



NEW...  
Now Low Odor.

# We were helping LCOs stay ahead of the pack before there was a pack.

Back when you could count lawn care operators on one hand, Dow perfected a highly effective insecticide for use in turf. Research showed that this insecticide, called chlorpyrifos, gave immediate control over a broad spectrum of surface feeding insects. And it kept on controlling them for weeks.

That was the start of DURSBAN® insecticides. They were developed and registered for turf applications before any other use. And as the lawn care profession grew, the reputation of DURSBAN spread. LCOs across the country, looking for cost-effective insect control, have found the answer in DURSBAN.

They know that it stays where it's applied, because it bonds tightly to organic material in soil as soon as it dries. So it won't cause damage to non-target species. Won't wash away with rain or watering. And retains its control power for 6 to 8 weeks. They like its broad spectrum label for turf, ornamental and shade tree insects.

And now, DURSBAN Turf Insecticide contains a new, more highly purified grade of chlorpyrifos. The result: far less odor to trigger complaints from neighbors and customers, and

## DURSBAN\*

Years ahead of the rest.



more pleasant working conditions for applicators.

DURSBAN effectiveness has been thoroughly researched and confirmed in decades of testing at leading universities. And DURSBAN is the *only* turf insecticide on which human toxicity testing has been conducted. So lawn care applicators can apply it with complete confidence, and customers need not worry about the safety of their pets and children after the treated surface has dried.

Dow's partnership with lawn care professionals and golf course managers goes far beyond supplying advanced products. We also conduct many types of market and product research, and share the results for your benefit. We produce helpful training materials for applicators, operators and others. In cooperation with the PLCAA, we have prepared materials to answer frequently asked consumer questions concerning the effect of chemicals on the environment.

DURSBAN insecticides. Developed for lawn care operators—preferred by lawn care operators. Available as emulsifiable concentrates or wettable powders. If you're not using DURSBAN, you could get left behind. Talk to your distributor today.



\*Trademark of The Dow Chemical Company

© Copyright of The Dow Chemical Company 1985.



A breakthrough in preemergence  
weed control.

# Pre-M Herbicide

## One product to meet all your needs.

- One low-rate application prevents crabgrass, foxtail, barnyardgrass and tough broadleaves like oxalis and spurge. Heavier rate provides season-long goosegrass control.
- Minimal photodecomposition and volatility reduces need for immediate watering.
- Compatible with most fertilizers and pesticides.
- No odor to bother applicators or customers.
- Labeled for most northern and southern grasses.
- Economical, easy-to-use formulations.

Order today.

(800) 321-5325 NATIONWIDE

(800) 362-7413 IN OHIO

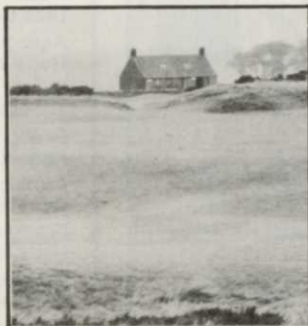
# LESCO

# WEEDS TREES & TURF

The Magazine of Landscape and Golf Course Management Since 1962



26



42



52



64

**20 COVER STORY: TODAY'S SUPERINTENDENT**

Today's superintendent has more responsibilities, and more headaches, than ever before. An exclusive survey examines the problems faced by today's super.

**26 FIRESTONE C.C. COMES BACK**

Dutch Elm disease, bacterial wilt, soft greens—Firestone's had its problems but its young superintendent has the course back in shape.

**42 ST. ANDREWS**

Famed St. Andrews in Scotland has become synonymous with the game of golf. Its superintendent enjoys working with a large part of golf history.

**52 AN INNOVATOR**

A Wisconsin superintendent designed his own irrigation system. It's worked.

**56 A TULSA TREASURE**

Southern Hills Country Club is rated as one of the top 10 courses in America. A look at its superintendent, an engineer turned turfman.

**64 THE GRANDDADDY**

The Rose Bowl hasn't always looked as spectacular as it does on Jan 1.

**74 A SAGGING CASH FLOW**

During the off-season, landscape managers must use fundamental credit strategies

**78 INCENTIVE PLANS**

Using incentive plans may be a key element to the continued growth of many service industries.

**82 A GROWING CONCERN**

There's not enough water to go around. The shortage could be a major problem.

**86 RUST CONTROL**

A California sod company battles turf invaders of its bluegrass.

**90 WEED CONTROL**

An Illinois company handles its weed control in-house.

**94 A MONSTER OF A PROBLEM**

How a Washington country club controls the crane fly.

**100 1985 ARTICLE INDEX**

**DEPARTMENTS**

- 4 TRENDS
- 8 GREEN INDUSTRY NEWS
- 12 SHORTCUTS
- 104 JOBTALK
- 106 PROBLEM SOLVERS
- 108 LETTERS
- 110 PRODUCTS
- 118 EVENTS
- 120 CLASSIFIED
- 124 AD INDEX
- 128 OUTLOOK



Photo by Iann-Hutchins studio, Cleveland

WEEDS TREES & TURF (ISSN 0043-1753) 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 455 East Paces, Ferry Road, Suite 324, 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 © 1985 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.

POSTMASTER: Send address changes to WEEDS TREES & TURF, P.O. Box 6198, Duluth, Minnesota 55806-9898.

A HARCOURT BRACE JOVANOVIH PUBLICATION



Jerry Roche



Ken Kuhajda



Ron Hall

## STAFF

Editor  
**Jerry Roche**, Cleveland  
Managing Editor  
**Ken Kuhajda**, Cleveland  
Associate Editor  
**Ron Hall**, Cleveland  
Publisher  
**Dick Gore**, Atlanta  
Associate Publisher  
**Ron Kempner**, Atlanta  
Senior Vice President  
**Tom Greney**, Chicago  
Group Vice President  
**Robert Earley**, Cleveland  
Production Manager  
**Anne MacLean**, Duluth  
Production Supervisor  
**Marilyn MacDonald**, Duluth  
Graphic Design  
**Denise Johnson**, Duluth  
Graphic Coordinator  
**David Komitau**, Cleveland  
Circulation Supervisor  
**Judy Bogenholm**, Duluth  
Directory Coordinator  
**Corinna Betterman**, 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**  
11 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

**Ron Kempner**  
Atlanta (404) 233-1817

**Jon Miducki**  
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, Group Vice President; Joe Bilderbach, Vice President; James Ghera, Vice President; George Glenn, Vice President; Harry Ramaley, Vice President.

## Turf fields on top of buildings?

■ Green space at Georgetown University is at a minimum. About 12,000 students attend the 100-acre campus. That's why officials at the Washington D.C. school might install a grass athletic field on top of a proposed building.

They've already reportedly talked to Dr. Bill Daniel, co-inventor of the sand-based Prescription Athletic Turf (PAT) system, about the feasibility of such an undertaking.

The building is being planned for the 2<sup>1</sup>/<sub>2</sub>-acre site presently used for Georgetown intramurals.

## Horticulture field 'wide open'

■ Looking for a job? How about a career switch into horticulture? According to a Temple University prof, the jobs are there, but the graduates aren't.

Dr. George Manaker, chairman of the department of horticulture and landscape design at Temple's Ambler Campus, says, "each year we get more and more inquiries for qualified graduates. The jobs are out there. But there aren't enough qualified people to fill them."

Temple literature notes that careers in horticulture are wide open, financially attractive, and personally rewarding. "If a graduate wants to work with interior plantings, it takes only minutes to land a job," says Manaker. "Large corporate buildings and shopping malls have opened up the field of interior landscaping design," he says.

A few years ago, a group of Temple horticulture alumnae formed a landscape design network, aimed at stimulating business opportunities for women. It was a good idea. Today the network serves both women and men as an exchange forum for information on a career in landscaping.

## Reduce injuries, reduce liability

■ Litigation arising from personal-injury accidents is a trend we all want to avoid. Greg Petry says park directors can reduce injuries and limit their exposure to liability with some planning.

Petry, coordinator for parks in Park Ridge, Ill., suggests monthly in-service safety training programs plus inspections of park grounds. Prepare and use a checklist, he says. It can be the documentation needed to head off a lawsuit.

Some other hints from Petry:

- Schedule inspections on a "regular" basis rather than weekly or monthly. The term "regular" gives the park director some leeway.

- Once you find a safety problem, make sure your boss is aware of it as well. "Push the responsibility up the ladder," Petry says.

- Don't alter playground equipment without permission of the equipment manufacturer. If you do and an injury results, you become legally vulnerable.

# When we develop a perennial ryegrass, we mean *business*

**Fiesta**  
TURF-TYPE  
PERENNIAL RYEGRASS

THRIVES UNDER  
LOW MOWING HEIGHTS

GOOD WEAR  
TOLERANCE



EXCELLENT  
MOWABILITY

DARK GREEN  
COLOR



RAPID ESTABLISHMENT &  
HIGH SEED COUNT PRODUCES  
THICKER STAND... FAST!

Quality doesn't just happen ... it is the product of years of careful research and extensive evaluation. That's what it took for researchers to develop Fiesta, the outstanding turf-type perennial ryegrass that meets the demands of today's turf manager.

#### The results:

- Dense, dark green turf
- Fine leaf texture
- Thrives under low cutting heights
- Excellent resistance to leaf spot, brown patch and many other diseases
- Outstanding winter hardiness combined with tolerance to summer stress
- High seed count—up to 330,000 seeds per pound—20-25% higher than most other varieties

***Fiesta*** – for permanent turf or overseeding – rapidly becoming the first choice of turf professionals.

Pickseed also produces



and other fine turf grasses, available nationwide from quality seed suppliers.

Circle No. 158 on Reader Inquiry Card

Produced by:

**PICKSEED**  
**PICKSEED WEST Inc.**

P.O. BOX 888 • TANGENT, OR 97389  
(503) 926-8886



## What could be more economical than a Toro?

You can find cheaper equipment on the market, but how much will it cost you in the long run?

Would you rather build a business on reliable equipment that gets the job done on time, or on cheap equipment that breaks down and produces unhappy customers. It's a simple formula: happy customers equal profitability.

And if you're serious about your customers, your reputation for cutting on schedule, and your competitive prices, few grass cutters can be as

economical or provide as much value as a Toro.

How can we keep your charges competitive when your competition is buying cheaper machines? By designing more productive, labor-saving mowers.

With out-front cutting units and rear steering for better maneuverability. With more up-hill and

hillside stability and balanced designs. With more efficient grass collection systems. And with comfort and safety designed into every machine for less driver fatigue.

We help you reduce operating costs with your choice of engines offering different fuel efficiencies—gasoline or diesel. We offer





you two or four cycle engines on our Commercial mid-size walk mowers along with several horsepower options to adapt to your needs.

Every Toro is designed to rugged standards for dependable, continuous performance under the most demanding conditions. So with our record of reliability there's less need to provide back-up equipment and less chance of falling behind in your schedule.

For unplanned maintenance needs, your Toro distributor or commercial dealer has the parts you need most often in stock. For other parts needs, our Unit Down or Direct Ship Program can get them to you as quickly as 24 hours.\*

When it comes to economy and

value, Toro commercial equipment is unequalled in the industry. Our competitors' equipment may cost you a little less up front, but in terms of reliability, may cost you your customers in the long run. And that's a price no business can afford.

For more information on Toro economy and value, contact your local Toro distributor or commercial dealer. Or send in the coupon.

Circle No. 174 on Reader Inquiry Card

\*Customer eligibility for Toro's Unit Down and Direct Ship Programs, and responsibility for freight and handling options, subject to local distributor option. All 24-hour Unit Down parts delivery orders must be placed with Toro by 2:00 p.m., Minneapolis time.

©1985 The Toro Company. Toro is a registered trademark of The Toro Company.

MAIL TO: D.L. Brown, Commercial Marketing Dept., The Toro Company  
8111 Lyndale Avenue S., Minneapolis, MN 55420

- I'd like more information about Toro Commercial equipment. Please have a distributor or commercial dealer contact me.
- I'd like to arrange for a demonstration of Toro Commercial equipment.

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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

Telephone (\_\_\_\_\_) \_\_\_\_\_  
WT016



The professionals  
that keep you cutting.



## ASSOCIATIONS

### ALCA members receive good business tips

"It's as easy to make \$1,000 as it is \$100. You just have to multiply your thinking by 10."

Gunther Klaus, keynote and most popular speaker at the recent ALCA Landscape Management Division conference, has a long and diverse business background. It showed during a three-hour presentation to more than 200 ALCA members. Here are some more of his gems:

- "When everybody else stops, you've got to go that extra step. That way, you'll always be ahead of the crowd."

- When you do something really well for a customer, that customer will tell three other people. But when you screw up something for a customer, that customer will tell 13 other people."

- "We're obsessed with the bottom line. But nothing will happen on the bottom line unless it happens on the top line first. That's where it's at."

The conference was held at Dallas's Fairmont Hotel.

The other featured speaker was Carol Sapin Gold, who discussed



Gunther Klaus captivates ALCA audience in Dallas.

"The Hidden Side of Customer Relations." Other sessions covered pricing, estimating, seasonal color, liquid fertilizer application, proposals, extras and image-building.

The conference was not without its lighter moments, especially during the annual Brag-Blooper Night.

David Cardenas of Crystal Springs Landscape Maintenance, Morgan Hill, Calif., received a \$100 prize for a

blooper he once pulled: planting some exotic flowers upside down. The kicker was that when the client wouldn't pay Cardenas for the work, he took her to court—and won!

George Morrell of Clark-Morrell, Lithonia, Ga. won the \$100 "brag" prize for the third consecutive year.

New LMD officers will be installed at the annual ALCA convention later this month in Tampa.



PGMS officers for 1986: (from left) executive director Allan Shulder; first vice-president Jeff Bourne; president Clarence Davids Sr.; second vice-president Russell Studebaker; treasurer Ted Shull.

## ASSOCIATIONS

### PGMS names top man, slate of officers

The Professional Grounds Management Society (PGMS) held its annual convention Oct. 19-24 deep in the heart of Texas (Arlington).

Charles Baiano, grounds supervisor for Sleepy Hollow Restorations of Tarrytown, N.Y., was named "Grounds Manager of the Year" at the group's awards banquet.

A longtime PGMS member, Baiano has guided Sleepy Hollow Restorations to several awards in prestigious shows like the Westchester Spring Garden and

Flower Show.

Among other highlights: tours of both the Dallas and Fort Worth park systems; Warren Purdy's two talks; John Watson on landscape illumination; Dr. Ricks Pluenneke on the computer's role in grounds management; WEEDS TREES & TURF advisor Dr. Kent Kurtz on sports turf; and a two-day trade show.

PGMS officially recognized its officers for 1986. They are: president, Clarence Davids Sr., Clarence Davids & Sons Inc. of Blue Island, Ill.; first vice

president, Jeff Bourne, Howard County Parks and Recreation in Maryland; second vice president, Russell Studebaker, Tulsa Parks Dept.; treasurer, Ted Shull, Kettering Medical Center, Kettering, Ohio.

Allan Shulder remains as executive director.

Next year, PGMS and the Associated Landscape Contractors of America (ALCA) combine their shows. The joint PGMS/ALCA convention will be held in Milwaukee in November.

## ASSOCIATIONS

### GCSAA conference in San Francisco

The International Golf Course Conference and Show will be held Jan. 27 to Feb. 4 at Moscone Convention Center in the heart of San Francisco.

Rooms at 10 area hotels have been reserved for attendees of the huge show, sponsored by the GCSAA.

For more information, contact the GCSAA at (800) GSA-SUPT.

## New sports turf association seeking allies on sports field

Turf industry leader Dr. Fred Grau pleads for unity in a national drive for safer sports fields.

"It's not just a cause anymore. It should be a crusade," said Dr. Grau to a 12-member "sports turf summit" this past October in Beltsville, Md. The gathering, the second summit convened at the Agricultural Research Station this year, will seek the help of allied green industry associations

for safer ballyards.

"Let's bring all the splinters together," said Dr. Grau, who along with Dr. Jack Murray of the USDA co-chaired the meeting.

"This is an opportune time for us to concentrate our efforts," Murray added. "We've got to let people know who we are and what we're doing."

Attendees of the summit



Jack Murray, left, and Fred Grau chaired turf "summit."

agreed to form the National Sports Turf Council (NSTC) under the wing of The Musser Foundation which Dr. Grau directs. The NSTC will act as an "umbrella" organization. It will seek the support of allied associations and suppliers serving the industry.

The next step for the fledgling council will be the drafting of policy statements by a committee

chaired by Dr. Eliot Roberts of the Lawn Institute.

Look for NSTC to begin a search for an executive director soon also. Murray said he would like to see a director in place (possibly headquartered in Beltsville) within a year.

Says Murray: "I just think in 10 years we're going to be overrun with things we should have done five years before, or even today."

## Pro gridders say real grass better

Most National League Football players prefer grass over synthetic turf.

That's the message John Macik, of the NFL Player's Association, delivered recently to the second "Sports Turf Summit" in Beltsville, Md. A

dozen top turf experts attended The Musser Foundation-sponsored summit.

Macik said the Player's Association sent surveys to 1,300 NFL players during the spring of 1985.

Survey results?

Of the 465 responding players, 380 favored natural turf, 55 indicated no preference, and 30 said they'd rather play on synthetic turf.

The NFL Player's Association advocates natural turf playing surfaces in an effort to protect the careers of professional football players. Macik added he feels the natural-versus-synthetic argument is heating.

Says Macik: "I think you're going to see the NCAA and other athletic powers putting together some forums to determine how they're going to deal with this controversy."

The five best playing surfaces voted by NFL players are all natural grass: Tampa Bay, Miami, Denver, Anaheim and Los Angeles.



NFL's John Macik

## New lab for ag center

The Ohio Agricultural Research and Development Center (OARDC) of Ohio State University has received a new laboratory to study the fate of insecticides on turfgrasses.

The Wooster, Ohio, lab, under the direction of Dr. Harry D. Niemczyk, professor of turfgrass entomology, will place emphasis on the fate and movement of insecticides in thatch and underlying soils.

"This facility will allow us to undertake some long-overdue studies on what happens to insecticides and

pesticides after they are applied to turf," Niemczyk tells WTT.

One project examines the role of microbial degradation in the breakdown of insecticides used for grub control.

"We have to begin to pay a good bit more attention to things like groundwater contamination," cautions Niemczyk.

Equipment and staff funding comes largely from the Ohio Turfgrass Foundation and allied industries.



Lab technician Jill Karner works with a flash evaporator.



Fallen telephone poles and debris littered most parts of the course.



The water swept away some golf cars, including this one.

NEWS

# Flood-damaged course pleads for assistance

Preston Country Club, a small community golf course in Kingwood, W.Va. needs assistance following a devastating flood on Nov. 4-5, 1985.

Water from nearby Cheat River caused \$1,163,000 damage, according to club superintendent Art George, who detailed the club's plight in an exclusive letter to WEEDS TREES & TURF.

"Our goal is to try to save nine holes for play in 1986, and commence rebuilding our other holes as resources permit," George wrote. "We have little to offer contributors that might aid our plight except our sincere thankfulness, down-home hospitality and the personal reward for helping fellow golfers."

Insurance provides only \$75,000 for clubhouse reconstruction which is expected to cost \$240,000 to replace. Most of that money will be used to pay off the existing mortgage.

"Flood insurance was not main-

tained on the remaining buildings because no one dreamed the Cheat River could flood to that extent," George wrote. "It might be noted that at no time in recorded history had the golf course or the Preston Country Club ever before flooded, and the November flood exceeded by 10 feet any recorded flood of the river."

Here is the golf course damage caused by the flood which claimed 35 lives and 1,000 homes:

- all maintenance equipment destroyed;
- golf carts and cart storage building washed away;
- one-third of clubhouse (now condemned) washed away;
- 70 percent of golf course covered with river silt, sand and rock deposits from one inch to six feet in depth;
- pump station washed away; and
- electric power lost for nine days.

"We can and must rebuild our golf course and country club, and it must

be done on our existing land because it has no greater value for our community, and represents the only flat ground in the area available for a golf course," George wrote. "Our main problem is that, with the cost of golf course materials and construction, we simply cannot afford a conventional reconstruction approach. That is why I am writing you for any help, suggestions or input that you might offer in our time of need."

The country club is a non-profit corporation owned by 130 stockholders. Its 1985 budget was \$200,000.

Golf course architect Michael Hurdzan of Columbus, Ohio, was one of the first to offer assistance.

"Our situation is near desperate and we do not want our community to lose one of its best assets," George concluded.

To offer assistance, write Preston Country Club, Kingwood, WV, 26537, or phone (304) 329-1780.



A shed crumbled under the raging current, damaging some golf cars.



A worker surveys damage to the clubhouse where water reached the second floor.