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Superintendent

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LANDSCAPE

Taking a couple steps forward, for the customer

Do you make it easy for your customers to use your services? Do you provide open communication lines to let them interact with you? Is the service you provide *useful* to your customers? Do you genuinely *care* about them?

These are all questions for which you should have answers, whether you're a golf course superintendent, landscape contractor, lawn care operator or groundsman.

They are the same questions the staff of LANDSCAPE MANAGEMENT pondered not long ago. This self-inspection process led us to the fact that—while we may be the most useful magazine in the turf industry—we could still improve upon our direct, interactive communication with the customer (you), and we could be even more “user-friendly” than we’ve been in the past.

Hence, this month you are seeing the fruits of our labor. We’ve changed our look and added some new departments.

First of all—and most noticeable—our design and typography is all new. We realize that we're not the only magazine competing for your valuable time. With our new design, thanks to Mark Wrasman of our Chicago office, we want to be more efficient for you to read.

This month, we've made the “Hot Topics” section more interesting (and, yes, a bit more “fun”), and moved it closer to the beginning of the magazine.

We've added two new “Think Tank” columns, one each by Senior Editor Ron Hall (in the “Lawn & Landscape” section) and Managing Editor Terry McIver (in the “Golf & Grounds” section). We hope their monthly commentary will

help make your jobs run more smoothly. For those of you who receive our “Lawn & Landscape” demographic section, we've added a new column, “Around the Shop” by Bob Andrews, a former president of the Professional Lawn Care Association of America who gives a unique first-person look at the business.

We've also added a department called “Industry Almanac” that will provide a current snapshot of what's going on in the turf and ornamental business. Again, this department was created with your needs in mind; its purpose is to help you forecast the direction your business or department needs to take, in order to more accurately tune it to the needs of the country.

Becoming 'interactive'

We've added a department called “Reader Feedback” in response to an editorial presentation we heard not long ago by magazine guru Dr. Don Ranly of the University of Missouri. He told us this: “Become more accessible and engaging. The buzzword is interactivity. When you make readers do more, they learn faster and remember better.”

To that end, we introduced our e-mail address two months ago. (And thanks to the dozens of e-mailers who've responded.) Starting this month, you'll have a chance to win a variety of prizes by responding to our questions in the “Reader Feedback” section. And you'll also be seeing other contests, letters to the editor and “neat stuff” on these pages.

Finally, we've all reluctantly updated our portrait photos, at the urging of friends, family and many of you. *Very* reluctantly.

This, then is the “new” LANDSCAPE MANAGEMENT: more of the things you like, and new things we hope you'll like even better. Enjoy.

We realize that we're not the only magazine competing for your valuable time.



Jerry Roche

JERRY ROCHE
Editor-in-Chief

INSIDE

THE VOICE OF THE GREEN INDUSTRY

LANDSCAPE *management*



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**26 COVER STORY:
GETTING THE MOST
OUT OF YOUR MOWERS**
"In the last five years, I've seen some of the largest contractors in the country go broke," claims industry consultant Jim Huston. "It's been because they haven't had a handle on equipment costs." Here's how to get a handle on the three important components of equipment costs.
JERRY ROCHE

**28 MANAGING ROOTS
FOR MAXIMUM
TURFGRASS GROWTH**
As plants wither from drought and high temperatures, turfgrass managers and research scientists appreciate the importance of roots to successful turfgrass culture. Management practices to achieve maximum rooting must be timed to take advantage of the natural periods of rapid growth.
DR. ROBERT N. CARROW

**30 SIX EASY RULES
FOR DIAGNOSING
PLANT PROBLEMS**
Diagnosing plant problems is difficult and requires discipline and diverse knowledge. Yet everyone



20



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wants an instant and simple answer, not to mention an inexpensive and certain solution. Is there a sure fire way to make diagnosis easy? Not really. But these six rules will lead to improved diagnostic success.
JIM CHATFIELD

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LANDSCAPE MANAGEMENT (ISSN 0894-1254) is published monthly by Advanstar Communications, Inc. Corporate and editorial offices: 7500 Old Oak Blvd., Cleveland, OH 44130. Advertising, accounting, advertising production and circulation offices: 131 West First St., Duluth, MN 55802; 1333 N.W. Norcross, Seattle, WA 98177. **Subscription rates:** one year, \$39, two years \$58 in the U.S.; one year \$66, two years \$99 in Canada. All other countries: one year \$130, two years \$195. Current issue single copies (pre-paid only): \$4 in the U.S.; \$7 in Canada; \$12 elsewhere; add \$3.50 per order for shipping and handling. Back issues, if available, \$10; 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. Second class postage paid at Duluth, Minnesota 55806 and additional mailing offices. **Copyright © 1995 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 x123. 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.



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

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A. Thomas Perkins, Ph.D.

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Poa annua



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Stellaria media



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GREEN FOXTAIL
Setaria viridis



GIANT FOXTAIL
Setaria faberi



SPURGE
Euphorbia spp.



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Oenothera biennis



GOOSEGRASS
Eleusine indica

“Once in a great while, a product comes along that deserves not just a minor mention, but a major announcement. PENDULUM® Plus Fertilizer belongs in that category.”

A. Thomas Perkins, Ph.D.

American Cyanamid is so excited about introducing new PENDULUM Plus Fertilizer, we're giving away \$10,000 in cash to the ultimate weed picker. PENDULUM brand Pendimethalin has earned a reputation for providing cost-effective, broad spectrum, season-long, preemergent control against many troublesome weeds. And now it's available on quality

fertilizers from American Cyanamid, the leading manufacturer of preemergent turf herbicides.

PENDULUM Plus Fertilizer controls all the troublesome weeds that PENDULUM alone does, including crabgrass, goosegrass, foxtail, oxalis and spurge. In fact, it controls every one of the weeds illustrated above *and more*. So the correct answer to our question is actually “none.” Remember *that* when you're filling out your entry form. It could win you \$10,000 in cash!

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PTO-953



Critical moss

How do you deal with moss problems on the golf course?

—NEW YORK

Moss plants, like many weeds, establish in open areas where turfgrass is not very aggressive. This might be related to cultural practices such as shorter mowing and/or low nitrogen fertilization. Other factors include too much shade, soil compaction, wet conditions due to poor drainage, poor air circulation and improper pH.

Mosses are small, leafy plants which usually grow in large numbers close to each other. They vary in size and do not have roots. However, they have root-like structures which help them attach to soil or other surfaces.

Usually, moss plants begin to grow before bentgrass turns green in the spring. You could consider using 3 to 5 lbs./1000 sq. ft. of hydrated lime in late March to burn back moss. For ease of dry application, lime can be mixed with a sand topdressing. Lime is also helpful if the soil pH is too acidic for optimal turfgrass growth.

Moss problems cannot be satisfactorily managed unless growing conditions for the desirable turfgrass is improved. Consider providing the following:

1) Maintain good soil fertility to help improve turfgrass health and competitive ability. Maintain good nitrogen and potassium in your program.

2) Improve drainage.

3) Provide selective pruning and/or remove dense shade to improve light. This may require removing some less desirable trees.

4) Plant shade-adapted aggressive turfgrass if shade is a factor.

5) Reduce soil compaction with yearly aerification. If you then apply sand topdressing, you create a system of vertical drains that helps water move from the surface.

6) Improve air circulation by removing low-growing branches.

7) Correct soil pH. Moss is tolerant of a wider pH range than turfgrass and can grow in either acidic or alkaline soils.

When these practices fail, consider using one of the three following chemical management options:

- When moss plants are actively growing, directly apply 10 lbs. of ammonium sulfate per 1,000 sq. ft. This treatment may cause some turfgrass to temporarily burn.

- Mix three level table-spoons of powdered copper sulfate in five gallons of water and apply over 1,000 sq. ft. Copper sulfate can stain clothes and non-target areas; therefore, use caution during application.

- Treat the area with herbicides such as Scott's Goosegrass Control (Betasan/oxidiazon combination), Siduron (Tupersan) or Bentazon (Basagran). Scott's Goosegrass Control may give the best control; however, it can cause turfgrass discoloration. Tupersan and Basagran

may not be as effective, but they are less injurious to turf.

Read and follow label specifications for best results.

Clogged tines

When aerating a green, the tines often clog up, resulting in the core being pushed down into the green rather than ejected. Can this lead to problems by compressing the soil beneath the surface?

—NEW YORK

Yes, clogged tines can cause soil compaction similar to a "spiking" operation. During spiking, soil is pushed down and to the sides of the spiking tool, creating the possibility of lateral as well as downward soil compaction.

Ideally, aerification should remove at least a two-inch core to obtain optimum benefit. If the tines are not penetrating deep enough into the soil or the cores are not being ejected, you may not get any aerification benefits. First, determine the problem:

- Are the tines too small?
- Is the soil too dry or too wet?
- Is the equipment heavy enough?
- Is there too much thatch?

To get maximum benefit out of your aerification operation, make sure that the equipment is in good condition and that the soil is moist but not wet.



BALAKRISHNA RAO

Manager of Research and Technical Development for the Davey Tree Co. Kent, Ohio

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Sod: a booming market in America

Millions of American households purchased in excess of \$420 million worth of turfgrass sod in 1994, according to a benchmark survey of 72 million households conducted by the Gallup Organization for the Turfgrass Producers International (TPI).

Unfortunately for the professional lawn and landscape

market, however, homeowners purchased and installed the sod themselves five times more often than they paid for its installation.

Survey findings:

- households that bought sod in 1994: 3.6 million
- average homeowner sod purchase: \$76
- total homeowner sod

purchases: \$272.2 million

- householders who paid to have sod installed: 700,000
- average paid to have sod installed: \$205

• total value of sod installed professionally: \$148 million

"These results offer real substantiation of the importance American homeowners place on turfgrass and the ease of using sod," says TPI executive director Doug Fender. "While \$420 million is just a small fraction of the estimated

\$25.9 billion spent annually by Americans for their lawn and garden activities, it is certainly significant and meaningful."

When asked about turfgrass sod purchases planned for 1995, 2.2 million households said they planned to make a do-it-yourself sod purchase. But an additional 300,000 indicated that they would employ the services of a professional to install the sod.

Biggest obstacles to growth

Small business owners across the nation don't have any worries different than small business owners in the green industry.

A survey by the Integra Marketing Group found that—not unlike LM's 1995 "State of the Industry" survey—competition and hiring good people are the biggest obstacles to growth among small businessmen.



Lawn/garden tractor popularity grows by 13.9%...

...could a decrease in professional lawn and landscape maintenance be far behind?

The Outdoor Power Equipment Institute predicts a radical increase in domestic purchases of lawn and garden tractors—a statistic that could suggest a slight tightening in the residential lawn maintenance market.

According to OPEI figures, sales of front-engine lawn tractors will increase 13.9% this year to more than 1,235,000 units. The domestic market for riding garden tractors is increasing even faster: 15.6% this year on more than 218,000 units—the first time in history the 200,000 mark has been breached.

Homeowners typically use front-engine lawn tractors and riding garden tractors to mow their own lawns, as opposed to having professional lawn care or landscape maintenance contractors do it.

Purchases of mowers by American homeowners and the professional market, on the other hand, will not reach 1994 levels. Walk-behind powered mowers are expected to experience a 3.3 percent decrease, to 5.8 million units. Domestic sales of rear engine riding mowers are expected to decrease 6.0 percent, to slightly more than 166,000 units.

KEY INTEREST RATES

	CURRENT	ONE YR. AGO
credit cards	18.1%	17.8%
vehicle loans	9.4%	8.4%
15-year fixed-rate mortgages	7.4%	8.4%

Managed health care costs

Health care costs are not as big a concern among small businesses as they were in 1994, which seemed to be a watershed year. There are fewer changes among coverages bought for employees of small businesses this year, according to Arthur Andersen's Enterprise Group and National Small Business United.

Here are comparisons of how small businesses are changing in 1995, compared to 1994 and 1993. Fiscal years run from July of the previous year to July of the current year.

	'92-'93	'93-'94	'94-'95
changed insurance company	22%	40%	21%
changed policy to higher deductible	31%	36%	18%
switched to HMO or PPO	12%	26%	14%
changed to policy with higher co-pay	19%	22%	13%
instituted managed health care	3%	2%	9%
increased employee contributions	17%	25%	9%
reduced benefits	15%	16%	7%