# We'd like to show you the weeds PENDULUM controls. But they never showed up.

herbicide is a highly effective preemergent turf herbicide.
Compared to the competition, PENDULUM demonstrates a higher level of control across a broader spectrum of weed species.
With PENDULUM, weeds won't ever see the light of day.
For the PENDULUM herbicide distributor nearest you, call: 1-800-545-9525, Ext. 1676.



PENDULUM offers unsurpassed weed control								
Herbicide	Crabgrass	Goosegrass	Foxtail	Poa Annua	<b>Oxalis</b>	Spurge	Henbit	Chickweed
PENDULUM				•		0		
Barricade <sup>a</sup>		0	0	0	<b>A</b>	0		
Dimension <sup>b</sup>		0		0		0	0	0
Team <sup>c</sup>		0	0	0	0	0	NR	NR
Ronstard	•		NR	0	0	NR	NR	NR
Surflan <sup>c</sup>				0	<b>A</b>	•		

Level of control







NR Not registered

\*\*\*Novartis











MAY 1998 VOLUME 37• NUMBER 5

# INSIDE



### COLUMNS

10 OPENING SHOTS

12 ASK THE EXPERT

### DEPARTMENTS

16 HOT TOPICS

45 SUPPLIERS CORNER

45 INFO CENTER

46 PRODUCTS

57 EVENTS

59 CLASSIFIED

61 AD INDEX

62 GRAB BAG

ON THE COVER: ORNAMENTAL GRASSES ARE POPULAR THANKS TO LOW NITROGEN AND PESTICIDE NEEDS AND DROUGHT TOLERANCE.

PHOTO COURTESY NEW ENGLAND STOCK PHOTO

### THE VOICE OF THE GREEN INDUSTRY

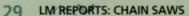
# LANDSCAPE management

### FEATURES

# 20 PRESCRIPTION SOILS CURE TURE ILLS

'Designer soils' blended with certain desired properties are used to improve site conditions such as drainage, aeration, water retention.

NORMAN W. HUMMELL, JR.



We combine information on suppliers' products with safety tips.

CURT HARLER

# 31 DISEASE CONTROL IN LANDSCAPE ORNAMENTALS

The maintenance of plant health and quality takes for thought and time but is a necessary step in the protection of our investment in the landscape.

DR. JOHN WATKINS

### 33 DISEASE CONTROL IN WARM-AND COOL-SEASON TURFGRASS

Every turfgrass manager wants to create a healthy turfgrass ecosystem. This can be a challenge since growing seasons in the north are never the same. Common southern diseases have distinctive symptoms..

DR. JOHN WATKINS
DR. GARY W. SIMONE





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). To subscribe, call (218) 723-9477; fac: (218) 723-9437.

Office of publication: Advanstar Communications, inc., 131 W. First \$t., Duluth, MN 55802. Perioder for shipping and handling (pre-paid orders only). To subscribe, call (218) 723-9437.

Office of publication: Advanstar Communications, inc., 131 W. First \$t., Duluth, MN 55802 postage paid at Duluth, MN 55806 and additional mailing offices.

Copyright ©1998 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, in-

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 ©1998 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, induding 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: 841919

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

Striking the ideal balance of light weight and raw power, Echo's CS-4400 weighs in at only 10.2 lbs.\* Echo's best selling vertical engine chain saw sets the standards in our demanding industry. With pro features like a Slope Advance Ignition System (SAIS2) that automatically senses engine speed and adjusts the ignition for optimum performance and a heavy-duty cartridge air filter for extended engine life and reduced maintenance intervals. The CS-4400 is powered by our legendary, world-class, two-stroke engine. Just what you'd expect from the number one name in outdoor power equipment.



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.

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).

# THE CHAIN OF COMMAND IN HIGH PERFORMANCE.



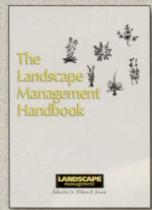


This new single-source reference provides the most current and comprehensive information on the basics of turfgrass and landscape management available today!

# The Landscape **Management Handbook**

edited by William E. Knoop 125 pages, softcover Item #LSMB830 \$3495

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
- W 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.

### EDITORIAL STAFF

Terence McIver Editor-in-Chief (440) 891-2709

E-mail: tmciver@advanstar.com

Managing Editor (440) 891-2636 E-mail: rhall@advanstar.com

Nancy Stairs Technical Editor (440) 891-2623

E-mail: nstairs@advanstar.com

Vernon Henry Group Editor (440) 826-2829 Lisa Lehman Art Director (440) 891-2785 Lisa Bodnar Graphic Designer (440) 891-3101

### READER ADVISORY PANEL

Jerry Coldiron Boone Links / Lassing Pointe G.C. Florence, Ky. Larry Iorii Down to Earth Landscaping Wilmington, Del.

Rick Kier Pro Scapes Jamesville, NY

David Mellor Milwaukee Brewers Milwaukee, Wisc.

### BUSINESS STAFF

John D. Payne Group Publisher (440) 891-2786 E-mail: jpayne@advanstar.com

Brenda Dunlap Administrative Coordinator (440) 891-2734

Karen Lenzen Production Manager (218) 723-9129 Debi Harmer Production Director (218) 723-9325

Karen Edgerton Circulation Manager (218) 723-9280 Lynn Viele Green Book Coordinator (218) 723-9393

### ADVERTISING OFFICES

Headquarters 7500 Old Oak Blvd. Cleveland, OH 44130-3369 (440) 243-8100 Fax: (440) 891-2675

Patrick K. Toal **Eastern Sales Manager** 

3101 Sawgrass Village Circle Ponte Vedra Beach, FL 32082 (904) 280-4205 Fax: (904) 280-2122 E-mail: ptoal@advanstar.com

Tom Galligan **National Sales Manager** 

3901 52nd Ave. Kenosha, WI 53144-1830 (414) 653-9523 Fax: (414) 653-9524 E-mail: tgalligan@advanstar.com

John Kiesewetter Western Sales Manager

859 Willamette St. Eugene, OR 97401 (541) 461-0022 Fax: (541) 461-0044 E-mail: jkiesewetter@advanstar.com

Bill Smith Classified / Market Showcase (440) 891-3162

Anthony Lavdas Directory Sales (800) 736-3665

Eugene Homan Account Manager (440) 891-2772

### MARKETING SERVICES

Marcie Nagy Reprints (100 minimum) (440) 891-2744

Mike Balzano Circulation List Rental (800) 225-4569, ext. 697

Advanstar Marketing Microfiche/film Copies (800) 225-4569, ext. 839

Chris Baxter Subscriber/Customer Service

Debra Carlson International Licensing (218) 723-9518

Books, directories, back issues, photocopies (800) 598-6008; (218) 723-9180



Chairman and Chief Executive Officer Robert L. Krakoff

Vice Chairman James M. Alic

VP, Business Development Skip Farber

VP/Finance, CFO and Secretary David W. Montgomery

Executive Vice Presidents William J. Cooke, Alexander S. DeBarr,

Glenn A. Rogers

Treasurer & Controller Adele D. Hartwick



# You can get the leading fungicides from Scotts.

Scotts offers the broadest line of granular and sprayable fungicides in the business at a very competitive price. Which means that cost-effective, proven performance for your specific needs has never been more convenient.

You know you can call your Scotts Tech Rep anytime for the best fertilizers, herbicides and fungicides, like new Scotts Golden Eagle™ and Fertilizer Plus Golden Eagle™. But he's also your key to other

popular fungicides such as Heritage, Daconil, Eagle, and Aliette.

And, as always, the added advantage is The Scotts Difference<sub>®</sub> in experience,

innovation and expertise.

For more information, contact your Scotts Tech Rep today. Or call 1-800-543-0006.



...The Scotts Difference www.scottscompany.com

© Copyright 1998, The Scotts Company. All rights reserved. Heritage» is a registered trademark of Zeneca. Daconil» is a registered trademark of ISK Biosciences.

Eagle» is a registered trademark of Rohm & Haas. Aliette» is a registered trademark of Rohm evaluation of The Scotts Company.



Circle 112



### "We do twice the seeding with half the crew."

Landscapers, grounds managers and superintendents rave about the ATI Preseeder Tiller. Now you too can reduce labor and improve results for all types of landscape construction and renovation work.

One operator can easily turn a rough grade into a perfect seedbed every time. Use it to renovate lawns, turf, golf courses. Rake and level. Ideal for sports field maintenance. Fixed angle and pivoting models in two sizes.

### TILL, LEVEL, AND RAKE IN ONE STEP

"We looked at other machines," says one customer, "But none even comes close for versatility and tough construction." Don't settle for less. Call today for FREE color brochure.



1-800-342-0905 325 W. Main St. New Holland, PA 17557

Circle 113

## LANDSCAPE management

### A proud supporter of these green industry professional organizations:



Associated Landscape Contractors of America 150 Elden Street, Suite 270, Herndon, VA 20170 (703) 736-9666; http://www.alca.org



American Nursery & 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; http://www.gcsaa.org



Independent Turf and Ornamental Distributors Association 1217 Wayburn

1217 Wayburn Grosse Pointe Park, MI 48230 (313) 331-7739

The Irrigation Association 8260 Willow Oaks Corporate Dr. Suite 120 Fairfax, VA 22031-4513 (703) 573-3551; http://www.irrigation.org



National Arborist Association
The Meeting Place Mall, P.O. Box 1094,
Amherst, NH 03031-1094
(603) 673-3311; http://www.natlarb.com



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



The Outdoor Power Equipment Institute 341 South Patrick St.
Old Town Alexandria, Va. 22314 (703) 549-7600; http://opei.mow.org



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; http://www.plcaa.org



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; http://www.aip.com/stma



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

# PREVENT GRUBS. STOP THEM IN THEIR TRACKS. OR MAKE SURE IT'S NOT EVEN AN ISSUE.



Now you can control grubs preventatively or curatively. With a single application. Only with new MACH 2<sup>™</sup> Turf Insecticide.

MACH 2 is a powerful killer with a new chemistry that accelerates the molting process of target insects.

Just hours after ingesting MACH 2<sup>™</sup>, the insect stops feeding. Then it dies beneath the surface in 2 to 3 weeks. It's that simple.

With MACH 2™ Turf Insectiside, you'll kill target

enemy insects all season long. Grubs. Cutworms. Armyworms. Sod webworms. Plus, odorless MACH  $2^{\text{TM}}$  is easy to apply. You don't even have to water it in immediately.

So don't let grubs control your grounds, or your schedule. Depend on MACH 2™ Turf Insecticide.

It's all you need to prevent *or* cure.

For more information or for the distributor nearest you, call 1-888-764-6432.



ALL YOU NEED TO PREVENT OR CURE.



Shows excellent job skills.

comfort make even the toughest work

look easy.



You get a choice of our 100,000-mile/5-year

Care Plus<sup>™</sup> service contract, or \$300 to \$500 cash back.<sup>4</sup> And new for the program this year is a flexible financing and leasing plan.

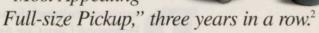


And behind those doors? Amenities like a fold-down center console and optional under-seat rear storage system.

But don't let the niceties fool you.

This is still a
Magnum®-powered
beast. There's a
choice of two V-8s,
an awesome 300horsepower V-10, or
a newly refined, more

powerful 24-valve Cummins Turbo Diesel with 460 lb-ft of standard torque. What's more,
Dodge Ram received
J.D. Power and
Associates' award for
"Most Appealing



Here's something else that's appealing. Dodge Rams are the longest-lasting full-size pickups on the road.<sup>3</sup>

To make your ownership experience

even better, there's our On The Job program, which







For more information, call 1-800-WORK RAM or visit our Web site at www.4adodge.com

Always use seat belts. Remember a backseat is the safest place for children.

<sup>1</sup>Club and Quad Cabs, and 5.2L V-8 not available on chassis cab models. <sup>2</sup>J.D. Power and Associates 1995-1997 <u>Automotive Performance, Execution, and Layout Studies.™</u> 1997 study based on 29,187 consumer responses. <sup>3</sup>Based on percentage of 7/88-7/97 new pickup registrations still registered on 7/1/97. Data Source: The Polk Company. <sup>4</sup>N/A on Ram Quad Cab 1500. Service contract option not available in AL, FL, MS, OK or UT. No refund if canceled. Some vehicles ineligible. There is a \$100 deductible for each covered repair visit. Tire coverage covers only complete or pro-rated replacement for original four tires, excluding spare. See plan copy and full details at dealer.

arring any trademark disputes, the Professional Lawn Care Association of America's Education and Research Foundation will be hereafter known as the Evergreen Foundation.

Dale Amstutz of Northern Lawns, Inc., Omaha, NE, is a PLCAA past president who now serves as president of the Foundation. Its stated mission is to "marshal the resources of the

# Another LM exclusive: PLCAA takes fresh approach to education

Green Industry and others to promote the development and maintenance of trails, greenways and other green spaces to improve the quality of life in America."

The theme of the Foundation is, "We improve the quality of life through green spaces."

Amstutz, in an exclusive interview with LM, says that in June of 1997, PLCAA took a hard look at what the original Foundation had accomplished, and saw room for improvement.

Now, says Amstutz, those who are on the cur-

rent Foundation board know what's expected of them and are ready to work.

"It's a whole new fresh start," insists Amstutz.

"We're going to evaluate ourselves regularly. And maybe each one of us will fill out a personal evaluation each year."

"We're doing a long-range plan, with specific goals," says Amstutz, who for years has been a dedicated member of PLCAA.

Helping with those goals are co-director Jim Brooks, lately with the Lawn Institute, and long before that PLCAA, and secretary Bob Tracinski of John Deere company.

Amstutz told LM that a committee would put together a philanthropic plan during the last week in April, to address questions of fund raising and staffing. Co-directors Dave Hanson of Environmental Care and Ron Johnson of Novartis are working on a stewardship committee to set some guidelines for board member accountability, which include attendance at meetings and possibly fund raising assistance.

PLCAA also decided to inject some new blood into the Foundation by having PLCAA immediate past-presidents serve on the Foundation board," says Amstutz. Service on the Foundation board, "had been almost an honorary position; that's probably why nothing happened."

Another caution which Amstutz says sparked the Foundation to rethink its efforts, is that it had become too much of a self-serving entity, something which could have caused legal problems under its 501(c)3 classification. Lobbying on behalf of itself, for example, is not permitted.

Lou Wierichs, Jr., Pro-X Systems, Appleton, WI, serves as Foundation vice president. PLCAA executive vp Tom Delaney is treasurer.

Other changes at PLCAA include an upgrade to Windows 95 software, and a new health care provider, which according to Delaney, will save the association \$7900. A new long distance telephone service is also saving the association about \$500 per month. And, the PLCAA website will soon include a "members only" section.

In other big news, The Lawn Institute has agreed to let Turfgrass Producers International be the Institute's "green knight." TPI was in the running to merge with the LI, as was PLCAA.

Says TPI's Doug Fender, "The Institute invited TPI to pick up the mission of the Lawn Institute and let [the Institute] dissolve. We're very excited. We can integrate the Lawn Institute's mission (to proclaim the benefits of turfgrass) into the TPI Turf Resource Center. In the future there may be an opportunity to revitalize the Lawn Institute as a separate entity." LM

One final exclusive: my wife Terrie and I were blessed with a beautiful baby girl on April 9th. Her name is Hannah Marie. God is faithful!



Deny The Jan

TERRY McIVER
Editor-in-Chief