

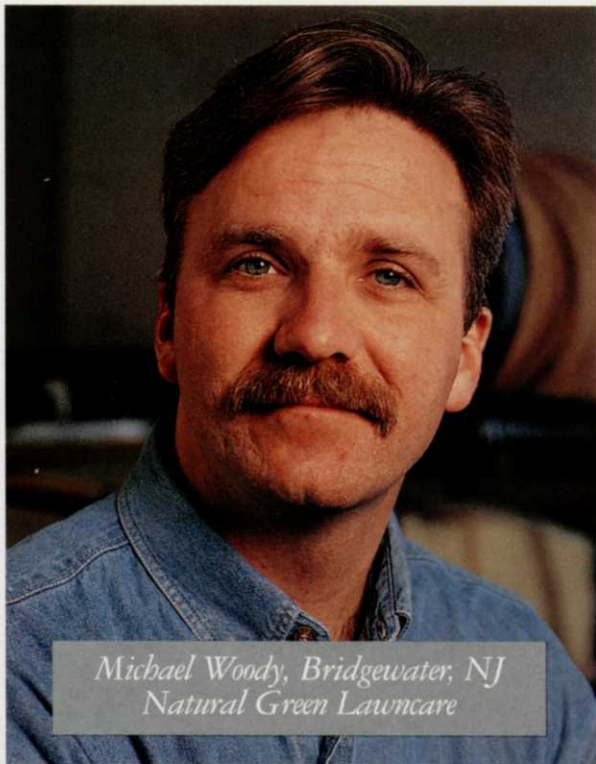
THE VOICE OF THE GREEN INDUSTRY

LANDSCAPE *management*

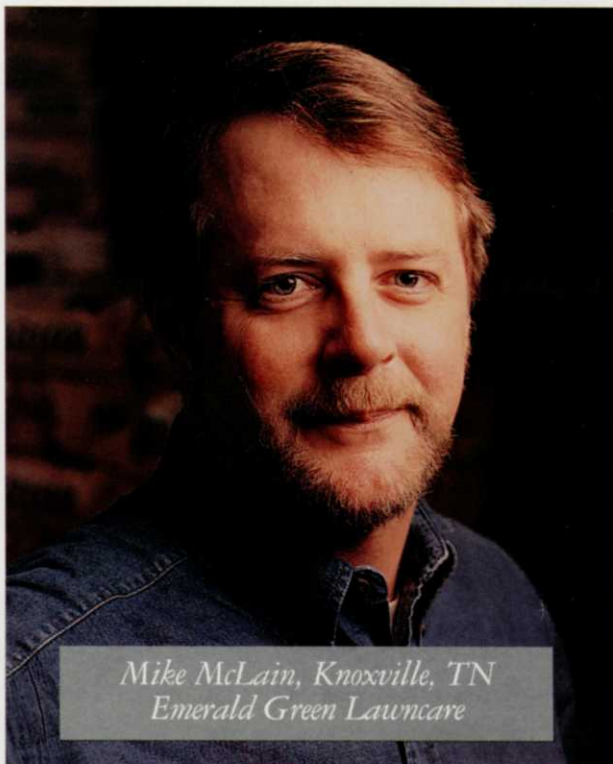
FEBRUARY 1996 • \$4

our **Picks** for **1996**

unique,
useful
products



*Michael Woody, Bridgewater, NJ
Natural Green Lawncare*

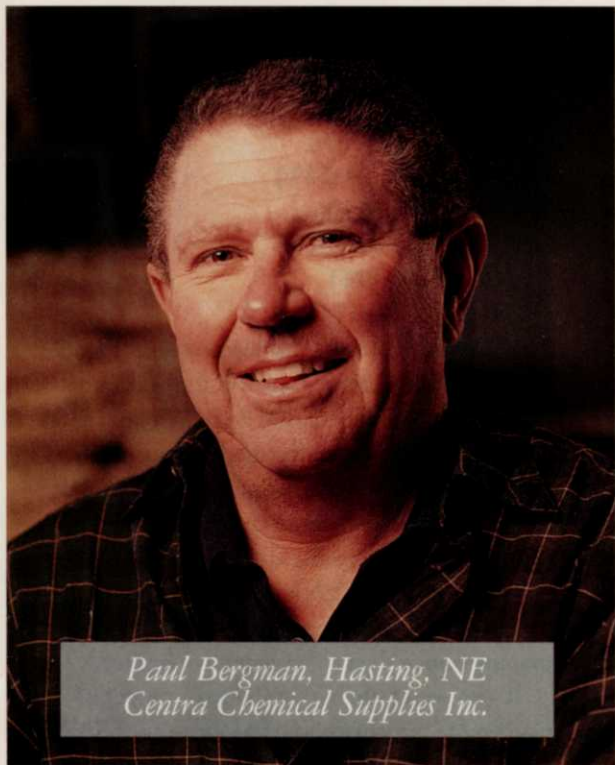


*Mike McLain, Knoxville, TN
Emerald Green Lawncare*

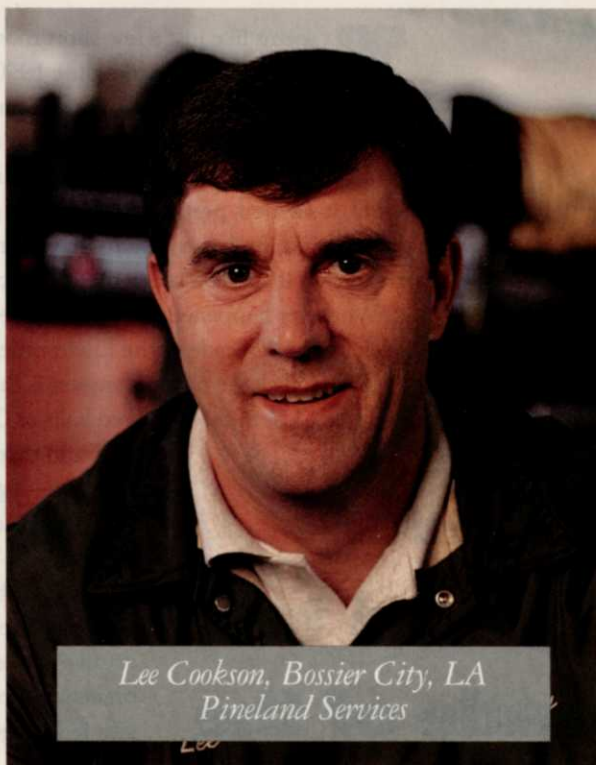
*“When it’s my
investment and my
reputation,
Pendimethalin is
my herbicide.”*

*“After a season
of using Barricade®,
I appreciate
Pendimethalin more
than ever.”*





*Paul Bergman, Hasting, NE
Centra Chemical Supplies Inc.*



*Lee Cookson, Bossier City, LA
Pineland Services*

"We want maximum performance against a wide spectrum of weeds all season long. We use Pendimethalin."

"In addition to delivering outstanding performance, Pendimethalin has helped my business grow by offering cash rebates for every purchase I make."

Take it from those who know. For broad-spectrum, season-long control and cost-effectiveness, no other preemergent turf herbicide can match Pendimethalin. For more information or for the distributor nearest you, call 1-800-545-9525.

Pendimethalin
Nothing Beats Pendimethalin

It seems like just a few short months ago that we were heralding the 1990s as the "Decade of the Environment" on these pages. In reality, it was three or four years ago that every article, every column we wrote, it seemed, pertained to how the green industry could implement more "environmentally-friendly" golf and landscape maintenance.

Whatever happened, we asked ourselves last week, to the "Decade of the Environment," then?

Well, folks...the obvious answer is that it got lost. It got lost in the hallowed halls of Congress

first, and then—most recently—it got lost in the White House during the great "Battle for the Budget" being waged between the executive and legislative branches of our sluggish federal government.

We asked ourselves whether the "Decade of the Environment" will ever be re-discovered by our leaders. And, remembering a *USA Today* article, we thought probably

not—at least not into the foreseeable future.

That article to which I refer ran on the front page of the January 8th issue. It listed the top 15 concerns of the voting public.

Nowhere among those concerns—indeed, nowhere in the entire lengthy article—was the environment ever mentioned.

To refresh your memory, here are the public's top concerns as we begin 1996, and what percentage voiced them, according to the *USA Today*/Gallup poll:

- 1) quality of public education (67%)
- 2) crime (66%)
- 3) the economy (64%)
- 4) jobs (63%)
- 4) availability of health coverage (63%)
- 4) cost of health care (63%)

- 7) budget deficit (58%)
- 7) drug abuse (58%)
- 7) financial security for retirees (58%)
- 10) Medicare (55%)
- 10) moral values (55%)
- 12) poverty (51%)
- 12) federal taxes (51%)
- 14) welfare (49%)
- 15) college costs (43%)

Latest word out of Washington seems to indicate that, if the Republicans win the budget battle, the EPA will face cuts of \$1 billion, meaning up to 50 percent less enforcement of its rules and regulations. Even if Pres. Clinton and his liberal cronies get their way about the budget, the EPA will reportedly face some cuts.

Either way, the EPA is gearing its internal organization to become more of an information and training source than an enforcement agency.

It's no secret, then, that the government is planning to put environmental issues on the backburner because of a change in public priorities.

This is good news for the green industry, because it doesn't appear that you will be subject to any new reporting requirements in the near future. You also probably won't face as many possible inspections.

But this turn of events could also be bad news for the green industry, if you let it be.

Because from now on, the government won't be looking over your shoulder and holding your hands at every juncture. Which means that the safety of the environment now rests on your shoulders alone.

Even though our politicians have lost the concept of the "Decade of the Environment," the green industry still has the power to keep it alive.

So please continue to watch what you're doing to the environment. Watch how you're doing it. And, when you're given this new responsibility, please don't take undue advantage it.

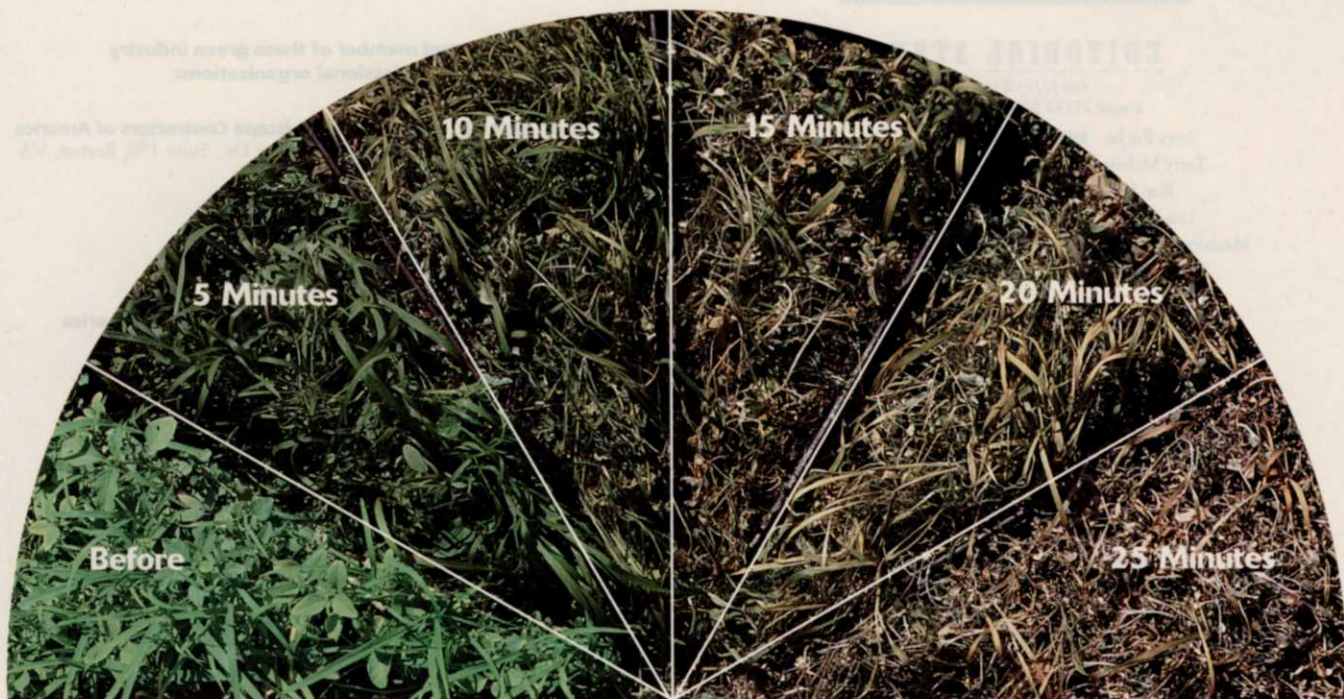
Or—just as sure as the sun will rise tomorrow morning—"the environment" will again leap to the top of public concerns and the government will slowly begin anew taking away our privileges, one by one. **LM**

What ever happened to 'Decade of the Environment?'



Jerry Roche

JERRY ROCHE
Editor-in-Chief



Weeds? What Weeds?

Scythe™ is an amazingly fast-acting herbicide that lets you see results in minutes or hours, instead of days or weeks. It is made from a naturally occurring fatty acid and offers many advantages over other herbicides

- Scythe is environmentally friendly, so it can be used around homes, in parks, on golf courses, along highways and fences, in greenhouses and nurseries.
- There is no soil persistence so it can be applied to seed beds immediately before planting and around shrubs, trees and other ornamentals.
- Scythe enhances the activity of glyphosate (Roundup® for example). Not only does it immediately start turning weeds brown, it accelerates the uptake of glyphosate into the plant. This speeds the systemic action and helps avoid washoff from rain or irrigation.

See your chemical dealer or call Mycogen at 1-800-745-7476.



Mycogen Corporation, 5501 Oberlin Drive, San Diego, CA 92121, 1-800-745-7476

Scythe is a trademark of Mycogen Corporation
Roundup is a registered trademark of Monsanto

EDITORIAL STAFF

Fax (216) 891-2675

E-mail 75553.502@compuserve.com

Jerry Roche **Editor-in-Chief** (216) 826-2830
 Terry McIver **Managing Editor** (216) 891-2709
 Ron Hall **Senior Editor** (216) 891-2636
 Lisa Bodnar **Graphic Designer** (216) 891-3101
 Maureen Hrehocik **Group Editor** (216) 826-2829
 Lisa Lehman **Art Director** (216) 891-2785

READER ADVISORY PANEL

Joe Alonzi **Westchester Country Club** Rye, N.Y.
 Rod Bailey **Evergreen Services** Bellevue, Wash.
 Alan Culver **Mahoney Golf Course** Lincoln, Neb.
 Charlie Racusin **Environmental Landscape Services** Houston
 Jack Robertson **Robertson Lawn Care** Springfield, Ill.
 Steve Wightman **Jack Murphy Stadium** San Diego

BUSINESS STAFF

John D. Payne **Publisher** (216) 891-2786
 Leslie Montgomery **Administrative Coordinator** (216) 826-2856
 Judy Miducki **Production Manager** (218) 723-9281
 Alex DeBarr **Group Publisher** (216) 891-2789
 Donna Pack **Group Business Manager** (216) 891-3131
 Debi Harmer **Production Director** (218) 723-9325
 Rosy Bradley **Senior Production Manager** (218) 723-9352
 Bob Dahl **Circulation Manager** (218) 723-9274
 Lynn Viele **Green Book Coordinator** (218) 723-9393
 Judy Aspling **Green Book Supervisor** (218) 723-8328

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

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

Bob Mierow **Western Sales Manager**
 1333 N.W. Norcross
 Seattle, WA 98177-5235
 (206) 367-5248 Fax: (206) 367-5367

Dan Hoke **Classified Ad Manager** (216) 891-2672

MARKETING SERVICES

Maureen Cannon **Reprints (100 minimum)** (216) 891-2742
 Mark Fleischer **Circulation List Rental** (216) 891-3166
 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



President & CEO Gary R. Ingersoll
President, Advanstar Publishing Brian Nairn
President, Advanstar Expositions William M. Windsors
VP/Finance, CFO and Secretary David W. Montgomery
Vice Presidents Kevin J. Condon, William J. Cooke,
 Brian Langille, Phil Stocker
Treasurer & Controller Adele D. Hartwick

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

International Society of Arboriculture

P.O. Box 908, Urbana, IL 61801
 (217) 328-2032

International Turfgrass Society

Crop & Soil Environmental Sciences, VPI-SU,
 Blacksburg, VA 24061-0403
 (703) 231-9796



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

2021 Coffey Rd., Columbus, OH 43210
 (614) 292-2601



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
 (404) 977-5222.

Responsible Industry for a Sound Environment

1155 15th St. NW, Suite 900, Washington, DC 20005
 (202) 872-3860



Sports Turf Managers Association
 1375 Rolling Hills Loop, Council Bluffs, IA 31503
 (712) 366-2669

Turf and Ornamental Communicators Association

P.O. Box 156, New Prague, MN 56071
 (612) 758-5811

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. Second class postage paid at Duluth, MN 55806 and additional mailing offices.

Copyright ©1996 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 photocopying, 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.



Canadian G.S.T. Number: R-124213133.


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



IF IT GROWS WE CAN CUT IT.



Grass, bushes, yes, even trees, Husqvarna has the power equipment to get the job done. In fact, with Husky, you get the most complete selection of

lawn and garden equipment of any major brand. You get Husky's exclusive features such as *Air Injection* for cutting up to 20 times longer between filter cleanings; *Smart Start™* for smooth, easy starts; and *LowVib™* for one of the lowest vibration ratings in the market. You get quality based on a 300-year tradition of excellence. Call 1-800-HUSKY-62, and you get our free catalog along with dealer locator information. Find out about the Superior Value of Husqvarna. If you have a yard, we have something for it.  **Husqvarna**

NOTHING WORKS



LIKE A HUSKY

LANDSCAPE *management*

INSIDE



FEATURES

20 COVER STORY: UNIQUE & USEFUL PRODUCTS FOR 1996

From the LM editors, some of the more interesting product offerings that have crossed our desk lately.

JERRY ROCHE

26 EARLY-SEASON FERTILIZATION

Base nitrogen fertilizer applications on typical plant usage, rather than soil test results.

JOHN C. FECH

30 BEST CREW LEADERS GO THE EXTRA MILE

They're also organized, show attention to detail and have a genuine interest in serving others. Here's a look at those and other qualities that leaders share, from consultant Phil Christian and others industry experts.

RON HALL

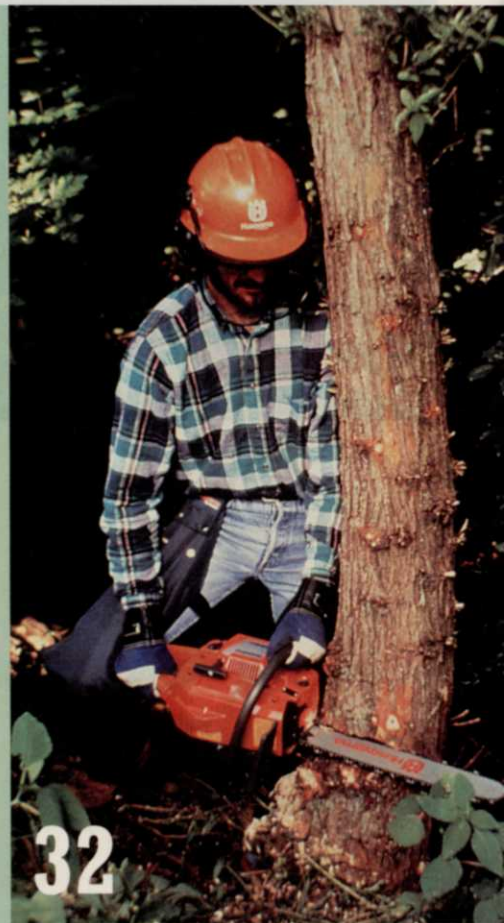
32 LM REPORTS: CHAIN SAWS

The features you want in a chain saw—whether they are based on size, startability or balance—will determine the make and model to fit your needs.

JERRY ROCHE

38 PRODUCT REVIEW: THE NEW MOWERS

A rundown on some of the new mowing equipment that has hit the green industry since last summer's International Lawn, Garden & Equipment Expo.



COLUMNS

2 OPENING SHOTS

8 ASK THE EXPERT

DEPARTMENTS

10 INDUSTRY ALMANAC

14 TALKBACK

15 HOT TOPICS

33 JOBTALK

34 SUPPLIERS CORNER

34 INFO CENTER

36 EVENTS

45 AD INDEX

PREVENT CRABGRASS WITH TEAM
AND EVEN YOUR HARDEST CUSTOMER
WILL CRACK A SMILE.



Dependability is what lawn care and landscape professionals look for in a preemergence herbicide. And dependability is what you get with the time proven Team* herbicide. Since 1985, Team has proven itself effective at stopping a broad spectrum of troublesome grassy weeds, especially crabgrass.

With the rock solid performance of Team, you can expect consistent, season long control.

Because nothing, pound for pound, prevents crabgrass better than Team, you know you've got a preemergent you can depend on to bring a smile to the face of any customer.

For further information on Team, or any other product in the extensive line of DowElanco products, give us a call at 1-800-352-6776. Always read and follow label directions.



DowElanco

*Trademark of DowElanco

Perennial weeds

We have had problems managing perennial weeds—such as poison ivy—by using Roundup herbicide. We apply Roundup in the spring, when other weeds and poison ivy begin to grow actively. We are not quite happy with the results. Is there something we are doing wrong, or is there a different way or time of the year to manage perennial weeds?

—SOUTH CAROLINA

People who have difficulty managing perennial weeds tend to question product performance. But problems may be related to: improper mixing rate, application coverage, equipment malfunctioning, equipment without a pressure regulator or flow meter to manage the flow rate, and proper timing. Among these, proper timing is the most critical factor.

Our experience suggests that late-summer or early fall application is better than a spring application to control poison ivy. Reports from the Georgia Extension Service indicate that Clemson University scientists found 20 percent control of poison ivy from May applications, 87 percent control from July applications, and 98 percent control from an August application. They also found similar results with other hard-to-control weeds, including yellow nutsedge.

It appears that timing may be your major problem. Mixing rates, application units and coverage also should be evaluated before your next application.

Fungus on mowers

Are there any solutions that can be applied to the undersides of lawn mowers to prevent fungus from building up? We scrape them clean every week, however still see a fungus buildup from wet grass.

—VIA E-MAIL

The fungal growth—moldy in appearance, with a decaying odor—is caused by saprophytes. These secondary fungi grown on dead and decaying organic matter like grass clippings. These saprophytes help the decomposition process. Generally, they are not considered to be harmful. However, some people may be allergic to the spores produced by these fungi. Therefore, while cleaning mower decks, it is a good idea for allergy-sensitive people to wear a dust mask to avoid inhaling fungal spores.

Maintain good sanitation, preferably cleaning the deck every day. Scrape off grass clippings and clean the mowers by using a water hose. In addition to this, you might also consider scrubbing with rubbing alcohol, diluted bleach (1 part bleach to 9 parts water) to kill the saprophyte fungal growth. Bleach mixtures are used to clean pots in greenhouses as well as disinfecting pruning tools. Bleach solution should remain on the mower deck surface for 10 minutes for better results. The solution should be thoroughly rinsed off to minimize corrosion. You can also try soaps or detergents like Comet or Ajax to reduce the saprophyte build-up.

Your best option is to mow when the turf is dry and clean the mower as often as possible with water (when feasible, use alcohol or Clorox) to prevent fungal growth build-up.

Slowing growth

Are there any products that we can use on hedge plants to slow their growth and reduce the need for pruning cycles? We are interested in managing the growth of plants like privet or honeysuckles.

—PENNSYLVANIA

Yes, there are a few products in the market which are labeled as plant growth regulators and should meet your needs. Such products are: Atrimmec, Embark 2-S, Trim-Cut ornamental growth regulator from PBI/Gordon Corp., and Maintain CF 125 from Uniroyal Co.

Most of the above-mentioned labels cover plants mostly from the southern or western plants of the United States. Therefore, refer to each label and be sure the specific plant or hedge is mentioned.

As a general rule, plant growth regulators are applied onto plants several days after they have been pruned. After treatment, these products slow growth from six to eight weeks.

As always, read and follow label specifications for best results. **LM**



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

SEND YOUR QUESTIONS TO:

"Ask the Expert"
 Landscape Management
 7500 Old Oak Blvd.
 Cleveland, OH 44130

Please allow two to three months for an answer to appear in the magazine.

IF YOU WANT TO KNOW HOW LONG
GALLERY WORKS TO PREVENT BROADLEAF WEEDS,
ASK SOMEONE WITH TIME ON THEIR HANDS.



After applying Gallery* preemergence herbicide, you've got about 6 to 8 months of good solid waiting before you'll spot the emergence of any of over 95 different broadleaf weeds. Even the tough ones like spurge, dandelion and plantain.

In fact, Gallery is the only preemergent on the market today that's designed to prevent so many broadleaf weeds, yet is safe over the top of all turfgrasses,

and over 400 different species of ornamentals.

So now that you have a little extra time on your hands, maybe you can get around to digging up even more business.

For further information on Gallery, or any other product in the extensive line of DowElanco products, give us a call at 1-800-352-6776. Always read and follow label directions.



*Trademark of DowElanco



American workers find it difficult to get away from job

Those vacationers you see in Las Vegas and Palm Springs lounging by the pool with a cellular phone in hand aren't calling out for pizza, according to a survey by Steelcase, Inc. They're talking to their employer, or their employees or—in some cases—their clients. In other words, they're trying to have

some fun while still maintaining a close tie to their workplace.

Business before pleasure? With our modern system of communications, workaholics are finding it easier and easier to work and play at the same time.

According to the Steelcase survey, most vacationers con-

duct work-related activities at some point in their vacation.

The activities conducted range from reading work-

related material to handling staff problems via phone.

Here are results of the survey:

WORK-RELATED ACTIVITIES CONDUCTED DURING VACATION, 1995

Work-related reading	40%
Checking in with supervisor	33%
Paperwork	28%
Handling client relations	26%
Learning new job skills	18%
Handling staff problems	18%

Commercial turf care equipment shipments are down in 1995

Even though the green industry is apparently doing more mowing than ever before, shipments of commercial walk-behind mowers and other equipment have taken a bit of a dip in 1995.

Shipping estimates for model year 1995 (Sept. 1, 1994 through Aug. 31, 1995) for the walk-behinds decreased six percent from 104,800 in 1994 to 98,300 in 1995.

However, shipments of commercial riding units showed a very slight increase, from 44,700 in 1994 to 44,800 in 1995.

These estimates by the Outdoor Power Equipment Institute, Old Town Alexandria, Va., represent shipments destined to U.S. markets only.

Overall, consumer products included, total shipments are estimated as somewhat more than 7.9 million, an increase of two percent over 1994.

In the near future, OPEI will provide a forecast of riding and intermediate walk-behind commercial unit shipments.

ANNUAL OUTDOOR POWER EQUIPMENT SHIPMENT ESTIMATES

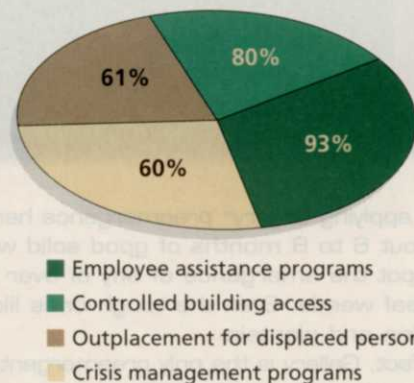
	1995	1994	Change
Commercial walk-behind rotaries	98,300	104,800	-6%
All walk-behind rotary mowers	5,950,000	6,030,000	-1%
All riding mowers	1,644,000	1,452,000	+13%
Commercial riding units	44,800	44,700	0%
Riding garden tractors	226,000	189,000	+20%
Front-engine lawn tractors	1,250,000	1,086,000	+15%
Rear-engine riding mowers	168,000	177,000	-5%
Walk-behind rotary tillers	350,000	315,000	+11%

SOURCE: OUTDOOR POWER EQUIPMENT INSTITUTE, INC.

Violence in the workplace still a concern of employers

Forty-three percent of businesses surveyed by the International Facility Management Association reported a "violent incident" in the workplace in 1994, making such violence a continuing concern.

Most businesses offer an employee assistance program to prevent further such outbreaks while many simply control building access. Here are some preventive measures that employers are taking to quell the violence, according to the survey:



The Ultimate in What a Mower Can Do.



The "outfront" leader in zero-radius mowers for more than a quarter of a century.



Quik-D-Tatch Vac® System

The New Combo Mulching™ Deck* lets you achieve superior results in varying conditions using the same deck.

Available in 44", 48", 52", 61" and 72" decks.

... to Side Discharge

... to Down Discharge™ Mulching

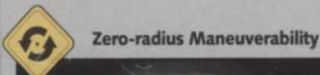


GRASSHOPPERABILITY

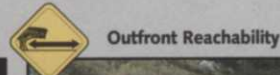
the ability to make all the right moves for mowing quality and timesaving productivity.

Ask about side-to-side flotation option.

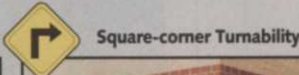
- **EASY CONTROL** to make all the moves you want to mow with soft-touch dual levers. You get the "feel" in no time at all because the hands-on control is so natural.
- **ELIMINATE MOST SECONDARY TRIMMING** using hydrostatic direct drive and zero-radius maneuverability with outfield deck reachability.
- **NO TOOLS NEEDED** to remove decks and add year-round attachments in minutes thanks to the new, exclusive Quik-D-Tatch® mounting system*.
- **CHOOSE YOUR POWER** from nine engine models, 14 to 28 hp, gas or diesel, air-cooled or liquid-cooled — the broadest line of outfront riders in the industry.



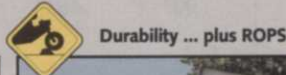
Zero-radius Maneuverability



Outfront Reachability



Square-corner Turnability



Durability ... plus ROPS



Grasshopper Selectability will change your mind about what a mower can do.



New Model 928D, 28 hp diesel, with Quik-D-Tatch Vac® System and Trail Hopper™ collector.



Snowthrower



Angle Dozer Blade



Rotary Broom

Other Attachments

- Dethatcher
- Bed Shaper
- AERA-vator™
- ROPS
- Cab Enclosure
- Sunshade
- V-Snow Plow

Call today for a demonstration to see what a Grasshopper can do for you!



First to Finish ... Built to Last

GRASSHOPPER®

YOUR NEXT MOWER

The Grasshopper Company • One Grasshopper Trail • P.O. Box 637 • Moundridge, KS 67107 U.S.A. • Phone: (316) 345-8621 • FAX: (316) 345-2301

Circle No. 112 on Reader Inquiry Card

*patent pending

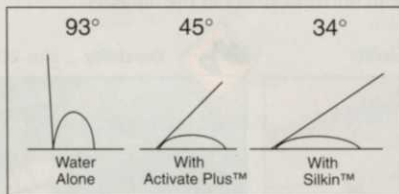
Using Adjuvants In Your Plant Protection Program

Here's how adjuvants can improve the performance and coverage of your plant protection product applications.

Using adjuvants in your turf management program can help you improve plant protection product performance. They can even make the difference between peak and poor performance. The starting point is to find the right adjuvant for the job. The most commonly used adjuvants for turf are: wetting agents; spreader/stickers; spreader/activators; sticking agents, and buffering and compatibility agents.

Wetting Agents

If you've been making thorough herbicide, fungicide and insecticide applications but still aren't getting the control you expect, your plant protection product may not be penetrating plant tissue surfaces. This reduces control and leaves spray residue susceptible to wash-off. The wetting agent Riverside® Silkin™ helps sprays penetrate plant tissue quicker for improved overall performance.



The wetting agent Riverside Silkin and spreader/activator Riverside Activate Plus™ reduce surface tension of spray so that it forms "flatter" droplets, improving coverage and absorption.

Spreader/Stickers

Good control in some areas and poor control in others could mean drift and wash-off are taking their toll on spray performance. During application, spray droplet size varies, reducing adhesion and causing spray to miss the target. To improve coverage and adhesion, use the spreader/sticker Riverside Complex™. It adjusts droplet size for better performance, even under adverse conditions. By reducing surface tension in the spray droplet and keeping the spray mixture suspended, Complex can dramatically improve the efficiency of herbicides, fungicides and insecticides.

Spreader/Activators

Droplet size varies during applications, making retention and distribution more difficult. Spreader/activators work in much the same way wetting agents

do. They deliver more uniform droplet distribution, quicker wetting and increased spray retention on leaf and stem surfaces when used with herbicides, fungicides and insecticides.

The spreader/activator Riverside Activate Plus improves performance and efficiency by moving the spray into plant tissue more quickly. By speeding up penetration, you get increased pest control.

Sticking Agents

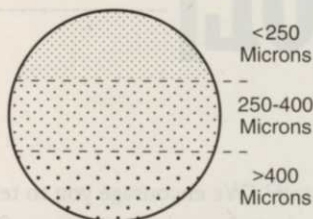
Contact herbicides, and non-systemic fungicides and insecticides can sometimes be washed away by rain, irrigation or even dew. Plant protection product sprays are also affected by drift. The sticking agent Riverside Plex® helps plant protection products penetrate the vegetation canopy and stick to plant tissue. That also helps control drift. Using



Riverside® Adjuvants Maximize Your Pest Control.

Plex will help you make applications that will last longer, even in wet conditions.

Approximate Actual Size



Spray droplets under 250 microns are susceptible to drift and poor coverage. Using Riverside Plex or the spreader/sticker Riverside Complex to control droplet size effectively controls drift and

improves coverage. Both maintain droplet size near 400 microns, ideal for the best application.

Buffering and Compatibility Agents

If you're not getting the control you want but have followed label directions to the letter, it could be a pH problem in your tank mix. The buffering agent Riverside Combine® will help you correct the pH level for maximum performance from your spray mixture. If you're unsure of your pH level, use a pH test kit or, if you don't have one, contact your Terra representative.

Combine® pH use chart.

		Starting pH			
		9	8	7	6
Desired pH	8	2	0	0	0
	7	4	2	0	0
	6	16	12	8	0
	5	20	16	12	8
		Oz/100 gal. water			

A chart like this one makes it easy to adjust pH level for optimum results. For example, if your desired pH is 7 and your starting pH is 9, you would need to mix 4 ounces of Combine per 100 gallons of water to get the proper pH.

In addition to buffering, Combine also works as a compatibility agent. The compatibility agent Combine should be used when: more than one plant protection product is included in a tank mix; when tank mixing different formulations like wettable powders and liquids; or when applying micronutrients or plant protection products with fertilizer. Also, Combine improves spray mix stability and dispersion.

To see if a compatibility agent will help your tank mix, try the jar test. Fill two quart jars each with a pint of water or carrier. Use the same source and temperature as you would in your actual tank mix. Mark one jar "with" and one "without." Add 1/4 teaspoon of Riverside Combine to the jar marked "with" and shake it gently for 5-10 seconds. Add the plant protection product(s) to both jars in the proper volume and sequence according to the label directions. Shake gently before adding each new product. Wait 5-10 minutes. Check both jars. If no gels, sludge, flakes or other irregularities are present, the mix is compatible.

If the jar marked "with" is compatible and the jar marked "without" isn't, a compatibility agent should be added to your tank mix. If the jar marked "with" isn't compatible, the tank mix shouldn't be used.

Wait 30 minutes. If the mixture separates but readily mixes again, the tank mix can be used with proper agitation.

Adjuvants Pay Off

Overall, adjuvants can help you protect the investment you make in plant protection products by making them more effective. Whether you're using wetting agents, spreader/stickers, spreader/activators, sticking agents, buffering and compatibility agents or all five, they can help you overcome some of the common problems faced by turf professionals.

For more technical information on adjuvants, contact your nearest Terra Professional Products representative.



Get maximum plant protection product performance with Riverside® adjuvants. They make spray mixes work harder, perform better and control more.

Adjuvants help you get the most out of your program and protect your plant protection product investment at the same time. Riverside adjuvants make the difference between a good job and a great job. Use them with your spray applications to maximize performance.



Terra International, Inc.
P.O. Box 6000
Sioux City, Iowa 51102
1-800-831-1002

[DRUGS & ALCOHOL]

by JERRY ROCHE / Editor-in-Chief

A company's typical "controlled substance" policy might read:

"The use, possession, sale or transfer of alcohol or illegal drugs on company-owned or company-controlled property or in company-owned or company-leased vehicles, or reporting to work while under the influence of alcohol or any illegal drug, is strictly forbidden.

"When there is reasonable cause to believe that an employee's physical or mental faculties may be impaired during work time as the result of alcohol or unprescribed drug use, the company may require a physical examination, which may include drug testing. Refusal...within a designated time period may result in discipline up to and including discharge."

Every once in a while, an employee nonetheless might show up for work under the influence of alcohol or illegal drugs, or get caught using such substances while on the job. In the 1990s, it's simply a fact of life, and most employers have been through this wringer more than once.

But what's more important is what supervisors and employers are doing with those employees so affected.

There are a variety of solutions to this problem,

depending on how much compassion your department or company is willing to show. Many employers won't tolerate a single drug or alcohol incident and summarily dismiss the employee. Others offer a two- or three-step process that can ultimately end in dismissal. The first steps might include counseling and/or testing for drugs.

This month, we're asking you to tell us how you deal with drugs in the workplace. How often do you have this problem? Does your program(s) work? What are some of the consequences your company or department has suffered from having an alcohol or drug

abuser on staff? (We encourage you to tell us your stories, but please don't mention offenders by name. If you desire anonymity, please tell us and we won't use your name in the magazine.)

We'll print your responses in our April magazine so that others can learn from your experiences. This is not a popular topic, nor is it easy to talk or write about. But your experiences can help the green industry beat the problem. **LM**

Your turn

Tell us your solutions to **DRUG & ALCOHOL** problems. Tear out or photocopy this page and return it to us. Or e-mail us. If we print your response in the April issue's "Talk Back" column, you'll receive a free high-quality Landscape Management baseball cap. Deadline for responses: March 1st. Fax to: (216) 891-2675. Mail to: LM Talk Back, 7500 Old Oak Blvd., Cleveland, OH 44130. E-mail to: 7553.502@compuserve.com.

How many instances of drug/alcohol have your employees had in the **past year?** _____ **five years?** _____

What methods have proven most effective in controlling this problem?

COMMENTS _____

What have been the consequences of having employees "under the influence" on the job?

COMMENTS _____

Please check here if you don't want your name used in the magazine.

Name _____

Company/Organization _____

Address _____

City/State/ZIP _____

Snow dumped on East: late spring?

by JERRY ROCHE/Editor-in-Chief
and TERRY McIVER/Managing Editor

Some suggestions for our Eastern Seaboard friends, who might be looking a month or two ahead with some trepidation.

Landscapers and golf course superintendents in the East Coast corridor hit hardest by snow this winter aren't expecting an early or an easy spring.

"There will be an awful lot of damage to trees and shrubs, I'm afraid," says Bob DeRosa of DeRosa Landscaping, Montvale, N.J. "We're also preparing to do a lot of turf replacement because of mechanical and salt damage. I'm sure there'll be a lot of snow mold damage, too.

"I'm hoping for an early spring, but I'm not planning on it. We have such a large amount of snow that it probably will take a long time to melt and we'll be forced to start the spring late."

Many plants were weakened by a 1995 summer drought, compounding the possible spring damage.

"A lot of shallow-rooted rhododendrons and azaleas took a real beating last summer," notes Skip Powers of Powers Landscaping, Westwood, N.J. "Then, because the snow came so early, none of us got the leaves off the properties, so we'll have that to do when spring comes, too.

"We have two-and-a-half feet of snow on the ground today [Jan. 16]. There'll be a lot of salt damage come spring, and plant availability could also be a problem."

"A lot of evergreens are bent and separated," says Mark Graser of Custom Landscaping Ser-

vices of Little Ferry, N.J.

"Junipers, arborvitae, anything deciduous is taking a beating. We're hard-pressed to find places to put snow; a lot of backhoe work caused tire damage on lawns."

Graser says moving snow from place to place—not just plowing it—became "a new industry," and says record amounts of salt were used in his state.

If clients resist paying for repair to turf caused by tire damage, try to work out a split with them, as Graser says he does, usually without much hassle. "They pay for materials, I pay for labor," he says.

Plants didn't just enter the winter with drought damage, they entered a *record* winter.

Snow stress, salt damage and vehicle traffic may cause some turf health problems come the spring.

Rich Buckley of Rutgers says increased snow mold is a possibility, especially on turf that has shown susceptibility to that disease in the past.

"Try to dry out the area as much as possible" once the spring thaw arrives, says Buckley, and overseed any

bare spots.

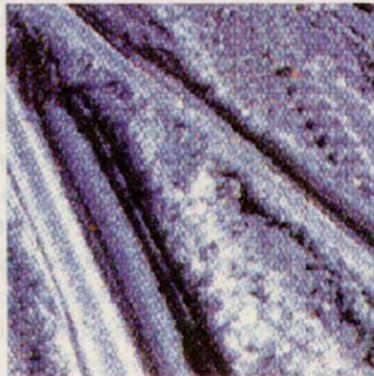
Dr. Joe Rimelspach of Ohio State University suggests the following treatments:

For gray snow molds, use pentachloronitobenzene (PCNB) or iprodione + chlorothalonil. For pink snow molds, use PCNB, iprodione, vinclozolin or thiophanate-methyl. Refer to product labels for accurate rates.

To prevent salt leaching in areas that show salt damage, Buckley suggests rinsing down with as much water as possible.

Low nitrogen-type fertilizers are good substitutes for rock salt as a way to melt snow without damaging turf.

Be on the lookout for canker-causing injuries on tree branches. *Botryosphaeria* and *Cytospora* could form within cracked branches. Prune off all diseased areas.



Research finds new control for summer decline complex

Research conducted in 1995 reveals more good news for landscape managers—especially golf superintendents—who battle summer decline complex, a combination of environmental stress, pythium and rhizoctonia.

As roots and crowns are influenced by summer decline, they die and plants are weakened, leaving them open to further infection. This complex causes large turf areas to become discolored, lose vigor and—if left untreated—to die.

Fungicide treatment with a tank-mix combination of Chipco Aliette WDG and Fore provides excellent control of summer decline complex, according to Dr. Leon Lucas, who conducted the research at North Carolina State University. And even better protection can be achieved by mixing those chemicals with a flowable formulation of Fore. (Mancozeb fungicides other than Fore were not as effective.)

"It is important to note, however, that a compatibility agent such as Blendex must be used with the flowable formulation of Fore [so] that it does not precipitate out of solution."

Fertilizer impact

New research also shows that excessive rates of certain types of fertilizers can play a key role in the onset of diseases. High levels of soluble salt from high-potassium fertilizers cause significant stress and

damage to turf root systems during dry weather.

About 150 to 250 parts per million of soluble salts are sufficient for optimal plant growth. While relatively high levels of soluble salt fertilizers are harmless during wet weather, salt levels of more than 300 parts per million have been associated with increased root rot and bentgrass decline during drier weather, Lucas notes. He recommends applying one-half the recommended rate of fertilizers twice as often to help protect turf from injury and subsequent disease infestation.

The high temperatures, high relative humidity and wet conditions experienced during the summer of 1995 was an example of what summer stress can do in the extreme.

Serious disease problems such as brown patch, pythium blight, summer patch, anthracnose, and take-all patch were reported in high levels throughout the cool-season climate zone.

A report from Ohio State University stresses the importance of correct diagnosis as a key to proper disease management. It is difficult to sort out all the factors resulting in brown grass, says the report, as there are many confusing symptoms. The interaction of disease, weather stress and damage from traffic was extensive. Preventive fungicide treatment can be a key to management.



AAN helps reform immigration laws

A two-pronged grassroots drive to reform immigration legislation has been launched by the American Association of Nurserymen (AAN), according to a press release.

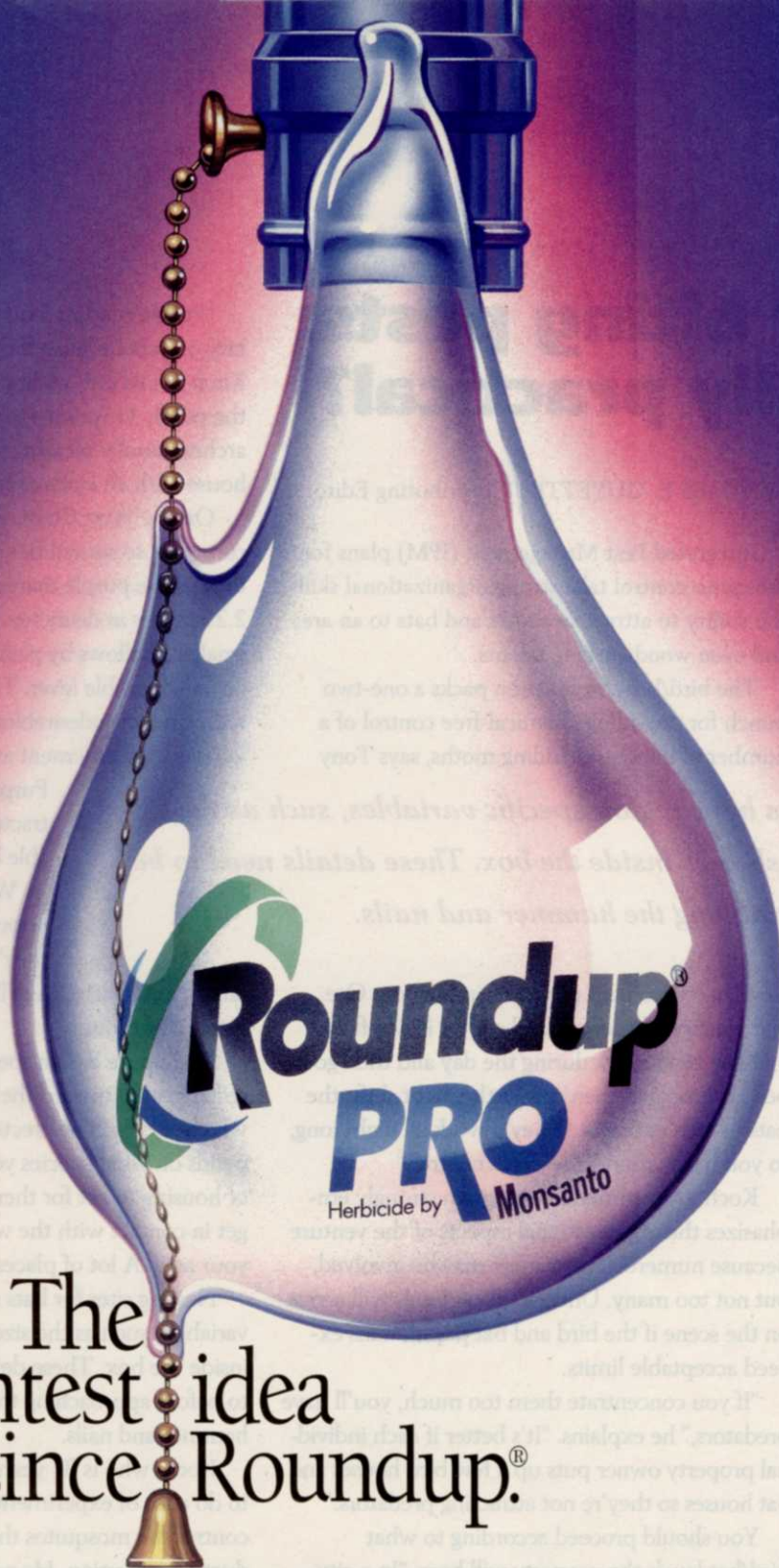
"Congress is debating perhaps the most historic and far-reaching changes ever in our nation's immigration policies," the AAN notes. It expects employee sanctions to be "dramatically increased" as soon as a new immigration bill is passed and enacted by law.

"AAN supports control of our nation's borders and a system of employment eligibility verification that is simple and works," the release notes.

The AAN notes that the current Senate bill (S. 1394) is "outright dangerous and full of anti-employer provisions." The organization suggests that people in the green industry—especially AAN members—write to their U.S. Senators, opposing S. 1394 as written.

As long as you're in the writing mood, AAN recommends that you send letters, too, to your Congressmen "in support of establishing a temporary and seasonal agricultural worker program as a reform of the current, unworkable H-2A agricultural worker program."

For more information, contact Ben Bolusky's office at the AAN: (202) 789-2900.



The
brightest idea
since Roundup.[®]

Twenty-five years after discovering the most effective herbicide ever, Monsanto does it again. With new Roundup[®] Pro.

Roundup Pro herbicide is specifically formulated for turf care professionals. This breakthrough formulation provides enhanced, broad-spectrum control over a variety of conditions and application methods.

So you get faster, more consistent results. Plus, Roundup Pro is rainfast *within one to two hours* after application.

Roundup Pro also offers a new "Caution" signal word. And you'll never have to add any extra surfactant. That means you can save *money and time* by cutting down on surfactant storage, handling and mixing.

For a free information kit that sheds more light on all the benefits of Roundup Pro, call **1-800-332-3111**.



IPM for biting pests: Is it really practical?

by JAMES E. GUYETTE / Contributing Editor

Integrated Pest Management (IPM) plans for mosquito control take strong organizational skills, the ability to attract swallows and bats to an area and even woodworking talents.

The bird/bat combination packs a one-two punch for providing chemical-free control of a number of insects, including moths, says Tony

Nesting sites for bats have region-specific variables, such as the size and number of shelves inside the box. These details need to be attended to before grabbing the hammer and nails.

Koch, a retired fruit producer in Stayton, Ore. and a nationally-recognized expert in the field.

"The birds work during the day and then go to bed at dusk, and then comes the night shift: the bats," Koch explains. "They'll work all night long, so you have around-the-clock control."

Koch's recommended program strongly emphasizes the organizational aspects of the venture because numerous customers may be involved, but not too many. Undesirable animals will arrive on the scene if the bird and bat populations exceed acceptable limits.

"If you concentrate them too much, you'll have predators," he explains. "It's better if each individual property owner puts up a few bird houses and bat houses so they're not attracting predators."

You should proceed according to what bird/bat levels the property will bear. "In a city park, you can have a lot more than on an individual property," Koch notes. Municipal contracts are another option.

In Briarwood Beach, Ohio, Mayor Terry Bidle is petitioning the state government for a \$5,000 grant to fund houses for bats and purple martins, a type of swallow. The control program is geared for the entire lakeside village, which has a population of 700 mostly summer residents.

"Purple martins lend themselves to a community project because they live close together," Koch points out, adding that the birds are fun for the public to watch and the houses can be built in architecturally pleasing styles. "They can put up a house with all kinds of holes."

On the West Coast, purple martins are less common, so sometimes smaller swallows will try to steal the purple martin holes, which need to be 2.25 inches in diameter. Koch is able to exclude smaller swallows by painting a picture of cat teeth on an adjustable lever. The system is activated to scare off the undesirables, making the hole a wholesome settlement as purple martins arrive.

Purple martins can also be attracted by airing tapes of suitable bird sounds.

When established, the population will remain. "Once they've successfully raised a

family in the area, they'll be back every year," Koch points out.

Bird house design specifications must be directly geared toward the region of the country in which they will be erected, Koch stresses. "It depends on what species you have as to what type of housing to get for them," he says. "You have to get in contact with the wildlife department in your area. A lot of places have different species."

Nesting sites for bats also have region-specific variables, such as the size and number of shelves inside the box. These details need to be attended to before approaching the jigsaw and grabbing the hammer and nails.

Koch, who is 81 years old, reports that he had to do a lot of experimenting when he first tried to control the mosquitos that plagued his fruit production operation. He now has 800 bird and bat houses on his 200-acre spread, yet he remains modest. "I'm just a farmer who got tired of spraying. We don't use any chemicals," he notes.

Sawllows and bats will control a multitude of insects in addition to mosquitos and moths.

—For more information, Koch can be reached at (503) 769-5597. Also, Barbara French at Bat Conservation International can be telephoned at (512) 327-9721.

INTRODUCING THE NEW HYDRO-POWER 1280



MOST POWERFUL IN ITS CLASS

Choose the 52 or 61 horsepower Yanmar diesel and tackle the toughest jobs. The deck system has a 62" full floating front deck that raises vertically for ease of service, and two 41" side decks supported by four caster wheels for full floatation. The side decks are swept forward for maximum trimability.

The 1280 operator console features a tilt steering column,

convenient implement controls, ease of entry/exit and many other standard features.

The 1280 has reduced noise levels by locating the muffler and air intake in the enclosed engine compartment.

An optional parallel cross flow hydrostatic four wheel drive system offers maximum traction.

Manufactured by

**HOWARD PRICE
TURF EQUIPMENT**

18155 Edison Avenue
Chesterfield, MO 63005

Circle No. 113 on Reader Inquiry Card

Editors' Choice: Products for 1996

by JERRY ROCHE / Editor-in-Chief

Don't look now, but the 1996 golf and landscape maintenance season is just around the corner.

While you're still considering how much and what you'll be buying before the first bud breaks, we offer you an assortment of interesting products that have crossed our desks in the last four or five months.

These items—presented in no special order—were chosen by the LANDSCAPE MANAGEMENT editorial staff for their uniqueness, their potential impact on the market, and their divergence from the normal types of products you see featured every month on these pages.

Certainly, many of the products deal with having a safer operation in one way or another, including our initial offering:

RGF

With RGF Environmental Systems' products, you can rest assured that you won't be polluting. The company manufactures three separate systems designed with the professional golf, lawn or landscape organization in mind.

The Ultrasorb GC and GC+ collect, treat and recycle wash water with zero toxic discharge. The Ultra Shed System includes custom-built, pre-fabricated storage buildings for wash water recycling systems. The easily-installed O₃ Algae Control System uses an oxidizer that naturally destroys algae blooms and odors in ponds.

RGF also provides technical support for solving waste water problems: storm water runoff programs, waste and wash water collection systems, oil-water separators, and custom-designed water treatment and recycling systems.

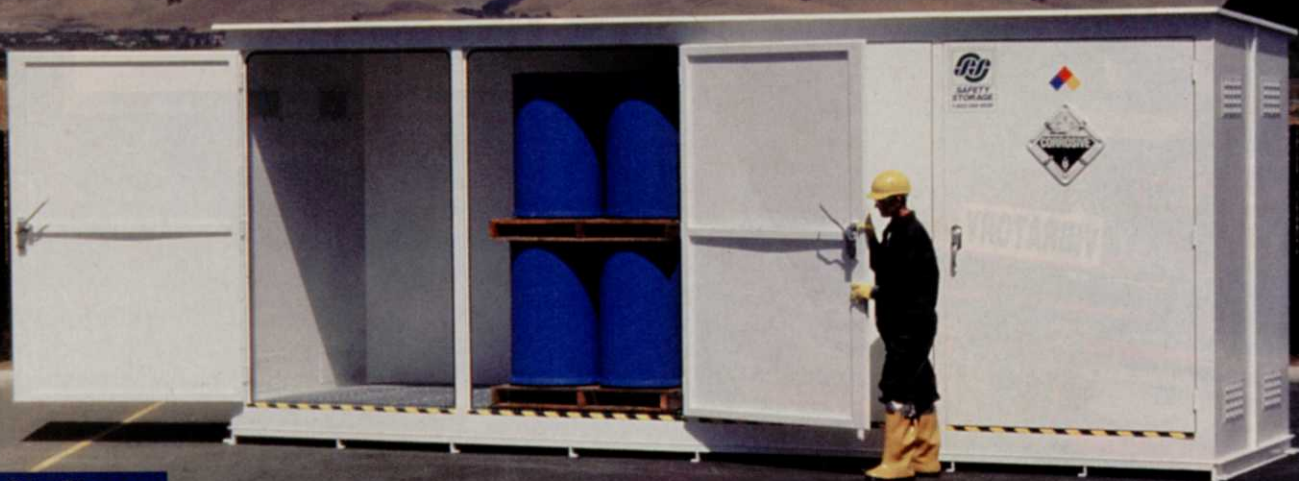
Circle No. 286

Safety Storage

It's no secret that safety is "job one" in the minds of LM editors—as it should be for LM readers. Here's a hazardous materials storage locker that will keep your immediate work environment safe from polluting the general environment.

The 30N is designed to single- or dou-





Safety Storage

ble-stack palletized materials or individual containers. At 32 feet long and 7 feet deep, it can store up to 45, 55-gallon drums. It includes a 640-gallon spill containment sump, a removable steel floor grating, chemical-resistant coating inside and out, and a secure locking system. Options include heating and air conditioning, explosion-proof electricals, lighting, a dry chemical fire suppression system, partition walls and shelving.

For more information, phone toll-free (800) 344-6539, or

Circle No. 287

Verti-Drain

Verti-Drain, maker of the pre-eminent turf aerator on the market today, now offers the Verti-Seed 1204 model overseeder. The 1204, at 48 inches, is 15 inches wider than

its predecessor.

The Verti-Seed, which needs a tractor of 22 hp or more to lift and drive it, uses specially-designed PTO-powered cutting discs to slide a deep channel in the soil without damaging the turf. Immediately behind the cutter shaft are the seeding elements, consisting of a knife which further opens the channel, a special hopper that places concentrated seed into the channel, and a sliding pressure shoe to close the channel.

Circle No. 288

Groundtek

Here's a totally new product that we've seen demonstrated at trade shows. Take

Verti-Drain



our word for it: it's neat.

Groundtek's Lady Bug is an all-purpose spray machine with single-hand steering, hydrostatic variable speed and good maneuverability. Not only that, but the driver sits right up front where he can see everything.

It includes a three-section boom sprayer, a standard spray gun and an easily-attached hopper for spreading materials. A wide range of application rates can be achieved by easily changing nozzles, pressure or speed. And it can carry up to six bags of fertilizer that it can spread in widths of 4 to 15 feet.

The Lady Bug has an on-board speed and area computer and fits through a 48-inch space. With all its attachments, it can spray turf, ornamentals and tall trees.

Circle No. 289

Groundtek





Turfline

Turfline

Golf course greens rollers are becoming more popular as superintendents try to speed up their greens without lowering mowing heights. Now comes the True-Surface vibratory greens rolling system that adds something extra.

The vibratory action "energizes" sand topdressing to conform with the green's contour and "trues" its surface without damaging grass. The True-Surface also eliminates footprints, spike marks and ball marks. By varying the machine's ground speed, you can "stimp" all greens within three to four inches.

Circle No. 291

Ciba

Unparalleled stability is what you get when you use Banner Maxx fungicide, being unveiled at the GCSAA show in Orlando this month. According to Ciba Turf & Ornamental, the new microemulsion formula is a clear liquid that mixes completely with

water, eliminating the petroleum solvents that act as a carrier in other formulations.

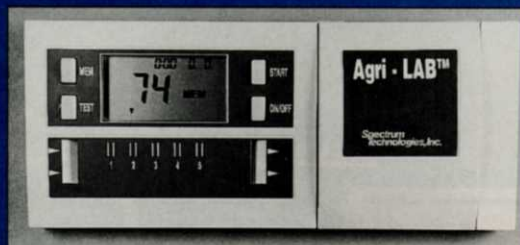
Banner Maxx's particles are about 1-25th the size of the particles of other sterol inhibitors.

In addition, three new diseases have been added to the label: take-all patch, necrotic ring spot and fusarium patch.

Circle No. 292



Ciba



Spectrum

Do you need to know how much nitrogen, potassium and phosphorus a specific soil, solution or groundwater contains? All you really need is Spectrum Technologies' portable Agri-Lab meter.

It measures N-P-K right on the spot, at the site, using test strips that turn color when reacting to specific elements, including some minor elements. The meter interprets the test strip color and provides the concentration in parts per million. The meter stores 50 test results, which can be transferred to your personal IBM or IBM-clone computer with the optional software.

For more information, phone toll-free (800) 258-8873 or
Circle No. 290



Allan Block

Allan Block

Here's a retaining wall system that you don't need mortar to build. The patented interlock on Allan Block Retaining Wall Systems makes them easy to install, yet strong and flexible.

These segmental retaining walls can be used on all types and scales of landscapes, from residential backyards to golf courses and large roadway projects. They can be used to manage water drainage and soil erosion, increase land utility, and add beauty to a landscape's design. In addition, Allan Blocks are lighter and easier to use than concrete blocks.

The blocks come with either straight or curved faces. They are available in either 4- or 8-inch heights.

Circle No. 293

A New Patented
Dry Soluble Concentrate

We've Improved The Best Performing Broadleaf Herbicide For Turf



**THE SAME
OUTSTANDING
PERFORMANCE
IN A NEW WATER
SOLUBLE BAG!**

- Truly soluble — not a wettable powder
- Pre-measured water soluble bags
- No amine odor
- No container rinsing or disposal

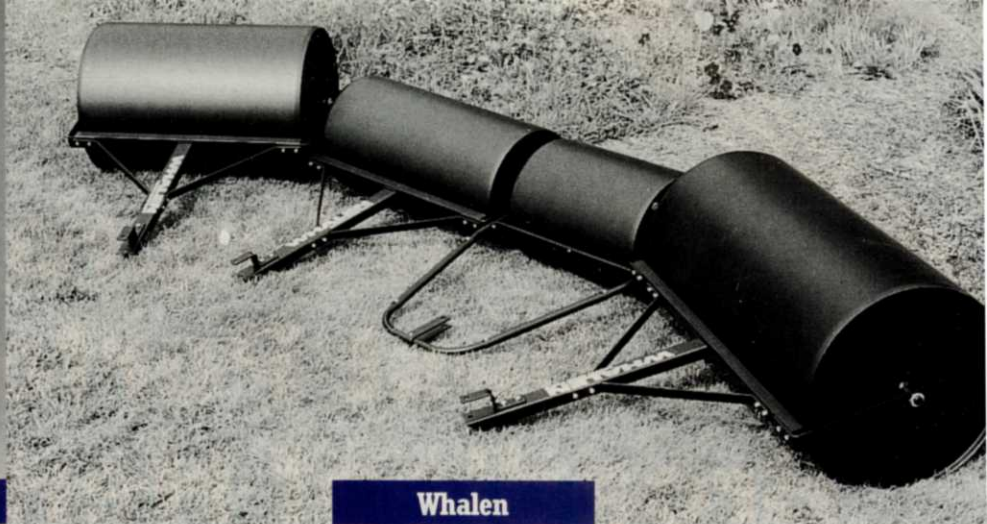
TRIMEC[®] CLASSIC
BRAND
**DSC DRY SOLUBLE CONCENTRATE
BROADLEAF HERBICIDE**

ALWAYS READ AND FOLLOW
LABEL DIRECTIONS.

G pbi/gordon
CORPORATION
An Employee-Owned Company



Shindaiwa



Whalen

Shindaiwa

Shindaiwa is one of a few equipment manufacturers that is signalling its continued interest in the commercial market by introducing a totally new piece of equipment: its first professional backpack sprayer.

Durability is its key feature. The SP415, during tests at the International Pesticide Research Center in London, was operated 2,500 hours at 36 strokes per minute while pumping 23 gallons an hour at 45 psi with no required maintenance.

This particular unit has a four-gallon tank capacity and features a 250 psi maximum, 15-90 psi operating range. It comes with a limited one-year warranty.

Circle No. 295

Whalen

When spring comes around and you have to deal with new landscapes that have heaved or settled over the winter, Whalen Lawn and Turf offers its line of lawn rollers, which weigh from 185 to 910 pounds.

The rollers, which can smooth out unlevel terrain, are made of heavy steel with a baked enamel finish. All four models come with a standard pin-type hitch, and the smallest can be towed by a tractor or pushed by hand.

The smallest of the units is 24 inches wide, the largest 48 inches. For more information, phone toll-free (800) 447-5777 or

Circle No. 296

MycorTree

It's not often in this business that you can buy an extra insurance against failing plants. But that's exactly what Tree Saver Transplant is. Formulated in easy-to-use pre-measured packs, the product is a mix of mycorrhizal fungi adaptable to a broad range of plant species, environmental conditions and soil types, including heavily-distressed sites.

The micorrhizae, according to MycorTree, is normally lower in soils distressed by compaction, fertilizer imbalance and other problems associated with urban landscapes.

The mix also contains Terra-Sorb super-absorbent gel to help prevent drought stress, and natural yucca, seaweed and humic extracts to promote fast root regeneration.

Each pack of Tree Saver Transplanter contains material to inoculate a single tree of one inch caliper or three one-gallon containerized plants, at a cost of less than \$2 per tree.

For more information, phone toll-free (800) 421-9051 or

Circle No. 297



TerraBiotics

Root growth is everything to healthy turf. And healthy roots can mean survival for turf under stress. CytoGro from TerraBiotics is a root-building biostimulant that the company reports out-performs the nine top-selling biostimulants on the market today.

CytoGro is a blend of cytokinins, auxins and natural synergists. It stimulates root growth, improves water leaf status, and speeds recovery of damaged turf.

It also retards senescence, improves salinity tolerance and increases fertilizer efficiency. It is EPA registered and contains a guaranteed cytokinin content, for product quality. The photo above shows the root growth possible by using CytoGro. It's available as a liquid, with or without iron, and will soon be available in water soluble packets with calcium and iron to stimulate root growth in high-saline environments.

Circle No. 294

MycorTree





your good judgment

Will tell you to select

turf type

Tall Fescue seed from Oregon

the beauty

of the blades

the strength

and durability

the tolerance

to drought & disease

the quality!

Look for the grown in Oregon label. It puts all others in a lower class. A lush, healthy, deep green turf is your reward for selecting superior seed. The world's leading turf grass breeders have been perfecting it for more than 20 years. The tough, vibrant turf will not only tolerate drought, but survive cold winters.

When you select Turf Type Tall Fescue seed from Oregon you can be sure you will enjoy your "good judgment" decision year after year.

**TURF
TYPE
TALL
FESCUE**

SEED FROM OREGON

Oregon Tall
Fescue Commission
1193 Royvonne, Suite 11
Salem, OR 97302
503-585-1157

Ration fertility over entire growing season

by JOHN C. FECH / University of Nebraska

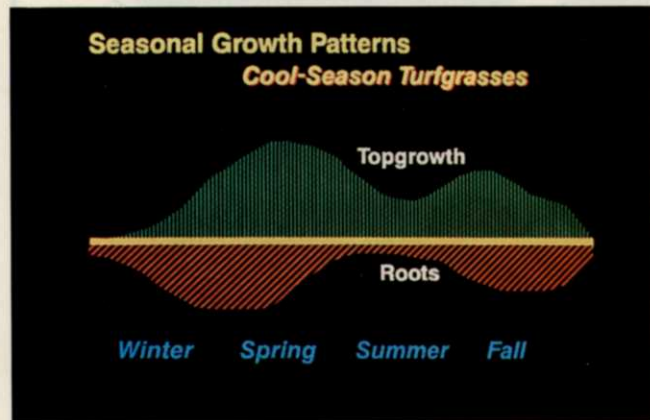


FIG. 1. Cool-season turfgrasses grow faster in the spring and fall, and slower in the other seasons.

Turf fertilization is an important factor in turf survival, especially in the lawn care, golf course and athletic field sectors. In spring, the demand for dark green turf is very high, as homeowners, golfers and athletic event spectators all want to

see lush, thick stands of turf.

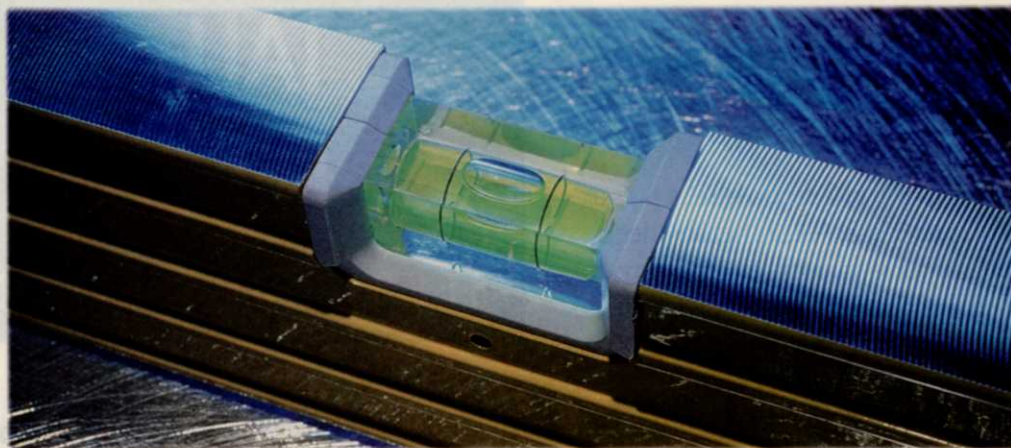
Nitrogen & timing

Assuming there are adequate levels of phosphorus, potassium and micronutrients present in the turf, nitrogen will show the quickest response. You can determine the level of nitrogen in the soil profile by way of a soil test, but calculated values tend to be of little value in that nitrogen is a transient element in the soil, and subject to rapid changes. Therefore, nitrogen fertilizer recommendations are based on typical plant usage, rather than soil test results.

Table 1 (page 28) shows nitrogen re-

5 FIVE STEPS Above

Over the past half decade, they've gone from drawing board to experimental varieties in a different class than anything you've ever seen. Piercingly deep color. to a level never before achieved. You're welcome to join us there.



Jacklin® Seed Co.: NuGlade, Award, J-1555, J-1561, J-1576, J-1936, J-2582, J-2579, TRC-1738

Medalist® America: Blue Moon, Blue Chip, Absolute Medalist®/Roberts Seed:

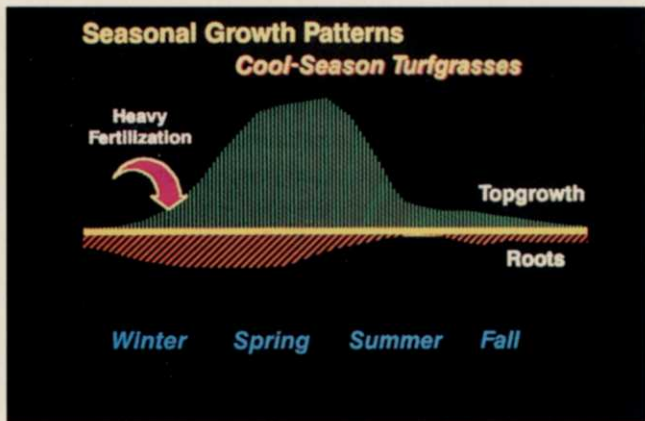


FIG. 2. When turf is fertilized heavily in spring, shoot growth is enhanced, while the root system naturally declines.

quirements for several turfgrass species.

Studies at various universities have confirmed that cool-season turfgrasses should receive the majority of their annual fertilizer in the fall. Heavier fall fertilization enhances root growth when roots are naturally increasing in depth and thickness (Fig. 1).

Cool-season turf tends to produce more roots, rhizomes and tillers in the fall than

in the spring. These structures are very important in avoiding drought stress and reducing the incidence and severity of diseases during the growing season. When turf is fertilized heavily in spring, shoot growth is enhanced, while the root system naturally declines (Fig. 2).

This creates a greater demand on the declining root system for moisture absorp-

tion, a greater need for mowing and produces soft, lush leaf blades that are more susceptible to foliar diseases.

Spring fertilization comes on the heels of an adequate fall fertilization program. For cool-season turfgrasses, approximately two-thirds of the annual requirement should be applied in the late summer and late fall, with one-third applied in the

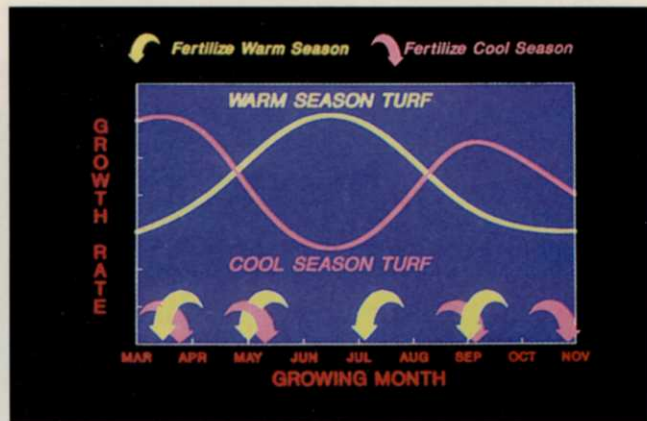


FIG. 3. Warm-season turfgrasses (bermudagrass, zoysiagrass and buffalograss) are fertilized in early and mid-summer.

plots. Now they're out. They're the 5-Steps Above™ varieties from Jacklin Seed. Strikingly new bluegrass Improved disease resistance. And higher seed yields. 5 Steps Above—they're raising the level of bluegrass quality

It's bluegrass on a whole different level.

JACKLIN
Seed Company

5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, Phone 208-773-7581, FAX 208-773-4846 ©1995, Jacklin Seed Company

Rugby II Roberts Seed Co.: QuantumLeap Pickseed West: PICK-3561 Peterson Seed: J-1561 Research Seed: J-1936 Zajac Performance Seed: ZPS-2572

Table 1. Annual nitrogen requirements for turfgrasses

Species	Nitrogen/1000 sq.ft./year
Common Kentucky bluegrass	2-3 lbs.
Improved Kentucky bluegrass	3-4 lbs.
Perennial ryegrass	3- 4 lbs.
Fine fescue	1-3 lbs.
Tall fescue	2-3 lbs.
Creeping bentgrass	3-5 lbs.
Zoysiagrass	1-3 lbs.
Buffalograss	0-1 lbs.
Bermudagrass	3-6 lbs.

spring (Fig. 3). Divide the amount suggested for the spring into two applications, one in mid-spring and the other in early summer. Due to a different growth pattern, warm-season turfs (bermudagrass, zoysiagrass and buffalograss) are fertilized in early and mid-summer (Fig. 3).

Nitrogen types

Nitrogen products are generally grouped into three categories: water soluble; slowly-soluble; and slow-release. Water soluble forms—urea, ammonium nitrate, ammonium sulfate) produce a rapid plant growth response soon after application, and produce turf stands that are more susceptible to foliar diseases and have a high foliar burn potential. These last only three to five weeks.

Because the entire nitrogen amount is readily available in the soil profile, there is often more nitrogen available than the turf plant can use. As a result, the remaining non-absorbed portion has great potential to leach downward in the soil profile and contaminate groundwater.

The best use of water-soluble fertilizers is for supplemental fertilization. A light application (less than a half-pound/1000 sq. ft.) will produce a quick response and greening effect for a special purpose, such as opening day in baseball season and special golf tournaments.

Slowly-soluble forms of nitrogen include synthetic and natural organics such as IBDU, urea formaldehyde, animal by-products and activated sewage sludge. These products provide nutrient release

limited in the spring and fall. While this is beneficial for root growth, limited turf injury and reduced pollution potential, the turf manager may need to supplement with light rates of water soluble products to provide necessary nutrients in the spring.

Many products are formulated with both water-soluble and slowly-soluble carriers. IBDU fertilizers depend mostly on low solubility and a slow rate of dissolution to control their release.

Slow-release products are basically water-soluble forms, coated with a membrane to restrict contact with soil moisture. As the coating thickness decreases, the release rate increases, providing nutrients for the turf. Both slow-release and slowly soluble products have characteristics of gradual

more gradually than water-soluble forms. The release from natural organics and urea formaldehyde depends on the breakdown of the product structure by soil microorganisms. Due to lesser microorganism activity in cooler periods, nitrogen release is

availability and low foliar burn potential, which make them very desirable for use.

Product combinations

Certain turf pests also divert a turf manager's attention in the spring. Annual grasses, broadleaf weeds, overwintering sod webworms and bluegrass billbugs are some of the most important pests and should be monitored. If a damaging level is detected or predicted based on pest history, consider choosing a fertilizer/pest control product, especially if the application windows for each are near the same time frame.

Combination products

In areas needing both nitrogen and pest control, the number of applications and passes over the turf stand are cut in half or thirds, depending on the number of pest control agents in the combination product. However, the turfgrass manager can save money by applying only fertilizer in areas where there is no pest present, or in which no pest history has been documented. Another benefit of applying only fertilizer is reduced environmental contamination, as is always a possible outcome when pesticides are applied. As with any pesticide or fertilizer product, read and follow all label instructions carefully. **LM**

The author is an extension educator for the University of Nebraska at Lincoln.

Tips for successful sod establishment

Attention to detail following installation increases sodding success, according to John Huber, president of Huber Ranch Sod Nursery, Schneider, Ind.

"Check rooting after a few days to adjust water application levels," he says. "Sod should be wet enough to avoid drying out, but not so wet that puddling takes place. The root system should extend at least one inch down into the soil before watering is tapered off, two inches if hot summer weather is approaching."

Paul Zwaska, head groundskeeper for

the Baltimore Orioles, says, "Overseeding newly-installed sod with perennial ryegrass can help connect the pieces laterally as the roots from the germinating ryegrass develop sideways into the sod.

"As soon as sod has rooted sufficiently, core aerify in two directions and drag the cores back into the soil profile to mix the soils. Overseeding at that time also will help stabilize the sod and encourage rooting as the sod roots follow the seed roots into the soil." □



Do It All



Write or Call
For a Free 30-Page
BobCatalog Buyer's Guide.
For an Automated FAXED
Response Call:
1-800-662-1907
(Ext. 701)



With more than 30 attachment choices, you *can* Do It All. Bobcat® attachments are designed, tested and manufactured to Melroe quality standards, and backed by our worldwide dealer network.

Melroe Company
P.O. Box 6019
Fargo, ND 58108-6019 • (701) 241-8700

MELROE
INGERSOLL-RAND



NOW AVAILABLE!
The NEW 873
Bobcat Skid-Steer Loader
2300 LBS.
Rated Operating
Capacity 73.5 HP
Oil-cooled
Diesel Engine

Crew chiefs asked to do more with fewer workers

by RON HALL / Senior Editor

Crew chiefs provide muscle for most green industry jobs.

But competitive pressures are demanding even more decision-making responsibility and production from them....this as the size of their crews shrink.

"You have to put your faith in the crew chief," says Phil Christian, PDC Consultants, Alpharetta, Ga. "At some point you've got to turn your customer and the delivery of your service over to that front-line working foreman."

Crews usually contain no more than two, three or four workers, including the crew chief. Build crews may have a person or two more, but usually not many more.

In lawn/landscape, owners are going to smaller crews.

"Typically we'll send out a crew leader with only two other people," says Dale Stell, Lakeview Lawn and Landscape, Canandaigua, N.Y.

"That crew size will out-perform any larger crew. Maybe they look around the job site and they say, 'Geez, we're the only three guys here. We better get going or we're not going to have anything to show for it at the end of the day.'"

For larger commercial jobs, Stell prefers several small crews working on different areas of the project rather than increasing the size of crews. His 16-year-old, design/build company is 65 percent commercial by dollar volume.

Steven Glover of L&L Landscape Services, Santa Clara, Calif., says his maintenance crews generally contain just two or three people, while construction crews may, depending on the job, range from five to eight people.

"We've been in a program to upgrade the responsibilities of our crew leaders," explains Glover. "We want to develop crew leaders that take ownership of pro-

jects and personal interest in their sites."

Adds Glover: "We also recognize that it's our responsibility within the corporate to provide them the resources they need so they can be efficient and accomplish what they need to do."

Christian says the smaller the crew size, generally, the more production it will do per person. "I hate four-person crews," he says.

Christian points to the service delivery system used by the late Richard "Dick" Duke in building ChemLawn as a model of efficiency. (Christian was involved with construction before heading ChemLawn's Atlanta-based Commercial Division for eight years.)

In that system, the service deliverer was basically also a self-supervised crew leader.

"They could pretty much solve all the problems in the field," says Christian.

"They were not really that dependent on middle management."

He also cites fundamental differences between lawn specialist crew chiefs and maintenance foremen. The lawn specialist/foreman is more "technical" whereas the good maintenance/construction crew chief tackles projects like a "linebacker."

"He just wants to go and get it done," says Christian. "Your crew chief on maintenance doesn't behave like your lawn specialist and that's normal. You (owner) are the one who has to change gears."

Whatever the temperament, the crew chief must get the work done.

"That crew is either self-supervised or not supervised. There is no way you (the owner) can supervise a mobile crew, even with a cellular phone," says Christian.

"That means you've got some training to do. And you've got to hold your crew chiefs accountable." **LM**

Crew leader: can you do it?

A maintenance crew leader needs special qualities, says David Burnley, general manager of Contra Costa Landscaping, Inc., Martinez, Calif. They include:

► **Attention to detail.** Most crews can get the job to 90-95 percent. It takes a special employee to get the last details completed: the spent flowers by the front door; the turf in the first stages of water stress because of a plugged nozzle; the litter behind the shrub that is visible from inside the building but hidden from the street.

► **Organization.** From keeping his truck and equipment clean and orderly to his approach on the job site.

► **Communication.** Whether it's telling a supervisor about a problem on a job site or talking with a crew member about a better way to prune a shrub.

Brent Totman, general manager of Orkin Plantscaping, Knoxville, Tenn., adds these to the list:

► **Leadership skills.** The ability to influence the behavior and performance of others. Willing to accept the responsibility of authority and be accountable.

► **Technical skills** in applied horticulture and equipment. It gives the crew leader confidence to make good decisions in the field and be responsible to the customer.

► **A service attitude.** Having a genuine interest and motivation to serve others needs. A crew leader must be able to listen and respond to the customer.

—R.H.

LANDSCAPE BOOKSTORE MANAGEMENT

NEW PUBLICATION!



Containment System Design: Chemical Storage, Mixing and Handling

by Fredric R. Haskett
Approx. 200 pages, softcover
Item #668 **\$74⁹⁵**

TREES & SHRUBS



TURF



Managing Turfgrass Pests

by Thomas L. Watschke, Peter H. Dernoeden & David J. Shetlar
361 pages, hardcover
Item #658

\$39⁹⁵

Management of Turfgrass Diseases

by J. M. Vargas, Jr.
294 pages, hardcover
Item #656

\$64⁹⁵

Turf Managers' Handbook

by W.H. Daniel & R.P. Freeborg
437 pages, hardcover
Item #614

\$39⁹⁵

Controlling Turfgrass Pests

by Shurtluff, Fermanian & Randell
449 pages, hardcover
Item #615

\$74⁰⁰

Turf Management Handbook

by Howard Sprague
255 pages, hardcover
Item #638

\$67⁵⁰

Turfgrass: Science and Culture

by James Beard
685 pages, hardcover
Item #639

\$82⁰⁰

Turf Irrigation Manual

by James Watkins
364 pages, hardcover
Item #640

\$32⁹⁵

Turfgrass Science and Management

by Robert D. Emmons
451 pages, hardcover
Item #664

\$37⁹⁵

A Color Atlas of Pests of Ornamental Trees, Shrubs and Flowers

by David V. Alford
448 pages, hardcover
Item #612

\$84⁹⁵

Diseases and Pests of Ornamental Plants

by Pascal Pirone
566 pages, hardcover
Item #631

\$58⁰⁰

Diseases of Trees and Shrubs

by Wayne Sinclair, Howard Lyon & Warren Johnson
575 pages, softcover
Item #633

\$52⁵⁰

Tree Maintenance

by P.P. Pirone
514 pages, hardcover
Item #652

\$49⁹⁵

Insects that Feed on Trees and Shrubs

by Warren Johnson & Howard Lyon
560 pages, hardcover
Item #645

\$52⁵⁰

The Shrub Identification Book

by George Symonds
379 pages, softcover
Item #650

\$19⁵⁰

The Tree Identification Book

by George Symonds
272 pages, softcover
Item #651

\$19⁵⁰

Urban Trees

A Guide for Selection, Maintenance, and Master Planning
by Leonard J. Phillips, Jr.
273 pages, softcover
Item #660

\$37⁰⁰

DESIGN & MANAGEMENT

Ornamental Horticulture Science, Operations & Management - 2nd Edition

by Jack E. Ingels
554 pages, hardcover
Item #666

\$40⁹⁵

Landscape Architecture A Manual of Site Planning and Design

by John Ormsbee Simonds
331 pages, hardcover
Item #662

\$73⁰⁰

Landscaping Principles & Practices

4th edition
by Jack E. Ingels
401 pages, hardcover
Item #665

\$29⁹⁵

Landscape Problem Management

by Balakrishna Rao, PhD
153 pages, softcover
Item #613

\$39⁹⁵

Landscape Plants Their Identification, Culture, and Use

by Ferrell M. Bridwell
560 pages, hardcover
Item #667

\$49⁹⁵

GOLF/BUSINESS



Winning Strategies for Lawn & Landscape Contractors A System for Success

by Brent Demos
136 pages, softcover
Item #653

\$59⁹⁵

Golf Course Management and Construction: Environmental Issues

by James C. Balogh, PhD & William J. Walker, PhD
976 pages, hardcover
Item #637

\$52⁵⁰

Turf Management for Golf Courses

by James Beard
642 pages, hardcover
Item #636

\$96⁰⁰

Call
1-800-598-6008
Outside the U.S. call
216-826-2839

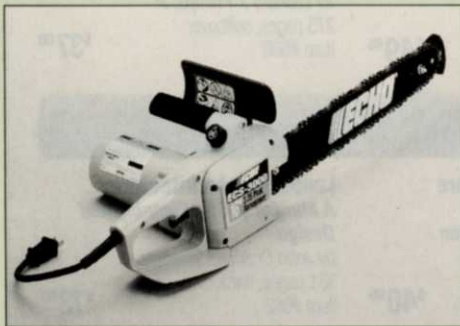
**ADVANSTAR
MARKETING SERVICES**

7500 Old Oak Blvd.
Cleveland, OH 44130

CODE: 949303



Husqvarna 254: all-weather, flush cut



Echo ECS-3000: you like electric?



Solo 639: for light cutting

CHAIN SAWS

Power, safety and balance are three key concerns when you shop for a chain saw.

When it comes to buying chain saws, the features you want will determine the make and model that best fits your needs.

For instance, if you want a machine that is small, easy to start and well-balanced, you might opt for the Husqvarna 246 with 14,000 no-load rpm. But if you want a large machine with a lot of toughness and muscle, you might want to try the McCulloch Pro-Mac 8200 with its 82 cc engine, optional 33-inch bar and shock mount anti-vibration system.

cont. on page 45

GASOLINE-POWERED CHAIN SAWS

Company Name	Models	Features
Echo Phone (708) 540-8400 Circle No. 280	CS-4400	43.6cc engine with 18" bar; 10.2 lbs.
Husqvarna Phone (704) 597-5000 Circle No. 281	246	46cc, 3.3 hp engine; Smart Start; 10.5 lbs.
	257	57cc engine; Air Injection system; 12.2 lbs.
	254XP	54cc engine; Air Injection system; 11.9 lbs.
McCulloch Phone (800) 421-9917 Circle No. 282	Pro-Mac 3805AV-18	38cc engine with 18" bar; Chain Brake; 12.0 lbs.
	Pro-Mac 4700/5000	46-49cc engine, 16"-20" bars; Chain Brake; 11.9 lbs.
	Pro-Mac 5700AV-20	heavy duty 57cc engine with 20" bar; 18.3 lbs.
	Pro-Mac 8200	big 82cc engine, 16"-33" bars; anti-vibe; 17.5 lbs.
	Titan 560 Titan 620	54cc engine, 16"-20" bars; 13.0 lbs. 60cc engine, 16"-24" bars; 13.0 lbs.
Shindaiwa Phone (503) 692-3070 Circle No. 283	357	35.5cc engine, 14"-16" bars; "1000-hour;" 9.1 lbs.
	488	49cc engine, 16"-20" bars; for dusty conditions
	577	59cc engine, 18"-24" bars; for dusty conditions
Stihl Phone (804) 486-9100 Circle No. 284	017	30.4cc engine with 14" bar; under \$200; 8.4 lbs.
	023L	'world's quietest gasoline-powered chain saw'
	023C	40.2cc engine with 14" bar; Elastostart; 10.1 lbs.
	044	72.7cc engine, 16"-32" bars; heated handles; 13.1 lbs.
	Westhoffer Phone (913) 843-1633 Circle No. 285	Solo 639

SOURCE: LM mail survey, Dec. 1995-Jan. 1996

We landscape professionals are chipping away at the tip of the iceberg armed only with ice picks.

That iceberg is the residential landscape market, and while some of us flake off bigger and bigger slivers, the huge unrealized market for installations and maintenance bobs just below the surface.

Not a one of us knows just how huge it can become. But, judging by the quality of landscapes already in place, the need is immense.

Drive through any neighborhood in any community and critique the landscapes. Look hard. It doesn't matter if the neighborhood is affluent, middle class—whatever. Compare the landscapes against what they could or should be.

Incredible: that's the only word to describe what most of the public (and some of us, too, apparently) thinks is a landscape.

That's the biggest challenge we face: the public doesn't know what it doesn't know, when it comes to landscapes and—to a lesser degree—landscape maintenance.

It's no surprise, then, that most of the public carries this fuzzy picture of who we are and what we can do for it.

You don't believe this? Ask anyone what they think a landscape is, and one of the first words out of their mouths will be "plants." Try it. It's amazing. It's amazing because my *American Heritage Dictionary* doesn't mention the word "plants" at all. There are several definitions but not a one of them specifically says "plants".

landscape, n. 1. A view or vista of scenery on land. 2. A picture depicting a landscape. 3. The branch of art dealing with the representation of natural

It's not 'just' the plants



Ron Hall

RON HALL
Senior Editor

[LAWN/LANDSCAPE]

PAGE 4L ▶

Around the Shop

PAGE 6L ▶

Theme park crews play it safe

PAGE 10L ▶

Building loyalty, even in adversity

PAGE 14L ▶

Tough season tests faith in IPM

PAGE 18L ▶

How to trap moles

PAGE 22L ▶

The necessary art of delegation

scenery.—*v.* -scaped, -scaping, -scapes.—

To adorn or improve (a section of ground) by contouring the land and planting flowers, shrubs, or trees.—*intro.* To arrange grounds artistically as a profession.

The important words and/or phrases in these definitions are: *view, vista, natural scenery, adorn, contouring* and *artistically*.

This is the language we should be talking.

Instead, too many of us have been offering, selling, installing and, in some cases, maintaining plants—just plants.

No wonder the public doesn't get more excited about our services.

The residential market will grow only in proportion to our success in opening the public's eye to the full range of our products and services. **LM**





THE INSECTICIDE TO USE
WHEN THE MAIN ACTIVE INGREDIENT
YOU WANT ON THE LAWN IS
AMY.

We thought an insecticide that controls grubs and other insects while using less active ingredient might appeal to people concerned about the environment.

Especially their children's environment.

That's where the brand new chemistry of MERIT® Insecticide comes into play.

MERIT is effective at rates 85% to 96% lower than other conventional soil insecticides.

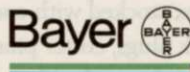
Which means you can get an average of 94% control of grubs, while putting less active ingredient onto your customer's lawn.

What's more, when applied in the spring, MERIT provides enough residual activity to effectively control grubs throughout the summer.

To find out more, contact Bayer Corporation, Specialty Products,

Box 4913, Kansas City, MO 64120. (800) 842-8020.

Because the only thing that belongs on your customers' lawns in high concentrations are their children.



Most of us have a period of down time during the winter, or at some other slow point during the year. Given the "steady beat" of our production season, these down periods are often the only times we can get serious about equipment maintenance.

Here are some tips from the pros on how to reduce your "in-season" maintenance costs:

1) Inspect each piece of critical equipment with key staff members. Make a list of the standard maintenance practices which must be performed as well as a list of special repairs required.

Have more than one knowledgeable person inspect the equipment, since one person may find a problem overlooked by another.

2) Put each list into a "to-do" format which is left on that piece of equipment. As the needed repairs are completed, they should be checked off, dated and initialed by whomever performs the work.

3) Keep a file for each piece of equipment. All of these files should be kept in the same place. The files should contain important manuals (operators and parts), warranty information, copies of all previous maintenance records, and repair bills. One person should be in charge of keeping these files up to date and in good order.

4) Replace parts that regularly wear out or otherwise fail. Virtually every piece of equipment I have ever owned has one or more of these parts. Don't take the chance of not being able to quickly obtain a part in season, when you can easily find one in down periods.

5) Each of your trucks should have a small tool box stocked with commonly-used parts such as spark plugs, cotter pins and fuses. There's no reason to lose valuable production time because

an employee must return to the shop for an easily replaceable part.

6) Talk with industry colleagues before buying a totally new piece of equipment. Usually, they're more than willing to share this information with you. From the school of hard knocks, I have learned that certain brands or types of equipment tend to have more than their fair share of maintenance problems. Also, listen to your employees. They'll tell you a lot about the equipment's strengths and weaknesses. Remember, they have to use this equipment. Also, take advantage of Field Days for some "tire kicking."

7) Recognize your maintenance limitations. This is especially important when it comes to serious engine repairs. Develop a good working relationship with a mechanic (if you don't have one) or your dealer. This brings up an additional point that can save you a lot of headaches. When buying a new piece of equipment, make sure that the dealer can service it. Does the dealer carry an inventory of commonly-used parts? What is the manufacturer's policy for supplying quickly needed parts? Get answers up front.

8) You or a responsible manager should re-view the winter maintenance when it's done. Equipment that's wearing out should be scheduled for replacement. This:

- ▶ allows you to budget for needed equipment rather than having to quickly locate emergency cash for new purchases,

- ▶ creates a gradual "aging" of your equipment inventory so that you always have something new coming on line.

An old farmer in eastern Indiana once told me, "A tractor don't break down when it's parked in the barn." True enough, but maintaining that tractor while it's parked in the barn may well keep it from breaking down once you take it to the field! **LM**

A winter maintenance checklist



BOB ANDREWS
Contributing Editor



What makes you so tough?

With the New Holland Super Boom™ skid-steer loader, the answer is simple: everything. Super Boom is the most durable, reliable and productive machine you'll find for any landscaping job.

There when you need it

The dual, endless drive chains don't have a master link so they're stronger than ordinary chains. And they're pre-stressed and never need routine adjustment. Axle oil seals are protected from damage and leaks are virtually eliminated.

Super Boom's cast iron axle housings provide rugged support for tough jobs and heavy loads. And the loader pins are twice the diameter of competitive machines for more strength and durability.

Easy to service

Super Boom is built intelligently for easy maintenance. You'll have quick access to all the routine service points with the boom down. It has a 50-hour lube interval, unlike competitive machines which require daily lubrication. The Advanced Warning



System keeps you informed of all major functions. And, if it ever needs major repairs, the entire boom and cab tilt forward for the best engine and transmission access anywhere.

Best in productivity

Super Boom is still the best for productivity and safety because of its superior boom reach, lift height, lift capacity and stability. And, Super Boom has a Pick Up'n Go™ universal attachment system that hooks up to New Holland and competitive attachments. So, what makes Super Boom so tough? Reliability, durability and superior performance.

Stop by your New Holland dealer today and put the toughest skid-steer loader on the market to work for you. Working together, we'll help you give Mother Nature a lift.



Theme park crews serious about safety

by TERRY McIVER / Managing Editor



Joe Parr: 'Everyone is eager, enthusiastic and fairly aggressive, so it's wonderful. There's a great spirit of optimism.'

Amid the fun that comes with working the grounds at Busch Gardens is an incredible attention to safe work habits.

A variety of topics are covered in bi-weekly safety meetings. One week they might review equipment safety; two weeks later it's first aid or protection against sunburn and heat stroke. Heat stress is avoided by proper diet (diluted Gatorade and fruits), clothing (big hats and sunscreen lotions) and rest.

A month free of any workmen's comp claims earns the entire crew breakfast on the company.

On the other hand, safety violations bring stiff penalties, says Joe Parr of ISS Landscape Management Services. Parr oversees the Busch Gardens crew, which tends the grounds at the huge theme park located just outside of Tampa, Florida.

"If they're spraying without safety glasses, we send them home," says Parr. Repeat offenses could result in termination.

"People are pretty good about [following safety regulations]," says Parr, "and they expect [to be disciplined]. If we're not enforcing it, they ask why not."

To get the big work done before guests arrive, work schedules must be exact, and the people who do the work must be courteous, quick and accomplished. In any month, a half-million guests storm the gates.

Parr says his best leaders "have a quality we can't instill in them. It's that work ethic. They want to get the job done right. We know the landscape industry doesn't pay as well as it should, so they've got to take pleasure in their work; they've got to take pride in what they do.

"We have a lot of people who put in extra hours just because they want to make sure it's done right. We know the client expects that," says Parr.

There's quite a "college crowd" on the ISS/Busch Gardens staff, many of whom came to the park trained in turf & ornamental horticulture. Parr says some of his best workers have come to the company from Auburn University—including vice president Dale Elkins—and from the University of Florida and Florida's Lake City Community College. Parr is a Virginia Tech grad who owned his own business for a time, and later worked for the Disney Co.

Training hits all bases

Each ISS landscape employee is trained in all maintenance duties, so anyone can pitch in at a moment's notice. As employees gain expertise in a certain duty, their progress is updated on a training board in the shop.

"The supervisors might need to pull a few of them to get a project done," explains Parr, "so they take a quick look [at the training board] as a reference to see what any one person is trained in."

The staff is divided into three crews: a "support crew," an "area crew" and a "turf crew." The turf crew works only on turfed landscape areas. The area crew works on detailing, with each area crewperson responsible for 10 areas around the park. The specialty crew handles the tree and hedge pruning, fertilizing and special projects.

According to Parr, Busch Gardens management has plenty of confidence in the ISS crew, which gives ISS some freedom to make long-term decisions. The management services company has handled the Busch account since 1974.

ISS people must of necessity get along well with theme park employees—those people who sell the

tickets and check the seatbelts—since they often work close to one another. Crowds and hot days can make anyone ornery, so cooperation is almost a motto.

"We don't have too many problems," says Parr. "You can take care of everything with a handshake and a little diplomacy."

Watching water

The landscape crews arrive early, which gives them first dibs on the oft-rationed water supply. In a warm-weather climate such as Florida, water use is closely-monitored. "You can take only so much water from the aquifer each day. We come in early so [other park personnel] can use the water the rest of the day for sidewalks and rides.

"We've got to have all our stuff done and out of the way before the park opens at 9 a.m. That's another reason why we come in at 5 a.m. We're still doing some stuff in the background after 9."

Chemical applications are either made very early in the morning, or certain areas will be closed for two or three days during applications.

Parr says he and his supervisors are looking ahead to staffing needs and budgets for 1996, as well as general troubleshooting.

"We think about what we could have done better from the year before as far as turf or shrub selection and maintenance."

Plans include a completely automated irrigation system within the next two years. An "Egypt" theme park is also going up soon.

"We've added one supervisor, and will add a second supervisor late this winter or early next spring. Right now we have about 47 to 50 people at Busch Gardens," Parr says.

Most of the turf around the Gardens is St. Augustinegrass. Zoysiagrass was recently added as a groundcover. The least visual areas are seeded with bahiagrass.

ISS is an international multi-service company based



Trees are planted a good distance from visitor paths and protected from any nearby construction.

in Denmark. It employs 115,000 people in a variety of facilities maintenance activities, including landscaping, security, custodial services and catering.

The ISS Florida landscape division recently won nine National Environmental Awards from ALCA for its work at Walt Disney World, the Orlando International Airport, the Busch Gardens "Land of the Dragons" exhibit, and six other properties. □



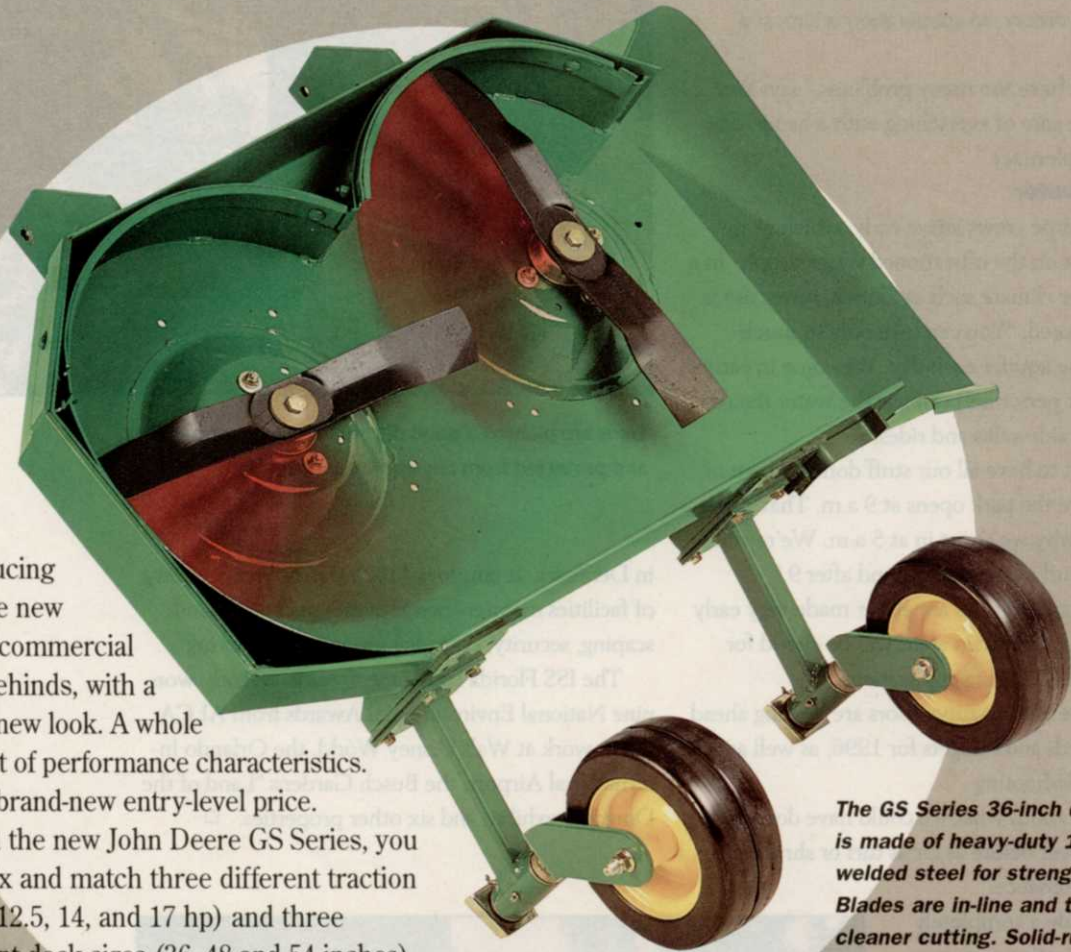
Pretty—but pesky—flamingoes are tough on the Busch landscape. 'They stand in one spot and shift from foot to foot to soften up the ground beneath them,' explains Parr.

THE 36-INCH DECK ON OUR NEW GS SERIES MOWERS IS FABRICATED.

Introducing a whole new line of commercial walk-behinds, with a whole new look. A whole new set of performance characteristics. And a brand-new entry-level price.

With the new John Deere GS Series, you can mix and match three different traction units (12.5, 14, and 17 hp) and three different deck sizes (36, 48 and 54 inches). That's seven different combinations you can create to match the mower to the jobs you do.

One thing you'll notice right off is that we've narrowed our smallest (36-inch) deck to an overall, gate-clearing 36.5



The GS Series 36-inch deck is made of heavy-duty 11-gauge welded steel for strength. Blades are in-line and timed for cleaner cutting. Solid-rubber gauge wheels won't puncture.



NEW GS25 with 36-inch deck



NEW GS45 with 48-inch deck



NEW GS75 with 54-inch deck

OUR NEW \$2,815* PRICE TAG ISN'T.

inches with the chute up. We've also built it of welded 11-gauge steel for added strength. And equipped it with timed, in-line blades for a smoother, cleaner cut.

All traction units are powered by Kawasaki engines with overhead valves, cast-iron cylinder liners and pressure lubrication with filter. The gear-drive transmission has five forward speeds, plus reverse. The knee-operated shift lever is centered beneath the handlebars for easy, more productive operation.

If you're looking for a fuller-featured machine, our deluxe gear-drive models — 14 or 17 hp, 48- or 54-inch cut — are still available for 1996.

For more information or your nearest dealer, call 1-800-537-8233.



**Manufacturer's suggested list price for the GS25 with 36-inch deck. Price may vary by dealer.*



DELUXE 14-hp with 48-inch deck



DELUXE 17-hp with 54-inch deck



NOTHING RUNS LIKE A DEERE®

Circle No. 116 on Reader Inquiry Card

Building loyalty, even in adversity

by RON HALL / Senior Editor

All your painstaking efforts to cultivate a responsible and caring image for your company repay you when calamity strikes.

Lawn care operators Terry Kurth and Steve Hyland shares how to build customer loyalty—even in the face of adversity.

Kurth, president of Lawn Care of Wisconsin, knows the technical side of turf. Yet he claims that successful companies must develop two other equally important attributes: "a caring attitude" and "communication skills."

A mishap put Kurth's belief to the test.

In 1993, his company—through no fault of its own—treated customers' lawns in the Green Bay/Fox Valley market with a product contaminated with atrazine, which kills cool-season grasses. The problem came to light when a customer called to say that her lawn was dying.

An initial investigation suggested a chemical burn. Kurth sought the advice of a friend who was also a plant pathologist. The friend suggested atrazine damage.

Kurth turned to his supplier for help. The manufacturer was cooperative and flew in an expert a few days later. After conducting lot checks and a short investigation, the supplier discovered that atrazine had unknowingly accumulated in its con-

veyor system. Some had fallen into the bags of fertilizer that Kurth's company had used.

"We realized we had a problem even before most of our customers knew what had happened," says Kurth. "We immediately started communicating to those who had been affected."

Kurth and his managers emphasized that both their company and its customers were victims. But more vital (from the customers' standpoint, anyway): his company was going to restore the lawns.



Steve Hyland kept his customers informed.

Review your recovery plan

Successful companies have recovery plans that include:

- ▶ An awareness of high-risk areas with training in crisis simulations.
- ▶ A crisis team of trained, knowledgeable and empowered personnel.
- ▶ A company spokesperson of high rank.
- ▶ An external communications mechanism to inform and reassure its customers.
- ▶ A system for internal communications that keeps employees onboard and moving in the right direction.
- ▶ A regular update of the plan as the company grows and the variety of its services increases.

—R.H.

"You're going to work with us. It (remediation) is going to come through us, and we're going to monitor it," Kurth says his firm stressed to clients.

Kurth's company acquired a large tank truck and employees sprayed each damaged lawn with an activated charcoal slurry to neutralize the atrazine. It did whatever



Terry Kurth insisted that his company take care of all customer concerns caused by the accident.

else required to bring the turf back.

At season's end, after the lawns had been repaired, his company hand-delivered a 10-pound box of steaks (paid for by the manufacturer of the tainted product) to each of the customers. "I hope this leaves you with a good taste in your mouth," a note with the box said.

Only five customers cancelled service because of the mishap.

Hyland Brothers Lawn & Tree Care of Ft. Collins, Colo., used a similar strategy in the spring of 1991, says President Steve Hyland.

For four straight days, an employee over-applied pre-emergence herbicides to 136 lawns. Within several days, the lawns started to look stunted.

"Right away we began spraying activated charcoal, aerating, seeding, sodding—anything we could do to get these lawns to grow again," recalls Hyland.

Meanwhile, in its newsletter, the company explained to all its customers what had happened. "We were hearing rumors about us that weren't necessarily true," says Hyland.

While employees increased their efforts, management took special efforts to keep customers informed.

"The public image and the good reputation that we'd developed helped us get through this," says Steve. "We responded in a way that our customers perceived to be professional and proactive."

Hyland says he lost just two customers. □

"WALKER" IS THE NEW EMPLOYEE'S NAME IMAGINE DOUBLING YOUR REVENUE WITHOUT HIRING ANOTHER EMPLOYEE

SID BURCHAM III, OWNER OF TERRE VISTA LANDSCAPES IN WICHITA, KANSAS, WAS MORE THAN A LITTLE EXCITED THE YEAR AFTER HE REPLACED HIS THREE INTERMEDIATE WALK-BEHIND MOWERS WITH THREE WALKER MOWERS.

HE WROTE TO TELL US WHAT HAPPENED:

"I think you have built, quite possibly, the BEST lawn mowing machine I have ever seen. I did not own any of your machines last season. This year, I own three with plans to buy a couple more next season. Your machine has allowed us to increase our business 100% from the previous year without hiring another employee. I would not have believed that it was possible but I can assure you that it is.

Our quality too has increased considerably. We were able to acquire a couple of major contracts this season and these businesses could not be more pleased with our work. I hold your mowers directly responsible for our success."



*Discover Walker
Labor Savings
to Help your
Business Grow*



Circle No. 134 on Reader Inquiry Card



With MERIT® Insecticide at the heart of your ornamental insect control program, you can have unsurpassed control throughout the season with just one application. Unlike other insecticides, which require

several foliar sprays, MERIT is applied as a drench or injected into the soil where it's translocated from the root system to the rest of the plant. This systemic action



keeps MERIT

in the plant

to provide unsurpassed control of selected ornamental pests from spring throughout the summer.

Protection that isn't subject to wind drift, and can't



be washed off in the rain or broken down by the sun's

rays. And when it comes to reduced environmental

impact, MERIT reduces exposure to the applicator,

bystanders, pets and wildlife.



To find

out more, contact Bayer Corporation, Specialty

Products, Box 4913, Kansas City, MO 64120.

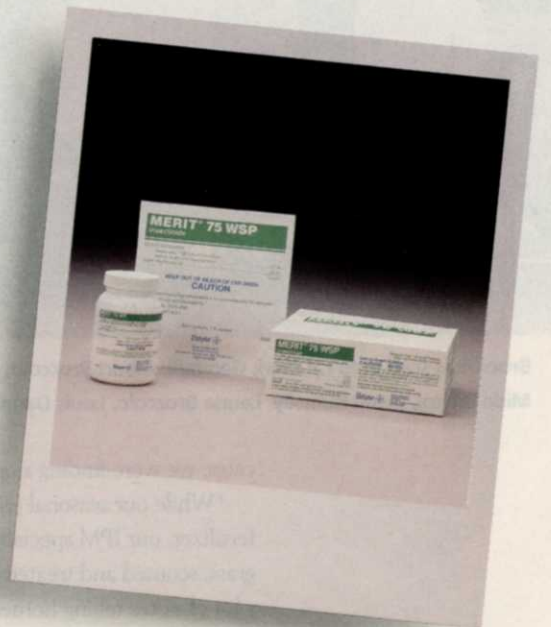
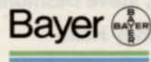
(800) 842-8020.

And stop

using orna-

mental insecticides that only work

on occasion.



NOW YOU CAN ADD ORNAMENTAL INSECTICIDE APPLICATION TO THAT LIST OF THINGS THAT HAPPEN JUST ONCE A YEAR.

Tough season tests N.Y. firm's faith in IPM

by RON HALL / Senior Editor

This past season tested Laurie Broccolo's faith in IPM. But, as the 1996 season approaches, she's even more committed to the treatment program that balances control product applications with cultural controls and pest monitoring.

"By the third round we had doubled our labor," says the owner of Broccolo Tree & Lawn Care, Rochester, N.Y. "We used two persons per truck be-



Broccolo's staff (l. to r.): Mark Gemmill, Albert Broccolo, Amy Lidie, Steve Desmond, Mida Bristol, Jason Rumsey, Laurie Broccolo, Louis Dannenberg, Cindy Halm

cause we were finding so many problems.

"While our seasonal employees applied granular fertilizer, our IPM specialists spot treated for crabgrass, scouted and treated for insects. They also left a lot of notes telling homeowners how to water and mow."

Broccolo altered her firm's 1995 mid-season program because of the freaky weather in lakefront Rochester. Instead of cool Lake Ontario breezes, a stubborn drought and weeks of stifling 90° F heat

stressed people and plants alike.

Crabgrass thrived in the heat, while grubs burrowed even deeper into the soil only to migrate closer to the growing zone and begin feeding on stunted turfgrass roots several weeks later than usual.

"It was a frustrating season. The weather conditions were terrible. We were miserable," says Broccolo.

Moreover, almost 25 percent of her customers had requested service calls. This was too high, both she and her staff felt.

By August when Ed Wandtke, a green industry consultant from Columbus, Ohio, visited her company, Broccolo admits everyone needed a pep talk.

"We took a day off. It was hard to because we were not quite done with the third round. But I wanted Ed Wandtke to talk to us about service and service calls," says Broccolo.

And what she and her staff learned was encouraging: they were actually doing a good job in light of conditions. In fact, they were experiencing significantly fewer service calls than companies using traditional calendar blanket applications of pesticides.

"By the time we got to the fourth round, our customers had a good understanding about their problems and about the weather," says Broccolo. "They were prepared to do some seeding. We did an excellent seeding business."

Broccolo formed many of her ideas about IPM from her days at Finger Lakes Community College, and while working 13 years for a large lawn/landscape company. In fact, she helped implement some IPM principles into that company's program.

When she started her own company five years ago, she built it with IPM at its center. But still she needed equipment to make her ideas work. Fortunately, she says, Tom Jessen at Perma-Green in Crown Point, Ind., provided molded, fiberglass tanks with compartments that fit neatly into the back of one-ton, dual-wheel Chevy pickups.

The separate tanks and pump/injection system allows IPM specialists to apply liquid fertilizer and pull a second trigger and spot treat for weeds at the same time. The specialist can also use the setup to treat trees while on a property.

"I try to dispel the myth that pesticides are a problem," explains Broccolo. "We don't want that myth out there, but I also want customers to feel comfortable that we're not going to treat if it's not

continued on page 16L

Question
What preemergence herbicide costs the most?

Answer
The one that quit in tough weather.

Solution
Our preemergence herbicide offers the toughest control for up to 26 weeks.

Getting started with IPM

- ▶ Include spot-treating weed control in your program, not blanket treatments, unless necessary.
- ▶ Pick a route with fewer insect problems. Do not treat unless the pests are visible and active.
- ▶ Keep a history of lawn problems by mapping regions for inspection.
- ▶ Implement computerized tracking with IPM software such as Practical Solutions to help in training and decision-making in the field.

—Laurie Broccolo

needed.

My company focuses on selling our expertise."

Broccolo points to her employees—and low employee turnover—as crucial to her company's continuing success.

"Everybody in our company is committed to an IPM philosophy whether it's our field staff or our office personnel," she says.

But, beyond that, they must also be technically knowledgeable, and confident enough about their diagnostic abilities to make on-site decisions based on a property's weed, insect or disease history.

"They can't wait for me to run to a property,

take a look at it and talk to their customer," explains Broccolo. "If we've got something critical going on, they have to make those decisions and talk to their customers."

Of course, there's a lot of communication within the company too, she adds. All

company trucks are equipped with two-way radios. She and her staff meet for an hour each week to discuss what they're seeing on their routes.

This insistence on tracking and communication allows field specialists to meet problems as they arise.

For instance, 1995 was the most troublesome grub season that her company has experienced to date. Even so, her specialists, after scouting and finding out where grubs were a problem, treated about 25 percent of customers' property. She estimates her company saved \$19,000 in 1995 by not making a blanket application of grub control products.

"If we scout and find one or two grubs per square feet, we don't treat. We only treat areas that need to be treated, areas that will be stressed. For instance, we usually won't treat areas in shade because they probably won't be stressed," she says. Routes with heavy clay soils often don't experience grub problems, either.

The insistence on scouting and keeping detailed records of each property creates added expense, admits Laurie. Also, specialists at her company don't do as much production as companies that make calendar blanket applications. But she feels the IPM approach is appreciated by most of her customers. It also has boosted her company's status with other local landscape and tree companies that routinely refer work to her company.

Broccolo Tree & Lawn Company has grown steadily, if not spectacularly, and now numbers 10 full-time plus seasonal employees.

Equally satisfying to Laurie and her staff—its customer cancellation rate is below 10 percent.

"In my market, we can charge about 10 percent more for a typical five-visit lawn care program," she says. "All the customer really wants is service and results."

Broccolo's advice to any other lawn care business converting its program to integrated pest management (IPM) is simple—do it one step at a time. □



cargoWagon®
with 102" Axles

JUST FLAT * GREAT!

Look inside our trailer, above. The big asterisk shows you our 6'9" wide interior floor is **Flat!** No wheel boxes inside. Perfect for motorized Lawn & Garden Equipment, and plenty of "walk-around" room, too. Wells Cargo offers great Options for customizing like: FLOW-THRU VENTILATION eliminating fuel fumes, PRESSURE-TREATED 1½" FLOORS and ¾" INTERIOR SIDEWALLS for "guts". **All backed by a 3 Year Warranty Program that really works for you!**

Call

1-800-348-7553

for Catalog & Prices

"With a Wells Cargo Behind... You Never Look Back!"

WELLS CARGO



Circle 135

Question

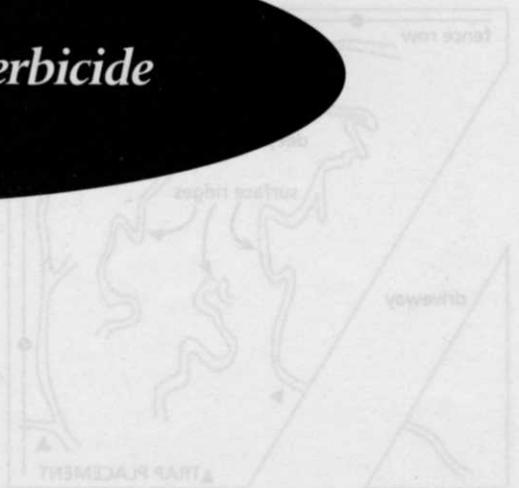
What preemergence herbicide costs the most?

Answer

The one that stained the white picket fence.

Solution

Our preemergence herbicide doesn't stain.



How to trap moles

by RON HALL / Senior Editor

Trapping controls moles the best, says Dr. Robert M. Corrigan, animal control specialist at Purdue University.

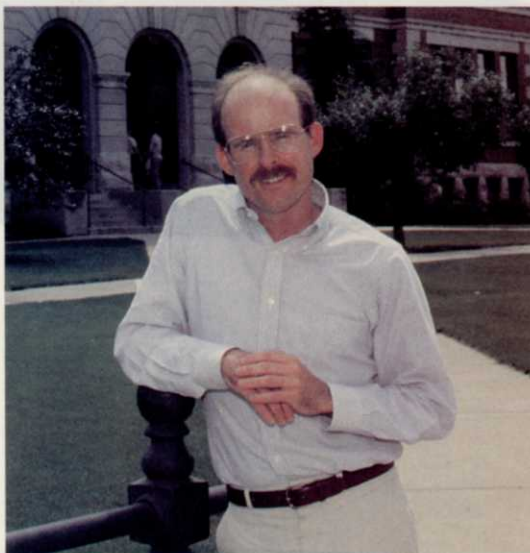
Follow the three "P's": patience, practice and persistence.

"Moles have an uncanny ability to detect and spring improperly set traps," says Corrigan. "So place traps carefully, and keep trying until experience leads to success."

For successful trapping, first locate the main runways. To identify main runways in a yard or on a golf course, look for runways which:

- ▶ follow more or less a straight course for some distance;
- ▶ appear to connect two mounds or two runway systems;
- ▶ follow fence rows, concrete paths or other manmade borders, or;
- ▶ follow a woody perimeter of a field or yard.

Surface runways are commonly seen as the raised ridges running through turf areas. They may be used daily, revisited at irregular intervals or only once and then abandoned. They connect with the deep runways which are located between 3 and



Purdue's Bobby Corrigan says moles aren't that hard to trap, but don't be surprised if another one moves in.

12 inches below the surface.

Also, because nests (4 to 16 inches below ground) are commonly located at protected spots along the edge of areas such as hedgerows or fence rows, border trapping at the places where runways enter the yard, field or garden often provides good results.

Corrigan recommends the harpoon trap (available from most hardware and garden shops), particularly for novices. Use three to five per acre. You can place plastic pails over the traps to prevent animals and children from tampering with them.

If a trap fails to produce a mole within four or five days, move it to another portion of the main runway system.

Corrigan says trapping is most effective during the spring and fall when mole activity rises. Also, trapping in the early spring can eliminate pregnant females.

In the East, moles mate during February and March with a single litter of three to five born later in the spring. Young moles grow rapidly and leave the nest by summer or fall.

Moles are insectivores. They feed primarily on earthworms, beetle grubs and other animals which live in the soil. They aren't rodents, so rodent baits do not control them.

Nor do they usually eat bulbs or the roots of garden plants. (Several species of mice also use runways and may be responsible for the occasional damage to roots and tubers in flower or vegetable gardens.)

Corrigan doesn't recommend using any baits, pesticides, gas cartridges or electronic noise makers to control moles. And he doesn't believe the claim that killing all the grubs in a lawn will cause moles to leave, since moles' main food is earthworms.

Trapping is the most efficient mole control, but they're not that difficult to capture live either, says Corrigan.

To capture a mole when it's observed tunneling, sneak up behind the mole and insert the blade of a shove or spade behind it so it cannot retreat back into the completed tunnel. Scoop it out of the ground with a shovel. The mole can be released into the woods where it's best suited anyway.

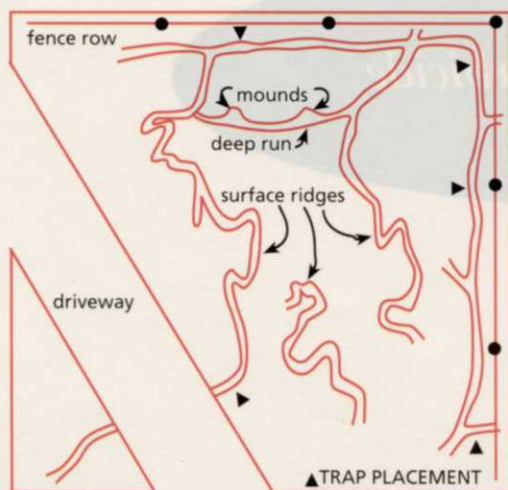
But even if you're successful in trapping or capturing all the moles on a property, your triumph might be short-lived. An opportunistic neighboring mole may just move into the suddenly vacated tunnels.

Corrigan says he knows of one $\frac{3}{4}$ -acre lawn, surrounded by woods, that yielded 68 moles over eight months.

"Probably the only solution there would be to put in a mole barrier," says Corrigan, a smooth barrier 16 to 18 inches into the soil and about eight inches above it surrounding the property.

Several species of moles can be found in the United States, but the most common one found in turfgrass in Midwest is the Eastern mole.

Corrigan spoke at the Ohio Turfgrass Conference this past December. □



Question

What preemergence herbicide costs the most?

1.

You want cheap stuff.

Answer

The one that just lost the Davidson account.

1.

You want to forget about stains.

2.

You want it to last longer and work better.

Solution

Our preemergence herbicide satisfies customers and builds profits.

*The thinking behind their
preemergence herbicides.*

1.

You want cheap stuff.

The thinking behind ours.

1.

You want to forget about stains.

2.

You want it to last longer and work better.

3.

You want to make so much money
you can retire to a thatched hut in Fiji
where somebody comes by regularly
to weed the roof.



Available
from:

Agra Turf
Searcy, AR 501-268-7036

Agriturf
Hatfield, MA 413-247-5687

Benham Chemical Co.
Farmington Hills, MI 810-474-7474

Cannon Turf Supply, Inc.
Fishers, IN 317-845-1987

Cornbelt Chemical Co.
McCook, NE 308-345-5057

E.H. Griffith, Inc.
Pittsburgh, PA 412-271-3365

Estes Chemical, Inc.
Wichita Falls, TX 817-766-0163

Fisher & Son, Inc.
Malvern, PA 610-644-3300

George W. Hill & Co., Inc.
Florence, KY 606-371-8423

GroTech/Pennington
Madison, GA 800-768-4578

Helena Chemical
Fremont, NE 402-727-9177

Helena Chemical
Tampa, FL 813-626-5121



Barricade®

HERBICIDE

If you want more customer satisfaction, fewer callbacks and increased profits, taking some low-cost route won't get you there. Barricade® preemergence herbicide will. Not only does Barricade control crabgrass and 29 other tough weeds, it gives you

everything else you need

to make a profit.

Like the longest

residual so you

can apply earlier

and service more

accounts—without

adding workers.

Barricade also works better:

Up to 26 weeks of consistent control

from a single application. And it won't

stain curbs, drives, fences or anything else.

For details, talk to your authorized Barricade distributor, Sandoz sales representative or call

1-800-248-7763.

For information on

tropical island

paradises, see your

travel agent.



SANDOZ

Always read and follow label directions. Sandoz Agro, Inc., 1300 E. Touhy Ave., Des Plaines, IL 60018. Barricade is a trademark of Sandoz Ltd. ©1995 Sandoz Agro, Inc.

Howard Johnson's Enterprises
Milwaukee, WI 800-642-4656

Professional Turf Specialties
Champaign, IL 217-352-0591

Turf Industries, Inc.
Dallas, TX 214-241-0545

United Horticultural Supply
Aurora, OR 503-678-9000

Vigoro Industries
Winter Haven, FL 800-329-4238

Knox Fertilizer
Knox, IN 219-772-6275

Regal Chemical Co.
Alpharetta, GA 800-621-5208

Turf Industries, Inc.
Houston, TX 800-288-8873

United Horticultural Supply
Tampa, FL 813-628-0496

Wilbur-Ellis Co.
Auburn, WA 206-351-6591

Lebanon Turf Products
Lebanon, PA 800-233-0628

The Andersons
Maumee, OH 800-537-3370

Turf Supply Co.
Eagan, MN 612-454-3106

United Horticultural Supply
Tucson, AZ 520-293-4330

Circle No. 128 on Reader Inquiry Card



The necessary art of delegation

by JOHNNY CULLISON

When your workload expands beyond your physical and time limitations and employees are added, delegation, however informal, *must* take place. It's needed in all but the smallest of organizations.

Delegation is more art than science.

When I think of science, I think of formulas and gear ratios and levers; things that I can measure and quantify. Successful delegation, however, depends on variables such as individual moods, and job and family relationships.

Even so, delegation can be charted. For instance, most of us are familiar with an "organization" chart. It shows the president at the top, then the executive vice president below that, followed by the assistant vice president, then it branches out to the various department heads or managers.

But instead of looking at it as an organization chart, look at it as a "delegation" chart, and focus on these benefits of delegation:

▶ It allows us, as managers, to extend our influence beyond the boundaries of time and space.

▶ It optimizes resources, allowing us to combine human resources in ways to minimize the weaknesses and maximize the strengths of the entire group.

▶ It allows completion of a task at the lowest cost, although this isn't absolute. Sometimes the least expensive resources aren't available. Sometimes the need to complete a task overrides economic considerations. Sometimes it's desirable to use more expensive resources to build a spirit of cohesion within a group.

▶ It's probably the best way to develop the leadership skills of subordinates. Most of us learn better by practice. A manager can strengthen the confidence and the ability of a team to take on greater responsibilities.

While we realize that we have to delegate responsibility, we must also delegate an equal proportion of authority. Otherwise it's like asking someone to mow grass

Four keys to proper delegation

1. Evaluate—Completing any task requires both the investment of human and, usually, mechanical resources. Both of these resources translate directly into financial requirements. Any attempt to delegate tasks will be futile unless adequate resources can be allocated.

2. Educate—All the resources in the world are useless unless they can be properly applied. Employees must be trained in basic job skills as well as in safe work practices. Certain types of training are now required by law and must be documented for review by regulatory officials. Leadership development is also essential to the growth and longevity of every organization. Individuals with leadership potential should be identified and encouraged.

3. Communicate—Management philosophies and expectations must be clearly communicated before they can be applied. Employees are not mind readers, yet we often act as if they are. We expect them to act on what we mean regardless of what we say. Beyond philosophies and expectations, we must also communicate basic task information. It is important to communicate the task—not the procedure. If employees are told every move to make, they soon become mental cripples, dependent entirely on someone else to do all the thinking.

4. Validate—Inspect completed work to see that it is completed properly and in a reasonable amount of time. Talk with employees to get suggested changes or improvements and to determine whether or not they are satisfied with the finished product. Provide feedback to employees. Give praise for jobs well done and correction where needed. □

INTRODUCING THE NEW SCAG TURF RUNNER

■ **Easy-dump, 7.14 bushel (67 gallon) grass bagger**

■ **1-gallon hydraulic oil reservoir** provides superior oil cooling capability

■ **7.5 mph ground speed** makes quick work of big cutting jobs

■ **Hydro-Gear pump/motor/axle** delivers smooth and predictable control

■ **20" x 10"-8 drive tires** provide superior traction and ride, while enhancing climbing ability

■ **12" diameter blower** is capable of moving higher volume of grass into bagger for more efficient collection of grass

■ **5-gallon fuel capacity**

■ **Padded high back seat**

■ **Powered by 20 hp or 22 hp Kohler Command V-Twin, horizontal shaft engine**

■ **Automatically converts** to side discharge with single lever control

■ **Rubber shock mounted footplate** for increased operator comfort

■ **4" deep cutting deck** is constructed of 10 gauge top with reinforced skirt

■ **9" diameter heavy-duty caster wheels**

■ **Height-of-cut** ranges from 1" to 4.5" to handle a variety of cutting conditions

THE ONLY MOWER WITH AUTO SIDE DISCHARGE!

Combining superior ground speed, exceptional bagging performance and single lever change-over to side discharge operation, Scag's new Turf Runner redefines the standard of performance for mid-size commercial mowers in this category.

To provide greater versatility to the commercial cutter, the Turf Runner can convert from a rear bagger to a side discharge mower with the flip of a lever. There's no need to remove the bagging deck to install a costly side discharge deck. This

innovative design (patent pending) allows more cutting time by allowing the operator to respond to changing conditions without downtime.

In addition, the Turf Runner's heavy-duty 12" diameter blower cleanly transfers the grass cuttings from the extra-deep deck to the bagger, for a manicured cut every time.

See the new Turf Runner at your Scag dealer today.



SCAG

Simply The Best®

Circle No. 129 on Reader Inquiry Card

without a blade.

Establishing boundaries or limits of authority is also necessary. Some of the more common limits include:

Authority to hire and fire employees. Most first-line supervisors aren't given sole authority to add additional or fire present employees. They must, however, be directly involved in the process.

Authority to acquire and dispose of assets. Few operations have the type and quality of equipment to do the best job possible. Authority to add or replace equipment is almost always limited. Limits may be based on types of equipment or on dollar values.

Expenditure limits. I know of no manager at any level who has a blank check. Limits may be determined by dollar amount, capital equipment threshold, or as needed for routine operations. Managers must maintain good communication lines about financial matters.

Rarely, however, is the "art" of delegation a straight-forward proposition.

A manager's ego, guilt (feeling uneasy about asking others to perform unpleasant tasks), and fear of losing control complicate the process.

It's scary to let others have such a significant role in controlling your destiny. It is, however, very rewarding to share the credit for collective successes.

As one of my former employees once said (and he surely wasn't the first to say it): "You can do anything there is to do in this department, but you can't do everything." **LM**

—The author is assistant vice president for physical plant at Oklahoma Baptist University, Shawnee, Oklahoma. Cullison presented these remarks at the 1995 Institute of Parks and Grounds Management in Toledo, Ohio, this past winter.

ALCA technician exam readied

The National Landscape Technician Council, chaired by Gary Thornton, CCLP, Thornton Gardens, Maineville, Ohio, finalized the certification exam for exterior landscape technicians. ALCA purchased the exam in 1994 from the California Landscape Contractors Association.

The test, standardized for national distribution and also modified to reflect regional variations, will be offered for the first time this spring. The test is designed to assess an exterior technician's knowledge and skills.

So far, 13 states and two Canadian provinces had signed on with ALCA to become licensees of the program. They are California, District of Columbia, Illinois, Maryland, New York, North Carolina, Oregon, South Carolina, Texas, Utah, Virginia, Washington and Wisconsin. Also British Columbia and Ontario.

For more information on this program, contact Vicki Buswell at (800) 395-2522.

New Certified Landscape Pros

In a separate ALCA program, the following people passed the Certified Landscape Professional (exterior) examination: Dennis Barriball, Hemlock Landscapes, Inc., Chagrin Falls, Ohio; Colleen Cotten, Gardener's Guild, San Rafael, Calif.; Thomas Heaviland, Heaviland Enterprises, Vista, Calif.; Patrick DeZeeuw, Botanical Technologies, Dallas, Tex.; Scott Hall, Classic Landscaping, Woodsboro, Md. All now get to use the "CLP" designation with their names.

Bertotti honored

Bertotti Landscaping, Novato, Calif., earned a Judge's Award in the 1995 ALCA Exterior Environmental Improvement Awards program. The project was a private residence and highlighted a natural swimming pool and spa with waterfalls. Bertotti Landscaping placed more than 600 tons of boulders in and around the pool. The pool structure was engineered to withstand an earthquake of 8.0 on the Richter scale.

Record turnout

ALCA says its conference this past November in Fort Worth drew a record 662 landscape professionals, the most ever. Judging by attendance, the most popular session was Dr. Gerry Faust's "Building a Successful Management Team" which played to standing-room-only for three hours.

The 1996 conference is set for Nov. 17-21 at the Omni Netherland Plaza in Cincinnati, Ohio.

NY conference cooks

The New York State Turfgrass Association reports its 1995 show was the most successful in the association's history. More than 1800 attended, and 347 companies exhibited. Among the highlights, Dr. Norman Hummel, ex-turf program director at Cornell University, received the NYSTA Citation of Merit for his contributions to the turfgrass industry.

The 1996 show will be held November 12-15 in Rochester.

1995 Operating ratio study

If you're curious about how your lawn care company stacks up with others in the industry, get PLCAA's 1995 *Operating Efficiency Study for the Lawn Care Industry*.

PLCAA executive vice president Ann E. McClure describes the study as a "snapshot of how resources are allocated and priorities lie."

The "snapshot" shows that the industry is widely divergent in both operating methods and key financial results. According to the study, "size alone is a significant factor

in operating results. The data suggest that higher profitability is earned, not through sheer size, but rather by achieving operating economies within a tightly defined and managed market."

Prepared by Wall-Bruning Associates, Inc., Columbia, S.C., the study contains geographical, sales statistics and major business emphasis sections.

To order a copy, contact PLCAA at (800) 458-3466. Fax is (770) 578-6071.

Good crew, busy members help manage small budgets



Terry McIver

TERRY MCIVER
Managing Editor

Remember those ads that promised you Europe on \$5 a day? That's almost an extravagance for some of our best superintendents, who often have very little cash to maintain their golf courses.

When faced with a small budget, you have two choices. You can throw up your hands and quit, or you can decide to make it work the best you can and have fun in the process.

Dave Pulley, superintendent of Pine Valley Country Club is having fun. He's worked at two courses now—Pine Valley and before that, Topsail Greens, both in North Carolina—with minimal budgets.

His budget at Pine Valley—a semi-private course—is a mere \$200,000, half of which goes for salaries. (Our February 1995 survey of golf course maintenance found the national average for public course budgets to be \$325,000, so it would be hard to blame Pulley if he did quit!)

On top of that, he arrived at Pine Valley to find a course suffering from years of neglect.

The fertilizer storage area was a rusty old trailer with no door. (Correction, there *was* a door; it was leaning against the trailer!)

The maintenance building was a 20 x 40-foot shed with no running water or restroom. Equipment was left where it was parked. The fairways were weed-infested.

"It's hard to believe the members put up with it," said Pulley. Now, members are some of Pulley's best "workers."

One member who owns a construction company builds free bridges for the course. Another, with a machine shop, donates equipment repairs. A third provides office equipment and turf equipment rentals at very low cost. A fourth helped to

GOLF/GROUNDS

PAGE 4 G ▶

Heat, water stress big news in '95

PAGE 6 G ▶

Tommy Witt crunches numbers

PAGE 10 G ▶

Winter projects cover shop, shows

PAGE 12 G ▶

Electric greensmowers earn looks

rebuild a green for a reduced membership fee.

Out on the course, Pulley removed all hazard and yard markers, to reduce mower operator dismounts. Colored paint now serves as a suitable marking method.

Growth regulators are used on greens, tees, fairways, and along the edges of sand traps and cart paths. Less clippings mean less disposal, which means faster mowing and a neater course.

"Growth regulators are essential for a low-budget course," insists Pulley.

Wildflowers save time in out-of-play areas.

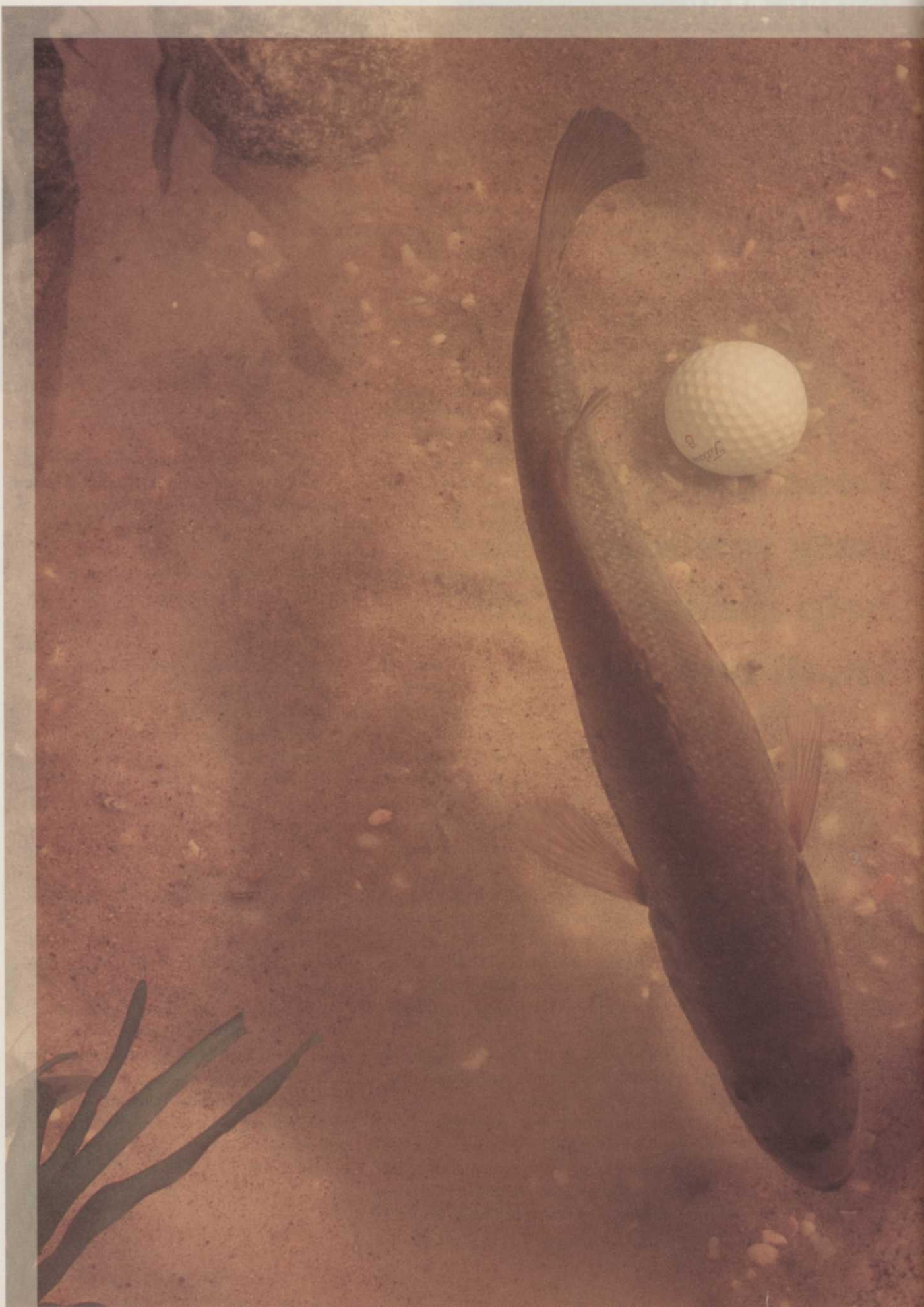
The only employee benefit for Pine Valley workers is free golf. So Pulley went and found good workers who also liked to play golf. Overtime's prohibited, so the guys on the weekend shift have to finish early during the week. Then they play a free round together, which Pulley says is good for team morale.

Pulley wants people who will take pride in the course, whether the budget is low or high.

"I can get more work done with three people who care than I can with six who don't care," he says.

After hearing Dave Pulley's story, I wanted to write an editorial slamming stingy owners. I'm glad I didn't. They know who they are, and this little column isn't going to change them.

I'd much rather praise Pulley's positive approach. He gets A's for attitude, initiative and ingenuity, and that's a great way to approach the new year. **LM**





ONE INSECTICIDE SATISFIES
EVERYONE IN THE GOLF WORLD.
INCLUDING THOSE WHO
DON'T GOLF.

Maintaining a showplace golf course goes beyond beautiful turf.

There's the birds of the air and the fish in your water hazards to consider, too.

That's where MERIT® Insecticide comes in.

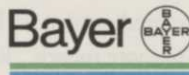
MERIT lets you control grubs, mole crickets and other insects while
using remarkably low levels of active ingredient.

In fact, MERIT is effective at rates 85% to 96% lower than other
conventional soil insecticides. And when applied in the spring to control billbugs
and black turfgrass ateniensis, MERIT provides enough residual
activity to effectively control grubs throughout the summer.

To find out more, contact Bayer Corporation, Specialty Products,

Box 4913, Kansas City, MO 64120. (800) 842-8020.

Do it for those in golf who actually like landing in trees
and splashing in water hazards.



1995 in retrospect:

Wet, blistering summertime pushed golf turf to limit

by TOM JOHNSON / Contributing Editor

When LM asked golf course superintendents what kind of year 1995 was, they had plenty to say about what the weather did to turf. There was extreme heat in the North, and plenty of rain in the South and East. Here's what supers tell us about the summer of 1995:

Northern Illinois

In suburban Chicago, the searing heat that killed 700 in July led Les Rutan of the Beverly Country Club to call it "the most miserable growing season I can remember."

The club, however, sees just 17,000 to 20,000 rounds over a seven-month season, so "we're not in the same predicament with a course putting down 40,000 or more rounds," Rutan says. The grass survived, but *Poa annua* took hold of the fairways.

"Theoretically, you want to remove as much of it as you can, using growth regulators and trying not to pamper it," he says.

Rutan credits the course's survival to the benefits of a five-year growth regulator program on the greens plus aggressive irrigation. "Even so, we took a hit on the fairways. We couldn't keep up with it, especially where old trees inhaled what moisture there was available."

Michigan

Stephen C. Rose, who manages 45,000-rounds-a-year Flint Elks Country Club, agrees. His course isn't trying to root out the poa. "It's not a bad grass," he says. "When it's your predominant grass, 80 percent, you better try to grow it. It melts out in the heat, but it comes back fast," he says. "We're not a high budget club. We hope for the best, fertilize and water and hope Mother Nature can make it back."

At the height of the heat wave and drought, Rose and his crew went to deep-aeration drilling once a month on the greens. "We went down eight to ten inches to get down through our hard soil layer. I firmly believe that if we hadn't done that, we would have lost the good half of our front nine greens. If you couldn't get the water off the course, it would have started to bake."

Wisconsin

"We were dry all summer, then in August we got the rain, heat and humidity," remembers Steve Schmidt, superintendent of the Butte Des Mortes Country Club in Appleton, Wis. The result was turf disease. "Guys got their chemical budgets blown out of the water, because they didn't have much choice.

"We had a day here on July 13 that sent the temperature to 103° F., the dew point to 89 and the heat index to 145," he recalls.

Schmidt's fairways are a combination of poa and bent, and the poa isn't entirely welcome. "I try to control it, but because it's on the golf course I have to try to maintain it." He uses turfgrass growth regulators, and keeps compaction down with light-weight mowing.

He Hydrojects his greens three to five times a year, and core aerates once in the fall to relieve compaction and allow better air and water movement. The practice allows him to interface his top dressing program with his original push-up greens.

Southern Illinois

Superintendent Jim Van Ravenswaay manages the grounds at the private, 20,000-round Illini

Country Club in Springfield. He calls 1995 weather "miserable. We lost some low areas and fairways the second week of August, but we kept the greens and tees."

The weather prevented serious problems for Van Ravenswaay when chemical controls began to break down fast, ahead of time.

The night before the Illinois State Amateur tournament, disaster struck. "We had a three-inch rain followed by 115 degree temperatures the day of the competition. That's when the turf went," he recounts, drily.

Kentucky

Larry Hantle of The Country Club of Paducah, though, came up aces. "We had a very beautiful spring, but it got a little wet in May." He's not complaining. In southern Indiana and Illinois, just 60 to 70 miles away, it was common for courses to record 12 to 15 inches in May. One southern Illinois course had 20 inches that month.

Carolinas

Dr. Bruce Williams, an agronomist with the North Carolina State Cooperative Extension Service, had a precise fix on what kind of a summer it had been for the grounds crews. "Dry spring, rains in May, coolish June," he says. "A lot of the [perennial ryegrass] overseeded into bermuda persisted, and folks who had overseeded golf greens had a difficult time with that."

The trouble started in earnest in October. "Some courses had more than 20 inches of rain, and their seed washed away," he relates. Poa, which he described as "a real problem down here," flourished in the October deluge. Then came November, with an earlier-than-normal frost. Temperatures didn't cooperate. "People seeding bent are finding poor root development," he observes. In December, he says, bermuda was dormant three weeks early.

Maryland

From July 3 to September 1, rainfall totaled $\frac{1}{10}$ th of an inch, and the temperature hovered in the mid-90s at Turf Valley Resort and Conference Center in Lutherville, Md.

Michael J. Gilmore's crews struggled with gray leaf spot disease. In the end, 40 acres of rye were gone, fairways and tees. "We were struggling to stop it," he says. "We overseeded our fairways three times last fall and got eaten up." They quit in October.

Gilmore controls his poa problem with a turf growth regulator program, which he says does a good job of helping the bentgrass push through. In a normal year's program, they Hydroject greens once every three weeks and aerate three times a year, in April, August and November.

South Florida

September and October storms drenched the state after a tranquil summer. Carlos McKeon, superintendent of The Links at Key Biscayne, notes that "it was very difficult, rainwise."

Damp conditions forced McKeon to deal with fungus problems. "We raised the height of the cut on the

mowers, and we stayed with pesticide application on a preventive basis. We don't use it unless we have to." The crew used liquid fungicides to attack the pythium and rhizochtonia, his main problems, along with algae. For algae: "We try to keep the grass growing, because the algae grows when there's space," McKeon explains.

Nevada

Maybe the place to go is Nevada, where Collier Miller, superintendent of the Tournament Players Club at Summerlin, Las Vegas, observes, "It's tough to keep moisture in the ground." With his caliche rock base, "you need a pick to take a soil sample out of the fairway," he says, adding, "Plays firm, putts fast." □

Jim Van Ravenswaay:
'You just have to hope and pray and do everything agronomically that you can think of.'

Dealing with boards and greens chairmen

In a disastrous weather year like 1995, how do golf course superintendents deal successfully with country club boards and greens chairmen unhappy over less-than-ideal course conditions? Tell them the truth:

Rutan — "Be honest with them. Try to give them the best playing conditions that you can—and don't turn your backs on the greens for a minute."

Rose — "We try to take care of problems as soon as we can. They understand we have a low budget. If we had an unlimited budget it might be different."

Schmidt — "The only way I have found is: (1) always remember it belongs to them; and (2) make sure your communications are always there, no matter how small the problem, so that they don't get any surprises."

Hantle — "The easiest way to keep them happy is to do a good job. Present the course as if you owned it yourself. Make yourself happy with it, and usually everyone else is happy."

McKeon — "Do the best job you can, and let the ball fall where it falls. In this business, you can only do so much and you run into problems with nature, or with budget.

"[Members] try to hear you, but they're simply not communicating—it's even hard to get the concept of seeding over to them."

Gilmore — "Always tell them the truth. Be prepared to answer questions, and know where to go to look for answers if you don't know." □

Using financials to sell yourself

by JERRY ROCHE / Editor-in-Chief

Stop selling yourself short. You, as a golf course superintendent, are not just a grower of grass. You're a maker of money—and you'd better make sure that your employer knows it.

"In my 16 years as a professional golf course superintendent, the only figures I ever heard about were the expenses," says Tommy Witt of Wynstone Golf Club, North Barrington, Ill. "Then I realized that every negative side of the accounting equation has an opposite side. And when I tried to start selling myself to my employers, who had the financials, they could never understand that I wasn't just spending their money."

Witt, lounging—for a change—in the comfortable confines of a breakroom on a rainy September afternoon, can recite Wynstone's financials without ever opening a ledger. And the rapidity of his verbal calculations leaves no doubt that he's committed them to memory.

"Last year, we had about 25 new members. They paid \$60,000 to \$70,000 each to become members—there's \$1.5 million. We have 275 members paying \$475 a month, times 12 months a year—there's another \$1.5 million. We'll do \$300,000 in guest fees, \$150,000 in cart rentals...it goes on and on and on.

"As a businessman, would you trade my maintenance budget of \$800,000 for \$4 million profits? I would. Other club professionals use profits as a selling tool to improve their compensation packages and their value as employees. But superintendents, typically, don't."

He's asked if the superintendent really makes an impact on how much the club rakes in.

"Look at any golf course in Chicago last year. A lot of them were trashed because of the weather. Compare their 1994 income with last year's income. That doesn't answer your question, but there is a correlation.

"In Minneapolis, normal building sites go for \$25,000 to \$30,000 an acre. Put a golf course in, and the property goes way up. So what does that golf superintendent mean to that developer? There's prob-

ably no one person more important to a piece of property than an experienced, qualified golf course superintendent."

The bottom line is that people become members of country clubs largely to play golf. Research says so, and Witt says so.

"I don't need the research: I know why people join Wynstone," Witt says. "A resident member pays \$60,000 to join. A social member pays \$3,000. Do they come to buy a golf shirt? I don't think so.

"In 1994, our revenues increased by \$500,000. Was it because they started serving a different kind of hamburger? No. Because the pro was offering shirts in the golf shop for \$90 apiece? I think not. It was because of the golf course. If it's maintained to its maximum quality, people come to play golf."

Experience counts

Anybody can shoot a round of golf. But not everybody can shoot 72. Likewise, not every superintendent can maintain a course to optimize profits.

"There's no question that a more experienced super will get more for the dollar," Witt emphasizes, "whether the budget is \$300,000 or \$1 million."

Practically in mid-sentence, he coyly checks the reactions of the dozen-or-so college turfgrass students who are sitting in on the interview as part of Witt's on-going public relations duties. He hopes they are learning something.

"The best superintendent in the world is not necessarily the guy with the highest budgeted golf course, it's the guy who can make what he's got go the farthest. There are some tremendously talented people who do a whole lot with a little bit."

continued on page 8G



Tommy Witt has made financial ledgers part of his daily routine.

**A new foundation
for your fungicide program.**

**NOW!
BIOLOGICAL
POWER!**

**The strongest IPM program
begins early in the spring with
BIO-TREK 22G™**

Don't let this summer's onset of plant disease attack your unprotected turf! *First thing in the Spring* put down BIO-TREK 22G and build a strong foundation for your entire fungicide program.

It's new. It's biological. And it's effective.

BIO-TREK 22G is the first biological fungicide approved for turf. It will help you get control of common fungus problems *before* they have a chance to wage a major attack on your turf. Because it's biological, BIO-TREK 22G is safe for use all around the golf course, even near water and wildlife.

GOLF COURSE PHOTO BY JOHN R. JOHNSON

**For more information, contact
your Wilbur-Ellis representative
or your Bio-Trek 22G distributor.**



Circle No. 136 on Reader Inquiry Card



The best superintendents are the ones who can do the most with the money they're given to work with, says Tommy Witt. And then, he proves it.



'There's probably no one person more important to a piece of [golf development] property than an experienced, qualified golf course superintendent,' says Witt.

Commitment to quality—and, thus, profits—does not come without its own price. It takes a willingness to work up to 80 hours a week, and a competent staff with the same commitment to quality.

"I've got the most wonderful family in the world, and they like to see me, too, but eight hours a day is unheard-of. It just doesn't happen," Witt says. "My time ranges from 60 to 80 hours a week for nine months of the year to 50 to 60 hours the other three months—and that includes delegating a lot of work to my assistants.

"I've got an excellent staff. I try to hire the best people on the continent. But I delegate so much that some of my assistants end up not being able to handle it. When I get squeezed for perfection from the people I work for, I've got to pass that down to my assistants. And they'll tell you that what is acceptable in Dallas, Texas, or Lex-

ington, Kentucky, is not necessarily even close to being acceptable here in Chicago."

The pleasures

The dreary weather, the long afternoon and his third media interview of the week have taken something from Witt. As the sun sets through the window behind him, he says he still values the opportunities he's been given.

"If I could be somewhat biased, gee, I think we're very lucky," he says. "And I thank the good Lord every night for the job I have and the product that's delivered.

"The real pleasure is when you go out at the end of the day and look back at the property, and you know that you and your staff may be the only people who really understand what it's taken to achieve that product. Certainly, 99.9 percent of the golfing public has little or no idea what the golf course superintendent does." □

QUOTABLE QUOTES

from TOMMY WITT

Wynstone Golf Club
North Barrington, Ill.

► More on profits:

"There are very few country club settings where food and beverage is a profit center. I have a friend in Georgia who was budgeted to lose \$1.2 million in food and beverage."

► On great golf courses:

"Great golf courses don't happen by accident. It's a tri-fold effort. One, a qualified staff to manage it. Two, a governing body that's willing to fund the effort. Three, a membership that is proud and willing to take care of it."

► On job interviews:

"The only reason I moved to Wynstone was because all 10 of the people who interviewed me said that they wanted Wynstone to move into the top 50 courses in the United States, and they would make that commitment at all costs. The members must care about the course."

► On ambience:

"When you talk about the Medinahs, the Bobolinks, Atlanta Golf Club, you're talking about upper echelon golf courses with not only the design but the ambience of a club. When you walk onto that course, you know it's special, that people take care of it."

► On satisfaction:

"I started playing golf when I was five, so it's a big part of my life. Plus, it's a challenge that very, very few professions have to offer. You're trying to derive personal satisfaction under extremely difficult circumstances. That's why a vast majority of our people are 28 to 35 years old and the average tenure for a superintendent on a course is just four years." □

We'll keep the pesticide industry from becoming a victim of air pollution.



Ahh, television news in the 90s.

Tabloid journalism has sneaked its way onto the airwaves. And the pursuit of facts seems to have been replaced by the pursuit of ratings.

So the specialty pesticide industry needs a media watchdog that not only watches. But that also takes action.

Fortunately, we have one.

RISE. Responsible Industry for a Sound Environment.

RISE is a coalition of manu-

facturers, formulators and distributors from all areas of the specialty pesticide business.

In addition to promoting environmental stewardship, RISE makes sure the media doesn't report misinformation as fact.

We also hold editorial meetings with media decision-makers. And respond to negative articles or broadcasts that are incorrect. We've been very successful so far. Not surprising considering what

our most powerful weapon is. The truth.

Of course, there's still a lot more work to do. But rest assured, RISE is up to the task.

Because we know if we eliminate air pollution, the pesticide industry can breathe a lot easier.



1156 15th St., N.W., Suite 400,
Washington, D.C. 20005. ©1995 RISE RISB-0047

Winter a time to plan ahead, hit the books

by STEVE & SUZ TRUSTY

Carefully planned and executed winter projects help lay the groundwork for success in the coming season. And they don't necessarily have to be outdoor projects, either.

Begin with a review of last year's programs, and how you got things done. Evaluate how efficient and effective your current programs are, and formulate a game plan for the coming year.

Divide projects into indoor and outdoor categories. Determine which projects, or segments of projects, must be handled by management and which can be assigned to specific crew members.

Educate and train

1) Establish in-house training programs. Review standard safety policies and procedures. Designate a part of the shop area as a demonstration area, a place where crew persons can practice and perfect routing procedures. Involve the crew each step of the way, and consider their comments and suggestions.

A demonstration area will let them time specific procedures using different steps or when performed by one-, two- or three-person crews.

2) Develop an accurate labor tracking method for certain tasks. If data is available, analyze labor efficiency over the past few years.

3) Analyze the past year's information, and compare results on specific sites with the amount of equipment, labor and materials invested. Would an upgrade of tools

or equipment, or the addition of some equipment, reduce, although not necessarily eliminate, labor time? At what point would such purchases be cost ef-

PRIORITY LEVEL: Urgent Essential
 Before use Aesthetic fix

Facility name:

Location:

Area to repair:

Action required:

Vehicles required:

Tools required:

Other materials:

Labor required:

Time to complete:

Other needs:

Special notes:

Assigned to:

Date assigned:

Date completed:

Materials used:

Time expended:

▲ The job starts with the work order. Make it specific, including estimated time required to get the job done.

effective? Decide where service levels can remain where they are, and where they must be cut or increased.

Job descriptions accurate?

1) Learn where you can improve indi-

vidual initiative and employee commitment to their careers.

During the course of employment, people can take on or neglect duties through no fault of their own. Are employees making the desired personal advances in skill and responsibility? Meet with managers and crew leaders to discuss problems, strategy and ways to improve. Meet with all members of your team during the off-season as you plan for the new year.

2) Attend winter meetings and seminars when possible. If your budget prohibits full staff attendance at a seminar, make sure you or another company representative attends, and brings back plenty of helpful information.

Your trade show plan should allow ample time for personnel to visit both the show floor and seminars.

3) Networking is often overlooked by green industry professionals. Discuss common problems with your peers to reduce your adventures in "trial and error" management.

General projects important

1) Walk through all facilities, and make note of areas that need cleaning and repair. Assign priorities to these tasks.

2) Take advantage of mild winter days to clean up grounds and facilities; repair fences; maintain parking lots, walkways and cart paths; work on building exteriors; and prune or remove trees and shrubs.

In bad weather, clean up and otherwise organize indoor areas. Wash or paint those dingy walls. Clean that floor. Get rid of all trash, including those faded notes hanging on the walls that you have not referred to in months, or even years.

3) Post all important information in a conspicuous, common area. Beyond all required safety notices, include weekly and daily crew assignments, vacation schedules, upcoming events that affect staff levels or workloads. Devise a workable method of getting individual messages to crew mem-

bers, such as a file or box each person, or a message rack with a slot for each person.

4) **Tackle** the small details. Repair a shaky tool handle. Repaint chipped or damaged mower decks. Lubricate all moving parts, and sharpen those mower blades.

Track tools & inventory

1) **Implement or develop** a computer system. Are you using your computers to their full advantage? Use a business analysis program such as Power Point to plan budgets and keep records. How closely do actual spending and use patterns match projections and budgets?

2) **Compare** ending inventories to last year's ending inventory and ordering frequency. Note any discrepancies and unusually heavy use. Find a way to monitor use and reduce waste.

3) **Refine** your equipment and tool tracking system. Small hand tools can be checked out to each crew member for the season, or assigned to specific crews and kept with that crew's equipment and supplies.

4) **Upgrade** systems of equipment allocation and supply usage. Track material

used for all accounts, areas or athletic fields.

Prioritize materials

1) **Analyze** material use patterns over the last several years and explore cost saving alternatives. If storage space is available, would larger initial orders earn discounts? If space is limited, is can any time or costs be saved by placing a series of orders for delivery at specific future dates?

Have certain items been hard to find or in limited supply during the rush of the season? (Turf seed might fall into this category in 1996.)

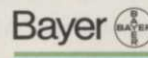
Would it be cost effective to keep these items on hand for use as required? Would it be beneficial to establish set "order points" on some frequently-used items? □

FOR DOLLAR SPOT, THE BUCK STOPS HERE.



Used either as a preventative or curative, BAYLETON® Fungicide is right on the money for control of dollar spot.

To find out more, contact Bayer Corporation, Specialty Products, Box 4913, Kansas City, MO 64120. (800) 842-8020.



© 1996 Bayer Corporation Printed in U.S.A. 96S10A0030

Storage strategy

- ▶ Clean and organize storage areas.
- ▶ Allow room for incoming supplies.
- ▶ Think about how, why and when materials are used.
- ▶ Allocate prime space to items used most often.
- ▶ Put lesser-used items on higher or lower shelves, or "in the back."
- ▶ Don't disregard the importance of labels.
- ▶ Set up pegboard racks for shared hand tools—draw an outline of tools on the pegboard. It's simple, but effective!
- ▶ Dry-applied materials must be off the ground. Put seed or smaller bagged materials in bins or sealed cans.
- ▶ Clean and organize the shop and equipment repair areas. If equipment is always parked or stored in a specific place, mark the floor to designate that area.

Circle 104

Electric greensmower eliminates noise and pollution complaints

by JAMES E. GUYETTE / Contributing Editor

Golf course superintendents who are using electric greens mowers say the mowers have greatly reduced mower noise and eliminated complaints from homeowners who live alongside golf courses. Exhaust emissions have also been eliminated with the electric-powered units.

"Any type of pollution is not going to be tolerated in the future—and I'm including noise pollution," reports Ben McBrien, superintendent at the Sea Cliff Country Club in Huntington Beach, Calif.

Loud noises emitting from routine maintenance tasks have become an increasing problem as more new, exclusive housing developments are built around the links to take advantage of the amenities offered by the game of golf. But people have limits: "The golfers want to start as early as possible, and the residents want to sleep in on weekends," explains Ron Parker, superintendent at the Calabassas Golf and Country Club in Calabassas, Calif.

The industry needs to get turned on to the concept and start making the switch, he observes: "It's going to be essential to have an electric mower to start mowing in the morning."

The shift to an electric greens mower has already become a requirement at Calabassas after the long arm of the law threatened to make a collar. "We got a call from the sheriff," Parker relates.

It was a similar situation at Sea Cliff, where early morning mowing was a key part of the dawn. "I've had the police come out here and stop me," McBrien recounts. "The complaints were pretty bad." Switching over to an electric commercial grade

greensmower made by Ransomes created an atmosphere now free of any sparks. "We're no longer having any problems with homeowners complaining about noise."

Weekday teetimes at Sea Cliff begin at 7 a.m. On weekends a golfer can start playing at 6 a.m. The greens are trimmed every day. "Noise and early starts are a real problem," McBrien notes.

COMPARING THE ELECTRICS: RUNNING TIME, IN MINUTES, BETWEEN RECHARGES

	Max.	Min.
Black & Decker (consumer)	67	48
Ransomes (reel)*	360	240
Ryobi (consumer)	100	47
Toro 24-volt (rotary)	114	79
Toro 36-volt (rotary)	206	125

*greensmower

"Now on weekends—when we start really early—everything is electric." The carts carrying equipment and crew are electric, and so is the mower. "We've been very successful with the electric greensmower, it's sure worth the money to us, and we're going to buy a second one."

The pricing is competitive when compared to fossil fuel machines, and the positive impact on the course activities is definitely up to par. "The quality of cut is as good, if not better than, gas," says McBrien.

"It originally was my concern that electric mowers could not mow an entire course," McBrien recalls. "If you can only mow nine holes at a time you need two machines, and that costs twice as much," he points out. "We're able to mow an 18-

hole golf course with one charge."

During the week, the greens are tended by a standard walk-behind mower. "On the weekends there's no way a walk-behind mower can get the course ready in time, so that's when we use the electric riding mower," McBrien explains.

The battery power provides enough juice to get the job done. "You just plug it in (when the day is over) and leave it, and when you come back the next morning it's ready to go."

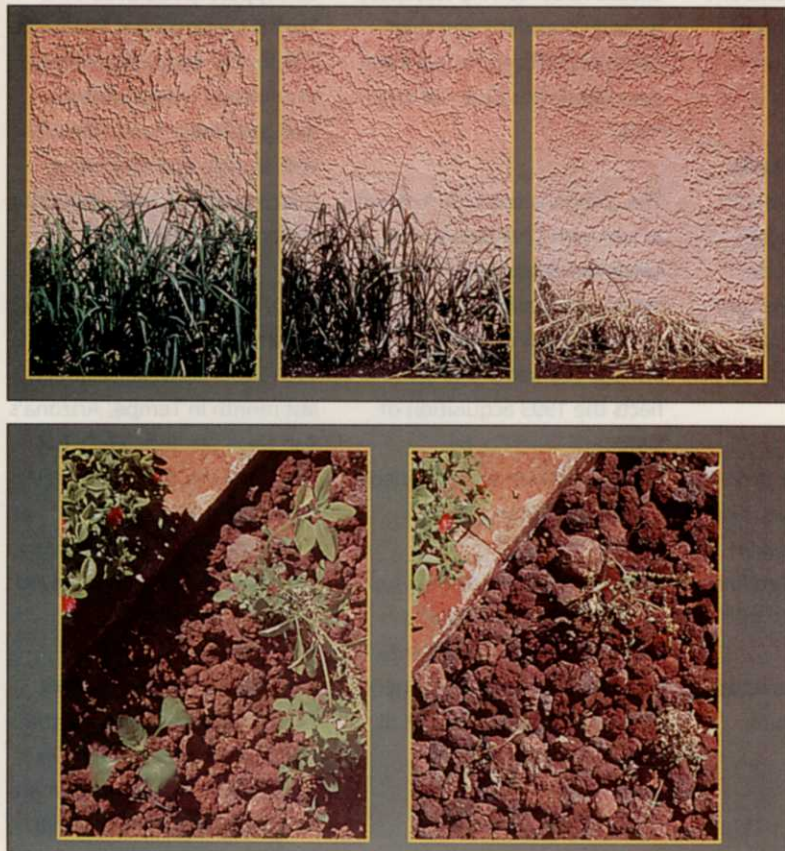
At Calabassas, the electric model is used daily, and Parker appreciates that the mower comes with lights to enable cutting during the dark, pre-dawn hours. It's also quiet. "You can talk in almost a normal tone of voice, and that's important because we're sort of down in a canyon so the noise echoes around."

"It's just like a golf cart," reports McBrien. "It's quiet. It's like a whisper going from green to green. It's got enough power to light the lights, run to the green, and then mow the green when you get there."

Superintendents who are pondering an electric mower need to take into account several factors, such as the terrain and the distance between holes. Hills and long distances can eat up battery power. Get your dealer to lend you a test model. "I tried it out for a couple of days and then I bought it," McBrien notes.

The reels turn faster on an electric, and McBrien and Parker say they adjust the knives differently than they would with a standard mower. That's the type of things you learn during the tryout period.

"Sea Cliff is not a flat course, it's not a hilly course—and that mower does a nice job here," McBrien says, adding that he's charged up over the concept of electric mowers being put to work—quietly and cleanly—by industry professionals faced with a demanding environment: "And I wasn't really aware of this until the homeowners got after me." **LM**



Fast results keep lawn customers happy

When lawn care customers face an intense weed or insect problem in their residential or commercial turf, they usually have no trouble communicating what they want. They want it gone. And it's likely to your benefit to take on that same sense of urgency, lest they embark on an urgent search for a new service provider.

Empathy for customer concerns is most evident in the way you respond to a problem; in your company philosophy; and maybe even in the products you use.

Jeff Mattioli, owner of Blue Tree Landscaping in Norristown, Pa., likes to prove to his customers that he not only cares

about solving their turf care problems, but that he also gives them value for their money.

"It's the attention to detail and establishing rapport that's key to keeping customers happy," says Mattioli.

Joe Loyet, owner of Loyet Landscape & Maintenance in St. Louis, sets stringent response-time

goals: he believes in "doing everything we can to resolve any problem for a customer within 48 hours. Being responsive in our service call operations is really important."

The two men share an interest in new control products. They've started to use Scythe, a relatively new non-selective contact herbicide from Mycogen Corp.

Scythe reportedly burns down weeds in a few hours, thanks to its active ingredient: a naturally-occurring fatty acid that disrupts the weed cell membranes on contact. When applied properly and carefully, the lawn care operator can cut razor sharp lines between desirable and unwanted turf.

According to Mycogen, there is no soil residual activity at normal rates, so areas treated with Scythe can be planted almost immediately.

Application can be made by boom, hand-held or high-volume equipment, but over-the-top spraying is not recommended. It's most effective when applied on warm, sunny days.

"We are always looking to separate ourselves from the competition," says Mattioli. "Our customers always want to see an instant response, something you don't get from any of the other products on the market."

Mattioli and Loyet frequently tank-mix Scythe with glyphosate, to achieve long-term systemic activity. It sounds like these guys have found the best of three worlds.

"Now," says Loyet, "we have proven pre-emergents, a systemic, and an immediate burndown. It helps position us for creating and maintaining satisfied customers."

Loyet says Scythe has reduced callbacks. "Usually, if there is a weed problem in the beds or on curbs, the property manager wants it gone 'yesterday,'" he explains.

"Now, we can tell the customer to walk out the morning after our service call and see the results for himself." **LM**

SUPPLIERS CORNER

Farmers Marketing and Cactus Seed have merged into a new company, **Seeds West**. The new company will be the largest bermudagrass seed company in the world, according to president Sheldon Richardson and vice president Ernie Millner. Corporate headquarters: 4445 N. 24th St., Phoenix, AZ 85016.

Sandoz has released a new reference for planning preventive control of tough golf course diseases, its "1996 Recommended Programs for Sentinel" turf fungicide. Details can be obtained by calling (800) 248-7763.

Don Woodall has joined **Burlingham Seed** as vice president. Since the mid-1980s, Woodall worked for AgriTurf

Co. in Massachusetts, building one of the country's premier golf course seed programs and pioneered the marketing of endophyte-enhanced turf-grasses.

Zajac Performance Seeds' new warehouse supervisor in Albany, Ore. is Michael Billman. The soon-to-be-completed facility will be the consolidation point for Zajac's common and proprietary turf-grasses and mixtures.

Briggs & Stratton has promoted Floyd Bretzman to vice president of its Industrial Engine Division and William Reitman to vice president of marketing. Bretzman was previously director of sales administration; Reitman was marketing director.

A. Montague Miller is **Club Car's** president and new chief executive officer. He was most recently president and chief operating officer. He has been associated with Club Car since 1978.

The company formerly known as Lebanon Chemical is now **Lebanon Seaboard**, according to vice president and chief operating officer Katherine Bishop. The name change reflects the 1993 acquisition of Seaboard Seed Co. by Lebanon, which was founded in 1948 by Vernon Bishop.

Kubota Tractor will be a supplier for the 1996 Olympic Games in Atlanta. It will provide agricultural tractors, generators and pumps for use at various Olympic venues.

Dr. Dennis P. Shepard of Overland Park, Kans., is new technical support specialist at **Ciba Turf & Ornamental Products**. The former assistant professor at Louisiana State University and golf course superintendent will develop and monitor research protocols with university researchers in the West.

Ph.D. perennial ryegrass from **International Seeds** made its 11th Super Bowl appearance last month in Tempe, Arizona's Sun Devil Stadium. Ph.D. has also been the choice for most Super Bowl team practice fields since 1980, even in years when the game itself is played on artificial turf.

Steve Lendvay of the **Garick Corp.** has been named to the Board of Directors of the Ohio Landscapers Association, where he will sit until January, 1998.

Husqvarna Forest & Garden donated a battery-charged trimmer and battery-run mower to the Sierra Club's fifth annual auction last October. The auction helped raise money for conserving natural resources, open space and wildlife habitat in California.

The **Ditch Witch** division of the Charles Machine Works has received ISO 9001 registration for its quality management system by Det Norske Veritas (DNV). The three-year ISO 9001 certification is the most comprehensive of the ISO 9000 conformance standards, because it touches on design, development, installation and servicing not addressed in other ISO standards. **LM**

Info center

VIDEOS AND LITERATURE FOR THE GREEN INDUSTRY

WATER ON THE COURSE...As the perfect working reference, "Guide to Golf Course Irrigation Systems Design and Drainage" covers everything from program scheduling to operation and maintenance of an irrigation program. The 400-page book costs \$45, plus \$3.50 shipping in the U.S. Starting in May, it will be available from: Ann Arbor Press, P.O. Box 310, Chelsea, MI 48118. Phone (800) 858-5299.

CUT LEGAL COSTS...The "CEO's How-to Guide for Successfully Managing and Controlling Attorneys, Legal Costs and Litigation Risks" is \$45, but write your order on letterhead and it's just \$22.50. The 1996 edition, based on actual cases, contains more than 30 pages of tips, techniques, tactics and strategies. Information and ordering: Pickering, Bell & Major, 580 Broadway, Suite 121, Laguna Beach, CA 92651; (714) 376-6188.

INSECT TRAPPING..."How Insect Pest Trapping Can Save You Money" is free from Gempler's. It explains the difference between visual, unbaited and pheromone baited traps, and shows how to interpret the results. Contact: Gempler's, Insect Trapping Guide, P.O. Box 270, Mt. Horeb, WI 53572; phone (800) 382-8473 or fax (800) 551-1128.

INVENTORY CONTROL.



Terra Professional Products Catalog

1996 Edition



Have what you need, when you need it, without the expense of a large inventory. It's easy. Make Terra Professional Products your single, convenient source for insecticides, herbicides, fungicides, adjuvants, fertilizers, micronutrients, turfseed and much more. Choose from a line-up that includes major brands as well as our own high-quality line of Terra Professional Products. All it takes

is a phone call. You'll get the products and service you want *and* the agronomic advice, technical support and product information you need. For your nearest sales and service location, talk to Terra at **1-800-831-1002**.



Terra International, Inc.
P.O. Box 6000
Sioux City, IA 51102

Events

FEBRUARY

25-27: Wisconsin Landscape Federation Winter Convention, Appleton, Wisc. Phone: (414) 529-4705.

27-28: "Current Concepts in Turfgrass Disease Management" symposium, Rutgers Cooperative Extension Advanced Turf Management Symposium, Milltown, N.J. Phone: (908) 932-9271.

27-29: Western Pennsylvania Turf Conference & Trade Show, Pittsburgh Expo Mart. Phone: (412) 796-5692.

28-29: Southern Illinois Grounds Maintenance School, Collinsville, Ill. Phone: (618) 692-9434.

MARCH

1: Landscape and Facilities Seminar, Lincoln, Neb. Phone: (414) 733-2301.

1-2: ALCA Masters in Management seminar, Chicago. Phone: (800) 395-2522.

2: Midwest Chapter STMA Awards Luncheon, Schaumburg (Ill.) Golf Club. Phone: (708) 439-4727.

4-5: Nevada Landscape Association Trade Show and Conference, Reno-Sparks Convention Center. Phone: (702) 356-0909.

4-5: Winter Meeting of the Michigan Forestry and Park Assn., Lansing Holiday Inn South. Phone: Ann Ashby, (517) 482-5530.

6-7 Storms Over the Urban Forest Conference, Nashville, Tenn. Phone: (402) 474-5655.

6-8: Massachusetts Turf Conference, Springfield. Phone: Mary Owen, (508) 892-0382.

7-18: Florissimo 96, Parc des Expositions, Dijon, France. Phone: (+33) 80 77 3900.

8-9: ALCA Masters in Management seminar, Denver. Phone: (800) 395-2522.

9-10: State Garden Show of Texas, Waco Convention Center. Phone: Gloria Gonzales, (817) 772-1270.

11-12: Estimating, by Vander Kooi & Assoc., in Baltimore and Denver. Phone: (803) 971-1724.

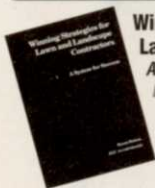
13: Shigo on Trees seminar, Milwaukee. Phone: (402) 474-5655.

14: Tree Health Management, Phoenix. Phone: Bob Bohlman, (602) 263-8889.

21-24: ALCA Student Career Days, Calif. Polytechnic, San Luis Obispo, Calif. Phone: (703) 620-6363.

LANDSCAPE BOOKSTORE MANAGEMENT

GOLF/BUSINESS



Winning Strategies for Lawn & Landscape Contractors
A System for Success
by Brent Demos
136 pages, softcover
Item #653

\$59⁹⁵



Golf Course Management and Construction: Environmental Issues
by James C. Balogh, PhD & William J. Walker, PhD
976 pages, hardcover
Item #637

\$52⁵⁰

Turf Management for Golf Courses
by James Beard
642 pages, hardcover
Item #636

\$96⁰⁰



Call 1-800-598-6008
Outside the U.S. call 216-826-2839

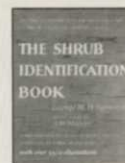
ADVANSTAR MARKETING SERVICES • 7500 Old Oak Blvd. • Cleveland, OH 44130
CODE: 949303

TREES & SHRUBS



A Color Atlas of Pests of Ornamental Trees, Shrubs and Flowers
by David V. Alford
448 pages, hardcover
Item #612

\$84⁹⁵



The Shrub Identification Book
by George Symonds
379 pages, softcover
Item #650

\$19⁵⁰



Diseases and Pests of Ornamental Plants
by Pascal Pirone
566 pages, hardcover
Item #631

\$58⁰⁰



The Tree Identification Book
by George Symonds
272 pages, softcover
Item #651

\$19⁵⁰



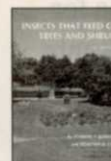
Diseases of Trees and Shrubs
by Wayne Sinclair, Howard Lyon & Warren Johnson
575 pages, softcover
Item #633

\$52⁵⁰



Tree Maintenance
by P.P. Pirone
514 pages, hardcover
Item #652

\$49⁵⁵



Insects that Feed on Trees and Shrubs
by Warren Johnson & Howard Lyon
560 pages, hardcover
Item #645

\$52⁵⁰



Urban Trees
A Guide for Selection, Maintenance, and Master Planning
by Leonard J. Phillips, Jr.
273 pages, softcover
Item #660

\$37⁰⁰



You're Looking At The Reason We Discontinued Our No.1 Trimmer.

INTRODUCING THE NEW ECHO SRM-3100 TRIMMER.

Anyone who knows trimmers knows the Echo SRM-2501. It's been Echo's No. 1 selling commercial trimmer since it's introduction.

But now there's the new Echo SRM-3100. A trimmer so good, in fact, we discontinued the SRM-2501.

In a word, the fantastic new SRM-3100 has just plain more of everything!

25% more power from a larger 30.5cc dual ring piston

engine. 30% more torque for greater productivity.

Quicker and smoother acceleration. More fuel capacity for fewer refill stops. And more cutting line capacity to take you farther between re-loads.

It also has Echo's proven Pro-Fire® Ignition and purge pump-equipped carburetor for fast starts. Plus a quiet, low tone muffler, and vibration reducing hand grips. And it's available in 3 versions: The SRM-3100, the SRM-3100S with solid steel drive shaft, and

the SRM-3110 with dedicated U-handle ready for blade use right out of the box.

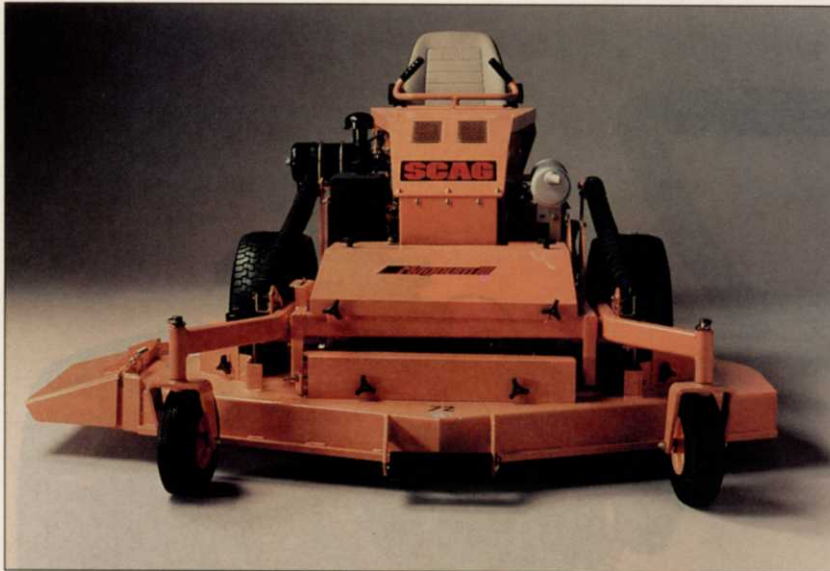
Don't wait. You can put the hottest trimmer in the business to work for you, now! For the Echo Dealer nearest you, call 1-800-432-ECHO (3246).

Or write: Echo Incorporated, 400 Oakwood Road, Lake Zurich, IL 60047.

ECHO

Ask Any Pro!

Circle No. 111 on Reader Inquiry Card



Mower reportedly can stay on the job longer

The new Magnum III diesel-powered mid-size mower has a 28 hp Kubota three-cylinder engine and a 7.5-gallon fuel capacity, allowing it to "stay out on the job longer than any gas-powered mower its size," Scag Power Equipment contends.

Although the Magnum III is built for maximum cutting performance, operators will find its convenient single-pedal foot control and well-balanced design make it handle like a much smaller rider, Scag says. Its heavy-duty pump and wheel motor drive system deliver continuous, even power to the drive wheels.

Circle No. 300



Deere GS series of walk-behind mowers offers range of features

John Deere's GS series of commercial walk-behind mowers are all equipped with five-speed gear transmission.

The line includes traction units with 12.5, 14 or 17 hp Kawasaki engines. They can be paired with a 48-, 54- or new 36-inch mower deck. The latter features two-spindle, timed blades, a larger discharge opening and new discharge chute, 1- to 5-inch

cutting range; and fixed and fabricated deep deck design.

All feature an operator presence system, electric power take-off, separate choke and spring-loaded automatic thumb latch release. Several attachments are optional, including fixed or steerable sulkies.

Circle No. 301



Hustler Hillsider takes mowing on slopes to a new level of safety

The Hustler Model 6400 Hillsider features six-wheel drive for incredible traction and safety on slopes, Excel contends. It also has a wide stance and self-leveling cab with a certified roll-over protection system.

The Hillsider's unique "turning mode" allows it to make a true zero-degree turn without scuffing the turf.

The machine comes with a 72-inch rotary deck and options like a 72-inch dozer blade, a 60-inch v-blade or a 60-inch two-stage snowthrower.

Circle No. 302

Mower cuts to 126 inches wide

Howard Price Turf Equipment has introduced the new Hydro-Power 1280 that has either a 52 or 61-hp diesel engine.

The Hydro-Power 1280 has a 126-inch full floating triplex cutting deck, anti-scalp protection, reduced operating noise levels, and a work station that's ergonomically engineered for comfort and ease of operation.

Circle No. 303



Snapper enlarges its commercial mower offerings with 'Great Dane'

Snapper introduced a commercial line of mowers at last summer's Louisville Expo '95.

Besides the redesigned Pro Series, Snapper unveiled the Great Dane Series, named after Dane Scag, an innovator in commercial mowers. The walk-behinds have 14 to 18-hp engines and floating decks. They are available in 36- to 61-inch cutting widths. The hydro rider (pictured) features a 33 or 40 hp engine with a cutting width of either 61 or 72 inches.

Circle No. 304

New Fine Turf Regulator . . .

Embark[®] Lite

REDUCES MOWING AND STRING TRIMMING COSTS

If you want to decrease your labor budget or increase the efficiency of your grounds crews, Embark[®] Lite is the tool you need.

Order a free copy of our Plant Growth Regulator Application Guide today and see how you can put Embark Lite to work for you.

Circle the readership reply card or write directly to PBI/Gordon Corporation, 1217 W. 12th Street, Kansas City, Missouri 64101.

EMBARK LITE Fine Turf Regulator



An Employee-Owned Company

Be sure to read and follow label instructions

Embark[®] is a registered trademark of PBI/Gordon Corporation.
© PBI/Gordon Corporation 1996



001/296

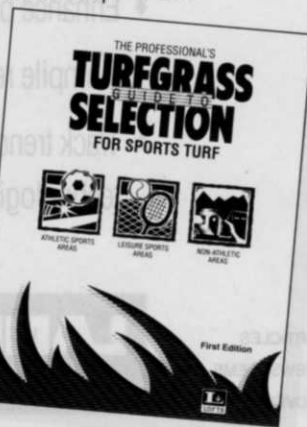
Circle 124

FREE GUIDE TO SPORTS TURF

This free guide to the selection and use of turfgrass is a handy reference for anyone involved in sports turf.

The booklet addresses every area of sports turf... from the fine, dense turf required for precision sports like tennis and croquet to the tough turf needed for rugged sports like football or racetracks.

Geographically arranged, it suggests the appropriate turfgrass species, where to use them and even proposes proper cutting heights and seeding rates. A separate section covers Southern Winter Overseeding. And this new guide is yours for the asking.



Lofts Seed Inc.
Dept. LM
347 Elizabeth Ave.
Somerset, NJ 08873
(800) 526-3890 ext. 250

Circle 117

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
7500 OLD OAK BLVD.
CLEVELAND, OH 44130

> PRODUCT REVIEW

Zero-turn mower boosts Byers Gold line to more than 50 models



Byers Gold has introduced a new zero-turn riding mower that expands its line of commercial lawn and turf equipment to more than 50 models.

The new rider's standard features:

- infinitely forward ground speed up to 8.5 mph,
- dual hydraulic reservoir system,
- cold start feature allows starting of only engine and not entire hydraulic system,
- 48-, 52- and 61-inch widths of cut, and
- 18 hp Briggs & Stratton Twin Vanguard or 18 hp Kohler Command engine.

Circle No. 305

'Mow'n Machines' have zero turn radiuses

Woods Equipment's new 6000 Series Mow'n Machines include seven models ranging from 14 to 24.5 hp with seven engine options including diesel. Versatile attachments such as snow thrower, sweeper and dozer blade enable the Mow'n Machine to be a year-round workhorse.

Models 6140 and 6160 are specially designed to serve the residential and light commercial markets. Models 6180, 6182, 6200, 6215 and 6250 are engineered for large residential areas and commercial mowing.

Mowing decks available are 44, 48 (offset), 52 and 61 inches and include options such as mulching kit or floating deck kit. All models feature four-gallon fuel tanks, larger headlights with halogen bulbs, puncture-proof caster tires, spring-loaded attachment pins and idlers.

Circle No. 306

NO OTHER TRADESHOW
DELIVERS THE PERFECT MIX
OF PRODUCTS, VISITORS
AND ACTIVITIES.



INTERNATIONAL
LAWN, GARDEN &
POWER EQUIPMENT

EXPO96

The Name Says It All

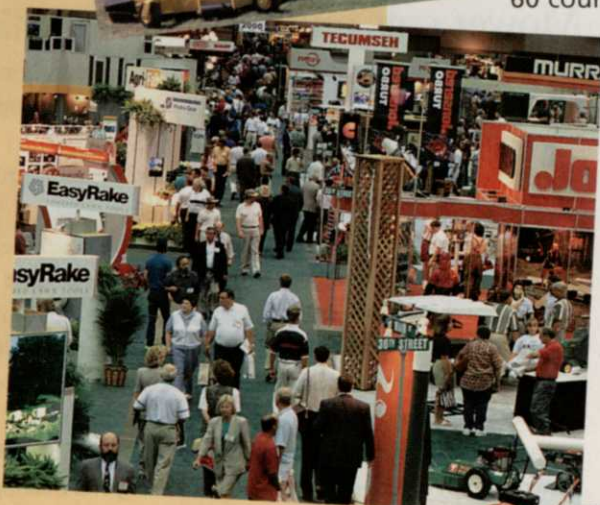
International... 29,000 participants from 60 countries in '95. Dealers, distributors, lawn & garden centers, rental operators, nurserymen, national retailers, commercial landscapers, commercial mowing and maintenance pros, plus suppliers – All find their marketplace in Louisville each year!

Lawn & Garden... 68% of EXPO 95's nearly 600 exhibitors featured or included nonpower products ranging from garden tools and terracotta pots, to patio furniture and barbecue grills. One-stop shopping!

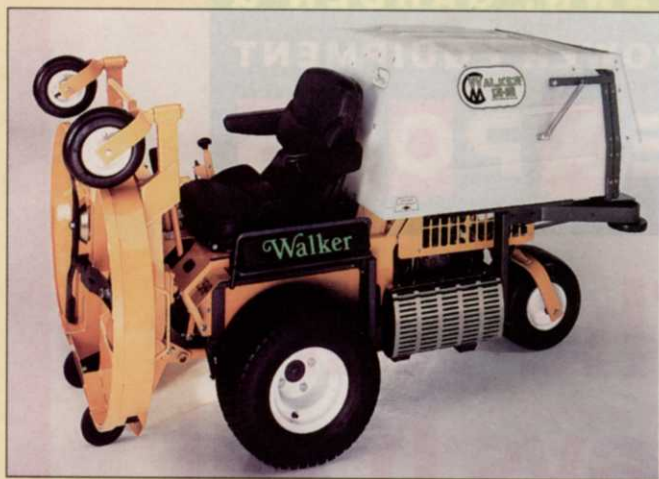
Power Equipment... EXPO is the premier tradeshow for outdoor power equipment for consumer, commercial and rental use. EXPO's giant demo area is open throughout show hours. Try before you buy!

EXPO... Seminars, entertainment, dealer meetings, sightseeing and more!

July 28–30, 1996
Kentucky Exposition Center
Louisville, Kentucky
502-562-1962
FAX 502-562-1970
800-558-8767



>PRODUCT REVIEW



Tilt-up option for 42-, 48-inch decks makes cleaning a snap

Easy deck cleaning and underside maintenance are offered by the new tilt-up deck option for the Walker mower.

A hinged deck carrier frame, large retractable handle on the front of the deck and roller wheels on the back provide quick, easy tilt-up of the deck assembly. One person can tilt the deck

up and then lower to the normal operating position in 15 seconds, Walker says.

For safety, the cutter blades are automatically locked and cannot be operated in the tilt-up position.

A retrofit kit will be available to install the tilt-up option on earlier models with 42- or 48-inch decks.

Circle No. 307



This zero-turn rider is made for everyone

Commercial landscapers and homeowners alike can appreciate the features of the new Yazoo YZTK20, specially designed for high productivity on dense terrain.

They include: Hydro-Gear, stick-piston hydraulic pumps, 20 hp Kohler Command OHV engine and 48-inch cutting deck made of 12-gauge steel.

Steering is by the twin-stick method for zero turn radius. Cutting heights are one, two, three or four inches.

For more information, phone toll-free (800) 723-9496 or

Circle No. 308

Mower cuts and trims at same time

The Grazer mower from Ingersoll Equipment Co. cuts more acres of turf in less time because of its higher ground speed and wide deck.

A 5-gallon capacity fuel tank maximizes continuous cutting time.

Engine, transmission and operator weight are positioned to pivot over the axle for superior performance on slopes and hills.

The forward deck is positioned so that the operator can easily cut under fences, shrubs and bushes for minimal trimming time.

Wheels are positioned behind the deck for an even cut every time because grass remains upright before being moved.

Large discharge chute helps to prevent clumps of grass from forming which in turn eliminates after-mowing and cleanup.

Circle No. 309

Flail mowers eliminate raking and bagging clippings

Alamo's AC48 and AC60 flail mowers can be used in parks, on golf course fairways, playgrounds, schoolyards and other areas where a smooth cut and finish is needed.

Raking and bagging clippings is not required because windrowing is eliminated by distributing the finely-clipped grass the entire width of the flail mower. By discharging the clipped grass downward, instead of outward, there is less chance for accidents caused by flying material. The AC48 has a four-foot cutting width and the AC60 has a five-foot cutting width.

The mowers will fit on smaller tractors. The AC48 may be mounted on a 12- to 25-hp tractor while the AC60 requires a 15- to 25-hp tractor.

Circle No. 310

NEW JERSEY '96 LANDSCAPE

"Meeting the Needs of the Green Industry Professional"

19th ANNUAL TRADE SHOW and CONFERENCE



AT HARMON MEADOW
SECAUCUS, NEW JERSEY

WEDNESDAY
FEBRUARY 28, 1996
8:30 AM - 4:30 PM

SPONSORED BY:
ASSOCIATED LANDSCAPE CONTRACTORS
OF NEW JERSEY
AND
BERGEN COUNTY LANDSCAPE
CONTRACTORS ASSOCIATION

***TRADE SHOW:** A world of new ideas, methods and materials awaits the green industry professional at **NEW JERSEY LANDSCAPE '96**. Time and money savings for landscape contractors, lawn care operators, chemical applicators, grounds maintenance supervisors, irrigation installers, arborists, cemetery managers, property managers, school building/grounds supervisors, parks and recreation supervisors, municipalities and related occupations. See over 130 companies exhibiting everything you need to be successful in today's economy.

- Turf Equipment
- Landscape Materials
- Horticultural Supplies
- Power Equipment
- Irrigation Supplies
- Fertilizers
- Pesticides
- Concrete Pavers/Walls
- Construction Equipment
- Custom Fencing
- Nurseries
- Annual/Perennial Growers
- Professional Uniform/
Clothing Companies
- Snow Plows/Salters
- Trucks/Truck Bodies
- Trailers
- Leasing Companies
- Computer Software/Services
- Insurance Companies
- Sod Farms/Growers

***CONFERENCE:** Seminars presented by Rutgers University Cooperative Extension Service. DEP Recertification credits offered. **Special Guest Speakers.**

>PRODUCT REVIEW

A time-saver that's also convenient to use

The new Zipper-TS commercial mower is designed for the grounds maintenance professional. It's safe, reliable, easy to transport and has a steel frame and body.

Cutting widths are available from 44 to 74 inches, and engine sizes from 14 to 22 hp. It also has a zero turn steering system.

Other features:

- lift-back deck for easy cleaning, servicing and storage,
- flip-open hood for easy access and maintenance of all major components,
- user-friendly instrument panel and cushioned steering grips,
- optional dual tailwheels install in just minutes, and
- optional 5.5-bushel vacuum grass-catcher system.



Circle No. 311

Power to spare with this front mower

The Kubota F3060 front mower is equipped with a hefty 30-hp, liquid-cooled, four-cylinder diesel engine. It comes with either a 60 or 72-inch deck with side discharge.

Designed to deliver maximum mowing performance, the F3060 features new dual-acting overrunning four-wheel drive with a clutch to prevent turf scuffing; hydrostatic transmission; and hydraulic independent power take-off.

The tilt-up mowers, designed for easy service, feature a cutting height from 1 to 4 inches. A tilt steering wheel, power steering, deluxe high-back seat with armrest and an easy-to-read instrument panel ensure maximum operator comfort and convenience.

Circle No. 312



Fast rider: commercial quality, consumer price

Encore's new Z42 is a fast, efficient intermediate riding mower with a new quality/cost standard, according to Encore's Dick Tegtmeier. Even though the mower was built for commercial use, it is "priced within the consumer range."

Top speed of the Z42 is 7 mph. It has zero-turning-radius ability, and its wide stance increases stability and gives maximum control over rough terrain.

The 42-inch cutting deck has both anti-scalp rollers and large turf tires. The deck itself is 11-gauge steel with 10-gauge wear strips and 7-gauge reinforcement bars. It's made to resist warp and blade vibration, too.

The Z42 has a 16-hp Briggs & Stratton Vanguard v-twin engine with side discharge, mulching deck or grass catcher.

Circle No. 313

Reel mower powered by low-emissions engine

Jacobsen's new Tri-King 1900D triplex reel mower is designed with a new, 19 hp, liquid-cooled, low-emissions Kubota diesel engine for greater power and performance.

"The new Tri-King is also easier to operate," says Steve Yolitz, company director of product management. According to Yolitz, the new steering system and three-wheel drive offers better maneuverability and operator comfort.

New, heavy-duty Eaton 2000 Series traction motors, plus a larger fan and high-flow water pump are features that have been designed in to make the Tri-King more reliable.

Tri-King mowers feature 72-inch and 84-inch cutting widths, with five- and ten-blade reels. Seven-blade reels will be available in mid-1996.

Circle No. 314

cont. from page 32



Stihl 044: carburetor is heated



Shindaiwa 577: advanced filter



McCulloch 5700: for serious cutters

These are two machines at the opposite ends of the professional spectrum. If—more likely—you want something in between, you'll be surprised how many different kinds of features are available.

For instance, Stihl's 023L is called "the world's quietest gasoline-powered chain saw" because its noise level is just 92dBa at the operator's ear. Standing at someone using an electric typewriter, the company says, is like standing 33 feet from someone

running an 023L.

Because such a wide range of features is available, the commercial chain saw user can also choose the protection and the power needed in extremely dusty conditions. And Shindaiwa's 577 and 488 offer advanced filtration options (the Power Pro Air Filter) for just that kind of use.

Here, then, are some of the sizes and styles of chain saws for the professional user. This month, we've included phone numbers in the company listings to make it even faster to receive information on the product.

—Jerry Roche

AD INDEX

101	American Cyanamid	Cv2-1
102	American Cyanamid	31
103	Agrevo	9G
104	Bayer Corp	11G
105	Bayer Corp	36
106	Bayer Corp	40
107	Bayer Corp	12-13L
108	Bayer Corp	2-3L
109	Bayer Corp	2-3G
110	Bush Hog	Cv3
	Dow Elanco	7
	Dow Elanco	9
111	Echo	37
112	Grasshopper	11
113	Howard Price	19
114	Husqvarna	5
	Int'l Lawn Garden	41
	ISK Biosciences Insert (Regional)	
12a-12d		
115	Jacklin Seed	26-27
116	John Deere	8-9L
117	Lofts	39
118	Melroe Co.	29
119	Monsanto	17
120	Mycogen Corp.	3
121	New Holland	5L
122	Oregon Tall	25
123	PBI Gordon	23
124	PBI Gordon	39
125	Sandoz Agro Inc	15L
126	Sandoz Agro Inc	17L
127	Sandoz Agro Inc	19L
128	Sandoz Agro Inc	20-21L
129	Scag	23L
130	Tee 2 Green	Cv4
131	Terra	12-13
132	Terra	35
133	Valent (Regional)	43
134	Walker Mfg	11L
135	Wells Cargo	16L
136	Wilbur Ellis	7G

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

LANDSCAPE management

For all ads under \$250, payment must be received by the classified closing date. VISA, MASTERCARD, & AMERICAN EXPRESS accepted. Send to: Advanstar Marketing Services, 7500 Old Oak Blvd., Cleveland, OH 44130.

Send blind box replies to: Landscape Management, 131 W. First St., Duluth, MN 55802 (Include box number in address.)

Every month the Market Showcase offers the readers of Landscape Management a complete and up-to-date section of the products and services you're looking for. Check it out every month, or you might miss out.

FOR ADVERTISING INFORMATION AND AD PLACEMENT, CONTACT:

Dan Hoke, 216-891-2762
1-800-225-4569 (ext. 762)
Fax 216-826-2865

EQUIPMENT FOR SALE

**Not Cheaper!
Not Bigger!
Just Better!**



**UNDERGROUND
CABLE-LAYER,
PIPE-LAYER**

TRANSPORTS
VAN, MINI-TRUCK
25" WIDTH

SINCE
1972



800 LB.
ON TRACKS
TO 16" DEPTH



Line-Ward Corp.
157 Seneca Creek Road
Buffalo, New York 14224
Fax: (716) 674-5334

Phone: (716) 675-7373 / (800) 816-9621

TRUCKCRAFT



PICKUP INSERT DUMPER
For FREE brochure, call toll free 24 hr.
1-800-755-3867
WE SHIP NATIONWIDE

Need Subscription Information?
Call 800-346-0085, ext 477

FOR SALE

**Creative
curb**

Concrete Curb &
Landscape Border
Equipment



Create
Beautiful
Concrete Borders & Curbs
for Less than Half the Cost
of Conventional Methods!

- Add on to your services/profits
- Low maintenance/easy to use
- Self-propelled, electric or gas powered
- Create various shapes and sizes
- Durable curbing is freeze/thaw tolerant

23362 Madero Rd., Suite E • Mission Viejo, CA 92691
(714) 587-8488 • (800) 292-3488 • FAX: (714) 587-9680

Classified Works!

EDUCATIONAL OPPORTUNITIES

Become a CERTIFIED
TURFGRASS PROFESSIONAL

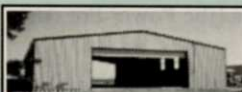
Train at home; master up-to-date turfgrass management practices and procedures. Covers 14 topics for all regions of U.S. Certification by The University of Georgia and PLCAA.



Contact Karen Bishop,
1-800-542-8097, UGA,
Georgia Center, 191,
Athens, GA 30602-
3603, for a brochure.

Circle No. 302 on Reader Inquiry Card

MISCELLANEOUS



30'x40'x10'
\$4,459

Build it yourself and save MONEY 5,000 sizes, all bolt-together ALL STEEL BUILDINGS. Call today for a price quote and a brochure.

HERITAGE BUILDING SYSTEMS
800-643-5555

FOR SALE

Landscape maint. co. servicing S.E. FL for over 20 yrs. \$800,000 + gross extensive inventory, owner relocating, serious inquiries only:

Landscape, P.O. Box 1853,
Pompano Beach, FL 33061

SPECIMEN CREPE MYRTLE TREES

Landscape firm has approx. 300 specimen quality, especially large callipered multi-trunked crepe myrtle trees. All boxed and professionally maintained ready for shipment. Trees wholesale valued by size (up to 25' tall with 15'-20' spread) from \$600-\$1500 each. Make offer for all or will sell in lots of 50.



CHARLIE @ 713/777-7399

- 2 Lesco hand aerators
 - 2 Lesco lawn renovators
 - 1 J. D. 3' 3pt hitch aerator
 - 1 3pt PTO Olathe slice seeder model 38.
- Price negotiable.

Call **PRO-LAWN-PLUS AT 410-426-1111**

Learn LANDSCAPING

TRAIN AT HOME for an exciting hobby or profitable career. Start your own spare or full time contracting business, work in the garden/nursery field or landscape your own property - we show you how. Diploma awarded. **FREE BROCHURE** describes opportunities. *No salesmen, 1047*

Write or call today! 1-800-326-9221

Lifetime Career Schools, Dept. LF0126
101 Harrison St., Archbald, PA 18403

Accredited Member, Distance Education & Training Council



Reserve Ad Space
in the next issue of
**Landscape
Management**

Call Dan Hoke:
216-891-2763

or fax your copy to him at
216-826-2865

SOFTWARE

TRIMS for Windows

The World's Most Popular Grounds Management Software is now available for Microsoft Windows.

TRIMS for Windows Includes:

- Budgets & Expenses Tracking
- Inventory & Purchase Orders
- Personnel & Labor Activity Records
- Equipment Maint. & Work Orders
- Chemical & Fertilizer Records
- Irrigation & Weather
- Fuel Reporting
- Event Scheduling
- TRIMS DrawView for site plans

TRIMS Software International
3110 N. 19th Ave. - Suite 190
Phoenix, AZ 85015

For More Information Call:
(800) 608-7467 or (602) 277-0067

LANDSCAPE
management

**GOLF COURSE
MARKETPLACE**

Reach over
21,000 key market
decision makers
in the new

**Landscape Management
GOLF COURSE
MARKETPLACE**

Call Dan Hoke
at 800-225-4569 ext. 762
or reach him by fax 216-826-2865.

FOR SALE

TURBO TURF

HYDRO SEEDING SYSTEMS



- Seed-mulch-fertilize
- Faster germination
- Lower seeding costs
- 1 man operation
- No messy straw
- Units start @ \$1295

FOR A FREE HYDRO SEEDING INFO PACK CALL

BADGER ASSOCIATES
1108 THIRD AVE. NEW BRIGHTON PA 15066
800-822-3437

LANDSCAPE
management

CLASSIFIEDS

For all ads under \$250, payment must be received by the classified closing date. We accept Visa, Mastercard & American Express. Credit card orders are accepted by phone. Send ad copy with payment to Dan Hoke, LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130 or call 216-891-2762. Fax Number 216-826-2865.

BOX NUMBER REPLIES: Mail box number replies to: LANDSCAPE MANAGEMENT, Classified Ad Department, 131 W. 1st St., Duluth, MN 55802-2065. Please include box number in address.

HELP WANTED

Harder Tree and Landscape Service, a 74 year old full service tree and landscape company is seeking qualified individuals for the following positions:

- ✂ **Tree care sales**, must have 5 yrs. experience in residential tree sales. Knowledge of integrated pest management a plus.
- ✂ **Landscape Architect/designer**, must possess strong organizational and communication skills. Landscape architecture or horticultural degree desired.
- ✂ **Landscape maintenance manager/supervisor**, Minimum 5 yrs. experience in turf management, strong supervisory skills needed. Competitive salary and benefits based on experience.

Send or fax resume to:

HARDER TREE AND LANDSCAPE SERVICE
63 Jerusalem Av., Hempstead, NY 11550
Fax: 516-481-8846 EOE

PROJECT MANAGER/ARCHITECT

Leading, well established, full service, landscape company located in Atlanta, GA has a position for an experienced Project/Installation Mgr. to coordinate and manage high-end residential and commercial landscape installation projects. Position is responsible for managing project installations from start to finish; scheduling; client contact; and employee management. Must be a professional with good communication skills. Landscape Architect/design background a plus. BS in Landscape Management/Design or related field required. Competitive salary, comprehensive benefits package, bonus program, etc.

Send Resume to: Project Manager; 4497 Windsor Oaks Drive; Marietta, GA 30066.

MAINTENANCE MANAGER Well established, San Francisco based landscape contractor has immediate opening for operations manager in its interior/exterior maintenance department. We are seeking an experienced and goal-oriented individual. Knowledge of landscape maintenance, pest control, irrigation. Position includes sales, estimating, administration of contracts, staff management, quality control, billing, etc. Please fax resume to (415)621-2324, mail to Korotkin Associates, 75 Spencer, San Francisco, CA 94103, or call (415)621-7173. 2/96

Premier Landscape Maintenance/Construction Company has openings for managers in golf construction, commercial grounds maintenance, landscaping and irrigation. We are a leading regional company, serving the greater St. Louis area for 17 years. Successful applicants must be a proven leader and self starter with a commitment to excellence in quality and customer service. Degree and/or experience in related field is preferred. Year round employment, benefit package and advancement opportunities. Send resume to: Manager, P.O. Box 8068; Belleville, IL 62222. 2/96

SALES REPRESENTATIVES

Greener Pastures is seeking commission based reps calling on the turf industry. Our commercial line of sewage free organic granular & liquid fertilizers are currently sold nationally. Protected territory. No stocking requirements. Send your resume to:

GREENER PASTURES
P.O. Box 18404, MINNEAPOLIS, MN 55418
OR FAX (612) 331-2357

Atlantic Landscapes Opportunities: We are currently seeking key people to work interior and/or exterior. We offer competitive salary, excellent benefits and unlimited opportunities in our: Richmond, VA; Hampton Road, Virginia Beach, VA; and Research Triangle, Raleigh, NC offices. Please call, fax or mail us a resume. Atlantic Landscapes, 1400B Nowell Rd., Raleigh, NC 26717. Phone 919-233-2930. Fax 919-233-2941. 2/96

MAINTENANCE SUPERVISOR/CHEMICAL OPERATIONS: Industry leader, established firm with a reputation for exceptional quality seeking individuals with 4 or more years of experience in full-service lawn and landscape maintenance of executive commercial and residential properties. Must be an enthusiastic self-starter, people oriented and organized. Strong supervisory skills and a good driving record required. Send resume to: Carey's Professional Turf, P.O. Box 3534, Des Moines, IA 50322. 2/96

Need Subscription Information? Call 800-346-0085, ext 477

HELP WANTED

MAINTENANCE ACCOUNT MANAGER

Come join one of the most prestigious, award winning, landscape companies in the Southeast. Maintenance Manager with min. 5+ years horticulture and account management experience needed. This exciting position, located in Atlanta, GA, is responsible for account profitability, renewals, referrals; employee mgmt./training; management of maintenance program, etc. Must have BS in Horticulture or related field, expert knowledge on insect & disease I.D./control and plant I.D.: sales ability, Competitive salary, bonus program, excellent benefits, etc.

Send Resume to: **Gibbs Landscape Co.; Human Resources; 4055 Atlanta Rd.; Smyrna, GA 30080; or FAX to (770) 432-9809.**

Grounds Maintenance and Enhancement Supervisors & Managers

Become a part of one of Washington's fastest growing team of landscape professionals. Come and work for a company that recognizes quality as a daily occurrence and knows that customer satisfaction is a successful driving force.

Positions are full-time with exceptional compensation, benefits, and advancement opportunities. Mail or fax your resumé today to: **Tom Davis, Bozzuto Lanscaping Company, 15127 Marlboro Pike, Upper Marlboro, MD 20774, Fax No.: 301-627-7011.**

Landscape Production/ Division Manager

Well-established, full-service company seeks ambitious, quality oriented person for scheduling, managing men and equipment, purchasing and maintaining quality of landscape maintenance division. Excellent working conditions, wages, benefit package. The salary ranges for these positions are based on experience:

PRODUCTION MANAGER \$27,000 to \$33,000
DIVISION MANAGER \$33,000 to \$67,000

Mid-western candidates preferred. For confidential consideration, send resume with salary history to Panoramic Landscape Management, Inc., Human Resources, 1470 Industrial Drive, Itasca, IL 60143, (708) 285-0300.

LAWN CARE SPECIALIST

Lucky Lawn Service, Inc. is seeking an individual who is self-motivated, dependable, hardworking and is serious about making a career in lawn care. This person must be able to communicate with customers, sell our program, do paperwork and be safety conscious. A college degree and/or turfgrass knowledge would be helpful but is not necessary. We offer competitive wages and benefits. Call or send resume to:

Resume, P.O. Box 1153, Enterprise, AL 36331, 1-334-347-8873

Reserve Ad Space
in The Next Issue by calling
Dan Hoke:
216-891-2762

Classified Advertising Pays...Make it Pay for YOU!

BUSINESS FOR SALE

COMPLETE NURSERY, RETAIL SALES and MAINTENANCE BUSINESS in **PIEDMONT, NORTH CAROLINA... HIGH GROWTH RETIREMENT and RESORT AREA.** On busy highway. Thriving and growing. Owner will stay for transition. Call John McKeithen, Gouger, O'Neal & Saunders, Inc., 800-672-2228 or 910-692-2696. 2/96

BUSINESS FOR SALE-SOUTH FLORIDA Landscape Design and Build Company. Award winning and profitable. Annual sales \$3mm. Established 33 years. Call Inter-American Corporate Acquisition Group Broker - Boca Raton 407-750-9750. 2/96

BUSINESS OPPORTUNITIES

FREE! LAWN AND PEST CONTROL SURVIVAL CATALOG. Non-Compete Agreements, Equipment Assignment, Office Forms, Contracts, Sales Letters. **A+BB** 1505 S.E. Elm St., High Springs, Florida 32643. Voice-24HRS. 1-800-308-4522 ext. 3 2/96

EDUCATIONAL OPPORTUNITIES

NOW...LEARN PROFESSIONAL LANDSCAPING AND GARDENING AT HOME! Accredited program provides thorough training in all phases of commercial and residential landscaping. Diploma awarded. Free brochure describes program and opportunities in detail. Call 1-800-326-9221 or write Lifetime Career Schools, Dept: LF01X7, 101 Harrison Street, Archbald, PA 18403. 6/96

WHOLESALE DISTRIBUTOR

Needed to market environmentally friendly, liquid, slow-release fertilizer products direct from manufacturer. Ken Franke, P.O. Box 123, Plato, MN 55370; 800-832-9635. 10/96

FOR SALE

Retail Nursery-Garden Center-Landscape Contractor. Established 1972 in growing central Florida community on East Coast. Resort & Retirement area over 4 acres on busy 4-lane highway. Greenhouses, Silk-Basket-Christmas Shops and office. Large inventory. Owner retiring. **904-427-3531.** 2/96

3 LOCKE mowers, 75" Triplex walk behinds, 9 HP, reels have many sharpenings left. Good running condition, many spare parts, will sell all 3 at \$2,250, or will separate-\$1,100, \$900, \$700 respectively. Call **401-624-8886.** 2/96

BUCKET TRUCK: Hi Ranger 65', 57', 50'. Sky-workers with chip boxes. Asplundh bucket trucks with chip boxes. Asplundh brush chippers. Bean 55 gal. sprayers, Pete Mainka Enterprises, 633 Cecelia Drive, Pewaukee, WI 53072. 800-597-8283. 12/96

Free Catalog 150+ Pages of Mower Parts. Engines, Blades, Tires and Tons of other Turf Supplies! Call Toll Free 24hrs 1-800-428-8004. Our 11th Year! 3/96

LEASE FINANCING

LEASE any type equipment for your business. Call AmeriNet Financial (216)543-3800. 3/96

EQUIPMENT FOR SALE

SPYDERS- New/Used/Rebuilt. Full line of replacement parts and update kits. Kubota, Ruggerini, and Kohler engines & parts. Nichols-Fairfield torque hubs. We repair and rebuild Spyder hydraulic pumps and motors. **FAST SERVICE.** Call or write: Mobile Lift Parts Inc., 5402 Edgewood, Crystal Lake, IL 60012. (800)397-7509, FAX (815)455-7366. 12/96

LANDSCAPE management

MARKET SHOWCASE, GOLF COURSE MARKETPLACE, CLASSIFIED ADVERTISING

For all ads under \$250, payment must be received by the classified closing date. We accept VISA, MASTERCARD & AMERICAN EXPRESS. Credit card orders are accepted by phone.

ISSUES	CLOSING DATES
April 1996	3/7
May 1996	4/8
June 1996	5/8
July 1996	6/6
August 1996	7/8
September 1996	8/8
October 1996	9/6
November 1996	10/8
December 1996	11/6

(Please call Sales Rep to confirm dates.)

SEND AD COPY WITH PREPAYMENT TO: Dan Hoke, **LANDSCAPE MANAGEMENT**, 7500 Old Oak Blvd., Cleveland, OH 44310. For more information call: 1-800-225-4569 or 216-891-2762, Fax: 216-826-2865.

Receive FREE information on products and services advertised in this issue.

LANDSCAPE
management

FEBRUARY 1996

*This card is void
after April 15, 1996*

NAME _____
TITLE _____
FIRM _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE (____) _____ FAX (____) _____

I would like to receive (continue receiving)
LANDSCAPE MANAGEMENT each month: Yes no

Signature: _____ Date: _____

1. MY PRIMARY BUSINESS AT THIS LOCATION IS: (check only ONE in either A, B or C)

A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:

- | | |
|---|--|
| 01 <input type="checkbox"/> 05 Golf Courses | 08 <input type="checkbox"/> 40 Private/Public Estates & Museums |
| 02 <input type="checkbox"/> 10 Sport Complexes | 09 <input type="checkbox"/> 45 Condominiums/Apartments/Housing Developments/Hotels/Resorts |
| 03 <input type="checkbox"/> 15 Parks | 10 <input type="checkbox"/> 50 Cemeteries/Memorial Gardens |
| 04 <input type="checkbox"/> 20 Rights-Of-Way, Maintenance for
Highways Railroads & Utilities | 11 <input type="checkbox"/> 55 Hospital/Health Care Institutions |
| 05 <input type="checkbox"/> 25 Schools, Colleges & Universities | 12 <input type="checkbox"/> 60 Military Installations & Prisons |
| 06 <input type="checkbox"/> 30 Industrial & Office Parks/Plants | 13 <input type="checkbox"/> 65 Airports |
| 07 <input type="checkbox"/> 35 Shopping Centers, Plazas & Malls | 14 <input type="checkbox"/> 70 Municipal Government/Municipal Facilities |
| | 15 <input type="checkbox"/> Other (please specify) _____ |

B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:

- | | |
|--|---|
| 16 <input type="checkbox"/> 105 Landscape Contractors (Installation & Maintenance) | 20 <input type="checkbox"/> 125 Landscape Architects |
| 17 <input type="checkbox"/> 110 Lawn Care Service Companies | 21 <input type="checkbox"/> 130 Land Reclamation & Erosion Control |
| 18 <input type="checkbox"/> 112 Custom Chemical Applicators (Ground & Air) | 22 <input type="checkbox"/> 135 Extension Agents/Consultants for Horticulture |
| 19 <input type="checkbox"/> 120 Tree Service Companies/Arborists | 23 <input type="checkbox"/> 140 Irrigation Contractors |
| | 24 <input type="checkbox"/> Other Contractor or Service _____ |

C. SUPPLIERS:

- 25 210 Sod Growers, Turf Seed Growers & Nurseries
26 215 Dealers, Distributors, Formulators & Brokers
27 220 Manufacturers

2. WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TITLE? (check ONE only)

- 28 10 EXECUTIVE/ADMINISTRATOR: President, Owner, Partner, Director, General Manager, Chairman of the Board, Purchasing Agent, Director of Physical Plant
29 20 MANAGER/SUPERINTENDENT: Arborist, Architect, Landscape/Ground Manager, Superintendent, Foreman, Supervisor
30 30 GOVERNMENT OFFICIAL: Government Commissioner, Agent, Other Government Official
31 40 SPECIALIST: Forester, Consultant, Agronomist, Pilot, Instructor, Researcher, Horticulturist, Certified Specialist
32 50 OTHER TITLED AND NON-TITLED PERSONNEL: (please specify) _____

3. SERVICES PERFORMED: (check ALL that apply)

- | | |
|--|---|
| 33 <input type="checkbox"/> A Mowing | 41 <input type="checkbox"/> I Landscape/Golf Design |
| 34 <input type="checkbox"/> B Turf Insect Control | 42 <input type="checkbox"/> J Turf Weed Control |
| 35 <input type="checkbox"/> C Tree Care | 43 <input type="checkbox"/> K Paving, Deck & Patio Installation |
| 36 <input type="checkbox"/> D Turf Aeration | 44 <input type="checkbox"/> L Pond/Lake Care |
| 37 <input type="checkbox"/> E Irrigation Services | 45 <input type="checkbox"/> M Landscape Installation |
| 38 <input type="checkbox"/> F Turf Fertilization | 46 <input type="checkbox"/> N Snow Removal |
| 39 <input type="checkbox"/> G Turf Disease Control | 47 <input type="checkbox"/> O Other (please specify) |
| 40 <input type="checkbox"/> H Ornamental Care | |

4. WHAT IS YOUR ANNUAL BUDGET FOR EQUIPMENT,
CHEMICALS, SUPPLIES? (please check one)

- 48 1 Less than \$50,000 51 4 \$250,001-500,000
49 2 \$50,000-\$100,000 52 5 More than \$500,000
50 3 \$100,001-\$250,000

101	119	137	155	173	191	209	227	245	263	281	299
102	120	138	156	174	192	210	228	246	264	282	300
103	121	139	157	175	193	211	229	247	265	283	301
104	122	140	158	176	194	212	230	248	266	284	302
105	123	141	159	177	195	213	231	249	267	285	303
106	124	142	160	178	196	214	232	250	268	286	304
107	125	143	161	179	197	215	233	251	269	287	305
108	126	144	162	180	198	216	234	252	270	288	306
109	127	145	163	181	199	217	235	253	271	289	307
110	128	146	164	182	200	218	236	254	272	290	308
111	129	147	165	183	201	219	237	255	273	291	309
112	130	148	166	184	202	220	238	256	274	292	310
113	131	149	167	185	203	221	239	257	275	293	311
114	132	150	168	186	204	222	240	258	276	294	312
115	133	151	169	187	205	223	241	259	277	295	313
116	134	152	170	188	206	224	242	260	278	296	314
117	135	153	171	189	207	225	243	261	279	297	315
118	136	154	172	190	208	226	244	262	280	298	316



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO 950 PITTSFIELD MA

POSTAGE WILL BE PAID BY ADDRESSEE

LANDSCAPE
management

ADVANSTAR COMMUNICATIONS INC
PO BOX 5054
PITTSFIELD MA 01203-9697



Receive FREE information on products and services advertised in this issue.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO 950 PITTSFIELD MA

POSTAGE WILL BE PAID BY ADDRESSEE

LANDSCAPE management

ADVANSTAR COMMUNICATIONS INC
PO BOX 5054
PITTSFIELD MA 01203-9697



LANDSCAPE
management

FEBRUARY 1996

*This card is void
after April 15, 1996*

NAME _____
TITLE _____
FIRM _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE (____) _____ FAX (____) _____
HAVE A SALES REP CALL ME 18 (A)

I would like to receive (continue receiving)

LANDSCAPE MANAGEMENT each month: Yes no

Signature: _____ Date: _____

1. MY PRIMARY BUSINESS AT THIS LOCATION IS: (check only ONE in either A, B or C)

A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:

- | | |
|---|--|
| 01 <input type="checkbox"/> 05 Golf Courses | 08 <input type="checkbox"/> 40 Private/Public Estates & Museums |
| 02 <input type="checkbox"/> 10 Sport Complexes | 09 <input type="checkbox"/> 45 Condominiums/Apartments/Housing Developments/Hotels/Resorts |
| 03 <input type="checkbox"/> 15 Parks | 10 <input type="checkbox"/> 50 Cemeteries/Memorial Gardens |
| 04 <input type="checkbox"/> 20 Rights-Of-Way, Maintenance for
Highways Railroads & Utilities | 11 <input type="checkbox"/> 55 Hospital/Health Care Institutions |
| 05 <input type="checkbox"/> 25 Schools, Colleges & Universities | 12 <input type="checkbox"/> 60 Military Installations & Prisons |
| 06 <input type="checkbox"/> 30 Industrial & Office Parks/Plants | 13 <input type="checkbox"/> 65 Airports |
| 07 <input type="checkbox"/> 35 Shopping Centers, Plazas & Malls | 14 <input type="checkbox"/> 70 Municipal Government/Municipal Facilities |
| | 15 <input type="checkbox"/> Other (please specify) _____ |

B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:

- | | |
|--|---|
| 16 <input type="checkbox"/> 105 Landscape Contractors (Installation & Maintenance) | 20 <input type="checkbox"/> 125 Landscape Architects |
| 17 <input type="checkbox"/> 110 Lawn Care Service Companies | 21 <input type="checkbox"/> 130 Land Reclamation & Erosion Control |
| 18 <input type="checkbox"/> 112 Custom Chemical Applicators (Ground & Air) | 22 <input type="checkbox"/> 135 Extension Agents/Consultants for Horticulture |
| 19 <input type="checkbox"/> 120 Tree Service Companies/Arborists | 23 <input type="checkbox"/> 140 Irrigation Contractors |
| | 24 <input type="checkbox"/> Other Contractor or Service _____ |

C. SUPPLIERS:

- 25 210 Sod Growers, Turf Seed Growers & Nurseries
26 215 Dealers, Distributors, Formulators & Brokers
27 220 Manufacturers

2. WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TITLE? (check ONE only)

- 28 10 EXECUTIVE/ADMINISTRATOR: President, Owner, Partner, Director, General Manager, Chairman of the Board, Purchasing Agent, Director of Physical Plant
29 20 MANAGER/SUPERINTENDENT: Arborist, Architect, Landscape/Ground Manager, Superintendent, Foreman, Supervisor
30 30 GOVERNMENT OFFICIAL: Government Commissioner, Agent, Other Government Official
31 40 SPECIALIST: Forester, Consultant, Agronomist, Pilot, Instructor, Researcher, Horticulturist, Certified Specialist
32 50 OTHER TITLED AND NON-TITLED PERSONNEL: (please specify) _____

3. SERVICES PERFORMED: (check ALL that apply)

- | | |
|--|---|
| 33 <input type="checkbox"/> A Mowing | 41 <input type="checkbox"/> I Landscape/Golf Design |
| 34 <input type="checkbox"/> B Turf Insect Control | 42 <input type="checkbox"/> J Turf Weed Control |
| 35 <input type="checkbox"/> C Tree Care | 43 <input type="checkbox"/> K Paving, Deck & Patio Installation |
| 36 <input type="checkbox"/> D Turf Aeration | 44 <input type="checkbox"/> L Pond/Lake Care |
| 37 <input type="checkbox"/> E Irrigation Services | 45 <input type="checkbox"/> M Landscape Installation |
| 38 <input type="checkbox"/> F Turf Fertilization | 46 <input type="checkbox"/> N Snow Removal |
| 39 <input type="checkbox"/> G Turf Disease Control | 47 <input type="checkbox"/> O Other (please specify) _____ |
| 40 <input type="checkbox"/> H Ornamental Care | |

4. WHAT IS YOUR ANNUAL BUDGET FOR EQUIPMENT, CHEMICALS, SUPPLIES? (please check one)

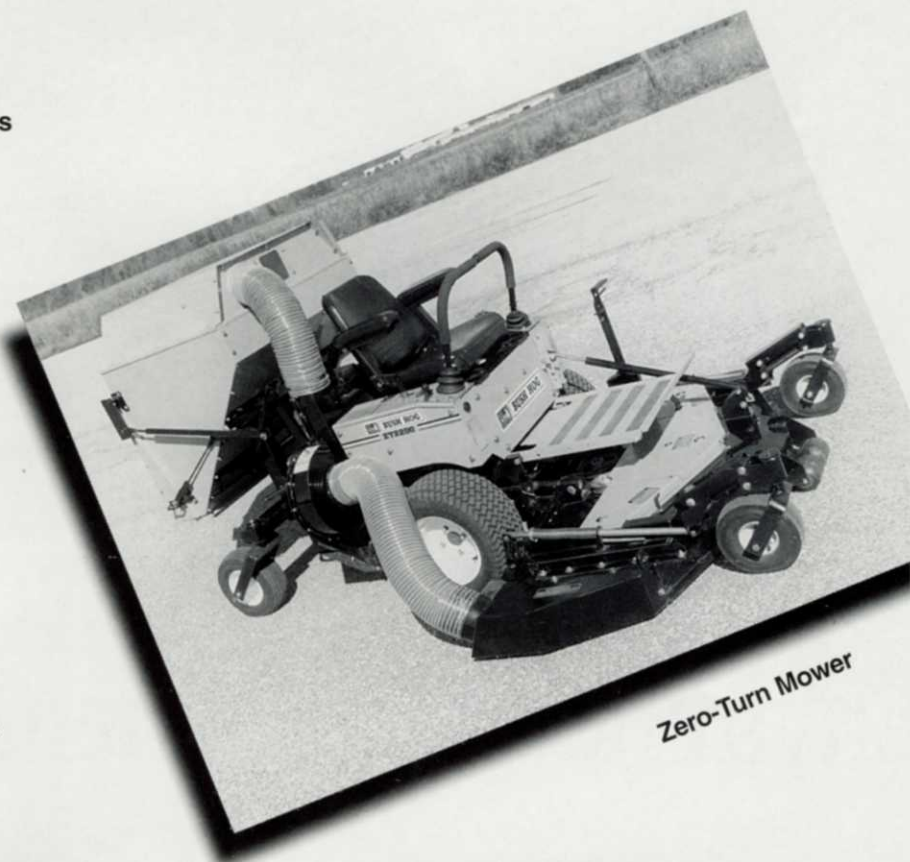
- 48 1 Less than \$50,000 51 4 \$250,001-500,000
49 2 \$50,000-\$100,000 52 5 More than \$500,000
50 3 \$100,001-\$250,000

101	119	137	155	173	191	209	227	245	263	281	299
102	120	138	156	174	192	210	228	246	264	282	300
103	121	139	157	175	193	211	229	247	265	283	301
104	122	140	158	176	194	212	230	248	266	284	302
105	123	141	159	177	195	213	231	249	267	285	303
106	124	142	160	178	196	214	232	250	268	286	304
107	125	143	161	179	197	215	233	251	269	287	305
108	126	144	162	180	198	216	234	252	270	288	306
109	127	145	163	181	199	217	235	253	271	289	307
110	128	146	164	182	200	218	236	254	272	290	308
111	129	147	165	183	201	219	237	255	273	291	309
112	130	148	166	184	202	220	238	256	274	292	310
113	131	149	167	185	203	221	239	257	275	293	311
114	132	150	168	186	204	222	240	258	276	294	312
115	133	151	169	187	205	223	241	259	277	295	313
116	134	152	170	188	206	224	242	260	278	296	314
117	135	153	171	189	207	225	243	261	279	297	315
118	136	154	172	190	208	226	244	262	280	298	316

19 WAYS TO LOOK YOUR BEST

The appearance your equipment delivers is vital. So is the productivity. And, the durability. Now you can have all three from 19 turf/ landscape tools. Because Bush Hog® has introduced 19 new ways to look your best, improve your productivity and reduce your downtime.

- Front End Loaders
- Zero-Turn Mowers
- GT42 Powered Rotary Cutters
- Box Blades
- Roll-Over Blades
- Single Roller Pulverizers
- Double Roller Pulverizers
- Pluggers
- Backhoes
- Landscape Rakes
- Rotary Tillers
- Rear Blades
- Post Hole Diggers
- Squealer Rotary Cutters
- Air Tunnel Finishing Mowers
- Flat Deck Finishing Mowers
- Tri-Deck Finishing Mowers
- Rear Discharge Finishing Mowers
- Chipper/Shredders



Zero-Turn Mower

For free literature, select the equipment you need and send us this advertisement.

Name _____

Address _____

City _____ County _____

State _____ Zip _____

Phone No. (____) _____

BUSH HOG®
TURF AND LANDSCAPE TOOLS
We Make You Look Your Best™



BUSH HOG®

DIVISION OF ALLIED PRODUCTS CORPORATION

Dept. LM-02 • P.O. Box 1039 • Selma, AL 36702-1039 • (334) 872-6261

Circle No. 110 on Reader Inquiry Card

PENNLINKS
Creeping
Bentgrass



Number 15 green, Oregon Golf Club, West Linn, Oregon, Ken Kavanaugh and Peter Jacobsen designers.

"PennLinks Is Perfect For Our Environmentally Friendly Course"

"PennLinks greens and tees at The Oregon Golf Club fit perfectly with our environmental concerns. Through good cultural practices and balanced nutritional feeding, I have had no need to apply any fungicides, herbicides or insecticides to them in more than 18 months.

When I change hole locations each morning, I walk the greens looking for stress areas and address them before they become a problem. I find PennLinks' upright growth and low thatch producing qualities, combined with light and frequent top dressing, provide near-perfect putting surfaces.

That's what the touring professionals tell me when we host the annual Fred Meyer Challenge.

Oregon Golf Club participates in the New York State Audubon Cooperative Sanctuary program and maintains their high environmental standards. Our club is one of only 45 fully certified courses in the United States.

I believe PennLinks provides the high quality playing surface demanded by today's golfers and also addresses the increasing awareness and responsibility of golf courses to be good stewards of the environment."

John F. Anderson
Superintendent

The Oregon Golf Club
West Linn, Oregon

**Tee-2-Green
Corp.**

PO Box 250
Hubbard, OR 97032 USA
1-800-547-0255
503-651-2130
FAX 503-651-2351

*Call today for a 'Penn Pals'
distributor in your area*