit home; and despite the many hours of hard work, one could not help to feel a little sad. The excitement level continued to rise as crowd favorite, Greg Norman, finished his round and led by six strokes. My favorite golfer was next on the leader board, a seemingly insurmountable

six shots back. It was great seeing him in contention even though it looks like Norman's tournament. I'm hoping Faldo can make it interesting, but Norman is playing so well that I don't think anyone can catch him.

Sunday, April 14

The final day has arrived! Four months of my life had been given for this event, and I was rather sad to see this day arrive. The crew began to leave throughout the day as soon as they finished their morning tasks. Many of the volunteers had very long drives ahead of them. It almost seemed like I was at summer camp, exchanging addresses and phone numbers with all the great people I had met throughout the week. As play began, the entire place was buzzing with excitement. I spoke with Nick Faldo's caddy, Fanny, and she said she would give me a ball that Nick had played with during the final round! I also had the opportunity to watch golf with ESPN's Dan

Patrick and Jim Colbert for some time on the 2nd hole. Much to the displeasure of the crowd, it was a day that witnessed one of the greatest collapses of a champion in the history of golf. I followed Nick and Greg almost the entire round and was obviously pleased with the outcome despite witnessing the struggles of Mr. Norman. Amongst the thousands of people, I did finally catch up with Fanny after the round; and true to her word, she gave me the ball Nick rolled in for the victory. I met her later that evening and gave her the flag from the 17th hole that she had requested. The tournament was finally over; and after some last minute syringing, the festivities began—unfortunately no Fosters Lager though! To many people, the 1996 Masters will be the one Greg Norman let slip away, but to me it will always be the Masters that Nick Faldo won. It's been one of the greatest weeks of my life! ■

Scotts Introduces...



Triaform™ Technology is a superior alternative to any traditional fertilizer you've ever used. It's patented, environmentally sound process dramatically improves the physical characteristics of a homogeneous fertilizer granule while delivering excellent agronomic performance and handling. Triaform technology offers better methylene urea (MU) nitrogen distribution to deliver more available nitrogen to the plant.

An innovation you'd expect from a name you can trust.



For details, call your
ProTurf Tech Rep

or 1-800-543-0006 today.

THE PROFESSIONAL'S SINGLE SOURCE - -

• CHEMICALS •

SIGNAL Spray Colorant

INCIDE-OUT Spray Tank Cleaner

TRUE BLUE Lake and Pond Dye

DIRECT Drift Retardant

BALANCE pH Adjuster

TEE-UP Ball Wash

KNOCKDOWN Defoamer

PEN-A-TRATE II Spreader/Activator

• ENVIRONMENTAL AND SAFETY •

CHEMSORB®

SARANEX/TYVEK SUITS

BOOTS

GOGGLES

GLOVES

WASH STATIONS

CALL US FOR INFORMATION ON THESE PRODUCTS--AS WELL
AS MANY OTHERS: 800-323-6280.

PRECISION
LABORATORIES, INCORPORATED
P. O. Box 127
Northbrook, IL 60065

Specializing in Golf Course Renovations

- Tees • Greens • Traps • Fairways
- Hydroseeding • Plant Installation •

company, inc.
don fiore

landscape contractors & architects
golf course contractors

28846 Nagel Court
Lake Bluff, Illinois 60044
708-234-0020
Fax 708-234-0922

Certified Member: American Society of Landscape Architects
Midwest Association of Golf Course Superintendents

THE HEAVYWEIGHT CHAMP



When you're looking for a skid-steer, there's the challengers and then there's the champ. Well say hello to the undisputed champ in the all-new Model LX885 New Holland Super Boom™ skid-steer loader.

MARTIN IMPLEMENT SALES, INC.

16400 S. 104th Ave.
Orland Park, IL 60462



(708) 349-8430



**HALLORAN &
YAUCH, INC.**
IRRIGATION
SYSTEMS

2040 Lehigh Avenue
Glenview, IL 60025
Telephone 847.724.8660
Fax 847.724.8659

- Irrigation Design & Installation
- Drainage Systems
- Pump Station Work & Consultation
- Irrigation Pipe & Supplies



Washed Sod That Fits Your Course To A Tee!

- PENNCROSS™ BENT SOD
- PENNEAGLE™ BENT SOD
- PENNLINKS™ BENT SOD
- XL-100 BLEND SOD™

Available as H & E Hydro-cut™ Washed Sod or traditionally cut sod with soil.

"Single Source Convenience"

H&E SOD
nursery, inc. 

GENERAL OFFICES:
3900 West 167th Street
Markham, IL 60426
Fax: 708-596-2481
Phone: 708-596-7200

Hiring an Irrigation Consultant

(continued from page 12)

Armed with all of this important information, the consultant custom designs an irrigation system engineered to your wishes and your golf course. The consultant specifies the best product or products to accomplish what you agree upon. The irrigation system will be designed for efficient use of water and electrical power. All aspects of the new system will be compatible.

Phase II, Bidding

However, the consultant's job is far from over, and the next phase of consulting services is where the consultant is of the most help to you. The consultant assures the competency of the irrigation package when it goes to bid. Whether it be materials only, installation only, installation and materials or a separate pump station, the consultant's job is to make sure that all aspects

of the system and bid package are complete and complementary. At bidding, the consultant can also help you identify qualified suppliers and installers. The consultant makes the bidding process smooth, leaving you to the important work of maintaining the golf course. Once the bids are received, the consultant can help to evaluate the bids and bidders.

Phase III, Installation

The consultant can stake the sprinkler locations and observe the contractor's installation procedures to insure that the system is installed as designed and specified. A final test is required to make sure the system is installed properly and that all equipment, including the pump station, is operating properly. The consultant will also insure that you and other course personnel receive adequate training in the use of the

new equipment, that accurate "as-built" of the system are maintained, and proper operating instructions and maintenance schedules for all equipment are furnished and approved.

Still in doubt? Here are five reasons to choose a consultant:

1. Paperwork: taxing and time consuming to superintendent's schedule.
2. Liability: minimize potential liabilities, creating a smoother operation.
3. Mediation: unbiased opinions and tends to treat all parties fairly.
4. Alternates: redesign without incurring more cost to fit adjustments.
5. Priorities: client receives all important items that the irrigation needs.

(continued on page 34)

Grow With Us™!

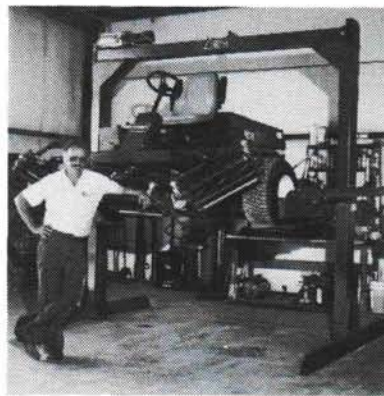


New construction or course renovation, contact LESCO for premium performance turf seed varieties and 18-24-12 starter fertilizer with PolyPlus® SCU. To obtain more information on LESCO turf products contact your LESCO Professional Golf Representative or call (800) 321-5325.

LESCO™

LESCO and Grow With Us are trademarks of LESCO, Inc. PolyPlus is a registered trademark of LESCO, Inc.

"I never want to work without a TRION™ LIFT again!"



"Before, it was almost impossible to see what I was doing, let alone repair it. Now everything is right where I can see it . . . sitting down!"

"I can save an hour or more a day on maintenance time."

Ed Ward
Head Mechanic, Highland Hills Municipal C.C.

THE ONLY LIFT SPECIFICALLY DESIGNED FOR GOLF COURSE EQUIPMENT

■ Several models available to lift all 3- and 4-wheel golf equipment up to 2,600 lbs.

(815) 469-8500
(708) 301-8500

TRION™

MIDWEST TURF & TRACTOR