

**"WHITEMARSH** Valley Country Club.

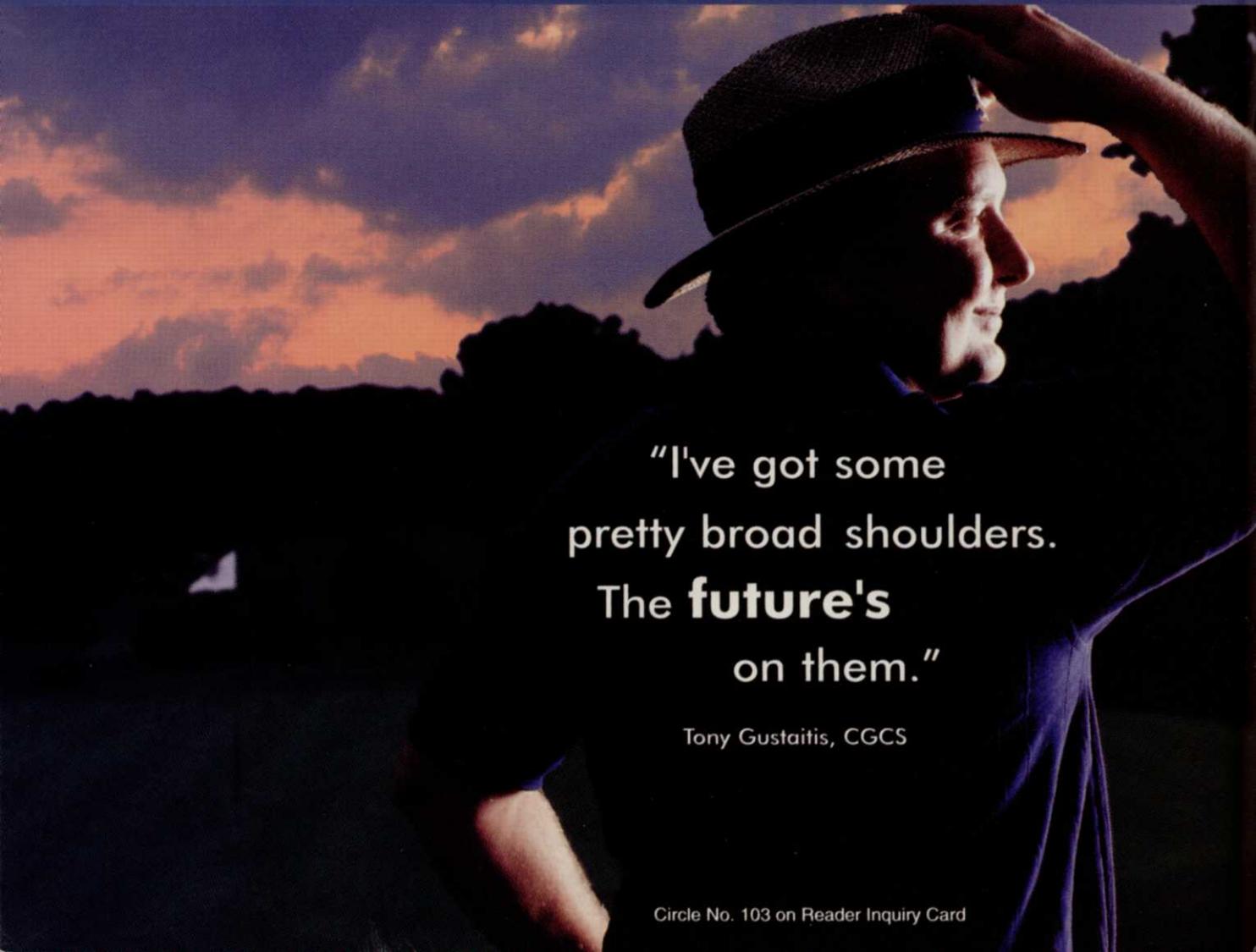
We've been around a long time — over 75 years.

The players demand impeccable turf and we deliver. But the **highest standards** around here are those I set for myself.

I have the future of the course to think about. So, I make sure the herbicides

I use to keep the course gorgeous are also **respectful of the environment**. I try to make sure the course and the world will be around for another 75 years. Pendimethalin is the turf herbicide that **meets these standards** year after year"

**Pendimethalin**



**"I've got some  
pretty broad shoulders.  
The **future's**  
on them."**

Tony Gustaitis, CGCS

Circle No. 103 on Reader Inquiry Card

INSIDE

THE VOICE OF THE GREEN INDUSTRY

# LANDSCAPE management



ON THE COVER: THE MANY TEXTURES OF A WELL-DESIGNED LANDSCAPE ARE FOUND IN THIS HOME GARDEN.

PHOTO BY LARRY LEFEVER FROM GRANT HEILMAN.

## COLUMNS

- 4 OPENING SHOTS
- 12 ASK THE EXPERT

## DEPARTMENTS

- 14 HOT TOPICS
- 16 EVENTS
- 19 LETTERS
- 54 TALKBACK
- 56 INFO CENTER
- 56 SUPPLIERS CORNER
- 58 PRODUCTS
- 58 AD INDEX
- 58 CLASSIFIED
- 64 GRAB BAG

## FEATURES

**22 COVER STORY: EMPLOYEES ARE ASSETS**  
In fact, they're your best and biggest assets, suggests this business owner. So give them ways to grow.  
*JON EWING*

**26 LM REPORTS: SEEDERS**  
Decisions you make before you begin a turfgrass seeding project will determine your success.

**28 COOL-SEASON INSECT CONTROL**  
Monitoring, field diagnosis tips and control product suggestions.  
*J. KEVIN MATHIAS, PH.D.*

**32 WARM-SEASON INSECT CONTROL**  
Weather plays a role in which pests you will see, where they are found, and in what numbers.  
*R.L. BRANDENBURG, PH.D.*

**37 INSECT CONTROL IN ORNAMENTALS**  
Lay out an effective battle plan before insects reach crisis levels.  
*TIMOTHY ABBEY*



**42 REVIVE SOIL IN WARM-SEASON CHANGE-OUTS**  
Evaluate planting conditions before you rush into change-outs in warm-season soils.  
*LEAH ROTTKE*

**49 LANDSCAPE VEHICLES: MUST HAVES FOR EFFICIENCY**  
A look at the leading truck offerings for 1997, and some of the utility vehicles available to professional landscape managers.  
*ARTHUR FLAX*

LANDSCAPE MANAGEMENT (ISSN 0894-1254) is published monthly by Advanstar Communications, Inc. Corporate, editorial and advertising offices: 7500 Old Oak Blvd., Cleveland, OH 44130. Accounting, advertising production and circulation offices: 131 West First St., Duluth, MN 55802.

**Subscription rates:** one year, \$39, two years \$58 (U.S.); one year \$66, two years \$99 (Canada and Mexico); one year \$130, two years \$195 (all other countries). For air mail delivery, include an additional \$70 per order annually. Current issue single copies (pre-paid only): \$4 (U.S.); \$7 (Canada and Mexico); \$12 (elsewhere); add \$3.50 per order for shipping and handling. Back issues, if available, \$10 (U.S.); \$14 (Canada and Mexico); \$20 (other countries); add \$3.50 per order for shipping and handling (pre-paid orders only).

**Office of publication:** Advanstar Communications, Inc., 131 W. First St., Duluth, MN 55802. Periodicals postage paid at Duluth, MN 55806 and additional mailing offices.

**Copyright ©1997 by Advanstar Communications, 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 Advanstar Marketing Services, Attn: Permissions, 7500 Old Oak Blvd., Cleveland, OH 44130 or phone (800) 225-4569 x742. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Advanstar Communications for libraries and other users registered with the Copyright Clearance Center.



Canadian G.S.T. Number: R-124213133, IPM number: B41919

POSTMASTER: Send address changes to Landscape Management, P.O. Box 6198, Duluth, MN 55806.



# WHEN YOU NEED TO PUT THE PEDAL TO THE METAL.

*Engines that deliver maximum performance when you need it most. That's Echo Pro Performance. At Echo, we've been giving landscaping professionals exactly what they need for over twenty-five years: superior outdoor power equipment that more than performs... day after day after bumping, jostling, banging, hard-working day.*



*Inside every Echo power tool beats our world-class, two-stroke engine - the heart of Echo's legendary performance and unsurpassed reliability. It's here, in the engine, that our rugged construction and intelligent engineering make the difference.*

*The result? Power equipment that exceeds professional demands for quality, durability and dependability. Echo Pro Performance. Built by the team that knows what professionals need. Maybe that's why more landscaping professionals choose Echo than any other brand of outdoor power equipment. For more information on Echo Pro Performance products call 1-800-432-ECHO (3246).*



**ECHO**<sup>®</sup>  
**The Pro Performance Team**

Circle No. 114 on Reader Inquiry Card

© 1997 Echo, Inc.

**T**his year, LANDSCAPE MANAGEMENT celebrates its 35th year of service to the green industry!

This is a great industry, with a great history of achievements, discoveries and advancements on all fronts: landscape; lawn care; golf course; athletic turf; grounds facilities.

We plan to highlight some of those achievements in our *35th Anniversary Spectacular*, in October, but we need your help.

This month's "Talkback" (page 54) contains a form we'd like you to complete and send back to us. We want to know how you got into the green industry, when you got started, what you were doing, and what you're doing now. We want to know what you think have been the most exciting, positive developments to come along over the past 35 years.

► From equipment, to control products, to business management, to golf course turf, to athletic fields...we want to hear

what you've liked, and what you've not been so crazy about since 1962, (or whenever you got into the industry).

► What have been your "personal bests" in the green industry? Is it building a top-flight business? An award-winning design/build staff? A model athletic field operation? Let us know!

► We also want to know what you think of this magazine. We have strived, since the days of *Weeds and Turf*, and later, *Weeds, Trees & Turf*, to be a comprehensive green industry publication, one you keep on your desk and refer to often.

So, how are we doing? Which stories have made the most lasting impression on you and the way you manage your operation? What would you like us to do differently? What are the issues

you face daily you would like to see us cover more often. What would you like us to give more coverage, whether it be industry trends or news?

► Where do you think the green industry is headed as it nears the year 2000? What are you most excited about? Do you see any signs of in your local economy that make you especially glad to be in this industry at this particular time?

► What do you think needs to be done for the green industry to keep up with the times, in terms of service, agronomics, employee relations, government relations, turf management, or business management? Where are we headed, in your opinion?

► State and local associations: we want to hear from you as well. When did you get started, and what has been some of your history in terms of growth, activities and benefits to members?

► We'd also like any of you who respond to include a photo or two (one you can part with) from the days when you first got started.

Use an extra sheet if necessary. That space on page 54 is pretty small for 35 years of memories.

Send your "Green Industry Memories" to:

The Editors, LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130; fax: (216) 891-2675; e-mail to [lscope@en.com](mailto:lscope@en.com)

Please get in touch as soon as you can. This is your magazine, and we can't tell your history without you. **LM**

## Tell us your memorable moments



*Terry McIver*

**TERRY McIVER**  
Editor-in-Chief



# Move to Kubota Country

Move to Kubota country and you'll find versatility, durability and operator comfort. The Kubota B-Series (13 to 18 PTO horsepower) tractors are compact to fit in tight places and powerful to get lots of jobs done. Kubota performance matched implements include rotary tillers, front loaders, mid and rear mount mowers, boxscrapers and snowblower.

Need more power? Move up to the innovative Grand L-Series (25 to 37 PTO horsepower). Hydrostatic steering, shuttle transmission with shift-on-the-go provides ease of operation. Kubota's exclusive optional Glideshift transmission has clutchless operation through all eight speeds, forward and



reverse. These tractors are smooth and quiet, with Kubota's E-TVCS engine which ensures clean emissions while providing high torque rise. Get one with an integral cab with heat and air-

conditioning for year 'round comfort.

Visit your Kubota dealer and find out how to make your move - to Kubota country!



For more information, please write to:

## Kubota

**KUBOTA TRACTOR CORPORATION**

P.O. Box 2992, Dept. LM

Torrance, CA 90509-2992

or call Toll Free 1-888-4 KUBOTA ext. 403

(1-800-458-2682 ext. 403)

Financing available through Kubota Credit Corporation

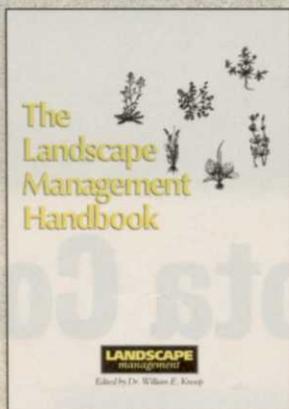


# *new* Publication!

*This new single-source reference provides the most current and comprehensive information on the basics of turfgrass and landscape management available today!*

## The Landscape Management Handbook

*edited by*  
**William E. Knoop**  
125 pages, softcover  
Item #LSMB830  
**\$34<sup>95</sup>**



- ☛ Provides an overall understanding of turf and landscape care and management and covers all the basics of the green industry
- ☛ Covers all the topics both golf course superintendents and students of turfgrass and landscape management need to know about
- ☛ Combines practical information with the tried and true basics of management to provide a single, practical, affordable and up-to-date text
- ☛ Features detailed information, charts, diagrams, figures and tables to illustrate key information points

**The Landscape Management Handbook** provides a unique, single-source reference of comprehensive information on a variety of turf and landscape topics. It's an ideal handbook for golf course and lawn care superintendents and crew members, and is also appropriate for schools that teach basic turf and landscape management.

**Call 1-800-598-6008**

Fax: 218-723-9146

Outside the U.S. 218-723-9180

ADVANSTAR MARKETING SERVICES  
Customer Service Dept. • 131 W. 1st St., Duluth, MN 55802

Shipping/Tax: UPS—add \$5 per order, plus \$1 per additional book. International, Hawaii, Alaska, Canada and expedited shipments—call for rates. Residents of CA, CT, GA, IL, MN, NJ, NY, OH and TX must add sales tax. Price subject to change. CODE: 950071

## LANDSCAPE management

### EDITORIAL STAFF

Fax (216) 891-2675  
E-mail: lscape@en.com

Terry McIver **Editor-in-Chief** (216) 891-2709  
Ron Hall **Managing Editor** (216) 891-2636  
Dr. Bill Knoop **Technical Editor** (903) 860-2410  
Vernon Henry **Group Editor** (216) 826-2829  
Lisa Lehman **Art Director** (216) 891-2785  
Lisa Bodnar **Graphic Designer** (216) 891-3101

### READER ADVISORY PANEL

Jerry Coldiron **Boone Links / Lassing Pointe G.C.** Florence, Ky.  
Corey Eastwood **Stockdale Country Club** Bakersfield, Calif.  
Mike Guthrie **Ground Control Landscaping** Orlando, Fla.  
Larry Iorri **Down to Earth Landscaping** Wilmington, Del.  
Pat Nibler **ProGrass** Wilsonville, Ore.  
Russell Studebaker **Horticultural consultant** Tulsa, Okla.

### BUSINESS STAFF

John D. Payne **Publisher** (216) 891-2786  
Leslie Montgomery **Administrative Coordinator** (216) 826-2856  
Judy Miducki **Production Manager** (218) 723-9281  
Donna Pack **Group Business Manager** (216) 891-3131  
Debi Harmer **Production Director** (218) 723-9325  
Rosy Bradley **Senior Production Manager** (218) 723-9352  
Karen Edgerton **Circulation Manager** (218) 723-9280  
Sandy Ollah **Green Book Supervisor** (218) 723-9618  
Lynn Viele **Green Book Coordinator** (218) 723-9393  
Alex DeBarr **Group Publisher** (216) 891-2789

### ADVERTISING OFFICES

**Headquarters** 7500 Old Oak Blvd.  
Cleveland, OH 44130-3369  
(216) 243-8100 Fax: (216) 891-2675

John D. Payne **Publisher** (216) 891-2786  
E-mail: jpayne222@aol.com

Sean Carr **Regional Manager**  
(216) 891 2767 Fax: (216) 891-2675

Tom Galligan **National Sales Manager**  
3901 52nd Ave.  
Kenosha, WI 53144-1830  
(414) 653-9523 Fax: (414) 653-9524  
E-mail: tgalligan@aol.com

John Kiesewetter **Western Sales Manager**  
859 Willamette St.  
Eugene, OR 97401  
(541) 461-0022 Fax: (541) 461-0044

Denise Zappola **Classified / Market Showcase** (216) 891-3162

### MARKETING SERVICES

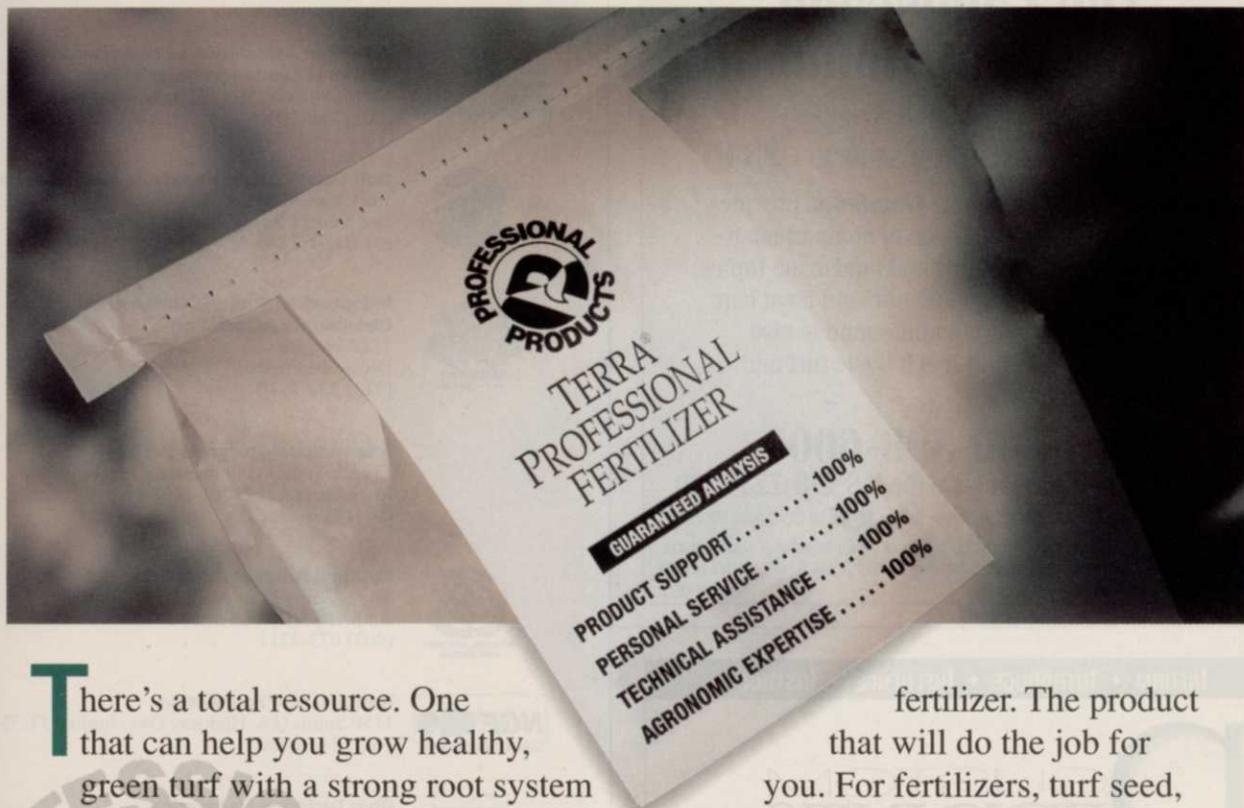
Marcie Nagy **Reprints (100 minimum)** (216) 891-2744  
Mark Fleischer **Circulation List Rental** (800) 225-4569, ext. 773  
Advanstar Marketing **Microfiche/film Copies** (800) 225-4569, ext. 839  
Chris Baxter **Subscriber/Customer Service** (218) 723-9477  
Mary Abood **International Licensing** (216) 826-2804  
**Books, directories, back issues, photocopies**  
(800) 598-6008; (218) 723-9180



ADVANSTAR  
COMMUNICATIONS

**Chairman, President & CEO** Robert L. Krakoff  
**President, Advansstar Publishing** Robert L. Krakoff  
**President, Advansstar Expositions** James M. Alic  
**President, Advansstar Marketing Services** William J. Cooke  
**VP/Finance, CFO and Secretary** David W. Montgomery  
**Vice Presidents** Kevin J. Condon, Alex DeBarr, Brian Langille, Glenn A. Rogers, Phil Stocker  
**Treasurer & Controller** Adele D. Hartwick

# There's more than fertilizer in this bag.



**T**here's a total resource. One that can help you grow healthy, green turf with a strong root system and a solid base. Turf that's healthy and better able to fight disease, pests and everyday wear and tear. That resource is Terra. You'll find a complete, new line of Terra Professional Fertilizers – with primary, secondary, micronutrient and pesticide packages available. Plus, you can count on the support, service, assistance and expertise it takes to select and use the right

fertilizer. The product that will do the job for you. For fertilizers, turf seed, plant protection products and a whole lot more – work with Terra. You'll get more.



Terra Industries Inc.  
P.O. Box 6000  
Sioux City, Iowa 51102  
1-800-831-1002  
[www.terraindustries.com](http://www.terraindustries.com)

*Working with you.*



# new Publication!

This new single-source reference provides the most current and comprehensive information on the basics of turfgrass and landscape management available today!



## The Landscape Management Handbook

edited by William E. Knoop

125 pages, softcover, Item #LSMB830 \$34<sup>95</sup>

*The Landscape Management Handbook* provides a unique, single-source reference of comprehensive information on a variety of turf and landscape topics. It's an ideal handbook for golf course and lawn care superintendents and crew members, and is also appropriate for schools that teach basic turf and landscape management.

**Call 1-800-598-6008**

Fax: 218-723-9146 • Outside the U.S. 218-723-9180

ADVANSTAR MARKETING SERVICES • Customer Service Dept. • 131 W. 1st St., Duluth, MN 55802

Shipping/Tax: UPS—add \$5 per order, plus \$1 per additional book. International, Hawaii, Alaska, Canada and expedited shipments—call for rates. Residents of CA, CT, GA, IL, MN, NJ, NY, OH and TX must add sales tax. Prices subject to change. CODE: 950072

INFORM ♦ INTRODUCE ♦ INFLUENCE ♦ INSTRUCT

# REPRINTS

Reprints of *Landscape Management* articles, advertisements, news items or special announcements are available through Advanstar Marketing Services. Customized to meet your specific needs, reprints are highly effective when you use them to:

- ♦ Develop direct-mail campaigns
- ♦ Provide product/service literature
- ♦ Create trade show distribution materials
- ♦ Present information at conferences and seminars
- ♦ Train and educate key personnel, new hires
- ♦ Enhance press kits
- ♦ Compile reference materials
- ♦ Track trends and emerging technologies

ARTICLES  
NEWS ITEMS  
ADVERTISEMENTS

**LANDSCAPE**  
management

ADVANSTAR MARKETING SERVICES  
1-800-736-3665  
216-891-2742  
Fax: 216-891-2727

## LANDSCAPE management

A proud member of these green industry professional organizations:



**Associated Landscape Contractors of America**  
12200 Sunrise Valley Dr., Suite 150, Reston, VA  
(703) 620-6363



**American Association of Nurserymen  
(National Landscape Association)**  
1250 I St. NW, Suite 500, Washington, DC 20005  
(202) 789-2900



**Golf Course Superintendents Assn. of America**  
1421 Research Park Dr.  
Lawrence, KS 66049-3859  
(913) 841-2240



**Independent Turf and Ornamental  
Distributors Association**  
1217 Wayburn  
Grosse Pointe Park, MI 48230  
(313) 331-7739

**International Turfgrass Society**  
Crop & Soil Environmental Sciences, VPI-SU,  
Blacksburg, VA 24061-0403  
(561) 996-3062



**National Arborist Association**  
The Meeting Place Mall, P.O. Box 1094,  
Amherst, NH 03031-1094  
(603) 673-3311



**National Golf Foundation**  
1150 South U.S. Highway One, Jupiter, FL 33477  
(407) 744-6006



**Ohio Turfgrass Foundation**  
P.O. Box 14824, Columbus, OH 43214  
(614) 261-6750



**Professional Grounds Management Society**  
120 Cockeysville Rd., Suite 104,  
Hunt Valley, MD 21031  
(410) 584-9754



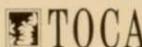
**Professional Lawn Care Association of America**  
1000 Johnson Ferry Rd., NE, Suite C-135,  
Marietta, GA 30068-2112  
(770) 977-5222



**Responsible Industry for a Sound Environment**  
1156 15th St. NW, Suite 400,  
Washington, DC 20005  
(202) 872-3860



**Sports Turf Managers Association**  
1375 Rolling Hills Loop, Council Bluffs, IA 51503-8552  
(712) 366-2669; (800) 323-3875



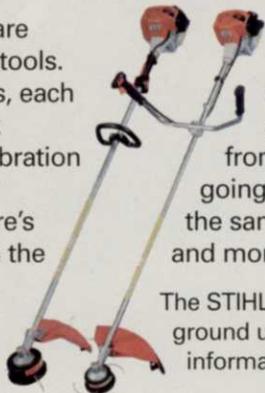
**Turf and Ornamental Communicators Association**  
P.O. Box 156, New Prague, MN 56071  
(612) 758-5811



## Dependability From Turf To Treetop.

STIHL's new Professional Series™ Trimmers are dependable, lightweight, heavy-duty, power tools. Available with "bike" or "loop" style handles, each features STIHL's exclusive ElastoStart™ shock absorbing handle, dual stage air filter, anti-vibration system, and high quality aluminum shaft for reduced weight and increased strength. There's also a one-year commercial use warranty on the unit and lifetime warranty on the drive shaft.

The FS 80 and FS 85 are just two of eleven different power tools manufactured exclusively for lawn care professionals and



arborists. The entire line is powered by STIHL's all new, made in the USA, 25.4 cc engine. Common parts mean you could pull an air filter, starter rope or other engine part, from your edger to keep your grass trimmer going. And it means routine engine maintenance is the same, as is the fuel mix. Saving you both time and money.

The STIHL Professional Series™...as tough as STIHL from the ground up. Call 1-800-GO STIHL (1-800-467-8445) for more information or for the name of your nearest STIHL dealer.

**STIHL**®

# *At least she insists*

There are times when it is critical  
to know that you're getting the real thing.  
Like when you're buying Dursban\* insecticide.

No Dursban wannabe can give you  
the same level of  
confidence, performance and support  
that you get from DowElanco.

Not to mention the superior control  
of over 140 insects, including  
worms, ants, fleas, ticks, mole crickets,  
aphids and chinch bugs.

The only way to get the real Dursban  
is to buy Dursban.

So always look for the Dursban trademark  
on the label, whether you buy from DowElanco  
or one of our formulator partners.

For more information,  
call us toll-free at 1-800-352-6776.

Always read and follow  
label directions.

 **DowElanco**

\*Trademark of DowElanco

*fake background*

*fake Ferrari*

