### Penneagle crowds out bluegrasses on Butler National's fairways



Triplex fairway mowing at The Butler National Golf Club, Oak Brook, IL

When Oscar Miles, CGCS, of The Butler National Golf Club, introduced Penneagle creeping bentgrass into his Poa annua infested A-20 bluegrass fairways in 1980, he took a dynamic step toward the beautiful fairways praised by the pros during the Western Open.

Utilizing a prescribed program of aggressive, deep core aerification, drop seeding and verticutting, Penneagle was expected to *aggressively compete* with the bluegrasses. With triplex mowing and clipping removal, the unwanted grasses are yielding to Penneagle. Oscar feels that his fairways are *now* 70-90% Penneagle.

With Butler National's reputation at stake, Oscar Miles couldn't chance anything less than Penneagle for his "immaculate" fairways.

Warren Bidwell is available to talk to your superintendents' group about Butler National Golf Course and the "Penn Pals," Penncross, Penneagle and Pennway Blend, on your golf course. Call or write TEE-2-GREEN Corp. for details. Penneagle blue tags earn cash or prizes.



Penneagle's Oregon certified blue tags qualify for cash awards to qualifying turf organizations for turf research. Call our toll-free number for details. Marketed by TEE-2-GREEN Corp., PO Box 250 Hubbard, OR 97032 1-800-547-0255 TWX 510-590-0957

Circle No. 145 on Reader Inquiry Card

# Nourishing your turf

Nourishing your turf with NITROFORM assures better root development and healthier turf by providing six important benefits.

Consistent 38% nitrogen.

- 2 Sustained, predictable release by soil bacteria to provide nitrogen when needed most by roots and vegetative parts.
  - Provides organic nitrogen and carbon to enhance bacterial activity, even in sandy soils.
- 4

Non-burning to turf, trees, or ornamentals when used as directed.

Environmentally sound... resists leaching, even in porous soils.

Fewer applications a year are required.

For a complete information kit on nourishing and protecting your turf, join the NOR-AM Turf Management Program. Write to the Communications Department, NOR-AM Chemical Company, 3509 Silverside Road, P.O. Box 7495, Wilmington, DE 19803.

NITROFORM<sup>®</sup> is available as BLUE CHIP<sup>®</sup> or GRAY CHIP<sup>™</sup> for dry application, or as POWDER BLUE<sup>®</sup> or POWDER GRAY<sup>™</sup> for liquid application.



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

TROFO

# in the rough on the green

You get the best of both worlds with the New Holland LB-620. A tough, articulated loader/backhoe that's easy to operate in rough spots and tight spaces. And, a lightweight low-profile design, with a softer touch on turf.



#### **Balanced design**

The low-profile design distributes the weight over each drive wheel for full ground contact and a softer touch on turf. Positive four-wheel hydrostatic drive combines with four-way articulation to give you the flotation and traction you need in rough spots and soft spots, and adds extra stability on slopes and rough terrain.

With a tighter turning radius, and a lower profile, the LB-620 works in spaces that are too tight for other loader/backhoes.

#### Deep digging high dumping

Powered by a 53-hp diesel engine, the backhoe has a

digging force of more than 10,000 pounds, and digs 11'-13'. The 5% cubic-yard capacity loader moves into the load with a breakout force of 6,442 pounds. Dump height is more than nine feet.

#### **Easy transport**

The compact LB-620 makes job-to-job transport easier, too. You tow it on a trailer behind a one-ton pickup. Yes, the LB-620 takes on the toughest jobs but works with a soft touch. Ask your New Holland dealer for a demonstration, or write to Ford New Holland, Inc., 500 Diller Ave., New Holland, PA 17557.



Circle No. 115 on Reader Inquiry Card

#### AUGUST 1987, VOLUME 26, NUMBER 8

# Formerly WEEDS TREES



**30 A CHALLENGING COURSE** 

36 Warm-season grasses

38 Cool-season grasses

beautiful.

22 COVER STORY: BRING BACK THE GRASS

superintendent than they have for the golfers.

**46 ANATOMY OF AN I.P.M. PROGRAM** 

management evaluation and assessment.

**56 MANAGEMENT EVALUATION** 

Damaged grass can be rejuvenated in any number of ways. Renovation

through aerification and overseeding might cure your damaged turf.

Olympia Fields' two courses have presented more challenges for the

**36 FERTILIZATION GUIDES FOR GOLF COURSE TURF** 

Using 'scouts' to detect pest populations, Montgomery Village in Maryland was able to save money yet keep its turf healthy and

In Part II of this series, Rudd McGary and Ed Wandtke deal with





#### DEPARTMENTS

- **3** NEWS/TRENDS
- 8 GREEN INDUSTRY NEWS
- **14 SHORT CUTS**
- 54 ON DESIGN

46

- **64** RESEARCH UPDATE
- **66** PROBLEM MANAGEMENT
- 68 JOBTALK
- 72 PRODUCTS
- **78** CLASSIFIED
- 86 AD INDEX



#### ON THE COVER: Excellent soil cores removed by a tine aerator.

LANDSCAPE MANAGEMENT, formerly WEEDS TREES & TURF, (ISSN 0894-1254) is published monthly by Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising Offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130, 111 East Wacker Drive, Chicago, Illinois 60601 and 3091 Maple Drive, Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: \$25 per year in the United States: \$35 per year in Canada. All other countries: \$70 per year. Single copies (pre-paid only): \$2.50 in the U.S.; \$4.50 in Canada; elsewhere \$8.00; add \$3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. Copyright © 1987 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. **ØBPA** \\BP

POSTMASTER: Send address changes to LANDSCAPE MANAGEMENT, P.O. Box 6198, Duluth, Minnesota 55806

(HBJ) A HARCOURT BRACE JOVANOVICH PUBLICATION

#### NEWS/TRENDS by the Editorial Staff

#### Insurance costs are growing

■ Rising liability insurance costs and legal battles are facing the green industry through the rest of the decade. Costs for insurance and legal defense fees constitute two major expenditures already in a number of golf course and company budgets.

John Moulder of Moulder Bros., Glendale, Calif., says his company spends about \$300,000 annually on insurance. He estimates that the fees have risen 450 percent in the last few years. However, he says, his legal fees are even larger.

Moulder Bros. currently faces about 15 lawsuits, either active or threatened. One involves a Naval employee who allegedly had an allergic reaction to a herbicide being sprayed by the company on a Naval installation. The suit is for between \$130,000 and \$140,000.

Golf clubs are also getting caught in the liability trap. Debates have surfaced over when clubs and courses are liable for injuries and damage resulting from wayward golf balls.

Courses built out in the boondocks 10 years ago now are in the middle of large residential areas. California (again) has led the way in the liability game. The "here first" argument does not hold up in court there (Sierra Screw Products v. Azusa Greens, Inc. 1979), the courts contending that courses are liable for damage and injury on adjacent property even though the property was developed after the course was in place and operating.

In addition, court cases have found clubs liable for spectator injury during tournaments. Perhaps clubs and tournaments should adopt a policy similar to that in place at many major league baseball parks such as Cleveland, which flashes a disclaimer on the scoreboard before each game releasing the team and organization from liability. Basically, it says by coming to the event the spectator assumes responsibility for an injury.

Clubs can successfully defend against liability cases if they can prove that "reasonable care" was taken in protecting residents adjacent to the course through design.

#### **Registration fees causing stink**

■ Pesticide manufacturers are raising their voices against an EPA proposal to add a registration fee above and beyond the normal fee required to prepare papers under FIFRA.

Fees would vary based on the type of application a company makes to EPA, ranging from \$163,000 for new chemicals to \$600 for amendments to registered ones. The fees could put many small business in critical condition, or worse.

#### LM Editorial Staff



Jerry Roche Heidi Aungst Jeff Sobu

LM

Editor Jerry Roche, Cleveland Managing Editor Heide Aungst, Cleveland Assistant Editor Jeff Sobul, Cleveland Publisher Dick Gore, Atlanta National Sales Manager Jon Miducki, Cleveland Senior Vice President Tom Greney, Chicago Group Vice President Robert Earley, Cleveland **Production Manager** Carol Young, Duluth **Production Supervisor** Marilyn MacDonald, Duluth Graphic Design Deb Georges, Duluth Graphic Coordinator David Komitau, Cleveland **Circulation Supervisor** Gail Mantay, Duluth **Directory Coordinator** Linda Hietala, Duluth **Reader Service Manager** Gail Kessler, Duluth Promotion Director Linda Winick, Cleveland

#### OFFICES .

ATLANTA 455 East Paces Ferry Road Suite 324 Atlanta, GA 30305 (404) 233-1817

CLEVELAND 7500 Old Oak Boulevard Cleveland, OH 44130 Editorial: (216) 243-8100

CHICAGO 111 East Wacker Drive Chicago, IL 60601 (312) 938-2344

SEATTLE 1333 N.W. Norcross Seattle, WA 98177 (206) 363-2864

DULUTH 120 West Second Street Duluth, MN 55802 (218) 723-9200

#### MARKETING REPRESENTATIVES

Dick Gore Atlanta (404) 233-1817 Jon Miducki Cleveland (216) 243-8100 Marsha Dover Cleveland (216) 243-8100 Ken Kuhajda Cleveland (216) 243-8100 Robert Mierow Seattle (206) 363-2864

(HBJ) HARCOURT BRACE JOVANOVICH PUBLICATIONS

Robert L. Edgell, Chairman; Richard Moeller, President; Lars Fladmark, Executive Vice President; Arland Hirman, Treasurer; Thomas Greney, Senior Vice President; Ezra Pincus, Senior Vice President; Joe Bilderbach, Vice President; James Gherna, Vice President; George Gienn, Vice President; Harry Ramaley, Vice President. "The Pro's son triggered the sprinklers during today's tournament. My brother wants me to co-sign a loan. And I just found out both my kids need braces. But what really concerns me is Pythium."

There's one sure way to avoid worrying about Pythium.Use Subdue\* fungicide. Subdue stops Pythium on contact. And once absorbed by grass roots, Subdue protects your turf against further attack for up to three weeks. So don't let Pythium get you down. Get Subdue. Because you've got other things to worry about. CIBA-GEIGY

## I'M OFFERING YOU MORE THAN



# ON LESCO EOUPMENT

#### Here's how.

Order a LESCO 300 Greensmower or 500 Fairway Mower — or any other piece of LESCO equipment — in August and I'll give you a 12% early-order discount. Take delivery at our option and don't pay until April 1, 1988.

If you choose, you can save an additional 7% by paying in August. Or pay anytime prior to March 1, 1988 and take a 1% per month early-payment discount. (See chart.)

There's more. Save another 5% by picking up your equipment at our Sebring, Florida manufacturing facility.

Keep in mind, too, these discounts apply to all items in the LESCO equipment product line. Spreaders. Sprayers. Gang Mowers. Lifts. Aerators.

Save the most by ordering and paying in August, but the savings don't stop there. The chart highlights the early-order and early-payment discounts by month. Determine your savings by combining discounts for the month you order and the month you pay.

Month	Early Order Discount	Early Payment Discount	Sebring Pickup Allowance
August	12%	7%	5%
September	10%	6%	5%
October	8%	5%	5%
November	6%	4%	5%
December	4%	3%	5%
January	2%	2%	5%
February	1%	1%	5%

The LESCO Equipment Early-Order Program ends February 29, 1988.



#### Here's why.

I can offer these discounts because it's to our advantage to manufacture and ship equipment year round. Delivering the bulk of our orders in March and April is simply not possible.

And remember, LESCO sells direct. With no dealers or distributors to supply, we have to do our own warehousing and carry our own inventory.

By leveling out our production and delivery, we run a more efficient and cost effective operation. And we're able to pass the savings on to you.

In addition to the savings, consider the benefits of owning and operating LESCO equipment. Because we manufacture and sell direct, we are able to utilize top-ofthe-line components, incorporate the exclusive features our customers want and still sell at a competitive price. And we stand behind our product with parts and service...and a toll-free hotline direct to our service manager. Our service department utilizes a fully computerized parts inventory and distribution center that allows quick and efficient response to customer inquiries. And our LESCO trucks stock an excellent assortment of replacement parts.

Early-Order. It's the way you've been buying fertilizer and control products for years. Now you can exercise the same buying power for equipment.

Don't delay. Maximize your savings by ordering now. Contact your LESCO Sales Representative or call us toll free.

(800) 321-5325 NATIONWIDE





LESCO, Inc., 20005 Lake Road, Rocky River, Ohio 44116 \* (216) 333-9250

#### **GREEN INDUSTRY NEWS**

#### LANDSCAPE MANAGEMENT

#### Average industry salary: \$29,000 per year

The average landscape manager who reads this magazine supervises 16 employees and has been in the green industry for 14 years. According to original research conducted by Readex, Inc. for LANDSCAPE MANAGE-MENT, the average landscape manager also makes about \$29,000 per year.

The survey, conducted last winter, determined that 46.9 percent of the random sample of LM readers have a college degree and that 70.2 percent have attended college.

Other averages from the survey:

• acres of turf maintained: 157

• miles of rights-of-way maintained: 71.5 miles;

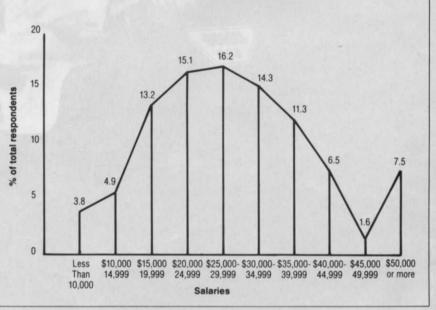
lake acres maintained: 25.3; and
number of years in present position: 10.

Respondents supervising more than 50 employees was 5.7% of the sample. Those supervising 20-49 people was 11.6%; 10-19 was 25.1 percent; 5-9 was 25.1 percent and 1-4 was 20.2 percent.

The results were based on a sample size of 371 out of 500 questionnaires mailed, a response rate of 74 percent.

INDUSTRY

#### LANDSCAPE MANAGERS' ANNUAL SALARIES



## Barefoot strikes agreement with Scott's parent company

CDS Holding Co., a division of Clayton & Dubilier, New York, N.Y., has acquired controlling interest in Worthington, Ohio-based Barefoot Grass Lawn Service, Inc., for an undisclosed amount. The company also owns O.M. Scott & Sons.

"The management of CDS Holding was interested in increasing their participation in the lawn care business," says Kimberly J. Rendleman, a spokesperson for CDS. She adds that Barefoot Grass is recognized nationally as a leader in the lawn care industry.

Barefoot Grass is the fourth largest lawn care company in the country, with 43 branch and franchise outlets. Revenue for 1986 was \$17.2 million for the branches, \$4.8 million for the franchises.

"They (Dubilier) brought more to the table than money," says Barefoot Grass president Patrick Norton. "I'm very enthusiastic." Norton feels the action will bring about little change in the company's present operations. He says one stipulation of Clayton Dubilier's buyouts is that manage-



ment usually stays and continues to have a stake in the operation. CDS Holding's R endleman confirms this, adding that no management changes are planned.

"O.M. Scott has the best

name in do-it-yourself lawn care," Norton says. "There are some interesting though yet undefined opportunities as far as that goes.

"They'll open some doors for us as far as the ability to fund growth," he adds.

#### ASSOCIATIONS

#### N.A.A. to open its membership ranks

The National Arborist Association has opened its doors to any commercial tree service.

In the past, the N.A.A. had required prospective members to be recommended by a member firm. That requirement has been dropped.

"We are increasing our staff from six to seven people," says executive director Bob Felix. "We would like to increase our membership from our current 600 to include many of the other 13,000 tree services which make up our industry.

"We would also like to upgrade those who aren't members through communication and education. We need better trained tree workers, crew leaders and owner knowledge about the tree care business," Felix notes.

With a larger member base, Felix feels the N.A.A. can better serve the industry.

For more information, contact Patricia Felix, N.A.A., 174 Route 101, Bedford, NH 03102. Phone number there is (603) 472-2255.



#### New faces at LM

Jon Miducki (above left) has been named national sales manager for LANDSCAPE MANAGEMENT magazine, according to publisher Dick Gore. Miducki had been regional sales manager. Added to the sales staff of the magazine as regional sales managers are Marsha Dover (center), who will be serving portions of the Midwest, and former managing editor Ken Kuhajda (right), whose territory will cover the upper Eastern seaboard and New England. Bob Mierow will continue to service the West Coast.

#### CONVENTIONS

#### Staubach keynotes annual PLCAA show

Hall of Fame quarterback Roger Staubach, the winningest quarterback in National Football League history, will present the keynote address for the eighth annual Professional Lawn Care Association of America's Conference and Show in San Antonio, November 12-15.

Staubach played 11 seasons in the NFL after getting a late start on his professional career because of his four-year military obligation following graduation from the Naval Academy.

He was the Cowboys' starting quarterback for 8½ seasons, leading them to victories in Super Bowls VI and XII. Staubach won many honors in his college and pro career, including the Heisman Trophy as the top collegiate player in 1963, and the Bert Bell Award in 1971 as the top player in the NFL.

**READERS RESPOND** 

#### How would a change in the minimum wage affect you?

A bill introduced by Sen. Edward Kennedy (D-Mass.) would eventually raise the minimum wage to \$5 per hour. If passed, the bill could have an effect on the green industry.



"I am of the opinion that the minimum wage is controlled by supply and demand. Because of the short supply of labor, businesses are already paying that much to get people in the door. So, in this area it won't have much effect."

—Susan B. Haupt The Haupt Tree Co. Suffolk, Mass.



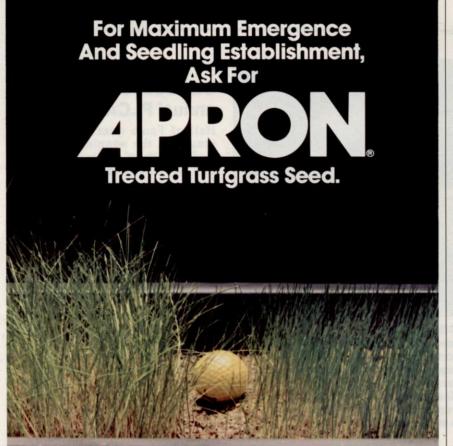
"The impact I think it's going to have on our business is in several things. Operations will become more automated, relying more on chemicals. I don't think any of the impact will be good. It will raise everybody's costs across the board. Fifty percent of everything we buy is labor-related.

"Anybody naive enough to believe that it's not going to have an effect because they pay more than the minimum wage now is crazy." —Dave Pinkus North Haven Gardens Dallas, Tex.



"We pay pretty much that anyway. They make close to that starting out, and if they can do the job then we raise them up. I'm looking to pay bigger bucks than \$5 to hold these guys if they're good." —Bob Berry Lancaster Landscape

Arlington, Va.



#### Apron Treated

Untreated

Apron, a systemic seed treatment fungicide, controls *Pythium* up to 21 days after seeding on turf species like ryegrass, fescue and bentgrass. Length of control may vary based on environmental and management conditions.

As the seed starts to germinate, Apron is systemically translocated throughout the entire growing seedling.

Since Apron systemically protects young plants from *Pythium* seed decay and damping off, you get maximum emergence and seedling establishment.

For broad spectrum seed and seedling disease control, you can have your seed treated with Apron and either Captan or Thiram.

Call your seed distributor today and ask for Apron treated seed for all your professional turfgrass plantings.



P.O. Box 660065 • Dallas, Texas 75266 • (214)985-8877

Apron is a Reg. TM of CIBA-GEIGY Gustafson (logo) is a Reg. TM of Gustafson, Inc. CHEMICALS

#### Elanco announces name of herbicide

Elanco Products Company has formally named its broadleaf preemergence herbicide EL107 "Encore."

The non-phenoxy herbicide, chemical name isoxaben, is registered to work on over 40 broadleaf weeds, though it doesn't control perennial dandelions. According to Elanco communications manager Roger Foulks, it does suppress seedling dandelions with about 80 percent efficiency. It has no post-emergence activity.

Development of the herbicide began about nine years ago, Foulks says. It was first introduced in England in 1981 for pre-emergence control of winter annuals in wheat and barley fields. Application rates were about 10 to 20 grams per acre, though Foulks says rates would be higher for turf.

ChemLawn has been conducting trials with the herbicide in the U.S. The herbicide is intended for use in the spring to control summer annuals, and in the fall to control winter annuals. Foulks says Elanco expects EPA registration in time for use in Fall, 1988.

#### PEOPLE

#### Retirement for industry leaders

Two distinguished members of the green industry will retire after more than 25 years of service to the industry.

Bob Lederer is retiring this month after 29 years with the American Association of Nurserymen, the last 23 serving as executive vice president.

He is noted for working with a



Nancy Reagan and Bob Lederer number of First Ladies on various programs, beginning with Lady Bird Johnson in her National Beautificacontinued on page 14

Circle No. 116 on Reader Inquiry Card 10 LANDSCAPE MANAGEMENT/AUGUST 1987